## EUROPEAN CURRENCY

## AND <br> FINANCE

## COXDISSION OF GOLD AND SILVER INQUIRY UNITED STATES SENATE.

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Serial 9<br>(Folume I).

By JOHN PARKE YOUNG, Ph. D.

Printod for the une of the Sensto Comminalor of Gold and Silver Inquiry



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## FOREWORD

Volume II of the commission's report on European currency and finance (Serial 9) is a continuation of Volume I, and deals with 12 countries of Europe not included in Volume I. It gives a brief description of pre-war currency systems in these 12 countries, an account of war and postwar developments, and a discussion of efforts toward currency and financial reconstruction. It also contains, in Part II, statistical tables relating to banking, currency, exchange rates, prices, purchasing power parities, trade, and government findnces of the countries treated.

Volume I contains four parts: (I) A general discussion of the European currency and financial question and its relation to the Urited States; (II) a section containing papers on currency and finance, prepared for the commission by 33 economists and bankers in Europe and America ( 15 countries represented); (III) a section dealing in some detail with currency and financial affairs of Great Britain, France, Italy, and Germany (continued for 12 other coontries in Volume II); and (IV) a section containing statistical material for the 4 countries mentioned above (continued for other countries in Volume II).

Since the appearance of Volume I in February considerable progress has been made in the reconstruction of European finance and trade. In fact, in the realm of currency the first six months of this year have witnessed more extensive currency rehabilitation than any like period since the war. Most of the trade of Europe is again being transacted on a gold basis, even though in most countries the complete gold standard has not yet been fully restored. Recent events have been in the direction of stabilization and a retura to the gold standard, with accompanying improved financial and economic conditions generally. A brief summary and description of the outstanding developments in 1925 is given in the introductory section of Volume II under the heading "European reconstruction."

In-the preparation of Volume II the following economists have participated: Mr. M. L. Jacobson, Mr. Elmer Wood, and Mr. E. V. D. Wight, whose names appear in connection with sections to which they contributed.

John Pares Young, Director Foreign Currency and Exchange Investigation.
Julx, 1925.

Another printing of Volume 1, Serial 9, has been made, and the volume may now be procured from the Superintendent of Docaments, Government Printing Offica, Washington, D. C, at 80 cents a copy.

# EUROPEAN CURRENCY AND FINANCE . 

## EUROPEAN RECONSTRUCTION


#### Abstract

Since Volume I of the Report on European Currency and Finance was issued in February, 1925, several important developments in European reconstruction have taken place. The progress begun in 1924 has been carried forward and the year 1925 bids fair to become the outstanding year in which Europe turned from the abnormalities and disturbed conditions of war and the post-war period, to a more healthy and economic basis of existence, to "normalcy" as the popular expression puts it. Soaring prices, demoralized production, bread riots, and other extreme conditions have disappeared, and have given place to renewed enterprise and increasing productivity and prosperity, which provides the proper background for healthy political and other conditions.


## Regtoration of Gold Standabd in Great Britain

The outstanding development in the realm of currency has been the announcement on April 28 of the immediate return of Great Britain to the gold standard. This was an event of far-reaching significance, both nationally and internationally. Europe for several years had been waiting for Great Britain to act and did not desire to do much in the way of currency reform until Great Britain set the example. As a result of Great Britain's move, the Netherlands, the Dutch East Indies, Australia, and New Zealand returned to the gold standard at the same time as did Great Britain. South Africa, which had planned to return to the gold basis on July 1, anticipated this date by several weeks (May 17). Other countries, notably Switzerland and Argentina, are ready to return to gold, and announcement may be forthcoming soon. With the return of Great Britain to gold the indications are that within a year or two the general restoration of the gold standard will be well nigh an accomplished fact.

As a result of the return of Great Britain to the gold standard, most of the trade of Europe and of the entire world is now conducted on the gold basis. This is of importance to trade since when trade has to be conducted in terms of a currency which fluctuates rapidly in value, transactions become hazardous and trade is interfered with. Aside therefore from the question of Great Britain's leading the way for other countries, the return of the pound to par will havo beneficial effects upon international trade and finance.

Much trade formerly financed in London in terms of sterling has come to be financed in terms of dollars in New York or other American centers because dollars represent gold. Inasmuch as the pound
now represents a definite amount of gold, London will recover part of the business lost to the United States. As a result of the war New York has assumed a position of leadership as an international financial center. In all important recent loan operations United States bankers have played a dominant rôle. With the pound back on the level of the dollar, London may be expected to play a more important part in international finance. The relations between these two financial centers will become closer and more interlocked as a result of the common basis, gold, which permits greater accuracy in the calculations of transactions.

The measure which has restored Great Britain practically to the gold standard was the granting to the Bank of England on April 28 of a general license to export gold, the exportation of gold having been previously prohibited. ${ }^{1}$ Since the general prohibition on the exportation of gold will not expire until the end of this year (1925), it is apparent that Great Britain will not have a completely free gold market until that time. However, this temporary interference with complete freedom of gold movements is of no great consequence and Great Britain may be regarded to all intents and purposes as upon the gold standard. The psychological effect of the restoration of the gold standard is healthy, and will inspire confidence in industry and trade as well as stimulate other countries toward currency reform.

The Bank of England has a gold reserve of about $\$ 155,000,000$ or about $\$ 750,000,000$ (including the $\$ 27,000,000$ transferred from the currency notes account). In addition to this a credit of $\$ 100,000,000$ was provided by J. P. Morgan \& Co., and gold to the extent of $\$ 200,000,000$ was made available to the Bank of England by the Federal Reserve Bank of New York. The total note circulation of Great Britain at present amounts to about $£ 385,000,000$, so that the gold reserve exclusive of foreign credits is about 40 per cent of notes. Economic conditions in Great Britain are sound and the price levels of the United States and Great Britain are in close harmony, i. e., purchasing power parities and exchange rates are not far apart, so that fundamentally Great Britain is prepared for the gold basis.

The gold standard has been accepted in preference to a system of managed currency. That Great Britain would adopt a thoroughgoing managed fiduciary currency standard was never seriously believed, even by those favoring such a system. On the other hand, the system which has been adopted is not an entirely unmanaged one. Par with the dollar will be maintained to a great extent by deliberate action of the Bank of England through the utilization of credits in New York or shipments of gold, and through alterations in the discount rate with consequent effects upon prices.

## Most Currency now Stabtlized

Currency stabilization has been accomplished in practically all European countries, and depreciation of much consequence is no longer taking place anywhere. The countries of central Europe, which were especially disturbed-Germany, Austria, Hungary, Poland, and Czechoslovakia-now have a form of the gold standard,

[^1]and are regaining the prosperity which has been lacking for about a decade. Central banks have been organized, or reorganized, in these countries and are functioning satisfactorily, issuing notes, accumulating gold reserves, and controlling credit conditions.

Sweden, the first European country to return to the gold standard after the war, has maintained successfully this standard for over a year (since April 1, 1924). The other Scandinavian and Baltic countries have either undertaken currency reform or are making plans in this direction. Russia has returned to a form of the gold standard and is accumulating a gold reserve, largely from domestic production and from gold coming out of hoards as a result of the introduction of a stable currency.

Belgium, France, and Italy are now seriously contemplating measures of currency reform. Metallic currency is appearing in circulation in practically all countries in place of the inconvenient and usually very dirty paper money of small denominations.

Erance passed through a financial and political crisis in April, 1925, when it became known that the legal limit to the circulation had been exceeded in order to provide the Government with needed. funds. In spite of the difficulties the franc experienced very little depreciation. France adopted vigorous reform measures, and a budget which really balances will soon be an accomplished fact, according to present plans. If the Government is successful in preventing further inflation and thereby maintaining a relatively stable level of prices, fairly stable exchange rates will continue, provided no untoward events take place. Italy in June, 1925, established a credit of $\$ 50,000,000$ in New York for the purpose of stabilizing the lira. Belgium, also in June, 1925, borrowed a sitmilar amount in the United States, part of which money is to be used to maintain the stability of the Belgian franc.

The necessity of devaluation-stabilization of currency units at approximately their present low levels-is now generally recognized throughout financial and governmental circles in Europe, including France, Italy, and Belgium. A certain amount of popular opposition is still to be overcome, and is a source of embarrassment to governments desirous of accomplishing early reform. The return already to the gold basis of countries whose currencies were extremely depreciated and whose conditions most disturbed, has shown other cointries that stable currencies are not dependent upon internal prosperity, an excess of exports or other popularly supposed requisites.

Recent developments indicate the increasing tendency of currency systems of the different countries to be interlocked, and based upon deposit credits in foreign banks in place of gold held in vault. All the central banks of Europe at the present time have important deposits in foreign countries, deposits which they look upon as reserves against their currencies. These deposits obviate to a great extent the necessity of gold shipments and are useful in sustaining exchange rates. The Bank of England has a credit in Now York of $\$ 300,000$, 000 for the sole purpose of sustaining the gold standard in Great Britain. Germany, on the other hand, has withdrawn to Germany
in actual gold a large part of her foreign deposits. Germany, however, had very little gold in the Reichsbank, and in addition to foreign deposits needed an internal gold reserve to inspire confidence and prepare for the resumption of specie payments. To what extent this system of deposited reserves in place of actual gold will continue, or to what extent it is merely a temporary expedient as a means of getting back to the gold standard, can be answered only in the future.

## Circulation of Gold Coin

Another noteworthy development in currency matters is the tendency to discourage, if not to prevent entirely, the circulation of gold coin. Before the war gold coin was commonly seen in hand to hand circulation. At the present time, however, even in countries where the gold standard prevails, gold coin is almost never seen in circulation. Paper money has proved convenient, and as long as it is possible to secure gold in exchange for the paper money individuals do not seem inclined to ask for gold. The Bank of England has been relieved of the obligation of redeeming its notes in gold except in very large quantities, in amounts not less than 400 fine ounces ( $\$ 8,268$ ). In order to discourage further the circulation of gold in Great Britain appeals are made to the public against the withdrawal and circulation of gold.

The significance of this tendency away from gold circulation is that the metal may be economized and oentralized, and that economizing gold in this fashion may have important effects upon its value, or, in other words, upon the level of prices. When gold is concentrated in banks it can serve as the basis for more paper currency and bank credit than when scattered throughout the hands of the people. If large quantities of gold are to accumulate in money centers and serve as the basis for currency and credit expansion, the value of gold may become less, or, in other words, the general level of prices may rise.

The extent to which control of credit and prices will be successful in maintaining stability is a question which can not be answered now. The United States has been successful in maintaining relative price stability for over four years and will no doubt continue this policy as long as it is possible. Great Britain and other countries will also be endeavoring to avoid price fluctuations and alfernating depression and prosperity. The leading countries of the world will all thus be following deliberately a policy which is more or less the same, namely, the maintenance of stable currency and price conditions. With the advancement in financial knowledge and available data, and with the weight of the leading countries thrown against rises and falls in the value of gold, considerable stability can be provided, especially over shorter periods of time as opposed to the long time trends.

The ratios of gold reserves to notes in circulation have been practically ignored since 1913, and the indications are that they will not again be considered the chief criteria of discount policy. The reserve ratio must be reckoned with if the gold standard and exchange stability are to exist, but in maintaining exchange stability foreign credits are as useful as gold. Reserve ratios can not be ignored
entirely, but countries have learned that they can be manipulated and do not bave to be followed rigidly. This is an important factor in efforts toward price control.

## Remistimbution of Unitres Statres Gosn

Since December, 1924, more gold has been leaving the Cnited States than has been coming in. This is the first time the United States has had a net excess of gold exports for over four years (since Aggust, 1920). The recent excesses of gold exports have not beea large, bat indicate a change in conditions, and the beginning of a more even distribution of the world's gold. However, it is not to be expected that the redistribution of the large gold stock of the Cnited States will take place rapidly. As the restoration of the gold standard proceeds and as countries continue to strengthen their gold reserves, part of the gold in the Cnited States will flow to other countries and new gold from the mines will find other destinations than the raults of the Federal reserve bants: The following figures shown the gold imports and exports of the United States since 1912

Caited Stetes-Inports ean exports of soll, 1918-19e5


Most European countries at the present time have a sufficient amount of gold to return to a form of the gold standard, but not a sufficient amount in most cases to restore a completely free gold
market. Various restrictions and measures aimed at economizing gold are being employed where a form of the gold standard has been adopted. The United States is the only country at the present time where a free gold market in the broadest sense may be said to exist. European countries may not find it desirable to establish the complete gold standard in this broad sense, but may prefer to economize the use of gold and maintain stability with reference to gold by various means of control. In fact, an approximation to the gold. standard and its introduction by gradual steps is the course that is leing followed.

## Loan Flotations in the United States and Foreign Trade

Since the fall of 1924 an unprecedently large amount of foreign loans has been floated in the United States market. These large loan flotations are still continuing. The flotations in 1924 amounted to $\$ 1,210,000,000$, of which $\$ 878,000,000$ represented new financing. Of the total loans, $\$ 512,000,000$ went to European governments or governmental units. During the first quarter of 1925 foreign flotations in the United States amounted to $\$ 279,00,000$, of which $\$ 238,000,000$ represented new financing. As long as the security behind the loans is adequate and the funds are used for proper purposes, such flotations redound both to the benefit of the United States as well as to that of the foreign borrowers who are very much in need of capital.

The loans are being used in Europe largely for reconstruction and other productive purposes. Even where the loans are used to defray ordinary running expenses of foreign governments, they may be regarded as legitimate, as long as these governments look upon the borrowing as of an emergency nature and take steps to secure an excess of revenues over expenditures at an early date so that the debts can be repaid.

The loans being floated in the United States have an important effect upon the foreign trade of this country. The United States has been becoming increasingly a leading nation in international trade and finance. The country's foreign trade has experienced tremendous expansion in recent years, as indicated by the table below. Merchandise imports into the United States in 1924 amounted to $\$ 3,609,963,000$ compared with $\$ 1,792,596,000$ in 1913. Exports in 1924 amounted to $\$ 4,590,984,000$ compared with $\$ 2,484,018,000$ in 1913. Furthermore, the invisible items in the balance of payments of the United States were large in 1924, the credit items being estimated by the Department of Commerce at $\$ 790,000,000$ and the debit items at $\$ 1,178,000,000$. The following figures show the merchandise trade of the United States since 1912:

Uwited States-Imports and exporte of merchandise, 1912-1985


Interest on the large loans which are being floated in the United States, together with the repayment of the principal, will tend toward further expansion in the import trade of this country, just as the money loaned when it is utilized enhances the export trade. Most of the loans are being floated at favorable rates of interest from the standpoint of the United States, an average rate of about 7 per cent.

The large loan flotations in the United .States since the fall of 1924 have been a factor in the general rise of foreign exchange rates in the United States. Since the adoption of the Dawes plan, and accompanying improved conditions in Europe, which paved the way for the increase in extension of credits, there has been a general upward movement in exchange rates of European countries in the United States market. Prior to this upward movement, many of the European exchanges were depreciated more than warranted by the reduced purchasing power of the currencies within their own countries, due largely to disturbed conditions and the flight of capital. At the present time, however, few of the currencies are much undervalued abroad on the basis of their internal purchasing power.

Negotiations in regard to the refunding of indebtedness of European governments to the United States have been progressing. The unsettlement of this question has been a disturbing factor in the finances and credit position of several of the European countries; and the funding of debts will assist in the return to normsl conditions. The question of currency reform, however, as mentioned in.

Volume $I$, is distinct from the questions of this indebtedness, and the currency reforms which have already been accomplished have had little connection with matters of interallied debts.

## Currency Conditions Still Unsatiefactury

In spite of the improvement that has taken place in European currency systems, and in financial and economic conditions generally, currency reform still remains an outstanding unsettled financial problem before Europe, and is one which must very soon be dealt with in a comprehensive way. A sound currency, tied up definitely with gold in such a way that people can have confidence in it, is vital to the prosperity of any country. The economic life of a country centers around money and the price structure, and if the currency system is of an uncertain character, business can not prosper.

Countries have been endeavoring to restore order into their currency systems independently, and one of the results has been the introduction of a number of new currency units in Europe. At the present time 27 different currency units exist in Europe, compared with only 10 distinct units in 1913. This multiplication of currency units is an unfortunate occurence. Greater uniformity in currency systems than existed before the war is extremely desirable and would have important benefits. Now that currency systems are being molded, and when many of them are admittedly of a temporary character, is a more opportune time than has ever before occurred to accomplish a considerable amount of currency unification.

While currency reform is to a large extent a domestic matter as regards any particular country, nevertheless the international aspects of currency and the close financial and trade relations of the different countries make the question one of an international character. The broad problem of currency reform, exchange stabilization, and the general restoration of the gold standard, including the utilization of foreign credits and gold reserves, is one which can be dealt with most satisfactorily only at an international gathering as discussed in the preceding volume.

## CURRENCY AND FINANCLAL CONDITIONS IN EUROPEAN COUNTRIES

## AUSTRIA ${ }^{1}$

## I. PRE-WAR CURRENCY

In studying the present Austrian currency and exchange situation little attention need be given to pre-war and war conditions. The present Austrian Republic with its 6,527,000 inhabitants and 83,904 square kilometers may not be compared with the Austro-Hungarian monarchy of 1913 with its $50,000,000$ inhabitants and 676,648 square kilometers. The treaty of St. Germain in 1919 completely destroyed the sequence of Austria's monetary development and rendered comparisons void. It has been impossible to calculate with any degree of certainty the amount of circulating media existing before the war within the borders of the present Austrian State. An entirely new bank of issue has sprung up and the country is working out a new currency system.

Nevertheless, a few of the more important events in the financial history of the Austro-Hungarian monarchy are worth noting. When Austria-Hungary abandoned the silver standard in 1879 she placed herself legally on a paper standard, not having at the time gold resources sufficient to establish a gold standard. Cut loose from fluctuations of silver, the Austro-Hungarian Bank followed a policy of exchange intervention through sales and purchases from its portfolio of foreign bills in order to maintain the value of its notes. This intervention was fairly successful, and between 1878 and 1891 the value of 100 gold florins (the florin was the unit at this time) as determined by exchange rates on gold centers, fluctuated within the limits of 115-125 paper florins. Yves Guyot and A. Reffalovich Frote in regard to this, "Thanks to the suppression of free coinage of silver and to extreme moderation in new issues of paper money, the paper florin of Austria increased little by little its purchasing power (as compared with the silver on which it was originally based) assured by its legal tender quality for payments to the State and between nationals." :

- In 1892 the monarchy introduced a monrtary reform by which the gold crown (there are 2 erowns to the florin) was substituted as a standard for the silver florin of prior to 1879 and the paper florin after that date. In 1892 the paper florin, due to scarcity, was at a slight premium in terms of the silver florin. The reform involved a debasement of 16 per cent from the nominal value of the hypothetical gold florin. The gold florin was ordinarily calculated as worth 48.2

[^2]cents in American money, while 2 gold crowns, which were exchangeable for 1 florin, were given a value of only 40.6 cents according to the new law. The loss of 7.6 cents to the florin, or 16 per cent, was closely equivalent to the premium which gold commanded over paper at the time of conversion, and was exactly the average of this premium for the years 1879-1891.

The Austro-Hungarian Bank experienced difficulty in establishing the new gold standard. A financial crisis in 1893 arrested the progress and gold again commanded a premium of from 3 to 7 per cent. Especially serious to the bank was the question of the large holdings of silver amassed during the period of the silver standard. In this the Government came to the rescue and bought a part of the metal, recoined it and tried to substitute silver coins for its own 1 and 5 florin notes. But the Austrians preferred notes to the more cumbersome silver, and the metal returned to the bank.

Besides bank notes there were in circulation at this time Government notes in small denominations, a considerable part of the issue being based on salt revenues. In 1892 the amount of these Government notes outstanding was $412,000,000$ florins, but, as part of the monetary reform, an efort was made to retire them, partly by substitution of interest-bearing Government bonds and partly by conversion into bank notes. In this latter case the bank received gold from the Government. . By 1900 there were still in circulation only $11,000,000$ crowns in Government notes, and by 1908 the circulation had entirely disappeared. In 1900 the Government was also succesoful in effecting payments to reduce its debt to the Austro-Hungarian Bank to $60,000,000$ crowns. The permanent advances to the Government for duration of the issue privilege enjoyed by the bank were placed at this figure.

In 1900 the Austro-Hungarian Bank of its own accord began gold payments. An effort was made to force gold coins into circulation, but the public, accustomed to using notes, returned the coins to the bank. This psychological factor rendered condjtions in Austria particularly favorable for expansion of paper money currency, and caused Austrians to have faith in their currency long after inflation during and after the war had made serious progress.

The German economist, Knapp, regarded the Austrian currency system of from 1878 onward as a model, in that scarcely any metal was in circulation, while the bank of issue through its foreign portfolio and reserve guarded the exchange and at the same time husbanded the reserves of the nation.

In 1913 the average circulation of the Austro-Hungarian Bank was about $2,349,000,000$ crowns, representing a continuous and slow growth since the beginning of the century. In order to arrive at $s_{0}$ figure representing the total circulating media within the country it is necessary, however, to add some two hundred to three hundred million crowns in gold and silver coins, especially the latter. The total metallic coinings in Austris before the war are given by Doctor de Bordes as $515,000,000$ crowns- $225,000,000$ crowns in gold coins, $250,000,000$ in silver florin coins, and $40,000,000$ in silver crown coins. However, a large portion of this amount, and probably most of the old silver florin coins, were hoarded, so an estimate of two hundred to three hundred millions in circulation seems reasonable.

[^3]

## II. CURRENCY, CREDIT, AND PRICE MOVEMENTS, 1914-1922

Rapid increase in note issues in Austria-Hungary after August 1, 1914, constitutes the outstanding feature of the monetary situation. As in the case of other European banks of issue, the Austro-Hungarian Bank placed its facilities for financing at the disposal of the State upon the outbreak of the war in August, 1914. On August 4 decrees authorized the disregarding of statutes of the bank forbidding advances to the State. This was applicable to the Governments of both Austria and Hungary. The bank was at the same time freed of its obligation to buy gold at parity. The provisions for a 40 per cent gold cover against outstanding notes were suspended, and treasury bonds admitted as cover for notes; excess circulation caused by advances to the State was freed from the 5 per cent tax. Finally, the bank was authorized to print small notes to take the place of metallic money, and received permission to suspend publishing weekly statements.

The condition of the bank was thus concealed until expiration of the note-issue privilege on December 31, 1917, when its renewal for two years led to a disclosure of the monetary situation. Statistics for subsequent war years were later made available, and from December 31, 1913, to December 31, 1919, the circulation of the AustroHungarian Bank increased from 2,494,000,000 crowns to $54,465,000$,000 , or 2,179 per cent. During the same period advances to the State increased from nothing to $42,289,000,000$ crowns. The accompanying chart (No. 1) shows the increase in the bank's note circulation after 1914.

Increases in the advances to the State did not constitute the sole manner in which the bank provided funds for the State. Raffalovich ${ }^{1}$ says that by far the larger part of the diścount portfolio and the private advances on securities were against State paper, bills drawn by individuals and secured by Government bonds. The bank accepted war bonds as security for advances at 75 per cent of the face value, continuing this policy even when in 1918 the bonds sold at 60. This fact accounts for the large advances in 1918 after the armistice. The same is true of the discount portfolio, and commercial paper practically disappeared from the bank's holdings, there being only $22,000,000$ of this class of paper on December 31, 1917. Vienna banks were able to meet the credit needs from their own funds, but at the end of 1917 there was a tendency in the direction of cash settlements, a tendency which became much more real as depreciation gained headway.

A second interesting feature of the war period is the melting away of Austria's gold reserve, which declined from $1,241,000,000$ crowns on December 31, 1913, to $261,000,000$ on December 31, 1918. At the first of 1925 the gold reserve of the new Austrian bank amounted

[^4]to only about $6,000,000$ gold crowns. Most of the gold lost during the war found its way into the vaults of the Reichsbank in Germany. Holdings of foreign bills decreased from $60,000,000$ crowns at the end of 1913 to 8,000,000 on December 31, 1919.

The above figures are those for the entire Austro-Hungarian monarchy. Beginning with the Czechoslovak revolution in October, 1918, the old monarchy broke up into several States. A distinction as to the monetary circulation in the different sections soon followed. Early in March, 1919, Czechoslovakia stamped with a Czechoslovak stamp the notes of the Austro-Hungarian Bank found within her borders; Austria followed suit a few days later (March 12 to 24). However, many notes of the bank were withheld from stamping in order to escape fiscal measures, or because it was considered that the notes would be more valuable if provided with the real or forged stamp of another country. A lively trade sprang up in these notes and they commanded a premium. These conditions created chaos for a while in the central European monetary situation and complicated estimates of probable circulation.

In Austria only $4,687,000,000$ crowns were stamped out of the total circulation of the Austro-Hungarian Bank of $37,965,000,000$ at the end of March, 1919. From this time on a separate account was kept of notes issued for circulation in the Austrian Republic, and by December 31, 1919, the outstanding circulation for Austria had progressed to $12,134,473,970$ erowns. On January 1, 1920, the AustroHungarian Bank was placed in liquidation, and the "Oesterreichische Geschäftsführung" took over the central bank function for the new Republic.

Chart 2, showing the condition of the central bank, shows that under the new system expansion of currency did not cease but grew rapidly, a result of increases in advances to the State. Compared with an estimated circulation in 1913 of $500,000,000$ crowns for what constitutes present Austria, the increase was 2,427 per cent at the end of 1919, 6,129 per cent at the end of $1920,34,800$ per cent at the end of $1921,816,000$ per cent at the end of 1922 , and $1,425,100$ per cent at the end of 1923." The heavy burden laid upon state finances by food subsidies and salaries of a large number of employees contributed to ever-increasing deficits which were met by operating the note-printing presses.

Late in 1921 another factor began to contribute to the growth of bank-note circulation, i. e., an increase in bills, warrants, etc., presented for discount. From the chart it is seen that loans and discounts rose from $29,374,000,000$ crowns at the end of 1921 to $175,000,000,000$ at the end of June, six months later. The low discount rate maintained by the bank, 6 per cent from April 14 to November 28, 1921, and 7 per cent from November 29 to September 3, 1922, in comparison with high market rates which prevailed as a result of rapid deprecistion, caused individuals to borrow from the bank in order to buy goods or foreign exchange and hold for speculative gain. To combat this tendency the bank raised its rate on September 4, 1922, to 9 per cent and adopted a vigorous policy of discount rationing. In this

[^5]CHART 2

respect it is to be noted that of all bills held the percentage of pure commercial bills declined to less than 50 per cent, from 61 per cent before the war.

Metallic money disappeared from circulation in Austria early in 1914. In regard to bank credits as a means of payment, the check system has only been slightly developed in Austria, and its influence upon the general price level has never been very great. Credit operations were hampered, especially during the postwar period. because the banks were compelled to charge enormous rates of interest to cover losses as a result of depreciation of the crown. Cash payments thus became the rule. Operations of Vienna clearing houses increased in terms of paper crowns, but when measured in gold showed a large falling off. Thus for the year 1923 clearings of the important "Wiener Giro und Kassenverein" were 199,762,311,000 crowns, or $13,872,000$ gold crowns, which is only 48.8 per cent of the 1913 figure of $28,404,000$ gold crowns. For the "Wiener Saldierungsverein" the decrease is even more marked with clearings for 1823 of $16,858,856,000$ crowns ( $1,171,000,000$ gold crowns, or 13.1 per cent of the 1913 figure). These two are local institutions upon which the breaking up of the empire had no great influence. The postal savings bank clearings, on the other hand, in 1923 were only 16.4 per cent of those in 1913, while those of the Austrian National Bank, which undertakes clearing operations throughout the entire country, were $111,172,448,000$ crowns ( $7,720,000,000$ gold crowns, or only 10.7 per cent of the pre-war figure). In all these instances the 1923 figure is taken for comparison with that of pre-war times; the 1922 and 1921 clearings were much smaller than in 1923, both in paper and in gold crowns. In 1923 reviving industry accompanied by stock-exchange speculation brought an increase in clearings.

Accompanying the rapid increases in paper money was a great rise in prices, which became especially steep in 1921 and in 1922 until stabilization was accomplished in the latter part of that year. In tracing the effect of Austria's expanding currency upon the internal price level the deficiency in available index numbers is somewhat of a handicap. A useful index of price movements is the cost of living index of the Paritätische Kommission, a commission composed of an equal number of representatives of employers and employees which determines each month the cost of living level used to regulate wages. In the construction of this index number an item for rent is included, which fact should be borne in mind since rents are controlled artificially by the Government. It should also be remembered that raw materials are not included in the index number, and also that in recent years inferior qualities of food were used as compared to 1913. The tendency is for food prices to lag behind those of industrial raw materials, which are more sensitive to price changes.

The periods of greatest rise in Austrian prices were as follows: 1918, when the allied economic blockade began seriously to interfere with the nation's food supply; at the end of 1921, and from May to September, 1922, on both of which occasions prices showed a disposition to follow exchange depreciation. Price movements since the period of stabilization began are shown in chart 6 below.

## III. EXCHANGE RATES, 1914-1922

During the early years of the war, although Austria was already issuing large amounts of notes, and although prices were rapidly rising, the foreign exchange value of the crown held comparatively firm. Until the armistice the crown never fell lower than about 8 cents in American money. On the other hand, the notecirculation in October, 1918, was over $30,000,000,000$ crowns as compared to less than two and one-half billions in the middle of 1914. This lag in. exchange depreciation was due largely to the vigorous control exercised over exchange rates during the war, and to the fact that the blockade kept down imports and consequently the demand in Austria for foreign exchange.

Control over exchange rates in Austria was first exercised by an association of banks in Vienna established in February, 1916. Since all banks were not members of the association, the result was not a complete success, and on December 19, 1916, a strict control was established by Government decree. Free commerce in foreign exchange was abolished, and a "Devisenzentrale" was formed under direction of the Austro-Hungarian Bank to receive and apportion foreign exchange resources available. On June 18, 1918, the restrictive measures were made more severe, with the result that not only did all purchases of exchange have'to be approved by the Devisenzentrale, but exports of goods and capital had to be visced by that organization in order to insure the return of the full equivalent amount. To this control may be attributed the high exchange value of the crown during the war.

In April, 1919, the Government reorganized the Devisenzentrale; separating it from the Austro-Hungarian Bank, which was about to be liquidated, and placing it under the control of the ministry of finance. As depreciation became greater the effectiveness of exchange control became less. An illegal market aprang up, and after October, 1920, exchange restrictions were relaxed. In December, 1921, after the value of a gold crown had risen rapidly-from 241 paper crowns in the first week of September to 1,502 in the last week of November-exchange restrictions were again introduced, and in July, 1922, the restrictions were made more severe. Restrictions are still in force, but since December, 1922, they have been gradually relaxed.

The restrictive measures of December, 1921, were not responsible for the relative stability of early 1922 which was due to utilization of foreign credits. When these were exhausted and internal depreciation was continuing at a rapid pace, exchange rates again fell sharply. From quotations showing a gold crown to be worth 2,175 paper units at the end of May, 1922, exchange declined so that by the end of September the gold crown was worth 16,160 paper units. The dollar, which was quoted at 11,100 crowns on May 31, was
quoted on August 25, 1922, at about 83,600, its highest point. The illegal market gained in activity under the policy of restriction, and dollars were often quoted 5,000 crowns higher on the street than in banks. It has been estimated that one-half of the foreign bills bought in Vienna were purchased in this illegal fashion. The Devisenzentrale was allotting only about 15 per cent of the amount of foreign currency asked for food imports, and only 10 per cent of that asked to cover imports of raw materials. The system of restriction became completely disorganized when merchants began requesting sometimes as much as ten times their real requirements.

As a result of exchange control there came about the creation by the Devisenzentrale of two sorts of accounts in Viennese banks. They were: (a) Ausland kronen accounts, which could be transferred abroad as well as used within Austria, and (b) inland kronen accounts, which could be used only within the country. This was done to prevent transfer of crowns to parties abroad except with the permission of the Devisenzentrale, which had charge of transfers from inland to ausland accounts. Also, the crediting of sums to inland accounts of foreigners was forbidden, unless ${ }^{2}$ -
(a) Austrian stamped bank notes had been imported.
(b) Foreign exchange and stocks had been sold in Austria.
(c) The Devisenzentrale had given its approval.

Further measures which the Devisenzentrale used in carrying out its policy were the prohibition of importation of Austrian notes into Austria, and the invoicing of Austrian exports in crowns. Since ausland crowns were free from restrictions they were more valuable than inland crowns. The relationship between the two may be illustrated by quotations in the first week of January, 1921, when inland crowns were quoted at rates implying only 88.90 paper crowns to the gold crown. Toward the end of 1921 the value of the gold crown was 1,228 inland crowns and 510.29 ausland crowns. In 1922, transfers to ausland crown accounts were more liberally permitted, and the two rates tended to come together by a rapid decline in the value of the ausland crown.

A serviceable benefit nendered by this arrangement was that it restricted a tendency to "Ausverkauf," foreign buyers being otherwise tempted to bleed the country of its material resources because of low prices of goods. Being compelled, however, to buy ausland crowns in settlement of their debt, the cost to foreign purchasers of goods was considerably greater.

The depreciation and fluctuations in the value of the Austrian crowir were to an important extent based upon political and economic events which had a psychological effect on the exchange market and influenced the rate at which the money circulated. The disintegration of the monarchy cansed a hasty decline in rates on Vienna, which were in any event headed downward as a result of the mach greater depreciation of internal prices than exchange rates. The publication of the treaty of St. Germain in 1919 was followed by a further fall in the crown. The fact that during this year the cromp did not fall further is due in part to food credits granted to Austria by the allied and associated powers. During 1920 a sensational rise

[^6]in the crown took place as a result of Government intervention on the exchange market. But this improvement was only temporary.

In 1921 plans for a credit to help Austria contributed to keep the crown fairly stable during the first part of the year. However, when it was discovered that difficulty was being experienced in securing support for the plan, exchange rates fell rapidly. The movement was continually downward until early 1922 , when use of the British credit of $2,250,000$ pounds sterling helped to check depreciation. When further loans failed to materialize, a new wave of pessimism swept over the country, and exchange rates declined to record levels. This was just before the installation of the Greneva protocols signed in October, 1922.

The following table shows the high and low exchange rates, New York on Vienna, annually from 1914 through 1922, in which latter year stabilization was accomplished:

Austria, exchange rates, 1914-1982, high and low, New York on Vienna, cents per - crown
(See Table 7 in Part II)

| Year | Hilgh | Low | Year | High | Low |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1914 | 20.38 | 17.30 | 1919 | 6. 50 | 0. 58 |
| 1915 | 17.50 | 129 | 1020 | . 91 | . 22 |
| 1918. | 15. 25 | 10.98 | 1821 | . 33 | -6 |
| 1917. | 12.08 | 830 809 | 1022. | .0380 | . 0018 |

## IV. LEAGUE OF NATIONS INTERVENTION AND CURRENCY STABILIZATION

Soon after the signing of the armistice it was generally recognized in Europe that something must be done by foreign nations to help place the new Republic of Austria on its feet economically. Many plans were advanced, but none got very far. Early in 1919 a call was sent out by relief missions in Austria for food credits. Practically all the allied and many of the neutral nations responded, and before October of 1921, 26,686,690 pounds sterling had been placed at the disposal of Austria. In February of 1920 Doctor Renner took Austria's case before the Reparations Commission, which in its Austrian section produced the "Goode scheme" calling for a reconstruction loan of $\$ 250,000,000$. The supreme council rejected this scheme as too expensive, and the committee then drafted the "Loucheur scheme," which endeavored to find a way to interest private capital in Austria. This scheme also failed.

In March, 1921, Doctor Mayr took the Austrian case up with the supreme council, which referred it to the financial committee of the League of Nations. This committee studied the situation in Vienna and gave an excellent report in June, 1921, proposing a foreign loan sufficient to cover temporarily Government deficits, and to provide for stabilization of the currency. In order to sell the bonds to subscribers, however, it was necessary to secure the loan upon revenues of the Austrian State. But these revenues were already mortgaged to meet claims for occupation costs, reparations, and relief credits, and it was necessary first to secure the release of these prior liens. Some 18 nations were concerned in this question and a number, including the United States, were slow in according the release. Meanwhile, conditions in Austria had so changed that another plan had to be evolved.

In December, 1921, conditions became serious in Austria, and allied nations again granted credits as follows: Great Britain, 2,250,000 pounds; France, $55,000,000$ francs; Italy, $70,000,000$ lire; and Czechoslovakia, $500,000,000$ crowns. There was also some discussion of a loan in the United States market. It was expected that Austria would accept finencial supervision by a commissioner appointed by the League of Nations. However, the Vienna government pleaded that the internal political situation made such foreign intrusion impossible at the moment. Thereupon the French and Italian credits became unavailable and the United Statea loan fell through, with the result that the aid was reduced to the English credit and the Czechoslovak credit, most of which latter had to be used in paying debts resulting from coal purchases.

When this attempt at reconstruction failed, exchange rates declined rapidly. Conditions became so disturbed that in August, 1922, the Austrian Government was prepared to accept almost any arrangement. A final request was made by Austria at the interallied con-
ference in Iondon for a guaranteed loan of $15,000,000$ pounds sterling. But the allied Governments were tired of loaning money to Austria and referred the entire question back to the League of Nations. After a few weeks of negotiations the Geneva protocols were signed on October 4, 1922, and the reconstruction of Austria began.
.These protocols were three in number. The first assured political independence of Austria, a necessary step in order to insure confidence of future subscribers to Austrian loans. The second fixed conditions of the loan of $650,000,000$ gold crowns which the league estimated would be necessary to carry out the reconstruction plan. The third protocol; signed by Chancellor Seipel alone on behalf of Austria, gave Austria's promises of financial and economic reform. In particular it contained a program of reforms, a draft proposition for securing extraordinary powers to carry out this program, a promise to cease inflation, and plans for the new and independent bank of issue. At the same time it was provided that the league should appoint a commissioner general who should reside in Vienna, have complete control over proceeds of all foreign loans, and see that the reconstruction plan was carried out.

The international loan of $650,000,000$ gold crowns, which was floated in the leading financial markets of the world in the middle of 1923, netted Austria $585,000,000$ gold crowns, or about $\$ 120,000,000$. Of this amount Austria at the end of 1924 still had about $\$ 42,000,000$.

One of the important sections of the third Geneva protocol provided for the creation of the new Bank of Austria to take over the Austrian section of the old Austro-Hungarian Bank, as well as certain assets resulting from the liquidation of the latter. The League of Nations found it necessary to modify considerably the original Austrian project. The revised statutes were thus not passed until November 14, 1922 and the bank came into operation on January 1, 1923. As eventually arranged, the institution was capitalized at $30,000,000$ gold crowns and given exclusive note issue privileges for 20 years. No governmental body could have recourse to the bank for advances without deposit of an equivalent amount in gold or foreign bills. Inflation from government sources was thus prevented.

In regard to reserve requirements it was provided that total bank-note circulation, plus current liabilities (but exclusive of existing Federal debt, as manifest by treasury bonds taken over from the Austrian section of the Austro-Hungarian Bank) should be covered by a minimum reserve of gold and foreign exchange holdings to the extent of 20 per cent for the first five years, 24 per cent for the next five years, 28 per cent for the next five years, and $331 / 3$ per cent thereafter. Whenever specie payments are resumed the proportion of cover must be maintained at a minimum of $331 / 3$ per cent.

As regards resumption of specie payments, it was provided that when the Government had succeeded in reducing its debt to the bank, which amounted to $2,557,948,000,000$ paper crowns when the new bank went into operation-to the equivalent of $30,000,000$ gold crowns, specie payments must be resumed and majntained. In February, 1925, this debt had been reduced to $2,168,169,600,000$ crowns which is the equivalent of a trifle over $150,000,000$ gold crowns, or about $\$ 30,000,000$. The debt of $30,000,000$ gold crowns will constitute a permanent advance from the bank to the State,

As a nucleus for its reserves the bank received the following: 11 the meager gold and foreign exchange holdings of the Austrin section of the Austro-Hungarian Bank, and (2) assets of the Dev: senzentrale, which institution the bank took over in its entirets The bank also received the proceeds of government foreign loant Furthermore the bank's capital was subscribed in gold or in foreig exchange.

Signing of the Geneva protocols in October, 1922, was not followe by an immediate cessation of note printing in Austria. In fact, on of the interesting developments in Austrian reconstruction is thr the note issue increased almost continuously to the present time Chart 3 shows that from about $2,500,000,000,000$ crowns outstandin on October 7, 1922, the circulation increased to about $4,000,000$ 000,000 crowns on December 31, 1922, when the new bank came int operation. By the end of 1923 the circulation had increased to ove $7,000,000,000,000$ crowns, and in the latter part of 1924 was ove $8,000,000,000,000$ crowns, after which time the circulation decline somewhat. This circulation has always been covered by a generou reserve.

This great increase in the note circulation of Austria was a resul largely of increased confidence in the currency, combined with a recoy ery of industry and accompanying speculation. When confidence it the currency was restored the rapidity with which the currency circu] ated became much less. People who formerly avoided holding th money for fear of depreciation now learned that the money would re tain its value and could safely be held until it was needed. Employ ers who formerly kept their cash in dollars and other foreign units and converted these into crowns when pay-day came, now kept thei cash in crowns from one week to the next. The demand for domesti currency thus increased greatly and the bank received foreigy currencies and exchange, giving in return local money. Thus thi bank's reserve at the same time was built up. The reserves agains the circulation and current accounts rose from 62.4 per cent ol January 7, 1923, to 74.7 per cent on December 31, after having reached 82.9 per cent at the end of August.

As the note circulation increased the gold value of the circulation also increased, as shown in the chart, since exchange rates were $n$ n longer depreciating. Chart 4 shows the gold value of the circulation computed according to two indices of the value of the crown, first exchange rates, and second, purchasing power parities. Chart : shows the gold value of the circulation computed according th exchange rates. After the currency was stabilized the Devisenzen trale received large amounts of foreign exchange resulting from thi return of capital to Austria. Some of the capital came by way o private banks, and some from the Government, which was nov receiving foreign exchange representing subscriptions to interna gold loans. The Devisenzentrale paid for this foreign exchange by borrowing notes from the Austrian Bank, thereby increasing thi latter's circulation. Thus reserves of the Devisenzentrale rose fron $£ 700,000$ sterling in October, 1922, to $£ 4,000,000$ at the end of thi year. The largest part of this amount came in when, after Novem ber 18, printing of notes for the Government ceased. Of thi total reserves more than two-thirds represented conversions fo




8- $-11704{ }^{6} 6890-196-65 I T S$
private persons, while one-third represented conversions for the Goverament.

When the new Austrian Bank absorbed the Devisenzentrale on January 1, 1923, it took over the function of regulating exchange rates. During the first two months, however, conditions changed and the demand for foreign exchange was again strong, due largely to a feeling that foreign credits might not be forthcoming. With the assurance brought by the short-term foreign loan of February, 1923, and still more by the long-term international loan of June, private capital again flowed back more rapidly toward Austria. In the spring of 1925 Austria abolished restrictions on dealings in foreign currencies.
ceart 5

[Purchaging power parities based on Statistische Nachrichten index numbers of prices for Auptris, 47 com: modities, fifth of month; Jan.-Apr., 1914=100; and Federai Reserve Board index numbers for the United Esates, 104 commodities, monthly average, $1913=100$ ]


The accompanying chart (No. 5) shows how exchange rates have remained constantly at .0014 cent per crown since stabilization was undertaken in the latter part of 1922, and how the purchasing power parities between the dollar and the crown (the parities based on the relationship between the two price levels) have been approaching exchange rates, which is as would be expected.

Beginning at the first of 1924 Austria experienced a financial crisis, following a stock exchange speculative movement. There resulted important strikes and failures among speculators in francs. The year 1924 was a difficult one for Austria in many ways, and although considerable liquidation took place, the result has been a sounder basis for business than that during the period of boom and speculation which followed stabilization. The speculation was first on the
stock exchange and then in foreign currencies, especially the French franc, which many individuals in Austria believed early in 1924 was going the way of the German mark and other currencies which had yielded speculstors handsome profits:

Chart 6 shows the course of prices in Austria since the first of 1923, and also the course of prices in the United States for comparative purposes. (Federal Reserve Board.) It will be noticed that prices in Austria were considerably higher in 1924, especially at the end of the year, as compared with 1923.

Government finances in Austria are showing gradual improvement. The budget, however, has not yet been balanced and 1925 estimates, conforming to the new limits as agreed upon between the Austrian

CHART 6

[Statistische Nechrichten index numbers for Austris; 0,000 omitted; January-Apr1]; 1914m 100; 47 commodities, firth of month; Federal Resarve Board inder numberst for United Stateg, 10i commodities, monthly average , $1013=100$


Government and the League of Nations in 1924, allow for a monthly deficit of $49,000,000,000$ paper crowns (about $\$ 3,052,000$ for the year). Estimated total expenditures for 1925 are $654,000,000,000$ crowns a month, while estimated net revenues are $605,000,000,000$ crowns a month. The deficit for the year 1924 amounted to $600,000,000,000$ crowns ( $60,000,000$ schillings) or $\$ 8,400,000$. A' new agreement in regard to Austrian finances was concluded September 16, 1924, at Geneva by the Austrian Government, the League of Nations financial committee, and the Commissioner General of Austria, Doctor Zimmerman. According to this agreement current expenditures must not exceed a maximum of $495,000,000$ gold crowns for the year, while capital expenditures must be limited to a maximum of $50,000,000$ gold crowns.

The foreign trade of Austria shows an excess of imports as the following figures indicate:

Austria-Imports and exports
[000 oraltted; gold crowns]

| Year | - Imports | Exports | Exceas of imports |
| :---: | :---: | :---: | :---: |
| 1020 | 1,756, 188 | 1,108, 712 | 652.474 |
| 1923 | 1,949,037 | 1,030, 5.51 | 818, 486 |
| 1024 | 2,238,220 | 1,223, 764 | 1,014,466 |

The principal invisible credit items in Austria's foreign trade are expenditures of tourists, income from foreign investments-which is the largest item-income from transit trade, snd income from banking and financial services rendered. Vienna is the financial center for much of the surrounding territory of Europe, including the Balkan States. The chief invisible debit item is interest and amortization charges payable abroad.

In the latter part of December, 1923, Austria introduced a new coin, the silver schilling, divided into 100 groschen. The word schilling is of German origin and the coin is not related to the British shilling. The Austrian schilling has a monetary value of 10,000 paper crowns, or thus about 14 cents in American money. It was introduced originally as a matter of convenience since the large denominations of depreciated paper money were cumbersome and unpopular, and for small purchases coins are much more useful. Prior to the introduction of the schilling 10,000 paper crowns had come to be somewhat of a unit in quoting prices, so that this denomination was a logical one to adopt for the schilling. Silver schillings were first put into circulation in June, 1924, and were well received by the public. In fact, although the silver in the coins was worth less than the money value of the coins, the coins almost immediately were withdrawn from circulation and were hoarded.

When the schilling was introduced the intention was not to create a new unit, but merely to provide a temporary convenience until comprehensive currency reform could be accomplished. The schilling, however, proved to be a very useful unit, and, as was to be expected, soon came to be the actual currency unit of the country. Business shifted quickly to the schilling, and the next step was taken in December, 1924, when a law was adopted which made the achilling the unit in place of the crown. The gold schilling according to the new law contains 0.21172086 gram of fine gold. Provision was made for the minting of gold coins of 100 and 25 schillings. The mint is directed to strike gold coins for private account when gold is presented for this purpose. The national bank must also pay out its notes in return for gold, coin or bar gold, on the basis of the new standard. The bank also may not issue notes in terms of crowns after December 31, 1926. The bank issued its first balance sheet in terms of schillings on February 23, 1925. Public accounts are being converted into schillings and must be so converted by June 30, 1925.

Thus a new currency unit has been added to those already existing in Europe, a unit the gold value of which was determined more or
leas by accident, i. e., by the rate of exchange existing between the dollar and the crown when stabilization was accomplished in 1922. It is regretted in Austria, as well as elsewhere, that in currency reform a unit could not have been selected which was in closer harmony with some of the leading currency units-such as the dollar, pound, or franc.

Austria desires to place its currency system completely upon the gold basis, and according to present plans, this event may soon transpire. Freedom of importation and exportation of gold, and complete convertibility are the principal requirements. In the meantime, exchange rates have been kept stable with reference to gold by operations of the national bank. Although these efforts toward stability have been successful, as a permanent arrangement the simple gold standard without restrictions is to be preferred. It offers more advantages and provides greater security for the stability of the currency system, since its operation is more or less automatic. The gold reserves of the Austrian National Bank-exclusive of foreign credits and exchange holdings-now amount to only about $\$ 1,500,000$, compared to gold reserves of the former Austro-Hungarian Bank at the end of 1913 of about $\$ 250,000,000$. Although the territory of Austria is much reduced, it is clear that before resumption of specio payments can take place a large amount of gold must be imported. The bank has large holdings of foreign bills and credits which can easily be converted into gold and returned to Austria when desired, so that the introduction of the complete gold standard into Austria does not involve very great difficulties.

## BELGIUM :

## I. PRE-WAR CURREXCY

Curreacy conditions in Belgium since the formation of the Latm Monetary Union, and even before, have been closely allied with those in France. In fact it was often claimed before the war that the real backing for the paper and silver circulation in Belgium was the gold reserve in the vaults of the Bank of France. This was becsuse the bank notes in Belgium were exchanged only for silver, which then conld be exchanged at the Bank of France for gold. The Bank of Belgium had the option of redeeming either in gold or silver and usually redeemed in the latter metal.

As in France, since the conference of the Latin Union in 1878 the monetary unit of Belgium has been the gold franc, weighing 0.32258 gram of gold 0.900 fine, and with a mint parity in United States money of so.192947. The monetary experiences of Belgium follow closely those of other countries of the Latin Union. The monetary law of Belgium, passed on June 5, 1832, is almost a literal reproduction of the French Law of 7 Germinal an XI, in which free coinage was proclaimed and a standard unit of 5 grams of silver nine-tenths fine created under the nanae of the franc. Article 7 of the Belgian law provided for the coinage of gold pieces of 20 and 40 francs at a ratio between gold and silver of $151 / 2$ to 1 . Between 1832 and 1847 very little coining took place in Belgium, and during this period French silver and Dutch gold, the latter coined at the ratio of 15.875 to 1 , circulated in the country. This was due, in the case of gold, to the fact that Belgian gold commanded a premium of 8 to 10 francs per thousand over silver.

In 1847 Belgium broke away from the bimetallic ratio of $151 / 2$ to 1, discarded the 20 and 40 franc gold pieces, which were the same as the French, and began the coinage of new coins of 10 and 25 francs at an issue © Price of 3,495 franes per kilogram 0.900 fine, or at a ratio with silver of 15.80 to 1 . A law of March 4, 1848 gave legal tender to English sovereigns and Dutch 10-florin gold pieces. Belgium, in an effort to provide itsef with adequate metalic circulation, had thus made legal tender four different gold coins, each with a different relation to silver, as follows:


At about this time the relation between gold and silver changed. The gold discoveries in California and Australia had begun to show their effects opon the value of the yellow metal, and the value of the

[^7]gold in Belgian gold coins declined below that of the face value of the coins. In December, 1850 , gold coins were at a discount in terms of silver of about 2 francs per thousand. As a result, the country was flooded by the gold currencies to which it had given legal tender, and experienced difficulty in retaining its silver coins. The legal tender quality was withdrawn from the British sovereigns on September 28, 1849, from the Dutch gold 10 -florin pieces on June 14, 1850, and from the French gold coins on December 28, 1850. Silver was recognized as the sole standard, the coinage of gold ceased, and Royal decree of August 11, 1854 demonetized gold coins, struck under the law of 1847, and provided for their payment into the treasury for taxes. ${ }^{3}$ Although gold was demonetized the people retained for some time the French 20 -franc gold pieces, even though the National Bank accepted these coins only at 19.75 francs silver.

A monetary commission appointed in 1859 found that French gold had driven all silver out of Belgium except a quantity of French silver pieces which were underweight. The law of June 4, 1861, reestablished the legal tender of French gold, and Belgium returned to the double standard of 1832-1850. Difficulties still existed, however, the most important of which was the great scarcity of small silver coins. Informal discussions on this subject between France and Belgium in 1865 gave the former nation the opportunity of calling the first monetary conference, held November 20 to December 23, 1865, which resulted in the formation of the Latin Monetary Union.

As has been indicated, the main purpose of the conference was to regulate the coinage of subsidiary coins. Since the relatively high value of silver had placed all the participants on a gold basis the presumption was they would stay on the gold basis. Article 4 of the agreement provided that subsidiary coins should have a fineness of 0.835 and should not be issued to a greater amount than 6 francs per inhabitant. The coinage ratio for these forms of money was 15.8 to 1. Article 3 preserved the French ratio of 15.5 to 1 for the 5 -franc pieces and extended to the issues of all participating powers either legal tender quality or the promise of acceptability in unlimited quantities by the banks of issue of all nations members of the union.

The Latin Union in its original form, providing for the free coinage of both silver and gold, lasted only nine years. The primary reason for the restrictions on silver coinage which were introduced in 1874, and which resulted finally in the cessation of silver coinage in 1878, was the alteration in the relative values of the two metals in the market. After 1865 gold coins began again to command a premium over silver coins. As a result gold tended to disappear from circulation and to be replaced by silver. This tendency was especially evident in Belgium, where large quantities of silver were coined and put into circulation. Several reasons have been put forward to account for these excessive silver coinings in Belgium. In the first place Austria suspended specie payments at about that time; also Austrian florins were being demonetized in Berlin. A lively trade sprang up between Berlin and Brussels of shipping silver to Brussels to be coined. In the second place the Belgian mint was one of the best equipped in the Latin Union, and the other members appeared to be willing to let Belgium coin under her own stamp while their own mints were inactive. In the third place the settlement of the

[^8]French indemnity after the Franco-German war involved large settlements via Brussels and heary drains on the Belgian metallic reserves. To restore these reserves the National Bank coined silver which, according to law, might be used in redeeming its notes. However, the responsibility for the large coinings of silver rests with Belgium for failure to adopt the restrictive measures which were adopted in other countries belonging to the union, notably Switzerland. During the nine years of complete free coinage of both silver and gold Belgium minted coins as follows:


On September 5, 1873, a decree of the Government limited the coinage of silver to 150,000 francs per day, a considerable reduction in the rate of coinage, and on December 18, 1873, coinage became no longer free but was reserved for the State.

In 1874 a convention of the members of the Latin Union allocated certain sums which should constitute a maximum of silver 5 -franc pieces which each might coin during the succeeding five years. While other members were very moderate in using this permission, Belgium coined close to her maximum, as shown below:


In 1878 the union suspended indefinitely the coinage of silver:
The year 1885 was one in which members of the Latin Monetary Union might call for a cancellation of the agreement, and in that year both France and Switzerland served notice of an amendment in the shape of a liquidation clause which provided that at the termination of the union each nation should reimburse in gold or foreign exchange the face value of its silver 5 -franc pieces found in circulation in other member countries. France had seven hundred to eight hundred million francs in 5 -franc pieces of Belgium and Italy, which would have involved an expense to these two latter countries of 22 per cent, of the nominal amount of these pieces, or one hundred and fifty-four to one hundred and seventy-six million franes, had the coins been melted down and the silver been sold to provide funds for redemption.

Belgium naturally opposed this form of liquidation. Professor Ansiaux, of Brussels, estimated that the aggregate loans required to cover the loss on sale of silver and to provide the necessary supplement to Belgium's gold reserve in order to insure the convertibility of notes, would have amounted in 1885 to $300,000,000$ franes, which at that moment would have inflicted a serious burden on Belgian finances.

Belgium proposed that this liquidation of expatriated coins should take place pro rata to the inhabitants of each country, i. e., that all coins circulating outside of their countries should be pooled for redemption and the expense divided according to population. This Was not acceptable to either France or Switzerland, and, since it was more unfavorable to Italy than the plan of France, Italy also sided with France, which left Belgium alone.

The Belgians withdrew from the conference, but nevertheless an agreement was signed on November 6, 1885, embodying the French plan of liquidation. The Belgians immediately resumed negotiations with the French, and based their new plans upon what they called the repatriation of coins by natural or commercial means. By this they meant that the coins, having ceased to have legal tender abroad should return to the home country in payment of commercial balances. In this fashion the home treasury was to be saved the danger of having a sudden burden thrust upon it. The French accepted this thesis in part, and on December 12, 1885, it was agreed that, in case of liquidation of the union, of the first $200,000,000$ france of Belgian coins withdrawn from French circulation 100,000,000 would be immediately redeemed by Belgium. As for the remainder Belgium agreed not to adopt during the next five years any measures which might interfere with the repatriation by ordinary commercial and financial processes. Since the Bank of France held $170,000,000$ silver Belgian coins which it might throw on the Brussels market, the danger of a disagreement had forced Paris exchange up and caused foreign exporters to demand London or Paris credits.

The 1908 convention of the Latin Monetary Union was the next which had a bearing upon the Belgian situation. Belgian coins had continued to appear in the vaults of the Bank of France and in French circulation. It was estimated that the amount of Belgian 5 -franc coins in circulation in France at this time was $100,000,000$ francs and that those held by the Bank of France amounted to $153,000,000$ francs. By the terms of the 1908 convention the Belgian Congo was admitted to the union, and Belgium immediately began to ship some of her excess silver to her colony. In 1909 and $1910,7,346,000$ francs, for the most part silver, and in 1911, $10,000,000$ more, were sent to the Congo.

The National Bank of Belgium, which is the sole bank of issue, was founded by the law of May 5, 1850, and was given a charter for 25 years. This charter has been prolonged, by laws of May 20, 1872, and of March 26, 1900, each time with important modificatiors. The original capital of the bank was fixed at $25,000,000$ francs, but in 1872 this amount was increased to $50,000,000$ francs, at which sum it now stands. The National Bank, although the sole institution exercising at present the right of issuing bank notes, does not, however, have an exclusive privilege of note issue. Nevertheless, since the statutes and powers of any corporation founded in Belgium must have legal sanction, the Government is in a position to prevent. any other organization of that type from exercosing the privilege. There is nothing in Belgian law, however, to prevent a partnership or an individual from issuing notes, with the difference, of course, that these notes will not be legal tender nor accepted by public offices.

The bank discounts three-name paper with maturity of 100 days or less, with provisions that in certain cases collateral with a market value over 100 per cent the amount of the bill may be substituted for
the third signature．An interesting peculiarity of the Belgian system is found in＂Comptoirs，＂or discount houses more or less dependent upon the different agencies of the bank，which for a slight commission supply the third indorsement on bills and guarantee them to the bank． The effect of this is to intrease greatly the number of small prom－ issory notes，arising none the less from commercial transactions， which the bank discounts for shopkeepters and laborers．

According to article 34 of the statutes，the bank must keep a metallic reserve equal to one－third of the demand liabilities．This provision was suspended at the beginning of August，1914：Like－ wise，according to article 23 the bank may not hold in its portfolio discounted treasury obligations to e sum exceeding $20,000,000$ francs．

This provision was suspended in 1918，when the bank undertook to advance funds for the exchange of marks left in Belgium by the German occupying forces．${ }^{3}$

The National Bank of Belgium may，according to its statutes， redeem its notes in either gold or silver，and it has constantly made use of this option to redeem in the latter metal，retaining its gold and using its foreign portfolio to reduce exchange fluctuations． Before the war the bank had never been compelled to suspend specie payments．

The State shares importantly in the profits of the bank．The entire profit from loans and discounts resulting from rates charged customers in excess of $31 / 2$ per cent（i．e．，the profit over and above $31 / 2$ per cent）goes to the Government．One－quarter per cent per semester of the avarage productive circulation above $275,000,000$ must alse go to the State；the bank also pays a stamp tax on its notes．The bank pays 230,000 francs per year toward treasury expenses in the Provinces．Finally，the State takes one－quarter of the net profits after a dividend of 4 per cent per annum on the capital is deducted．Thus in 1923 out of total profits amounting to $83,380,705$ francs，the National Bank was compelled to turn over $\mathbf{4 0 , 2 1 4 , 3 8 7}$ francs to the Government．

The following table shows the condition of the bank from 1851 to 1914：

National Bank of Belpiums，1851－1914
C［000 omftum；December 21］


| Dee 31－ | $\begin{array}{\|l\|} \text { Metallise } \\ \text { repre } \end{array}$ | Faretgn holding | $\begin{aligned} & \text { Damentic } \\ & \text { bills } \end{aligned}$ | Note ir culation | Depoentis | Toten deprositis | Percentapo of metalise reserves to notes and deporis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prence ${ }^{\text {Pramer }}$ |  | Frame | Prance 50,346 | France | Prames |  |
| 1960 | 180， |  |  |  | 8， 805 | 119，725 |  |
| 1880 |  | －3i4i | 站等 |  | $8 \mathrm{8L} 500$ | 23， 48 |  |
|  | 12000 | 54，910 | 28， 062 |  |  | 413112 | 年 |
|  | c， |  |  |  |  |  |  |
|  | 101， 108 | 174，008 |  | 404．721 | 7\％，${ }_{7}$ | 478.45 <br> 4808 | 188 |
|  |  | ${ }_{17}^{19.850}$ | ${ }^{234} 300$ | ${ }_{631} 838$ | \％81， 74 | 712,386882085 |  |
| 180 | 117， 62 |  |  |  |  |  | 14 |
| 1910 |  | 17238 | （3）．458， |  | $\mathrm{m}_{13}^{183} 119$ |  | 30 |
| 1912 |  |  |  |  | ${ }_{138}^{2381}$ |  | 永 |
| 1913 | 304， 308 |  |  | 1，08， 407 | 14， 1178 |  |  |
| 1814. |  |  |  | 1；006，488 | 118，004 | i，121， 132 |  |

[^9]
## II. CURRENCY, CREDIT, AND PRICE "MOVEMENTS, 1914-1925

The progress of inflation in Belgium from August 3, 1914, until the end of 1918 can only be roughly inferred from scattered statistics and from a comparison of the known circulation at the beginning of the period with that at the end of the period. No statistics are available covering the continuously increasing circulation of German marks, which were declared legal tender by the occupying forces on October 3, 1914.

At the beginning of the war in 1914 the National Bank of Belgium, like other banks of issue throughout the world, passed through a most trying period. A run on private institutions compelled the National Bank to absorb huge quantities of commercial paper, and the portfolio of commercial discounts rose from 425,000,000 francs on July 25 to $616,000,000$ on July 30 to $830,000,000$ on August 6, and to $883,000,000$ on August 13. Advances on public securities advanced from $58,000,000$ to $102,000,000$ between July 25 and August 6.

The bank was besieged by holders of notes who wished to convert them into hard cash. From the 27th of July to the 1st of August, 1914, $50,000,000$ francs in silver were paid out by the bank which was permitted by law to redeem in either gold or silver. The silver reserve fell from $74,000,000$ on June 30 to $4,800,000$ on December 31, 1914. As a measure of protection against these panicky conditions the bank raised its discount rate from 4 per cent to 7 per cent. At the same time the bank was permitted to apply paragraph 2, article 34, of the statutes, which allows reserves to fall below one-third of the demand liabilities under circumstances and within limits approved by the Minister of Finance. The 5 -franc silver pieces withdrawn from the bank passed immediately into hoards and the bank was compelled to put into circulation 5 -franc notes, which had been prepared some years previously with a view to such an emergency.

On August 3, 1914, after receipt of the German ultimatum, the Belgian Government declared 8 moratorium on commercial bills, and the forced circulation and nonconvertibility of bank notes. On the same day, by a third decree the Government delcared a moratorium on bank deposits, limiting withdrawals to a thousand francs per fortnight. Thus began Belgium's inconvertible paper money experience.

The Minister of Finance on August 3 ordered the bank to transfer its metallic reserves, unissued notes, government securities, and the plates for printing notes to Antwerp. Later these things were transferred from Antwerp to London where they were deposited with the Bank of England. The bank, however, retained its office in Brussels during the entire war. The effect of this move was to leave the country without a convenient means of increasing its circulation, and at the same time to leave in the hands of the Belgian Government in London, the means of issuing paper money which enjoyed circulation behind the German lines, i. e., in occupied Belgium, and thus possibly to secure funds in this way.

The German authorities demanded the return of the metal and plates. When the National Bank in occupied Belgium had sent two missions across the lines to persuade the Belgian Government to accept this return, and when each mission was unsuccessful, the Germans, on December 24, 1914, withdrew the right of issuefrom the National Bank and conferred it upon the Société Générale, Belgium's largest private banking institution. The National Bank agreed to this after consulting with leading banks in order to avoid the introduction into Belgium of currency under German control. ${ }^{1}$

The circulation in Belgium during and after the war was composed as follows: (1) National Bank notes, (2) current account notes (issued by the National Bank), (3) notes issued by the Societe Générale de Belgique, (4) notes issued by the Communes, and (5) German marks.

National Bank of Belgium, 1915-1824
[Milifogs of france; end of month Gigares, Borres: Bapporte de le Benque Nationale de Belgrifue]

|  | Gold | Silper | $\left\|\begin{array}{c} \text { Foroign } \\ \text { change } \end{array}\right\|$ | Total gold silver, and foreign axchange | ing | Current account depoaits | Total notes <br> - and depopite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1912-Jmis. | 227.4 | 67.0 | 141.9 | 436.4 | 1,008. 8 | 1125 | 1,119.4 |
| December | 249.0 | 68.3 | 171.8 | 477.2 | 1,067. 4 | 117.0 | 1,184. 4 |
| 1014-June.- | 260.3 | 74. 6 | 1384 | 473.4 | 1,007. 4 | 118.6 | 1,121.0 |
| December | 204.1 | 4.8 | 145.8 | 414.8 | 1, 614.2 | 97.8 | 1,712. 1 |
| 1918-June...... | 262.8 | E. 8 | 346.8 | 616.2 | 1, 1024 | 182.8 | 1, ¢15. 2 |
| Decambe | 2620 | 6.8 | 320.1 | 5949 | 1,320.3 | 2180 | 1, 636.3 |
| 1910-June.. | 2029 | 5.7 | 463.4 | 7320 | 1, 291.0 | 2022 | 1,403.8 |
| 1017 December | 2029 | 6.2 | 2238 | 489.5 | 1,281. 5 | 101.8 | 1,473. |
| 1917-June... | 2829 | 8.8 | 225.0 | 494.5 | 1,2884 | 140.8 | 1,400.8 |
| Decembe | 2829 | 6.6 | 2331.6 | 503.1 | 1,287.9 | 1685 5 | 1,488. 6 |
| 1918-Jume...-. | 2820 | 11.0 | 215.6 | 489.6 | 1,282 1 | 146.7 | 1,407.9 |
| 1010 Decamber | 264.8 | 24.8 | 100.6 | 880.4 | 8,210. 4 | 6826 | 8789.1 |
| 1010-June... | 286.0 | 27.8 | 27.8 | 310.8 | 4, 608.0 | 28880 | 7,24. 1 |
| 109 D Decamber | 266.4 | 27.1 | 56.8 | 350.4 | 4.785 .9 | 2481.7 | 7.207 .6 |
| 1890-June | 266.4 | 29.2 | 64.6 | 860.4 | 6,265.3 | 1. 881.8 | 7.24.9 |
| 1921 Deatune | 266.5 | 27.8 | 27.1 | 321.5 | 6,200. 4 | 1. 189.8 | 7.410 .8 |
| 1921-June--.-- | 206.5 | 38.8 | 25.8 | 831.2 | 6, 118.0 | 1.118.8 | $7,288.8$ |
| 1989-Jun6. | 268.5 266.5 | 40.5 | 20.0 19.6 | 327.1 | $6,418.0$ $6,288.7$ | 667.1 887.9 | 7,082.1 |
| December | 268.0 | 88.0 | 17.3 | 341.8 | 6,878.3 | 458.8 | 7,233. 1 |
| 1923-June. | 2889 | 021 | 18.8 | 847.8 | 6,832 2 | 451.8 | 7,234. 1 |
| 1023 Dacembe | 270.5 | 780 | 182 | 883.7 | 7,537. 1 | 480.2 | 7,987.4 |
| 1901-June.... | 270.5 | 68.8 | 17.6 | 354.9 | 7,668, | 8482 | $8,017.0$ |
| Decamber. | 272.2 | 74.0 | 30.0 | 376.2 | 7,873.1 | 487.7 | 8,310, |

Reference to the accompanying table shows that the outstanding circulation of national bank notes on June 30, 1914, amounted to $1,007.4$ million francs, from which figure it rose to $1,614.2$ millions at the close of that year. On December 22, 1914, the bank was forbidden to issue any new notes or to reissue old notes which came into its possession. Further orders from the German authorities on April 28 and July 5, 1915, required all customs and tax receivers to exchange National Bank of Belgium notes for those of the Sociéte Generale. Thus the circulation of the national bank declined gradually until the end of the war. Practically all the notes outstanding were hoarded, and they were seldom seen in circulation, where they commanded a premium over other forms of payment.

From the beginning of 1915 the national bank made efforts to reduce its portfolio of discounts rendered immobile by the moratorium

[^10]decree. An offer of a rebate of 2 per cent on interest charged brought in repayment to the extent of $200,000,000$ francs between February 20, 1915, and March 31, 1915, payments being made largely by banks having surplus funds and in German marks. Presentations to drawees were made in July and November of 1915, with the result that the portfolio fell to $522,837,000$ francs on December 31, 1915, from $933,248,000$ at the end of 1914. On January 6, 1916, the German administration declared the gradual removal of the moratorium beginning March 1.

## CURRENT ACCOUNT NOTES

The removal of bunk notes and plates from the vaults of the national bank placed that institution and the nation in a difficult position in view of the monetary crisis following the outbreak of the war. On August 26, 1914, therefore, the national bank decided at the request of Brussels banks to issue a special form of bank notes known as "compte courant" notes. This issue was made and was carried along through five months. The issue at its maximum amounted to $189,310,500$ francs. About $100,000,000$ francs of this issue served to liquidate the demand deposits of the national bank, and the rest were withdrawn by the State Savings Bank, the Communal Credit Bank, etc. When the Société Générale began to issue notes, the withdrawal of the compte courant notes commenced, the latter being exchanged for notes of the Société Générale. At the beginning of 1916 about $50,000,000$ francs of these compte courant notes still remained in circulation.

## NOTES OF THE SOCIÉTE GENÉRALE DE BELGIqUE

The German authorities on December 22, 1914, gave the Sociét6 Générale de Belgique the right to issue notes. Notes of this institution increased rapidly during the war and reached a maximum on February 1, 1919, of $1,898,178,000$ franes, declining promptly thereafter. The following figures show this development:

## Circulation of Saciete Gentrale

| Feb | 94, 322, 000 | 18. | 1, 405, 289, 000 |
| :---: | :---: | :---: | :---: |
| June 30, 1915 | 289, 853, 000 | Oct. 31, 1918 |  |
| Dec. 31, 1915. | 609, 185, 000 | Dee. 31, 1918 | 1, 888, 352, 000 |
| June 30, 1916 | 722, 628, 000 | Feb. 1, 1919 | 1, 898, 178, 000 |
| Dee. 31, 1916. | 850, 465, 000 | Dee. 31, 1919 | 981, 449, 000 |
| June 30, 1917. | 928, 711, 000 | Dee. 31, 1920 | 261, 537, 000 |
| Dee. 31, 1917. | 116, 082, 000 | Dee. 31, 1921 | 45, 712, 000 |

Behind these notes was the paper of financial institutions responsible for the war contributions levied by Germany, the third signature required by Belgium's law to make paper eligible for rediscounting being replaced by provincial bonds taken at 80 per cent of their value. Thus the issue department of the Sociéte Generale remained within statutory limits. A small amount of notes was issued against commercial paper representing transactions of the relief organizations and of those few industries which produced for domestic needs.

Both the national bank and the issue department of the Societe Générale retained whatever German marks they received and regarded the marks as representing gold in the Reichsbank. The

Sociéte Générale issued its own bank notes against these marks. The German administration objected to this practice and said that it really placed the burden of security of the notes of the Societe Générale on the metallic reserves of the Reichsbank. The Germans, therefore, ordered that the mark notes be returned to Germany for credits in German banks, and when the two Belgian institutions refused, the marks were seized and forced credits for the institutions created, credits which, however, could not be availed of by. the creditors. On December 12, 1916, 189,500,000 marks were seized in the vaults of the national bank. Similar seizures were made at the issue department of the Sociéte Génerale, and in the December 31, 1918, balance sheet we find a credit of $1,481,000,000$ francs egainst the German Government representing these forced credits. By the terms of the armistice these sums were returned to Belgium in the form of mark notes, these latter being exchanged for paper money of the Belgian National Bank in accordance with the conversion policy of 1918 and 1919, discussed below.

The seizure of mark notes changed the policy of the Sociéte Générale, and thereafter this institution forced into circulation all the marks it received, thus reducing the circulation of its own notes and enabling it to avoid loans of marks to the German Government.

## NOTES ISSUED BE THE COMMUNES

When the Germans occupied Belgium the communes became practically autonomous, as far as the central government was concerned, since the central government of Belgium had left the country. The communes in occupied Belgium then issued notes to relieve the monetary situation, the former currency being hoarded in large part. An investigation by the national bank found that in August; 1915, there were in circulation, for the most part in the two Provinces of Flanders, $57,000,000$ francs in communal notes, based in large part on Government securities. The serious danger of counterfeiting and the nonacceptability of these notes outside the issuing commune led the bank to urge their withdrawal. They practically all disappeared within a year following these recommendations.

## mark notes

The fifth kind of circulation in Belgium, and probably the largest in amount, at least at the close of the war, was that of German mark notes. These on October 3, 1914, were declared legal tender by the German civil administration for all payments. The rate of exchange with francs was established at 1.25 francs for 1 mark.

The number of marks introduced into Belgium has been the subject of controversy between the Belgian and the German Governments since the close of the war. Belgian claims go as high as $6,100,000,000$ marks, i. e., the amount held to-day in the vaults of the National Bank. German representatives claim that only $4,000,000,000$ marks were introduced and that the remainder represents sums brought in by fraud from Holland, France, and Germany at the time of the conversion of 1918-19.

On October 22, 1918 a decree law of the Belgian Government forbade the introduction into Belgium of all moneys of enemy powers;
a second decree law of October 24 authorized the taking of measures necessary for the reorganization of the circulation and the withdrawal of foreign notes. Obviously these laws were effective only within the limits of the Belgian military advance. On November 9, 1918, an issue of 5 per cent treasury bonds, of three years' maturity, was authorized; three-fourths of the subscription was to be paid for in marks and one-fourth in Belgian francs. The loan closed on January 15,1919 , with subscriptions amounting to $3,100,000,000$ francs, of which $1,792,000,000$ francs were paid for in marks at 1.25 francs to the mark. About $1,433,600,000$ marks were thus withdrawn from circulation.

Marks having ceased to possess legal-tender qualities in Belgium, their prompt retirement was urgent and was demanded by public sentiment. A ministerial decree of December 7, 1918, arranged for this retirement. Technical difficulties prevented the beginning of the operation before the end of December, 1918, but it was practically completed during the month of January, 1919. Sums less than 1,000 marks, i. e., equivalent to 1,250 francs, were immediately exchanged by the bank as agent for the Government. For larger sums other arrangements were made. About 4,666,400,000 marks were eventually withdrawn from circulation, which together with the $1,433,600,000$ paid in for the loan made a total of $6,100,000,000$ marks withdrawn, valued at $7,592,000,000$ francs. The rate of 1.25 francs to the mark probably overvalued the mark in view of the relative depreciation of the two currencies at this time.

In effecting this operation the National Bank of Belgium was compelled to issue large amounts of notes. As cover for these notes the Government gave the bank bonds, taking the marks in return. Article 23 of the bank's statutes provides that the institution can not hold in its portfolio discounted treasury bills for more than 20,000,000 francs. In 1919 the bank made advances to the Government of $5,800,000,000$ francs, all of which was used in redemption of mark notes. A contract giving lawful form to the bank's advances to the State was later signed July 19, 1919. By its terms the bank renounced all claims for interest, and the debt took the form of renewable three months' bills of $100,000,000$ franca each. The Government can not demand prolongation of the bills once it requires the bank to resume specie payments. On August 29, 1919, in extraordinary session, the stockholders of the National Bank voted approval of the agreement and modified the statutes accordingly.

Before the war deposits of the Bank of Belgium fluctuated in the neighborhood of one hundred and ten to one hundred and twenty million francs. By December 31, 1918, they had reached the figure of about five hundred and eighty-three million francs, and by June 30, 1919, reached the high figure of $2,526,000,000$ francs. After this date they declined gradually exhibiting considerable stability since the first of 1923 as shown in chart 7.

It will be noticed also that the note circulation increased continually from the close of the war almost to the present, showing more stability, however, in 1924. The increase in circulation was due in part to the utilization of current-account credits created in favor of holders of German marks when the marks were converted, and in part to the fact that the Belgian franc has now to meet the currency requirements of the Grand Ducky of Luxemburg. In 1921 and 1922
the business depression prevailing throughout most parts of the world was felt also in Belgium. In the autumn of 1922, however, an industrial revival commenced, and business at the present time in Belgium is fairly prosperous.

Since the advance from the bank to the Government of 5,800 ,000,000 francs to finance the conversion of marks into franes in 1918 and 1919, the Government has not borrowed from the bank, with the exception of a credit of $64,000,000$ received in 1922 and paid off promptly. (This credit was for the withdrawal of marks from German territory ceded to Belgium by the treaty of Versailles.) The Gov-

CEART 7



End of month

ernment debt to the bank has been gradually reduced and at the close of 1924 stood at $5,200,000,000$ francs. It was the original intention of the Government to reduce the debt more rapidly but demands upon the treasury, and various difficulties interfered.

Belgium has held Germany responsible for the funds necessary to cancel the indebtedness incurred in withdrawing the mark circulation from Belgium. The treaty of Versailles denied Belgium the right to reimbursement as a reparation charge, and left the settlement to be worked out in a separate accord between the two interested nations. Negotiations were undertaken, and in the Eraberger agreement. Germany accepted responsibility for a part of the mark circulation
in dispute. According to the agreement four billions were to be reimbursed by Germany. In return the Germans were to receive their property, held in the custody of the Belgian Government, property which had not been liquidated. The value of property already liquidated was to be retained by Belgium as security for the reimbursement. However, the German Reichstag failed to ratify the agreement, and in the meanwhile the marks seriously declined in value. At different occasions, and in fact whenever they met the Germans at conference, the Belgian representatives attempted to take up the question of reimbursement for the marks. In 1923, when prospects for a settlement seemed discouraging, the Belgian Parliament passed a law creating a special fund for reimbursement of the State's debt in question. The matter is still in dispute.

In 1914 the National Bank met the run on its vaults by paying, in accordance with law, silver against its notes, and the silver reserves consequently fell from $74,000,000$ francs to $4,800,000$ on December 31, 1914. Since the war there has been a large increase in the silver reserves of the bank, due to the unloading of peasant hoards, and to a small extent to liquidation of claims of Switzerland arising out of the Latin Monetary Union. During and after the war large amounts of silver coins minted by other members of the Latin Union found their way into Switzerland because of their higher purchasing power in that country. This was in spite of the laws of 1915 forbidding the exportation of the coins from France and Belgium, and of 1920 forbidding the importation of the coins into Switzerland. In December, 1921, Switzerland found that there were circulating within her borders $231,985,000$ francs in silver coins of other members of the Latin Union, of which $35,410,000$ francs bore the Belgian stamp.

On December 9, 1921, an important agreement in the history of the Latin Monetary Union was entered into by which this silver in the coffers of the Bank of Switzerland was liquidated. The conditions affecting Belgium were as follows: The major part of the holdings, to a nominal value of $29,410,000$ francs, were taken over by the Swiss Government, melted down, and recoined as Swiss currency. Switzerland was to be reimbursed for the remainder, $6,000,000$ francs, as follows: 2,000,000 in gold and 4,000,000 in Swiss 5 -franc pieces or in drafts on Switzerland. Thus, in addition to the large quantities of silver coins melted down fraudently during and after the war to take advantage of high silver prices and the low monetary value of the Belgian franc, nearly $30,000,000$ francs of Belgian silver pieces were disposed of.

The National Bank of Belgium, since early in its history, has kept an important part of its funds in foreign exchange holdings, a practice which has in the last few years become general for European banks of issue. In 1870 the foreign portfolio of the bank was useful in securing metal to meet a run on the bank. The foreign portfolio was useful at the outbreak of the war in 1914, when it gerved as a means of redeeming francs carried out of Beigium by refugees in England, France, and Holland. The foreign exchange holdings of the bank increased during the first two years of the war, as seen in the table on page 33. Since 1916 these holdings have declined greatly and at present amount to only about $\mathbf{3 0 , 0 0 0 , 0 0 0}$ francs, as compared to $138,000,000$ in June, 1914.

The National Bank of Belgium has maintained during and after the war relatively low discount rates. . This has been due to a desire to assist industry and commerce as far as possible, especially in the

## CHART 8

Belaidm-Tholratis Prices on Paptit Basis and on Goid Basib, Montily, 10a1-1925
IMinistry of Labor inder for Belgium, 128 commodities, last half of month; A pril, 1014-100; United States Buresn of Labor Statistics inder, 404 commodities, monthly average, 1913-100)

period of reconstruction following the war. Low interest rates were also desired to facilitate government borrowing on favorable terms. However, low discount rates have probably contributed to inflation and the resulting depreciation of the franc. The following table shows the course of the discount rates since 1851:

Discount rates of the National Bank of Belgium
[Sourca: Amnualre Etatistique de la Belgigte tet do Congo Belge, and Rapports de la Banque Nel tanalo do Belgique]

|  | Average | High | Low |  | Aversage | High | Low |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1851. | 4.00 |  |  | 1911. | 4.15 | 6.00 | 2.50 |
| 1860 | 83 |  |  | 1912 | 4.41 | 500 | 400 |
| 1870. | 237 |  |  | 1913. | 5.00 | 8.00 | 500 |
| 1880 | 2.35 3.28 |  |  | 1919 | 420 | 500 | 250 |
| 1885. | 3.28 | 400 | 400 | 1920. | 403 | 5.50 | 8. 50 |
| 1890. | 3.28 | 400 | 800 | 1921 | 8. 19 | 6. 50 | 8.00 |
| 1885 | 260 | 3.00 | - 250 | 1922 | 472 | ${ }^{6} 00$ | c. 50 |
| 1800. | 409 | 5. 00 | 4.00 | 1923. | 5.44 | 6. 80 | 450 |
| 1905 | 2. 17 | 400 | 2.60 | 1004. | 5. 50 | 8.50 | 5. 50 |
| 1910. | 4. 13 | 5.00 | 2.50 |  |  |  |  |

The price level in Belgium has increased considerably since the outbreak of the war, and reached its high point in February, 1924, as shown in Chart 8, when the index number was 642 (April, $1914=100$ ). The rise in prices during the war is accounted for by a acarcity of commodities as well as by an increase in the amount of purchasing media. During the period of German occupation the difference between index numbers based on artificially fixed prices and those based on free prices was great, the latter of course being much higher. The following figures show index numbers of retail prices during the German occupation:

Belgium-Inder Numbers of retail prices, 1914-1918
(April, 1914=100)
[Bource: "Rorne du Travall," Belgrim]


In 1919 prices declined and index numbers of prices in the last half of the year were about 340 to 350 . In 1920 prices rose again and reached about 477 in October. In 1921 there was a reaction, but beginning in the fall of 1922 a sharp rise took place, which continued with some reactions until February, 1924, as shown in the accompanying chart of wholesale prices. This great rise early in 1924 was partly a reflection of exchange depreciation when the franc touched new low levels. A marked fall in prices took place in March and April, and for the remainder of 1924 the level was around 550 or 560.

## III. FOREIGN TRADE

Belgium has long had an excess of imports, as shown in Chart 9. Until the present century, however, this excess never exceeded $300,000,000$ francs, and frequently fell below $200,000,000$ francs. After 1900 the excess of imports began to mount steadily, reaching $720,000,000$ francs in 1905, 733,902,000 franes in 1910, and 1,006,799,000 francs in 1913. In 1901 the excess represented 18 per cent of total imports and in 191322 per cent. To this excess of merchandise imports must be added an excess of gold and silver imports for most of the pre-war years, in fact, for all of them since 1906, when Belgium exported an excess of $56,397,000$ in gold. The continued excess of silver imports has been discussed above, but in this connection it is important to remember that this excess of silver imports took place in spite of the fact that the exchange premium on Paris continually favored an export of silver coins. The export traffic in silver coins escaped the customs records because it could be accomplished more simply clandestinely, while the repurchases by the national bank were faithfully recorded. It is therefore probable that the net silver imports were much less than the figures indicate-

Offsetting the excess of imports, Belgium had in her forcign trade several credit items. In the first place, there were sums brought back from France by Belgian laborers who migrated for short periods for seasonal employment. Another credit item resulted from the transit trade through Antwerp to Germany, Switzerland, France, and in some cases, as for instance fast freight, to Italy. The importance of this transit traffic is shown by the attached table.-

Belgium-Transit traffe, 1901-192s


|  | Qaxplaty | Talum |  | Qmantify | Velat |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mferic lopes | Pract |  | Matctan | Prener |
| 1501 | 2,879,453 | 1.411.211. 208 | 1920. | 5,55.69 | 2255. 211.8 |
| 1908 | 2.54, 183 | 1,547, 6, 838 | 1911 | -124 73 | 22080 |
| 1908 | \%.5P6, 746 | 1, $710,513,870$ | 1913 | 4,501, | 2 457. 2545 |
| 1904. | 3. 28.48 |  | 1913 | 7.803, 734 | 2.4588 |
| 1905 | 2, 50208 | $12 \underline{20} 5$ | 1910 | 1.944 | 2334.588 |
| 1906. | 4. 006.05 | 2208802014 | 1983 | 6,54.198 | 7, 13, 158. |
| 1908\% | 4. 37.063 | 2383.015 .82 | 19 l | 1 47\% 300 | 4.2085 |
| 1808 | 4.708.890 | 2 0m, 04, 623 | 1928 | 7.70n. 235 | 8 04528 |
| 190 | 4, 78.428 | 2,20, 355,585 | 18 | 893465 | 7, 581, 24, |

Perhaps the most important credit item in Belgium's international accounts is found in the large holdings of foreign securities by Belgian citizens and the foreign assets of Belgian companies. The large amount of foreign investments was due principally to the low interest rates prevailing in Belgium before the war, as a result in part of the advanced state of industrialization which Belgium had attained and which reduced the opportunities of employing capital

## BELGIUM.-Imports and Exporta of Merchandise; Annually, 1881-1923

 Spocial Importa-i. e., importa for domentic coneumption. Special Exportu-i. e., exports of domestic merchandise Quentity: Bliliont of kiloyrme For figures eee Tiable 17Valua: athlons of franes

profitably in Belgium. M. Clavier in his pamphlet on Belgian wealth before the war estimated the holdings of foreign securities by Belgium at $5,000,000,000$ gold francs. The foreign assets possessed by Belgian corporations he placed at $3,000,000,000$ gold franes, of which about $1,000,000,000$ were invested in Russia. The total of these revenue-bearing sources was thus $8,000,000,000$ francs, from which, estimating an average return of 5 per cent, Belgium probably received about $400,000,000$ gold frances per year. This accounts for about half the excess of imports of most pre-war years. The remainder is accounted for by the transit traffic of Antwerp, by banking services, and certain other items. The most important debit item in Belgium's invisible trade is that resulting from shipping services rendered Belgium. A large part of the country's foreign trade prior to 1914 was carried in British and German ships.

For the war period, when Belgium was occupied by German forces, foreign trade figures are not available. Figures for 1919 show a great reduction in quantities imported and exported, and also an important reduction in the value of goods exported. Since 1919 quantity figures have increased although they are still below prewar figures. Import and export values, however, are above pre-war figures, due largely to higher prices. The increase in values but not in quantities, as compared to 1913, is due also to the fact that Belgium is carrying her goods to a higher point of manufacture than before the war. Instead of exporting pig iron to Germany and England, as in 1913, Belgium machine shops with their modern equipment, installed since the war, are turning more to the production of finished machines and tools which have a greater value per unit of weight than the unfinished iron or steel. The same tendency is taking place to a certain extent in textile production.

Belgium imports large quantities of food products, especially cereals and meats, also raw materials such as wool, cotton, iron ore, coking coal, and other products. The exports are largely textiles and other manufactured articles.

In spite of the war disturbances Belgium has not lost entirely her investments abroad, and the director of direct taxation estimates that $500,000,000$ francs was declared in 1922 as revenue coming from foreign securities. On the other hand, Belgium has borrowed extensively in foreign markets, especially in France, Great Britain, the United States, and Canada. The borrowing has been by both the Belgian Government and private interests. Interest is not being paid on all these foreign obligations, and the significance of the revenue being received from foreign securities should be interpreted accordingly. Probably on net account Belgium is now a debtor nation. In addition to credits borrowed abroad, Belgium has received credits for reparation account, a large part of which, however, has been received in kind.

In interpreting Belgian trade statistics allowance should be made for the economic agreement between Belgium and the Grand Duchy of Luxembourg, which went into effect May 1, 1922. By its terms tariff barriers between the two countries were abolished and a single system of rates and statistics applied to both. The effect of this is probably a slight increase in both exports and imports, but leaving the excess of imports at about the same proportion of total trade.

The following table shows the trade of Belgium with the principal countries:

Belgium-Imports and exports, by countries, 1913 and 1885
[Source: Bulletins Mensuels dn Commeree Special. Quantity in metric tons; value in thousands of trancel

|  | Imports |  |  |  | Exports |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1013 |  | 1983 |  | 1913 |  | 193 |  |
|  | Quankity | Vabue | Quantity | Value | Quantity | Value | Quantity | Falue |
| Argentina |  | 316,79748,67$1,090,297$ | 011,8238,813$9,345,352$ | $\begin{array}{r} 960,501 \\ 32,074 \end{array}$ | 457,184110.78 | $\begin{aligned} & 91,154 \\ & 20,978 \end{aligned}$ | 316,32054,091 | 348, 748 |
| Belgian Congo |  |  |  |  |  |  |  | 112,305 |
| Prance.- |  |  |  | $2,784,534$ <br> 912,040 | 8, 563, 184 | $762187$ | $\begin{array}{r} 8,252,739 \\ 709,391 \end{array}$ | 1.97\%, 661 |
| Germany | 10, 413,300 | 761, 765 | 3, 120, 3008 |  | 4,441,698 |  |  |  |
| Iraly Britain. | 3, 177, 504 | 518,475 44,007 | 5, 425,002 | 1,012 046 | $1,810338$ | 040, 378 <br> 511.710 | 1, 094.851 | 1, 782, 232 |
| Netherlards. | 2,409,005 | 35,903 | 2,925, 0203 | 1, 280.888 | $\begin{aligned} & 303.352 \\ & 2.460 .573 \end{aligned}$ | $\begin{array}{r} 75,931 \\ 820,630 \end{array}$ | $\begin{array}{r} 87,472 \\ 2,600,950 \end{array}$ | $\begin{aligned} & 172652 \\ & 1,182755 \end{aligned}$ |
| Switterland. | 1, $5 \times 52,190$ | 19,370 <br> 20,480 | 1,000, 2058 | 1, 1581,834 | $\begin{aligned} & 101,892 \\ & 208,186 \end{aligned}$ | $\begin{gathered} 53,416 \\ 106,381 \end{gathered}$ | $\begin{aligned} & 386295 \\ & 374,500 \end{aligned}$ | $\begin{aligned} & 122,440 \\ & 340,305 \end{aligned}$ |
| United States. |  |  |  |  |  |  |  |  |

## IV. EXCHATGE RATES ATD PURCHASING POWER PARITIES

During the war there were no quotations for Belgian francs in any of the important foreign exchange centers since Belgium was occupied by Germany. Certain sales and purchases of Belgian currency took place in Amsterdam and in Zurich, but the rates were nominal and have not been preserved in statistical form. The rate of exchange between Belgian franes and German marks during the war was fixed by the occupying forces at 1.25 franes per mark.

Pounds sterling, dollars, and French francs were quoted again in Brussels the second week in January, 1919. New York banks, however, did not quote rates on Brussels to any extent until the month of April. Dollar quotations in Brussels began at about 6 francs to the dollar, compared with a parity of 5.18 francs; sterling was quoted at 27.75 francs, compared with a parity of 25.2215 francs; and French francs were quoted at 105 Belgian francs, compared with a parity of 100.

New York exchange rates on Brussels fell rapidly during 1919, as can be seen in Chart 10. The fall of the Belgian franc in this year was largely a refection of internal depreciation which had been taking place for several years. Early in 1919 the Belgian franc was at a high level due to the artificial support given currencies of the allied countries by the United States. In March, 1919, artificial stabilization was withdrawn and the rates were left to themselves. Although further credits ceased, Belgium still held in New York a considerable amount of dollars, so that she was enabled to retard somewhat the fall in the franc.

The course of the Belgian franc follows very closely that of the French franc, and a comparison of the accompanying chart (No. 10) with that for the French franc (chart 21, vol. 1, p. 326) shows a striking similarity. The two curves appear almost identical. In Brussels the rate on Paris is the leading rate quoted, and the two countries have very close economic and financial relations. In October, 1919, the Belgian franc commanded a premium over the French franc. Most of the time, however, the Belgian franc has been at a slight discount in terms of French francs, which is the case at the present time.

From the first of 1920 to the latter part of 1922 the Belgian franc fluctuated around 7 cents, going as high occasionally as about 9 cents and as low as about 6 cents. In June, 1922, after the breakdown of new efforts to settle the reparations question, and the separation of France from the rest of the group, a decline in the Belgian franc began which continued with some interruptions until March, 1924, when a low point of about 3.16 cents was reached. Contributing to the decline in 1923 was an important outward movement of capital as a result of weakening confidence in Belgium and France. There had been in the previous years some exportation of funds, but in 1923 a pronounced "flight from the frane" developed.

In August, 1923, as a result of the exportation of capital, the Belgian Government placed severe restrictions upon dealings in foreign exchange. The purchase of foreign currencies was forbidden except for certain purposes which were permitted by the decree. These restrictions prevented some speculation but like previous measures were not entirely effective.

The rapid rise in the Belgian franc in March and April, 1924going from a low of about 3.16 cents in March to a high of about 5.72 cents in April-was largely a reflection of a similar rise in the French franc at this time. The French Government in March, 1924, established a credit of about $\$ 100,000,000$ in New York to be used in protecting the franc against further depreciation. The announcement of this positive action on the part of the French Government,

CHART 10
Beloive-Exchange Ratis, Hiot And Low, Montily, 1019-1925
[Cable Rates, New Yorz on Brusbels]
Cents par írane
[For Igures see Table 14]

coupled with satisfactory progress of the Dawes Committee in Paris, served to revive confidence and check the selling of francs by speculators and others. Also, Belgium, to help meet the exchange situation, in January, had arranged with the Schweizerischer Bankverein foreign credits to the extent of $£ 600,000, \$ 1,000,000$ and $16,000,000$ Swiss francs.

During the last half of 1924 and the first part of 1925 the Belgian franc remained around 5 cents, and the fluctuations became much narrower than they had been. This increasing stability of exchange rates has been of assistance to exporters, importers, and others who must deal in foreign currencies and who find the uncertainties of exchange fuctuations a considerable handicap in doing business.

The purchasing power parities of the Belgian franc with the dollar are shown in Chart 11, which also shows average exchange

rates. The purchasing power parity is the parity between the two units based upon the relationship between the price levels of the two countries, i. e., the parity according to purchasing power of the units. It will be noticed that most of the time exchange rates have shown greater depreciation than purchasing power parities. This has been due in part to lack of confidence, and to disturbed conditions in Europe which caused exchange rates to depreciate somewhat below the level warranted by the internal value of the unit. For various reasons, discussed in volume 1, the two curves should not be expected to coincide, although the tendency is for them to approach each other. It will be noticed that in 1924 the two curves came closer together and that the purchasing power parity curve showed increasing stability, which is a result of increasing stability of internal prices.

## V. STABMTZATIOE

Since the middle of 1924 increasing stability has been exhibited by the Belgian franc. This has been the result of a combination of factors, the most important of which are greater stability of internal prices, and improved conditions in governmantal finance. The price level in Belgium as shown in the previous chart (No. 7) has not showen any pronounced tendency either upward or downward since the spring of 1924, although minor fluctuations have taken place.

While deficits in the budget have not yet been eliminated, expenditures are more nearly being met out of current revenues. Since the end of the war the demands on the Belgium treasury have been hesvy, and large deficits, amounting to nearly $3,000,000,000$ francs in 1923, have resulted. Reparation receipts from Germany were not as large as anticipated by Belgium, which did not contribute to the establishment of a balanced budget. The following figures show the budgets of Belgium since the war, and also for the pre-war years 1910-1913. No figures are available, of course, for the war years, when Belgium was occupied by German forces.

Belgium-Receipts and expenditures, 1910-1915

[000 ampitacol]

| Yeer | Reedipa |  |  | Expendituras |  |  | Defete |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ordinary | $\begin{aligned} & \text { Extrear- } \\ & \text { dinary } \end{aligned}$ | Totel | Ordinary | Eytrack- dimant | Total |  |
| 1910 | ${ }^{\text {Pramer }}$ |  | ${ }^{\text {Prawa }}$ | ${ }^{\text {Frama }}$ | ${ }^{\text {Pramay }}$ | ${ }^{\text {Pranct }}$ | $P^{\text {Pramer }}$ |
| $1911 .$. |  | 42717 | ${ }^{788}$ | 689, 186 | 121,781 | ${ }_{8}^{810} 8$ | 128.909 |
| 1913 | 75, 614 | 10, 174 | 800, 780 | 75, 850 | 140, 63 | 208, 519 | 13, 713 |

[Bource: Annuaire Statistique de le Belgique]
1000 omitted]

|  | 1920 : | 1921 ' | 19221 | 1978 : | 1924: | 1025 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EECEIPT | Franes | Franca | France | Pranes |  |  |
| Ordinary. | 1, 106,736 | 1,308, 942 | 1,724,639 | 12,940,000 | 3,345,000 |  |
| Extraordinsey | 1,750 | 26,550 | 2,600 | 8,000 | 15,000 |  |
| Nonpermanent | 400,230 | 282, 500 | 36,500 |  |  |  |
| Redelpts from Germany: |  |  |  |  |  |  |
| On reparations account. | 92, 252 | 298, 752 | 2,933,870 | 1,640,000 | 1,036,000 |  |
| Oecupation and other --.-------- | 95,000 | 540,000 | 807, 210 |  |  |  |
| enterprises. | 712,377 | 1,077,562 | 1, 142, 175 | 1,341,000 | 1,003,000 |  |
| Food edministration | 1,350, 000 | 1,150, 400 | 75,550 | 4.000 |  |  |
| Total. | 3, 767, 345 | 4, 652, 706 | 6,722, 624 | 6,042,000 | 6,609,000 | 7,450,000 |
| Ordinary. | 2,082, 119 | 2,473,473 | 2,895,912 | 2,858,000 | 3,392,000 |  |
| Extraordinary | 376,974 | $\mathrm{I}_{2}, 368,011$ | 1, 034, 721 | 2,095,000 | 452,000 |  |
| Recovarable.-..-------- Goverament | 4, 044,533 | 2,982, 985 | 3, 058, 512 | 2,940,000 | 1,835,000 |  |
| enterprises. <br> Food administration. | $\begin{aligned} & 1,451,642 \\ & 2,088,074 \end{aligned}$ | $1,783,731$ $1,100,902$ | $\begin{array}{r} 1,678,010 \\ 80,650 \end{array}$ | $\begin{array}{r} 1,699,000 \\ 4,000 \end{array}$ | 1,931,000 |  |
| Total | 10, 043,642 | 2,809, 192 | 8,748,714 | 8, 180,000 | 8,322,000 | 8,220,000 |
| Deficit | 7, 176, 297 | 5,165,436 | 2028, 090 | 2,244,000 | 1,083,000 | 770,000 |

${ }^{1}$ Budgat laws passed.
1 Budget estimates.

- Includes nonpermanent, oecupstion and other.

Although complete figures are not yet available, the budgetary deficit in 1924 was less than estimated, due largely to increased receipts from taxation. Budgetary estimates for 1925, when all items are included, show a deficit of about $770,000,000$ francs. However, if capital outlays are excluded, the estimated receipts and expenditures for 1925 will come closer to balancing. The following figures show the budgetary estimates for 1925.

## Belgium-Receipts and expenditures, 1925

[Estimsted but not yet voted, March, 1025]

*. The total indebtedness of the Belgian Government at the present tinine amounts to about $41,000,000,000$ francs: A large part of the debt is in terms of foreign currencies, dollars, pounds, French francs, and Dutch florins, and since the value of these currencies in terms of Belgian franes fluctuates, no precise figure for Belgium's total debt can be given. The following figures show the total debt as calculated by the ministry of finance according to prevailing exchange rates on the corresponding dates:

$$
\text { B elgium-Public debt on September } 30
$$

| Francs | Franes |  |
| :---: | :---: | :---: |
| $\mathbf{2 5 ,} 470,000,000$ | $1922 \ldots$ | $39,502,000,000$ |
| $31,000,000,000$ | $1923 \ldots$ | $40,000,000$ |
| $37,026,000,000$ | $1924 \ldots$ | $40,684,000,000$ |

The indebtedness of Belgium to the United States Government amounted on November 15, 1924, to $\$ 471,823,713.39$, of which $994,794,143.33$ was interest accrued. The following table shows the details of Belgium's total indebtedness:

Belgium-National debt
[Scurce: Annualne Statistique de la Ealgique]
[000 mitted]

| Dee. al- |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: |

The improved conditions which have been taking place in government finance provide a good background for currency reform. Nevertheless, in Belgium, budgetary deficits have never been allowed to lead to inflation to the same extent as in some other countries, so that currency reform in Belgium is not dependent upon a balanced budget.

Currency reform in Belgium involves the question of determining a level at which to stabilize the franc. According to its gold par, the Belgian franc is worth 19.29 cents, which was its value before the war. However, at the present time; according to current exchange rates, it is worth only about 5 cents, and in 1924 was as low as a little over 3 cents. Opposition to stabilizing the franc at
its present low level has existed in Belgium, and there has been some sentiment for a gradual raising of the franc to its pre-war level. However, this policy would not undo the evil already done by depreciation, but would merely add new difficulties. A rising franc is depressing to business and industry, and at the same time causes injustice in the settling of contracts and other obligations. Financial and business interests in Belgium have generally come to accept the necessity of devaluation, i. e., stabilization at approximately the present low level, and would be opposed to measures of contraction and deflation with a view to raising the value of the franc. The monetary authorities of Belgium realize the difficulties and evils in the way of raising the value of the franc, but prefer not to deal with the question until currency reform is undertaken.

The present value of the franc according to purchasing power parieties is about 5.85 cents, which is slightly above that according to exchange rates of about 5.15 cents (April, 1925). These two indices indicate that a value of around 5 cents would be an appropriate one at which to stabilize the franc at the present time, a value at which stability could be most easily maintained and which would involve little change in wages and prices. For some time the franc has been fluctuating at a value of about 5 cents, so that business has become adjusted to the present franc. The present franc is an entirely different unit from the pre-war franc, although they both have the same name.

The gold value of the total note circulation of Belgium is shown in Chart 12, computed according to two different indices of the value

CHART 12
Beloitu-Gold Valuz of Total Noty Ctbcolation on Babis of Exchanoz Ratza amd on Baste of Puechasino Powre Pabities, Montily, 1919-1924


Of the franc, that expressed by the purchasing power parities and that expressed by exchange rates. The gold value of the total circulation is computed by miltiplying the amount of notes outstanding by the value of the unit. The decline in the gold value of the total circulation in the early part of 1924 was due largely to the depreciation of the franc, since the amount of currency outstanding did not demerease; in fact, the amount of currency outstanding was larger than it had been in 1923. Normally, if the amount of currency outatanding increases, the value of the unit tends to depreciate, so that when the two are multiplied the value of the total circulation tends to remain fairly constant. Under disturbed conditions; however, this may not be the case, since the rapidity with which the money circulates and other factors change. The upward tendency of the curves in the latter part of 1924 and the first of 1925 was the result largely of an increased value of the franc, since the amount of currency outstanding remained fairly constant. Relative stability in the gold value of the total circulation usually indicates more healthy conditions.

When Belgium has determined at what level the franc is to be stabilized, the next step is the accumulation of a sufficient gold reserve, or gold credits, so that redemption can take place with perfect freedom and all demands for gold can be met. Convertibility of all forms of currency in gold on demand, and freedom regarding the exportation and importation of gold, is the surest way to maintain the franc stable with reference to gold. The Bank of Belgium now holds gold in its vaults to the extent of about $\$ 55,000,000$, as compared with gold reserves of about $\$ 48,000,000$ at the end of 1913. Since gold is depreciated in value compared with 1913 a larger gold reserve is now necessary, and it is probable that before full redemption could safely be undertaken Belgium would need a somewhat larger gold reserve than that now held. Acquiring the necessary gold or gold credits would not be a very difficult task for Belgium and could be accomplished most easily through foreign borrowing. Foreign borrowing is probably necessary since the national bank's foreign credits are very much reduced as compared to before the war, and internal borrowing for the establishment of foreign credits may involve difficulties: At the end of 1913 foreign exchange holdings of the bank amounted to about $172,000,000$ francs (about $\$ 34,000,000$, while in March, 1925 , they amounted to only about $30,000,000$ francs (about $\$ 6,000,000$ ).

Exchange rates have now become much more stable than they have been, as a result of fundamental improvement in underlying conditions. This relative stability should be maintained and followed by a gradual restoration of free gold movements and the ultimate resumption of specie payments at a new value for the franc. The introduction of a new currency unit at some multiple of the current value of the franc, so that the new value would be convenient in size and conform to that of other international units, is chiefly a matter of arithmetic in conversion. Now that conditions are approaching normal, the immediate program for Belgium should be the selection of a rate at which stabilization is to be accomplished, and then the taking of positive measures to maintain this rate, such as has been done recently by several European countries, notably Germany, Austria, Hungary, Poland, Czechoslovakia, Russia, Finland, Latvia, and Lithuania.

[^11]
## CZECHOSLOVAKIA ${ }^{1}$

## I. CURRENCY PRIOR TO INDEPENDENCE

The Republic of Czechoslovakia declared its independence October 28, 1918, following the collapse of the Austro-Hungarian Army. Czechoslovakia had been a part of Austria-Hungary for several centuries, although the people of Czechoslovakia were different racially and had long had nationalistic aspirations. On October 28, 1918 the national committee (Nérodni Vybor) in Czechoslovakia assumed the power and declared the country independent. The committee promptly called upon the political parties in Czechoslovakia to nom. inaterdeputies for the National Assembly. The different parties were asked to nominate deputies in proportion to the strength shown in the general electiens of 1911. The National Assembly met November 14 and declared Czechoslovakia a Republic. A president was elected, Thomas Garrigue Masaryk, and the organization of the Government was then undertaken.

Masaryk, who was later elected president for life, was the principal figure in the securing of independence. He had left Czechoslovakia during the war to further the interests of the country abroad, going to America and the allied countries, where he obtained the support of the American and allied Governments. The people of Czechoslovakia hailed Woodrow Wilson's pronouncements on selfdetermination of peoples as especially in line with their aspirations, and after the United States entered the war became increasingly friendly to the allied cause. A Czechoslovak Army was organized in France during the war, composed of Czechs in America, and of those taken prisoners by allied armies, to fight now with the allied armies. Czechoslovakia had been forced to fight on the side of the Central Powers, although the people were not in sympathy with the Austro-Hungarian Government. An army was also organized in Russia from Czechoslovak prisoners captured by Russia, and fought against the Central Powers. After the inauguration of the Bolshe vist regime in Russia in 1917 the Czechoslovak Army there fought against the Bolshevists, and after the armistice, went across Siberia, finally joining the American forces in Vladivostok. The Government of Czechoslovakia repatriated these legionaries, as they were called, from Siberia, France, and also from Italy.

The status of Czechoslovakia was arranged in the treaties of Versailles, St. Germain and Trianon. On February 29, 1920, the National Assembly of Czechoslovakia adopted a constitution, which went into effect a few days later. On April 18, 1920, the first general election was held for deputies to the National Assembly.

As a part of the Austro-Hungarian monarchy, Czechoslovakia before the war had the Austro-Hungarian system of currency. The

[^12]gold standard was nominally introduced into Austria-Hungary by the law of August 2, 1892. According to this law the monetary unit was the krone, containing 0.338753 gram of gold 0.900 fine, which thus made it the equivalent of about 20.26 cents in American money. ${ }^{2}$ The crown was divided into 100 hellers. The silver coins were the 1,2 , and 5 crown pieces, which were legal tender only in limited amounts. There was free coinage of gold, and gold was legal tender in unlimited amounts.

In addition to the metallic money before the war were the notes of the Austro-Hungarian Bank, which circulated widely. The smallest denomination of the bank notes was the 10 -crown note. The bank enjoyed a monopoly of note issue and was required to hold a metallic reserve in gold or silver to the extent of 40 per cent of the notes outstanding. Foreign exchange holdings payable in gold could be counted as metal up to $60,000,000$ crowns according to the law of 1911. Additional circulation was allowed, but above a certain minimum bore a tax of 5 per cent.

The bank never was required by law to redeem its notes in gold. When the charter was renewed in 1911 the matter was discussed at length, and the arrangement made was that the bank should propose to the two Governments redemption in specie whenever the bank thought the time proper. In the meantime the bank was to use its efforts to maintain exchange rates stable at the gold par. This the bank was able to do most of the time, so that the paper and silver money was practically identical in value with gold money.

After the beginning of the war, restrictions on note issues were relaxed and the bank proceeded to issue large quantities of paper money, the notes being issued in small denominations. The Gorermment borrowed freely from the bank, and as a result inflation of currency and credit took place. In July, 1914, the note circulation of the bank amounted to a little over $2,000,000,000 \mathrm{kronen}$. By the first of 1919 this had risen to over $35,000,000,000$ kronen. The gold and silver reserves of the bank were very greatly depleted during the war and at the time of the armistice were about one-fifth the amount in 1914. In the middle of 1914 the reserves amounted to about $1,500,000,000$ kronen, of which about $1,238,000,000$ kronen was gold. It the time of the armistice in 1918 the reserves were only about $342,000,000$ kronen, of which about $268,000,000$ was gold. The increase in the bank's notes circulation during the war is shown in Chart 1 in the section on Austria.

[^13]
## II. CURREHCY MEASURES FOLIOWING IFDEPEEDEEGE

After the collapse of Austria-Hungary in October, 1918, and the pronouncement of independence by Czechoslovakia, the notes of the Anstro-Hungarian Bank continued to circulate as before in the various sections. They also were increasing in amount, since there had been no cessation of inflation. Czechoslovakis was entirely independent of the old Austro-Hungarian monarchy, yet the country's circulating media were the depreciated notes of the Austro-Hungarian Bank, which were out of the control of the new Republic. Czechoslovakia desired to complete the separation from the dual monarchy, and one of the first problems with which the new Republic had to deal, therefore, was that regarding the bank notes of the Austro-Hungarian Bank. The notes continued to be issued in increasing amounts, Bend protest was made by the Czechoslovak Government.

The method adopted by Doctor Rasin, minister of finance, in dealing with the problem was unusual. Preparations were made quietly for several weeks and discussed confidentially with the financial committee of the National Assembly. There was no intimation to the general public as to what was about to happen. On February 25, 1919, the plans were laid before the National Assembly in secret session, and were immediately adopted and put into operation. According to the plan, the frontiers of the country were closed from February 26 to March 9, and what travel took place was scrutinized very elosely to avoid smuggling of money. Foreign-mail service was suspended. During the period all the notes of the AustroHungarian bank were ordered to be brought to the public officesand banks to be stamped with the Czechoslovak stamp. Part of the notes were to be retained by the Government as a compulsory loan. Large posters were placed in conspicuous places telling the people what to do. The closing of the frontiers prevented any influx of bank notes from Vienna and Budapest, and after March 9 only. the notes with the Crechoolovak stamp were legal tender.

There were presented for stamping during the allotted time about $8,000,000,000$ kronen in notes of the Austro-Hungarian Bank and about one-half billion kronen in Kassenscheine, cartificates issued by the bank and which circulated as money. The Government also took over the deposit accounts in the branches in Czechoslovakia of the Austro-Hungarian Bank, which amounted to $1,616,885,000$ kronen, giving a total lisbility of over $10,000,000,000$ kronen. Of the $8,000,000,000$ notes presented $2,134,149,000$ kronen were retained by the Government in the form of a forced loan from the public, bearing interest at 1 per cent. Receipts given for these were made receivable by the Government in payment of the capital levy. In addition to the notes stamped and returned, there were about $300,000,000$ kronen in 1 and 2 krone bank notes which were not included in the order for stamping, and a few million kronen of
iron, nickel, and copper coins. The total circulation after the stamping was thus about $7,000,000,000$ kronen. The stamped notes were later exchanged for Czechoslovak notes, or Czechoslovak crowns as they are called.

The treaty of St. Germain, signed September 10, 1919, provided in article 206 that each of the States which had been formerly a part of Austria-Hungary should stamp the notes of the Austro-Hungarian Bank with the stamp of its own Government. These measures, it will be noted, were undertaken by Czechoslovakia several months prior to the signing of the treaty. ${ }^{3}$

A law was passed by Czechoslovakia April 10, 1919, which limited the amount of fiduciary circulation which might be issued. Article 10 of this law is summarized by the banking office of the Government as follows:

Any increase in the circulation of the State notes which exceeds (1) the total amount of the bank notes stamped according to the law of February 25, 1919, (2) one-half of the check accounts, and (3) one-half of the short-term cash vouchers of the Austro-Hungarian Bank taken over by the banking office is atrictly forbidden, except when the overissue of State notes is entirely covered by a aecurity of a purely private commercial nature.

No other increase is allowed except. when authorized by a apecial law. ${ }^{+}$
The maximum fiduciary issue allowed according to this law is about $7,000,000,000$ crowns. This provision has been rigidly observed, and the increases in circulation have been covered by gold, silver, or legal security. The law is thus a safeguard against paper money inflation, since legislative action is necessary before the fiduciary circulation can be increased. The following figures issued by the banking office of the ministry of finance show the details of the conversion transactions and the determination of the maximum fiduciary issue:

## Czechoslovakia-Legal maximum fiduciary circulation

Austro-Hungarian bank notes withdrawn from circulation -......-.--
Less bank notes retained on occasion of stamping and less bank notes retained on occasion of exchange (purchase)

Kr. 8, 015, 119, 794

Bank notes etamped and exchanged
Kr. 5, 880, 770, 985
Check accounts of the treasury departments at the Austro-
Hungarian Bank
789, 720, 443

[^14]CZECHOSLOVAKIA-Banking Office of Ministry of Finance.-Note Circulation, Loans and Discounts, Deposits, Foreign Exchange Holdings, Gold and Silver, and Prices, 1919-1925
Index numbers of Central Bureau of Statistics, 126 commodities, first of moneh, July, $1914=100$. Banking figures, end of month For figures see Tables 22 and 23

Prices: Percent


| Check accounts taken over.......... Kr. 1, 616, 884, 522 |  |
| :---: | :---: |
| Less above Government accounts....- $789,720,443$. |  |
| 827, 164, 079 |  |
| 50 per cent of private check accounts...-----1.- | Kr. 413, 582, 039 |
| 50 per cent of cash vouchers (Kassenscheine) of AustroHungarian Bank. | 233, 767, 000 |
| Total | 7, 317, 840, 467 |

The administration of the currency system was delegated by the Government to the banking office, which was established under the ministry of finance. The banking office took over the branches in Czechoslovakia of the Austro-Hungarian Bank and is similar to a State bank of issue. Loaning to the Government by the banking office is prohibited, with certain exceptions, such as discounting bills against customs receipts. According to the treaty of St. Germain, Czechoslovakia was to share in the distribution of the reserves and the assets of the Austro-Hungarian Bank, which went into liquidation at the first of 1920. Claims against the Austro-Hungarian Bank thus tend to offset the liabilities assumed by the Government for notes and deposits of the defunct bank.

The banking office has endeavored to accumulate a metallic reserve and in this endeavor has been reasonably successful. At the time it began operations it had no metallic reserve, but in May, 1925, the gold and silver holdings amounted to over $1,000,000,000$ Czechoslovak crowns and the foreign currency and balances abroad to about $568,000,000$ crowns. In the middle of 1923 the latter amounted to over two and one-half billion crowns, but in order to maintain exchange stability the bulk of this was disposed of. The metallic reserves (largely gold) were built up by moans of loans and also from gold received from the Austro-Hungarian Bank. Soon after the stamping of the notes, a patriotic appeal was made to the people to turn over to the banking office as much gold os possible. A certain amount was turned over also in the shape of gifts.

During 1919 and 1920 the circulation increased rapidly, as can be seen in Chart 13. In the latter part of 1921 the tendency was again upward and, a high point of over $12,000,000,000$ crowns was reached. The increases, however, were entirely covered by gold, silver, securities, or other assets, so that the legal maximum of uncovered issue was not exceeded. The circulation declined sharply during the first part of 1922 and continued downward with some reactions until the middle of 1924, when the notes outstanding amounted to a little over $8,000,000,000$ crowns.

Prices declined very rapidly in 1922, as can be seen in Chart 14, accompanying the contraction in the currency and the general business depression, which prevailed at this time. The index numbers of prices declined from nearly 1,700 in January, 1922, to 1,000 in December, 1922. (July, 1914, =100.) Since this precipitous drop the price level has remained relatively stable in the neighborhood of 1,000 .

The contraction of the currency in 1919 was accomplished by Czechoslovakia at a time when practically all the other countries of Europe were still inflating and printing large quantities of paper money. The deflation which Czechoslovakia accomplished under the Minister of Finance, Dr. Alois Rasin, has been criticized as being too

OEART 14
Crichoblovakia-Wholesale Prices on Paper Bagts and on Golp Bagts, 1922-192b
[Index numbers of Central Bureau of Btatistics for Crechoslovakin, 128 commodities, beginning of mant $h_{\text {, }}$ July, 1914-100; and Federal Reserve Board Inder numbers for United States, 104 commodities, monthly Average, $1918=100$ )

drastic and pushed too rapidly in view of the difficult economic conditions at that time. As a result of the conservative currency policy, Czechoslovakia did not have the artificial stimulus of paper money inflation, and conditions in Czechoslovakia during the first few years of the country's history were not prosperous. However, the country's firm stand against inflation was well rewarded, and Czechoslovakia did not experience the extreme conditions which came to exist in the five States bordering upon Czechoslovakia.

In the summer of 1922 when the Czechoslovak crown increased in value from 2 to 3.5 cents, both internally and in foreign markets, the business depression in Czechoslovakia became severe. The crown rose in a few week's time from less than 2 cents to about 3.5 cents. Wages and general prices became adjusted to the now value more slowly, which fact was the source of difficulty. The textile and glass industries were seriously affected and were forced to reduce their output to only a small percentage of their capacity. Liquidation and business failures were prevalent. The crown became expensive in foreign countries, while at the same time in these countries the depreciated currencies of other countries were relatively cheap. The relatively high value of the Czechoslovak crown was a handicap to the Czechoslovak export trade, which normally is of considerable magnitude, and thus of great importance to Czechoslovak prosperity. Although Czechoslovakia was following conservative principles of finance, the fact that the countries about her continued to inflate and experience depreciation contributed to the unsettled conditions in Czechoslovakia.

The establishment of the banking office of the ministry of finance to perform the function of a central bank and to control the currency was regarded as a temporary measure to meet the emergency, since Czechoslovakia had to have some sort of a central financial institution to provide the country with a national currency under the control of Czechoslovakia, and to take over the aff airs of the branches of the Austro-Hungarian Bank in Czechoslovakia.

When the banking office was organized the time was not opportune to take subscriptions and establish a national bank such as Czechoslovakia would ultimately want. Since this time conditions have improved so that Czechoslovakia is now making plans for a new national bank having a capital stock subscribed by private individuals to take over the present $b$ anking office of the ministry of finance. These plans are discussed below.

## III. FOREIGI TRADE

Czechoslovakia is to a large extent an industrial country and is dependent upon the export trade as an outlet for much of the country's production. About one-third of the population is engaged in agriculture, but a large part of the agricultural products are such articles as sugar beets, barley, and hops, which are the raw materials for the sugar and liquors which are exported. Czechoslovakia is one of the largest exporters of beet sugar in the world, and the price of sugar has been an important factor in the country's prosperity. During the period of the high price of sugar Czechoslovakia was assisted in securing foreign food and other products by the sale of sugar abroad. The precipitous drop in the price of sugar in 1920 and 1921 contributed to the depression in the country. In 1922 Czechoslovakia exported about 30 per cent more sugar than in 1920, yet due to the fall in price the value of the sugar exported in 1922 was considerably less than one-half that in 1920.

A large part of the industries of former Austria-Hungary were located in Czechoslovakia, especially the textile industry, the porcelain, and the iron and steel industries. It has been estimated that before the war only about one-third of the articles manufactured in Czechoslovakia were consumed there, the remainder going to AustriaHungary, Germany, and other countries. The following table shows the principal items entering into Czechoslovakia's foreign trade:

The trade of Austria-Hungary with the United States before the war was not large, and of this trade the part that was with Czecho-

Czechoslovakia-Imports and exports of principal commodities, 1920-1984
[Source: Commerce Exterieur de hatepablique Tehecosloveque. See Chart.]

| Articles | 1920 | 1021 | 1902 | 198 | 198 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| proris | Crowcre | Cromes | Crownt | Croums | Crowns |
| Tobaceo | 236, 294 | 788,838 | 373,934 | 308, 280 | 488,053 |
| Grain, flour, mill prodacts, | 2300,054 | 4. 532,054 | 1,281, 141 | 870.357 | 2,355,242 |
| Fruits and vegetables | 681, 079 | 718,679 | 448,622 | 834,608 | 519.313 |
| Liveatoct | 138, 314 | 71,817 | 513.508 | 644,043 | 827, 142 |
| Fats and greases | 1, 080,375 | 819.482 | 837, 797 | 856.358 | 800, 915 |
| Wood, coal, and peat | 520, 934 | 576,279 | 208, 003 | 242856 | 298,778 |
| Mineraks. | 702.249 | 687, 849 | 342338 | 302,913 | 263,835 |
| Cotton, Farn, and cotton manuia | 5,029,943 | 5, 446,546 | 1,972,482 | 1,763,630 | 2,858, 102 |
| Flat hemp, jute, yarns, the | 311,348 | 507,397 | 293, 804 | 213, 182 | 429,909 |
| Wool, yarns, and woolen manulactures | 2,211, 535 | 2, 123,485 | 1, 603, 615 | 1, 248, 018 | 1,734,804 |
| Base metals and manufactarts. | 765, 768 | 1538221 | 779, 457 | 290, 483 | 3H6, 314 |
| Machinery and electrical good | 1,329, 284 | 1, 297, 347 | 559, 157 | 24, 831 | 421, 612 |
| Chemicals.. | 541,247 | 604,013 | 817, 257 | 238,295 | 844.719 |
| ETPOETS |  |  |  |  |  |
| Sugar | 2,403,244 | 2, 748,761 | 1, 500,58 | 1,888, 800 | 2,431, 605 |
| Grain, ford, mill prod | 731.256 | 327.512 | 619.821 | 548,996 | 452. 170 |
| Fruits and vegetables | 909, 988 | 657, 70 | 3200,615 | 204, 320 | 643, 687 |
| Wood, coal, and y | 1,740,8007 | 1, 805, 723 | 2,549,6\%1 | 2.335,710 | 2,203,900 |
| Minerals | 388, 062 | 24,802 | 260, 740 | 124, 252 | 147, 522 |
| Cotton, yarn, and cotton ma | 2,525, 613 | 3,801, 563 | 2, 566,069 | 1,585,498 | 2,547,349 |
| Flax hemp, fute yarns, etc | 330,959 | 423, 410 | 878.632 | 290,625 | 588, 258 |
| Wool, Ferms sid woolen manubat | 4,683, 764 | 4, 104,014 | 2,807,307 | 1,150,817 | 1, 745,008 |
| Clothing. ete | 904,817 | 70,0088 | 600, 430 | 206, 162 | 349, 145 |
| Paper sind paper wares | 605,434 | 653,863 | 427, 800 | 251, 743 | 258, 204 |
| Leather and leather goods | 642,242 | 802,105 | 478,256 | 258, 374 | 308,843 |
| Wooden and other wares | 401, 180 | 400, 142 | 362, 947 | 143, 048 | 218,468 |
| Olase and glessware | 1,808, 025 | 2,072, 702 | 2,046, 413 | 961, 972 | 1, 258, 716 |
| Earthenpare- | 205,467 | 488, 067 | 283, 338 | 236, 827 | 819,841 |
| Iron and lron manufecture | 1,511,288 | 1,348, 518 | 708, 005 | sex 176 | 1,000,079 |

slovakia can not be accurately determined, but was not of great magnitude. The chief exports to the United States from this part of Austria-Hungary were glass and glassware. However, since the war, Czechoslovakia has sent an increasing amount of products to the United States, one of the reasons being the high value of dollars in Europe and the relatively large number of crownse obtainable for dollar drafts, either directly in Prague or by arbitrage through Vienna, Berlin, Paris, or elsewhere. There are also permanent economic reasons for an important trade between Czechoslovakia and the United States.

The exports to the United States from Czechoslovakia are chiefly glass and glassware, flax, hemp, and jute manufactures, wood products, such as bent wood furniture and musical instruments, woolen manufactures, and cotton goods. The principal imports from the United States are raw cotton, lard, grain, and flour. Imports from the United States have increased very greatly since the war and now rank second to those from Germany, with Austria third and Hungary fourth. Exports from Czechoslovakia go largely to Austria, Germany, Hungary, Great Britain, and the United States, in order of importance. The following table shows the foreign trade of Czechoslovakia with the different countries:

Czechoslovakia-Imports and exports of merchandise, by principal countries, 1920-1824
[Source: Commercee Exterieur de le République Tch\&coslocraque. Quantity to thousands of metrio quintaln of 220.46 lbs. value in thousands of crowns.)

|  | 1020 |  | 1921 |  | 1022 |  | 1023 |  | 1024 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Quan- | Value | Quan- | Value | $\begin{aligned} & \text { Quan- } \\ & \text { tity } \end{aligned}$ | Value | Quan- | Value | $\begin{aligned} & \text { Quan- } \\ & \text { tity } \end{aligned}$ | Value |
| EPPOETS |  |  |  |  |  |  |  |  |  |  |
| Germs | 20,785 | 5, 608,858 | 18,940 | 5, 802, 123, | 18,988 | 8, 230 | 18,240 | 4,132,750 | 19, 106 | 5, 583, 254 |
| Austria. | 3,272 | 3,041,983 | 3, 181 | 1, 082, 809 | 2,181 | 688, 357 | 2,843 | 665, 250 | 3, 462 | 1,245,437 |
| Unived States | 2084 | 4,111,815 | 8,777 | 4,547, 248 | 2,300 | 2,288, 336 | 1,088 | 714, 000 | 1,025 | 889,386 |
| Hungary. | 871 | 855, 808 | 2,519 | P25, 578 | 1,822 | 683, 748 | 1,446 | 363, 250 | 4, 560 | 880, 132 |
| France. | 247 | 955, 251 | 119 | 688, 408, | 800 | 444, 944 | 808 | 365, 500 | 474 | 595, 615 |
| Poland | 1,061 | 3908160 | 1,444 | 383, 728 | 2.208 | 324, 337 | 8, 749 | 378,330 | 8,695 | 788.721 |
| Italy. | 623 | 1,002,612 | 863 | 733, 159 | 1,012 | 295, 751 | 1,228 | 462, 750 | 2.474 | 988879 |
| Netherlands | 677 | 1,316, 134 | 017 | 1,106,110 | 1,200 | 428, 360 | 091 | 415, 330. | 826 | 478,350 |
| Bejefum | 837 | 1, 037,860 | 396 | .447, 359 | 525 | 227,954 | 55 | 80, 000 | 60 | 113,726 |
| Great Britaln | 323 | 1,009, 005 | 979 | 1, 341,598, | 485 | 651,981 | 348 | 236, 750 | 331 | 417,898 |
| Rumanis. | 547 | 308, 477 | 887 | 481, 662 | 785 | 430, 315 | 661 | 186,000. | 1,654 | 467,281 |
| Jugoslavia: | 818 | 340, 094 | 606 | 307, 447 | 509 | 267,832 | 1,442 | 276,200 | 3, 118 | 417, 537 |
| Switeerland. | 150 | 624,631 | 66 | 3159 | 78 | 166, 332 | 111 | 214,750 | 119 | 369,352 |
| Other countries | 7,408 | 2,978,288 | 5,017 | 3,300,488 | 4,004 | 1, 861,824 | 9, 5157 | -1, 558,380 | 10,922 | 2,716,730 |
| Total fmports EyPORT: | 30, 102 | 23, 384, 412 | 30,012 | 22, 438, 203, | 81,012 | 12, 695, 517 | 41, 914 | 10, 127, 100 | 66, 656 | 15,882, 2988 |
|  |  |  |  |  |  |  |  |  |  |  |
| German | $\left\|\begin{array}{l} 30,81 \\ 2,8,01 \\ 201 \end{array}\right\|$ | 8,330,600 | $88,252$ | 3,061, 280 | $\begin{aligned} & 89,582 \\ & 20,444 \end{aligned}$ | 3,407,475 | $\begin{aligned} & 50,345 \\ & 24,084 \end{aligned}$ | 2, 554, 0000 | 58, 418 | 3,317, 671 |
| Austria |  | 9, 678, 483 |  | 7,885, 188 |  | 3, 869, 0981 |  | 2, 839,000 | 29, 111 | 3, 523, 7121 |
| United | 3,225 | 2,512, 428 | 38,381 |  | $\begin{array}{r} 20,444 \\ 516 \end{array}$ |  | $\begin{gathered} 24,084 \\ 463 \end{gathered}$ |  |  |  |
| Prance. | 1, 058 |  | $\begin{array}{r} 18,287 \\ 1,728 \end{array}$ | 8,066, 439 | 8,764 8,258 | $1,658,521$ 868,088 | $\begin{array}{r} 11,429 \\ 2,105 \end{array}$ | 713,509 300 5000 | 18,688 2.017 | 1, 134,185 |
| Poland | 1,763 | 2,373, $1,425,480$ | 8, 507 | 1, $1,424,061$ | $\begin{aligned} & 8,258 \\ & 2,130 \\ & \hline 1 \end{aligned}$ | 800, 808 | $\begin{aligned} & 2,105 \\ & 2,613 \end{aligned}$ | 302,500 358,000 | 2,017 | 557,802 |
| Italy-- | 1,738 | 1, 800,000 | 1,464 | -920, 809 | $\begin{aligned} & 1,112 \\ & 1,063 \\ & 1,003 \end{aligned}$ | 683, 262 | 1,275 | 464,000 | 2,607 | 851,548 |
| Netherlands |  | 13, 284 |  | 506, |  | 409,524294,500 | 1,291 | 283,00006,500 | 814258 | 251,980101,474 |
| Belgium ${ }^{\text {a }}$ | 8181269 |  | 2781,560 | 293, 572 | ${ }^{4} 497$ |  |  |  |  |  |
| Great Britaln |  | 772,055 |  | 2, 104, 017 | 1,2900002 | 1,34B, 385 | 2,896 | 1,216,500 | 8, 643 | 1, 588, IE5 |
| Rumanla. Jugoalavia ${ }^{\text {a }}$ | 348 <br> 348 <br> 38 |  | 1,860 | 1,176, 428 |  | 522, 788 | 818 | 405, 000 | 1, 345 | 795, 988 |
| Sugodiserland | ${ }_{9} 68$ | $\left.\begin{aligned} & 760,422 \\ & 2,318,258 \end{aligned} \right\rvert\,$ | $\begin{array}{r} 805 \\ 1,800 \end{array}$ | ( 510.655 |  | 782, 020 |  | ${ }^{548} 80000$ | 1,769 | 829,724 |
| OLber countries | 2, 408 |  |  |  | 2,278 | 2, 424,10, 198 | 3, 466 8,904 | 1,84, 48000 | $\begin{aligned} & 2,152 \\ & 5,244 \end{aligned}$ | 2, 838,145 |
| Total enports | 60, 022,27, 560,415 |  | 67, 427 | 27,311, 690 | 04, 060 | 18,038, 849 | 118,094 | 12, 317,000 | 124, 208 | 17, 028, 251 |

[^15]In 1919 and 1920, when the Czechoslovak crown was relatis pressed, the export trade was stimulated by relatively low ed production within Czechoslovakia compared to the prices ol abroad. Since 1921 the export trade of Czechoslovakia has sit considerably and has been a factor in the depressed conditions: the country. During 1922 the crown was appreciating, which Czechoslovak goods expensive abroad, especially in comps with those from countries with depreciated currencies, so thu Czechoslovak export trade was interfered with. In view of thr tively large proportion of the country's production which is abroad, the decline in the export trade was a serious blow ot country's domestic prosperity. Imports also declined very gr during 1922 and 1923. In 1924 both imports and exports sh. considerable improvement. The chief factor in the reduction in foreign trade of Czechoslovakia was doubtless the general fal prices throughout the world and especially in Czechoslovakia, so total values became less. It will be noticed in the table below 1 quantity figures in 1922 showed relatively less decrease than wi figures, and in 1923 showed a large increase. The general fal. prices was rendered more severe in Czechoslovakia by the policy great contraction in the currency. At the present time adjustma have taken place, so that the foreign trade of Czechoslovakil prospering.

Imports and exports of merchandise, 1920-1924
Including gold and silver
[Source: Zabranicni Obchod Republiky Ceskoslovenake-Prague]

|  | Imports |  | Exports |  | Exeese of expor |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Metrie quintala | Thousends of crowns | Metrle quintals | Thansands of crowns | Metric quintals | Thons of cro |
| 1920. | 30, 101, 560 | 23, 384.412 | 00.022. 200 | 27. 800.415 | 29,920, 649 | 4.11 |
| 1921 | 31, 911, 743 | 22 433, 200 | 97, 427, 354 | 27, 311, 58\% | 57. 513, 611 | 4.81 |
| 1922. | 31, 942150 | 12, 695.516 | 9,002.625 | 18, 068,349 | 62,960, 473 | 5, 36 |
| 1923. | 41, 914, 808 | 10, 134,615 | 113,097, 725 | 12,318,611 | 71, 182. 017 | 23 |
| 1924.. | 58, 850, 440 | 15, 862, 298 | 124, 248, 250 | 17, 02,251 | 67, 641, 813 | 1, 1: |

During the period that figures have been available for Czec slovak trade, independently of Austro-Hungarian trade, Czecho vakia has had each year an excess of exports. The excess of expc is accounted for to a certain extent by interest and dividends industrial and other securities of Czechoslovakia held by foreign: An accurate estimate of the invisible trade of Czechoslovakia difficult. Czechoslovakia receives paymente for an important amo of transit trade across the country. Money also is sent home Czechoslovaks abroad, largely by those who left the country bef the war, and especially those from Slovakia. Another credit it in the country's invisible trade is that of tourist expenditu Czechoslovakia has several famous resorts, such as Carlsbad, wh are attracting an increasing number of tourists and travelers. I Government encourages tourists to visit its resorts.

## OHART 18

CZECHOSLOVAKIA,-Imports and Exports of Merchandise, Monthly, 1921-1925 Special Importa-i. e., importa for domeatic consumption. Special Exporta-i, e., exporth of domentic merchandise


Chart 15 shows the imports and exports of Czechoslovakia since the first of 1921. Prior to this date no figures are available. Only quantity figures are shown for 1921 and 1922 since value figures for this period have not been computed on a monthly basis. Quantity figures are unsatisfactory since they do not show the effeets of price movements upon the balance of trade and since heavy articles have an unwarranted importance. Value figures are shown for 1923 and 1924. It will be noticed that since the latter part of 1923 the foreign trade on the basis of both value and quantity has shown considerable increase.

## iv. exchange rates and purchasing power parities

The course of exchange rates during the brief period of Czechoslovakia's history exhibits some interesting movements. In spite of the rigid policy against further inflation, and the currency measures undertaken early in 1919 when the circulation was reduced, the Czechoslovak crown continued to depreciate during 1919 and the early part of 1920. Although nominatly worth a little over 20 cents (20.26), according to its pre-war gold value, the crown fell precipitously during 1919, and was worth a little less than 1 cent for a time early in 1920, as can be seen in chart 16. A sharp reaction took place in the spring of 1920 when the crown more than doubled in value in two or three months' time, and in May was worth over $21 / 2$ cents. However, by the end of the year the crown had fallen again, and was down to a little over 1 cent in value.

CHART 16
Czechoslovagia-Exchange Rates, Hioh and Low, Montily, 1019-1026
[New York on Prague; July, 1919-June, 1921, sight drafts; July, 1921-1925, noon buying rates for cable transiers]


On the foreign exchange markets the Czechoslovak crown was worth practically the same as the German mark, and for some time the two currencies moved almost in unison.' This parallel movement continued until the latter part of 1921 ,rishen the reparations situation,

[^16]inflation, and disturbed conditions in Germany had a very depressing influence on the mark. The mark then went downward while the crown went upward. The close uniformity in the movements of the two currencies is very striking, and was due largely to intimate trade relations between Czechoslovakia and Germany and to psychological factors. Many people looked upon the two units as of equal worth on account of the close economic relationship between the countries, not distinguishing the difference in the currency situation. Germany is the chief source of Czechosloval imports, and next to Austria receives more Czechoslovak exports than any other country. The two countries were looked upon more or less as an economic unit. The countries were so closely related that forces which influenced mark exchange also influenced crown exchange.

In the fall of 1921 the crown was depressed as a result of the return to Hungary of the former Emperor Charles. This led the Little Entente, Czechoslovakia, Rumania, and Yugoslavia, to mobilize against Hungary. As the crisis passed, exchange rates improved and soon had much more than recovered the ground lost.

During 1922 the crown experienced a marked appreciation, rising from about 1 cent late in 1921 to over 33/2 cents in the summer and fall of 1922. Several factors account for this appreciation, among which were the decreased currency circulation and low internal prices, so that the domestic purchasing power of the crown was much greater then it had been. Furthermore, the metallic reserves were built up during 1922 so that there was greater confidence in the currency system. This affected the value by creating a greater demand for the currency. Another factor in the rise in the value of the crown was the increased excess of exports from Czechoslovakia in 1922. Exports declined in 1922 but not to the extent that did imports, so that the excess of exports was greater in 1922 than in previous years.

The condition of the Government's finances improved during 1922, reacting favorably upon exchange rates. Revenues in 1922 were greater than during the preceding years and the general position of the Government was becoming stronger. The internal debt of the Government was reduced during 1922 from about $10,000,000,000$ crowns at the end of 1921 to a little under $7,000,000,000$ crowns at the end of 1922. The improvement of the Government's finances strengthened the Government's credit and loans were floated successfully in New York, London, and Amsterdam.

Perhaps the most important cause of the appreciation of the crown was, as already mentioned, an increase in the internal value of the crown. As can be seen in Charts 13 and 14 above, the circulation contracted considerably during the first part of 1922, and at the same time the price level fell very sharply. In January, 1922, the price index was nearly 1,700 (July, 1914=100), while for December, 1922, the index was 1,000 . An increased external value of the crown was thus to a large extent merely a reflection of an increased internal value. Since the first of 1923 exchange rates, prices, and the amount of circulation have remained relatively stable.

The relation between exchange rates and the internal price level is shown graphically by curves for purchasing power parities and for exchange rates. Chart 17 shows the value of the crown in terms of

OHART 17
Oxmchoslovaifa-Publeanneg Power Paritiga and Exchange Ratrg, Monthly, 1921-1024
CBated on inder numbere of Central Bureau of Statistios for Cxoohoslovakia, 126 commoditles, beginuing month, of July, $1914=100$; and on Fedoral Reserve Board index numbers Conter par wrown [For Agures see Table 25]

Centa per crown

dollars on the basis of the relationship between the purchasing power of the crown and of the dollar. It will be noticed that the parities of the two units on the basis of purchasing power correspond fairly closely to current exchange rates. The value of the crown on the basis of purchasing power parities increased from a little over 11/2 cents at the first of 1922 to nearly $31 /$ in the latter part of the year. This alone accounts to a very large degree for the rise in exchange rates. Exchange rates reached their high point in the fall of 1922 when they were in the neighborhood of $31 / 2$ cents to the crown. The purchasing power parities continued around this point during all of 1923, and declined somewhat in the first part of 1924. The tendency recently has been for the two curves to come closer together, which is as would be expected under normal conditions.

Exchange rates declined rather abruptly in the last few weeks of 1922 and the first part of 1923 from the high points of a short time previously: However, since the early part of 1923, exchange rates have remained fairly constant at about 3 cents, as a result of efforts towstrd stabilization on the part of the Government. The banking office buys and sells bills, and as can be seen in Chart 16, has been very successful in maintaining exchange rates stable since early 1923. In doing this, however, it has had to dispose of a large part of its foreign exchange holdings, as shown in Chart 13. In the latter part of 1923 and the first part of 1924 exchange rates tended to decline. The foreign exchange holdings of the banking office declined as follows:

Czechoslovakia-Foreign exchange holdings (ond of month)

## Crowns



Since the middle of 1924 the foreign exchange holdings have shown no great change, and the banking office has found it easier to maintain the value of the crown. In fact, plans have been made to stabilize permanently at the present level of about 3 cents to the crown.

## V. STABILIZATION AND REFORM

Czechoslovakia is unique in that it is one of the few countries of Europe which did not inflate its currency in response to Government needs for revenue, but, on the contrary, brought about a sudden contraction in the circulation in 1919. Expansion soon took place in response to business needs, but did not lead to depreciation of the crown. In 1922 the crown tripled in value from its low point, going to over $31 / 2$ cents, and since the first of 1923 has remained relatively stable at about 3 cents.

In the brief period of Czechoslovakia's independent existence the country has made a satisfactory record, and although conditions have been disturbed, prosperity is now increasing.

About three-fourths of the industries of the former Austro-Hungarian Monarchy were located in Czechoslovakia and as a result the country industrially is in a strong position. The sugar, glass, textile, and other industries are important in Czechoslovakia, and the country has a considerable amount of iron and coal deposits; also extensive forests. The agricultural production is large but the country nevertheless has to import foodstuffs. Banking and commerce are well developed. The banking office has 31 branches scattered throughout the Republic. Foreign banks are also active in Czechoslovakia, so that with the country's varied resources and industrial equipment, the basis exists for an economically strong and prosperous country.

Severe depression and unemployment existed in Czechoslovakia for several years, but at the present time conditions are much improved. The progress of Czechoslovakia was interfered with by the disturbed conditions surrounding the country, and goods from Czechoslovak industries had to compete with foreign goods, low in price on account of depreciated currencies in these countries. On the other hand, when conditions in neighboring countries became extremely disturbed, as during the currency collapse in Germany, Czechoslovakia was able to supply goods both at home and abroad which formerly had been bought in Germany, for example. This situation was only temporary and what benefits there may have been to Czechoslovakia from the currency collapses in Germany and other countries were more than offset by various disadvantages.

The condition of the Government's finances has been improving continually, and the deficits in the budget have been reduced from the large amounts in 1919 and 1920. Revenues and expenditures have increased greatly, but revenues have increased more rapidly than expenditures so that the deficits have become less. The budget does not yet balance and Czechoslovakia must follow a policy of strict economy until equilibrium is attained. During the period following the obtaining of independencer, the country was confronted with various abnormal expenses, expenses which had to do with the - organization of the Government and the establishment of new offices,
military requirements, repatriation of legionaries, unemployment, food subsidies, and rehabilitation of the properties of the railways and other State enterprises which had been allowed to deteriorate during the war. The burden of most of these abnormal expenses is now reduced so that the Government is getting in a stronger position financially. The following table shows the revenues and expenditures since 1919:

Crechoslovakia-Receipte and expenditures, 1919-1985
(Exclusive of expenditures for capital improvements eovered by loans)
[Source: Docments of the International Financial Conference, Bruseals, 1020, and United States Department of Commerce. Millions of crowns]

${ }^{1}$ Provisional.
The deficits shown in the above table do not include expenditures for capital improvements, which have been met by loans. Although such expenditures increase the actual deficit, their exclusion is legitimate in so far as the undertakings are profit-yielding investments. The following are the sums which the Minister of Finanice was authorized to spend for "Capital investments." He was, authorized to negotiate loans to cover these amounts. These are estimates in the budgets, and in 1921 (the only year for which final figures are available) actual expenditures for capital purposes were
only $1,775,000,000$ crowns as compared with the estimate of $3,173,000,000$ crowns.
Crowns
1921
1922
1923
1924
1925.

The total debt of Czechoslovakia at the present time is undetermined but is probably about $40,000,000,000$ Czechoslovak crowns. ${ }^{1}$ According to the peace treaties ${ }^{2}$ the pre-war debt of Austria-Hungary was to be apportioned among the succession states by the Reparation Commission. The exact amount of Czechoslovakia's share of this debt has not been determined. From the total are to be offset amounts representing the value of Austrian property, railways, etc., acquired by Czechoslovakia. In addition, Czechoslovakia was charged with a so-called liberation payment of $750,000,000$ gold francs. Czechoslovakia hopes to have some adjustment made of these debts when the matter comes up again for discussion.

In addition to these obligations resulting from the country's former relations with Austria-Hungary, Czechoslovakia has borrowed at home and abroad, especially in the United States, Great Britain, France, and Italy. In the 1925 budget an amount of a little over $2,000,000,000$ crowns is provided for service of the Government's debt. This is a slight increase over the amount in the 1924 budget. On the basis of the 1925 budget estimates the service of the national debt represents about 14 per cent of the total expenditures.

The debt of Czechoslovakia to the United States Government on November 15,1924 , amounted to $\$ 115,528,440$, of which $\$ 23,648,769$ was interest accrued. The 1925 budget, like that of 1924 , does not provide for payments of interest or principal to the United States on this debt. The 1923 budget included an item for payments to the United States, but no payments were made.

Czechoslovakia adopted the capital levy and the increment tax in the spring of 1920. The increment tax was a tax on the increase of wealth of individuals as determined by the difference between the wealth before the war and in March, 1919. The rate progressed from 5 per cent on increments of 10,000 crowns to 40 per cent on increments in excess of $10,000,000$ crowns. The capital levy was assessed on the basis of property held on March 1, 1919, valued in excess of 10,000 crowns. The tax was made progressive from 1 per cent to 30 per cent ( 30 per cent on property valued at more than $10,000,000$ crowns). The capital levy and increment tax were made payable in the certificates of deposit, among other things, which were issued in return for bank notes retained by the Government at the time of the stamping of the Austro-Hungarian bank notes. The capital levy had yielded up to the 1st of February, 1925, a total of $10,814,940,000$ crowns, as shown by the following figures.

[^17]
## Czechoslovalita-Net proceeds of the capital levy

[Source: Banking office of the ministry of Ansnoe. Ceechoslopak erowns]
Receipts during year ending Jan. 31:


The Government of Czechoslovakia has not been financing itself by inflation, as have most of the other countries of Europe, and although the currency is Government paper money, the currency system has not been made subservient to the Government's needs, so that the condition of the Government's finances has not been as great a factor in the currency situation in Czechoslovakia as in some other countries. Nevertheless, the Government must eventually bring its budget into balance, and pay off part of its large debt, since unhealthy conditions in the Government's finances do not provide a good backgrotud for currency and banking stability.

The banking office of the ministry of finance, which Czechoslorakia established early in 1919, was looked upon as a temporary institution which was to pass out of existence when a national bank of issue more independent of the Government could later be founded. In March, 1925, a bill was submitted to Parliament regarding the estabjishment of such a private bank. The proposed bank would have a capital of $\$ 12,000,000$, of which one-third would be subscribed by the State and two-thirds by domestic subscribers. The Government would secure funds to subscribe for its share of the capital out of funds provided by the liquidation of the Austro-Hungarian Bank, and out of the reserve holdings of the present banking office, substituting Government securities in place of the reserve. . The amount of reserve removed would be turned over to the new bank so that there would really be no dissipation of reserves. Inasmuch as the banking office is to be taken over by the new bank, this method amounts to the Government subscribing to the capital in its own securities.

The administration of the bank is to be vested in a governor, appointed by the President of the Republic, and a board of directors of 9 or 10 members. Of these members, three are to be named by the president and six by the stockholders in their general meeting. In this general meeting the Government has only one vote for its entire stock, while each stockholder has one vote for every 10 shares. The tenth member of the board of directors is chosen by the board itself in agreement with the governor.
In the proposed measure the Czechoslovak crown is definitely established as the lawful currency unit. The bank is directed to maintain the crown stable in value, i. e., within the limits of 2.9 cents to 3.03 cents to the crown, which represents the fluctuations of the crown during the last two years. The crown will thus be given a relatively fixed relation to stable currencies.

The reserve provisions for the circulation of the projected bank are similar to those of the present Austrian and Hungarian national banks. The reserve may consist of both metal and net holdings of foreign exchange, i. e., the excess amount in foreign credit, bills, etc., held over like amounts owed abroad by the bank. At the outset*
the reserve is to amount to 20 per cent of the notes in actual circulation, excluding the existing uncovered notes amounting to about $5,500,000,000$ crowns, plus all other demand liabilities. Each successive year this reserve of 20 per cent is to be increased by 1 per cent, so that at the beginning of the sixteenth year a reserve of 35 per cent will have to be maintained.

In order that the bank may have the necessary means of maintaining the stability of the currency, the Government is authorized to negotiate a foreign loan to a maximum amount of $\$ 50,000,000$. The proceeds of this loan would be turned over to the bank, which is to maintain the funds separate from other funds of the bank. The withdrawal of the present circulation is provided for through the payment of the existing notes in purchase of foreign exchange and when so paid in the notes are to be retired.

The following figures show the condition of the banking office of the ministry of finance on March 7, 1925. The new bank would take over the present banking office.

Czechoslovakia-Banking office of ministry of finance, condition March 7, 1985
Assets: Crechoslovat crowns
Gold reserve-.-.-.-....-.-............................................. 1, $028,821,000$
Balances abroad and foreign currency............................................. $567,922,000$





$293,586,000$
9, 014, 215, 000
Liabilities:

Chart 18 shows the gold value of the total note circulation of Czechoslovakia computed according to the value of the crown expressed in exchange rates, and according to that expressed in purchasing power parities. It will be noticed that on both bases the total gold value rose very greatly during 1922, and in 1923 was about double what it was in 1921. The cause of this rise in the gold value of the total currency was the sudden appreciation of the value of the crown, without a corresponding contraction in the total note circulation. The crown more than doubled in value, while the note circulation declined by not more than 15 or 20 per cent. Accompanying the increase in the value of the crown was a decrease in the velocity of circulation as confidence in the currency increased.

Normally an increase in the volume of note circulation tends to be accompanied by a decrease in the value of the unit, and vice versa, so that the total value of the circulation tends to remain fairly constant. In the case of Czechoslovalia, conditions have been so disturbed that no regularity in the total value of the circulation exists. The low value of the crown in 1921 was not due to large issues of paper money, but appears to have been due to disturbed

political and economic conditions, during which time production was curtailed and there was a rapid turnover of money. Changes in the rate of turnover tend to cause fluctuations in the value of the unit and thus of the total circulation. In 1922 the crown separated from the mark, and as the demand for the crown increased, its value rose, and thus the value of the total circulation also rose.

The curves in Chart 18 showing the gold value of the circulation, assist in determining what might be considered a normal value for the crown in view of the amount of circulation outstanding. The problem is, with a circulation of $10,000,000,000$ crowns for example, what would be the average value of the crown under normal circumstances? This can be approximated if the point around which the total value of the circulation would fluctuate in normal times, can be determined. If this total value, obtained by inspection, is divided by the amount of currency units outstanding, a value for the unit will be arrived at which will be close to what would be the average value of the unit in normal times, assuming that the amount of circulation remains about the same as at present.

The assumption in this computation is that the curves would remain fairly constant in normal times, perhaps tending slightly upward as business expanded in a growing country. This assumption is borne out by the facts, although difficulties exist which limit the usefulness of this method of determining the value of the unit. The principal difficulty is that where checks are used widely they serve the same purpose as money, and therefore deposit credits should be included in the calculations. The inclusion of deposits complicates the computations, but since the relation between deposits and currency in circulation is fairly constant, this omission is not as serious as it might otherwise be.

Conditions in Czechoslovakia have been so extremely disturbed and the curves have moved so erratically that what may be considered a normal total value of the circulation can not be accurately determined. Furthermore, as conditions return to normal and the gold standard is adopted, the velocity of circulation may decline; also hoarding of paper money would take place to some extent. Increased business activity would create a greater demand for money. These factors would tend to raise the value of the crown. In view of this, the present gold value of the total circulation may be too low, compared to what it will be as conditions become more settled.

Using the figures of Czechoslovakia shown in the chart, the total value of the circulation in 1923 and 1924 appeared to fluctuate on the average at about $\$ 275,000,000$ or $\$ 280,000,000$. The circulation outstanding during 1923 and 1924 averaged about $9,000,000,000$ crowns. This would give a value to the crown of about 3 cente, which is close to that expressed in current exchange rates and in purchasing power parities. The indications thus are that the value selected by Czechoslovakia of about 3 cents is an appropriate level at which to stabilize the crown.

Since the first part of 1923 exchange rates on New York have been kept stable at close to 3 cents to the crown. The former gold par value of the crown was 20.26 cente, but Czechoslovakia has discarded this value in making plans for currency reform. In accepting the present level for stabilization Czechoslovakia has set a good example
for other European countries. Devaluation is perhaps easier for Czechoslovakia than some other countries, since the country has no sentimental tie to the old Austrian crown, but on the contrary is glad to get away from it.

The present crown, worth about 3 cents, is a rather small currency unit, and Czechoslovakia may eventually find it desirable to adopt a larger unit equal to 10 or more of the present crowns. Such a reform should ultimately be made, and when it is undertaken a unit should be selected which harmonizes well with some of the leading existing units. Before the war there were too many different units in Europe and the permanent introduction of a new unit worth 3 cents should be avoided.

Czechoslovakia hopes eventually to have the gold standard and is making plans in that direction. Such a step is very desirable and would contribute to the economic recovery and prosperity of the country. The gold standard would facilitate foreign trade, especially with countries which have the gold standard. A healthy export trader is essential to Czechoslovakia since the country has a larger industrial capacity than is necessary for home consumption and must dispose of her products in foreign markets. The import trade is also of importance since the country depends upon outside sources for many articles. The introduction of the complete gold standard would give greater assurance regarding the stability of the crown. than can exist under methods of artificial control.

## DENMARK ${ }^{1}$

## I. PRE-WAR CURRENCY

Before the war Denmark was on the gold standard. The standard monetary unit was the krone, containing 0.44803 of a gram of gold 0.900 fine, and worth 26.798456 cents. In practice, gold was usually taken to the National Bank of Denmark, which was required to buy it at the rate of 2,480 kroner per kilogram of fine gold, less one-fourth per cent for cost of minting (i. e., at the rate of 1 krone for 0.44691 of a gram of gold 0.900 fine). Practically no gold coin was in actual circulation. The currency circulating consisted of notes of the nationnal bank (which were in denominations as low as 5 kroner ${ }^{2}$ ) and about twenty-five millions of silver and small coin. Silver was coined in denominations of $2,1,0.25$ and 0.10 kroner.

Denmark was a member of the Scandinavian Monetary Union. According to the treaties of 1873 and 1875, the gold and silver coins of any one of the three Scandinavian countries were lawful money in all of them. In practice the bank notes of the Scandinavian central banks were also accepted at par in all three countries. The three central banks held balances for one another and sold drafts against those balances usually at par. In this way they kept exchange rates between any two of the Scandinavian countries usually at par. The National Bank of Denmark also kept an account with the German Imperial Bank.

The National Bank of Denmark (Nationalbanken i K $\beta$ benhavn) is the central bank of issue and maintains general control over Danish credit. It has enjoyed the monopoly of issue since 1818. It is a joint-stock bank with its shares privately owned, but of its five managing directors two are appointed by the Government, and in practice the Government exerts considerable influence over the bank's policy.

The national bank holds deposits for the other banks, rediscounts for the other banks, and acts as fiscal agent for the Government. In general its funotions are those usually performed by central banks. As is the case with most of the European central banks, the National Bank of Denmark also does business with private individuals and firms.

The notes of the national bank were redeemable in gold on demand prior to August 2, 1914. The issue was unlimited, except that the bank had to maintain a cash reserve of 50 per cent against the notes outstanding and liquid assets equal to 125 per cent of the remainder. The reserve might consist of legally current coin, gold bullion, and noninterest-bearing balances with the central banks of Norway, Sweden, and Germany. However, it was provided that legal coin (gold and silver) must equal not less than 60 per cent of the note

[^18]reserve. ${ }^{\text {B }}$ However, in case of emergency, such as in the autumn of 1907, reserve requirements could be suspended by an order in council, in which case a special tax had to be paid to the Government.

The bank controls the supply of credit available to the business community by regulating the amount of trade paper and Government. bills that it buys. The Danish private banks hold most of their reserves in the form of deposit credits at the national bank, and also in national-bank notes. The central institution, by regulating the amount of its advances to the private banks, can affect the reserves of these banks, and so affect the amount of their advances.

The gold reserve of the country was mostly in the hands of the national bank. The principal demand for gold was for export when the exchanges became " unfavorable"; so the bank had to regulate credit in such a manner that the exchanges would remain usually within the gold points. It might meet extra demands for exchange by drawing against its foreign balances and selling some of its assets payable in foreign currency. But any heavy and sustained demand for foreign exchange could be met only by tightening credit.

[^19]
## II. CURRENCY, CREDIT, AND PRICE MOVEMENTS, 1914-1925

Immediatply after the outbreak of the war, both wholesale and retail prices in Denmark began to rise. The average of wholesale prices in 1915 was 38 per cent higher than the average for 1914. When there is a sudden shortage of important commodities and an increase in purchasing power, as was the case in Denmark, there is a tendency for the average of prices to rise.

The increase in media of payment in Denmark in 1914 and 1915 was primarily in note circulation, although there was also some growth of deposits. The discount rate of the National Bank of Dentaark was raised from 5 to 6 per cent on August 1, 1914, and to 7 per cent August 4; it was then lowered to 6 per cent August 11, and remained there for the rest of 1914. But that pressure on the money market was not sufficient to prevent expansion, and thus keep the average of prices from rising. The note circulation increased from $156,000,000$ kroner at the end of July, 1914, to $224,000,000$ kroner at the end of October. After this time there was a considerable decline. This early increase in note circulation was due in part to the fact that on account of the general business uncertainty people held larger amounts of cash than usual in proportion to their money outlays. To the extent that the money was held and not expended, it was not a factor in the rise of prices.

There was also an increase of loans and discounts at the national bank. Loans against stock-exchange securities increased from $10,600,000$ at the end of July to $17,300,000$ at the end of October, ${ }^{1}$ but declined to $13,000,000$ at the end of January, 1915. Domestic bills discounted increased from 57,900,000 at the end of July to $80,500,000$ at the end of October, but declined to $47,900,000$ at the end of January, 1915.

During this early period of the war exchange rates on London, Paris, New York, and Hamburg (until October, 1914), were above the gold export point as credits in these centers were called home. Curiously enough, during part of this period, kroner were quoted at a premium in New York at the same time that dollars were quoted at a premium in Copenhagen. Ordinarily, under such circumstances as existed in 1914, drastic measures would have been taken to bring the exchange down to the gold point by a very high discount rate. But the circumstances of the war were considered so unusual that no such action was taken. Instead, the convertibility of the notes of the national bank was suspended (August 2, 1914) and an embargo was placed on the exportation of gold (August 6, 1914).

During the first few months of the war the disturbed conditions brought on a business depression in Demmark. Raw materials could

[^20]not be obtained in sufficient amounts, and there was considerable unemployment. But the depression did not last long. In the early part of 1915 an agreement was reached with the British Government with regard to the importation into Denmark of raw materials and their ultimate destination. As the war continued there was a strong demand for Danish manufactures and agricultural products, both at home and abroad. Business confidence was high, and so there was a strong demand for credit. The discount rate of the national bank remained at 5 per cent from July 10, 1915, to Jauuary 3, 1919, which was inadequate under the circumstances to prevent inflation. This rate was not a high one in Denmark, since the rate had not been below 5 per cent since 1911.

Exchange rates on other countries did not long remain above par, and soon went below par. ${ }^{2}$ Gold began to be imported; but only in such amounts, of course, as the various governments (except the United States) saw ft to send. By 1916 gold was being imported in large amounts. The national bank did not want to take so much gold, and so asked to be relieved of the obligation to buy gold at the old legal rate. The bank was relieved of this obligation April 17, 1916; and the free coinage of gold at the mint was suspended May 1, 1916. Although the bank was relieved of the obligation of buying gold at the legal rate, nevertheless the bank's gold reserve continued to increase.

The gold reserve grew from $144,000,000$ kroner in May, 1916, to $227,000,000$ kroner in May, 1920. The purchase of gold was a factor tending to increase the demand liabilities of the bank, and increased the reserve basis for the extension of credit by the private banks. (The reserves of the private banks consist of deposit credits with the national bank, and of national-bank notes.) The bank might have diminished its earning assets in amounts equal to its purchases of gold, but such a diminution of its earning assets would have been difficult, and, in fact, did not occur.

The purchases of gold facilitated inflation, not only because bank currency was given in return for the gold purchased but also because an enlargement of the gold reserve appeared to sanction and make feasible the purchase of additional earning assets. The business community had become accustomed to look at the gold reserve ratio as an important index of the amount of credit that might safely be issued by the central institution. Since the ratio of the metallic reserve ${ }^{2}$ to note circulation continued well above the legal limit, going as high as 68 per cent in 1917, the credit position appeared to be very strong. Furthermore, the Danish krone was above par in practically all countries except Norway and Sweden, and there appeared to be little danger of the bank being faced with the alternative of losing part of its gold reserve and having to contract credit, or of having the notes of the bank depreciate in terms of gold.

The demand for foreign credits was very urgent, both at the Danish private banks and at the national bank. However, the supply of foreign bills increased as a result of larger exports, so that the foreign

[^21]
assets of the bank increased during the war. After 1918 these assets diminished. In December, 1924, the bank's foreign balances show an increase from $25,500,000$ to $42,800,000$ kroner, as the result of loan operations in the London and New York markets. During March of 1925 these balances show an increase from $23,600,000$ to $34,900,000$ kroner. The amount of the foreign assets of the national bank, by years, is shown in the following table:

Denmark-Foreign assets of the national bank
[Source: Annual reports of the National Bank of Denmari. Milions of kroner]

| End of July |  | Balances with central banks of Norwey, Sweden, and Germany | $\begin{aligned} & \text { Other bal- } \\ & \text { ances } \\ & \text { abroad } \end{aligned}$ | $\begin{gathered} \text { Forefm } \\ \text { bills } \end{gathered}$ | Farelgn securities | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1014-...- |  | 11.9 | 14.1 | 7.5 | 8.1 | 27.8 |
| 1815. |  | 148 | 37.6 | 1.1 | 9.0 | 42.9 |
| 1916. |  | 15.7 | 59.9 | 11.0 | 8.9 | 74.1 |
| 1917. |  | 11.8 | 41.8 | 10.1 | B. 0 | 88.7 |
| 1918. |  | -1 | 68.0 | 10.1 | 4.0 | 78.2 |
| 1919. |  | 27.5 | 43.7 | 7.5 | 4.8 | 83.0 |
| 1920 |  | 27.8 | 36.8 | . 7 | 4.1 | 69.4 |
| 1921. |  | 33.1 | 18.7 | 1.8 | 40 | 67. 6 |
| 1022 |  | 28 | 25.9 | 29 | 8.8 | 35.1 |
| 1923. |  | 1.6 | $\frac{22}{18}$ | 1.7 | . 2 | 26.8 |
| 1934 |  | 6. 6 | 15.9 | .1 | .2 | 21.7 |
| 1925 : |  | 6.3 | 34.8 | . 6 | .2 | 49.0 |

Developments in the condition of the National Bank of Denmark from 1913 to the present can be seen clearly from the accompanying chart (No. 19). It will be noticed that until the latter part of 1920 the circulation moved continually upward. The amount of loans, discounts, and advances also increased at about the same rate during this period. Deposits show an erratic movement, sudden increases followed by large decreases, although the tendency was upward. The gold holdings of the bank continued to increase until the first of 1920 , reaching at this time about $227,000,000$ kroner, as compared with about seventy-two or seventy-three million prior to the war. Since the first of 1920 the gold reserve has remained practically constant, with the exception of a loss of about $20,000,000$ kroner in July, 1923, when gold was sent to the United States to support exchange rates.

Government financing contributed to the inflation in Denmark during and after the war, since large amounts of government paper found their way into the bank's assets and served as security for deposits and notes in circulation. The Danish treasury keeps an account at the national bank. This account may have either a debit or a credit balance. The condition of this account at the end of July for recent years is shown in the following table:

Denmark-Account of the Danish State Treasury with the National Bank of Denmark 1
(Source: Annual reports of the National Bank of Denmark. Thousands of kroner)

| End of July | Debit balance or ovardraft | Credit balance | End of July | Deblt balance or overdraft | Credit balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1915 | 120,200 |  | 1921. | 00,601 |  |
| 1916 | 16,008 |  | 1022 |  | 28,299 |
| 1917 | 2,225 |  | 1923 |  | 3,435 |
| 1019 | 81,986 |  | $1925:$ | 40 |  |
| 1020. | 75, 573 |  |  |  |  |

1 This item is shown among the bank's "miscellaneous debits" and "mincellianeous credits."
Approximate.
Mar. 81.
The bank rate was raised to 6 per cent on October 7, 1919. This rate, however, did not seem to check borrowing materially, and thus did not keep prices from moving upward. The Finanstidende index number of wholesale prices for 1919 was 294 . In 1920 it rose to

CHART 20
Denzart-Wholrqale Prices on Paper Bagis and on Gold Babis, Montrity, 1020-1025
[Finanstidende inder numbers, 33 commodities, beginning of month, July, 1912-Juna, 1914-100; United States Bureau of Labor Statisties index 404 commodities, monthly sverage, $1913=100 \mid$


382, reaching a maximum of 403 in Novernber. The bank rate was raised to 7 per cent April 17, 1920. Even this rate seems to have been inadequate to stop inflation. So long as prices were rising at a rapid rate, and profits were high, business men could easily afford to pay 7 per cent for loans. But as soon as the tide of business prosperity had turned, and there appeared to be no longer any profit from the mere holding of goods-rather indeed a loss-a rate of 7 per cent became a burden. Liquidation was therefore rapid. It will be noticed in the above chart that loans and discounts and note circulation declined considerably in 1921.

The index number of wholesale prices fell from 403 in November, 1920 to 186 in November, 1921, a decline of 54 per cent. As Denmark is so largely dependent upon agriculture, and as the prices of farm products fell more than the average, it is not surprising that business confidence in Denmark should have been undermined.

Average wholesale prices in Denmark remained very steady throughout 1922. But beginning in 1923 there was a considerable rise. - This upward tendency has continued to the present time, although since thedatter part of 1924 more stability has been shown. The accompanying chart (No. 20) shows the course of prices in Denmark from 1920 to the present.

## III. FORGIGN TRADE

The foreign trade of Denmark has experienced considerable expansion since the war. During the war disturbed transportation and other conditions interfered with the country's trade, but in 1919 and 1920 -imports and exports were both large. A reaction took place in 1921 but since then the foreign trade has shown a decided improvement, more in fact than in almost any other European country.

The principal exports. of Denmark are food products, butter, bacon, eggs, and milk. The leading imports are iron and steel manufactures, and coal. The trade of Denmark, now as before the war, is largely with Great Britain, Germany, and the United States. The following tables show the principal articles entering into Denmark's foreign trade and also the percentages of the total trade with different countries.

Denmark-Imports and exports of principal articles, 1985


## Denmark-Percentages of foreign trade with principal countries

[Eource: League of Nations, foreign trade balances]

|  | 1913 | 1920 | 1922 |  | 1913 | 1920 | 1922 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IMPORT |  |  |  | EIPOETS |  |  |  |
| Great Britain. | 15. 7 | 27. 4 | 21.9 | Great Britaln. | 50.9 | 32 | 99.5 |
| Germany - | 38.3 | 164 | 30.7 | Germany. | 24.8 | 16. 6 | 7.0 |
| United States | 102 | 24.2 | 14.4 | United States | 1.1 | 4.6 | 1.2 |
| France. | 25 | 20 | 20 | France. | . 8 | 1.1 | 3.0 |
| Sweden. | 8.3 | 8. 8 | 6.7 | Swreden. | 47 | 18.3 | 7.8 |
| Narway | 1. 0 | 28 | 22 | Norwsy | 8.7 | 9.4 | 6.7 |

Before 1914 Denmark regularly had an excess of merchandise imports, as can be seen from the accompanying chart (No. 21), showing trade on the basis of both quantity and value since 1900. This pre-

OHABT i

TQuantity and value special tmports, i. en imports for domestic consamption; opecial arparts, i. 6., ex-
[Far figured mee Trable 3s]
Thousands of kronger

war position of Denmark should be borne in mind when it is noted that in recent years there has been an "unfavorable" balance of trade, i. e., an excess of imports. Also, Denmark was a debtor to other countries (in the net) to the extent of about $800,000,000$ kroner. ${ }^{14}$ Interest and profits on this money invested in Denmark had to be remitted abroad. These two important debit items-an excess of imports and interest due by Denmark-were offset largely by the credits on account of foreign freight receipts of Danish vessels and charges for handling goods transshipped in Danish ports.

Other items in the balance of international payments were of less importance. It does not appear that there were any large net capital movements in either direction during the years just prior to the war; although there may have been some seasonal movement. The following table gives the estimated amounts of foreign indebtedness for certain years.

Denmark-International balance of indebledness (capital account)
[Souree: Danish Statistical Yearbook. Mulions of Kronerl

| End of year | Credit itasus |  |  | Debit items |  |  | Balance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Foraign } \\ & \text { securlities } \\ & \text { in Donish } \\ & \text { hands } \end{aligned}$ | Credits extended to foralgners | Total credits |  | $\begin{gathered} \text { Floating } \\ \text { dobt } \\ \text { held } \\ \text { sbroad } \end{gathered}$ | Total debits | Deblt | Credit |
| 1806. | 68 | 52 | 121 | 608 | 100 | 708 | 587 |  |
| 1809. | 00 | 60 | 120 | 807 | 70 | 967 | 847 |  |
| 1911 | 70 | 6 | 134 | 941 | 70 | 1,011 | 877 |  |
| 1014. | 60 | 120 | 180 | 858 | 70 | 928 | 748 |  |
| 1915. | 250 | 200 | 450 | 350 |  | 350 | --.--.... | 300 |
| 1920 | 100 | 800 | 000 | 800 | 900 | 1,700 | 800 |  |
| 1921. | 75 | 600 | 575 | 885 | 565 | 1,400 | 825 |  |
| 1822 | 65 | 316 | 380 | 045 | 585 | 1,480 | 1,100 |  |
| 1823 | 125 | 450 | 575 | 1,125 | 675 | 1,800 | 1,225 |  |
| 1924 | 135 | 635 | 770 | 1,100 | 855 | 2,045 | 1.275 | -------* |

The excess of merchandise imports continued during the war, except for the one year 1914. For the years 1915, 1916, and 1917 the balance was considerably reduced as compared with 1913. This was due especially to greater exports. The reduction in debit items on account of a smaller excess of imports was coupled with an increase in credit items on account of greater foreign earaings of Danish shipping. Thus the balance of mdebtedness declined in these years.
The gold reserve of the national bank increased from $91,400,000$ kroner at the end of 1914 to $194,600,000$ at the end of 1918 . Since practically no gold had been circulating in Denmark, most of this increase came from abroad. Another factor helping to account for the reductions in indebtedness was the increase of foreign assets of Danish banks. The foreign assets of the national bank increased from $27,800,000$ at the end of July, 1914, to $78,200,000$ at the end of July, 1918. What data are available show there was a return of Danish securities on a large scale early in the war. This export of capital in one form or another doubtless continued through 1918.
The great increase in Danish foreign trade in 1919 and 1920 was one phase of the post-war business boom. It was due partly to the re-

[^22]moval of trade restrictions. In both these years the values of imports, exports, and the excess of imports passed all records. This was to a large extent due to the inflation of prices. This fact is indicated in a general way by figures for quantities of imports and exports, wherein everything is reduced to tons. The reduction in quantities since the outbreak of the war is shown in Chart 21 above: The monthly imports and exports of Denmark (values) are shown in the accompanying chart (No. 22).

CHART 22



The excess of merchandise imports was large in 1919 and 1920, and for these years combined amounted to $3,000,000,000$ kroner. This large excess had to be paid for, of course. The high ocean freight rates prevailing during this period swelled the item of foreign freight receipts of Danish shipping and thus helped to pay for the excess of imports. In addition, Denmark once more became a borrowing country. The city of Copenhagen floated a loan of $\$ 15,000,000$ in the United States in 1919 and the State floated a loan of $\$ 25,000,000$ in 1920. There was also liquidation of foreign assets that had been held by the Danish banks. Between July, 1918, and July, 1921, the balances abroad of the national bank declined by about $45,000,000$ kroner, while its total foreign assets declined by over $20,000,000$ kroner.

Another item helping to offset the large merchandise imports was the losses sustained by Danish holders of foreign exchange. No estimates of the actual amounts can be given, but they were probably considerable. For during 1919 and 1920 confidence in the exchanges that later collapsed had not been undermined and large quantities of foreign bills were bought up at what was thought to be bargain rates.

The excess of imports since 1920 has not been unusually large. In fact, after making allowance for the difference in wholesale prices, the average excess of imports has been even less than before the war. This shows that the present depreciation of the Danish krone is not due to the "unfavorable" balance of trade. Furthermore, the Government and municipalities of Denmark have received loans in the United States to the amount of $\$ 100,000,000$ since January, 1921, and loans in England to the amount of $£ 4,700,000$.

The following table gives an estimate of the items in Denmark's balance of international payments for 1922:

Denmark-Balance of payments in 1924
[Souros: Dentsh Statstical Department. In millions of kroner]
DEEIT

Bunker coal purchased abroad, net tourists' expenditure, etc..................... 75
Interest and dividends payable to other countries_ ..................................... 70

Increase of miscellaneous credits........................................................................ 185

credit

Stabilization funds utilized
Profit from commercial and insurance activities abroad.......................- 25



## IV. EXCHANGE RATES AND PUBCHASING-POWER PARITIES

The Danish krone, unlike sterling and francs, did not go to any considerable premium in New York at the outbreak of the war or during 1914. The rates continued to sag from month to month, reaching a low of 25 cents per krone in December, 1914, and a low of 24.13 in February, 1915. The gold par is 26.80 cents.

In Denmark the exchanges followed practically the same course they did in Sweden. Until the autumn of 1915 the three Scandinavian monetary units remained "pegged" together. Sterling, francs, and dollars rose in Denmark from the outbreak of the war until the spring of 1915. There was then a general drop; so that by the end of 1915 sterling and francs were below par and dollars had reached par. The extent of this movement is shown by the following figures:

Denmarb-Percentage rates of exchange, Copenhagen on various countries
[Source: Federal Reserve Bulletin]

|  | $\begin{gathered} \text { High, } \\ \text { July-Dt } \\ \text { comber, } \\ 1014 \end{gathered}$ | $\underset{1015}{\text { High }^{2}}$ | L07\% |
| :---: | :---: | :---: | :---: |
| Great Britain. | 105. 73 | 107.38 | 88.00 |
| Franco. | 107. 64 | 109.63 | 88.11 |
| Orited Itates. | 107.78 | 110.68 | 90.16 |
| Germany-.-. | 100. 85 | 88, 27 | 77.68 |

The explanation of this rise of foreign currencies in Denmark during the early months of the war is not difficult. During the crisis following the outbreak of the war there was a severe contraction of credit at the various financial centers. Those centers which were the largest creditors in the international money market were able in the short run to bring in their favor the balance of payments with countries in a technically weaker position. There was not sufficient time for the countries in the technically weaker positions to influence exports greatly and so create a greater supply of commercial bills payable in the stronger markets. London and Paris were in an exceptionally strong position. Consequently, sterling and francs were at a premium in practically all other markets. New York, by the liberal use of gold reserves, soon brought sterling down to par again. Thus, dollar exchange soon went to a premium in those markets where sterling and francs were already at a premium.

After the war had continued a few months the demand for supplies by the allied countries soon created a large supply of commercial bills payable in London and Paris. Although this turn of events perhaps was foreseen, nevertheless during the early period of the war private business men were too busy trying to protect their own solvency to take advantage of a profitablespeculation. While the allied countries were buying in large amounts in neutral markets, they were restricting
the export of goods to those markets. The result of this situation was that francs went below par in Copenhagen after May, 1915, and sterling after June, 1915. They continued below par for the period of the war. The following figures show the percentage which sterling was of par during the war years:

Denmark-Percentage of par of the pound aterling in Copenhagen
[Source: Federal Reserve Bulletin]

|  | $\left\{\begin{array}{c} \text { July-De- } \\ \text { cember; } \\ 1014 \end{array}\right.$ | 1915 | 1916 | 1917 | 1018 | 1019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High <br> Low. | 105.73 100.4 | 107.38 88.08 | 87.30 | 95.82 | 88.35 | $\begin{array}{r} 100.69 \\ 97.68 \end{array}$ |

An explanation of the exchange relations between the allied countries and Denmark, especially between Great Britain and Denmark, is necessary to an understanding of the exchange relations between the United States and Denmark. The allied countries protected their exchanges in the United States. Before the United States entered the war they sent gold to New York and obtained dollar loans through American banking houses. After the United States entered the war the necessary support was furnished by United States Treasury advances to the fiscal agent of the allied governments in New York. Since bills in sterling, francs, etc., could be disposed of on more favorable terms in the United States than elsewhere, such bills tended to come to this market. If the dollar funds thas obtained by bankers and dealers in Denmark, for example, could have been taken out in gold, sent to Denmark without interference, and then freely coined at the Danish mint, obviously no considerable discount on dollar exchange in Denmark could have arisen. But a good deal of the time these conditions did not exist. The risk in sending gold from the United States to Denmark was very great. Besides, there was an embargo on gold exports from the United States from September 7, 1917, to June 30, 1919. And then if the gold had reached Denmark it could not have been coined after May 1, 1916.

But even though there were difficulties in the way of the transfer and coinage of gold, dollar exchange might still have been maintained close to par in Demmark if it had not been for trade reatrictions. Before the United States entered the war the main hindrance was the allied restrictions on merchandise imports into Denmark. After the United States entered the war there was the additional hindrance of American restrictions on merchandise exports from this country.

The krone reached a high point of 38.75 cents in November, 1917. It averaged around 31 cents for the first nine months of 1918, and then fell to about par in November. From that time the rate fell rapidly, reaching a low of 14.40 during the exchange crisis of February, 1920, and a low of 13.05 during the crisis of November, 1920. The course of the krone from 1914 to the end of 1924 can be seen in the accompanying chart (No. 23).


In the spring of 1919 the allied exchanges were "unpegged." American Treasury advances to the allied governments practically stopped. Consequently, the supply of dollar exchange in other markets was greatly curtailed. Thus, even if the United States restrictions on merchandise exports had remained in force the dollar would have risen as against the Danish krone. The reduction in the artificial supply of dollars was coupled with the removal of reatrictions in the United States upon exports, which led to an increased demand for dollar exchange generally to buy the much-desired American goods at the relatively low prices prevailing in this country. Index numbers of prices in the United States in 1919 averaged 206, compared to 294 in Denmark and 235 in Great Britain.

As soon as the trade restrictions were removed, Danish importers began to take advantage of the lower prices in the United States and in Great Britain. The balance of imports in 1919 and 1920 amounted to $3,000,000,000$ kroner.

The precipitate drop in Danish exchange in February, 1920, and again "in November, 1920, was due largely to exchange crises in the United States. Most of the European exchanges participated in these drops. American merchants and dealers had been holding large amounts of foreign exchange (mostly sterling) on which they suddenly tried to realize. The foreign exchange crisis at the end of 1920 was aggravated by the general business crisis in the United States. Business men were trying to realize on stocks of goods and securities as well as on foreign exchange.

The fundamental reason for the depreciation of the krone has been the reduced purchasing power of the krone in Denmark; that is, a rise in prices relatively greater than in the United States. A numerical expression of this relatively greater inflation of prices in Denmark than in the United States is found in purchasing-power parities. Purchasing-power parities are parities, as the name implies, on the basis of the purchasing power of the currency units.in the countries in question. Purchasing power parities computed on the basis of index numbers of prices in the United States and in Denmark are shown in the accompanying chart (No. 24). It will be noticed that exchange rates since the fall of 1921 have exhibited greater depreciation than warranted by the purchasing power of the krone in comparison to that of the dollar. The two eurves in general move more or less together.

In the early part of 1921 the krone made a rapid recovery, but did not hold the gain. However, beginning in July, 1921, there was a steady improvement that lasted for a year. The principal factor making for the recovery was the fall of prices in Denmark. Imports were thus discouraged relatively to exports. The balance of imports for 1921 and 1922 combined was $418,000,000$ kroner, as against $3,006,000,000$ kroner for 1919 and 1920 combined. Although prices in the United States were falling rapidly in 1921, they were falling still more rapidly in Denmark. Prices continued steady in Denmark after they began to rise in the United States in 1922. This relatively greater increase in the value of the krone than in that of the dollar is shown in the purchasing-power parities. For example, the purchas-ing-power parity rose from 12.82 cents in December, 1920, to 24.63 cents in July, 1922.

CEART 24
Demare-Purchagno Power Pabitis and Exchanay Rater, 1920-192s
Based on Finanstidende index numbers for Denmark, 38 commorities, beginning of month, July, 1912June, 1014-100; and on Federal Reserve Board inder numbers for the Vnited Btates, i01 commoditied monthly sverage, $1913=100]$
[For figurea see Table 38]


The Danish krone also received support from loans floated abroad especially in 1922. The following list of State and local government flotations is significant in this connection:

Denmark-Borrowings abroad; 1980-1985

${ }^{1}$ The credits negotiated by the national bank and syndleate were for purpose of carreney and asehange解能ization.

The krone reached a high point (since 1919) of 22.18 cents in June, 1922. It declined almost continuously after that until the spring of 1924. The principal cause of this depreciation was a rise
of prices in Denmark. In May, 1923, the bank rate was raised from 5 to 6 per cent. This served to check the rise in prices for a time. In July, 1923, the bank sent a shipment of gold to the United States in an effort to support the krone. Imports of Danish gold to the United States amounted to $33,600,000$ for that month. In September, 1923, the bank gave some further support to exchange by selling some of its own foreign holdings.

In the autumn of 1923 the Government agreed to a proposal to establish (December 15, 1923) an exchange equalization fund. The fund was to consist of foreign credits against which the committee of control was to sell drafts in times of emergency. The credits were to be supplied to the market only in times of exceptionally high foreign exchange rates. It was expected that the fund would be gradually increased again as foreign currencies became cheaper. A credit of $\$ 10,000,000$ was obtained from the National City Bank of New York and a credit of $£ 2,700,000$ from a syndicate of London bankers. ${ }^{1}$ In Denmark participation in the exchange equalization fund was as follows: The Government, 40 per cent; the National Bank of Denmark, 40 per cent; and four important Danish private banks, 20 per cent.

Immediately after the announcement (in November, 1923) that an agreement had been reached regarding the fund the krone rose in value. From a low of 16.64 cents around the middle of November, the rate went to 18 cents in December. The national bank took advantage of this improvement to increase its own exchange holdings. Had it not done so the krone would doubtless have gone even higher. In January, 1924, there was a panicky demand for foreign exchange and the krone declined rapidly. A large part of this demand represented a real flight of capital.

The krone reached a low point of 15.30 cents in March, 1924, from a high of 17.58 in January, a decline of 13 per cent. The wholesale price index number rose from 210 at the beginning of January to 227 at the beginning of March. The committee controlling the exchange equalization fund tried at first to stop this downward movement of the krone by large offers of foreign exchange. The committee used up about half of its foreign credits in this way. It then relinquished its efforts and allowed the krone to find its own level in the market.

The national bank raised its rate to 7 por cent in January, 1924. The bank issued a cricular in March in which it announced a policy of credit restriction. It urged the private banks, however, not to restrict credit to commerce and industry more than was necessary.

In March, 1924, the Valuta Central was established (effective March 31) with power to regulate foreign-exchange transactions. All exchange holdings worth more than 5,000 kroner must be registered. Foreign exchange can be requisitioned by the Valuta Central unless the holder of the bill is able to show that the bill is needed to pay for imports within three months. The Valuta Central may also issue regulations designed to prevent the acquisition of foreign credit balances by roundabout methods; e. g., allowing someone abroad to draw on a bank account in Demmark. A proposal to allow the Valuta Central to control imports of merchandise was disapproved.

[^23]The Government in January, 1925, fixed rates for stabilization, rates which provide for a gradual raising of the value of the krone over a period of about two years. In order to maintain these rates the bank has at its disposal the $\$ 40,000,000$ revolving credit arranged in New York in January, 1925. ${ }^{3}$ The stabilization rates are as follows:
17.42 cents per krone to July, 1925.
17.86 cents per krone to January, 1926.
18.30 cents per krone to July, 1926.
18.80 cents per krone to January, 1927.

During recent months there has been quite a notable rise in the New York quotations of the Danish krone, from an average of 17.55 cents for November, 1924, to over 18 cents for March, 1925. By the end of June, 1925, the rates were close to 20 cents. Thus the prevailing rates have been above those provided for in the stabilization plan.
${ }^{3}$ To be utilized in consultation with the Minister of Finance.

## V. STABILIZATION

It should be said at the outset that the main problem in stabilizing the Danish krone is not how to balance the budget, although this is important. Treasury financing, of course, has its difficulties; but Government borrowing is not leading to much inflation of currency or credit. The deficits in the budget are met to a large extent out of funds coming from investment sources, and not out of bank credit or issues of paper money. The deficite, however, are large and must be reduced if sound conditions are to prevail. For the five fiscal years 1919-1923 (end of March) ordinary receipts averaged only about 78 per cent of ordinary expenditures.

The following figures show the receipts and expenditures of Denmark since 1911, and also the total Government debt. It will be noticed that the finances of Denmark are not in a very bad condition compared to those of some of the other European countries. The credit of Denmark in the United States is good, as indicated by the fact that the 6 per cent bonds of 1942 are selling in New York at about 101.

Denmark-Receipts and expenditures, 1911-1923
[Source: Stathatink Aarbog, Kobenhavn. 000 ouilted]


1 Surplas.
Denmark-National debt, 1910-1988
[Source: Etatistisk Asrbog. In thousands of kroner]

| March s1- | $\begin{aligned} & \text { Internal } \\ & \text { debt } \end{aligned}$ | Extermal debt ${ }^{6}$ | Total indebtedness | March 31- | $\begin{gathered} \text { Internal } \\ \text { debt } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { External } \\ \text { debt }{ }^{2} \end{gathered}\right.$ | Total indebtednass |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1010. | 81,887 | 210,867 | 301,784 | 1917 | 825,776 | 288, 310 | 680,086 |
| 191. | 81, 603 | 254, 187 | 835,800 | 1918 | 843, 017 | 260,321 | 603,365 |
| 1912 | 81, 511 | 270,487 | 351, 978 | 1910. | 523 , 74 | 257, 338 | 780,607 |
| 1914 | $84,3,52$ 88,397 | 272,237 272,482 | 856,039 800,879 | 1820 | 671, 916 | 254, 344 | 988, 2660 |
| 1915. | 123,000 | 200, 576 | 882, 030 | 18222. | 667,865 | 534, 502 | 1, 200, 477 |
| 1916 | 104,667 | 266,208 | 400,956 | 1028 | 660,888 | ©31,962 | 1,201,870 |

[^24] 1920 at 16.66 vanth per Krone; $\$ 30,000,000$ logn of 1021 et 22,88 agnts per Erome.

The main problems to be faced by Denmark with reference to currency reform are: (1) What price level should be maintained, i.e., what value should be given the krone, and (2) how can stabilization be accomplished and external depreciation of the krone brought on by panicky demands for foreign exchange be avoided?

The krone at the present time has a value, according to current exchange rates, of only about 18 cents, as compared with 26.80 cents before the war, which is the gold par. The question thus arises whether Denmark should stabilize at approximately the present value or endeavor to return ultimately to the pre-war level. Returning to the pre-war level would, of course, mean a fall in prices, and any change in the general scale of prices is disturbing to the industry of a country. Falling prices are almost always accompanied by depression and unemployment. A change in the value of the unit also results in an injustice to borrowers or lenders. Inasmuch as business in Denmark has become adjusted to the present krone, it would seem preferable to stabilize the currency at approximately the present level of prices.

Stabilization of the currency below its gold parity is sometimes regarded as partial repudiation of the Government's debts contracted before the depreciation began, or had gone so far. This same scaling down also applies to private debts. However, at the present time the bulk of indebtedness outstanding, private and governmental, was contracted at a time when the krone was depreciated in value, so that if debtors were made to pay back gold kroner greater injustice would be done than if stabilization at the present level were accomplished. It would be possible for the law providing for stabilization to arrange that obligations be repaid according to a fixed scale determined on the basis of the value of the krone at different dates. Thus a debt contracted in 1920, when the krone averaged about 15 cents, would be repaid on a different basis than one contracted in 1922 when the krone averaged over 20 cents, according to the exchange rates. In deter-- mining such a scale index numbers of internal prices should also be taken into consideration. Although devaluation of the krone has its difficulties, when the depreciation is so great as it is in Denmark restoring the krone to its former par offers many serious disadvantages and but few advantages.

The problem of how to maintain stable exchange rates has to do largely with the maintenance of a stable price level internally. On the other hand even though internal prices are stable, a sudden demand for foreign exchange might lead to depreciation. The external value of the currency may depreciate not because internal prices are rising but because of heavy purchases of foreign exchange to get capital out of the country. Under such circumstances the best way to meet the situation is by liberal use of the central bank's reserve. The central bank at the same time would have to take measures designed to restore exchange rates; that is, the bank should endeavor to keep the mgrket rate of discount high. This tends to attract capital to the country and at the same timn by contracting credit tends to increase the purchasing power of the currency unit. While the bank should not hesitate to draw heavilyon its exchange reserves in the face of rising exchange rates, it should at the same time take precautions to deflate prices if the krone appeared to be "overvalued."

Internal prices in Denmark have now become relatively stable, so that there seems to be little danger of much depreciation of exchange rates resulting from internal depreciation. In addition to its gold reserve the National Bank of Denmark has a credit with the National City Bank of New York and also a credit in London. With these resources the national bank is in a position to control exchange rates within substantial limits, provided there is no inflation or other fundamental disturbance. Once the currency is stabilized and the market is assured that the bank will unreservedly maintain the stabilized rate, much of the work of equalizing the demand for and the supply of bills will be done by private dealers. They will buy when the dollar rate goes much lower than the stabilized rate and sell when it goes much higher.

The National Bank of Denmark at the present time has a gold reserve of about $\$ 56,000,000$ ( $210,000,000$ kroner), compared to about $\$ 20,000,000$ at the end of 1913 . This constitutes a reserve of about 45 par cent of the note circulation of about $460,000,000$ kroner. The bank also has balances abroad to the extent of about $34,000,000$ kroner. Denmark is thus not in a weak position as regards gold reserves. If the country should adopt a new gold unit close in value to the current value of the krone, as indicated by exchange rates and purchasing power parities, little difficulty would be experienced in maintaining the gold standard on the basis of the new unit. The stabilization law of January, 1925, provides that the bank be relieved of its obligation to redeem its notes in specie until December 31, 1926.

An attempt by the Government to control exchange rates through restrictions on the purchase and sale of foreign bills may make stabilization more difficult. If trading is allowed to be absolutely free, there are automatic remedies which tend to restore the rates. If external depreciation is due to a rise in prices internally, or some other fundamental reason, the condition should be remedied at its source as outlined above, rather than by restrictions on exchange dealings. Experience has shown that an arbitrary limitation on purchases is ineffective, and at the same time interferes with trade.

Once the krone has been stabilized and has a definitely established value with reference to the dollar, the return to the full gold standard is largely a matter of detail. If the national bank should fear an excessive drain of gold the bank could redeen for a time only in gold bars of large denominations. People in Denmark have become accustomed to paper money and do not regard it with the same suspicion as in some of the other countries, so that the bank could discourage the actual circulation of gold, and cause the bulk of the circulating medium to consist largely of paper money. To do this the bank would have to adopt a bold policy with reference to redemption so that there would be no question as to the value of the currency or of another suspension of specie payments.

The gold value of the total circulation of Denmark is shown in the accompanying chart (No. 25). Figures for the gold value are computed by multiplying the total amount of circulation outstanding by the value of the unit. The chart shows two curves, one on the basis of the value of the krone, as indicated by exchange rates, and the other on the basis of the value of the krone as indicated by purchasing power parities. The value of the total circulation fluctuated erratically during and after the war as the amounts of circulation out-

CHART ${ }^{28}$
 [Por dgures see Tablo 34]

standing changed and as the value of the krone also fluctuated. During 1924, however, while the fluctuations continued, there was no net movement either up or down of any extent.

The countries with which Denmark has the most important trade relations either are now on the gold standard or soon will be. It therefore is of importance that exchange rates with such countries be stable. Otherwise the prices of import and export commodities will continue to fluctuate with exchange rates. Also the foreign trade transactions themselves are rendered more hazardous by fluctuating rates.

## HUNGARY ${ }^{1}$

## I. CURRENCY PRIOR TO 1918:

On the break-up of the Austro-Hungarian monarchy at the end of October, 1918, Hungary became an independent State. Hungary had been united with Austria since about 400 years ago when Hungary, Austria, and Bohemia formed a single State under a commou sovereign. Hungary was distinct from Austria in many ways, and retained in large measure her independent existence, although much of this was only nominal. The two countries had common departments of foreign affairs and of war. They had a common customs frontier, and various other things in common.

Màtters pertaining to currency and banking, however, were not common, although in actual practice the two countries by agreement had adopted similar systems. In this way the old Austrian National Bank, founded in 1816, was made the Austro-Hungarian Bank in 1878. At intervals of every 10 years the bank received from the Parliaments of both States the right of issuing notes.

Hungary was practically upon the gold standard prior to the war, in accordance with the law of 1892, adopted by both countries. Prior to 1892 Austria-Hungary had three different currency units, the silver florin, the gold form, and the paper florin. The silver florin was based upon the law of 1857 which attempted to end the period of inconvertible paper money. ${ }^{3}$ War with Italy interfered and in April, 1859, the bank was again relieved of its obligation of redeeming its notes in coin. As a result of the large issues of paper money, the silver coins were at a premium in terms of paper until the price of silver declined, beginning in the early seventies. As a reault of the decline in the gold value of silver the free coinage of silver was suspended in 1879.

A gold coin, the Napoleon d'or, was introduced in 1868 and was of the same weight and fineness as the 20 -franc gold piece of the Latin Monetary Union, worth about $\$ 3.858$ in American money. The Napoleon was to be the equivalent of 8 silver. florins. When the price of silver fell, however, this was not the case. The gold florin was worth a little over 48 cente (one-eighth of $\$ 3.858$ ), while the silver florin, as the price of silver continued to fall, became ultimately worth only about 40 cents. The silver florin in this wey came to be on a par with the depreciated paper florin.

The unsatisfactory currency situation was remedied by the gold standard law of August, 1892, which established the gold krone, containing 0.33875 gram of gold 0.900 fine. The krone was thus the equivalent of about 20.26 cents in American money. The krone was divided into 100 hellers. The silver coins were the 1, 2, and

[^25]5 krone pieces, which were legal tender only in limited amounts. Gold was unlimited legal tender and there was free coinage of gold.4

On account of the large amounts of silver and paper currency in circulation the transition to the gold standard did not take place until January, 1900. The silver and the paper florin were made the equivalent of two gold crowns, or about 40.52 cents. However, none of the silver or paper currency of Austria was ever made legally redeemable in gold.

In addition to the metallic money, notes of the Austro-Hungarian Bank circulated widely before the war, the smallest denomination being the 10 -krone note. The Austro-Hungarian Bank was reorganized in 1878 from the former Austrian National Bank, founded in 1816. The bank enjoyed a monopoly of note issue, and its notes were legal tender except for payments which specially stipulated coin. The bank was required to hold a metallic reserve against its notes outstanding to the extent of 40 per cent in gold or silver. Foreign exchange holdings payable in gold could be counted as metal up to the limit of $60,000,000$ crowns, as arranged by the law of 1911. Additional circulation was allowed, but above a certain minimum bore a tax of 5 per cent. Notes not covered by gold or foreign bills were to be covered by domestic bills, securities, and certain other types of assets.

In the administration of the bank, the Governments of both Austria and Hungary were represented. After the payment of a dividend of 7 per cent to the shareholders, three-fourths of the net profits were turned over to the State. The capital of the bank amounted to $210,000,000$ crowns in 1914.

The notes of the bank were never redeemable in gold, although the bank in practice maintained them at a parity with gold. The matter came up for discussion when the charter was renewed in 1911, and it was arranged that the bank should propose to the two Governments redemption in specie whenever the bank thought the time proper. In the meantime, the bank was to use its efforts to maintain stable exchange rates with reference to gold. When the first Balkan war broke out in 1912, hoarding of gold took place, and the gold was replaced by silver. During that war the notes of the bank were at a slight discount in terms of both gold and silver.

In addition to the Austro-Hungarian Bank, Hungary, in 1913, had 6,062 credit institutions. Of these 2,035 were banks and 4,023 were, so-called credit cooperative societies, with a membership of $1,312,000$. The aggregate capital of all these institutions amounted to $2,568,-$ 400,000 crowns. Hungary also had a postal savings system. The Postal Savings Bank dated from 1885 and in 1913 had 4,695 offices.

When the war broke out in 1914 restrictions on note issues of the Austro-Hungarian Bank were relaxed. The bank then proceeded to issue large quantities of paper money, the notes being issued in small denominations. The Government turned to the bank for funds, and as government borrowing increased, inflation of currency and credit took place. In July, 1914, the note circulation of the bank amounted

[^26]to a little over 2,000,000,000 kronen. By the first of 1919 the circulation had increased to over $35,000,000,000$ kronen.

The gold and silver reserves of the Austro-Hungarian Bank became greatly depleted during the war, and at the time of the armistice, in November, 1918, were about one-fifth of what they had been in 1914. In the middle of 1914 the metallic reserves amounted to about $1,500,000,000$ kronen, of which about $1,238,000,000$ kronen was gold. At the time of the armistice in 1918 the reserves amounted to only about $342,000,000$ kronen, of which about $286,000,000$ was gold. Part of the gold had been sent to Germany and was in the vaults of the Reichsbank. Part also had been sent to other countries in payments for goods imported into Austria-Hungary:

## II. CURRENCY MEASURES FOLLOWIIG SEPARATIOI

After the break-up of the Austro-Hungarian monarchy at the end of October, 1918, political conditions in Hungary were disturbed. A revolution took place, King Charles abdicating November 13, and on November 16 a republic was declared. Count Michael Karolyi was proclaimed provisional president. The Karolyi government had only a short and disturbed existence. In March, 1919, it was overthrown and a Bolshevist government set up under Bela Kun. During the period of Bolshevist rule and reign of terror affairs in Hungary were greatly disorganized, financially as well as politically and in other ways. The Bolshevist government lasted only about four months, and Bela Kun was finally overthrown by a Rumanian army, which occupied Hungary. The Rumanian army withdrew after a few weeks and a National Government was reestablished in August, 1918, under Admiral Horthy, who became regent. In March, 1920, the Government of Hungary formally declared the country a monarchy.

The international status of Hungary was arranged in the peace treaties of St. Germain and Trianon. The territory of the country was greatly reduced by these treaties. Other succession States had occupied territory belonging to the former Hungary, and according to the rearranged borders the territory of Hungary was reduced to about 36,000 square miles from about 125,000 square miles before the war.

Various changes in government in Hungary during the first few years following the war, and the attempts of the late King and Emperor Charles to regain the throne in 1921, did not conduce to the establishment of healthy financial conditions. The currency was depreciating rapidly in consequence of increasing issues of paper money. The country's credit was weak; revenues were disorganized and were reduced in purchasing power by the depreciation of the currency; at the same time expenditures were large.

When the Bolshevists were in power in Hungary the plates for printing small denominations ( 1 and 2 crowns) of banks notes of the Austro-Hungarian Bank were in Budapest, the capital. The Bolshevist government used these plates to print paper money which was put into circulation, money which later came to be called counterfeit money, but which was nevertheless honored by the subsequent government. The Bolshevist government also printed its own money in the larger denominations. These larger notes of the Bolshevist government were known as "white notes," since they were printed on white paper because the government had insufficient material to print the customary kind of notes. The white notes were regarded with suspicion by the public, which preferred the blue ones with the stamp of the Austro-Hungarian Bank. These white notes were later redeemed by the Government at only 25 per cent of their face value. The 1 and 2 crown bank notes of the Bolshevists, however, were redeemed in full partly because it was impossible to distinguish them.

After Hungary separated from the Austro-Hungarian Monarchy in 1918, the Austro-Hungarian Bank continued to operate and to
issue notes which were current in Hungary. The treaty of St. Germain signed September, 1919, provided that each of the States which had been formerly a part of Austria-Hungary should stamp the notes of the Austro-Hungarian Bank with the stamp of its own Government. This was done first by Czechoslovakia in March, 1919, prior to the treaty and later by the other succession States. The treaty also provided that the respective Governments should within one year replace the stamped notes by new national currency.

The stamping of the Austro-Hungarian notes was undertaken by Hungary according to a decree of March, 1920. Inasmuch as Hungary was the last State to stamp these notes, those which had not been presented for stamping in other States were brought into Hungary. The small denominations of notes were not stamped promptly, due to their large number and the labor involved in stamping such large quantities of notes. This omission resulted in a certain amount of contusion, since in Vienna the krone was more depreciated in terms of dollars than in Budapest. Consequently, the small notes were brougnt from Vienna to Budapest and used to purchase dollars there which were then taken back to Vienna and sold for a larger amount of kronen. The process could thus be repeated indefinitely.

The Austro-Hungarian Bank, according to the treaties of St. Germain and Trianon, was to pass jnto liquidation, and its assets were to be divided among the succession States. The gold reserve of the bank was its chief liquid asset. On January 1, 1920, the bank was divided into two sections, an Austrian section and a Hungarian section. In August, 1920, liquidators were appointed, as provided in the treaties, and the bank has now passed completely out of existence.

A national system of currency was introduced into Hungary by the law of May 4, 1921. This law provided, among other things, for the withdrawal of the paper currency then in circulation, which was chiefly that of the Austro-Hungarian Bank, and the substitution of national currency. It also provided for the establishment of a State note institute, which was to be under the control of the Minister of Finance. This institute was to be a more or less temporary organization to take over the affairs of the Hungarian section of the AustroHungarian Bank and to perform the function of a central bank of issue. The note institute was authorized to issue notes in exchange for the stamped notes of the Austro-Hungarian Bank, the postal savings notes, and also to issue various other amounts of notes, including those issued in connection with ordinary commercial operations.
The note institute began operations the first of August, 1921, and began promptly to issue its own notes in exchange for the stamped notes of the Austro-Hungarian Bank, as well as for the small amount of other notes in circulation, the postal savings notes, and the socalled counterfeit notes issued by the Bolshevists.

Notes of the Austro-Hungarian Bank which had been stamped with the Hungarian insignia amounted to $20,689,412,775$ crowns, of which $15,827,190,632$ crowns were later exchanged for State notes. The remainder were retired. State notes were also issued in exchange or $793,400,000$ crowns in notes with the Yugoslav stamp, notes whi h had been circulating in territory regained from Yugoslavia, and $n$ exchange for $87,300,000$ crowns of counterfeit or forged notes of 1 and 2 crown denominations issued during the Bolshevist regime.

These notes were recognized at their face value, although the "white notes" of the Bolshevists-those issued in larger denominationswere redeemed at only 25 per cent of their value. ${ }^{B}$ These and other

CHART 28
National bany of Hunoary-Nots Ohaculationg Advances to phe Bratr, and Cuterent accounts AND Deposts, MONTHLy, 1021-1025
[State Note Institute prior to June, 1004] End of month
(allinons of kronen
[For figures see Table 39]
Millions of kronen

(1) Yigures for currenit accorints and deposits beginning with Jume, 1928, are not comparable with flgared prior to this date due to the crgeniratiga of the now bank and to regrouping of iteme which mate ap ourrent socounts and deposits.
notes presented for exchange brought the total amount of State notes issued to retire other circulation up to the figure of 18,396 ,000,000 crowns.

[^27]According to the law of May, 1921, the maximum amount of notes which might be issued by the note institute was limited. It was intended to make the institute independent of the Government's finances, and the law prohibited the granting of credits to th State. Thess ambitions, however, were realized only for a short time, and in October, 1921, advances in the form of notes were made to the State against treasury bills, in order to cover the budgetary deficits. Inflation, which had been checked for a short time, thus began again and led to the progressive depreciation of the crown.

The State note institute had no capital, and its assets behind the notes were largely claims against the Austro-Hungarian Bank as a result especially of the notes of that bank taken over, and also Hungarian treasury bills against which notes had been issued. The note institute had only meager metallic reserves, and its chief function came to be that of supplying funds to the Government in the form of notes.

As the advances to the State continued to increase from the end of 1921 to the middle of 1924 the note circulation also increased rapidly. The accompanying chart (No. 26) shows how these two items increased together. As depreciation took place, borrowing on the part of speculators became profitable, inasmuch as the money borrowed could be repaid later in depreciated money. This led to a large demand for credit, and it will be noticed from the chart howt current accounts and deposits also increased during these years of deprecistion.

The State note institute was organized as a temporary institution and was to pass out of existence later when a central bank of the customary type could be established. Such a bank, the National. Bank of Hungary, was organized in June, 1924, and took ower the affairs of the State note institute at that time. This new bank is: discussed below in Section V.

## III. FOREIGI TRADE

No accurate statistics for Hungarian trade, as distinct from that of Austria, are available for the pre-war period, inasmuch as the two countries of the dual monarchy had a common customs frontier. Furthermore, Hungary lost a large amount of territory in the rearrangement of borders according to the treaties following the war, the present Hungary comprising only 28 per cent of pre-war Hungary, and only 36 per cent of the pre-war population.

Hungary is essentially an agricultural country, and produces each year, in addition to her own food supply, large quantities of agricultural products for export purposes. The principal crops exported are wheat, maize, rye, barley, and oats. Sugar beets are also grown in considerable quantities, and refined sugar is exported. Other important exports are live animals and food products, such as meat, wines, eggs, and poultry.

Hungary has been endeavoring to develop some industries within the country, especially the textile industry, since large amounts of textiles are imported and Hungary feels it would be a good thing to be less dependent upon foreign textiles. The raw cotton imported into Hungary practically all comes from the United States. An industry of considerable importance to Hungary is that of milling, and a large part of the wheat and barley grown is exported in the form of flour. Budapest is one of the leading flour milling cities of Europe. Hungary also manufactures a certain amount of iron and steel products and also leather products, especially shoes. The greater part of the coal used in Hungary is mined within the country, although importations of coal are of considerable amount. In addition to cotton and woolen textiles, and coal, Hungary imports a large amount of lumber. The following table shows the principal articles imported and exported by Hungary.

## Hungary-Imports and exports of merchandise, by principal commodities, 1980-198s

[Source: Magyar Statimetiral ssomile. Quantity in metric quintale; valus in thousands of crown]

| Articlen | 1020 |  | 1021 |  | 1002 |  | 1978 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Vaius | Quantliy | Value | Quantity | Value | Quantity | Value |
| [MPOBTE |  |  |  |  |  |  |  |  |
| Cotton fabrica | $\begin{array}{r} 69,768 \\ 18,788 \\ 250,121 \\ 1,57,107 \\ 8,508 \\ 813,178 \\ 23,404 \\ 209,670 \\ 172,802 \\ 179,100 \\ 9,800 \\ 10,99 \\ 14,791 \end{array}$ |  | $\begin{array}{r} 115,884 \\ 31,329 \\ 6,132,949 \\ 10,098,723 \end{array}$ | $\begin{aligned} & 0,246,700 \\ & 4,462,800 \\ & 3,474,400 \\ & 1,042,700 \end{aligned}$ | $\begin{array}{r} 116,478 \\ 38,287 \\ 7,030,880 \\ 16,698.790 \end{array}$ | 28, 894, 700$14,130,400$ | $\begin{array}{r} 72,001 \\ 8,687 \\ 8,380,025 \\ 20,674,231 \end{array}$ | $119,777,900$$80,134,400$ |
| Weolen fabrices |  |  |  |  |  |  |  |  |
| Cosil........ |  |  |  |  |  | 18, 14, 300 |  | 159, 228, 700 |
| Thuber and lumber |  |  |  |  |  |  |  |  |
| Cotton yarn and thrend |  |  | 27, 198 | 1, 767, 500 | 41,738 | 6, 976,700 | 40,700 | $72,160,000$ |
| Paper and papar goods. |  |  | 839,309 | 1, 734, 200 | 482002 | 6, 169, 200 | 858,287 | 48, 048,100 |
| Iron manulacture. |  |  | 230, 238 | 1, 338,800 | 100,755 | 8, 8182,700 | 141, 169 | - $21,741,300$ |
| Mineral olls....... |  |  | 200, 418 | 1,139,200 | 568, 077 | 8, 248,100 | 841,858 | 81, 68000000 |
| Machinary and appar |  |  | 928878 | 1, 091, 900 | 177,648 | 4, 000,200 | 161,980 | 46, 0088,800 |
| Footwear -....j...... |  |  | 9,811 | 700,000 | 7,177 | 2,809,000 | 2, 941 | 18, 458,800 |
| Bew and gcrap fron...... |  |  | 115,915 | 137, 800 | 563, 101 | $1,761,800$ $2,095,800$ | 6S, 685 | $\begin{array}{r} 8,749,600 \\ 23,897,700 \end{array}$ |
| EXPOBT |  |  |  |  |  |  |  |  |
| Wheat and barley flour. |  | 18,202975,308 | 60,000 | $\begin{aligned} & 1,250,089 \\ & 025,274 \end{aligned}$ | $\begin{aligned} & 8,250,300 \\ & 1,682,700 \end{aligned}$ | 1,026, 683 | $16,004,800$$3,609,200$ | 1,840,688 | 268, 650, 800 |
| Wines-....-.......-.-.... | $2,713,300$180,000 |  | 227,751 |  |  | 110, 589 |  | 88, 210,000 |
| Animali for sianghter ond drat animala |  | 7,208 |  | 68, 170 | $\cdots 1,316,200$ |  | 11, 712, 200 |  |
| Mechinery and apparatus.....-.- | 11,374 | 201, 600 | 106,092 | 1,272,400 | 257,096 | $8,712,100$$\mathbf{8 , 2 1 3 , 4 0 0}$ | 129, 025 | 40, 668,000 |
| Electrical machinery and apparatus. |  | 740,600 | 23,843 | 1,105, 700 |  |  |  | 88, 487, 100 |
| Woal...-. | 38,8901,70 | 28,200 | 88,472 | $\begin{array}{r}\text { - } 64,700 \\ 645,700 \\ \hline\end{array}$ | 42,543 | 2, 473, 200 | 88, 184 | 82, 125, 000 |
| Fresh and prepared mid |  |  | 48, 687 |  | 91,236 | 2, 211,100 |  |  |
| Feathers. | 0, 8,888 8,858 | 335,700 81,800 | 21, 168 | 465,700 |  |  | 18,07723,031 | $12,236,600$$8,842,800$ |
| Raw hides | $\begin{array}{r} 60,488 \\ 121 \end{array}$ | 617,000 | 85,784 | 324,200 | 23,901 | $1,785,200$ |  |  |
| Rgge. |  | $\begin{array}{r} 617,700 \\ 1,200 \end{array}$ | $\begin{aligned} & 80,87 \\ & 17,80 \\ & 14,275 \end{aligned}$ | $\begin{aligned} & 84,500 \\ & 301,500 \\ & 157,000 \end{aligned}$ | $\begin{aligned} & 2,691 \\ & 30,712 \\ & 88,489 \end{aligned}$ |  | $\begin{aligned} & 35,210 \\ & 68,780 \end{aligned}$ |  |
| Alcohol |  |  |  |  |  |  |  |  |

Hungary's foreign trade is predominantly with Austria, largely as a result of the former close relations between these two countries. In 1924 about 23 per cent of the imports into Hungary came from Austria and about 37 per cent of the exports went to Austria. Czechoslovakia ranks second as a destination of Hungarian exports, and as a source of imports into Hungary in 1924 ranked first, being ahead of Austria. The trade with Germany and with Rumania is also large. Exports to the United States are not very large from the standpoint of value, although imports from the United States are of considerable importance. The following table shows the trade of Hungary with the principal countries:

## Hungary-I mports and exports of merchandise, by principal countries, 1925 and 1824

[Sonrce: Statigztikd Havi Eorlemények]

|  | 1928 | 1024 |
| :---: | :---: | :---: |
| LTPORTS | Gold lronew | Gold krones |
| Crechaslovatia. | 101, 888,000 | 176,805,000 |
| Anstris. | 109, 223,000 | 162,970,000 |
| Germany | 60, 480,000 | 88,071,000 |
| Rumania | 43, 375, 000 | 55,024,000 |
| Poland | 27,182,000 | 28, 856,000 |
| Itayy-.- | 12,816,000 | 20, 474,000 |
| Switzerland | $13,237,000$ <br> $, 062,000$ | 28,341,000 |
| United States- | 15,024,000 | 17, 735,000 |
| Great Britain. | 6,501,000 | 15, 306,000 |
| France. | 3, 244, 000 | 11,388,000 |
| Netherlands | 6, 128,000 | 8,019,000 |
| All other conntries | 18,055,000 | 44,356,000 |
| Total | 422, 885,000 | 702,806,000 |
| ExPORTs |  |  |
| Austris. | 147,500,000 | 200, 610,000 |
| Czechoslovatria | 139,340,000 | 138, 334, 000 |
| Germany. | 22, 838, 000 | 45, 424,000 |
| Italy | 27, 730.000 | 24.770,000 |
| Jagoslavia | 23, 818.000 | 23, 485,000 |
| Rumania | 20,42.000 | 30, 322,000 |
| Poland Switzerland | 5, 78, 000 | 14,861,000 |
| Great Britain. | 18, 838,000 | 11, 617,000 |
| Netherlands | 8, 811,000 | 9, 431,000 |
| Onited States. | 2,083,000 | 3,04, 000 |
| Prance. | 1,841,000 | 2,180,000 |
| All other coantries. | 11, 534,000 | 88,070,000 |
| Total | 238,088,000 | 573, 010, 000 |

Hungary has an excess of merchandise imports almost regularly. Only four months in the last few years have shown an excess of exports, and none of these amounts were large. The excess of imports for 1924 amounted to about $126,000,000$ gold kronen (about $\$ 25,000,000$ ). Before the war Hungary had an excess of merchandise imports estimated at about $176,000,000$ kronen (about $\$ 35,000,000$ ). This "unfavorable" balance represented to a large extent the flow of foreign capital into Hungary. One of the chief credit items in the present balance of trade of Hungary-an item which helps to account for the excess of merchandise importo-is the money remitted to Hungary by Hungarians in foreign countries. This amount has been estimated for 1922 at about $19,000,000$ gold kronen. Inasmuch as Hungary has large interest payments to make abroad, the exceas
of merchandise imports must ultimately be reduced, or various credit items increased. Whatever adjustment is necessary in this direction will take place automatically, and no artificial measures, of course, are needed.

The accompanying chart (No. 27) shows the imports and exports of Hungary annually during the last five years. In examining this chart, it should be remembered that the figures used have been converted from paper kronen into gold kronen according to current exchange rates, which have fluctuated rapidly. Monthly figures may be found in the statistical tables below, but these have not

CHART 27

[Valne special imports, i. a., Imports for domestie consumption; special exports, i. e., exports of domeetic marchandise)

been charted on account of the large extent to which they reflect erratic exchange fluctuations, since they have been converted into gold kronen on the basis of current exchange rates. In the annual figures the abnormalities in current exchange rates tend more to offset each other.

Various restrictions upon the importation of articles into Hungary have existed, and still exist to a certain extent. Restrictions were placed especially upon the importation of luxuries, notably textile products. Such articles could not be imported except under license which was granted only for limited quantities. Restrictions upon exports were largely abolished in the spring of 1924. The restrictions had to do especially with the exportation of food products. The trade between the succession States, which formerly was practically all within one country, was greatly interferred with by tariffs and other restrictive measures which the States began to adopt after they became independent. These measures are being abolished in large measure so that the economic system of this part of Europe is being able to function more as it used to.

## IV. EXCHANGE RATES AND PURCHASING POWER PARITIES

The Hungarian krone, according to its gold par, is worth 20.26 cents. Before the war the Austro-Hungarian krone, out of which the Hungarian krone developed, was maintained by the Austro-Hungarian bank practically at par. On the outbreak of war the Austro-Hungarian krone began to depreciate in the New York market, and at the end of 1914 was down to between 17 and 18 cents. The depreciation continued during 1915, accompanying increased note issues by the Austro-Hungarian Bank, and at the end of that year the krone was worth only about 13 cents. During most of 1916 the krone was fairly stable at about that rate, although at the end of the year it declined to about 11 or 12 cents.

When the United States entered the war in the spring of 1917 quotations in New York on Vienna ceased, but by comparing New York quotations on Amsterdam with Amsterdam quotations for Austrian currency, it appears that the krone was worth between 8 and 10 cents during most of 1917. During the first part of 1918 the value of the krone was greater than it had been during 1917, and quotations in January, 1918, indicated a value of about 14 cents. The tendency of the krone during 1918 was continually downward and at the same time the fluctuations were wide. By November, 1918, the krone was worth only about 7 cents.

After the close of the war New York quotations on Vienne were not resumed until about the summer of 1919, when the krone was quoted at between only 2 and 3 cents. During 1919 the Hungarian krone became separated from the Austro-Hungarian krone, as Austria and Hungary became separate countries. The currencies of both countries declined rapidly during that year and in December were worth only a little over half of a cent. During the first two months of 1920 the Hungarian krone continued to depreciate (as did also the Austrian krone), but recovered somewhat during the spring and early summer. At the end of 1920 it was worth about a fifth of a cent. The Hungarian krone and the Austrian krone moved more or less together during the years immediately following the war, although during 1921 and 1922 the Austrian krone fell more rapidly, until it was stabilized in the latter part of 1922.

The Hungarian krone rose considerably in value in March, April, and May of 1921. It was at this time that the Government was making efforts to check inflation and that plans were being made for the withdrawal of the old paper currency and the substitution of State notes by the establishment of the State note institute. The currency in circulation had increased only slightly during the first three months of 1921, and actually declined to $13,100,000,000$ kronen at the end of April from $15,700,000,000$ at the end of March. The krone in April and May was quoted at more than double what it had been quoted at in February.

The efforts to prevent inflation were only temporarily successful, and the printing presses for turning out notes were again soon active. As the Government turned once more to the bank for advances in the fall of 1921, the note circulation increased rapidly. At the end of 1921 about $25,000,000,000$ notes were outstanding, compared with about $15,000,000,000$ at the first of the year.

The krone declined rapidly in October and November, 1921, being worth less than a tenth of a cent in November. From this time until the spring of 1924 the krone continued downward with some reactions. The value of the krone seemed almost to disappear, and in May and June, 1924, was down to 0.0011 cent. The accompanying chart (No. 28) shows the course of exchange rates in New York for Hungarian kronen from the middle of 1921 to date. The depreciation in exchange rates was a result of internal depreciation following very large issues of paper money. The notes in circulation in-

CHART 8

[Noon buying rates for cable tronatras; New York an Budapast]

creased from about $25,000,000,000$ kronen at the end of 1921 to about $76,000,000,000$ at the end of 1922, to $931,000,000,000$ at the end of 1923 , and to nearly $3,000,000,000,000$ in the middle of 1924 , when the currency was stabilized.

The depreciation in exchange rates became very great in the summer and fall of 1922, and the Government at this time endesvored to check depreciation through placing restrictions upon the buying and selling of drafts. The Devisenzentrale (central foreign exchange office), which had been established during the war but later abandoned, was again placed in operation in August, 1922. The Devisenzentrale was under the State note institute and all dealings in exchange were restricted to members of the Zentrale. Official
rates were published daily and were to be observed by the members of the Zentrale.

For a short time these measures of official control over exchange rates produced a certain amount of stability, but inasmuch as the fundamental causes of depreciation were not removed the efforts were not successful, and in the spring and summer of 1923 the krone plunged downward agsin. Only a small portion of the demand for foreign currencies could be satisfied at the artificial rates published by the Devisenzentrale. As a result there came into existence an illegal market for foreign currencies, where a large amount of business was carried on. Rates on the illegal exchange were uniformly higher than the official rates, until the middle of 1924, when currency reform was undertaken. With the opening of the new bank in June 1924, the Devisenzentrale passed out of existence. What control continued to exist was in the hands of the national bank.
In order to provide a more or less stable unit for business the Government early in 1924 endeavored to introduce the so-called sparkrone. The number of paper kronen contained in the theoretical sparkrone was to be fixed daily by a committee under the State note institute. In determining this rate for the sparkrone the committee was to consider especially three factors-(1) the rate for dollars in Budapest, (2) the rate for Hungarian crowns in Zurich and Vienna, and (3) the relative quotations of securities in Budapest and Vienna. The sparkrone was utilized only a short time since the currency became stabilized and the National Bank of Hungary came into existence in June, 1924. The sparkrone was used for awhile by the State note institute, since in February, 1924, the Government declared that loans and discounts granted by the institute should be payable at a rate determined on the date of maturity; that is, at the rate for the sparkrone.

The depreciation of the krone in the exchange markets was in the main a reflection of the internal depreciation, and the rise in prices within Hungary. Prices in Hungary rose rapidly during these years, as seen in the accompapying chart (No. 29). This chart shows prices on the basis of paper kronen, and these same prices converted to a gold basis by reducing them according to the depreciation indicated by exchange rates. The chart also shows United States prices for purposes of comparison.
The relation between the krone and the dollar on the basis of the purchasing power of each currency within its own country is shown in purchasing power parities, which are parities computed from index number of prices in the respective countries. These purchasing power parities, shown in the accompanying chart (No. 30), were above current exchange rates most of the time, indicating that the krone was depreciated to a greater extent in the exchange market than warranted solely by the amount of internal depreciation. The two curves moved continually downward in more or less parallel lines and in the latter part of the period shown have been in fairly close agreement.
In the latter part of 1923, when negotiations were under way regarding control of Hungarian finances by the League of Nations, the krone ceased to depreciate and showed considerable stability in the exchange market. However, inasmuch as internal depreciation was still continuing, as shown by the fall in the purchasing power parity

CHART 20
 Lagyar Statisxtikal index for Hungary, 52 commodities, and of month, 1913=100; Federal Heserve Board fndex for

curve (Chart 30) and in the price curve (Chart 29), exchange rates were soon falling again. With the inauguration of control under the League of Nations and the organization of the new bank in June, 1924, inflation to meet government deficits ceased. During 1924, with inflation finally checked, the internal price level became fairly stable, and since the early part of that year prices, exchange rates, and purchasing power parities have all shown considerale stability.

CHART 30
Hungary-Purceagne Poweg Pariteg and Exchange Ratgg, Monthly, 1921-1925
[According to Magyar Statisztikal index for Huggary, 52 commodities, end of month, 1013-100; and Federal Reserve Board indax for United States, 104 commedities, monthly average, 1913=100]


The krone was definitely stabilized in the middle of 1924 with reference to sterling. Sterling was selected in preference to the dollar or gold. As sterling returned to par in 1925 the krone thus became also stabilized with reference to the dollar. The rate of stabilization finally selected and maintained is the same as that of the Austrian krone, namely, 0.0014 cent to the krone, or 346,000 kronen to the pound sterling. This is discussed further in the following section.

## F. FITANCIAL RECONSTRUCTION

Economic and financial conditions in Hungary became progresively worse during 1923. The currency was depreciating rapidly as result of large issues of paper money to meet budgetary deficits of he Government. In order to stop inflation and to stabilize the curency it seemed that an external loan was essential, so that the Govrnment would not have to resort to further issues of paper money. The credit of Hungary was weak and the country was burdened with aparation and other charges, so that little security could be offered or a loan.
In April, 1923, the Hungarian Government requested the Reparaion Commission to release the country from the charges imposed by he treaty of Trianon, so that the country's resources might thereby erve as security for an external loan. The Reparation Commission eplied that it would lift the charges provided the loan scheme were ubmitted to it and provided that part of the funds obtained from he loan would go to reparation purposes. Hungary endeavored to segotiate a loan on this basis, but the arrangement was found to be insatisfactory to the bankers in the chief financial markets, so that unds were not available.

The financial reconstruction and control of Austria under the League of Nations by this time had been proving successful, and a similar scheme was proposed for Hungary. The political situation n the countries around Hungary had improved, and in October the Reparation Commission declared it would lift the charges on Hungarian assets and revenues to permit a loan and the financial reconstruction of Hungary under the League of Nations along the lines of the arrangement in Austria. The Reparation Commission then asked the League of Nations to prepare plans. The League sent a delegation to Budapest in November, 1923, and about the first of February, 1924, submitted its plan to the Reparation Commission.

On February 21 the Reparation Commission formally notified the League that it would remove the liens on Hungary's resources, so that the new loan could be a first charge on these resources. The commission agreed that no reparation paymente should be made during the first two and a half years of reconstruction, and that during the period of 20 years of repayment of the reconstruction loan reparation charges should not exceed $10,000,000$ gold crowns per year on the average. ${ }^{6}$

Another step was necessary in order to free Hungarian assets and revenues so that they could serve as the basis for a reconstruction loan. It was necessary to remove the prior liens in favor of holders of relief bonds so that the new loan could have a clear first charge on Hungarian revenues. Consent for this release was finally obtained from the nations holding relief bonds, viz, France, Great Britain, Sweden, Norway, Denmark, Switzerland, Netherlands, and the United States.

The plans for reconstruction under the League of Nations were adopted by Hungary in the form of laws April 17, 1924, and became effective April 26. The nations concerned had signed the necessary

[^28]protocols in March, agreeing to respect the political, economic, and territorial integrity of Hungary. These plans of the League provided especially for a cessation of inflation, currency stabilization, a budget balanced by June 30, 1926, and a reconstruction loan negotiated to meet the deficits until June, 1926. The plans provided also for the appointment of a commissioner general to exercise supervision over the financial situation in Hungary and to insure the proper fulfilment of the entire program, and for the establishment of a central bank with a foreign adviser. Mr. Jeremiah Smith, of the United States, was appointed commissioner general by the council of the League of Nations. The commissioner general is responsible to the council of the League and is removable by it.
A reconstruction loan to the amount of $250,000,000$ gold kronen was floated by Hungary in the leading financial centers in July, 1924.' The loan is secured by customs receipts, by revenues from the tobacco monopoly, the salt monopoly, and by receipts from the sugar tax. Revenues from these sources have been considerably in excess of the amounts necessary for the service of the loan. The bonds are 20 -year bonds, bearing $71 / 2$ per cent interest and were issued at a price of $871 / 2$.

The plan of reconstruction provided for the establishment of a national bank to take over the affairs of the State Note Institute and to serve as a central bank of issue. Such a bank was organized with a capital of $30,000,000$ gold crowns (about $\$ 6,000,000$ ) and opened for business June 24, 1924, in the premises of the former State Note Institute, which had also been the premises of the Austro-Hungarian Bank. The bank is modeled along the lines of the National Bank of Austria. It is a private corporation, although the Government participates in the administration in that the governor is appointed by the State on the recommendation of the Minister of Finance. The board of directors consists of the governor and 13 members, elected by the stockholders. The general manager and other managers are appointed by the board of directors and have charge of the actual sadministration of the bank. They constitute the board of management. The Government appoints a government commissioner whose duty it is to see that the bank conforms to the law. The Government participates in the net profits of the bank to the extent of twothirds after the payment of a dividend of 8 per cent to the shareholders. After the payment of a dividend of 10 per cent the share going to the State increases to three-fourths.

As regards reserve requirements the bank is obliged to maintain a reserve against its notes and demand liabilities of 20 per cent during the first five years of the bank's existence; during the second five years, 24 per cent; during the succeeding five years, 28 per cent; and thereafter $331 / s$ per cent. As soon as specie payments are resumed, however, the bank is liable to a tax on the notes whenever the cover falls below 40 per cent. The reserve may consist of gold or foreign currency and bills of exchange of countries where the currency is relatively stable. Until specie payments are resumed these reserve requirements do not apply to notes arising out of the debt of the Government to the bank.

The new bank has a monopoly of note issue, and its notes enjoy full legal tender in respect to all payments, public and private, with the

[^29]sxception of those which specify metallic currency. This legal jender quality lapses with the introduction of specie payments. The sank took over the note circulation and affairs of the State Note [nstitute, which passed out of existence with the opening of the new bank. The liabilities taken over, i. e., the notes and current accounts, were larger than the assets, partly because the bank found that some of the bills in the portfolio were unacceptable. The Government, therefore, had to increase its debt to the bank to make up the difference.

The Government is not permitted to borrow from the bank except against foreign currency or foreign bills given over to the bank to the extent of 100 per cent of the loan.

The bank's statutes provide for the ultimate resumption of specie payments and the introduction of the gold standard. This may take place when the Government's debt to the bank shall have been reduced to $30,000,000$ gold kronen. When either the Government or the board of directors of the bank think specie payments should be resumed, negotiations must be commenced and a bill for such resumption submitted to the legislature.

On account of the intimate financial relations between Hungary and Great Britain the krone was stabilized in the middle of 1924 with reference to the pound sterling, which at that time was not a gold unit, in preference to gold. The original stabilization rate adopted was 360,000 kronen to the pound, which meant about 83,000 kronen to the dollar since the pound was quoted then at about \$4.32. As conditions in Hungary improved, and as a slowing down in the rate of turnover of the currency took place, the value of the krone increased so that a rate of 346,000 kronen to the pound (the same as the Austrian rate) was adopted, which is the equivalent of about 71,000 kronen to the dollar or about 0.0014 cent to the krone. While the krone was stable with reference to sterling, it was not stable with reference to the dollar, inasmuch as sterling was fluctuating in terms of dollars. As sterling rose, practically reaching par in April, 1925, the krone also increased in value, and is therefore now stabilized in terms of dollars at the same level as the Austrian crown, namely, the above rate of 0.0014 cent to the krone.

The stabilization of the krone has been one of the outstanding events in Hungarian reconstruction, and has been of great benefit to the industry and prosperity of the country. When the currency was fluctuating rapidly the economic life was deranged and production reduced. Since the country now has a definite unit, in which it can do business, a unit stable in terms of gold, transactions are carried on with a greater degree of certainty. The Government's revenues have reflected the benefits of a stabilized currency, and have increased more than expected. The country has recovered remarkably from the chaotic conditions prevailing at the first of 1924.

The accompanying chart (No. 31) shows how the gold value of the total circulation in Hungary has increased since stabilization began. The chart shows two curves for the gold value of the circulation, one computed on the basis of the value of the krone as indicated by exchange rates, and the other computed by the value of the krone as indicated by purchasing power parities.

It will be noticed that both curves in the summer of 1923 and the spring of 1924 were low. The rise at the end of 1923 was when
control by the League of Nations was anticipated so that the value of the krone rose. But as long as inflation was continuing this rise was not maintained. When stabilization finally commenced in the middle of 1924, both curves rose continually. This rise in total value was due to the increased amount of circulation which the country was able to absorb once the currency became stabilized. When the krone was depreciating and fluctuating rapidly, business avoided its use and turned to foreign currencies and bills as far as possible. No one desired to possess paper kronen very long, since holding them usually meant a loss in value. Consequently, the field for the domestic currency was restricted and the krone's value declined all the more on that account.

However, after stabilization took place, business which formerly avoided the use of kronen now accepted them. Confidence increased

CHART 31
Eungart-Gold Valug of Total Circtiation, Montriy, 1921-1925. On Bags of Exchange Rates and on Bagts of Pubcharing Powne Parities

and individuals were no longer afraid to hold the money from one day to the next. The rate of turnover thus slowed down. The circulation of the bank increased from about two and one-half trillion kronen in the middle of June, 1924, to over four and one-half trillion at the end of December, 1924. This increase took place through the presentation at the bank of foreign exchange and other eligible collateral for notes. These events were similar to those which transpired in Austria a year or two earlier.

The gold reserve of the Bank of Hungary increased from about $247,000,000,000$ kronen (paper) at the end of June to about 654,000,000,000 (paper) at the end of April, 1925. ${ }^{*}$ On the same dates the holdings of foreign currencies and exchange increased from about $681,000,000,000$ kronen to about $2,082,000,000,000$.

The reserves which may serve as legal cover for notes and demand liabilities may consist of "metal"-gold or silver-and foreign

[^30]currencies, foreign bills, and deposits in countries with stable currencies. The following figures show how the legal reserves of the bank have increased; they now amount to about 61 per cent of the notes outstanding to the extent of $4,526,000,000,000$.

Hungarian National Bank
[Paper kronen; ane krone- 0.0014 cent]


The bank is thus in a fairly strong position to maintain the currency at its present level. Prices, exchange rates, government finances, and conditions generally are such as to permit convertibility into gold and the establishment of the complete gold standard at an early date. The bank reduced its discount rate in March, 1925, from $121 / 2$ per cent to 11 per cent on account of improved credit conditions. The demand for credit had become reduced, and it was hoped lower rates would help to stimulate business and the economic recovery of the country.

The Government finances of Hungary have shown continued improvement under the control of the League of Nations. Revenues pledged for the reconstruction loan have been much more than required to meet the payments, and the entire program of reconstruction has made more rapid progress than was anticipated. The plan of reconstruction did not contemplate a balanced budget until June, 1926. However, in October, 1924, a surplus of revenue was realized, and this condition has continued each month since then. Although the budget is already balanced there is still much to be accomplished before the country may be said to be in an entirely satisfactory condition and deficits may occur again from time to time. The following tables show the receipts and expenditures of Hungary for the year 1924-25, and also receipts and expenditures during the war and the years following when depreciation was taking place rapidly.

> Hungary-Net reccipts and expenditures, 1084-25
[Sourso: Moothly reports of commisaioner gemeral far Hungary. Gold lmonen]
Estimated budget, July 1; 1924-Juze 30, 1925:
Net receipts
307, 350, 680


RESULTS FIRST SIX MON'TE


Hungary-Receipts and expendilures, 191s-1924
[Source: Magyar KIr. Pfnaldgyministar. $\mathbf{0 0 0}$ ominted]

|  | Budget estimates |  |  |  | Cloeed accounts 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Receipts | Expendrtuces | Surplus | Defict | Receipts | $\begin{array}{\|c} \text { Erpend- } \\ \text { itures } \end{array}$ | Surplus | Deffelt |
| 1913 | $\begin{gathered} \text { Kronen } \\ 2,073 \end{gathered}$ | $\begin{gathered} \text { Kronen } \\ 2,073 \end{gathered}$ | ETonen | Kronen | $\underset{\substack{\text { Kronen } \\ 2,547}}{ }$ | $\underset{2,319}{\boldsymbol{Z} \text { roner }}$ | $\left\lvert\, \begin{gathered} K_{223} \text { ren } \\ \hline \end{gathered}\right.$ | Eronen |
| 1914 (January-June) ${ }^{1}$-- | 1,1073 2,284 | 1, 112 |  | 38 | 1,356 | 1,44 |  | 8 |
| 1915-18: |  |  |  |  | 7, 712080 | 12,48 | 608 | 159 |
| 1910-17 ${ }^{\text {P }}$ |  |  |  |  |  |  |  |  |
| 1917-18 | 3,400 | 3,483 | 28 |  |  |  |  |  |
| 1920 ( February ${ }^{\text {ajune }}$ ) ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
|  | 10, 521 | 20, 211 | --...... | 0,690 |  |  |  |  |
|  | 152, 802 | 183,455 |  |  |  |  |  |  |
| 1923-24 | $2.168,140$ | 8,307, 099 |  | 1,138, ${ }^{459}$ |  |  |  |  |

1 Fiscal year changed from calendar year to year ending June 30.
Finances were cartied on by means of lodemnity scts.
Budget estimates were prepared, but finanoes were carried on by means of Indeunity acts.
No budget was prepared on account of revolution and Bolahevitt regime.
Indempity aet for period indicated.
Budget act or 1920-21.
TBeglining with 1910-17, closed accounts were not dealt with by legtolation.
Inasmuch as the reconstruction of Hungary has progressed so satisfactorily the Government has not found it necessary to utilize as much of the 1924 loan as expected. The loan-was floated to provide funds to meet deficits which were expected to occur until June, 1926. Out of the $254,000,000$ gold kronen realized, only $148,000,000$ had been utilized at the end of March, 1925. On account of the rise in the value of currencies of countries in which the proceeds of the loan were held on deposit, that portion still available for use at the end of March had increased in value and amounted to about $116,000,000$ gold kronen.

Hungary in the spring of 1924 funded its debt to the United Statea Government. This debt, which is repayable over a period of 62 years, amounted on November 15, 1924, to $\$ 1,953,542.50$. The debt bears interest at 3 per cent over the first 10 years and $31 / 2$ per cent thereafter. The following table shows the total debt of Hungary, internal and external, at the end of 1913 and at the end of the years since the war:

Hungary-National Debt
[Soarce: Magyar Kir. Peasagyminites. Paper kropen]

| Dec. 31 | Internal | External 1 | Total |
| :---: | :---: | :---: | :---: |
| 1913 | 2,161,911,634 | 5, 84, 440, 618 | 8,007,201, 242 |
| 1919 | 17,474, 94, 131 | 0,808, 818,104 | 84, 313, 762,325 |
| 1980 | 27,488, 583, 021 | 20, 854, 227, 24 | 124,342, 700235 |
| 1921. | 50, 300, 376, 599 | 128, 047, 219,345 | 187, 347, 506, 964 |
| 1922 | $82,357,517,719$ | 424, 24, 457, 875 | 508, 683, 975, 594 |
| 1923 | $418,352,207,610$ | 2,320, $850,310,005$ | 8,787,051, 578, 235 |

[^31] In Zurich on the last day of the correaponding pear.

## NETHERLANDS ${ }^{1}$

## 1. PRE-WAR CURRENCY

Before the war the Netherlands was practically upon the gold standard. The currency unit was the guilder, or florin, as it is sometimes called, and the gold coins contained gold at the rate of 0.672 gram 0.900 fine per guilder. The guilder was thus worth about 40.20 cents in United States money. The gold coins were the pieces of 10 guilders and 5 guilders. There was free coinage of gold (a small charge was made for the minting) and the gold coins were unlimited legal teader. The silver and subsidiary coins were coined only for the account of the Government. Some of the silver coins were unlimited legal tender, namely, the 23/2 guilder, 1 guilder, and $1 / 2$ guilder pieces. These silver coins contained silver at the rate of 10 grams 0.900 tine per guilder. ${ }^{2}$ The silver coins, it will be noticed, are subsidiary coins, and although they are not all full legal tender they circulated before the war at a parity with gold.

The Netherlands, like most other European countries, experienced currency difficulties during the nineteenth century, much of the trouble resulting from efforts to maintain the bimetallic standard in the face of fluctuating market ratios between gold and silver. The mint act of September 28, 1816, fixed the 10 -guilder gold piece at 93.465 grains of fine gold and the 1 -guilder silver piece at 148.39 grains of fine silver. This gave a bimetallic ratio of about 15.88 to 1 . In 1847 gold was demonetized in the Netherlands and the silver standard adopted. The metallic contents of the silver guilder was lowered to 145.85 grains. The Netherlands continued on the silver standard until 1875, sand during this period large quantities of silver coins were minted. The price of silver declined beginning about 1875, and on June 6, 1875, the free coinage of silver was definitely suspended. The law of 1875 established the gold guilder as the unit, with a metallic content of 0.672 grams 0.900 fine ( 0.6048 gram 0.1000 fine), which is the weight of the present gold guilder.

The large quantities of silver in circulation were a menace to the gold standard, and since the coins could not be exported profitably, gold was exported instead to meet the demands resulting from unfavorable exchange rates. The gold reserve of the Netherlands Bank declined from about $57,000,000$ guilders at the end of 1880 to $11,000,000$ guilders in October, 1882, and to about $5,000,000$ guilders in February, 1883. In April, 1884, the melting down of $25,000,000$ guilders in silver coins was authorized. However, about this time gold began to flow back into the country so that the Government did not find it necessary to melt down this amount of silver.

The gold standard continued in the Netherlands down to the middle of 1914. The bank met demands for gold for export freely, but discouraged as far as possible the circulation of gold within the country. The currency system in 1914 was besed upon the coinage act of 1901,

[^32]amended by acts of December, 1906, July, 1909, and October, 1912. These laws embodied the gold standard and gave the Netherlands the currency system described above.

In addition to the metallic currency circulating before the war were the notes of the National Bank. These notes were unlimited legal tender and were redeemable by the bank on demand in other legal tender currency, i. e., gold or silver, before the war. Gold did not circulate before the war in Netherlands to any extent, but was concentrated largely in the vaults of the Netherlands Bank. The amount of silver, nickel, and bronze currency circulating in the first part of 1914 was approximately $65,000,000$ guilders. The circulation of bank notes at this same time was about $325,000,000$ guilders.

The Netherlands Bank (Nederlandsche Bank) was founded in 1814 under a charter from King William I. ${ }^{3}$ It had been hoped that the old Amsterdamsche Wisselbank could be revived, but when this was seen to be impractical, the existing bank was organized as its successor. The Bank of Amsterdam (Amsterdamsche Wisselbank) was one of the famous early banks, and was founded in January, 1609. It began its career by accepting bullion and coin according to weight and giving receipts in return. These metallic deposits were accepted for safe-keeping and a charge was made. The receipts of the bank for deposited bullion came to enjoy extensive circulation and were known as "bank money."

It was generally supposed that this early bank retained in its vaults an amount of coin and bullion equal to the bank money or receipts issued. However, this was not the case; but since the affairs of the bank were secret, the public did not become aware of the situation until about 1789, although as early as 1657 individual were permitted to overdraw their accounts. Loans of specie had also been made to the Dutch East India Co. Efforts were made to reorganize the bank, but were unsuccessful and the bank was finally closed by decree of December, 1819.

The Netherlands Bank (Nederlandsche Bank) is the sole bank of issue. It is a private institution with a capital stock of $20,000,000$ guilders and a surplus of $5,999,469$ guilders. Although the bank is a private institution as regards ownership, the president and secrotary are appointed by the Crown, as well as a government commissioner, who exercises a certain amount of authority in the management. The Government participates in the net profits of the bank to the extent of 25 per cent until a dividend of 7 per cent has been paid the shareholders. After this the Government receives seveneighths of the net profits. Although the Government appoints the officials mentioned above, the bank formulates its own policies.

As regards reserve requirements, the bank must keep s reserve in gold or silver against all its sight obligations to the extent of at least 40 per cent. ${ }^{4}$ There are no provisions determining how much silver might be kept, but in actual practice silver in recent years has constituted a very small portion of the bank's metallic reserve. There is no fixed limit to the amount of notes the bank might have outstanding so long as reserve requirements are met.

The bank is the fiscal agent of the Government and is required to make temporary advances to the Government without interest to a maximum amount of $15,000,000$ guilders.

[^33]
## II. CURRENCY, CREDIT, AND PRICE MOVEMENTS, 1914-1925

Although the Netherlands was not one of the belligerent nations, nevertheless the outbreak of war in 1914 caused considerable disturbance to the economic and financial life of the country. Upon the outbreak of war the financial centers of London, Paris, and Berlin reoalled credits, so that exchange rates on these cities rose and gold began to leave the Netherlands. The Government promptly placed a prohibition upon the exportation of gold. Several of the articles of the bank act were suspended, and the Government was authorized to exempt the bank from the obligation of redeeming its notes in specie. The reserve required to be held against demand liabilities was reduced from 40 per cent to 20 per cent. ${ }^{6}$

In prder to help meet the crisis in the middle of 1914, about 30 municipalities, including Amsterdam and Rotterdam, issued emergency currency after consultation with the bank. These issues were ilegal according to the Netherlands stamp act, and the notes were withdrawn when the crisis subsided.

Prior to the war the only paper currency in the Netherlands for some time had been the notes of the Netherlands Bank. However, in the early days of the war the Government, in accord with the bank, issued currency notes known as silver bonds (zilverbons) in denominations of $1,21 / 2$, and 5 guilders. The smallest bank note had been 10 guilders. These Government notes were unlimited legal tender. By October 17, 1914, the amount of such notes outstanding was 16,906,000 guilders. The act authorizing these issues provided that the notes were to be withdrawn as soon as the Netherlands Bank could place a sufficient amount of silver currency at the disposal of the Government. At the present time most of these notes have been withdrawn, although a certain number of the $21 / 2$ guilder notes is still in circulation. These ultimately are to be replaced by silver.

The Netherlands Bank raised its rate of discount upon the outbreak of war, as did other central banks of Europe. The rate was raised on July 29 from 31/2 per cent to $41 / 2$ per cent and on August 1 to 6 per cent. On August 20 the rate was lowered to 5 per cent, where it remained for nearly a year (until July 1, 1915).

On account of the stringent credit conditions there was organized the General Netherlands Central Currency Bank for the Middle Classes. This institution created with the support of the Netherlands Bank was to aid especially the small shopkeepers and professonal classes who were embarrassed by the suspension of credit.

The note circulation of the Netherlands Bank increased very greatly on the outbreak of the war, and continued to rise until the time of the armistice in 1918. Prior to the war the circulation outstanding amounted to a trifle over $300,000,000$ guilders. The circulation increased from about $306,000,000$ guilders at the end of June, 1914, to about $444,000,000$ at the end of August and to about $473,000,000$ at the end of December, 1914. Deposits also increased

[^34]very sharply from about $5,000,000$ at the end of June, to about $32,000,000$ at the end of August, 1914, declining to about $17,000,000$ by the end of December. The accompanying chart (No. 32) shows the principal items in the Netherlands Bank from 1912 to 1925. It will be noticed that the note circulation rose from the pre-war figure of about $300,000,000$ guilders to over a billion guilders by the end of 1918.

The increase in the note circulation of the Netherlands during the war was due to a large extent to the influx of gold into the country. The bank issued notes in return for deposits of gold. It will be noticed in the chart that the gold reserves increased from about $160,000,000$ guilders in June, 1914, to $208,000,000$ by the end of the year, to $429,000,000$ by the end of 1915 , and to a maximum of over 725,000,000 in April, 1918. The increase in the note circulation was caused also by the bank discounting large quantities of government securities. This was especially the case during 1918 when purchases of gold had practically come to an end.

The Government had need for increased revenue to meet abnormal expenditures growing out of the disturbed conditions, and at the close of 1914, in consultation with the Netherlands Bank, decided to float a 5 per cent loan to the extent of $275,000,000$ guilders. The Netherlands Bank offered to make loans against the new securities on a margin of 5 per cent instead of the customary 30 per cent. Similar provisions were made in the case of loans in 1916 and 1917. This special privilege afforded government securities was canceled in June, 1920, and as loans matured the full 30 per cent margin was required for new borrowings. As a result of this change, loans against securities decreased from the high point of $332,000,000$ guilders on July 26, 1920, to about 248,000,000 guilders on December 27, 1920.

During a part of the war money rates in the Netherlands were very low. In July, 1914, prior to the war, the private discount rate in Amsterdam was in the neighborhood of 3 per cent. The outbreak of the war pushed rates up to over 6 per cent, but this condition did not prevail long, since funds from abroad began to come into Holland. At the same time there was almost a complete shutdown of industry within the country so that large amounts of capital funds were at the disposal of the market.for short periods. During 1915 and 1916 the rates were fluctuating around 2 and 3 per cent and occasionally even 1 per cent.

It is reported that for a short time in the autumn of 1916 short term money could be had for even less than 1 per cent. This situation changed so that by 1919 rates were around 3 and 4 per cent. In 1922, however, German capital in large quantities flowed into Holland due io disturbed conditions in Germany, and especially to the depreciation of the mark and to reparation difficulties. The effect of this influx of funds was to reduce the price of short term money. The discount rate of the Bank of the Netherlands remained at $41 / 2$ per cent from the 1st of July, 1915, to July 18, 1922, when the rate was lowered to 4 per cent.

The Bank of the Netherlands during and since the war discounted large quantities of municipal securities as well as State securities. With the growth of borrowing by cities, increasing amounts of these securities passed into the hands of the bank. This borrowing on

the part of municipalities was a factor in the increase in issues of bank notes."

After the outbreak of war an increase in the use of checks for settling transactions took place in the Netherlands. The amount of bank clearings has increased almost continually from 1914 to the present.

The effect of the expansion of currency and credit in the Netherlands on prices was marked:. The following figures show how the index numbers rose from 100 in 1913 to nearly 400 for 1918.

CHART 88

[Central Bureau of Statiatics index numbers for Netheriands, 53 commodities, monthly average, 1013-100; United States Bureau of Labor Btatistics index, 404 commodities, monthly averages, 1913-100]

[Source: Onntral Burean of Atatistics. Annual averages; 1018-100

| 1913 | 100 | 1917 | 286 | 1921 | 181 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1914 | 105 | 1918 | 392 | 1922 | 160 |
| 1915. | 145 | 1919 | 297 | 1923 | 151 |
| 1916. | 222 | 1920. | 281 | 1924. | 156 |

The rise in prices was not due entirely to inflation, but was due also to the scarcity of goods. Especially was this true as the war progressed and stocks of goods were exhausted and could not be replaced. After the depression of 1920 prices declined from their high levels. The decline was especially precipitous in the last few months of 1920 and the first few months of 1921. The course of prices since 1920 can be seen in chart 33, which shows Netherlands prices on the basis of paper currency, and on the gold basis. The chart alse shows prices in the United States for comparative purposes. It will be noticed that since the first of 1922 prices in the Netherlands have shown practically as much stability as prices in the United States, both fluctuating around 150. This stability in prices in the

Netherlands is due primarily to the fact that little inflation has taken place since the end of the war, as already noted in the previous chart (No. 32), which shows how the note circulation has fluctuated around $1,000,000,000$ guilders most of the time since the armistice.

In examining the amount of inflation in the Netherlands it should be pointed out that considerable hoarding of guilders has taken place, not only in the Netherlands but also in Germany and other countries. Silver coins and also paper money have been hoarded. The actual circulation of the Netherlands Bank is thus less than shown by the reports of the bank.

Silver money began to disappear from circulation soon after the outbreak of war, and silver bonds were issued by the Government to replace the silver coins which had been in circulation. These silver bonds, as discussed above, were in small denominations, namely, $21 / 2$ guilders, 1 guilder, and one-half guilder. The amount of currency of this type reached its high point at the end of 1918, when about $70,000,000$ guilders were outstanding. Since that time the amount has gradually declined.

As a result of the rise in the prices of silver in the latter part of the war and in the years following the war, silver guilders were at a premium in terms of paper guilders. In order to remedy the situation the Government, November 27, 1919, reduced the fineness of the coins from 0.945 to 0.720 .

The Netherlands Bank does not include its foreign-bill portfolio as part of its reserve. These foreign holdings, however, are useful in controlling exchange rates. At the end of Decomber, 1913, the foreign portfolio amounted to about $14,000,000$ guilders. By May, 1915, it had been reduced to about 170,000 guilders, but by the end of 1918 it amounted to nearly $9,000,000$ guilders. Since that date the amount of foreign-bill holdings has increased, and in the middle of April, 1925, amounted to about $119,000,000$ guilders.

The Bank of the Netherlands has at various times exported its gold in order to replenish its foreign-bill holdings and to sustain exchange rates. It will be noticed in the previous chart how the gold reserves have declined from a maximum of $785,000,000$ guilders in April, 1918, to about $500,000,000$ at the first of 1925 . This reserve in 1925 amounted to about 54 per cent of the note circulation. Thus the Netherlands has a large gold reserve behind its currency.

## III. FORETGI TRADE

To a small country like the Netherlands, which does not produce a sufficient variety of articles to be self-sufficing, foreign trade is of considerable importance. The Netherlands finds it necessary to import large quantities of coal and coke, and also textiles and manufactured articles, especially iron and steel products and industrial machinery. The principal food imports are wheat, corn, and coffee. The principal exports from the Netherlands are various textile manufactures, vegetable oils, confectionery, and seeds, and dairy prod-ucto-cheese, milk, and butter. The following table shows the principal commodities imported and exported by the Netherlasds:


Germany is the chief source of imports into the Netherlands and is followed in order by Great Britain, United States, and Belgium. As regards exports, Great Britain receives more goods from the Netherlands than any other country and is followed in order by Germany,

Belgium, and France. The trade of the Netherlands with the principal countries in 1913 and 1923 is shown in the following table:

Netherlands-Imports and exports of merchandise, by principal countries, 1018 and 18\&S
[Soures: Jaercijfers voor Nederlend. In thousands of guilders]

|  | 1913 | 1028 |  | 1913 | 1923 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IMPORTE |  |  | BYPORTA |  |  |
| Cermany ${ }^{1}$ | 1, 138, 520 | 404, 888 | Great Britain. | 056,315 | 350,001 |
| Great Britain | 339,635 | 308, 317 | Germany.. | 1,569, 618 | 186,700 |
| United States | 442,733 | 256, 017 | Belgium. | 389,628 | 139,338 |
| Belgium. | 352, 051 | 215, 250 | France. | 31, 423 | 128, 116 |
| Dutch East Ind | 528, 452 | 114, 184 | Dutch Eest Indie | 102,769 | 110,851 |
| Argentine. |  | 100,083 | United Etates. | 131,271 | 69,452 |
| France. | 33, 211 | 68,744 | Ewedon. | 28,084 | 23, 606 |
| India |  | 40,675 | Denmark | 18,200 | 20,852 |
| Finland |  | 27,881 | Norway. | 23,182 | 20,288 |
| Brazil. | 42,148 | 25,919 | Switzerland |  | 19,573 |
| Sweden | 68,864 | 24,499 | Argentine |  | 18,491 |
| Canada |  | 14,641 | Spain.- | 11,927 | 17,022 |
| Spain. | 90, 401 | 14, 484 | India |  | 14, 045 |
| Other countries | 872,801 | 12,763 200,912 | Other colun | $\begin{aligned} & 22,209 \\ & 90,309 \end{aligned}$ | $\begin{aligned} & 12,720 \\ & 163,516 \end{aligned}$ |
| Total. | 8, 017,885 | 2,009,220 | Total | 3,002,085 | 1,300,221 |

${ }^{2}$ Bremen, Hambarg, Lubeck, Mecklenburg, Oldonbarg, Prussia.
2 Inclades Fíume.
CHART 34

Special imports, i. e., imports for domestic consumption; specisl exports, i. e, exports of domestic merchandise]


The foreign trade of the Netherlands suffered severely during the war. The geographical location of the Netherlands, between two hostile countries, made it difficult for the country to import and export. Furthermore, much of the trade of the Netherlands is transit trade, and this was very greatly reduced as a result of the hostilities.

The accompanying chart (No. 34) shows the foreign trade of the Netherlands from 1899 through 1923. During the years 1914-1918
both imports and exports declined continually, with the exception of 1915, when the imports were a trifle larger than the preceding year. In 1913 imports amounted to about $4,000,000,000$ guilders, while in 1918 they were reduced to only 608,000,000 guilders. Exports declined from 3,000,000,000 guilders in 1913 to $381,000,000$ in 1918. The United States, Great Britain, and other allied countries placed restrictions upon shipments of goods to the Netherlands, since the goods found their way into Germany, the Netherlands serving as a gateway.

The Netherlands changed its method of computing foreign trade values beginning with 1917, so that comparisons of the different years are apt to be misleading. From 1847 to 1916 the official values of the different goods imported were not changed, although important price changes had taken place during this period. The 1917 figures are based upon values declared by the importers and exporters.

After the close of the war, the opening of markets and freer transportation permitted a recovery of trade, so that in 1919 the foreign trade of the Netherlands experienced considerable expansion. Imports ior 1919 amounted to $2,826,000,000$ guilders compared to only $608,000,000$ in the preceding year, while exports for 1919 amounted to $1,411,000,000$ guilders compared to only $381,000,000$ the preceding year. The trade in 1920 was also large. As business depression developed throughout the world the trade in 1921 and 1922 was less than in the two preceding years.

The Netherlands, as shown in the chart, has continuously had an excess of merchandise imports, the excess in 1913 being over $800,000,000$ guilders, an unusually large amount. During the war the excess of imports increased very greatly as exports declined to a greater extent than did imports. At the present time the excess of imports is back to about the same figure as before the war.

The excess of merchandise imports represents payments due the Netherlands for various types of services rendered foreigners. Among the most important of these services is that of handling transit trade through the country. A large part of the goods which are received in Rotterdam and Amsterdam are destined for reshipment to central European points. The reshipment of these goods involves profits to the Netherlands. During and after the war this item in the balance of payments was very much reduced. The profit from the transit trade for 1923 has been estimated at about $40,000,000$ guilders.

Another service which the Netherlands renders and which is paid for by merchandise and other imports, is that of carrying goods in her ships for foreigners. For 1920 such shipping earnings have been estimated at $450,000,000$ guilders. Earnings have declined since then until for 1923 they are estimated at about $145,000,000$ guilders. Part of this reduction is due to the Rubr occupation and other disturbed conditions, which reduced the trade of the Netherlands, both the transit trade and trade destined for domestic consumption.

Interest and dividends from foreign and colonial investments constitute a net credit item on the Netherlands balance sheet. The Netherlands has a large amount of capital invested abroad. Large sums, however, were invested in Russia, most of which money is now looked upon as lost. Returns on foreign investments are estimated for 1923 at $275,000,000$ guilders.

A further source of revenue to the Netherlands is found in the payments from the colonies, especially from the Dutch East Indies, to the home government. The colonies owe substantial amounts to the Netherlands, and payments in 1923 are estimated at $155,000,000$ guilders.

Offsetting these invisible credit items are invisible debit items, such as investments which are made abroad each year by the Netherlands. In 1921 there was an important influx of German capital into the Netherlands. There has also been a flow of capital into the Netherlands from France and Belgium, and other countries which experienced either severe currency depreciation or threatened currency depreciation and other disturbances. Hoarding of guilder notes abroad has been a factor in the balance of payments and such notes exported are an offset to an excess of imports. The following table shows an estimate of the balance of payments for the Netherlands.

Netherlands-Balance of payments
[Source: De Economische Toestand van Nederland, Colijn, quoting Ven Leeuwen. In millions of cuilders]

|  | 1820 | 1981 | 1022 | 1023 |
| :---: | :---: | :---: | :---: | :---: |
| Crspits |  |  |  |  |
| Exports of merchandise. | 1,701 | 1,370 | 4,221 | 1,803 |
| Net gold erports-.............. |  | 50 |  |  |
| Exoess of polished diamonds exported over rough diamonds imported.: | 10 | 10 | 13 | 10 |
| Profts from transit trade. |  | 80 | ${ }^{0}$ | 40 |
| Profits from shipping service- | 450 | 200 | 160 | 145 |
| Return on foreign investments | 150 | 90 | 176 | 77 |
| Colorial in climbursements and payments in Ho | 328 | 240 |  |  |
| Dutch sales of forejgen security poldints in Hol | 100 |  |  | 60 |
| Imports of foreica capital (largely Oermani) |  | 235 |  |  |
| Funds borrowed abroad. |  |  | 825 |  |
| Net withdramaly of Duteh |  | 25 |  |  |
| Miscellaneous | $6{ }^{\circ}$ | 25 | $30^{\circ}$ | 40 |
|  | 3,532 | 2,346 | 2,160 | 1,968 |
| DEbits |  |  |  |  |
| Imports. |  | 2240 | 2008 | 2,000 |
| Investments abrosd and in colonie | 250 |  |  |  |
| Net cost ghip construction abroed. |  | \% |  |  |
| Not sum lent colonies in axcess of payments and reimbursemonts mos- |  |  |  |  |
| Expenditures of Doülen toorists abroad |  | \$0 |  |  |
| Repurchase guilder securtios issued in New Yori |  |  |  |  |
| Repurchase dollar securitles lesued in New York. |  |  | 45 |  |
|  | 2,686 | 2385 | 2.150 | 2,000 |



## IV. EXCHANGE BATES AND PURCHASDIG POWER PARITIES

The guilder, the currency unit of the Netherlands, is worth, according to its gold contents, about 40.20 cents in Americen money; or, as the rates are quoted in the Netherlands, there are 2.4875 guilders to a dollar. Before the war exchange rates on New York were practically at par inasmuch as gold movements were permitted to take place freely. At that time if the price of dollars in the Netherlands rose very much, it soon became cheaper to export gold than to pay much more than the gold par. Thus before the war fluctuations in exchange rates were confined within narrow limits marked by the "gold points."

The outbreak of the war in 1914 brought confusion into the exchange market in the Netherlands as in other countries. London and Paris exchange immediately went to a premium in Amsterdam, due largely to a recall of credits by these financial centers. Gold started to go out under these circumastances, and an embargo upon its exportation was imposed by the Netherlands. On account of increased freight rates and insurance charges the shipping of gold became more expensive. It is thus doubtful whether much would have left the Netherlands without the embargo, especially since the premium on London and Paris exchange did not continue very long. After the first few weeks of the war, sterling bills declined below par in Amsterdam. In the spring of 1915 London exchange again rose above par, but did not continue there long, and after May, 1915, the rates were again below par.

Exchange rates in Amsterdam for American dollars rose during the early months of the war, or, in other words, in New York guilders were at a premium. The accompanying chart (No. 35) shows the course of exchange rates in New York on Amsterdam from the first of 1914 to 1925. It will be noticed that in February, 1915, the guilder went below par ( 40.20 cents), where it ramained until August of that year. In November and December of 1915 and in January, 1916, guilders rose rapidly, reaching a high point of over 45 cents. The rates gradually declined and were down practically to par in February, 1917. However, a new rise commenced at this time, which became more precipitate after the United States entered the war, until the guilder was selling for about 53 cents in August, 1918. This was when the military situation seemed to be favoring Germany.

As the military fortunes changed rapidly in the summer of 1918, the discount in Amsterdam upon dollans declined rapidly, or, in other words, the promium in New York on guilders became much less. Guilders gradually declined from about 53 cents in August, 1918, to about 42 or 43 cents at the end of November, 1918.

Rates in Amsterdam upon Berlin began to fall soon after the outbreak of war. Reactions occurred from time to time as gold shipments from Germany were made. The currencies of the Scandinavian countries also went below par in the Netherlands during the first part of the war. Thus in November, 1915, practically all foreign currencies were at a discount in the Netherlands.

The rise in exchange rates on the Netherlands during the war was due in part to the flight of capital from belligerent countries to the Netherlands, where neutrality existed. The result of this situation was that gold flowed into the Netherlands in large quantities. The chart (No. 32) in the previous section shows how the gold reserves of the Bank of the Netherlands increased continually from about $160,000,000$ guilders before the war to about $725,000,000$ guilders in April, 1918. After this date gold was exported from time to time and the gold reserve now amounts to about $500,000,000$ guilders.

Inasmuch as exchange rates between the allied countries and the United States were "pegged" at relatively fixed points during most of the war, these different currencies moved in more or less parallel lines in Amsterdam. After March, 1919, when the artificial support to the pound, the franc, and other currencies was withdrawn, the dollar pursued an independent course in the Netherlands. The dollar rose to a premium; or, in other words, the guilder went to a discount in New York. This decline was due in large part to the relatively greater depreciation of the purchasing power of the guilder in the Netherlands than that of the dollar in the United States. The decline continued until November, 1920, when the guilder was quoted at about 30 cents.

A rapid recovery took place in the first part of 1921 when the guilder by May had risen to over 35 cents. This recovery was short-lived and exchange rates by the end of the summer were down almost to where they had been in 1920 . However, this decline marked the end of very great depreciation of the guilder and rates rose rapidly in the last part of 1921. From that date until par was reached at the end of 1924 the depreciation was selrom more than 2 or 3 cents to the guilder. In fact, at the end of 1922 the guilder was practically at par for a short time, although it did not remain there long.

A comparison between the depreciation of the guilder within the Netherlands and that of the dollar in the United States is shown in the purchasing-power parities computed from index numbers of prices. These parities, based upon the index numbers of the respective countries, are, as the name implies, parities according to the purchasing power of the two currency units, each within its own country.

The accompanying chart (No. 36) shows the purchasing-power parities of the guilder and the dollar from 1920 to 1925, and also for comparative purposes, average current exchange rates. Two curves for purchasing-power parities are shown, computed according to two index numbers of prices for the United States, those of the Federal Reserve Board, and those of the Bureau of Labor Statistics. From the middle of 1922 to the end of 1924 it will be noticed that purchasing-power parities according to both curves were above exchange rates; that is, the guilder, according to market exchange rates, was depreciated to a greater extent than might be expected from the internal depreciation of the guilder, i. e., from the rise in prices within the Netherlands as compared to the rise in prices within the United States.

Since the latter part of 1924 exchange rates and purchasing-power parities have been close together, which is as would be expected. Exact uniformity is not to be expected, since purchasing-power fari-

ties do not allow for such things as freight rates or tariff barriers. Cheap goods within the Netherlands, for example, might not lead to increased purchases of guilders in New York on account of tariff and other barriers, and thus might not be reflected in exchange rates. The fact that purchasing-power parities and exchange rates are now close together indicates a return to more normal conditions."

Exchange rates by the end of 1924 had returned to par and, in fact, the guilder was at a slight premium. During the first part of 1924 and the last few weeks of 1923 the guilder had been down to a little below 37 cents. This was the period when almost all European currencies in New York were weak, and when the French franc touched new low points; it was when the flight of capital to the United States took place in considerable quantities. During 1925 the guilder has been practically at par.

Inasmuch as Holland at the end of April, 1925, returned to the gold standard, permitting the free exportation of gold, very great fluctuations in exchange rates are a thing of the past. The fluctuations'may now be expected to be confined within the "gold points." Thus exchange rates upon the Netherlands will not depart far from par.

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## V. RETURN TO GOLD STANDARD

The Netherlands, simultaneously with Great Britain, announced on April 28, 1925, that the country was returning immediately to the gold standard. The principal change introduced was the removal of restrictions upon the exportation of gold. These restrictions had been the principal interference with the gold standard. The step was not entirely unexpected, since exchange rates between guilders and dollars (i. e., gold) had been practically at par since the latter part of 1924; in fact, the rates for guilders part of the time had been above par.

The formal restoration of the gold standard in the Netherlands marked an important step in the country's financial and economic reconstruction following the disturbances of the war. Although the Netherlands was not a participant in the war, the country did not escape many of its consequences. The restoration of the gold standard in the Netherlands was necessary if Amsterdam was to retain its position among the leading international financial centers of the world.

Amsterdam for many centuries has been an important financial and trading market and was one of the earliest homes of banking. Down to the present time Amsterdam has played an important part in most all international financial operations of consequence. The guilder is one of the currencies which is quoted on the exchanges of most markets where foreign trade transactions take place. Therefore, unless the guilder had not been made a gold unit again, it could not have expected to compete long with other gold units such as the dollar or pound.

Before the war not much gold was in circulation in the Netherlands. The Netherlands Bank adopted a policy of discouraging the hand-tohand circulation of gold and retained its gold reserve, as far as possible, to meet foreign demands. This policy will be continued, and since gold has circulated scarcely at all since the middle of 1914 it is not to be expected that gold will again appear in circulation in the -Netheriands in any great quantities.

This policy of keeping gold out of circulation is significant. Centralizing gold in banks permite greater expansion of credit and currency than when the gold is scattered throughout the pockets of the people. If such expansion takes place, the effect may be a cheapening of the value of gold; or, in other words, a rise in prices, unless artificial control can counteract this result. If other countries follow the lead of Great Britain and Holland in discouraging the circulation of gold, an important economy in the use of gold will take place and gold will tend to become centralized so that its value may become altered.

The guilder, as already noted, is worth 40.2 cents in American money, according to the gold par of the two currencies. This means that there are 2.4875 guilders to the dollar, or that there is this many times the amount of gold in the dollar as in the guilder. Since the movement of gold between the United States and the Netherlands and vice versa can now take place freely, the rates at which the two currencies will exchange can not depart far from this gold par, the
premium or the discount being approximately equal to the cost of shipping gold.

The gold reserve of the Netherlands Bank on April 14, 1925, amounted to $491,982,361$ guilders, which was 54 per cent of the total circulation at that date. This compares with a gold reserve of about 48 or 49 per cent prior to the war. Thus the bank is in a relatively strong position as regards gold and is prepared to resume specie payments. The bank also possesses a considerable amount of foreign credits. The price level in the Netherlands has been relatively stable since the first of 1922 and is approximately at the same level as that of the United States. These factors indicate that the Netherlands will have no difficulty in maintaining the gold standard.

The condition of the Government's finances is not unhealthy, although budgetary deficits have not yet been removed. The deficits have been reduced from a maximum of $490,000,000$ guilders in 1918 to an estimated deficit for 1925 of $80,000,000$ guilders (about $\$ 32,000,000$ ). The following table shows the receipts and expenditures of the Netherlands since 1910:

Netherlande-Receipts and expenditures, 1910-1925.
[Boarce: Jeareljfars vocr het Koninkrl]k der Nederlanden. In thonsands of guilders]


[^36]Small deficits existed in the budget prior to the war, due largely to educational and labor reforms which entailed greater expenditures. While the Netherlands was not one of the combatants, she was nevertheless compelled to meet many extraordinary expenditures incident to the war. The size of the army was increased and army and navy expenditurestbecame greater. Another source of expenditures arose from the efforts of the Government to keep prices of food low. Through the Netherlands Oversea Trust Co., the Government bought and sold grains, meats, and other foodstuffs. Furthermore, important sums were paid out in relief work, in unemployment insurance benefits, and in caring for Belgian refugees. Expenditures of the foreign service were heavier, since the Netherlands was continually being called upon to look after the interests of the belligerents. Total expenditures in 1913 were $239,000,000$ guilders, while those in 1918 amounted to slightly over a billion guilders. Estimated expenditures for 1925 amount to $691,000,000$ guilders.

In order to meet the additional expenditures growing out of the war the Netherlands in 1916 introduced the war profits and the defense taxes. The country already had an income tax, a personal property tax, a tax on capital, a land tax, and an inheritance tax. Most of these taxes were increased shortly before the war to meet the needs of growing expenditures. The new taxes adopted in 1916 yielded considerable revenue, but the total receipts of the Government were insufficient to meet the heavy expenditures. In the first part of 1919 the rates of progression of the income tax were raised. The tax on capital was doubled and the four defense taxes of 1916, which were about to expire, since they were given life originally for only three years, were prolonged for four years more with some decrease in the rates. Indirect taxes have been increased, especially on. such articles as tobacco and alcohol.

The Government is making a strenuous effort to balance the budget and has reduced salaries and adopted other economies. Largely through salary reductions the postal and railway budgets for 1925 will approximately balance.

On account of the deficits during and since the war the total indebtedness of the Government has increased considerably. The total debt at the present time amounts to about a billion and a half dollars, as compared to less than $\$ 500,000,000$ before the war. Before the War the total debt had been relatively constant for several years; in fact, the funded debt had increased from only $1,082,564,000$ at the first of 1887 to $1,148,000,000$ at the first of 1914 . Of a floating debt at the opening of the war amounting to $84,000,000$ guilders, $69,000,000$ represented advances to the East India colonies.

Most of the long-term issues of bonds since 1914 have been consolidation loans. Money to meet the current expenses was raised by short-term bills, and later the short-term bills were consolidated into long-term bonds.

At the end of April, 1924, Holland negotiated a loan in the United States to the extent of $\$ 40,000,000$. The bonds, issued at $981 / 2$, bear 6 per cent interest and are due the 1st of April, 1954. Interest and principal are payable in United States gold dollars. The purpose of this loan was to consolidate part of the floating debt of the Netherlands. The dollars were turned over to the Bank of the Netherlands

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and thus increased the foreign holdings of the bank, facilitating control over exchange rates. The following table shows the national debt of the Netherlands at the first of each year from 1913 to the present.

Netherlando-National debs, 191s-1925
[Source: Jaaroijlars voor Nederiand]

|  | Consalidated | Floating | $\begin{aligned} & \text { Total indebt- } \\ & \text { edreess } \end{aligned}$ |  | Consolideted | Floating | Total indebt- edneas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1: |  | Guild | Gual | Jan. 1: | Guidetre | ounders | Hut |
| 1918 | 1,156,000,000 | 3,000,000 | 1,150,000,000 | 1920 | 2, 183,000, 000 | as | 000 |
| 1914 | 1,148,000,000 | 13,000,000 | 1, 101,003,000 | 1821 | $2,569,000,000$ <br> 2,500 <br> 000 | 514,000,000 | 3,083,000,000 |
| 1915. | 1, 409, 000, 000 | 188, 000, 000 | 1,574,000, 000 | 1023.- | 2,745,000, 000 | 838,000,000 | 3,583, 000,000 |
| 1917.. | $1,500,0000000$ | 251,000, 000 | 1,759,000,000 | 1204 | 2, 788,000,000 | 6\%3, 000,000 | 8,371,000,000 |
| 1918- | 1, 00050000,000 | 331,000,000 | 1,944,000, 000 | 1925. | 2,920,000,000 |  |  |
| 1019.- | 1,851,000, 000 | 1614,003,000 | 2, 465,000, 000 |  |  |  |  |

## NORWAY ${ }^{4}$

## 1. PRE-WAR CURRENCY

Norway was on the gold standard before the war, like the other members of the Scandinavian Monetary Union, Denmark and Sweden. The stendard monetary unit was the krone, containing 0.44803 of a gram of gold 0.900 fine, and thus worth 26.798 cents in United States money. The gold standard was introduced into Norway in 1876.

Little gold was in hand to hand circulation before the war. Most of it was held by the Bank of Norway. The currency in actual use consisted of notes of the Bank of Norway (which were in denominations as low as 5 kroner) and silver and other coins. Silver was coined in denominations of $2,1,0.25$, and 0.10 kroner, and could be coined only for government account. Its supply being sufficiently limited, it circulated on a parity with gold.

Norway signed the Scandinavian monetary convention in 1875 (Sweden and Denmark in 1873), and from that time onward the gold and silver coins of Sweden and Denmark were lawful money also in Norway. Scandinavian silver coin was legal tender only up to certain amounts in all three of the countries. The bank notes of the Scandinavian central banks were also generally accepted at par in all three countries. The three central banks held balances for one another, and sold drafts against those balances, usually at par. In this way exchange rates between any two of the Scandinarian countries were kept usually at par.

The Bank of Norway (Norges Bank) is the central bank of issue, and maintains general control over the country's credit structure. It was established June 14, 1816, to replace the branch of the Danish National Bank after the separation of Norway from Denmark. It is a joint-stock bank with its shares privately owned. The capital was secured by a tax on land, the landowners becoming shareholders in proportion to their payments. The bank's board of directors15 in all-is appointed by the Storthing (Parliament). The president of the board, or managing director, is appointed by the Crown. The actual administration of the bank is in the hands of the managing director and four other directors designated by the Storthing. The Government shares in the profits of the bank after the payment of dividends of 6 per cent on the capital of $35,000,000$ kroner.

The notes of the bank, which are legal tender, were redeemable in gold on demand until August 4, 1914, when on account of the war the bank was relieved of its obligation to redeem in gold. Of the total circulation, there was a fiduciary issue of $45,000,000$ kroner. ${ }^{22}$ Beyond this amount, the notes had to be covered in full by

[^37]gold and foreign balances payable in gold, provided that the balances abroad should not exceed one third of the total reserve. Any excess issues above these amounts were subject to a high tax so that they would not continue outstanding.

The Bank of Norway does a general banking business. Because of the fact that its deposit liabilities and its notes are the reserve basis for the private banks, it can exercise a general control over the entire credit structure. By regulating the amount of its own advances-either in the form of rediscounts for banks, advances to the Treasury, or purchases of commercial paper from private individuals-the central bank can control the amount of the reserves of the private banks, and so affect indirectly the amount of their advances.

The gold in the country before the war was only a small percentage of the total media of payment. The bank consequently endeavored to counteract any tendency of exchange rates to go above the gold export point, in advance of an actual drain of gold. The bank held foreign bills and securities which it could sell in foreign markets when necessary and so give support to Norwegian exchange. If the tendency of exchange to go above the gold export point was persistent, the bank exerted pressure on the money market, and thus on the price level. That is to say, the bank kept the purchasing power of the currency at such a level that foreigners were willing to "buy" the currency at approximately its par value in terms of their own currency.

## II. CDRRENCY, CREDIT, AND PRICE MOVEMENTS, 1914-1925

The gold standard ceased to exist in Norway in August; 1914, when specie payments by the Bank of Norway were suspended. Inconvertibility was provided for by the provisional law of August 4, 1914, which was superseded later by various orders in council.

During the crisis at the outbreak of the war the discount rate of the bank was raised from 5 to 6 per cent, August 1, 1914; and to 61/2 per cent on August 4. It was lowered again to 6 per cent on August 20, where it remained until May 26, 1915. Although Norway was not a participant in the war, here relations with the belligerent countries were so close that financial and business conditions in Norway became greatly disturbed. There was an increased demand for loans at the bank and also expansion of the note circulation. Demand deposits increased from less than 7,000,000 kroner at the end of June, 1914, to over $14,000,000$ kroner at the end of July, and to nearly $21,000,000$ kroner at the end of August. The increase in note circulation did not take place until August, and the expansion was not relatively as great as in deposits. Notes outstanding rose from about $124,000,000$ kroner at the end of June, 1914, to a little over $140,000,000$ at the end of August. Loans and discounts increased from about $79,000,000$ at the end of June to $115,000,000$ at the end of August, 1914.

The principal items in the statements of the Bank of Norway are shown in the accompanying chart (No. 37) from 1914 to date. It will be noticed that the note circulation did not increase very greatly until the latter part of 1915, and that during the first part of 1916 the increase was especially rapid. As the war progressed Norway experienced considerable prosperity. The demand for Norwegian products grew intensely, both at home and abroad. Profits were good and business confidence was high. Many new enterprises were started. High freight rates brought prosperity to the shipping industry. The result of these conditions was that there was a strong demand for credit. Furthermore, large credits were granted to foreign countries. Loans and discounts of the Bank of Norway increased from about $71,000,000$ kroner at the end of 1913 to about $429,000,000$ kroner at the end of 1918 . The note circulation increased during the same period from about 108,000,000 kroner to about $436,000,000$.

The discount rate of the Bank of Norway was fairly high during most of this war period. It was less than 5 per cent only for a short period and from December 13, 1917, to May 9, 1919, was maintained at 6 per cent. It is to be remembered, however, that Norway normally had a higher rate of interest than many other countries.

Exchange rates on London, Paris, Hamburg, and New York were at a discount in Norway except during the early part of the war. ${ }^{\text {si }}$

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With the krone at a premium in foreign countries, the tendency was for gold to flow to Norway. Although the gold embargo and suspension of specie payments in practically all countries prevented free gold movements to Norway, nevertheless, belligerent governments and central banks shipped gold to Norway to help pay for the goods which they were purchasing there. The gold reserve of the Bank of Norway began to increase about the middle of 1915, and grew rapidly during 1916. Most of the gold coming into the country went to the Bank of Norway. The gold reserve at the outbreak of the war amounted to about $44,000,000$ kroner. At the end of 1915 this reserve had increased to about $52,000,000$, and at the end of 1916 amounted to $123,000,000$. The bank did not desire to increase its gold reserve by such large amounts and asked the Government to relieve it of its obligation to buy gold at the legal rate. Accordingly, on-April 4, 1916, the Government relieved the bank of its obligation to buy gold at the fixed rate. Although forced purchases by the bank were abolished the bank continued to acquire gold, as can be seen in the chart.

The purchase of gold by the bank tended toward inflation, because bank notes and deposit credits-which serve as reserve for the. private banks-were given in return for the gold purchases. The increased gold reserves of the bank also provided the basis for expansion of its own currency and credit. The enlarged gold reserves, coupled with the premium on the Norweigian krone, gave the appearance of soundness in the country's credit position and thus encouraged inflation. There appeared to be no danger of the bank having to face a rapid drain of gold.

The inflation which took place in Norway was in part a result of the issuance of government securities which went into the banks and served as the basis for borrowing. The internal debt of Norway increased from about $22,000,000$ kroner at the end of June, 1913, to over $400,000,000$ at the end of June, 1918, and to over a billion kroner at the end of June, 1924. The deposits of the jointstock banks in Norway increased from 592,000,000 kroner at the end of 1913 to 2,721,000,000 at the end of 1918. Deposits in savings banks increased on the same dates from $607,000,000$ to $1,566,000,000$.

The laws in regard to the amount of bank note circulation which might be outstanding were modified during the course of the war. Before the war the bank was allowed to have a fiduciary issue of $45,000,000$ kroner. Above this amount all the notes were to be covered in full by gold and foreign balances payable in gold, the foreign balances not to exceed one-third of the reserve. Any excess issues were subject to a tax. In November, 1920, the fiduciary issue was raised to $250,000,000$ kroner to take care of the large issues which had already been made. This same law of 1920 provided that only gold held in vault by the bank could serve as reserve for the notes. Thus foreign gold balances of the bank were no longer available as cover. The law also provided for an extraordinary issue of $100,000,000$ kroner which was gradually to be retired. This extraordinary issue was reduced January, 1921; to $80,000,000$ kroner; July, 1921, to $50,000,000$ kroner; and February, 1922, to 25,000,000 kroner, where it still remains.

Norway's leading industries, shipping, lumber and wood products, fishing and mining, depend to a large extent upon foreign mar-
kets. During the war the foreign business had been greatly stimulated by the commercial banks, which took an active part in the flotation of shares and debentures of new concerns besides financing the current requirements of their customers. The general trade depression of 1920-21 affected seriously each of the four basic industries of the country, through losses of foreign freight earnings, the wholesale cancellation of foreign orders and contracts, and the sudden decline in demand for the surplus products of the country's export industries. In 1921 there were 1,061 business failures in Norway, about ten times as many as in 1918, and almost immediately the commercial banks of the country came to feel the adverse turn of business. Following the failure of a number of smaller banks the Centralbanken for Norge, one of the largest banks of the country, early in 1922 found itself in difficulties and underwent reconstruction involving a loan of $50,000,000$ crowns supplied by the State, the Bank of Norway, and the other leading private banks. Later in the year similar action had to be taken in order to save the Foreningsbanken, representing a merger of two powerful banks, the Andresens Bank of Christiania and the Bergens Kreditbank of Bergen. Another large bank which had to undergo reorganization was the Norske Handelsbank, which likewise had sustained heavy losses in its support of trade and industry.

Early in 1923 a new run on the banks developed, which forced new suspensions. In order to save the situation the Government passed a bank administration act, which provided for the temporary public administration for a period not exceeding one year of joint-stock banks and savings banks which suspended paymente, in case this is considered necessary for the benefit of creditors and in the public interest, provided the application by the bank is indorsed by the Bank of Norway. During 1923 not less than 27 banks were placed under public administration, while the aggregate number of all banks under administration or liquidated as a result of the banking crisis of 1922-23 was not less than 25 per cent of the total number of all the banks in tbe country, including three of the seven large banks.

No special provisions had been made by the Government to safoguard the interests of the foreign banks and other foreign creditors of the banks under public administration. In the face of the numerous and important bank failures this omission was thought to have weakened the position of the Norwegian banks with their foreign correspondents, and to have caused the temporary impairment of Norwegian credit in foreign banking centers. Subsequently, therefore, the Government announced that in order "to avoid an interruption of regular business transactions with foreign banks" the Government would see to it that existing liabilities due to ordinary exchanges of goods between countries (i. e., documentary credits and export bills) should be promptly honored. For the more recent period a general but slow improvement in the banking situation has been taking place. The Bank of Norway has come to exercise an administrative power previously unknown, controlling, in the opening of 1924, the operation of some 28 banking institutions under public administration. The bank followed a policy of credit restriction by maintaining until November, 1924, a 7 per cent discount rate and also "played an active part in the market in order to prevent unsound speculation in exchange." The results of this active policy are seen in a gradual im-
provement of business and the banking situation-and more recently also in a substantial rise of the krone in the foreign exchange markets.

Prices began to rise in Norway promptly after the outbreak of the war and by the end of 1914 wholesale prices had risen about 15 per cent. This early rise in prices was a result largely of a scarcity of commodities caused by the war. Prices continued to rise as the war progressed, reaching a high point in September, 1920, of 425 (December, 1913 -June, $1914=100$ ). This rise in prices during and after the war was due in part to the scarcity of commodities, but more especially to the increase in purchasing power, i. e., an expansion of notes and deposita. By the end of 1916 the price level had risen to 233 and by the end of 1918 to 345. The discount rate of the Bank of Norway was over 6 per cent from May 26, 1915, to December 13, 1917. The rise in the discount rate at this latter date helped to check the course of inflation. In 1919 there was a slight decline in prices; which was followed, however, by a renewed upward movement in 1920, when the high point of 425 was reached in September.

CHART 88
Norwat-Whomesine Paices of Papar Bann and ox Gowd Basis, Montily, 1920-1925
[Okonomisk Revus inder numbers for Morway, 92 eommodities, end of month, Decsubler, 1913-Juno; 1914-100; Vnited States Burean of Labor inder numbers, 404 commodities, monthly average, 1918-100.]


The accompanying chart (No. 38) shows the course of prices in Norway from the first of 1920 to the present, and these same prices converted to a theoretical gold basis. It will be noticed that the prices converted to a gold basis correspond closely to those in the United States. Prices in Norway fell very sharply in the last fow months of 1920 and the first part of 1921. This was part of a general
fall in prices throughout the world, accompanying business depression and liquidation. The decline in prices in Norway continued until January, 1923. The liquidation of credit and prices in Norway did not go as far as it did in Sweden, although it was of considerable extent and the country suffered severe depression.

Since January, 1923, prices in Norway have been gradually rising, with some reactions. The rise has been from 220 in January, 1923, to 281 in February, 1925, followed by a decline to 276 in March, 1925. This rise in prices which took place, especially in the first part of 1924, was in the face of a discount rate at the Bank of Norway of 7 per cent from November 10, 1923, to November, 1924 . On the latter date the rate was lowered to $61 / 2$ per cent. Since the fall of 1924 the rise in prices has not been of as great an extent as previously. When the index aumbers are reduced to a gold basis (i. e., discounted according to thediscount on the krone in the exchange market) the price level in Norway and the price level in the United States are in close harmony, as can be seen in the preceding chart.

## III. FOREIGI TRADE

The merchandise imports of Norway for many years have regularly exceeded the exports. The accompanying chart (No. 39) shows imports and exports since 1890, by values and quantities. The excess of imports is paid for principally by shipping services furnished to foreigners. Before the European war these two items nearly balanced. Norway was a debtor country, but apparently the interest and dividends that had to be remitted abroad before the war were about offset by new loans to Norway. Of the total government debt in 1913 of $363,000,000 \mathrm{kroner}, 341,000,000$ was foreign debt. The following table shows the excess of merchandise imports, and the receipts from shipping services since 1910 :

CHABT 80

Quanttty and valite
[Spectal imports, 1. e., tmports for domestic consamption; special exports, 1, e.s exports of domestle merchandise]


## Norway-Excess of merchandise imports and foreign shipping receipts

[Sounce: Norwegfan Statistical Yearbook]

| Year | Excess of merchandise imports | Receipts from thipping servises rendered lorejgnera | Credit | Debit |
| :---: | :---: | :---: | :---: | :---: |
| 1910. | $\begin{aligned} & \text { Kroner } \\ & \text { i19, } 500,000 \end{aligned}$ | $\begin{aligned} & \text { Kroner } \\ & \mathbf{1 3 8 ,}, 000,000 \end{aligned}$ | $\begin{aligned} & \text { Kroner } \\ & 20,400,000 \end{aligned}$ | Eroner |
| 1911 | 170, 300, 000 | 181, 100, 000 | 9, 200, 000 |  |
| 1912 | $100,100,000$ <br> 159 <br> 100,000 | 188, 400,000 | 1,700,000 |  |
| 1914. | 157,300,000 | 218, 6000,000 | 61, 200, 000 | 68, 900,000 |
| 1915 | 191, 200, 000 | 474, 500,000 | 283, 300, 000 |  |
| 1916. | 365, 300, 000 | 1, 062, 700,000 | 697, 400, 000 |  |
| 1917. | 86i8, 000,000 | 1, 107, 200,000 | 237, 300, 000 |  |
| 1918. | 497, 500, 000 | ,905, 000,000 | 407, 500,000 |  |
| 1919. | 1, 801, 700, 000 | 1,032, 5000,000 |  | 760, 200,000 |
| 1920 | 1,786, 5000,000 | 1, 280, 000, 000 |  | 506, 500, 000 |
| 1021. | 825, 600,000 | 544, 200,000 |  | 281, 400,000 |
| 1022 | $525,000,000$ | 462 600, 000 |  | 62,400, 000 |
| 1823. | 519, 000,000 | 483, 200, 000 |  | 35, 800,000 |
| 1824. | 484, 100,000 | 660,000,000 | 65,900, 000 |  |

After the outbreak of the war, imports and exports of merchandise both increased. This was the result of the rise in prices, and also of increased sales to belligerent countries. The fact that it was to a large extent merely a reflection of higher prices is shown by the decrease in physical quantities imported and exported during most of the war years. On the other hand, because of higher freight rates the tendency was to reduce shipments of more bulky articles.
Although the balance of merchandise importe increased considerably during the war years, the receipts from foreign shipping increased in even greater amount as a result largely of high freight rates, so that the credit balance for the two items amounted to $1,680,000,000$ kroner for the years 1914-1918. Net imports of gold during this period amounted to only about $78,000,000$ kroner, so that Norway received payment for the shipping services in other ways to an important extent. There was a return to Norway of Norwegian securities. Also, there was the purchase (in Norway) of foreign securities, and the extension of foreign credits by Norwegian banks.
In 1919 and 1920, a very great increase in import values took place. The axcess of imports for these two years amounted to three and onehalf billion kroner. Although receipts from foreign shipping continued large, they were insufficient to pay for the large excess of imports, and the debit balance of these two items for the two years amounted to $1,276,000,000$ kroner. After 1920, import values declined greatly, but export values declined at the same time, so that the excess of merchandise imports, while it was much reduced, was still large compared to pre-war figures. Furthermore, the depression in the shipping trade led to a heavy decline in freight receipts, which help to pay for the excess of merchandise imports. In fact, the decline in freight receipts was in part responsible for the reduction in imports. During the five years 1919-1923 the debit balance on account of merchandise trade and receipts from foreign shipping amounted to 1,655,000,000 kroner.

This large debit balance was offset in part by the liquidation of foreign assets by the Norwegian banks. Also, several loans were floated in New York and London.

A large foreign floating debt existed during 1920 and 1921. For instance, the $\$ 20,000,000$ loan placed in New York in 1921 was used largely to liquidate floating debts on account of ships built for Norway in England, ships contracted for at very high prices before shipping became depressed. During 1924 shipbuilding contracts placed abroad had a value of $128,000,000$ crowns, of which $60,000,000$ were either paid in advance or were payable before January 1, 1925. The following are the principal loans floated abroad by Norway during the last five years. The net foreign debt of Norway on October 1, 1924 -Government and private-has been estimated at $1,600,000,000$ crowns.

Norway-Foreign borrowings

|  | Barrower | Year | Amount | Nominal rate |
| :---: | :---: | :---: | :---: | :---: |
| City of Christianis. |  | 1020 | \$5,000,000 | 8 |
| City of Bergen.. |  | 1020 | \%, 000,000 |  |
| Do. |  | 1922 | E1, 000,000 | $53 / 4$ |
| Do....... |  | 1822 | \$2,000,000 | 6 |
| Clty of Trondhjem. |  | 1924 | \$2,500,000 | $61 / 4$ |
| King dom of Norway |  | 1970 | \$20,000,000 | 8 |
| Do. |  | 1021 | 54,000,000 | 6 |
| Do. |  | 1922 | \$18, 000, 000 | 6 |
| Do. |  | 1992 | $\bigcirc 20,000,000$ |  |
| Do. |  | 1925 | \$0, 000,000 | ${ }_{51 / 2}$ |

The trade between Norway and Germany is of considerable size. As before the war, Germany is now the chief source of the imports into Norway. Next in importance as a source of imports is Great Britain, followed by the United States, Sweden, and Denmark. The trade with France is relatively small compared to that with the countries mentioned above. The exports of Norway go largely to Great Britain, followed by the United States, Germany, France, and Sweden. Germany, which before the war was the second best customer for Norwegian goods, has now yielded second place to the United States.

The principal export of Norway is paper and paper products. Norway also exports large amounts of animal food products, especially fish. In 1923 Norway exported about $155,000,000$ kroner of fish products. The imports of Norway consist principally of textile fabrics, grains, coal, and coke. The following tables show the foreign
trade of Norway according to principal countries and according to
principal commodities:
Norway-Imports and exports of merchandise, by principal countries, 181s, 188\%,
and 198s
[Soturce: Norges Handel]

| , | 1913 | 1922 | 102\% |
| :---: | :---: | :---: | :---: |
| IMPORTA |  |  |  |
| Germany | 176, 064,000 | 283, ${ }^{\text {K14, }}$, 000 | $\begin{aligned} & \text { Yroner } \\ & 308,118,000 \end{aligned}$ |
| Oreat Britais and Ireland | 146, 244, 000 | 204, 772,000 | 206, 829,000 |
| United States.. | 39, 201, 000 | 243, 450, 000 | 223,089, 000 |
| Sweden. | 48, 328, 000 | 123,049, 000 | 91, 0n3,000 |
| Netherlands | 23, 387,000 | 103, 920,000 | 0, 310,000 |
| Belgium. | 17,928,000 | $58,894,000$ $36,464,000$ | $65,710,000$ $58,287,000$ |
| France. | 11, 719,000 | $30,464,000$ $28,678,000$ | $63,287,000$ $31,528,000$ |
| Argentina. | 4,058,000 | 23, 315,000 | 30, 890,000 |
| British East Indies. | 2, 187,000 | 11, 2001,000 | 20,610,000 |
| All other countries. | 50, 165, 000 | 102, 272,000 | 133,097,000 |
| Total. | 562,321, 000 | 1,313,980,000 | 1,342,870,000 |
| Exports |  |  |  |
| Great Britaln and Ireland. | 98, 648, 000 | 231, 717,000 | 288, 946, 000 |
| United States. | $30,211,000$ | 90,340,000 | 112, 150, 000 |
| Germany. | 67, 228, 000 | 76, 364, 000 | 78,351, 000 |
| France | 14,228,000 | 55, 107, 000 | 53, 456,000 |
| 8weden. | 26, 430, 000 | 52, 147,000 | 62, 146,000 |
| Denmark | 9, 158,000 | 35, 891,000 | 41, 416,000 |
| Belgium. | 14,680,000 | 24,808, 000 | 25,447,000 |
| Australia. | 14, 406,000 | 31, 650,000 | 24,483,000 |
| Italy- | 10,598,000 | 20, 34, 000 | 20, 072,000 |
| Spain and the Camaries | 12, 168, 000 | 10, 254, 000 | 17, 371,000 |
| All other conintries | 94, 868, 000 | 149,030,000 | 152, 105,000 |
| Total | 302, 813,000 | 787, 390,000 | 820,045,000 |

Norway-Imports and exports of merchandise, by principal commodities, 1818 and 1928
[8ource: Norges Eandel]

|  | 1918 | 1028 |
| :---: | :---: | :---: |
| IMPORTS | Kroner | Kroner |
| Textile fabrics. | 45,160,100 | 157,44, 200 |
| Grains | 64, 068, 200 | 140, 186,200 |
| Coal and cote. | 60, 934, 300 | 134, 191,600 |
| Ghips, carriages, machines, etc | 73, 204, 000 | 119,773,160 |
| Colonisl products | 79, 054, 500 | 115, 191,000 |
| Fat, oil, tar, etc | 37,293,300 | 00, 306, 100 |
| Food products of antmal origil | 16, 310, 000 | 88, 45, 870 |
| Metal manufactures...--..- | 24,500,700 | 75,237,050 |
| Prinit, green vegetables, ete | 11, 208, 000 | \$2,905, 400 |
| Mineral manulactures..... | 6,647,100 | 62,922,870 |
| EXPOMTB |  |  |
| Paper and paper products. | 32, 248, 100 | 209, 491, 478 |
| Fish and other food producta of animal or | 132,038, 300 | 170, 727,652 |
| Mineral manufacturea | 19, 640, 100 | 75,818, 064 |
| Wood | 65,700, 300 | 70,202, 105 |
| Fat, oil, tar, sum, etc | 16,007,900 | 65, 781,728 |
| Hides stins, plumes atc. | 33, 567,040 | 24,069,904 |
| Metals, raw and partly manufactured | 17, 846, 100 | 31,807. 124 |
| Ghips, carriages, machines | 7,813, 400 | 24,000,218 |
| Metal manulactures.-...- | 1, 802,700 | 7,156, 060 |



## IV. ExCHANGE RATES AND PURCHASING POWER PARTIES

The Norwegian krone according to its gold par is worth about 26.8 cents in United States money. Before the war exchange rates were practically at par most of the time, since gold movements were free. Upon the outbreak of war in 1914 the krone went to a discount in most foreign markets, or, in other words, foreign currencies were at a premium in Norway.

The high rates in Norway for foreign exchange during the last half of 1914 and the early part of 1915 were due principally to a practical refusal of banks in financial centers outside Norway to discount foreign bills. Inasmuch as Norway was a debtor in the monety markets of Paris and London, the difficulties of discounting bills in those markets seriously curtailed the supply of sterling and francs in Norway. Dollar exchange was also at a discount in London and Paris during the early days of the war, but the autumn shipping of American commodities and the exportation of American gold to Canada for the account of the Bank of England soon brought dollars back to par. Consequently, the krone, being at a discount in London, went to a discount in New York. The following table shows the percentage rates of exchange in Norway on some of the leading countries during the early days of the war:

Norway-Percentage rates of exchange, Christiania (Oslo) on certain countries ${ }^{1}$
[Souree: Norwegian Statistical Yearbook]

|  | High, 1914 | $\begin{aligned} & \text { High, } \\ & 1015 \end{aligned}$ | $\begin{aligned} & \text { Low, } \\ & \text { 1016 } \end{aligned}$ | $\begin{gathered} \mathrm{High}, \\ \mathbf{1 0 1 6} \end{gathered}$ | Low, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Great Britaln. | 106. 88 | 107.89 | 02.24 | 96.98 | 84.85 |
| Germany. | 100.46 | 08. 72 | 78.47 | 78.47 | 64.97 |
| France | 108.33 | 108. 38 | 88.11 | 88.54 | 75.00 |
| Netharlamds. | 108.67 | 100.34 | 100.01 | 111. 34 | 88.34 |
| United States. | 107.20 | 100.88 | 96. 04 | 100.50 | 86.20 |

1 Rates for sight drafts.
By November, 1915, the krone was again at par in New York, rising from a low point of 24.23 cents in February to 28.10 cents in November. It continued to rise rapidly during the spring of 1916 and in, May, 1916, was over 31 cents. The accompanying chart (No. 40) shows the course of New York exchange rates on Christiania (Oslo) since the first of 1915.

The factors responsible for the rise above par of the krone, beginning at the end of 1915, were easentially the same as those for Sweden and Denmark. The belligerent nations, while making large purchases in Norway, curtailed the exportation of their own merchandise. Trade restrictions upon the exportation of goods from Great Britain and other countries reduced the demand for sterling and other bills in Norwsy and thus tended to cause these currencies to go to a dis-
count. Part of the purchases by belligerent nations was paid for in gold, but after April 4, 1916, the Bank of Norway was not obliged to purchase gold at the legal rate. The following figures show the percentage of par of the pound in Norway from 1914 to 1923. It will be noticed that in 1916, 1917, and 1918 the pound was continuously below par:

Norway-Percentage rates of exchange for the pound sterling in Christiania
(OBLo)
[Source: Norvegian Btatistical Yearbook]

|  | EIgh | Low | Avarage |  | High | Low | Averaye |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1914. | 100.88 | 100.00 | 101. 71 | 1919-.-----------.-- | 10. 63 | 92.95 | 60. 78 |
| 1915. | 107. 09 | 92.24 | 101. 48 | 1924 | 148. 48 | 10243 | 122.85 |
| 1016. | 66. 02 | 84.25 | 9240 | 1921 | 174.84 | 107. 66 | 143.95 |
| 1917. | 9. 17 | 71.04 | 86.95 | 1922. | 151. 16 | 126. 06 | 130.87 |
| 1918. | 96.09 | 70.57 | 85.85 | 1023.. | 170.71 | 134.86 | 151. 44 |

Sterling and other allied currencies received support in New York during most of the war from American advances to the allied governments. Before the United States entered the war the advances were made by private American bankers. After the United States entered the war advances from the United States Government were utilized in maintaining exchange. Norwegians, rather than accept a large discount in selling sterling bills in Norway, could dispose of their bills in New York, where exchange rates were maintained at the high level of about $\$ 4.76$ to the pound. But the dollar funds thus obtained could not be used freely to purchase American goods to be shipped to Norway because of export restrictions in the United States and shipping difficulties in view of the submarine campaign. Nor could the funds be drawn out in gold on account of the gold embargo in the United States. Dollars, therefore, went to a discount in Norway along with sterling and other allied currencies.

The discount of the dollar in Norway was not due to reduced purchasing power in the United States, i. e., a higher price level, since prices in the United States had not risen to as great an extent as those in Norway. In fact, prices in Norway were higher than in either Great Britain or the United States, as shown in the following table:

Yearly average wholesale prices in Norway, the United States, and Great Britain
[Source: Federal Reserve Bulletla]

| Average | Onited States (Bureau of Labor Statistice Index) | Norwey (Central byra index) | Great <br> Britain <br> (Economist <br> inder) | A verage | United States (Bureau of Labor Statistics Index) | Norway (Central byrt inden) | Great <br> Britatn <br> (Economist <br> Inder) <br> * |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1013..... | 100 |  | 100 | 1919.... | 206 | 1822 | 1235 |
| 1914. | ¢88 | 115 | 9 | 1920 | 220 | 382 | 258 |
| 1915 | 101 | 159 | 123 | 1021. | 147 | \%88 | 181 |
| 1916. | 127 | 1233 | 161 | 1922. | 149 | 233 | 150 |
| 1917 | 177 | 1341 | 204 | 1973 | 154 | 2383 | 108 |
| 1918.- | 194 | 1346 | 225 | 193. | 150 | 200 | 174 |

[^39]The premium in New York on kroner declined during the latter part of 1918 when the end of the war appeared near, and in November, 1918, the rates were down to par. After a slight rise, which lasted only for a few weeks, the krone fell below par in March, 1919, and depreciated almost continuously during the entire year, being quoted at less than 20 cents in December. This fall of the krone, which continued also during 1920 with a reaction in the spring, was due largely to the removal of trade restrictions, resulting in large orders being placed abroad by Norway, and was due also to the fact that the artificial support given the allied currencies was removed in March, 1919, so that after this time the greater rise of prices in Norway than in the United States could exert its influence on exchange rates. This greater depreciation of the krone in Norway, relative to that of the dollar in the United States, has been the fundamental cause of the continued low value of the krone in New York since shortly after the close of the war.

The relationship between the krone and the dollar on the basis of the pirchasing power of the two units is shown in computations of purchasing-power parities prepared from index numbers of prices in the two countries. The accompanying chart (No. 41) shows purchasing-power parities between the dollar and the krone since the first of 1920, and shows also market exchange rates for comparative purposes. According to the purchasing-power parity,

CHART 41

 of month. Decomber, 191a-June, 1914=100; and Federal Fhoserve Board inder nambore for United Btatos, 101 commodities, monthly averages, 1913-100]

the krone was worth a little less than 20 cents at the first of 1920 , and as prices in Norway rose faster than in the United States during this year, by the end of 1920 it was worth only 12.72 cents. At the first of 1921 the krone rose in value in New York, due to a reduced excess of imports and to foreign borrowing which had been taking place. ${ }^{s 5}$ These factors increased the value of the krone in the exchange market, but inasmuch as the internal purchasing power of the krone relative to that of the dollar had not increased, a fundamental basis for the rise in exchange rates was lacking, and exchange rates by the fall of the year declined considerably, to a point in harmony with purchasing-power parities, as can be seen in the chart. This overvaluation of the krone on the exchange market in the first part of 1921 led Norwegian importers to take advantage of the relatively low price of foreign goods, and therefore raised the price of dollar drafts.

The shortage of foreign goods in Norway at the close of the war and the removal of restrictions on the exportation of these goods would have led to an even greater depreciation of the krone had it not been for the accumulation of foreign bills and securities in Norway which could now be used to purchase goods abroad.

Another factor which tended to depress the krone in the latter part of 1920 was the money stringency in New York and London during the crisis and busimess depression. Individuals in these financial centers endeavored to liquidate their holdings of kroner. The decline in shipping receipts of Norwegian vessels after 1920 was also a factor which depressed the krone. Shipping receipts, as already noted, declined from $1,280,000,000$ kroner in 1920 to an average of about $500,000,000$ for the three years 1921-1923.

The fall of prices in Norway, which began September, 1920, and continued to the end of 1922, was of considerable magnitude, and inasmuch as prices in Norway fell to a greater extent than did those in the United States, quotations for kroner in New York rose. The krone, according to its purchasing-power parity, was worth about 20 cents at the end of 1922. During 1923 and the first part of 1924, however, both purchasing-power parities and exchange rates declined.

During the last half of 1924 and the first part of 1925 the krone participated in the general rise of exchange rates in New York. This general rise was a result partly of large loan flotations in the United States and improved conditions in Europe. The rise of the krone was due also to the continued improvement in the shipping trade. Since exchange rates for kroner during 1923 and 1924 were depreciated considerably more than warranted by purchasingpower parities, part of the rise of the krone in the latter part of 1924 and the first part of 1925 was merely the removal of the undervaluation of the krone in the exchange market. Purchasing-power parities and exchange rates are now in close agreement so that existing exchange rates seem to be fairly normal in view of the underlying conditions.

[^40]
## V. STABIIIZATION

The Norwegian krone at the present time is worth a little less than 17 cents in American money, compared to its pre-war gold par of 26.80 cents. The present depreciation of the krone in exchange rates is merely a reflection of the depreciation of the krone within Norway. The external and internal depreciation of the krone at present are of about the same extent.

The question of currency reform in Norway centers around the question of at what level the krone should be stabilized, whether it would be preferable to reduce the price level and restore the former purchasing power of the krone, or whether it would be better to maintain the krone at its present level. The question is thus one of devaluation versus deflation. The krone has lost about one-third of its former purchasing power, and to raise it by this amount would be a most difficult task and one which would be accompanied by severe disturbances and depression to the business and industry of the country. A declining price level, even if gradual and apread over a considerable period of time, is not conducive to prosperity. Furthermore, it interferes with the relations between debtors and creditors, debtors being called upon to pay back units more valuable than those they borrowed. Business in Norway has become adjusted to the present level of values and would find readjustment to a new level a source of serious difficulty.

A further question in regard to determining the level at which to stabilize the krone is that regarding the repayment of the Government debt. If the debt is to be repaid in gold kroner the burden becomes much greater. Norway, no doubt, is in a sufficiently strong position to meet the tax burden necessary to pay interest and to amortize the debt in gold at the old par, but since a large part of this money was borrowed by the Government at a time when the krone was depreciated in value, paying back on the gold basis would require the Government to repay greater purchasing power than was borrowed. Justice, therefore, does not require that the Government should pay back its debt in gold kroner. An equitable revaluation, worked out on the basis of the internal value of the money at the time a particular loan was contracted could be arranged. A similar scale could be applied also to the repayment of private debts within Norway, contracted at a tirne when the purchasing power of the krone differed considerably from that at present. The question of repeyment of debts is the chief hindrance to devaluation of the krone, and thus to currency stabilization and return to the gold standard.

The selection of a new gold par for the krone is not very difficult, and several guides for this are available. Current exchange rates on gold-standard countries provide a useful index of the present gold value of the krone. Also, purchasing-power paritieg-parities on the basis of the purchasing power of the krone compared to that of gold-
currency units-are serviceable in determining the gold value of the krone. According to exchange rates for dollars, the krone is worth between 16 and 17 cents, which is about the rame as the value indicated by purchasing-power parities.

A method of procedure in stabilization would be for Norway to announce a rate at which the krone would be maintained, a rate in agreement with existing rates of exchange and purchasing-power parities. Norway would have little difficulty in maintaining this rate, inasmuch as prevailing exchange rates do not seem to be out of harmony with fundamental conditions as they exist in Norway to-day. Stabilizing the krone at the present level would be introducing a new currency unit into Europe, a unit determined more or less by accident and one which might not be desirable for Norway as a permanent unit. Therefore, a new gold unit in harmony with other currency unita could be selected and introduced in place of the present krone, the rate of exchange between the two being determined by simple arithmetic. Thus, if a 50 -cent gold unit were adopted and the krone stabilized at its present leval of a little over 16 cents, approximately three of the present kroner would be exchanged for one of the new gold units. Adjustments of wages and prices to the new unit would take place also by simple arithmetic.

The return of Sweden, Great Britain, and the Netherlands to the gold basis, and stabilization by Denmark, Germany, Russia, and other neighboring countries to Norway makes an early solution of the currency question in Norway very desirable.

The gold reserve (when taken at its nominal value) of the Bank of Norway at the present time amounts to about 39 per cent of the note circulation, compared with 36 per cent in June, 1914 . In addition to gold in its vaults to the extent of about $147,000,000$ kroner, the bank holds balances with foreign banks to the extent of about $57,000,000$ kroner. The note circulation outstanding April 22, 1925, amounted to about $373,000,000$ kroner. If the gold reserve is computed according to its value in paper kroner, it amounts to over one-half more, or the equivalent of about $232,000,000$ kroner (about 62 per cent of the notes). The Bank of Norway, therefore, is not in a weak position as regards gold backing for its notes and could maintain the gold standard at the present level of values. Improvement in the shipping industry and other industries important to Norway also will facilitate currency reform.

The government finances of Norway have shown a considerable deficit of receipts over expenditures. This deficit must be reduced if healthy conditions are to prevail. Progress is being made in this direction. During the war years, although expenditures increased by large amounts, revenues also increased, so that with the exception of 1915 a surplus regularly occurred. In fact, not until 1920, when expenditures were increased very much more than revenues, did a deficit appear.

The debt of Norway has increased greatly since 1913, a large part of the proceeds of the loans, however, going to productive purposes. At the end of June, 1919, the total debt amounted to about $1,000,000,000$ kroner, and at the end of June, 1924, to about 2,000,000,000 kroner. Part of this increased indebtedness, however, is merely a reflection of the rise in prices; or, in other words, of the depreciation of the krone. The following tables show the receipts
and expenditures of Norway since 1910 and also the amounte of the public debt:

Norway-Reccipts and expendritures, 1910-1924
[Sogres: Statistisk Arbok for Keagoriket Norgo. In thousands of kroner]

| Year endlog Jnne 30- | Recexpts not ineluding lpams | $\begin{aligned} & \text { Rxpeni- } \\ & \text { itumes } \\ & \text { loss } \\ & \text { amorth- } \\ & \text { Eacion } \end{aligned}$ | Surplus | Detielt | Proceeds from nuw lowns | $\begin{aligned} & \text { Amarti- } \\ & \text { zation of } \\ & \text { debt } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1910 | 116,431 | 112, 245 | 4,188 |  | 5.818 |  |
| 1911 | 123,408 | 116,307 | 7,101 |  | 4,872 | 4,509 |
| 1912 | 134,912 | 128, 086 | 6,828 |  | 5,817 | 4,827 |
| 1913 | 155, 071 | 147,944 | 7, 127 |  | 5 5,64 | 5,082 |
| 1914. | 186,981 | 161, 407 | 5,454 |  | 2,041 | 5,249 |
| 1015 | 182, 872 | 208, 177 |  | 21,205 | 14.457 | 5,157 |
| 1916. | 293,656 | 212.02 | 13,984 |  | 13.727 | 568 |
| 1917 | 774,833 | 228,594 | 78, 289 |  | 19,843 | 11,471 |
| 1918 | 504,503 | 543, 148 | 51, 415 |  | 25,200 | 14,425 |
| 1919. | 718, 900 | 708, 508 | 10, ${ }^{\text {cta }}$ |  | 68,788 | 5,957 |
| 1900 | 994,209 | 953, 136 |  | 157, 887 | 50, 235 | 5,986 |
| 1921 | 750,682 | 751,798 |  | 143,205 | 64, 601 | \% 5808 |
| 1923 | 487, 356 | 634, 128 |  | 145, 782 | 58,868 | 4,155 |
| 1922 |  |  |  |  | 04.808 | $\cdots$ |

Norway-National debi, 1900-1984
ISource: Statistiak ìrbok tor Kongariket Norge. In thomands of kronery

| Year ondiog Jume | Damestic debt | $\begin{aligned} & \text { Porelgn } \\ & \text { debt }{ }^{2} \end{aligned}$ | Total debt | Year ending Jme | $\begin{gathered} \text { Domestic } \\ \text { debt } \end{gathered}$ | Yoroign dabt | $\begin{aligned} & \text { Total } \\ & \text { dobt } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 14.902 | 219, 163 | 231,006 | 1917.. | 108, 643 | 348,801 | 155.505 |
| 1906 | 15,523 | 280, 401 | 304,924 | 1918. | 400, 272 | 353, 328 | 738, 600 |
| 1019 | 18,341 | 812,957 | 229,298 | 1919. | 676, 175 | 231, 863 | 1,008,009 |
| 191 | 18,049 | 248,004 | 307, 65 | 1920 | 792,250 | 237, 339 | 1, 129, 605 |
| 1912 | 17,839 | 24,966 | 302, 806 | 1921 | 782,249 | 433,711 | 1,215,960 |
| 1813 | 27, 253 | 840,701 | 362, 743 | 1822 | 815, 186 | 402, 227 | 1,807,473 |
| 1914 | 20,922 | 230,473 | 357, 394 | 1923 | 883, 010 | 593, 388 | 1,419,407 |
| 1915 | 67.220 | 254094 | 421,324 | 1924 | 1,050,000 | 988,700 | 2007,700 |
| 1916. | 85,745 | 867,231 | 422,975 |  |  |  |  |

[^41]
## POLAND ${ }^{1}$

## I. CURRENCY CONDITIONS PRIOR TO STABIIIZATION

The Republic of Poland, which came into existence at the time of the armistice in November, 1918, is composed of former parts of Germany, Austria-Hungary, and Russia, territory which had constituted in the main the Poland dismembered about 150 years ago by Russia, Austria, and Prussia. The independence of Poland was provided for by the treaties of Versailles and of St. Germain. The eastern boundaries of the country were arranged in the treaty of Riga in 1920, which ended the war between Poland and Russia. Upper Silesia was transferred to Poland from Germany in June, 1922, under a decision of the League of Nations. In the spring of 1921 Poland adopted a constitution providing for a Parliament of two chambers, the Diet and the Senate, and providing for a President with a seven-year term. The President is elected by Parliament and appoints his cabinet of ministers.

Upon the outbreak of war in 1914 Germany invaded Russian or Congress Poland and soon had taken over most of this section of country, which was occupied until the armistice in 1918. In 1916 the Germans introduced a new currency into this section of Poland, the German-Polish mark of 100 pfennigs. This was accomplished through the establishment of a government bank of issue, the Polska Krajowa Kasa. Pozyczkowa, or Polish State Loan Bank. Prior to this time, the currency in Congress Poland had been the Russian ruble, which. was legal tender.

After the entry of the German troops, German marks began to appear in circulation. The German Government paid the troops in marks and the marks were spent locally by the men. Also, property in Poland, requisitioned by the German Government, was paid for in German marks. The Polish population received the marks but preferred Russian rubles, with which they were familiar, and disposed of the marks as promptly as possible. Due to the German occupation of this part of Russia (Congress Poland) the amount of ruble circulation available was limited, and since the demand for rubles was strong the value of the ruble in terms of marks was high compared to what it was in outside markets. In Galicia, which at this time belonged to Austria, the Austrian krone circulated.

The bank established in Warsaw by the Germans in 1916 was received with disfavor by the Polish people, and was looked upon as a German institution serving German interests. The Bank issued German-Polish marks, paper currency which was declared to have a value equivalent to that of the German mark. The German Gover-nor-General of Warsaw in April, 1917, issued adecree demonetizing the ruble and forbidding the quoting of prices, the transacting of business, or the kesping of accounts in terms of rubles. Polish marks

[^42]and German marks were decreed the only legal money. These rigolous measures on the part of the Governor-General sufficed to gain general currency for the new Polish mark.

After the armistice, when Poland became independent, the currency was very much confused, consisting of a variety of currency units fluctuating in value in relation to each other. Posen or German Poland, had the German mark; Galicia, or Austrian Poland, had the krone of the Austro-Hungarian Bank; Congress, or Russian Poland, had the German-Polish mark, and in the east beyond the German occupied area, the Russian ruble. In some sections different currencies were circulating side by side.

The Polish Government when it came into power took over the bank formed by the Germans and accepted the bank's note circulation as the temporary currency of the country pending the issue of a national currency. According to the treaty of St. Germain, Poland was to convert the kronen of the Austro-Hungarian Bank circulating in Poland into national currency. This conversion of kronen into Polish marks was undertaken at a rate of 70 marks to 100 kronen. The German marks in Poland were deprived of their legal tender quality in the latter part of 1919, but few were in circulation at that time, so that the new Polish mark and the former German-Polish mark wern the sole monetary units.

The history of Polish currency from the armistice until the spring of 1924 is chiefly an account of continued paper money inflation and accompanying depreciation in the value of the mark, both internally and externally. The depreciation of the mark was practically continuous, sometimes taking place precipitously and again more slowly. The circulation of the Polish State Loan Bank at the end of 1918 amounted to a little over $1,000,000,000$ marks. By the end of 1919 this had increased to over $5,000,000,000$ marks, and by the end of 1920 to nearly $50,000,000,000$ marks. However, during this time there was a withdrawal of German marks and other currencies from Poland, and an extension of the area over which the Polish mark had to circulate, so that a certain amount of increase was legitimate. The currency continued to increase, as can be seen in Chart 42. and from the following figures, until it reached a maximum of about $600,000,000,000,000$ marks early in 1924.

Note circulation of Polish Stats Loan Bank (end of year; Polish marks)

| 1918 | 1,023, 800, 000 | 1922_.--------793, 437, 500,000 |
| :---: | :---: | :---: |
| 1919. | 5, 316, 300, 000 | 1923_......- 125, 372, 000, 000, 000 |
| 1920 | 49,361, 500, 000 | 1924 (Mar. 31)- 596, 244, 000, 000, 000 |
| 1921 | 229, 537, 600, 000 |  |

The inflation took place largely as a result of advances to the Government by the Bank. On account of budgetary deficits the Government had recourse to the Bank to supply its fiscal needs. The importance of the government advances in the Bank's statements as compared to advances made to private individuals, can be seen from the accompanying chart (No. 42). The almost parallel movement of the curves representing note circulation and advances to the Government, is very striking, and shows how the large issues of paper money were caused by the Government borrowing from the Bank.

CHART 4
 LOAM Banz, Mositilx, 1010-1924
[Erchange rates, New Yait on Wareaw, Juls, 1019, kight drafts; August, 1019-1025, cable transfars]
Oents per mark Minions of miths


The financial burdens of the Government were heavy, and the country was in a weak economic condition. When the German troops were in possession of Poland a large amount of the industrial equipment and raw materials were taken out of the country, so that when the new Polish State came into existence it found the country stripped of much necessary equipment. The railways and other industries were in a deteriorated condition. The country had been the scene of severe fighting and large areas had been laid waste. The expenses of reconstruction and of organizing the new Government were thus a heavy burden upon the treasury. Furthermore, the armistice did not end the war for Poland, but until 1920 the country was involved in war with Russia.

The war with Soviet Russia was very costly and was the principal factor in reducing Poland's finances to a state of practical bankruptcy and in preventing the rehabilitation of the country. In the middle of 1920 the Bolshevik troops invaded Poland and caused considerable devastation. The Bolshevist invasion led to a run on the banks and caused a general stringency of credit.? Individuals who were unable to get sufficient funds from the private banks began turning to the Polish State Loan Bank for accommodation after this time and the increase in discounts and advances to private persons was very marked, as can be seen in the chart (No. 42). The chart shows how the advances to private parties rose sharply in the last half of 1920 , and continued to increase along with the advances to the Government and with the note circulation. Discounts at the bank exhibited a similar increase beginning in the last half of 1920.

The war with Russia came to an end in the fall of 1920 with the defeat of the Bolshevists. By the treaty of Riga, Poland and Russia in March, 1921, agreed to terms of peace. Russia agreed to pay Poland $30,000,000$ rubles in gold for Poland's share in the assets of the Russian State Bank. With hostilities ended, Poland now had an opportunity to organize and rehabilitate the country. Although the Russian troops did not remove or requisition machinery and materials as did the Germans, Poland was exhausted and industry was suffering from the strain and ravages of the long period of war.

The demands upon the Polish treasury for conducting the war and for various civil and other purposes were great, so that the total expenses of the Government during these years were very much more than current revenues. The end of war, however, did not bring an end to the deficits. The Government met its expenses by loans, by the capital levy, by current revenues from taxation, and especially by large issues of paper money advanced to the Government by the Bank.

During 1921 and 1922 the increases in paper money did not take place as rapidly as during the two preceding years. This was partly accounted for by the receipt of extraordinary revenue and by the fact that the war with Russia had ended. However, inflation continued, and in the year 1923 the printing presses turned out such large quantities of notes that the value of the mark seemed almost to disappear. The total circulation increased from $793,000,000,000$ marks at the end of 1922 to $125,000,000,000,000$ marks at the end

[^43]of 1923. In the spring of 1924 the maximum of about $600,000,000,-$ 000,000 was reached.

The effects of these large issues of paper money were, as would be expected, a very great increase in the cost of living, depreciation of the Polish mark in foreign countries, and greatly disturbed industrial and economic conditions within Poland. The fluctuations and depreciation in the value of the mark were so great that business became all but impossible. Chart 43 shows the rise in prices charted on logarithmic scale, where equal vertical distances indicate equal percentages of increase. It will be noticed that the rise in prices from the middle of 1922 to the spring of 1924 was very precipitous. Corresponding index numbers for 1919 and 1920 are not available. The rise in prices in 1919 and 1920, however, was not as great as in the following years.

About 1921 people in Poland began to realize the effects of depreciation, and in order to avoid loss through the depreciation of paper money, resorted to the expedient of purchasing raw materials, manufactured articles, real estate, and various other articles the values of which rose along with general prices. Some of these purchases were made for speculation, and good profits are reported to have been made, due to the unevenness with which prices fluctuated.

During 1921 and the first half of 1922 prices did not move upward continuously. Inflation was at a slower rate during this period, since the Government was receiving increased revenues, which improved the general situation. The improvement, however, was only temporary. After the middle of 1922 prices rose very steeply. The following are the index numbers of wholesale prices in Poland at the periods indicated-Januery, 1914, equals 100:


The above chart shows also prices on the new zloty basis since August, 1923. It will be noticed that since the first of 1924, when currency reform was undertaken, prices have been relatively stable.

In the middle of 1920 the general business depression throughout the world added to Poland's troubles, and industry there suffered severely. Prices declined somewhat for a time, although the note circulation continued to increase. Industry was inactive and unemployment resulted. The textile trade was especially depressed and . many of the mills were working only a few days a week. The political and military situation in the middle of 1920 was unsatisfactory, which also had a depressing effect upon industry. The business depression continued in Poland through 1921 and to the middle of 1922. Some improvement then took place, but conditions since that time have not been prosperous.

## CHART 48

Poland-Wholzgale Prices on Paper Mare Bagis and Convertid to Cold Babis, and on Zlott Bagis, Montrix. 1921-1925
[Index numbers from Rocznte Btatystyk Rzeczypolitef Polskie], 64 commodities, end of month, January, 1914-100. January-August, 1921, are Index numberi of retall pricea of food, July, 1914-100; from the Economist, London]
Per cant
[For flgures gee Table 68]
Per cent


## II. EXCHANGE RATES AND PURCHASING POWER PARITIES

The course of exchange rates in Poland during the first five years of the country's history was continually downward, the rates sometimes falling rapidly and again temporarily showing signs of stability. Poland has close economic relations with Germany, and the Polish mark for several years moved in sympathy with the German mark. The two separated in the latter part of 1923, when the depreciation of the German mark became more precipitous than that of the Polish mark. The depreciation of the Polish mark, like that of the German mark, is accounted for by very large issues of paper money. Chart 42 above shows the relationship between exchange rates and the note circulation in Poland, exchange rates moving downward as the note circulation and advances to the Government moved apward.

The Polish Government endeavored by various means to control the depreciation of the mark, but as long as inflation continued none of the efforts was successful. An office was established by the Government to control exchange rates. This expedient was not successful, since the rates established were too low to equilibrate demand and supply, and requests for foreign bills frequently had to be refused. As a result, the so-called "Black Exchange" came into existence. This was an illegal market where foreign currencies were dealt in. The exchange rates prevailing on the "Black Exchange" were always in excess of those of the government body.

The efforts to prevent exchange depreciation were futile, and the interference by the Government was disturbing to trade. Importers found the procuring of foreign currencies difficult. Exchange rates continued to fall and the office was soon abolished, only to come into existence again, however, in a somewhat different form. Since the official rates of exchange were usually below the market rates, exporters and others possessing foreign currencies were reluctant to dispose of their currencies through the official channels.

Exchange control still continues. The right to deal in exchange is restricted to the exchange banks or devisen banks and to exchange commissioners, of whom there are 10 in different parts of the country. These various agencies, which are authorized to deal in foreign exchange, endeavor to restrict the sales of bills to legal purposes.

In the first part of 1921 exchange rates in New York on Poland were more stable than previously, due largely to improved governmental conditions in Poland and to the holding down of exchange rates artificially. Other European currencies apparently were undervalued in Poland at this time, and it is reported that foreign goods were imported into Poland and sold at less than the cost of competing Polish goods. The foreign goods came especially from Great Britain and Germany. The stability in exchange rates in the spring of 1921 was only temporary, and soon the rates were again falling more rapidly than ever.

In the spring of 1923 the minister of finance attempted to prevent further depreciation of the mark, and in this endeavor disposed of
part of the gold reserve and foreign assets of the Polish State Loan Bank. The efforts to stabilize exchange, however, again were unsuccessful, and on the illicit exchange the rates for foreign currencies showed a depreciation of the mark 20 or 30 per cent greater than that shown in the official rates.

The banks which were obliged to quote the official rates did not receive many foreign bills, since better rates could be obtained elsewhere. With their supply of bills thus reduced, the banks were unable to furnish foreign remittances even to individuals with a license to purchase. The Government was forced to abandon the drastic policy and in the middle of 1923 returned to the system of permitting certain banks to sell bills for purposes growing out of commercial transactions, although nominal legal rates continued to be fixed by the Government. With the inauguration of this more liberal policy, the rates of exchange fell rapidly. The rates prevailing were determined by the demand and supply of bills and not by artificial measures. This new policy was welcomed by business in Poland, and the supply of drafts appeared ample.

The great drop in exchange rates which occurred in the last half of 1923 was caused by very large issues of paper money and a resulting collapse of public confidence. The circulation increased from $3,566,649,100,000$ marks on June 30, 1923, to $82,188,343,000,000$ marks on December 20, 1923, and $528,913,418,744,000$ by March $1_{t}$ 1924. In the first part of 1924 Poland stabilized the currency and adopted the aloty as the unit with a gold par of 19.29 cents, the same as the franc. The zloty was made the equivalent of $1,800,000$ Polish marks, which was in close harmony with current exchange rates. Since this time Poland has been successful in maintaining exchange rates practically at par. The Bank of Poland holds balances abroad, which are used in maintaining exchange rates. The reform measures inaugurated in 1924 are discussed below.

The purchasing power parities of the mark with the dollar are shown in Charts 44 and 45. The purchasing power parity is merely the parity of the two currencies on the basis of purchasing power, and is determined according to the relationship of the price levels in the two countries. Since the Polish mark until 1924 had no real par and was merely a paper unit, the gold par of the German mark, 23.82 cents, was used as a point of departure in the computations. The German mark was introduced into present Poland during the German occupation and became the basis for the Polish currency until the zloty was introduced in 1924. The index numbers used are computed on the basis of prices in terms of gold marks in 1914 as 100 . Whatever error may be introduced by the use of a more or less hypothetical par is a constant amount all the time so that the movements of the curve are unaffected, and only the absolute value is altered. ${ }^{1}$

The purchasing power parity curve, which shows the value of the mark based on the relationship between the price level in Poland and the price level in the United States, moves in very close ratio to the curve showing market exchange rates. Inspection will show that at the different dates the distance between the two curves is fairly constant, even during the period of precipitous fall in 1923.

[^44]
## CHART 4


 Boerd index nambers for United States, 105 commodities, monthly average, 1913-100)
Cents per mart
Centa per marl:


Due to the sharp fall in the rates in 1923 the area inclosed between the two curves is reduced, although the ratio of movement remained fairly uniform most of the time.

The very similar movement in the two curves is accountable in part to artificial control over prices and exchange rates. Exact uniformity in the curves is not to be expected, inasmuch as the price indexes used reflect domestic prices in the respective countries. Domestic prices may not move in exact uniformity with the prices of articles which enter into international trade, and it is the prices of these articles entering into international trade that influence exchange rates. When the prices of such goods become cheap exports tend to increase; on the other hand, when the prices of such goods are higher within the country than prices of similar goods in other countries imports tend to increase.

Chart 45 shows the purchasing power parities since the period of stabilization began in 1924. The figures begin with November, 1923, since price index numbers on the zloty basis are available back to this date. It will be noticed that the purchasing power parity curve has gradually been approaching that of exchange rates.

CHART 45

Purchasing powar parities based on index numbers of Central gtetistical Omee for Poland, 86 commodtties, end of month January, 1914=100; and on index numbere of Federal Reverve Board for Unfued states, 104 commodities, monthly aversge, $1018=100$. Exchange rates, New Yoak on Waratw, monthly averages of dally quotations, cable tranafers]
Cents per sloty
[For figures see Table 71]
Cente per sloty


## III. FOREIGN TRADE

Foreign trade is important to Poland since Poland has very close economic relations with the countries about her. Poland imports a large amount of raw cotton and wool and makes them up into fabrics, a large part of which are exported. Poland also imports tobacco, manufactured metal products, skins, and various other articles. In addition to textiles, Poland exports petroleum products, lumber and wood manufactures, and various food products, such as sugar. Since the acquisition of Upper Silesia in 1922, coal is also exported.

Imports into Poland come primarily from Germany ( 44 per cent) followed by the United States, Austria, Great Britain, and Czechoslovakia. About 50 per cent of Poland's exports go to Germany; then come Rumania, Austria, Great Britain, and Czechoslovakia. The United States receives very little from Poland. As soon as normal conditions in Russia and the Ukraine are restored, trade between Poland and these countries will no doubt increase. Judging by prewar conditions, these countries may be expected to import from Poland textiles, machinery, and other articles. Poland also will doubtless have considerable transit trade between Russia and western countries. The following table shows Poland's trade with the principal countries:

## Poland-Imports and exporis of merchandise by countries

[Value in zlotys; 1 aloty-19.3 centa)
[Source: Annualre du Commerce Extérieur de ls Républlque Polonalse-1922-23, p. XI]

|  | 1922 |  | 1923 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Value | Per cent of total | Valtu | Per ceant of total |
| mporta |  |  |  |  |
| Great Britain | 59,307,055 | 7.0 | 90, 529,1830 | 8.1 |
| Czechosiovakia- | -65, 128, 433 | ${ }_{6} 10.5$ | 80, 705, 019 | 4.8 |
| France... | 86, 306,689 | 4.3 | 42, 955,277 | 28 |
| Germany. | 312,412,906 | 87.0 | 488, 906, 294 | 42.8 |
| Onited Statas --. | 131, 683,690 | 1.6 | 171, 323,137 | 15.8 |
| Argentine- | 4, 719, 924 | 4.6 | 17, 873, 187 | 14. 4 |
| Begium. | 33, 573,686 | 4.0 | 15, 259, 388 | 1.4 |
| Brazil. | 6,519, 878 | . 8 | 8,279,557 | . 6 |
| Cbile- | 1, ${ }_{1}^{1,4883,372}$ | ${ }_{2}$ | 5, 304,126 | . 8 |
| Notheriands | 14, 378,278 | 1.7 | 17,34, 3 B | 1.6 |
| British India | 12,623, 187 | 1.4 | 12,230, 478 | 1.1 |
| Dutch lidies | 3,744, 112 | . 4 | 2. 1888 | . 2 |
| Norway.. |  | 1.0 | 4,80, 4,588 | . 6 |
| 8witzarland | 10, 520, 177 | 1.2 | 12.645, 560 | 1.1 |
| Swedent. | 2,246,617 | .3 | 5,001, 008 | . 6 |
| Turkey-..-- | 3,716, 892 | . 4 | 3, 912,2888 | . 4 |
| Hangary.. | 0,016,580 | .88888 | 6, ${ }^{6,3051,891}$ | 18 |
| Other countries | 15,023,488 | 1.8 3.9 | 21,731,349 | 3.8 |
|  |  |  |  |  |
| Total | 945, 355, 374 | 100.0 | 1,116, 481, 702 | 100.0 |
| Exporys |  |  |  |  |
| Great Britain. | 28,701, 761 | 4.1 | 70,041, 628 | 6.8 |
|  | $72,125,303$ $31,406,020$ | ${ }^{11.0} 4$ | $110,949,378$ $87,508,837$ | 8.8 |
| France... | 11, 818,446 | 1.8 | 21, 662,277 | 21 |
| Oramany. | 324, 320, 65 | 40.5 | 604, 624,202 | 50.6 |
| Onitad States | $72,304,502$ <br> $5,601,165$ | 11.1 | $\begin{array}{r}136,007,110 \\ 6,018,087 \\ \hline\end{array}$ | 11.4 |
| Depmaric. | 11, 141, 825 | 1.7 | 24,252, 116 | 20 |
| Finland. | 10,744, 171 | 1.6 | 9,887, 614 | . 8 |
| Netherlands | ${ }^{6} 1085.177$ | 11 | 13,050, 483 |  |
| Rassta. | 11, 249,431 | 1.7 | ${ }^{21.598 .812}$ | 200 |
| Switzerland | 2, 533,550 | 4 | 9,700,200 | . 8 |
| Hungary | 18, 161,018 | 28 | 19, 112,612 | 1.6 |
| Otaly, | $2,285,050$ 30800 | ${ }^{3}$ | 6, 8011.5076 | 4.6 |
| Other coantriee | 20, 890,144 | 41 | 54, 810, 955 | 4.6 |
| Total | 655, 150, 671 | 100.0 | 1, 194, 588, 682 | 100.0 |

Figures for Poland's foreign trade are not very satisfactory for several reasons. Until 1922 value figures were not shown. Furthermore, trade passing through Danzig was not included in Polish figures until the latter part of 1922. In the middle of 1922 Upper Silesia, formerly belonging to Germany, became a part of Poland, according to an award of the League of Nations. Coal from this district, which formerly constituted a considerable item in the imports into Poland, disappeared from the import figures, and exports of coal from Upper Silesia to other countries became a part of Polish axports.

Quantity figures are unsatisfactory for a study of foreign trade, since heavy or bulky articles assume an undue importance. In the case of Poland value figures are available only since the first of 1922. Chart 46 shows imports and exports of Poland since the first of 1922, according to $\forall a l u e$, and Chart 47 shows imports and exports since the first of 1920 according to quantity. Imports and exports

(value) have been more or less in balance since the middle of 1922, sometimes the excess being of imports and again of exports. During the few years prior to the middle of 1922, according to quantity figures and such value figures as are available, Poland had an excess of imports. The change in the country's position after the middle of 1922 appears to have been due in large measure to the acquisition of Upper Silesia at this time, and the effect of exportations of coal and industrial products from this newly acquired district. On the basis of quantity Poland has had a large excess of exports since the middle of 1922. On the basis of value the excess has sometimes been one way and sometimes the other; in recent months an excess of imports has existed.

In Poland's so-called invisible trade an important item is the money sent home by Polish immigrants in the United States and in countries in Europe. These remittances have been estimated to amount to about thirty or forty million dollars annually. Poland has also been paying interest upon part of the external debt of about $\$ 300,000,000$. The debt to the United States Government amounts to about \$178,566,000. Funding arrangements in regard to this debt have been concluded and have received formal ratification.

The wide fluctuations and depreciation in exchange rates which existed until 1924 were very disturbing to Polish foreign trade. When wide fluctuations existed, before a transaction could be completed exchange rates frequently became altered so that the transaction was no longer profitable. . In addition Government control over exchange rates and over the buying and selling of bills interfered with the conduct of foreign trade. Transportation and communication difficulties were also a handicap to foreign trade. Due to the depreciation of the mark, the Government collected import duties with an agio which was increased as depreciation became greater. Since the stabilization of the currency, it has been possible to conduct foreign trade with a greater degree of certainty.

CHART 47
Poland-Lypoent and Exporas of Merchanding, Montily, 1920-1925
Quantity
[Special limports, 1. e., Imports for domestic consumption; apedil exports, L. e., erports of domentie mer-
ohandise)


## IV. STABLIZATIOY AID REFORTI

Poland from the beginning of the country's independence in 1918 desired to institute an independent currency system based upon gold. The Polish mark was looked upon as an emergency currency to be supplanted later by a stable currency. In 1919 Poland adopted the zloty as the unit (zloto meaning gold in Polish), the value of the zloty to be equal to that of the gold franc. However, at this time Poland did not attempt any real currency reform involving the introduction of the new unit into circulation. The zloty was to be, for the time being, only a theoretical unit. The intention was later to create a State bank which should issue currency in zlotys. The creation of such a bank was thought to be inopportune until fiscal stability had been attained.

Until 1924 the zloty was a theoretical unit used for purposes of computation to avoid the difficulties resulting from the fluctuations of the mark. In 1923 the Government issued bonds, half of each bond being in terms of zlotys and the other half in terms of Polish marks. Marks were received in payment for the bonds at the rate of one zloty for 1,400 marks. Thus a bond of 100,000 marks and 100 zlotys cost 240,000 marks. In June, 1923, the Government began converting its statistics into zlotys, retroactively, using a rate for each month based upon the price of rye and upon exchange rates for Swiss francs. The value of the zloty was determined differently at different times, but was based generally on a combination of the price of rye and other commodities, with exchange rates for Swiss francs.

In the spring of 1924, after the organization of the Bank of Poland (Bank Poksi), which took over the former Polish State Loan Bank, zloty currency was putinto circulation. According to the monetary decree the zloty is equivalent to the gold franc, 1. e., 19.29 cents. ${ }^{3}$ The zloty is divided into 100 groszy. Gold coins have not yet been minted, although it is the intention of Poland later to mint such coins. Silver coins, however, have been minted and were put into circulation in 1924. Some of these silver coins were minted for Poland by the United States mint in Philadelphia, and others were minted in Great Britain. Silver coins are legal tender only to the amount of 100 zlotys. The Government may not issue silver currency in excess of 8 zlotys per capita. Nickel and bronze coins have also been put into circulation.

The conversion of marks into zlotys began in the spring of 1924, after the cessation of inflation and the establishment of the new bank. The exchange was made at the rate of $1,800,000$ marks to the zloty, which corresponded to the current exchange rates at that time (on the basis of 19.29 cents to the zloty). This rate of $\mathbf{1 , 8 0 0 , 0 0 0}$ marks

[^45]was established in February, 1924, at which time about $9,200,000$ marks were worth $\$ 1$. At 19.29 cents to the zloty this gives the rate of about $1,800,000$ marks to the zloty. The exchange of new zloty currency for marks was carried out by the Bank of Poland. During the few weeks when marks and zlotys circulated side by side considerable confusion existed in making change. The zloty notes are the obligations of the Bank, and ultimately will be made redeemable on demand in gold.

During 1923 Poland witnessed Austria's success in stabilizing the currency, and the sentiment in Poland became favorable to the immediate establishment of a central bank of issue. The eatablishment of such a bank had been discussed in Poland for several years. The Minister of Finance, who had been granted liberal powers in January, 1924, decided upon the immediate establishment of a bank of issue. The British financial adviser, Mr. E. Hilton Young, who went to Poland in the latter part of 1923, when conditions were practically at their worst, was opposed to the establishment of a bank as a means of currency reform, until budgetary reform had been accomplished, believing that currency reform would be premature and of uncertain success unless the Government's finances could be divorced from the currency system so that further issues of paper money would not be made.

The Minister of Finance proceeded to the organization of the Bank and opened subscriptions to its stock by the general public. Diffculty was encountered at first in the sale of the shares to the public, but soon the entire capital of $100,000,000$ zlotys was entirely subscribed. The Bank is a semiprivate institution, although controlled by the Governnent. The stockholders of the Bank (all private citizens) are to receive a dividend of 8 per cent, and above this the profits are to be divided between the Government and the bank in varying amounts.4 Before the payment of dividends, 10 per cent of the annual net profits is carried to surplus. The Bank enjoys a monopoly of note issue for 30 years, the notes being full legal tender. ${ }^{5}$

Although the notes are to be convertible into gold, the date when such convertibility is to begin is to be determined later. In this connection article 47 of the Bank's statutes reads:

> The date for the beginning of the convertibility of bank notes for gold coins according to the monetary bill will be fixed by an order of the council of ministers, or the proposal of the Minister of Finance based on the resolution of the board of directors.

Thus the reform does not actually bring with it the complete gold standard.

The Bank of Poland (Bank Polski) took over the affairs of the former Polish State Loan Bank. The present bank is thus a continuation of the bank organized in Poland by Germany during the period that Germany was in occupation of Poland.

The minimum reserve which the Bank must hold against its notes is 30 per cent and may consist of the following: (a) Gold bars or coin; (b) foreign paper currencies which are not subject to great fluctuations; (c) checks, drafts, and balances in foreign banks of undoubted solvency, payable in the above currencies. Items in (b)

[^46]and (c) must be valued at their current exchange value in gold, and must be net amounts, i. e., after deductions of the Bank's liabilities in foreign currencies. As soon as convertibility of bank notes ingold is established, only foreign currencies redeemable on demand in gold can serve as cover for bank notes.

Above the 30 per cent minimum reserve, notes in circulation may be secured by the following: (a) Bills of exchange and various other securities; (b) silver according to its bullion value; (c) Polish silver and subsidiary coin at its face value, which amount, however, must not exceed 5 per cent of the total notes outstanding; (d) the noninterest-bearing credit of $50,000,000$ zlotys granted the Government for the privilege of issuing notes. This credit of $50,000,000$ zlotys is the maximum amount the Bank may loan the Government.

A novel feature in regard to the Bank has been adopted in the tax on the notes in circulation. The tax varies with the amount of gold behind the notes, being greater as the gold cover decreases and becoming less as the gold increases. This arrangement differs from that of the Federal reserve system, whereby a progressive tax is levied when reserves fall below a legal minimum, in that the tax in Poland is not a penalty tax when reserves fall below a certain point, but is a permanent tax on all notes outstanding, the rate of taxation varying with the percentage of gold reserves.

The accompanying chart (No. 48) shows the condition of the new bank since it began business in May, 1924. It will be noticed that the note circulation increased greatly as conditions became stabilized.

OHART48
Bang of Polasd-Note Orbculamon, Dibcounts, Balances whri Fobeton Banes, and Cold Begrerver, MONryity, 1924-1025


The gold reserve which the bank maintains behind its notes is gradually being increased. At the first of 1925 the gold reserve of the Bank amounted to slightly over $100,000,000$ zlotys, while the note circulation amounted to about 550,000,000. The Bank also held foreign currency and balances abroad to the extent of about $270,000,000$ zlotys. Although at the present time the Bank does not redeem the notes in gold, nevertheless the Bank has been successful in maintaining their value on the exchange market practically at par. This has been possible chiefly because the Government is no longer inflating the curreacy by borrowing from the Bank. In fact, such borrowings are prohibited by law, with the exception of the noninterest-bearing credit to the Government to a maximum of $50,000,000$ zlotys.

Chart 49 shows the gold value of the total note circulation of Poland. This total value is obtained by multiplying the total note circulation outstanding by the gold value of the unit on corresponding dates. The total value has been computed according to two different indices for the gold value of the unit-first, exchange rates and, second, purchasing-power parities.

The total value of the circulation has shown interesting fluctuations. When inflation and depreciation were at their worst, in 1923, the total value was loweat. This was because the depreciation in the value of the mark at this time was so great that it had even outstripped the rate of increase in the amount of notes outstanding. People lost confidence in the currency and in the Government's financial policy, so that the rapidity with which the currency circulated was greatly increased. The people did not desire to hold money which was continually becoming of less value. The increase in the rate of turnover, in the same way as though more currency had been issued, thus made the depreciation greater.

As soon as the currency was stabilized in 1924 the total value increased sharply. Business which formerly avoided the use of the domestic money now did not hesitate to use it, so that the demand for the currency was greater. The rate of turnover slowed down, and more currency was absorbed into circulation. Thus the gold value of the total circulation increased. These same events transpired first in Austria and later in Russia, Germany, and Hungary.

Poland has been faced with the task of uniting the different parts of the country into a homogeneous State. The country which now constitutes Poland, prior to 1918 was ruled by three different nations, and the Polish population, with the exception of that in Austrian Poland, had been prevented from participating in the administration of government affairs. Thus the Polish people were inexperienced in governmental matters. Furthermore, the nations which governed Poland had endeavored to suppress as far as possible the Idea of Polish unity.

The territory comprising Poland is rich in resources; it has extensive forests, valuable mineral deposits, and a fertile soil, also petroleum fields and refineries. Poland has several important industries, such as the textile, iron and steel, lumber, and sugar industries. Although the economic background in Poland is satisfactory, the Republic has not enjoyed much prosperity. Disturbed conditions throughout Europe and within Poland itself have prevented any real prosperity.



An unhealthy condition of Polish government finances was the chief disturbing factor in Poland. Now that government finances are being established upon a more sound basis, and since budgetary equilibrium is practically accomplished, considerable improvement is taking place. The internal funded debt of Poland amounted to $\$ 26,441,000$ at the end of 1924 . The external funded debt on the same date amounted to the equivalent of $\$ 320,380,000$. In January 1925 Poland borrowed $\$ 35,000,000$ in the United States. The bonds were 25-year 8 per cent bonds and were issued to the public at 95. The following figures show the Polish debt, also the revenues and expenditures of Poland during the last four years and the estimates for 1925.

> Poland-National debl, 1919-1924
> End of year
[Source: Rocznik Statystyki Rzeczypospolite] Polekled]
[Millions of Polish marks]


[^47]
## Poland-Receipts and expendiuturet

[Converted from maris to zloty om following basis: 1021, 1 zioty- 303.75 maris. Fist quarter 102z, 1 cloty 518.52 mpiks; second quarter, 601.49 marks; third quarter, $1,004.97$ marica; and fourth quarter, 1,063.87 marks. (In thoussands of elotys)]
[Souros: Annusire Statistique de la Reppoblique Polonaisa, II me Annee, 19e3]


1 Figares farniahed by tha Polith Iegation, Washington.
a Preliminary.
a Sugar, salt, tobeco, lottérise,

## Polish budget-Estimate for 1985

[In Zlotys; I elotyに 10.20 cents]


Since the first of 1924 the revenues and expenditures of Poland have been upon a gold basis and have been expressed in terms of the new Polish unit, the zloty, which is the equivalent of the gold franc. This change assisted the Government materially and permitted the balancing of the budget. When the currency was depreciating rapidly, taxes were gathered in depreciated money and revenues did not increase as rapidly as did expenditures. As the cost of living went up government salaries were increased, while the adjustment of revenues to depreciation was accomplished more slowly. Railway rates also did not keep pace with depreciation, and losses of the state railways were a large item in the Government's deficits.

The new cabinet formed at the end of 1923 was pledged to financial reform. In January, 1924, the Premier, and also Minister of Finance, Mr. Grabski, was given very broad powers in the field of finance for a period of six months, during which time it was expected he would accomplish considerable reform. He was authorized to change the tax system, float loans, reform the currency, and do various other things. These powers were later extended and expired at the first of 1925. During this time, the Polish National Bank was organized, the currency stabilized, the debt to the United States funded, and various other fiscal reforms introduced. A capital levy was also put into effect which yielded considerable revenue.

The placing of revenues and expenditures upon a gold basis at the first of 1924 was a very important move. Formerly revenues had depreciated so rapidly that by the time they were collected they were insufficient to meet the growing expenditures. In the spring of 1924 the budget was actually brought into balance. While since this time some months have shown a deficit, the results at the close of the year showed a surplus of revenue of about 74 million zlotys. The position of the Government has continually been increasing in strength, and present conditions are in marked contrast to the chaotic conditions which prevailed during currency depreciation. Although stabilization has been accomplished Poland has not yet placed the currency completely upon the gold basis. Poland desires the gold standard and intends ultimately to introduce convertibility and the full gold standard.

## RUSSIA ${ }^{1}$

## -I. PRE-WAR CURRENCY

At the outbreak of the Great War the Russian currency system was based upon the gold ruble, which contained 11.94792 grains of fine gold (as against 23.22 grains of fine gold in $\$ 1$ ), and was equivalent therefore to 51.455 cents of American money. This system was adopted in 1897 under the direction of the Finance Minister, Witte. Prior to that time Russia's currency, while nominally on a silver basis, was composed in fact largely of irredeemable paper, so-called credit notes (kredítnye billéty), issued by the State bank. Owing to excessive issues of these State bank notes, especially during the Russo-Turkish War of 1877-78, the foreign-exchange value of these notes.had declined below their normal par, the average exchange value of the paper (credit) ruble for the years 1888 to 1895 being about two-thirds of a ruble in gold.

After the Government had decided to place the circulation on a gold basis, the bank accumulated gradually a gold reserve against its outstanding notes. Between January 1, 1888, and January 1, 1897, the gold reserve of the bank was increased from $390,000,000$ to $1,095,000,000$ rubles. This additional gold came in part from the country's own gold production, partly from customs duties, which since 1877 were made payable in gold, but chiefiy from foreign gold loans and the imports of the proceeds of these loans. In 1896 the value of the existing half imperial ( 5 rubles) was fixed at $71 / 2$ rubles paper, and the State bank announced that it would redeem in gold in the same ratio all its notes upon presentation. This secured the stability of the paper ruble in terms of gold.

In 1897 a law was passed providing for the continued coinage of the "imperials" and half imperials at their former weight and fineness, but with the new legends of 15 and $71 / 2$ rubles, instead of the former legends of 10 and 5 rubles. This change of the ratio was tantamount to a one-third devaluation of the paper currency and a corresponding raise of the value of the gold coins in terms of paper.

In November, 1897, the coinage of new gold coins of 5 rubles was ordered, while in December; 1898, a new gold piece of 10 rubles was authorized, which soon superseded the older pieces and became the standard gold coin of the country. Provision was also made for the bank to issue and receive gold coin at the legally fixed ratios. In 1899 the law declared that the monetary system of Russia was henceforth to be based on gold. In addition to gold there also circulated silver and copper coins, which, however, were legal tender only in limited amounts. Moreover, the amount of silver coin in circulation could not exceed 3 rubles per head of population, while a special imperial order was required for additional issues of copper coins.

In connection with the monetary reform, the Russian State Bank underwent certain changes. This institytion, as its name implies, was

[^48]owned by the State, and after its reorganization in 1894 assumed the functions of a modern central bank of issue, although continuing operations under the direct control of the Minister of Finance. In 1897 the former separation of the issue department from the banking department was abandoned and the accounts were merged into one general balance sheet. The authorized maximum "fiduciary" issue was fixed at $600,000,000$ rubles, and of this amount one-half had to be secured by gold; issues in excess of $600,000,000$ rubles could be made only when fully secured by gold. Silver could not serve as note cover. Foreign bills and deposits were to be regarded as gold, however. It was further stated in the act that note issues were to be kept within limits strictly determined by the actual needs of the money market, though the customary provision for commercial paper to serve as part cover for note issues is not found in the Russian act. The restrictive provisions were more rigorous than in the bank acts of most other countries and were thought to be warranted by the peculiar position of the bank, as a State institution, subject to the control of the Minister of Finance, and thus more exposed to political and administrative pressure than the privately owned central banks in other countries. Experience even before the Great War proved that these provisions while insuring adequate cover for the note issues, made these issues inelastic and insufficiently responsive to normal trade requirements. The State bank notes were unlimited legal tender, on a par with gold coin.

In accordance with the officially held view that the new gold standard could be made secure only if a sufficient amount of gold were in actual circulation, the bank met the demand for currency by paying out gold. Between January 1, 1897, and January 1, 1914, the volume of the outstanding circulation (exclusive of the amounts of subsidiary silver and copper in the smaller denominations) increased from $1,134,000,000$ to $1,486,000,000$ rubles. But while the amount of bank notes in actual circulation during this period shows a decrease from $1,068,000,000$ to $578,000,000$ rubles, the amount of gold coin in circulation shows an increase from $36,000,000$ to $775,000,000$. Silver coin of the larger denominations after reaching the point of saturation in 1900 , when over $145,000,000$ rubles were outstanding, shows a small decrease for the following years. The following table shows the composition of the Russian circulation at the beginning of each year from January 1, 1896, to January 1, 1916:

Russia-Gold, silver, and paper money in circulation Jantary 1, 1896, to January 1, 1916
[Sonare: Annual reports of the State bank. In millions of rables]

| Jan. 1 | Gold 1 | Silver 1 | Bank note | Total | Jan. 1 | Gold ${ }^{\text {a }}$ | Silver 1 | Bank notes | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1896 |  |  | 1,055. 8 | 1,055. 8 | 1007 | 64 L .9 | 119.8 | 1, 194.6 | 4,966 3 |
| 1897 | 360 | 29.9 | 1,007.9 | 1,833,8 | 1903 | 6204 | 112.6 | 1. 154.7 | 1, 806. 7 |
| 1888 | 147.8 | 78.9 | 901.0 | 1,127. 7 | 1400 | 661.1 | 1105 | 1, 087.1 |  |
| 1899 | 451.4 | 121.5 | 661.8 | 1, 231.7 | 1910 | ${ }^{360} 9$ | 1125 | 1, 172.8 | 1, 887.2 |
| 1900. | 641.3 <br> 683 <br> 1 | 145.3 | 4891.1 | 1,277.7 | 1911 | 641.7 | 115.9 | 1,2345 | 1,2021 2,000 |
| 1901 | ${ }_{608}^{681} 2$ | 145.7 <br> 140.3 | 5540 | 1,388.8 | 1912 | 658. 8 | 117.6 | $1,320.5$ $1,454.8$ | $2,000.9$ 2,244 |
| 1903 | 731.9 | 137.5 | 5538 | 1,423. | 1914 | 494.2 | 1227 | 1.64 .7 | 2281.6 |
| 1904 | 774.8 | 1372 | 5784 | 1,446. 4 | 1915 | 4588 | 142.2 | 2946 | 2,547.6 |
| 1903. | 683. 6 | 1230 | 853.7 | 1,000.3 | 1916 | 4129 | 14.4 | 5,616. | 4,206, 1 |
| 1906. | 887.8 | 139.4 | 1,207.5 | 2,178.7 |  |  |  |  |  |

[^49]During the difficult years of the Russo-Japanese War and the subsequent domestic disturbances (1904-1907) the amount of outstanding bank notes increased from $578,000,000$ to $1,195,000,000$ rubles, i. e., more than doubled, while the gold circulation actually declined from $775,000,000$ to $642,000,000$ rubles. Additional note issues during that period were made without specific cover almost exclusively for Government account, though in accordance with the provisions of the act, i. e., the amount of notes issued without legal eover (largely gold) at no time during these three years exceeded $300,000,000$ rubles. During the Japanese War the bank never suspended specie payments. It goes without saying that these issues were not "determined by the needs of the money market," but were made to supply the Government with the means of conducting the war against Japan and later on to meet the extraordinary expenditures caused by the revolutionary outbreaks within the country. But the fact that the amounts of currency issued during these years did not flow back to the bank tended to prove that the bank's previous issue policy had been excessively cautious.

About the same time, i. e., in 1903-4, the bank adopted a more active policy in meeting the currency requirements of private trade by increasing its note issues in the autumn months: when the crops were being moved, following in this respect the example of other banks of issue. This action was regarded as a new departure in opposition circles, and the Government in an official statement undertook to explain that these increases in the note issue were but of a temporary seasonal character and in no way endangered the status of the bank, since the newly issued notes after the marketing of the crops were sure to flow back to the bank. It was in this manner that the Russian bank note issues partook of some element of elasticity, though the "spread" between the high and low figures of note circulation before the war at no time was in excess of 300,000,000 rubles, the maximum of uncovered note issue permitted by the act.

As a rule the volume of outstanding notes during the years immediately preceding the Great War was largest in October, when general business showed the largest volume, and smallest in July, when general business was at its lowest point. At the time of the adoption of the gold standard in 1897 the bank's gold reserve was in: excess of $1,000,000,000$ rubles, a substantial portion of which was held abroad, largely in the form of demand gold deposits with foreign leading banks. These balances represented mainly assignments to the bank by the State Treasury of sums realized or about to be realized from foreign loans, the equivalents of which were delivered to the Treasury by the bank at home in the shape of its notes. Foreign balances of the State bank served largely the fiscal purposes of the Government or else were drawn on to maintain the stability of the exchanges. During the entire period since reorganization they were reckoned by the bank as part of the gold eover against its outstanding notes. Between 1898 and 1904 the amounts were relatively small; moreover, the outstanding notes were more than fully secured by the amount of gold held in the vaults of the bank. But during the period 1904-1907, as stated above, the bank had to issue on Government account large amounts' of notes not
covered by gold, although these uncovered notes were kept within the legal limit of $300,000,000$. As there was no legal provision regarding any specific coverage of these notes, they were found at times to lack any specific cover, in particular the amount of uncovered notes was found to be in excess of the bank's bill portfolio, the ultimate security being long-term loans and other assets.

It should be borne in mind that commercial bills eligible for discount at the Russian State bank might run 9 and even 12 months and that other earning assets of the bank had an even less liquid character. This relative lack of liquidity of the central bank's earning assets accounts largely for the peculiar reserve provisions of the bank act and also for the noted disinclination of the bank to issue any but gold secured notes. In the following table are shown the amounts of the State bank's gold reserve held on the first of the year from 1896 to 1916 under the twofold head of gold held at home and gold held abroad.

Russia_Gold holdings of the State bank at home and abroad, January 1, 1896, to January 1, 1916

- [Source: Annual reports of the state bank. In millons of rubles]

| Jan. 1 | Gold held st home | Gold held abroad | Total gold holdings | Jan. 1 | Gold held et homb | Gold held abroad | Total rold holdInge |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1896. | 944. 4 | 19.5 | 903.9 | 1007. | 899.9 | 300.6 | 1.190. 5 |
| 1867. | 004.8 | 190.6 | 1,095,4 | 1908. | 948. 5 | 219.8 | 1,108.3 |
| 1898 | 1, 146.8 | 17.4 | 1, 164.2 | 1909. | 1,079.0 | 141.0 | 1,220.0 |
| 1890. | 990.3 | 15.1 | 1,005. 4 | 1010. | 1, 173.6 | 240.9 | 1,414.8 |
| 1000. | 833.4 | 5.4 | 838.8 | 1911. | I, 281. 6 | 2187 | 1,450.3 |
| 1901. | 708.2 | 24.3 | 732.6 | 1912 | 1,250. 3 | 176.9 | 1,436.2 |
| 1002 | 682.2 | 18.6 | 700.8 | 1913 | 1,327.9 | 227.6 | 1,365. |
| 1003. | 708.5 | 57.3 | 785.8 | 1914 | 1,627. 8 | 167.4 | 1,695. 2 |
| 1004 | 734.0 | 169.0 | 903.0 | 1915 | 1,5ff0. 0 | 172.5 | 1,732. 5 |
| 1905 | 880.4 | 149.0 |  | 1916. | 1,614.0 | 046.1 | 2,200, 1 |
| 1800.- | 716. 0 | 203.7 | 919.7 |  |  |  |  |

## II. CURRFNCY LIFLATION AND GOVERNMTENT FITANCES, 1914-1921

Immediately after the outbreak of the Great War the state bank was relieved of its legal obligation to redeem its notes in gold, while the maximum limit of its uncovered note issue was raised from $300,000,000$ to $1,500,000,000$ rubles. Prior to the March, 1917, revolution the limit was raised altogether five times to $6,500,000,000$ rubles, while under the provisional revolutionary government until its overthrow by the Bolsheviks in November, 1917, this limit was raised five more times to a maximum of $16,500,000,000$ rubles. Furthermore, the bank was authorized to discount short-term obligations of the state treasury issued to cover the war expenses.

The' gold reserve of the bank at the beginning of the war, including its gold holdings abroad ( 140.7 million rubles) amounted to 1,774.4 million rubles. In October, 1914, the bank shipped 75.3 million rubles of gold to England to serve as a basis for a war credit. This credit was immediately utilized for the payment of war orders placed in Great Britain and the United States. Further shipments of $£ 60,000,000$ of gold were made to England in 1915, 1916, and early in 1917, just before the revolution. In consideration of these shipments and with the view of enabling the Russian State Bank to increase its note issue, the British Treasury agreed to open to the Russian Government a credit of $\$ 200,000,000$, which was shown in the accounts of the state bank as "gold held abroad." Former Assistant Minister of Finance Novitzky ${ }^{2}$ quotes the part of the agreement between the two Governments relating to the opening of 'this credit as follows:

In Flew of the issue of Russian credit notes and as a temporary measure untll the time when Russta shall have successfally consolidated its domestic debt, the British Government agrees to exchange with the Russian Government obligations of equal value to be transmitted by installments upon order of the Rusgian Government to an amount not exceeding $\mathbf{~} \mathbf{2 0 0 0}, 000,000$ in British currency ("en valnta britannique"). On the part of the Russian Government these obligations shall consist of noninterest bearing obligations of the Russian Treasury. On the part of the British Government these obligations shall consist of nontangible credits.

The effects of this agreement immediately became reflected in the balance sheet of the Russian State Bank. In November, 1915, the amount of gold held abroad by the bank showed an increase of almost $200,000,000$ rubles. During December the amount almost trebled, while at the end of June, 1916, the amount-1,588,600,000 rubles-for the first time was shown in excess of the amount of gold held at home. In August, 1916, the total had increased to over $2,000,000,000$ rubles, an amount larger than the total gold reserve of the bank before the war, also in excess of the world output of gold and the net gold imports into the United States for the previous two

[^50]years. Because of the fictitious character of this item, the total of uncovered notes issued by the bank under the old régime (i. e., to March, 1917) must be increased by about $2,000,000,000$ rubles.
Another new class of cover for bank notes issued since the outbreak of the war.is represented by discounted short-term obligations of the Government, which made their first appearance in the balance sheets of the bank about the middle of August, 1914. By far the larger portion of the notes issued during the war was secured by these obligations. At the close of 1914 the bank held 663.1 million rubles of these obligations; at the close of 1915 its holdings had gone up to $3,270.1$ millions, and at the close of 1916 to $6,866 \mathrm{mil}-$ Iions. At the time of the fall of the old régime the total held by the bank reached 7,882 millions. Under the Provisional Revolutionary Government these holdings about doubled, reaching a total of $15,221.5$ millions in October 29, 1917, the date of the last bank statement published before the overthrow of the Kérenski government. Corresponding increases are shown by the total amounts of outstanding notes, as may be seen from the following figures and chart (no. 50) :

## Rusata-Notes outstanding

(Dates in parenthets are according to the Gregarian calendar which now prevalis in

## Rubles





January 1 (14), 191
March 1 (14), 1917 9, 097, 393, 000

October 16 (29), 191 9, 949, 626, 000

For the first two years of the war the figures of note circulation are not fully indicative of the total volume of monetary circulation in the country. In the first place, during the earlier period there were still considerable amounts of metallic money in actual circulation, although hoarding of hard money, especially gold, began as soon as the bank suspended gold payments. After a while silver coins likewise began to disappear from circulation, so that by the summer of 1915 a shortage of small change began to be felt all over the country. This want of small change the Government tried to meet about the end of 1915 by the issue of treasury paper stamps or tokens of small denominations, which were declared to be legal tender equally with small silver and copper coins. The appearance of these paper tokens speedily completed the disappearance from circulation of the remainder of metallic currency, so that since the beginning of 1916 Russian currency came to consist only of paper.
In addition to the notes of the State bank and the fractional paper currency issued by the treasury, there were injected into circulation also short-term obligations of the State treasury. At first these obligations were issued only to the State bank in exchange for bank notes, though some part ( $724,000,000$ rubles out of 3,200 ,000,000 taken over from the Government in 1915) was placed by the State bank with the private banks and the public at large. Later on these obligations were placed also directly in the open market by being forced on contractors and purveyors of war supplies in pay-

ment for services, materials, and goods furnished to the Government. These obligations were discounted by the private banks, like any other commercial and treasury bills, and soon became a sort of currency, the total sold in the open market to the end of 1916 being about $2,600,000,000$ rubles. After the October revolution the Soviet authorities put all the short-term obligations on a par with currency by enacting that further interest on them was to cease. ${ }^{2}$

During 1914 almost two-thirds of the budget deficit was covered by note issues. During the next two years, although the deficit was much larger, the Government was able to cover it to a large extent by loan operations so that the percentage covered by note issues declined to about one-third, and then to one-quarter. But in 1917, a year of both war and revolution, this percentage rose to nearly three-quarters of the budget deficit, as can be seen from the following table:

Russia-Revenues, eapenditures, and note testes, and proportions of the annua? deficits coverred by note iseutes, 1914-1917 ${ }^{2}$
[f millions af rubles)

|  | Revenames | $\underset{\substack{\text { Expendi- } \\ \text { ture }}}{\text { (2) }}$ | (3) Deficits | $\begin{aligned} & \text { (6) } \\ & \text { Note } \\ & \text { lusues } \end{aligned}$ | (5) <br> Per cent of 4 to 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1014. | 2,961 | 4,809 | 1,808 | 1,282 | 67 |
| 1915 | 3,001 | 11, 562 | 8, 861 | 2,670 | 31 |
| 1915 | 4,345 | 18, 101 | 13,750 | 3,480 | 25 |
| 1917. | 6, 039 | 27,607 | 22,606 | 10,403 | 73 |

1 Yurovill, Prof. 1. N. On the Wey to Monetary Reform (In Rasian), Moscow, 102t, p.io.
The large note issues during the early period of the war affected but little the purchasing power of the currency. On the contrary, the closing of the European frontiers, which practically stopped the exports of Russian grain and raw materials, caused at first a decline in the domestic prices of these articles. On the other hand, industry and trade, because of the large war requirements of the Government, showed a large development; moreover, mobilization of a large proportion of the country's male population made necessary the purchase in larger volume in the market of articles of common consumption which before the war had been consumed within the household without ever reaching the market. Gold, as mentioned before, went into hiding, and a corresponding amount of paper currency had to take its place in the total circulation of the country. An increase of $2,183,000,000$ rubles in the note circulation in 1914 therefore hardly caused any rise of prices during the early months of the war. However, in 1915 and 1916 prices rose considerably.

Average retail prices in 1915 were about 30 per cent higher than before the war, and by January 1, 1916, they were about 43 per cent above the pre-war level. At the close of 1916 the price index had risen to $294(1913=100)$, and on the eve of the March revelution it reached 315. The purchasing power of the paper ruble had thus declined to about 32 pre-war kopeks ( 1 ruble $=100$ kopeks). Prices, it is seen, nearly trebled, while the note circulation of the country increased from $1,744,000,000$ to $9,950,000,000$ rubles, or nearly six-

[^51]fold. The accompanying chart (No. 51) shows the movement prices since 1916.

It is probable that this divergence between the rates of increat in the volume of note issues and the depreciation of the notes was du in part to the diminished use of credit and credit instruments as th result of the economic disorganization of the country, and also t the considerable hoarding of paper money by the peasantry, whos money income during the war years and even as late as 1918 wa higher than ever before. Under the provisional government, i 1917, signs of the economic deterioration of the country as the resul of prolonged warfare and domestic disturbances became more an more manifest. Labar productivity declined, transportation lagge, in a dangerous degree, the war industries could be kept going only b the payment of increasing subsidies, proceeds from taxation decline perceptibly, while Government expenses continued to increase, an Government credit, as shown by the very moderate success of th Russian Liberty loan, showed all the marks of exhaustion. Durin 1917 about 73 per cent of the deficit had to be met by further not issues, and at the time of the overthrow of the provisional govern ment in the first week of November, 1917, the amount of outstandim notes had risen to nearly $19,000,000,000$ rubles, having almost double during the eight months the provisional government had been is power. During this period the rise of prices had more than kep pace with the increase in the volume of note circulation. The No vember 1, 1917, retail price index was 1,020 , compared with 815 or March 1 of the same year; at the time of the November revolution the ruble was thus worth 10 pre-war kopecks.

The ruble's foreign exchange value during the three years fol lowing the outbreak of the war reflected only imperfectly the pro gressive fall of the domestic purchasing power of the ruble. In thi first place, while the ruble was never "pegged" directly, it is evident that the pegging of the allied currencies must have indirectly benefited the Russian ruble in the foreign exchange markets. On the other hand, the vicissitudes of the war, particularly the successe and reverses of the Russian armies, undoubtedly affected to a con siderable extent the foreign quotations of the ruble, while the practical suspension of Russian exports to Europe following the outbreak of the war was a most important factor in depressing the exchange value of the ruble. The accompanying chart (No. 52) shows exchange rates in New York 1914-1918.

During 1915 the average exchange value of the ruble in New Ycrk declined from about 43 cents to about 31 cents; the December quotation being about 40 per cent below par. Its value remained fairly constant around 30 cents in 1916, and slightly below this level during the early months of 1917. The March revolution produced no sudden fall in the rate of exchange and it was only in May that the ruble began its rapid decline. In October 1917 the New York average quotation of the ruble was 14.504 cents, while its purchasing power parity, i. e. the theoretical purchasing power of the ruble in terms of dollars-considering the rise of prices in the United States and in Russia-was about 12.5 cents.
(

Purchasing power parities for the period 1916-1922 are shown in the accompanying chart (No. 53).

* Under the Soviet régime which began in November 1917, currency inflation assumed increasingly large propartions, since during the first three years of the new regime practically the entire money deficit of the State budget was being covered by note issues, as may be seen from the following figures:

Russia-Reventes, expendittres, and note issues, 1918 to 1921
[In millans of psper rables]



Nationalization of industry, transport, domestic and foreign trade, and banking were proclaimed by the new Government soon after its accession to power in the latter part of 1917, and all the processes of mining and industrial production, also of exchange and distribution, were concentrated in the hands of the State. All trade and commerce were nationalized by the decree of June 28, 1918. Free trade, in the sense of exchange of commodities for money at prices agreed between buyer and seller, was officially abolished; the Government became the only seller, and it fixed the prices and arranged the terms of exchange. Only agricultural production was left uncontrolled in the hands of the peasants; but the products of the
soil-except the portion required to support the peasants and their families-together with those of the nationalized industry, were to go into a common State fund, thence to be distributed according to a general plan on the basis of public requirements and class principles. Commodity markets, with their free prices, were regarded as an outlived economic category and merely standing in the way of the newly forming communist system. They were to be tolerated only to the extent that small industries could not be fully nationalized or subjected to State control.

Realization in money form of the products of the State establishments, or payment in money for services or raw materials furnished them by other branches of the Government, gradually lost all practical importance, for the consumers of these articles were largely State establishments, and their workmen or employees who in turn received their wages and salaries from the same establishments. Moreover, distribution, to the extent that it was made in money, was made at fixed prices, which showed a steadily increasing lag behind the market prices and therefore no longer represented the money equivalents of the products and services rendered. Accordingly the Government before long adopted the principle of gratuitous distribution. Thus, in October, 1920, it was proposed to abolish payments by State institutions and establishments for the use of all public services, including postal, telegraph, telephone, water, gas, electricity, fuel, and for articles of food furnished by the commissariat of food supply; also for the use by State workers of living quarters in the nationalized or municipalized apartments. Not merely were cash payments abolished, but even no bookkeeping or accounting entries with respect to these items were to be made. About the same time traffic on railroads and waterways was declared free. Under these conditions any imposition of money taxes on production, exchange, or even consumption became unnecessary and in most cases even impracticable.

Reform of taxation with the view of adapting it to the changed economic conditions continued for some time after, and in April, 1921, almost on the eve of the adoption of the "new economic policy," the collection of money taxes was altogether discontinued. According to semi-official estimates, aited by Yurovski,' expected receipts from taxes in the 1918 budget were 153.2 millions in terms of "gold" rubles (calculated on the basis of the Labor Office Index), in 1919 they were 10.2 million rubles, and in 1920 only 0.2 rubles. Actual receipts were even smaller. . With the gradual disappearance of money receipts from taxation, monetary expenses of the Government more and more had to be met by note issues. For money was needed to conduct the war operations on the various fronts during the civil war period, since the financing of the war could not be done merely by means of those products which were obtained from the grain monopoly, the nationalized industries, from requisitions and confiscations. Money was also required for maintaining the various organs of state administration, for financing the transport service and the, various state industries which were operating at a loss. The only means of covering these monetary expenses under the given conditions was the issue of notes, though with the gradual change from a money to a moneyless econ-

[^52]PURCHASING POV -PARITIES

BASIS OF GHERVONET
omy, the part played by money in the scheme of Soviet state finance was growing smaller and smaller. In 1920, it is estimated, the total value of Government exactions in the shape of goods, services, and money taxes, including gross revenues from state enterprises amounted to over $1,700,000,000$ pre-war rubles. This total admittedly includes besides current revenue, the value of capital belonging to industry and the transportation service consumed as a result of deficits incurred under State management. Of this total of over $1,700,000,000$ of pre-war rubles, the money receipts (nearly all from note issues) probably did not exceed 10 per cent, although the aggregate nominal amount of these issues for the year was about 944,$000.000,000$ rubles.

The above figure, while far from accurate, gives, however, some idea of the relatively small importance of the money part of the state revenue at the time when the communist scheme of abolishing all money taxes had been largely realized. As a matter of fact, during this period the mainstay of the Russian budget were the taxes in kind (grain, drayage, labor) exacted from the peasantry, whose money equivalent according to authoritative estimates shows the following growth (in millions of pre-war rubles) : 1918-19, 127; 1919-20, 253; 1920-21, about 500: ${ }^{\text {s }}$

These figures do not include the considerable quantities of breadstuff's and feed, nor the large number of horses requisitioned from the agricultural population for the use of the army during the civil war. There are no data regarding the money equivalents of these requisitions, but if it is borne in mind that during the height of the civil war no less than $5,000,000$ men were drawn into active military service some idea may be had. of the burden imposed upon the peasantry during these troublous years.

Other important sources of revenue during the initial period of the Soviet régime (the period of "war-time communism") were the stocks and reserves of raw materials (cotton, mineral oil, coal, pig iron, lumber, etc.) which had come into the possession of the Soviet authorities mainly through the nationalization of the large industries, also the gold reserves of the former state bank (over $1,000,000,000$ rubles). The greater part of these stocks and reserves were used up during the civil war and the period immediately following.

On the whole, it would appear that currency issues during that period, nothwithstanding their large volume, merely supplemented the deficient revenues from taxes and other supplies in kind, requisitions, compulsory contributions, and the steadily declining revenues from the state domains and industrial undertakings. It will be noted that the communist fiscal scheme provided for little or no taxation of the city population, and that taxes in kind were collected from the rural population largely for the support of the city population. To the extent that this arrangement did not require the use of currency it narrowed its sphere of circulation and thus tended to depress the value of the existing volume. Factors working in the same direction were the decreased volume of business caused by the decline of national agriculture and industry, the gradual discarding of the

[^53]practice of accumulation and saving, the substitution of taxes in kind for the former money taxes, the adoption of moneyless methods of exchange and distribution by the state undertakings, and the increasing speed of circulation, which went hand in hand with the progressive depreciation of the currency. On the other hand, with the closing of all banks and the discontinuance of bank clearings and credit operations, all trade, or what was left of it, had to be conducted on a cash basis, and this naturally increased the demand for currency. Hoarding of paper currency in peasant circles had a similar effect.

In analyzing and comparing the circulation figures of this period (1917-1921) account must also be had of the shifting size of the territory and population over which the Soviet rule extended at various times. Between 1917 and 1920 various border districts and provinces passed under the temporary control of foreign occupants and contending partisan forces (Yudénich, Kolchák, Deníkin, Wrangel, etc.) who set up their own taxing machinery and introduced their own currency to the exclusion of Soviet taxes and currency. Between November, 1918 and July, 1920 the population of the Soviet-controlled territory varied between fifty-two and one hundred thirty-two millions, and the continuous changes in the geographic bounds of Soviet money circulation affected the purchasing power of the oustanding paper currency as much as did its changing volume.

During the period of war-time or militant communism, i. e., from November, 1917, to the middle of 1921 the nominal amount of outstanding paper currency increased from $22,446,000,000$ rubles to 2,346,139,000,000 rubles, i. e., more than one hundredfold. The following table shows the nominal amounts of the circulation outstanding at various dates during this period and their equivalents in terms of pre-war rubles, converted on the basis of the retail price index of the office of Labor Statistics (in millions of rubles).


As may be seen from the table, the growth in the volume of outstanding currency during this period proceeded at a progressive rate. Thus for the year 1918 the increase was about 125 per cent, in 1919, 265 per cent, in 1920, 420 per cent, and for the six months of 1921 , over 100 per cent. Prices during the same period are shown to have increased about eight thousandfold, the rate of rise of the price level in each year by far exceeding the rate of increase in the volume of circulation, particularly during the earlier part of the period. The result is seen in a continuous depreciation (in terms of pre-war rubles) of the total outstanding circulation. This depreciation was relatively greatest in 1918 and 1919, when the ter-
ritory of Soviet Russia showed the largest shrinkage in consequence of invasion by foreign and partisan armies; in 1920, on the other hand, with the defeat of the "white" forces and the reconquest of the occupied territories, the pre-war value of the outstanding currency showed a much more moderate decline than for any previous year, notwithstanding the much larger amount of currency injected into circulation. By July 1, 1921 as the combined result of a doubling in the volume of cireulation and a 380 per cent rise in the price level, the value of the circulation had declined to about 29,000 ,000 in terms of pre-war rubles. Table 85 on page 363 and chart No. 50 in illustration of this movement bring out also the effect of seasonal factors operating in the autumn of each year, i. e., the larger amount of currency required at the height of the crop moving season about October and the consequent rise or at least the break in the fall of the value in terms of pre-war rubles of the total currency outstanding, notwithstanding the continued rise in the price level.

It may be noted in this connection that the price movement for the eptire period since 1916 can be traced only according to the "budget" index of the Soviet office of labor statistics. This index is based upon the retail prices of commodities that enter the consumption budget of a workingman's family. While such an index is but an imperfect yardstick to measure changes in the general price level in countries with well developed commodity markets, it can be used with fairly satisfactory results to measure price changes during the Russian revolutionary pexiod when wholesale commodity markets were losing more and more of their former significance and by far the larger portion of the declining supply of commodities was sold in the market direct to consumers.

To the extent that retail trade and distribution, because of goot ernment prohibition or the breakdown in production, became disorganized or ceased to function altogether, giving place to clandestine profiteering, known as "speculatsiya," even the official retail index came to reflect less and less the actual cost of living and the true depreciation of the currency.

## III. CURRENCY AND PRICES UNDER THE NEW ECONOMIC POLICY

In March, 1921, the Soviet Government suddenly announced the abandonment of the extreme communist policy and the adoption of a new economic policy. The first practical measures signifying the ushering in of this new policy were the abolition of the Government grain monopoly, and the setting free of the trade in agricultural products. This change implied essentially the recognition to a limited extent of the right of private property of the peasants in their products, including the right of selling these products in the market.

The next step was to place the nationalized industrial establishments on an "economic" basis and to permit them to buy the raw materials and sell their products in the open market. Attempts at compulsory organization (" militarization") of industrial labor were dropped and qualified workmen who had abandoned their tasks, because under the former régime their wages in many cases did not provide even for a physical minimun of existence, were encouraged to return to the works and factories by the lure of higher money wages and of voluntary wage contracts. Operating expenses of the state industries not merely came to be expressed in money but actually required the use of actual cash, since fuel, raw materials and other articles could be obtained only at free competitive market prices and no longer by requisition on some other Government establishment at artificially low "fixed" prices.

In the summer and fall of 1921 all public services, including mail, telegraph, telephone, electric light and power, transportation, etc., were placed again on a money basis, while during 1921 and 1922 the state budget was reorganized and based largely upon a system of direct and indirect money taxes, which were to be collected alike from the city and rural population.

Under such circumstances, money which only a short time before had been characterized by some as a "dying economic category" or as mere pieces of "colored paper," regained its old importance as a general instrument of exchange and measure of value.

As a palliative device to simplify calculations which were becoming increasingly cumbersome and difficult, as larger and larger denominations of paper money wére coming into use, a new type of ruble currency was issued in 1922, one ruble of which was decreed equal to 10,000 rubles of previous issues. A second "denominalization" was decreed in October, 1922, by which one ruble of the latest 1923 type was to equal 100 rubles of the 1922 type. If the aim of these successive "denominalizations" was to get a currency unit with a purchasing power equal to pre-war, the scheme panifestly proved a failure because of the continuous depreciation of the Soviet currency, which could not be halted by purely formal or technical devices.

At the close of 1921 the All Russian Congress of the Soviets directed the Commissariat of Finance to use its utmost efforts in effectingrath the least possible delay the reduction and ultimate discon-
tinuance of the issues of paper money and the restoration of a normal currency system based upon gold. ${ }^{\text {. }}$ The Commissariat of Finance was also instructed to prepare an estimate of state revenues expected in 1922, including the revenue from the issue of paper money, with an indication of the true value of such issues. This marks the first attempt of expressing the budget estimates in terms of stable currency, i. e., imaginary rubles having a theoretical purchasing power equal to that of the 1913 ruble. On the basis of the price level prevailing in October, 1921, one pre-war ruble was proclaimed equal to 60,000 current soviet rubles. This "stable" budget estimate, however, soon lost all practical usefulness, when after temporary stabilization, between July and September, 1921, prices resumed their upward course in a much more emphatic manner than at any previous period. Budget estimates in terms of pre-war rubles in consequence had to be revised every month. The official rates were, however, considerably below the open market rates and out of accord with the retail price index. Accordingly, in March, 1922, the use of the ideal pre-war gold ruble for budgetary purposes was abandoned. Meanwhile, this unit of account had come to be adopted in general business practice, and in order to meet the general business needs the publication of the rates was taken up in April, 1922, by the newly founded state bank and subsequently by a special quotation committee.

In October, 1921, as part of the general scheme of economic reorganization a new State bank was opened, whose principal function was to finance the nationalized industries and the renascent foreign trade. The bank's capital was furnished by the state treasury and, as in the case of the old state bank, a considerable portion of the new bank's resources soon became immobilized through the financing of the nationalized industries which used the bank credit largely to restore their operating capital. ${ }^{2}$

During 1922 public expenditures, due to the abandonment of " moneyless" forms of public finance, showed a large increase, while public revenues, except for the food taxes, which continued to be collected in kind almost to the end of 1923, were quite insignificant. Issues of paper money thus became a much more important means of carrying on the government than under the former régime of "natural" or "moneyless" economy. On the other hand, as trade and industry revived, the demand for currency increased and for a time at least-during the summer of 1921-it seemed as if the increasing demand for currency might without disturbing the existing price level absorb the very large additional monex issues, made necessary by the increasing budget deficits. These hopes, however, were dashed completely by the crop failure and the consequent famine of 1921-22, which affected most adversely the industrial and trade revival of the country, as well as the scanty resources of the state treasury. During the second half of 1921 the volume of outstanding circulation shows a nominal increase from $2,346,000,000$ to $1 \uparrow, 533,000,000$ rubles-i. e., a 7.5 fold increase, compared with a twofold increase only for the immediately preceding six months. The situation became even worse in 1922, the first sif

[^54]months of which saw an 18.3 -fold increase in the circulation. Retail prices, which from July to October had continued on a practically stable level, started on an unprecedentedly rapid rise, increasing more than twentyfold during the first six months of 1922.

As a result the pre-war value of the outstanding circulation (calculated on the basis of the Labor Statistics price index) Which had more than doubled during the second half of 1921 , on May 1 , 1922 declined to about $31,000,000$ rubles, a figure only slightly higher than the minimum of $29,000,000$ reached on July 1 of the preceding year.

In view of these developments the financial returns to the state treasury from the steadily increasing outpourings of paper money were becoming less and less sufficient to meet even the most modest needs of the Government. According to estimates by Professor Yurovski ${ }^{3}$ the gold or pre-war value of the $223,844,000.000$ paper rubles issued in June, 1921, did not exceed 3.1 millions, while the aggregate pre-war value of the $16,370,838,000,000$ rubles of paper money issued during that entire year was not quite 150,000,000 rubles. In 1922 according to official calculation ${ }^{4}$ the total revenue from issue operations (in terms of pre-war rubles) was 344.5 million rubles, or about 60 per cent of a total of 570.3 million rubles of money revenue for the year, and while money revenues from taxes and government undertakings were visibly increasing, it was evident that for some time to come the revenue from note issues would continue to figure quite prominently in the Russian state budget.

With the steady decline in the value of the paper ruble the financial difficulties of the Government were becoming more serious. For, as pointed out by Professor Katzenellenbaum, ${ }^{\text {b }}$ the revenue of the Government from note issues was by no means all net revenuc. Soviet notes depreciated as much in the tills of the treasury of the state railways and of state enterprises as in the hands of the people.
The issue tax was therefore paid to a large ertent by the state itself. The covering of the budget deficit through the issue of depreciating notes increased the exchange losses and the deficits of the State institutions and enterprises, and these losses in turn caused an increase in budget expenditare.

Thus both general economic and financial considerations called for currency reform. The several phases of this reform have been discussed quite fully by Professor Yurovski on pages 253 to 269 in the first volume of this report. Briefly stated, the restoration of a stable currency system in Soviet Russia passed through two stages first the issue of secured bank notes "chervontzi" by the State bank alongside of Soviet "fiat" notes, which continued to circulate in increasing volume. A peculiar feature of this dual eurrency system was the absence of any legally fixed ratio between the value of the two classes of notes. The chervonetz, not being legal tender, was quoted in terms of Soviet rubles just the same as the pound sterling or the dollar, and although losing in purchasing power during its early career, represented a relatively stable currency as compared with the precipitously declining Soviet ruble.

[^55]This situation continued throughout the year 1923. The decision to keep the soviet ruble side by side with the chervonetz was prompted largely by the desire of the Government to obtain revenue from the issue of Soviet notes.

To have issued bank notes for revenue purposes was out of the question, as this would have endangered the integrity of the new currency and jeopardized the whole scheme of currency reform. Chervonetz notes (bank notes), because of their large sizes (the smallest denomination being 10 rubles) had at first but little circulation outside the large cities, while soviet notes (issued by the Government) found their way chiefly into the open country and became for a time a currency used mainly by the rural population. Hence the main burden of depreciation was shifted to the peasantry in the shape of losses on the sales of agricultural products. By the fall of 1923 the peasantry throughout the country refused any longer to part with their grain and other produce in exchange for soviet money, and workmen would not accept it in payment of their wages. The chervonetz was too large a denomination for the payment of tbese small wages.

This brought on the second-stage of currency reform, the final liquidation of the soviet ruble and its replacement by the chervonetz during the early part of 1924.

It is estimated officially that the aggregate pre-war circulation of both metallic and paper currency within the territory comprised by present-day Soviet Russia was in the neighborhood of $2,000,000,000$ rubles, or a little over $\$ 1,000,000,000$. For the first two war years reliable circulation figures are lacking, as part of the circulation was still composed of metallic currency. By 1916, however, the circulation may be said to have become composed exclusively of notes issued by the state bank and of relatively small amounts of subsidiary currency issued direct by the treasury. Chart 54 shows the gold value (in dollars) by months of the bank note circulation in 1916 and 1917 on the basis of New York quotations of the ruble, also on the basis of purchasing power parities. It will be noted that the exchange value of the currency continued to rise steadily until May 1, 1917, two months after the overthrow of the old régime, reaching a high of $\$ 3,133,500,000$ on that date. Until July 1, 1916, the gold value of the Russian note circulation continued higher on the basis of purchasing power parities than on the basis of foreign exchange values. During the rest of the year and the greater part of 1917 the value of the circulation on the basis of purchasing power parities was lagging behind that based on exchange values, the lag increasing perceptibly after the Bolshevik coup in the late part of the year. For the next four years the depreciation of the ruble can be measured only on the basis of purchasing power parities, as foreign exchange dealings with Russia had been practically suspended in Europe and in the United States, and as there was no legal foreign exchange market in Russia itself. Illegal clandestine operations in gold and foreign exchange continued in the principal Russian cities, but reliable exchange quotations are lacking. It was only in February, 1922, that the Government sanctioned the opening of a foreign exchange department at the Moscow Commodity Bourse.



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At the beginning of 1922 the gold or dollar value of the outstanding circulation calculated on the basis of Moscow exchange quotations of the dollar had declined to about $\$ 42,000,000$, agreeing fairly well with the gold value of the circulation reckoned on the basis of the purchasing power parity of the ruble. This agreement continued, within moderate limits, during the early part of the year. For the remsinder of the year, however, the spread between the two valuations was quite considerable, the exchange value at first exceeding the purchasing power parity, while about the end of the year the purchasing power parity stood much higher than the exchange value of the ruble.

Since 1923, when the chervonetz began to be quoted on the Moscow exchange, purchasing power parities, exchange rates, and gold values of the currency have been calculated with reference to the new chervonetz currency. (See Table 87, on p. 366.)

## IV. DISSIPATION OF THE RUSSIAN GOLD RESERVE

At the outbreak of the war the total gold holdings of the state bank were about $1,744,000,000$ rubles, of which about $1,604,000,000$ constituted the portion held in the country. One of the earliest financial measures following the declaration of war was the law of July 27 (August 9, Gregorian Calendar) 1914, which suspended gold payments by the bank and modified the provision of the bank act, which restricted the issue of uncovered bank notes to 300,000 ,000 rubles. This opened the era of paper money inflation, discussed in previous sections. The bank was authorized to issue an additional $1,200,000,000$ of uncovered notes, and the new issues were made largely for account of the Government and against the security of short-term Government obligations. But these measures were insufficient to meet the war necessities of the Government. Large war orders for munitions had to be placed abroad, funds had also to be sent to foreign financial centers to pay the interest and amortization on Russian state and corporate obligations held in the allied and neutral countries, while the efforts of the Government to obtain foreign credits did not prove immediately successful.

In October, 1914, therefore, the Russian Government in accord with the British Government made a first shipment of gold to England of 75.3 million rubles (equivalent to about $£ 8,000,000$ sterling), which was to cover a credit granted by the British Government for war orders placed in Great Britain and in the United States. As the war proved more protracted than expected, and the British Government found it impossible to extend further credits, unless the allied Governments shared in gold shipments to the United States for the purpose of maintaining sterling exchange in New York, the Russian Government in conjunction with the French and Italian Governments undertook to make further shipments of gold. These shipments up to the outbreak of the revolution in 1917 totaled $60,000,000$ pounds sterling, viz:

| December, 1915 | 210,000,000 |
| :---: | :---: |
| June, 1916 | 10,000, 000 |
| November, 1916 | 20, 000, 000 |
| February, 1917 | 20,000, 000 |

Including the initial shipment of $88,000,000$, the Russian gold reserve suffered a loss of $868,000,000$, equivalent to $640,200,000$ rubles. In addition, the Kérenski provisional government on the eve of the November, 1917, revolution shipped $4,850,000$ rubles gold to Stockholm, where they were to serve as the basis of bank credits. Deducting the amounts of gold shipped abroad and including the amounts of newly mined gold, also the relatively small amounts of gold withdrawn from circulation, the portion of the gold reserve of the State bank held within the country at the time of the October revo-

Iution totaled about $1,164,000,000$ rubles, or $440,000,000$ rubles less than on July 16-29, 1914, just before the outbreak of the war. ${ }^{5}$

Of this total, less than one-half was held in Moscow and Petrograd (Leningrad), while slightly more than one-half had been removed out of the danger zone to Samára and Kazán. A further loss of $120,400,000$ rubles in gold was caused by the payment to the German Government of part of the war indemnity under the Berlin agreement supplementary to the Brest-Litóvsk treaty. Under the terms of the armistice this gold was turned over to the Allies, and subsequently divided between the French and British treasuries.
According to W. Novitsky, former Assistant Minister of Finance, the amount of gold abandoned by the Soviet authorities in Kazan and subsequently appropriated by the Kolchák Government totaled $633,600,000$ rubles. In the published accounts of the Omsk Office of the State bank gold holdings (including small amounts of silver) figure to a total of $645,256,000$ rubles. During 1919 a considerable part of this reserve had to be shipped to Vladivostók in payment of munitions, and as collateral for credits opened to the Kolchák Government by Japanese, British, and American banking interests. Part of the gold thus shipped (viz., $42,200,000$ rubles) fell into the hands of Atamán Semiónov; and it does not appear that this gold was ever recovered by the Soviet authorities. Of the $237,200,000$ rubles of gold which arrived at Vladivostók, $68,300,000$ rubles were paid over outright and $126,800,000$ rubles were pledged to Allied financial interests, leaving a balance of $42,200,000$ rubles in the vaults of the Vladivostók office of the State bank. About the end of October, 1919 when Omsk and Western Siberia had to be evacuated by the Kolchatk Government, the balance of the gold reserve was shipped east on a special train, which was abandoned by Admiral Kolchák at Nizhneúdinsk and for some time was guarded by the Czechoslovak troops, who delivered the gold to the Soviet authorities about the close of January, 1920, prior to their final evacuation of the country.

In addition to the gold of the Russian State Bank the Soviet authorities also held about $118,200,000$ rubles of Rumanian gold, shipped to Moscow by the Rumanian Government for safe-keeping during the German invasion late in 1916 and at the beginning of 1917. Their holdings were also augmented to a small extent by requisitions and confiscations of church and private treasure, and the output of the Ural and Siberian gold mines. All in all the amount of gold in the hands of the Soviet Government at the close of the Civil War in 1920 is estimated by Novitsky at about $900,000,000$, or $1,000,000,000$ rubles, composed of, first, about $450,-$ 000,000 rubles, the balance left in their hands after payment of the German indemnity and the loss of gold in Kazán in 1918, and second, another $450,000,000$, which comprises the gold which fell into their hands at Omsk, Nizhneúdinsk and Irkutsk following the overthrow of the Kolchák and other Anti-Soviet governments, and

[^56]finally the Rumanian gold and the small amounts of new production. The official Statistical Annual of the Soviet Government for 1918-1920 (Vol. II, p. 41) shows the following amounts of gold held by the central office of the Budget and Accounts, the temporary successor to the former State bank, and in charge of its liquidation:
[In gold rubles]

|  | Jan. 1, 1920 | Juily 1, 1020 | Jan. 1, 1021 |
| :---: | :---: | :---: | :---: |
| Held in the central treasury - | 3,052,622 | 87, 194, 636 | 158, 748, 759 |
| Account of the State bank in liquidation: |  | $19,450,764$ |  |
| Gold in transit. | $319,365,841$ | 376, 381, 351 | $888,479,369$ |
| Total. | 341, 869, 227 | 483, 026,751 | 741, 676, 376 |

Figures for the earlier dates apparently are incomplete and do not include the accounts of outlying offices in Siberia, data for which became available only in the Iatter part of 1920 with the progressive pacification of the country. Meanwhile, however, the Government in order to pay for indispensable imports, also to meet international obligations assumed under the peace treaties with the new contiguous states (Esthonia, Latvia, Poland) began to export gold in large quantities, chiefly to Sweden, whence after further refining and stamping, the gold found its way to the United States direct, or to other European countries (e. g., Switzerland, France, etc.) and ultimately to the United States. There are no Russian data regarding the volume of these gold exports, which commenced in 1920, reached their peak in 1921 and continued in large volume during the following year. According to the Swedish official trade statistics, gold imports from Russia and total gold exports from Sweden during the three years mentioned were as follows (in thousands of kronor of 26.8 cents each) :

Suedish imports of gold from Russia and total exports of gold from Sweden, 1920-1922

|  | Gold Imports from Rastia | Total gold exporta from 8weden |
| :---: | :---: | :---: |
| 1920 | $\begin{aligned} & \text { Kronor } \\ & 272487,000 \end{aligned}$ | Eronor 62, 701,000 |
| 1921 | 670, 028, 000 | 934,366.000 |
| 1822. | 245, 318, 010 | 380, 372,000 |
| Totat. | 1,277,8938,000 | 1,303, 539,000 |
| Equivalent in doilars | 231, 739,000 | 135, 908,003 |

Of the gold exported from Sweden during these three years, $563,319,000$ kronor, or 42.4 per cent of the total exported, went to the United States; $433,854,000$ kronor, or 32.6 perf eent, was shipped to Switzerland; while $215,386,000$ kronor, or $16 . z$ per cent of the three years' total, was forwarded to France. Smaller amounts are shown to have been consigned from Sweden to the Netherlands, Great Britain, Germany, and Finland. Gold exports (largely coin) to Switzerland from Sweden were particularly heavy during 1921 and 1922. The Swiss figures of gold imports from Sweden for the same
period differ but little from the corresponding Swedish export figures. Most of the gold imported into Switzerland in coin form was reexported to the United States in the shape of bullion so as to comply formally with the provisions of the American regulations which prohibited the official assaying of gold traceable to Russia under Bolshevik control. A small part of the gold thus received was reexported from Switzerland to India.

Gold imports into the United States from Sweden during the three years under consideration are shown in the official United States trade returns as $\$ 101,278,000$ or about $\$ 50,000,000$ below the corresponding Swedish export figures, while reported gold imports from Switzerland into the United States for the three-year period under discussion are quite insignificant. On the other hand, gold imports from France into the United States for the three years exceed by far not merely the corresponding exports but even the total gold exports from that country. It is evident, therefore, that American figures of gold imports from France include shipments to the United States from Sweden and mainly Switzerland by way of French ports. Aggregate gold imports into the United States from Sweden and France during the three years under discussion are shown as slightly over $\$ 350,000,000$, or in excess of $1,300,000,000$ kronor, the approximate amount of gold exported from Sweden during this period. This total is equivalent to about $680,000,000$ rubles, which may therefore be regarded as a conservative estimate of the gold exported from Russia by the soviet authorities during the three years following the Civil War. These imports include also $\$ 11,400,000$ of Russian gold, which in accordance with an agreement with the American Relief Administration were turned over by the Soviet authorities to the American Relief Administration for the purchase of food. This gold apparently must have reached the United States by way of some other European country, as the American import statistics fail to show any direct gold imports from Russia during the past few years. The Soviet Commissariat of Finance has a small gold reserve of its own apart from the gold reserve of the newly established state bank. No statement of its size has ever been made. On the other hand, the early statements of the new state bank show but insignificant amounts of gold, and the present more important gold holdings of the issue department of the bank on May 1, 1925 -viz, 180 milion rubles-largely represent new output, imports, and gold brought out of hoards since the reestablishment of a relatively stable currency.

## V. FOREIGN TRADE AND INTERNATIONAL BALANCE OF PAYMENTS

Russian foreign-trade development before the World War reflects on its import side the progressive industrialization of the country which began in the nineties of the last century and became especially noticeable since the war with Japan. During the decade immediately preceding the Great War merchandise imports show an increase from $651,000,000$ rubles in 1904 to $1,374,000,000$ in 1913. About one-half of the imports into Russia before the war constituted raw and partially manufactured materials for use in her industries, while between one-fourth and one-third of her pre-war imports were composed of manufactures, largely machinery.

While part of the 100 per cent increase in the value of imports is undoubtedly due to the rise of prices during the period, it is, however, true that industrial expansion at home required a steadily expanding volume of imports of industrial equipment as well as of certain raw materials (such as cotton, wool, jute, silk, rubber, etc.) which were not produced at all or produced only in insufficient quantities within the country. These imports were paid only in part by Russian exports; to a large extent they represented new investments of foreign, largely French, capital. As a consequence a large number of Russian industrial securities, in addition to Government securities, came to be listed on the principal European stock exchanges during the two decades before the Great War. Currency reform and the maintenance of the gold standard encouraged foreign investments, with the result that the foreign indebtedness of the countrye steadily increased.

This indebtedness was the consequence in the first place of Government borrowings, either for productive purposes such as the construction of railways, elevators, river and harbor works, port improvements, etc., but more largely for defraying the cost of armaments, of the preparations for war, and the actual pursuit of war operations during the conflict with Japan.

It is estimated that of the total state debt of $8,811,000,000$ rubles on January 1, 1914, about 48 per cent was held abroad, ${ }^{1}$ and that possibly one-half of this foreign-held debt was contracted during the 20 -year period preceding the World War. Foreign loans were also raised during this period by Russian municipalities for the development of their public utilities, while considerable amounts of bonds of private railroads, bearing the indorsement of the Government, were also placed abroad. All in all, the two decades immediately preceding the Great War saw increases of the foreign Russian state debt by about 2.5 billion rubles and of municipal and Government guaranteed loans by about $600,000,000$ rubles, whild foreign industrial investments increased by not less than $1,000,000,000$ rubles. ${ }^{1}$ Annual interest, during the five-year period immediately preceding the war, on the foreign indebtedness of Russia, both Government and cor-

[^57]porate, aggregated about $350,000,000$ rubles, out of a total of invisible debits of about $440,000,000$ rubles, representing annual payments due on account of total foreign obligations and services, including banking, brokerage, insurance, tourist and official expenditures, etc. ${ }^{2}$ What were the offsetting credit items in Russia's international balance sheet? As distinct from the industrial countries of Europe, Russia's international account had no sizable offsetting credit items, except an excess of merchandise exports. By far the larger part of her sea-borne trade (about 92 per cent, according to official estimate) has been and is still being carried in foreign bottoms. The annual tribute paid to foreign vessel owners before the war was about 100 ,000,000 rubles. ${ }^{3}$

French and German banks either directly or through branches and allied banking institutions in Russia did the greater part of trade financing, while the number of foreign tourists in Russia was relatively smali, as compared with the number of Russian tourists and students travelling or having their temporary residence abroad. During the years immediately preceding the Great War the only credit item of importance outside of the export surplus was the remittances made to relatives and friends by Russian immigrants settled in the United States and other foreign countries. But as a large part of these remittances were used by the recipients to buy transportation to the United States and other foreign destinations, and as these people after liquidating their property at home before leaving the country would invest the proceeds in ocean transportation and foreign funds, it is evident that these remittances could not gffect the Russian balance of international payments to any appreciable extent.

Russia's merchandise exports increased during the 10 -year period preceding the war from $1,006,000,000$ rubles in 1904 to $1,520,000,000$ in 1913 , and averaged slightly over $1,500,000,000$ rubles during the 5-year period 1909-1913, compared with an average of about 1,140 ,000,000 rubles of imports for the same period. The average export surplus for the period- $360,000,000$ rubles-was thus insufficient to cover all annual payments on account of foreign debts and services.

Between 55 and 60 per cent of the exports during the 10 -year period before the war were composed of foodstuffs and between 35 and 40 per cent of raw and partly manufactured materials. Agricultural products constituted about 80 per cent of the total exports, while fully one-third of the exports consisted of the four principal grains produced in the country, via, wheat, rye, barley, and oats. Butter and eggs, sugar, corn, flour, bran, oil seeds, oil cake, flax and hemp complete the list of the more important agricultural exports before the war. Lumber and wood products followed next in importance among pre-war exports. Petroleum exports were of less importance, a growing share of the annual production being retained for domestic consumption. Manganese and platinum comprised the bulk of the metals exported, Russia maintaining a leading position in the world markets of these two metals. Exports of manufactures, largely cotton goods shipped to Persia and other Asiatic markets, constituted about 5 per cent of the total exports

[^58]during the pre-war period. Every effort was made by the Government to expand exports, so as to ward off gold exports and a possible breakdown of the gold standard and the country's international credit.

War with the Central European powers and Turkey resulted in the closing to trade of the Empire's western frontier and the "bottling up" of Russia's seaports on the Baltic and Black Seas, which in 1913 had handled by far the larger part of the country's foreign commerce. The effect of the war was to reduce the volume of the total trade carried, but chiefly the volume and value of the exports. Imports on private account (apart from munitions and other war supplies brought in by the Government and not recorded in the trade statistics), though much diminished in weight, did not decline in value, the articles imported during the war period apparently being of relatively high value and small bulk and thus able to bear the high freight charges. In fact, total imports into Russia for the calendar years 1916 and 1917, while only 36 and 26 per cent in weight of the five-year average 1909-1913, nevertheless on the basis of 1913 prices were valued 50 and 72 per cent higher than the average yearly imports for the five-year period 1909 to 1913. Exports, on the other hand, normally composed chiefly of low-priced and bulky agricultural products, fell off enormously both in volume and value. Thus in 1915 they were but 26.7 per cent in value and 10 per cent in weight of the average exports for the five-year period 1909-1913, while in 1917 they declined to about 30 per cent in value and to less than 4 per cent in weight of the five-year pre-war average. If the surplus of merchandise exports before the war was insufficient to cover all required foreign payments on government and private account, and the equilibrium of international accounts was maintained by new borrowings, this was even more the case during the war, with the steady decline of exports. As interest payments on the foreign held part of the debt continued until the advent of the Soviet régime and even part of matured obligations were re-deemed-foreign borrowings in even larger volume than before the war became necessary. In fact, the foreign indebtedness of Russia increased during the war period by about $7,681,000,000$ rubles, ${ }^{4}$ i. e., almost doubled.

Under the communist regime one of the first measures passed in the early part of 1918 was the nationalization of foreign trade. Private trading with foreign countries was prohibited and foreign trade was to be carried on exclusively by the Commissariat of Foreign Trade (Vneshtorg) in accordance with a yearly import and export scheme or schedule worked out by the planning organs of the Government.

In the spring of 1921 after the adoption of the new economic policy the foreign trade monopoly was modified, and several state trading organizations, the central cooperative bodies and in special cases also private corporations and individuals wede given the right to engage in foreign trade through their own agencies at home and abroad, but in strict accordance with the Government's general import and export plan and under the supervision of the Commis-

[^59]sariat of Foreign Trade. No goods are permitted to enter or leave the country without special certificates or licenses issued by the commissariat, which examines into the expediency of each transaction from the governmental point of view, its profitableness and its accord with the general foreign trade policy of the Government.

As the result of war, revolution, and secession about 225,000 square miles with a population of about $25,000,000$ were lost to Russia. In this territory, it is estimated, were found over 30 per cent of all industrial establishments with 17 per cent of the industrial workers and 18.6 per cent of the entire industrial output of the country. ${ }^{6}$ This does not include Finland, with an area of about 150,000 square miles and a population of $3,400,000$, since this country was economically autonomous before the war and treated as foreign territory in the Russian pre-war trade returns. The setting up of the new independent States (Poland, Lithuania, Latvia, Eisthonia, etc.) was followed by protracted warfare, which of course, made trade recovery impossible.

During the first three years of the soviet régime foreign trade of Soviet Russia was practically extinct, as may be seen from the trade figures for the years 1918-1920, shown in Table 88 on page 366. Most of the import trade in 1918 and of the export trade in 1919 was with the Ukraine, which was the only "foreign" country with which Soviet Russia maintained trade relations at that time. Trade with the rest of the world was practically suspended during these years owing to the actual blockade maintained by the Allied Powers. About the close of 1920 with the termination of the civil war and hostilities against the border States trade relations were reestablished at first with the Scandinavian countries and soon after also with other European countries. In 1922 by the treaty of Rapallo trading was formally resumed with Germany. During the years 1921 and 1922 imports by far exceeded exports and as shown in Section IV the soviet authorities during the three years 1920 to 1922 had to ship abroad not less than $680,000,000$ rubles of gold to pay for indispensable imports in addition to the $104,000,000$ rubles of merchandise exported during these three years. According to Table 88 on page 366 the excess of imports over exports for the three years was only $456,000,000$ rubles, but as the official figures are based upon 1913 prices, the difference of about $225,000,000$ rubles, or 50 per cent, between the estimated amount of gold shipments and the official estimate of the excess of merchandise imports over exports for the three years, seems quite reasonable, since this excess, when figured on the basis of current prices, must have been at least 50 per cent larger than shown in the official trade returns. Imports for 1922 are exclusive of famine relief supplies, the value of which is officially given as 183.8 million rubles. This amount affects the Russian balance of payments only to the extent that an amount of $\$ 11,400,000$ in gold was contributed by the soviet authorities for the use of the American Relief Administration in the purchase of food for the population in the famine area. ${ }^{\text {. }}$

For the last two fiscal years (ending September 30, 1923, and 1924) the official trade figures show export surpluses of $15,000,000$ and

[^60]$68,000,000$ rubles. This change is due largely to the resumption of grain exports, which totaled $39,300,000$ rubles in 1923 but increased in 1923-24 to 145,000,000 rubles, constituting over 40 per cent of the total exports for that year. It is worth while noting that rye, the cheaper grain, now holds first rank among the total grain exported, whereas before the war wheat was leading all other grain exports. Owing to the partial crop failure in 1924 grain exports during the current year have been practically suspended, and the Government has been obliged to import substantial amounts of grain and flour for the benefit of the population in the districts affected, incidentally, also, for the purpose of preventing an excessive rise of domestic grain and flour prices. Other agricultural products which have assumed some importance among Russian exports for the more recent period are butter, oil cake and eggs. Raw and semimanufactured materials constituted slightly over 40 per cent of the 1924 exports. Leading items in this class of exports were petroleum and products thereof, lumber and wood products (boards, planks, etc.), flax, furs, seeds, oil cake, manganese, and bristles. With the decline of grain exports in the current fiscal year, the Government is promoting the export of petroleum, eggs, flax, oil seeds, and manganese, for which there is an active foreign demand.

Nearly 75 per cent of the total imports during the past fiscal year (1923-24) were composed of raw and partly manufactured materials for use in industry. Imports of raw cotton, chiefly from the United States, totaled $53,000,000$ rubles, or over 25 per cent of the total imports, constituting by far the largest single import item for the year. Colors and dyes, crude rubber and metals are some of the other important import items. Imports of machinery and plant equipment, though indispensable for the rehabilitation of Russian industry, were quite inconsiderable, with the consequence that Russia's iron and steel industries are still in a state of partial disorganization and their 1924 output does not exceed 15-20 per cent of pre-war. rmports of articles for immediate consumption, such as tea, coffee, rice, etc., are subject to official restriction and showed smaller absolute and relative figures for 1924 than for the immediately preceding years.

As compared with the pre-war figures both imports and exports for the most recent period are relatively small. In fact, imports for the last fiscal year (1924) were only about 18 per cent of the average for 1909-1913, compared with 22 per cent in 1922 and 24 per cent in 1923. Exports, while showing a steady growth since 1921, were but 22.6 per cent of the 1909-1913 average.

In connection with the monetary reform and with the view of maintaining the stability of the currency the foreign trade policy of the Government during the most recent period has been concerned largely with attaining a substantial "favorable" trade balance through the encouragement of exports and the systematic restriction of imports. As a result of this policy, it is pdinted out, the State bank was able to increase largely during 1924 its gold and foreign exchange reserves (see Table 77 on page 358) while maintaining the value of the newly adopted monetary unit (the chervonetz) at about par with the dollar. For the current year (1924-25), however, the export plan of the Government provides for total imports of about $500,000,000$ rubles as against exports of $472,000,000$ rubles (on the
basis of current prices), i. e., a large increase of imports over 1923-24, mainly of raw materials, agricultural machinery, and plant equipment without any decrease of exports, notwithstanding the practical elimination of grain exports. This would leave a small "adverse" trade balance, which is to be covered by the disposal of some of the foreign exchange reserve, accumulated during the previous two years. As a matter of fact, the foreign exchange holdings of the new State bank, which at the beginning of the present fiscal year (October 1, 1924) stood in excess of $10,000,000$ chervontzi ( $100,000,000$ gold rubles), declined to $4,700,000$ chervontzi by May 1 of the present year, this decline indicating a much larger "unfavorable" balance of trade and payments for the year than reckoned by the Foreign Trade Administration at the time of the adoption of the national import and export schedule. Preliminary estimates of foreign trade for the seven months ending April, 1925, show 291,357,000 rubles of imports and $260,705,000$ rubles of exports, with an excess of imports over exports of $30,65 \mathrm{~L}, 000$ rubles.

Pricr to the Great Wax, as may be seen from the table on page 367, Gernany's importance in Russia's foreign trade was paramount. Her imports into Russia in 1913 were over 47 per cent of the total imports, while of the total exports of Russia almost 30 per cent were shipped to Germany direct and an additional 12 per cent to the Netherlands, largely for transshipment to western Germany. During the war all this trade disappeared, and Germany's position was taken by Great Britain, the United States, and to a smaller extent by France and the neutral countries.

Since 1922 Germany's share in Russian foreign trade has shown a substantial growth, and in the year 1923-24 Germany supplied 21.3 per cent of Russia's imports, while taking 18.5 per cent of ber exports. Great Britain's share in Russia's foreign trade for the same year was somewhat larger, imports from Great Britain constituting 22.4 of total Russian imports and exports to Great Britain forming 21.7 per cent of the total exports. Russian trade with the United States grew considerably during the war and the year following (1919). In the famine year 1921-22 imports from the United States were largely composed of articles of food and constituted over 16 per cent of the total imports for that year. During the most recent period trade with the United States has been subject to large fluctuations, mainly by reason of the changing volume of cotton imports. Thus in 1922-23, when cotton imports were heavily restricted, the share of the United States in the total imports was only 3 per cent, while in 1923-24, in consequence of larger raw-cotton imports from this country, this share rose to 19.1 per cent. Exports to the United States even before the war were small, the leading articles sent to this country being furs and skins, carpet wool, manganese ore, platinum, and licorice. At present the leading article of exportation to this country is furs. Considerable imports and exports from and to the contiguous border States of Esthonis and Latvia are shown in the Russian trade returns. This trade is largely in transit from and to Great Britain. Table 90 on page 367 shows the foreign trade of Russia by countries for the calendar year 1913 and the years ending September 30, 1923 and 1924.

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## VI. FINANCIAL RECONSTRUCTION

A new state bank was founded by decree of October 12, 1921, and opened for operations on November 16 of the same year. With the adoption in the early part of 1921 of the new economic policy, the subsequent reestablishment of private trade and the growth of commodity markets, the need for credit machinery became more and more pressing. Plans began to be made for the recreation of credit institutions, which had been destroyed in the beginning of the revolution as useless under a system of communist moneyless economy. In accordance with the new economic policy, "Nep," all governmental undertakings were placed on an economic or business basis; i. e., they were to continue only as self-supporting enterprises without drawing upon the state treasury for their operating expenses or deficits of operation. But all these establishments lacked operating capital and unless short-term credit was to be forthcoming, the economic operations of the Government could not proceed. The reestablishment of the state bank was thus absolutely indispensable, if nationalized industry was to continue. The purpose of the bank, as stated in the October decree, was to "aid the development of industry, agriculture, and trade by means of credit and other banking operations with the object of concentrating monetary transactions and adopting other measures for the establishment of a sound monetary system."

The new State bank started operations under most unfavorable circumstances. The whole credit machinery of the country had been destroyed and the use and legal regulation of credit instruments (bills, drafts, notes, etc.) had been discarded. Nationalization of the banks, confiscation of bank deposits, and nullification of loans had created a general feeling of insecurity, which seriously hampered the efforts of the bank authorities to attract deposits. Another factor, which interfered with the normal growth of the bank during the first year of its existence was the steady depreciation of the national currency. During 1921 the amount of soviet rubles in circulation rose from 17.5 trillions to 1.994 .5 trillion rubles, a one hundred and sixteenfold increase, while the purchasing power of the Soviet ruble decreased 72 times. In the face of this situation the bank, in order to protect its capital funds against loss from depreciation, had to charge high rates of interest. During the early period of its existence these rates varied from 8 to 12 per cent per month, and reached 23 per cent per month in May of 1922, declining precipitately to 2 per cent shortly after when the soviet ruble seemed to have attained relative stability in the summer of 1922. Another means of self-protection was the sharing by the bank in the profits from the sale of goods of the borrowers. Later on loans were made in terms of foreign currency or gold rubles, especially to finance export transactions. Besides safeguarding the bank against financial losses, these operations enabled the bank also to accumulate a gold and foreign exchange reserve which was found of great
use later in connection with the assumption by the bank of note issue functions at the end of 1922. This and direct purchases in the open market were apparently the main sources of the bank's gold and foreign exchange reserves. It does not appear that the Government ever used any of its own gold for financing the bank, the Government endowment being exclusively in the shape of paper money.

The bank constitutes part of the commissariat of finance and is subject to the direct authority of the commissar of finance, who exercises supreme control over its activity, approves all general regulations concerning the bank's operations, determines the bank's policy, sanctions its rates of interest and commission, and has general supervision over its operations. He also approves the bank's annual budget and report.

Actual administration of the bank is vested in a managing board (Pravléniye), whose chairman is confirmed by the council of the commissars upon recommendation of the commissar of finance; the other members of the board are appointed by the commissar of finance. (Secs. 6 and 7 of the bank act.)
The board is assisted in its work by a committee on loans and discounts which determines the lines of credit to be granted to both state-controlled enterprises and private organizations. Similar committees form part of the bank's branches and agencies. The committee at the central office comprises, besides the chairman and a member of the managing board, also two representatives each from the leading Government departments, including those of finance and foreign trade; also representatives of the principal cooperative organizations and of trade and industry.

When in November, 1922, the bank was given the right of note issue and a special issue department was created, a council on issue operations was instituted whose functions include the continuous scrutiny of the securities used as cover for the bank's notes, the examination and approval of the balance sheets of the issue department, the examination at frequent intervals of the vaults of the department, and the control over the issue, retirement, and destruction of the bank's notes. The notes are issued in denominations of $1,2,3,5,10,25$, and 50 chervontzi of 10 "gold" rubles each and must be covered, to an extent of not less than 25 per cent, by precious metals and stable foreign currency. This cover must be kept in the vaults of the issue department. Gold and foreign currency held abroad for account of the state bank can not serve as cover for note issues. The remainder of the note cover consists of easily marketable merchandise, short-term bills of exchange, and domestic and foreign securities. Not less than two-thirds of this part of the cover must be composed of commercial bills. The new unit of currency, the chervonetz, according to the law is equal to 10 rubles gold. For the present chervontzi are not exchangeable for gold, the law merely stating that the date from which they are to be redeemed in gold is to be fixed by future decree.

Bank notes were made legal tender only at the beginning of 1925, though they were accepted before at their face value in payment of State taxes and dues (customs, railway fares, etc.), and in all cases where the law required payments in gold. Loans in bank notes made to the commissariat of finance must be secured by precious
metals to a minimum of 50 per cent of the face value, and as to the remainder by interest-bearing bonds of the commissariat. It is to be noted that up to the present no loans have been made by the bank to the Government.

The bank acts as the Government's fiscal agent and makes all cash disbursements in connection with the execution of the Government budget of revenues and expenditures. Its capital resources were composed originally of $200,000,000$ rubles of the 1922 issue (equal to $20,000,000,000$ of former issues), furnished to the bank from the resources of the state treasury. In February, 1922, the capital of the bank was increased to $575,000,000$ rubles of the 1922 type. The progressive depreciation of the soviet ruble impaired seriously the resources of the bank, and in the autumn of 1922 the capital of the bank had to be reinforced again, this time to $13,017,000,000$ rubles of the 1922 type. The surplus is to be formed out of the net profits of the bank, which are distributed in the following manner: 50 per cent goes to surplus, not more than 20 per cent for the improvement of the living conditions of the employees of the bank, and the remainder to the state treasury. There is no limit upon the total of the surplus.

When the chervonetz currency was adopted the capital of the bank was fixed at $5,000,000$ chervontzi, while on October 1, 1924, it was raised to $10,000,000$ chervontzi, equal to $100,000,000$ gold rubles, compared with $55,000,000$ gold rubles, the capital of the former State bank. In addition $7,900,000$ chervonetz rubles were carried to surplus at the close of the last fiscal year.

In addition to its own capital and deposits proper the bank shows among its liabilities large amounts under the caption "Funds of and amounts due the commissariat of finance." These funds constituted about 34 per cent of the bank's liabilities in October, 1923, and about 20 per cent of the much larger liabilities on April 1, 1925. Some of these funds the bank uses for specific purposes, designated by the commissariat of finance, for instance, the financing of certain industries, or of grain operations, advances to cooperative organizations, etc. In so doing it acts merely as the disbursing agent for the Government, which at times operates in the same fields without the intermediation of the bank. Other funds, standing in the name of the commissariat are gold and foreign exchange deposits, or else time deposits (Vklady), which the bank apparently is able to use for current operations. As compared with the total deposit account of the finance department, other deposits credited largely to nationalized industrial and trading concerns were in the early period of the bank's existence of smaller importance. They have shown only moderate growth, especially since the opening in 1923 of other special Government banks, such as the Industrial Bank, the Bank for Foreign Trade, the Moscow Municipal Bank, the All Russian Cooperative Bank (all four in Moscow), and the several provincial banks.

The general financing scheme adopted in the spring of 1922 provided for a distribution of the burden between the treasury and the bank in the manner that long-term advances to "heavy" industries (coal, petroleum, iron and steel, munitions, etc.) were to be made by the treasury, the bank merely acting as its disbursing agent, while the shorter-term advances to the "light" industries (textile, food, lumber, chemical, leather, etc.) were to be carried by the bank
direct. With the assumption of the note issue function in November, 1922, the credits accorded to the various industries came more and more to be granted in the shape of chervonetz bank notes, and the rapid growth of the bank's note liability during 1923 reflects largely the volume of industrial and trade financing carried out by the Government through the intermediation of the banks

Table 78, on page 358, gives the monthly figures of both loans and discounts and deposits for the State Bank and the four leading commercial and industrial credit banks in Moscow. Figures for the State Bank are exclusive of loans extended on account of the commissariat of finance as well as of balances due to the comamissariat. During 1923 industrial and commercial loans and discounts of the State Bank increased from 30.8 to 313.7 million chervonetz rubles, while in 1924 they more than doubled. Loan operations of the four Moscow stock banks (their stock being owned either directly by the Government or jointly by the larger State industrial and trading organizations), which commenced only in 1923, show a more rapid development in 1924, and on February, 1925, stood at $384,000,000$ rubles, compared with $659,000,000$ reported by the State Bank. On the same date commercial deposits of the four Moscow banks totaled $252,000,000$, compared with $299,000,000$ at the State Bank, the four "big" Moscow banks showing much larger relative gains in deposits for the year than the State Bank, mainly because of the higher rates of interest they were paying on current accounts.

Only a small proportion-a little over 7 per cent on October 1, 1924 -of the State Bank's loan and discount portfolio is composed of paper rediscounted for other banks. As distinct from the banks of issue in central and westerin Europe, the Russian State Bank acts at present primarily not as a bankers' bank but as a bank of shortterm industrial and commercial credit for the leading State enterprises, dividing the field with the other banks especially created for the purpose of serving the credit needs of State trade and industry.

The following table shows in summary form the condition of the State Bank at six months' intervals between October 1, 1923, and April 1, 1925. The figures are inclusive of those shown in Table 77 for the issue department and cover all the operations of the bank:

Russia-Condition of the State Bank of the Union of the Socialist Soviet Republics, 1989-1925

IIn thoussads of chervontal of $\mathbf{\$ 5} .145$ eachl

|  | Oct. 1, 1828 | Apr. 1, 1924 | Oct. 1, 1824 | Apr. 1, 1925 |
| :---: | :---: | :---: | :---: | :---: |
| Asbrit |  |  |  |  |
| Cash in vault and in tramsit. | 2,052. 1 | 8,510.3 | 6,223.7 | 7,315.8 |
| Precious metala and fordign currenoy | 15, 852.4 | 80, 113.1 | 30, 883.8 | 88, 517.1 |
| Securities and commodities.. | 2,650. 1 | 4, 3427 | 5,062. 6 | 5, 845.8 |
| Digcounted bills..... | 12.430 .4 | 17, 704.8 | 27,084.2 | 40, 620, 2 |
| Adrances on goods.. | 17,108. | 22.309 .0 | 25,110,0 | 13, 460.18 |
| All other loans and discounts. |  | $2,271.9$ |  | 2,769.9 |
| Grain operstione account (loams \% sariat) | 12,762, 8 | 12,200.7 | 18, 068. 0 | 22.141 .4 |
| Correspondents......- | 12,762.8 | 12.20 .7 | 18, | 184. 6 |
| Due from branches and onilles | $17,500.7$ $3,385.8$ | 29, 14.807 .0 | $36,077.1$ $10,764,1$ | 69,852. 7 |
| Total esets | 83, 654, 7 | 180,710.0 | 161, 888, 5 | 243, 470.4 |

Russia-Condition of the State Bank of the Union of the Socialist Soviet Republics, 1985-1925-Continued

|  | Ott. 1, 1928 | Apr. 1, 1924 | Oct. E, 1924 | Apr. 1, 1928 |
| :---: | :---: | :---: | :---: | :---: |
| HABIKITIR |  |  | - |  |
| Capital | 5,000. 0 | 5,000.0 | 10,000.0 | 10,000. 0 |
| Sarplus. |  |  | 780.0 | 790.0 |
| Notes in circulation | 23, 500.0 | 33, 800.0 | 162, 185.1 | 69,020. 5 |
| Special funds for long-term loans to industry, \% commissarist of Anance. | 10,800. 7 | 12,417.6 | 18,011.7 | 20, 150. 8 |
| Corrent acconnt and other deposits: <br> Due to the commissariat of financeTime deposits (Vklady) |  |  | . | 4,234.8 |
| Garrent eccounts | 17,889 1 | 11,557.4 | $84,119.5$ | 19,662. 8 |
| Dratts and transfers unpald | 1,0820 | 24,7328 |  | 20,14. 5 |
| Orain operatons account. |  | 1,476. | 1,106. 6 | 11,711. 5 |
| Correspondents -.-- |  |  |  | 201.2 |
| Due to branches and ofilce | 17, 116.8 | 80.068 .8 | 34,498.1 | 60.373. 4 |
| Interest, commissions, and of her earning | 88.8 | 5,024.6 | 288.3 | 6, 6007.7 |
| Profit and loss. | 1,508. 4 | 1,088. 4 | 2,800.8 | 1,560.8 |
| 4 ll other Habilitie | 6, 335.1 | 11,544.9 | $5,480.5$ | 8,201. 6 |
| Total lishiliters. | 83,464.7 | 136,719.9 | 101,288. 6 | 243, 470. 4 |

I As agalnat $51,887,000$ chervontel ahown in the report of the leane department.
Since the beginning of the present fiscal year (October 1, 1924) the gold reserve of the issue department increased by $48,540,000$ chervonetz rubles and on May 1 of the present year stood at 179,940,000 chervonetz rubles. The department holds no silver at present, but reports among its reserves a considerable amount of platinum bullion, valued at $18,390,000$ chervonetz rubles, an increase since October 1, 1924, by $10,960,000$ rubles. Combined gold and platinum reserves show an increase for the seven months of $59,500,000$ chervonetz rubles. As against this increase the department reports, however, a reduction in foreign currency holdings of $53,280,000$ chervonetz rubles, so that its total reserve shows an increase for the period of but $6,220,000$ chervonetz rubles. Meanwhile note liabilities of the bank have gone up from $518,870,000$ chervonetz rubles to $604,390,000$ chervonetz rubles, an increase for the period of $85,520,000$ chervonetz rubles, notwithstanding the heavy seasonal decline in January. The ratio of issue department reserves to note liabilities thus shows a decline from 46 to 40 per cent. The remainder of the note cover is made up of discounted paper, including paper secured by liens on merchandise (advances on goods). The latter item shows a large decline during the present year, which is, however, fully offset by the increase in unsecured paper held in the issue department. In addition to the amounts held as note cover by the issue department, considerable amounts of precious metals and foreign currency are held unpledged in the banking department. Thus on April 1, 1924, the issue department held $173,600,000$ rubles of metallic and foreign currency, while the aggregate bank holdings (i. e., including both amounts held as note cover in the issue department and amounts held in the banking department proper) of precious metals and foreign currency on that dat? are given as $301,131,000$ rubles. On April 1 of the present year the holdings of the issue department were $254,140,000$ rubles, while aggregate bank holdings were $335,171,000$ rubles. Apparently with expanding note issu:s an increasing propor-
tion of the bank's metallic and foreign currency reserves is finding its way into the vaults of the issue department to serve as note cover.

Table 77 on page 358 shows monthly figures of assets and liabilities of the issue department of the Stata Bank for the period November, 1922, to May 1, of the present year.

Besides chervonetz (bank) notes, treasury notes of smaller denominations, silver and copper coin and temporary fractional currency to be exchanged for silver and copper coin, there are in circulation also so-called certificates of the commissariat of finance, issued in denominations of $1,000,2,500$, and 5,000 gold rubles, and used largely by the State institutions and the industrial and trading State enterprises for purposes of mutual settlements. During the winter of 1923 and the first half of the following year there were also in circulation 5-ruble certificates issued by the commissariat of communications (so-called transportation certificates) receivable in payment for all classes of State transportation services. These certificates, limited in amount, circulated as ordinary currency and were used as divisionary money with relation to the bank notes. They were replaced by treasury notes of the larger ( 3 and 5 ruble) denominations, which began to be issued in March, 1924. Of the total of 780.1 million rubles of currency (exclusive of certificates of the commissariat of finance) outstanding on May 1 of the present year, 408.6 millions, or 52.4 per cent, consisted of bank notes, 249.9 millions, or 32 per cent, of treasury notes, and 101.1 millions, or 13 per cent, of silver coin, while the remainder was made up of temporary fractional paper notes and copper coins. The silver in circulation is composed largely of 20 -kopeck and 50 -kopeck coins, and shows a larger relative growth during the more recent period than any other class of currency, as may be seen from Table 80 on page 359, which showe the changes in volume of the several classes of currency in Soviet Russia since January 1, 1923. Coinage of silver currency was started in March, 1924.

With the gradual consolidation of the new chervonetz (bank) currency in 1923 and its gradual infiltration into circulation channels, the spread between the exchange value and the purchasing power parity of the new currency became less, largely through the decline in the domestic purchasing power of the new currency unit, partly also through the steady rise of the exchange value of the chervonetz. But during the entire year the gold value of the outstanding circulation, reckoned on the basis of purchasing power parities, continued higher than its value based upon foreign exchange rates, notwithstanding the preponderant influence of the State Bank in the determination of the exchange rates (no exchange dealings in Russian currency have as yet been resumed in the leading European money markets). During 1924, in consequence of the general improvement of the financial and foreign trade situation, the exchange value of the chervonetz gradually approached par and has been maintained around that point since the early summer of that year. Since February, 1924, the purchasing power parity of the ruble (in terms of dollars) has been invariably below the exchange rate, reflecting in its movement the seasonal fluctuations of the domestic price level, especially the movement of prices of agricultural products.

The gold or dollar value of the aggregate circulation has shown a steady growth since the beginning of 1923 and at the beginning of the present year totaled about $\$ 410,000,000$, when calculated on the basis of exchange rates, and $\$ 380,000,000$ on the basis of purchasing power parities. As compared with pre-war the dollar value of all the Russian money in circulation shows a decline of about 60 per cent, notwithstanding the considerable rise in the general price level, and reflects more or less the decline in general business that has taken place since.

Monthly figures of exchange rates and purchasing power parities also of the gold value of the total circulation calculated on both bases for the period since January 1, 1923, are given in Table 87 on page 366.

Stabilizition of the currency was made possible by financial reform, the rehabilitation of the State budget and the elimination of paper money issues for covering the budget deficits. Efforts to bring about an approximate equilibrium between State revenues and expenditures continued for several years, but it was only in the budget for the current fiscal year (1924-25) that the Government relinquished altogether note issues as a source of State revenue. As may be seen from the following table, note issues furnished nearly 30 per cent of the total State revenues for the fiscal year ending September 30, 1923, and about 8 per cent of the total revenue for the fiscal year 1924. The remainder of the deficit was covered by loan operations. Government borrowing began in May, 1922, with the launching of the first grain loan for $10,000,000$ poods of rye ( 1 pood $=36.112 \mathrm{lbs}$.), and was followed by a 6 per cent 10 -year lottery gold loan which had however to be changed to a forced loan, as voluntary subscriptions to it yielded only $26,000,000$ rubles out of the $100,000,000$ rubles expected. In addition to the certificates of the commissariats of finance and of communication which were issued largely in anticipation of revenue there were issued in 1923 another grain loan for about $100,000,000$ poods of rye, which yielded to the Government $46,700,000$ rubles, and a sugar loan, totaling $1,000,000$ poods of sugar, which was to furnish the sugar industry with some of the lacking operating capital.

During 1924 the Government placed an 8 per cent compulsory gold loan for 6 years among the trading and industrial State institutions, another 6 per cent lottery loan, also partaking of compulsory features, and a peasant loan for about $50,000,000$ rubles, which was only partly successful. It is only in the current year that the Government announced the relinquishment of forced loan operations.

At the opening of the present fiscal year (October 1, 1924) the total debt recognized by the Soviet Government was $245,800,000$ rubles, all of which had been concluded since 1922. During the current year it is proposed to raise from loans a total revenue of 110 ,000,000 rubles.

The following table shows the revenues and expenditures of the Soviet Government for the three fiscal years ending September, 1923, 1924, and 1925:

## Russia-Recoipts and expenditures of the Union of Sovict Republics

(Actual for the flecal years ending Sept. 50, 1023, and 1924, and eatimated for the fiscal year ending Gept. 30, 1925)
[Sourco: Viestnit Finansor, No. 1, 1925. In thoosands of ohervonetry rublea]


## SPAIN ${ }^{1}$

## I. CURREXCY SYSTEER OF SPAII

The currency situation in Spain is peculiar in that the country for a long time has not been upon the gold standard, the silver standard, or the paper standard. Although nominally upon the bimetallic standard, Spain actually is upon a fiduciary standard of which the metallic money consists of silver coin. Spain can not be said to be upon the silver standard, however, since there is no free coinage of silver in Spain, and the value of the silver coins is not influenced to any great extent by the market value of the bullion in the coins. The coins have a scarcity value which is greater than that of the bullion in the coins, due to the fact that their quantity is limited. Spain is thus upon the fiduciary silver standard and exchange rates fluctuate with practically no relation to the price of silver, and about no fixed par with any other country. The silver coins have continally bean worth as money more than the bullion value of the silver they contain, as can be seen in chart 55 which shows exchange rates on Paris (gold francs for 100 pesetas), and also the value in gold franes of the silver in 100 pesetas.

The monetary unit of Spain is the peseta, which is divided into 100 centimos. The gold coins contain 0.290322 gram of pure gold for each peseta, while the 5 -peseta silver pieces contain 4.5 grams of pure silver for each peseta, ${ }^{2}$ giving a bimetallic ratio of approximately $151 / 2$ to 1 . The gold peseta is thus worth 19.29 cents in American money, the same as the French franc and other units of the Latin Monetary Union. Since gold has not circulated in Spain for many years this gold par of exchange has little significance and exchange rates have been subject to considerable fluctuations.

Spain adopted the monetary system of the Latin Monetary Union in October, 1868, although Spain did not become a party to the agreement and was not a member of the union. The Spanish law of 1868 provided for unlimited coinage of both gold and silver. Gold coins were not struck, however, until 1877. By this time, the gold price of silver had begun to fail and the market ratio between gold and silver was not that of the monetary ratio of Spain, nor of the countries in the Latin Monetary Union. As silver fell in price and as the monetary circulation increased, the gold coins became more valuable as bulfion than as money, and were driven from circulation in accord with Gresham's law.

Free coinage of silver by private individuals. was abolished in Spain in 1878, so that the quantity of currency that could be put into circulation was restricted after this date. However, the Government continued to coin silver money for its own account, and increased the circulation in this way. As the price of silver fell the Government found these operations very profitable. This continual increase

[^62]in the circulation was largely responsible for the decline in exchange rates during the last quarter of the last century. After 1899 the coinings of silver money were very much reduced.

Although the Government coined large quantities of silver coins, especially 5 -peseta pieces, or duros as they are called, the restrictions upon free coinage prevented the quantity of the coins becoming so

## chart so

Spam-Exchamoz Rates and Gold Valde of Siliga in 100 Peseras, 1858-1994
Erchange rates in Madrid on Parls

great as to depreciate their value as rapidly as the price of silver was falling. The coins all the time have been sufficiently limited in number to prevent their value falling to that of the bullion they contain. At the same time, they have been sufficiently redundant to prevent their value being maintained at the gold par. A very large number of duros was coined in 1898 , worth nearly $200,000,000$ pesetas, a greater amount than had been coined in the previous seven yeara combined. The effect of these large coinings on exchange rates at this time can be seen in the above Chart (No. 55). In November,

1901, a law was adopted which prohibited the coining of the 5-peseta. silver pieces. Since 1899 there have been no mintings of these coins, and since 1905 there have been practically no coinings of any description.

Spain coined large quantities of gold coins from 1877 to 1892. These coins, however, did not stay in circulation, as already noted, since their monetary value was less than that of the gold in the coins. The great majority of these coins were exported to foreign countries. Some also were melted down for use in the arts in Spain, or went into hoards.

At the present time the gold in the Bank of Spain, amounting to about $2,500,000,000$ pesetas ( $\$ 500,000,000$ ) is practically the only gold coin within the country. The Bank of Spain has used its eption to redeem its notes in silver coin, since it was feared that had the Bank attempted to redeem the notes in gold, it would have promptly lost all its gold. Spain is thus upon the fiduciary silver standard, and the large amount of currency in existence has depreciated the value of the peseta below its nominal par, and kept Spanish exchange at a discount in foreign markets most of the time since about 1882.

The Bank of Spain, Banco de España, dates back originally to 1783, but under its present name only to 1856 . Its predecessor, the Bank of San Fernando, was the outgrowth of the Bank of San Carlos, founded in 1783. The Bank of Spain, like other central banks, is a bankers' bank and serves as fiscal agent for the Government. The Bank holds the bulk of the country's specie reserve and rediscounts for private banks and bankers who look upon deposite at the Bank of Spain as cash. The Bank of Spain has enjoyed a monopoly of note issue since March, 1874, the notes being redeemable in either gold or silver at the option of the Bank. The Bank preforms most of the operations of other banks, but it is not regarded by other banks as a competitor. Its policies have long been very conservative, but in spite of this fact its profits have been large. The Bank transfers funds to any of its branches for a small charge, and serves as a clearing house for the other banks.

The maximum amount of notes which the Bank was permitted to have outstanding before the war was $2,000,000,000$ pesetas. At the outbreak of the war there was a demand in Spain, as inother countries, for more cash and on August 5, 1914, the limit to the note issue was raised to $2,500,000 ; 000$ pesetas. This limit was subsequently increased several times.

Spain being neutral during the war received large quantities of gold in payment for exports. The gold reserves of the Bank of Spain increased very greatly, as can be seen from Chart 56. As the gold reserves increased and as the demand for currency increased during the course of the war, the limits to the note issue were raised so as to avoid the necessity of the Bank having to pay out its silver money. The policy of the Bank, however, in regard to note issues has been conservative, and the increased circulation has been almost equalled by new gold acquired.

The legal reserve requirements against notes of the Bank of Spain are somewhat complicated. The reserves required before the war have been described as follows:

For notes up to the amount of $1,200,000,000$ pesetas as specie reserve of one-third at lesst one-half of which must be gold; for notes from $1,200,000,000$ to $1,500,-$ 000,000 a specie reserve of 60 per cent of such notes, of which at least two-



#### Abstract

thirds must be gold; for notes from $1,500,000,000$ to $2,000,000,000$ a specie . reserve of 70 per cent of the amounit of auch notes, of which at least five-sevenths must be gold. Thus, for an issue of 2,000,000,000 pesetas, total reserves of 930,000,000 pesetas, or 46.5 per cent, must be kept, of which at least $570,000,000$ must be gold. The kind of gold that may be held is either Spanish gold at par, foreign gold at the mint par of exchange, or bars at the rate of 3,44444 pesetas per kilo of fine gold. The silver must be Spanish coin of legal currency.:


The decreas increasing the note issue after the beginning of the war provided that the increases should be backed by an equivalent amount of specie. The first decree did not specify whether silver or gold, but the other decrees provided that the increases authorized should be covered entirely by gold.

On the outbreak of war in 1914, the sudden demand in Spain for funds was met by the Bank through the extension of credit as well as by increasing the note circulation. In addition to the expansion of notes and deposits, the Bank paid out large quantities of silver coin from its vaults. As the war progressed both the note circulation and the deposits continued to expand.

The conditions brought about by the war caused a considerable development of the practice of rediscounting. As the private banks were called upon increasingly for funds, they found it convenient to go to the Bank of Spain and rediscount their paper. Rediscounting was also encouraged by the method used for financing credits to the belligerents. The Spanish banks accepted drafts drawn by foreign bankers, which drafts were then rediscounted to a great extent at the Bank of Spain.

The use of checks has never been developed in Spain as it has in the United States and elsewhere, and credits granted by the Bank of Spain are ordinarily taken out in notes. Checks payable to order are subject to a small tax which tends to discourage their use. A recent law has removed this tax when checks go through the clearing house, but checks are still used very slightiy. The chief reason, however, for the nonuse of checks seems to be the fact that business in general is not familiar with the checking system and the convenience which it affords. Also people are inclined to be afraid of checks and prefer cash, which they know is good. On account of the little use made of checks the note circulation of the Bank of Spain has always been very much larger than the deposits.

As the belligerent countries made purchases in Spain, gold began to flow into Spain in payment for these goods. The large importations of gold which have taken place since 1914 have changed decidedly the complexion of the reserve in the Bank of Spain. Before the war the metallic reserves in the bank consisted of a larger percentage of silver than of gold. However, at the present time the gold reserve is about four times the size of the silver reserve, and the total reserve has much more than doubled aince the first part of 1914.

The gold imported into Spain went almost entirely into the Bank of Spain, since there was practically no other market there for gold. The Bank of Spain is not required to purchase foreign gold at a fixed price, and therefore purchased the gold that was imported at a discount which varied from time to time. The discount on gold

[^63]dollars at its maximum amounted to about 6 per cent, the bank paying 4.85 pesetas for the dollar in place of 5.18 , the nominal par. Since there is no free coinage of gold in Spain, importers of the metal could not secure the full number of pesetas, but had to accept the current rate if they desired to dispose of their gold. These operations were very profitable to the bank. They were also profitable to those importing gold, since dollar drafts on the exchange market could be purchased at a lower figure than the rate quoted by the Bank of Spain for purchasing the gold. During 1916 and 1917 most of the gold that was acquired was American coin.

## II. FOREIGI TRADE

Foreign commerce is important to Spain since the country depends upon foreign sources for many articles, especially manufactured articles, ulso raw cotton from the United States for the textile mills. The exports from Spain, which help to pay for the imports, consist chiefly of raw materials and foodstuffs, and comprise an important percentage of the country's total production. Spain is rich in resources and produces a. large amount of agricultural and mineral products, part of which are sent abroad. Although Spain has not been considered an industrial country, certain industries exist there on a considerable scale, and industries seem to be increasing in number and importance. The most. important industries of Spain are the textile industry and the iron and steel industry. The textiles which Spain exports go in a large degree to the Latin American countries, with which Spain has close affiliations due to a common language and to historical and other ties.

The leading products which Spain imports are raw eotton, (mostly from the United States), machinery, coal, cereals, iron and steel manufactures and other products. The chief exports of Spain consist of wines (mostly to France), iron ore, lead, oranges, textiles, copper, cork, olive oil, nuts, and other food products.

France has long been the leading country in Spain's foreign trade, from the standpoint of value, and has ranked first, both as a source of Spain's imports and as a recipient of Spain's exports. The geographical proximity of France has accounted for this to a large extent. In recent years, however, the United States has exported more to Spain than has France. The following table shows the chief countries with which Spain trades.

Spain-Imports and exports of merchandise by countries
[Source: Anuario Retadistion de Espafia]

|  | Imports |  |  | Exports |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1028 | 1980 : |  | 1913 | 10801 |
|  | Pestur | Pestas |  | Pestas | Pexetar |
| Urited States. | 167, 485, 782 | 331, 845,958 | France. | 327, 744, 318 | 290, 579, 000 |
| France. | 204, 258, 202 | 219, 228, 020 | Great Britain | 231, 571, 221 | 218, 704, 144 |
| Grest Britain. | 244,600, 190 | 213, 814, 723 | Argentins. | 70, 064, 239 | 98, 550,580 |
| Argentina | 110,970, 604 | 134, 331, 538 | Cubs | 64, 138, 839. | 81,024,000 |
| Germany | 185, 360, 0808 | 86, 160,405 | United 8tates -.-.-.-.--- | $72,104.808$ | 77,031,628 |
| Belgium | 45,088, 813 | 44, 504, 165 | Belgium.....-..........- | 45,278, 431 | 44,940,484 |
| Italy | 15, 805, 757 | 38, 805, 707 | Italy- | 34, 722, 408 | 36, 457,347 |
| Chilo... | 5,889, 093 | 82, 049,088 | Holland. | 63, 874, 331 | 22,806, 023 |
| Switzerl | 24,928, 297 | 31, 500, 000 | Portural. | 47,367,918 | 19, 485, 938 |
| Brasil. | 14, 438, 8889 | 28, 684,106 | Canaries. | 13,018,000 | 19, 170, 983 |
| Philippines | 21, 400, 054 | 28, 034, 763 | Germany. | 74, 418,506 | 15, 883, 356 |
| Poperton | 17, 824, 254 | 21, 898, 802 | Mexico... | 16, 851,807 | 13, 505,529 |
| Portugal. | 80,510, 154 | 20, 464,443 | Urazusy | 10,851, 510 | 13, 151, 907 |
| Holland. | 18,642380 | 19,743, 201 | Ewitzerlend ............. | 14, 048,947 | 8,418, 144 |
| Yenetwols | 0,385, 008 | 18, 489, 159 | Brazll. | 5, 468, 845 | 7, 981,408 |
| Cuba. | 2,477, 549 | 18.978, 458 | frweden. | 14, 828, 607 | 7, 203, 481 |
| Norway | 16, 404, 505 | 16, 647,057 | Norway. | 2,240, 177 | 6,319,210 |
| Enasha. | 44, 973,818 | 1, 34t, 079 | Chile...-...............- | 7,584, 278 | $\begin{aligned} & \mathbf{3}, 359,378 \\ & 2384,656 \end{aligned}$ |
|  |  |  | Phillppines.............. | 7,050,385 | 2,384,658 |

${ }^{1} 1020$ is the latest gear for which ngurte are available according to countries.

Trade with the United States has increased very greatly as a result of the war and it will be noticed that the United States now ranks first in Spain's import trade. On the other hand, exports from Spain to the United States are only one-fourth the size of those going to France and one-third the size of those going to Great Britain. Beiore the war Germany received a large quantity of Spanish goods, but at the present time this trade is very much reduced.

For a long period prior to the war Spain had an excess of imports most of the time. Nevertheless, Spain was not a creditor nation.

CHART 57

IEpecial imports, i. e., Imports for domestic consumption; special exports; I. e., axports of domestic merchandisol


The war, however, has changed this condition and Spain is now to be regarded as a creditor nation. The excess of imports prior to the war represented a flow of investments into Spain from Great Britain, France, and other countries. These investments, which led to the importation of goods, were offset by the exportation of Spanish securities. In addition to private borrowing in foreign countriea, the Spanish Government borrowed funds in France and in Great Britain. The excess of imports also represented remittances to Spain by Spaniards residing in foreign countries, especially in Latin America, and by expenditures of tourists in Spain, probably also by earnings of Spanish ships in excess of payments made to foreigners for shipping services rendered to Spain. Chart 57 shows the imports and exports of Spain since 1900.

Upon the outbreak of war, the belligerents turned to Spain to supply many of their war needs. The proximity of Spain and the various products which were available there, caused the other countries to look to Spain to a large extent for materials needed. It will be noticed from the above chart that exports increased after 1914; and that Spain had a large excess of exports during the entire war period. These exports were paid for by the foreign countries through shipments of gold, and also through credits granted by Spain. The excess of exports was also paid for by the return to Spain of Spanish securities, both governmental and private, from the warring countries. The following table shows the importation of gold into Spain since 1910:

Spain-Inports and exports of gold, 1910-198s

| - | Imparts | Exports | Erceet |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Importa |  |
|  | Peseless | Pesatus | Peselas | Pendas |
| 1910. | 704, 480 | 237,40 | 368, 080 |  |
| 1911. | 208,800 | 367, 120 |  | 68,320 |
| 1913 | 1, 205, 200 | 278, 280 | 912,480 | 683,080 |
| 1914. | 25, 488,240 | 234,400 | 25, 263, 810 |  |
| 1915. | 220, 2088080 | 369,280 | 219,929,400 |  |
| 1916 | 255, 378, 207 | 133, 120 | 355, 248,087 |  |
| 1917 | 650, 774, 325 | 12,250 | 800, 762,046 |  |
| 1918. | 33, 858, 720 | 215,600 | 33,643, 120 |  |
| 1919 | 184, 060, 483 | 628, 720 | 183, 583, 708 |  |
| 1820. | $7,467,840$ 175,220 | 4,904,880 | 2,552, 000 | 4,787,680 |
| 1022 | 2,422,500 | 40,000 | 2362,500 | 4, 107,000 |
| 1923. | 178,600 | 28,800 | 149,800 |  |

The products which Spain exported during the war were sold at. high prices, and therefore yielded attractive profits to Spanish merchants. As a result of the intense demand for Spanish products and the attractive prices which could be obtained, internal industry was stimulated. The character of Spain's production was also changed. Imports of coal were cut off and the high prices obtaining for coal caused the domestic production almost to double. The production of iron and steel and other manufactured articles was also extended. The large profits accruing to Spain as a result of the war increased the wealth of many individuals and also of the country as a whole, and brought about a period of great prosperity and a revival of enterprise.

When examining statistics on Spanish trade, it should be börne in mind that imports and exports are valued at officially fixed prices. The official prices for the articles remained the same during the entire period of the war and until the year 1921, although prices rose very greatly during this period. The amount of error introduced by this artificial method can be realized from the fact that prices of important articles which are imported, such as raw cotton, coal, and other articles, rose to several times their height existing in 1913. Exported articles also show a similar rise in price. The official values were changed and new values made applicable to trade figures beginning with the year 1921. ${ }^{2}$

[^64]The method of determining the official values is as follows: The import prices for any year are based upon the average of prices for the year preceding as shown in the invoices of all the customs houses, plus the freight and commissions. If the difference between this price of the article and the domestic cost of production of a similar article is less than 10 per cent, the domestic cost of production is used instead. If the difference is more than 10 per cent, an arithmetic average is struck between the average domestic cost and the average foreign price, and the resulting price is the official price. Prices for exported articles are also fixed officially. These export prices for each year are the average of the factory prices of the article for the preceding year. ${ }^{8}$

The total excess of merchandise exports from Spain during the five years, 1915 to 1919 , amounted to over $2,000,000,000$ pesetas. This excess of exports is in contrast to an excess of imports of a little less than $500,000,000$ pesetas during the five years prior to 1915 . In spite of the artificial method of showing import and export values, it can be seen from these figures that Spain exported a very much larger amount than in normal times. Were actual values shown the figures would be much greater. In addition to this increase in merchandise exports, Spain's invisible exports increased as a result of the war. Spanish laborers migrated to France, attracted by lucrative wages there, and remitted large sums to Spain. Also, Spanish ships enjoyed large earnings as a result of the urgent demand for ships during the war and the high freight rates obtaining. It is known that during the war Spanish ships handled practically all of Spain's foreign commerce, as well as a large amount for other countries. The increase in the credit items in Spain's foreign trade resulting from large exports, both visible and invisible, has placed Spain in the position of a creditor nation and has reduced the external debt of the Government held abroad. The external debt of the Government now amounts to a little over $900,000,000$ pesetas. Most of the obligations representing this foreign debt have now been purchased by Spaniards and are therefore domiciled in Spain.

The increase in the exports of Spain during the war was financed through the return to Spain of Spanish securities, both Government and private, especially railway securities; also through borrowings in Spain and through shipments of gold to Spain. The low prices prevailing in Spain for francs and other foreign currencies induced Spanish investors to purchase these currencies and with them buy Spanish securities abroad, which were thus cheap in terms of pesetas. On the other hand, in France and Great Britain pesetas were expensive, and the return to Spain of Spanish securities and their sale there, provided pesetas which yielded a relatively large amount of francs or pounds to the foreign owners of the securites.

In June, 1916, the Government issued a decree regulating the importation of securities into Spain. The Government, according to the law, reserved the right to prohibit the introduction of Spanish securities into Spain. Persons intending to bring Spanish securities into Spain were required to notify the Government to this effect. The law was not enforced strictly, but to the extent that it discouraged

[^65]the return of Spanish securities it tended to depreciste still further exchange rates in Spain on foreign countries.

According to an agreement between Spain and the United States, signed in August, 1918, an arrangement was made for the granting of credits by Spanish banks or bankers to American banks or bankers to the extent of $250,000,000$ pesetas. The credits were to be used by the United States for purchases in Spain and were secured by the deposit in New York of obligations of the United States payable in pesetas. Although credits to the extent of $250,000,000$ pesetas were provided for, only $155,000,000$ pessetas of this amount were used. Credits were also granted by Spain to Great Britain and France. When the United States placed an embargo upon gold exportations in the latter part of 1917 , the influx of gold into $\mathrm{S}_{\mathrm{p}} \mathrm{ain}$ declined greatly. Credits were then needed to finance the large balance of merchandise exports from Spain to the belligerents. ${ }^{4}$ Gold imports were resumed in 1919, after the embargo in the United States had been lifted.

The events noted above show how the position of Spain has been changed since 1914. Chart 58 shows this situation and how Spain's trade since the first of 1920 has shifted back to an excess of imports. Although Spain's pre-war excess of imports has returned, the excess of imports is now due to different factors than in 1913. The excess of imports now instead of representing investments coming into Spain represents, to a large degree, payments on indebtedness to Spain contracted during the war. It also represents remittances of Spaniards to Spain, especially from Argentina and other countries in North and South America.

[^66]Gpain-Ilgrobta and Exporta of Merchandiex, Monteily, 1010-1023
[Apedal imports, 1. e., imports for domeatic consumption; special experts; I. en, aports of domestic merchandise]


## III. FXCHAFGE RATES AND PURCHASING POWER PARITIES

Exchange rates in Spain on gold-standard countries have bean subject to fluctuations for several decades, since Spain has not been upon the gold standard and the equalizing influence of gold shipments has been absent. The currency in Spain before the war, as already noted, consisted of bank notes and silver coin, the monetary value of the coin being greater than that of the bullion in the coin. This greater monetary value was due to the fact that free coinage did not exist and the quantity of the coins was limited. The coins could not be exported profitably, and there was therefore not much limitation upon fluctuations of exchange rates other than that resulting from the demand and supply of bills.

Upon the outbreak of the war, banks and individuals in Spain. holding funds in foreign countries desired to bring their funds home to Spain. Heavy offerings of francs, pounds, and other currencies resulted and rates of exchange on foreign money centers declined. Francs and pounds both went below their nominal par in August, 1914 (i. e., par determined upon the basis of the gold peseta, which did not circulate and which was more valuable than the silver peseta). Francs and pounds recovered from their discount by the latter part of 1914, but as exports from Spain increased, the recovery lasted for only a few months. From the first of 1915 to the middle of 1918 these currencies continued to fall, with slight reactions. During 1915 and 1916 the fall was not as rapid as later, since gold shipments tended to sustain exchange rates. Large gold shipments from Great Britain and to a less extent from France took place during 1915 and the early part of 1916, when they were discontinued. Gold shipments from the United States continued until the latter part of 1917. During 1916 and 1917 most of the gold imported into Spain came from the United States.

Prior to 1915 there was practically no foreign exchange business between Spain and the United States transacted in termas of dollars. Trade that took place between the two countries was financed chiefly through London by means of sterling drafts. However, conditions growing out of the war caused a change, and since about 1915 Spanish bankers have kept balances in New York and New York bankers have kept balances.in Spain, so that a large amount of trade is now financed directly. Inasmuch as Spain's foreign trade is chiefly with Great Britain and France, pounds and francs have a wider market in Spain than dollars.

Dollars were at a discount in Spain from the first of 1916 to the latter part of 1919. This was in spite of the fact that during the entire period imports from the United States to Spain were greater than exports from Spain to the United States. The depreciation of the dollar during this period is to be accounted for by the fact that the dollar was tied up artificially with the pound and the franc: Exchange rates in New York on London and Paris were "pegged" at relatively fixed points. Heavy exports from Spain to Great

Britain and France, which depreciated the pound and the franc, thus also depreciated the dollar. The method by which this depreciation of the dollar took place may be illustrated as follows: Early in 1918 a draft in Spain for 100 francs could be purchased for only 70 pesetas (rather than 100 pesetas or par). The 100 francs could be sent to New York and sold at the artificially fixed rate of about $\$ 18$. At about the same time $\$ 18$ in New York would purchase approximately 72 pesetes in Spain. There was thus a profit of 2 pesetas in 70, less commissions. These operations took place to a considerable extent as long as the difference in the rates made them profitable. These operations thus depreciated the dollar along with the franc and the pound, by creating a large supply of dollars in Madrid on the part of banks and individuals who had sent their pounds and francs to New York to be sold and by creating a large demand for pesetas in New York.

The depreciation of foreign currencies on the Spanish exchange market was greatest in the middle of 1918. Coincident with the allied military successes beginning in the middle of 1918, the depreciation rapidly became much reduced, as can be seen in Chart 59. Exchange rates improved remarkably in the fall of 1918 as the end of the war appeared near, and at the time of the armistice were back approximately to where they had been a couple of years previously.

In Chart 59, which shows New York exchange rates on Madrid, it will be noticed that the value of the dollar returned to par during the last half of 1919, and that since 1919 the peseta has been at a discount in terms of dollars. In the spring of 1919 the "pegging" of the franc and the pound with the dollar was discontinued, and since that time the currencies have moved independently and the depreciation of the franc and the pound has not carried down with it the value of the dollar in Spain. The removal of the gold embargo by the United States in June, 1919, permitted the settlement of balances between the United States and Spain and was one of the factors improving the value of the dollar after the war.

At the first of 1920 pesetas started downward in New York and continued to fall during the entire year. Since the end of 1919 pesetas have continuously been depreciated in New York in terms of dollars. This depreciation of the peseta has been due mainly to relatively higher prices in Spain than in the United States. The purchasing power parities of the peseta with the dollar in Chart 60 show the value of the peseta in terms of dollars computed on the basis of the ratio between the price levels in the two countries, atsuming 1913 to be 100 . Bearing in mind that the index numbers for Spain and for the United States have been constructed according to different methods, and thus are not entirely comparable, it will be noted, nevertheless, that in 1921 the value of the peseta in New York according to exchange rates was almost the same as the hypothetical value of the peseta on the basis of the relation between the two price levels. The curves for exchange rates and purchasing power parities move more or less together until May, 1922, when the purchasing power parity value of the peseta rises above that according to exchange rates, and remains continuously above the latter.

The fact that exchange rates have been lower than purchasing power parities since May, 1922, is accounted for largely by the urgent


Spany-Pbrceagne Power Parmise and Rated or Exchange, Montity, 1019-1026
Purohasing power parities based on Index numbers of Institute of Geagraphy and Statistics for Spain, 74 commodities, middie of month, $1918=100 ;$ and on index numbers of Federsal Reserve Board

demand for dollars in Europe, due to political and other events, and to disturbed conditions in Spain. The fall in the peseta, or the rise in the dollar, has been due to an important extent to the intense demand for dollars in Europe and elsewhere, which reacted upon peseta exchange. The demand for dollars at some times became relatively greater in Paris and other European centers than in Madrid, and banks in Spain with dollars for sale found it profitable to transfer the dollars to London, Paris, or elsewhere and secure a relatively large amount of pounds or franes, which then could be converted into pesetas. These operations raised the price of dollars

CHART 61
Spain-Wholegale Pbices on Paper Babis and on Gold Bagis, Montely, 1021-109s
[Index numbers of Ynstitute of Geography and Statistics, 74 commodities, middla of month, 1913-100. United States Federal Reserve Board index, 104 commodities, monthly avarage; 1913-100]

in Spain. The fall of the peseta in New York may also have been due in part to an excess of merchandise imports into Spain from the United States and elsewhere during the lust few years.

In spite of reduced imports from the United States in 1923 the peseta fell in the United States during the entire year 1923, especially in the last half of the year. ${ }^{1}$ The greater proportionate fall of the pound and the franc at this time tended to increase Spanish purchases in Great Britain and France. As the dollar became more expensive importations of American goods competing with British and French goods were affected.

The fall in the peseta during the last half of 1923 was also due to a slight fall in prices in the United States and to a slight rise in prices in Spain, as can be seen in Chart 61. The purchasing power parities

[^67]curve in Chart 60, which shows this situation clearly, turned downward in the spring of 1923. These curves also help to explain the improvement in the peseta from the middle of 1921 to the middle of 1922. Prices in the United States rose somewhat during this period and prices in Spain fell somewhat so that the two price curves came close together in the last half of 1922. Exchange movements were erratic in 1920 and 1921 due to the depression which prevailed at this time and which disrupted business and financial conditions. Nevertheless, the influence of the price levels upon exchange rates is very noticeable.

The financial situation in Spain in 1923 and 1924 was not satisfactory. The Government had to resort to borrowing to meet its needs and there was a tendency toward inflation. The note circulation increased, as shown in Chart 56, and the price level tended upward. Another factor in the fall in exchange rates during 1923 and the first part of 1924 was the Spanish campaign in Morocco, which was to a large extent the cause of the disturbed conditions in Spain. The campaign was expensive and did not seem to be meeting with much success. Internal political difficulties in Spain were also a factor which affected the demand and supply of drafts and thus exchange rates.

In the latter part of 1924 and the first of 1925 the value of the peseta in the United States increased to about fourteen and onehalf cents, higher than it had been since the middle of 1923. This improvement was part of the general upward movement of European currencies as a result of improved conditions in Europe and large loan flotations in the United States.

During and after the war Spain's policy was conservative as regards credit and currency expansion. The note circulation of Spain increased during the course of the war chiefly as a result of very large gold reserves, rather than as a result of government financing, as was the case in other countries. Although the note circulation is adequately backed by gold, the expansion which has taken place is the chief cause of higher prices and depreciated exchange rates. The large gold importations were used as the basis for new currency, and the note circulation at the present time is more than double that of 1914. It is backed to the extent of about 71 per cent in gold and silver, the silver being about one-sixth of the total reserve. Bank deposits in Spain, both in the Bank of Spain and in the other banks, increased during the war but not to the extent that they did in many other countries. The checking system is used very little in Spain and thus the demand for deposit credit was not as great as it would otherwise have been. Different from most countries, the expansion Which has taken place in Spain since 1914 has been to a great extent in note circulation.

## IV. CURRENCY REFORM

The change which the war brought about in the character of the reserve behind the note circulation of Spain led to some discussion in Spain of currency reform, involving the establishment of the gold standard. Since 1914 Spain has received net gold importations amounting to about a billion and a half pesetas (about $\$ 300,000,000$ ) This gold went almost entirely into the Bank of Spain and the following figures and Chart 56 show how the reserve position of the bank has been strengthened.

Bank of Spain-Circulation and reserves, 1814-1824
[End of year; 000,000 oultted]

|  | Heserves |  |  | Notes in circulation | Fercentage of cold ant silver to notes | Percentage of gold to notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Silver | Gold | Total |  |  |  |
|  | Penelas | Peretas | Pesclae | Peselas | Petefas | Pesetas |
| 1914 | 709 | 573 | 1,282 | 1,974 | 64.9 | 29.0 |
| 1915. | 758 | 887 | 1,020 | 2, 100 | 77.0 | 41.0 |
| 1916. | 741 | 1,251 | 1.992 | 2,360 | 84.0 | 53.0 |
| 1917. | 709 | 1,067 | 2, 678 | 2. 799 | 96.0 | 70.0 |
| 1918. | 641 | 2228 | 2,870 | 3,334 | 86.0 | 67.0 |
| 1919. | 030 | 2,46 | 3,076 | 3, 858 | 79.0 | 6.0 |
| 1820 | 574 | 2,457 | 3,681 | 4,326 | 70.0 | 56.7 |
| 1921 | 625 | 2,513 | 3,138 | 4,244 | 73.9 | 592 |
| 1922 | 46 | 2,525 | 3,170 | 4,137 | 76.6 | 60.9 |
| 1923. | 649 | 2,528 | 3, 177 | - 4,378 | 73.2 | 58.2 |
| 1924 | 652 | 2,535 | 3, 187 | + 4,535 | 70.3 | 66.1 |

The introduction of the gold standard into Spain would be very advantageous to the country, both from the standpoint of foreign trade and from that of domestic prosperity. It would create greater confidence in the conduct of business and would practically abolish exchange fluctuations with gold standard countries. A more stable currency than Spain now has under the fiduciary silver standard would encourage trade and intercourse with other countries and would be beneficial not only to Spain but to the other countries as well. If the peseta were a gold unit and were freely convertible into gold, it would soon acquire a prestige which it has never enjoyed, and would place Spain in a position of grester importance in international trade and finance.

A plan for the introduction of the gold standard into Spain was proposed in the spring of 1918 by the Minister of Finance. His measure, which provided that the silver coins be legal tender in limited quantities only, and that gold be placed in circulation, was widely discussed. However, the plan was never adopted. The general sentiment then was that a more propitious time would be found after the close of the war. Agitation for the gold standard has continued to the present time although the question is not now a very live one. Sentiment seems to be in favor of reform, but no definite action in this direction has been taken. Political and other events have occupied the attention of Spain recently.

The introduction of the gold standard involves the question of the gold value to be given the peseta. The general opinion in Spain seems to be that the nominal gold par of 19.29 cents is the most logical and desirable value to give the peseta. However, the present value of the peseta as expressed in exchange rates on New York is considerably below this nominal par. While it is possible that the peseta could gradually be raised to par in the course of a few years, a rising peseta is depressing to business. Stability is what is wanted, and a rising peseta is an evil just as a falling peseta is an evil. Furthermore, the nominal par of 19.29 cents has little practical significance in Spain, especially since the currency has never been at par for any length of time.

If Spain desired to restore the currency to its nominal par, and should announce a redemption date two or three years hence, at which time the silver and paper pesetas would be redeemed in gold, the value of the peseta would gradually rise toward par as the redemption date approached. The present peseta then would have value as an' investment, and could not be worth much less than a non-interest-bearing Government security, maturing in three years for example, which the peseta in essence would become.

Spain at present has sufficient gold within the country to undertake redemption of the currency even at the nominal par. However, if this were done paper and silver money would be presented for redemption, which would tend to reduce materially the gold reserve. Therefore, to avoid a great reduction in the reserve, provision should be made for the redemption also of the money in interest-bearing securities, if the holders desired, the securities being made sufficiently attractive to protect the gold reserve, giving assurance that a large amount of the currency would be presented in exchange for securities -and thus would become funded. Chart 56 shows the reserve position of the Bank of Spain, and the large amount of gold held.

The gold which is now in the vaults of the Bank of Spain is lying idle and is yielding no interest. It was received by Spain in exchange for goods and services but is at present serving practically no useful purpose to Spain. Most of the gold reserve is in the form of bars or foreign coin which is not legal tender in Spain, and a great part of it would have to be reminted before Spain could undertake redemption, if actual circulation of gold were desired. ${ }^{1}$ Actual circulation of gold coin is not essential, and if redemption only in bars or large denominations of coins were made, protection would be afforded to the gold reserve. Arrangements could be made later for the introduction of gold coins into circulation.

The finances of the Spanish Government in recent years have not been in a satisfactory condition. While this does not provide a very good background for currency reform, it is nevertheless not a very serious obstacle, since in Spain the currency system is not tied closely to government finance, as in some other countries. The Government hes not been obtaining much revenue through inflation of the currency, and since checks are used very little, credit inflation is not great.

Deficits in the Spanish budget have been occurring regularly since 1913. These deficits have been due to various causes-to the falling

[^68]off in revenue during the war (especially a reduction in receipts from import duties which are an important source of income), also to increased civil expenditures due to the rise in prices, to extraordinary expenditures, greater military and naval outlays, advances to the railways, and also to expenditures occasioned by the campaign in Morocco. These deficits have been met largely by issues of treasury bills or certificates, many of which have been funded into long-term obligations. The deficits have thus increased the total public debt of Spain and have not led to healthy financial conditions. The following tables show the public debt and the revenues and expenditures of Spain for several years:

Spain-National funded debt, 1900-18as
[Baurce: Ancarto Erstadistico de Espatia]

| [000 omitted] |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Pasotas |  | Pesetar |
| 1900 | 10, 135, 265 | 1912. | 9, 310, 305 |
| 1901 | 10, 303, 036 | 1913 | 9, 321,570 |
| 1902 | 10, 963, 142 | 1914 | 9, 313,371 |
| 1903 | 10, 963, 055 | 1915 | 9,309, 875 |
| 1904 | 10, 956, 717 | 1916 | 9, 275, 113 |
| 1905 | 10, 958, 193 | 1917 | 9, 256, 441 |
| 1906. | 11, 143, 555 | 1918. | 10, 314, 804 |
| 1907 | 11, 162, 364 | 1919. | 10,306, 220 |
| 1908 | 11, 161, 229 | 1920. | 11, 926, 295 |
| 1909 | 11, 330, 209 | 1921 | 11, 900, 580 |
| 1910 | 9,330, 375 | 1922 | 11,859, 821 |
| 1911 | 9,314, 972 | 1923. | 11, 822, 125 |

Spaiv-Receipts and expenditures, 1909-1925
[Source: Amparlo Egtadirtico de Espalia]
1000 omitted)
RECEIPTA

|  | Direct taxes | Indireet | State monopaliea, eve. | Fees, etc. | Miscellaneous | Total receipte |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pestas | Peretar | Peselas | Pestas | Pesctat | Pesetat |
| 1800 | 457,398 | 375, 016 | 182,770 | 19.020 | 31, 365 | 1.055,570 |
| 1910 | 460,391 | 398,383 | 207, 490 | 18,356 | 88, 634 | 1.171,210 |
| 1911 | 475, 105 | 408, 439 | 195,934 | 21.800 | 75, 096 | 1.177. 174 |
| 1912 | 488, 129 | 415,393 | 207,803 | 23,363 | 27,047 | 1, 161,724 |
| 1913 | 496, 117 | 478, 272 | 811, 572 | 20,710 | 197,360 | 1, 504, 031 |
| 1914 | 483, 807 | 435, 601 | 308.270 | 19,519 | 95, 284 | 1,343,002 |
| 1915 | 491, 024 | 303, 882 | 304,202 | 115, 760 | 641, 474 | 1.918, 408 |
| 1918 | \$17. 943 | 381, 311 | 332,283 | 09, 027 | 423, 740 | 1,756, 50\% |
| 1017 | 540, 571 | 378, 128 | 348, 361 | 43,778 | 950, 059 | 2. 280.877 |
| 1918 | 573,238 | 250, 502 | 349,655 | 83,825 | 412.673 | 1,820,602 |
| 1019 (first quarter) | 143,908 | 116, 520 | 80,688 | 27, 125 | 297.374 | 820,083 |
| 1819-20 | 631, 876 | 583, 007 | \$77, 242 | 100, 735 | 1,377, 621 | 3,020, 5551 |
| 1920-21 | 710,665 | 685, 214 | 300. 734 | 148, 5.52 | 857.357 | 2.708, 584 |
| 1921-22. | 816,823 | 845, 104 | 501,330 | 122, 388 | 2072,20 | 4,357, 874 |
| 1922-23 | 868, 717 | 945, 676 | 345, 404 | 61,912 | 541, 263 | 2,962,972 |

Spain-Receipts and expenditures, 1909-192s-Continued
EXPENDITURES

|  | State | War | Nevy | Govern: ment | Pablle instruction, Treasury and Labor | Total expenditures | Defielt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pesetas | Perdas |  | Petclas | Petctat | Pesetas | Pesetar |
| 1009. | 250,000 | 64, 875, 000 | 273,000 |  | 781,000 | 68, 129, 000 | 64, 063, 430 |
| 1910 | 200,000 | 64, 010, 000 |  |  | 875,000 | 55, 085, 000 | 53, 013,760 |
| 1911. | 667,000 | 78,759,000 | 1,920,000 |  | 679,000 | 77,025,000 | 75, 847,826 |
| 1912. | 2,369,000 | 84, 050, 000 | 1,872,000 |  | 722,000 | 89, 013, 000 | 87, 851,276 |
| 1913 | 2,089,000 | 101,089,000 | 1, 439, 000 | 481,000 | 8,523,000 | 108, 618,000 | 107, 113, 269 |
| 1914 | 1,768, 000 | 134, 054,000 | 2,226,000 | 1,153,000 | 3, 805,000 | 143, 008, 000 | 142, 662,898 |
| 1815 | 1, 122,000 | 136, 840,000 | 1, 608, 000 | 745,000 | 3,586, 000 | 143, 901,000 | 142, 074, 597 |
| 1916. | 12, 488,000 | 131, 773,000 | 1,518,000 | 1, 306,000 | 2,942,000 | 150, 005, 000 | 148, 248, 198 |
| 1017 | 4,623,000 | 103, 271, 000 | 1,614,000 | 845, 000 | 3,030,000 | 112, 383,000 | 111, 122, 128 |
| 1918. | 8, 834,000 | 111, 802,000 | 1,689,000 | 973,000 | 2,963,000 | 125, 901, 000 | 124, 131, 108 |
| $\begin{aligned} & 1010 \text { (first } \\ & \text { quarter) } \end{aligned}$ |  | 29, 248,000 | 471,000 | 183,000 | 710,000 | 30,012,000 | 20,046, 677 |
| 1019-20. | 5,701,000 | 130, 454,000 | 1,829,000 | 1,062,000 | 2001,000 | 141,947,000 | 138,985,449 |
| 1020-21. | 0, 883, 000 | 173,047,000 | 8, 272,000 | 2,347,000 | 2,887,000 | 191, 236, 000 | 198, 437, 479 |
| 1021-22. | 7,364,000 | 502, 005, 000 | 4,063, 000 | 2,689,000 | 8,012,000 | 619, 683, 000 | $615,325,126$ |
| 1022-23.-1 | 34,896,000 | 447, 131, 000 | 9,000,000 | 2,851,000 | 6, 098,000 | 520, 78, 000 | 617,829, 028 |

1 Fiscal year was changed trom calondar year to year ending Mar. 81; later was changed to year ending June 30. Thus year 1982-24 was from Mar. 31, 102 to June 30, 1824.

General fiscal reform and greator economy are needed in Spain, so that the budget can be brought into balance and the Government's position strengthened. This would react favorably upon private finance and upon the value of the peseta. Spain is not faced with a tremendous war debt as are many of the other countries, and the problem of government finance ought not to be very difficult. The situation in regard to Morocco is the chief source of disturbance in Spain, and until this matter is cleared up, substantial improvement in the finances of Spain is not to be expected.

The war brought somewhat of an industrial apd economic revival to Spain. Large profits were made during the war in industry, commerce and banking, and as a result considerable economic development has taken place in the last ten years. There has been increased use of modern mechanical appliances, and a notable development in the use of electricity, and the manufacture in Spain of electrical equipment. The country desires to retain as far as possible the adventages gained during the war, and to become more of an industrial nation. A protective tariff has been adopted to encourage home industry, although the tariff has not proved entirely satisfactory. Banking underwent considerable expansion as a result of the war, and financial institutions have extended their facilities so that in the feld of finance, Spain has advanced considerably; the discount market however, still needs development.

If Spain is to retain permenently the advantages gained duringthe past ten years and to continue to expand and to play a more important part in international trade and finance, which seems to be the ambition of the country at present, the adoption of the gold standard is very desirable. The peseta for several decades has moved not with gold currencies nor with silver currencies, but has been subject to fluctuations entirely of its own. If the peseta were to become a gold unit and if Spain were tơ become a free gold market the trade and general business conditions of the country would be greatly benefited.

## SWEDEN ${ }^{1}$

## I. PRE-WAR CURRENCY

The present Swedish krona, worth 26.8 cents in American money, is the descendant of the old "debt certificate" daler. During the latter part of the eighteenth century Sweden was on a deprecrated paper currency basis, although the theoretical monetary unit was the silver daler. The money which was largely in use, however, was the "debt certificate," paper dalers and the bank notes of the old State bank. The debt certificate dalers were more depreciated than the bank notes. In 1800 the Government arranged for the redemption (to take effect 1803) of the "debt certificate" dalers in bank-note dalers at twot-ihirds of their nominal value. At the same time, however, the bank-note dalers were depreciated in terms of silver. Legal recognition was given to this fact in 1834, and the bank notes were redeemed at $371 / 2$ per cent of their nominal value in silver. Their nominal value had been $\$ 1.072$ in American money, so after devaluation they were equal to only 40.2 cents.

In 1855 the "currency" daler or "debt certificate" daler was made the legal unit. Since its value, as noted above, had been reduced to two-thirds of a bank daler, the unit established by the law of 1855 was equal to two-thirds of 40.2 cents, or 26.8 cents, the present par. At that time the currency was redeemable in silver, but in 1873 Sweden adopted the gold standard, and after that date the currency was redeemable in gold continuously down to August, 1914.

The gold krona, the standard monetary unit. after 1873, contains 0.44803 of a gram of gold 0.900 fine and is thus the equivalent of 26.798456 cents. Sweden was a member of the Scandinarian Monetary Union, established at this time, and the standard and subsidiary coins of Norway, Sweden, and Denmark were lawful money in all three countries. ${ }^{2}$ In practice, the bank notes of the Scandinavian central banks were also accepted at par in all three contnries. The three central banks all held balances for each other, and sold drafts against these balances, usually at par. In this way exchange rates between any two of the Scandinavian countries were kept usually at par.

The control of credit is in the hands of the Bank of Sweden or the Riksbank. This bank is a reorganization of an old State bank founded in 1668. The bank is owned and controlled by the Riksdag or Parliament. It is thus one of the few central banks that is entirely a State bank. The profits of the bank all go to the State, over and above the amounts which go into surplus. Since 1904 the bank has had the exclusive right of note issue. It has a capital of, $50,000,000$ kronor and a surplus of $12,500,000$ kronor. The bank is governed by a board of seven directors, the chairman being appointed by the King and the other six elected by the Riksdag.

[^69]The notes of the bank are legal tender and were so prior to the war. The bank is required to redeem them unconditionally in gold, except during the period of inconvertibility during the war, and thus maintains them at parity. Over and above a fiduciary issue of $125,000,000$ kronor the bank must maintain a cash reserve against note circulation of not less than 50 per cent. However, under exceptional circumstances the Government might suspend the reserve requirements, in which case the bank has to pay a tax of 5 per cent per annum on the amount not covered by the 50 per cent reserve.

The bank, besides being a bank of rediscount, also does a general banking business. It buys bills of exchange, makes loans on personal guaranty and on collateral security in the form of stocks, bonds, real estate, and commodities in warehouses. It also makes advances to the State and the local governments.

The bank controls the supply of credit available to the business community by regulating the amount of its rediscounts for private banks, and the amount of its advances (in one form or another) to the Government and to the business community directly. The private banks in Sweden hold most of their reserves in the form of deposit credits with the Riksbank or in Riksbank notes. The central institution can therefore regulate the volume of credit put at the disposal of the business community by the private banks through its power of controlling the amount of their reserves.

Little gold circulated in Sweden prior to the war. Most of it was in the vaults of the Riksbank. Since the bank held the gold reserve of the country and was required to meet all demands made on it for redemption, it had to regulate its credit policy in such a manner that the demand for gold was kept within limits it could easily satisfy. Since the principal demand for gold was for export when the exchanges became "unfavorable," it controlled credit in such a manner that the exchanges would not stay unfavorable for too long a time. It would occasionally meet some extra demand for exchange on other countries by shipping gold abroad or selling some of its assets payable abroad. But any persistent tendency for exchange to go above the gold export point could be dealt with only by a curtailment of credit. By and large, therefore, the bank authorities looked to the foregn exchanges to guide them in their credit policy.

Besides the Riksbank, there are two other types of banks doing a general banking business in Sweden, the Fnskilda banks and the joint stock banks. The Enskilda banks, of which there were 10 at the end of 1923, have unlimited liability of shareholders. They were favored by investors down to 1897, because they had the right of note issue. Since the banking law of 1897 gave the exclusive right of issue to the Riksbank, ${ }^{3}$ no new Enskilds banks have been founded. The joint stock banks have limited liability of shareholders. There were four of this type of banks doing business at the end of 1923. Both types of banks have branch offices in diffgent parts of Sweden.

[^70]

## II. CURRENCY, CREDIT, AND PRICE MOVEMEITTS, 1914-1925

Aithough Sweden was not one of the belligerents, her economic relations with Germany, Russia, Great Britain, and other countries were so intimate that the outbreak of war in the middle of 1914 caused considerable derangement in the economic life of Sweden. The country abandoned the gold standard on August 3, 1914, when redemption of the notes of the Riksbank was suspended. This suspension continued only until January, 1916, when specie payments were resumed. However, in 1920, after the war, inconvertibility was again introduced and continued until the spring of 1924.

The note circulation of the Riksbank expanded continually during the course of the war, reaching the high point of over $800,000,000$ kronor at the end of 1918. This is shown in the accompanying chart (No. 62) which shows the principal items in the Riksbank accounts from 1914 to date. It will be noticed that loans and discounts also expanded during the war, reaching their high points in 1920. The Riksbank received large amounts of gold from the end of 1915 to the latter part of 1919. This increase in gold reserves is also shown in the chart.

Immediately after the outbreak of the war, wholesale prices in Sweden began to rise. This early rise may be considered as due both to the relative scarcity of commodities, and to an expansion of purchasing power.

It must be remembered in speaking of the effect of scarcity of goods on prices that it is always in comparison with the supply of the means of payment. Average prices might have been held stable on the outbreak of the war by a contraction of the currency. But there would still have been a violent change in individual prices; many imported articles of necessity would still have risen and domestic goods would have been depressed. The discount rate of the bank of Sweden, which was $41 / 2$ per cent at the outbreak of the war, was raised to $51 / 2$ per cent on July 31, 1914, and to 61/2 per cent on August 3, 1914; lowered to 6 per cent August 28, and left there for the remainder of 1914. ${ }^{1}$ That pressure was not sufficient to prevent the average of wholesale prices from rising, at last when heavily weighted with the prices of raw materials.

At that period and until the spring of 1915 , several of the important exchanges, including exchange on London and Paris, were "unfavorable." Ordinarily under such circumstances, drastic measures would have been taken to restore the exchanges to the gold point by a very high bank rate. But the circumstances of the war were considered so unusual that no such action was taken. Prices were allowed to rise, bank notes and deposits increased, an embargo was placed on gold exports, and the exchanges were allowed to remain "unfavorable."

Business soon felt the stimulus of orders from the belligerent nations. The demand for loans at the banks increased. The Bank of Sweden increased its loans; and the private banks also increased

[^71]their loans-synchronizing their increases with those of the central bank. This increase in the means of payment, resulting in an increased amount of spending without a proportionate increase in pro-duction-in fact, the supply of goods in Sweden was somewhat less than normal-was the principal cause of the rise in prices which commenced almost immediately after the outbreak of war.

By about the middle of 1915 exchange rates on other countries (except the Netherlands) were down to par again, and after this time went below par. Gold began to come in about the end of 1915, and the reserve of the Riksbank therefore increased. The business community had become accustomed to look at the position of the exchanges and the amount of the gold reserve as guides to credit policy. So long as these indicators were favorable-and there seemed no early prospect of their becoming unfavorable-it was thought safe to continue the expansion of credit. The customary warning signals against an overextension of credit were thus removed, and the increase of the means of payment and the rise of prices continued. The "direct" discount rate, i. e., the rate to customers other than banks and the Government, was lowered to $51 / 2$ per cent January 7, 1915, and to 5 per cent May 1, 1916; the rediscount rate was lowered to 5 per cent January 8, 1915, and to $41 / 2$ May 1, 1916.

On February 4, 1916, the Riksbank asked the Government to relieve it of the obligation to accept gold at the legal rate. The bank gave as its reason that it held all the gold it needed, and that it could not dispose of gold purchased at the legal rate except at a considerable loss on account of the exchanges being then favorable to Sweden.

By the law of February 8, 1916, the Riksbank was relieved of the obligation to buy gold. The free coinage of gold at the mint was suspended April 28, 1916. The exclusion policy could not be applied immediately to Scandinavian gold coin on account of the Scandinavian monetary convention. Norway and Denmark had also abolished the free coinage of gold, but there was nothing to prevent the central banks of those countries from buying gold in the open market, coining it, and sending it to Sweden; or sending old Scandinavian gold coin. So long as exchange with Norway and Denmark was practically at par, there was no incentive for the central banks of those countries to send gold to Sweden.

However, by August, 1916 (for Denmark), and September, 1916 (for Norway), exchange rates on Sweden in those countries were high enough to make the sending of gold profitable and gold was sent. On advice from the Riksbank, the Swedish Government called a conference which met in Stockholm April 17, 1917, and at which the three Scandinavian central banks were represented. The conference recommended that the existing embargo on gold exports in all three countries be rigidly enforced. Shipments of Scandinavian gold coin to Sweden, however, continued until the autumn of 1917.

After the autumn of 1917 the Riksbank took only such amounts of gold as it saw fit to purchase in the open market, which were, however, quite considerable. The gold reserve grew from about 215,000,000 kronor in September, 1917, to a maximum of about $300,000,000$ kronor in August, 1919. Obviously, the purchase of gold was a factor tending to increase the demand liabilities of the bank, and so the volume of credit put at the disposal of the business community.

Loans and discounts of the bank increased from about $312,000,000$ kronor in September, 1917 -which was near the time the gold exclusion policy became finally effective-to about $727,000,000$ kronor in March, 1920. Just how much more inflation there would have been if gold had not been excluded it is not possible to say. The following tables show significant assets and liabilities in the Bank of Sweden and in the private banks of Sweden:
Sweden-Significant assets and liabilities of the Bank of Sweden and the Swedish privale banks
[Sonice: Anoulal reports of the Bank of Sweien. Amounts in thousands of kronor. Average for the year] BANK OF SWEDEN
(Bitabank)

| - | Assets |  |  |  |  | Liabilitiles. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Domestic bills | $\begin{gathered} \text { Loans } \\ \text { (againgt } \\ \text { pecari- } \\ \text { ties, } \\ \text { meer- } \\ \text { chandise, } \\ \text { etc.) } \end{gathered}$ | Advances on current account (overdrafts) | Total domestic loans, discounts, and advances | Foregn bills and net foreign balanced | Publle deporsits on current account | Other deprosits on current eccoant | Total deposits | Note cfrculation |
| 1011. | 98,908 | 15,977 | 4,252 | [19, 187 | 76,888 | 40, 679 | 8,472 | 4, 151 | 192, 517 |
| 1912 | 101, 700 | 13, 127 | 3,017 | 117,933 | 昸, 100 | 46,411 | 8,054 | 80,306 | 202,401 |
| 1013... | 121, 466 | 15, 171 | 3,759 | 130,396 | 70, 474 | 54, 803 | 4,711 | 50,515 | 200, 024 |
| 1914 | 119,205 | 16, 735 | 2,519 | 138, 518 | 80,000 | 67, 144 | 6,203 | 72, 377 | 243, 300 |
| 1915 | 88, 103 | 29, 115 | 2125 | 124,353 | 91, 671 | 71, 219 | 7,880 | 79,199 | 281, 787 |
| 1916 | 54,274 | 18, 686 | 1,845 | 74, 805 | 150,850 | 84, 488 | 14,811 | 98, 797 | 233,882 |
| 1917 | 116.859 | 38, 716 | 1,835 | 158, 210 | 135, 810 | 112,356 | 11,123 | 128,479 | 450, 952 |
| 1918-- | 176, 875 | 102, 628 | 1, 165 | 280, 169 | 132,481 | 91, 895 | 17, 520 | 109, 415 | 651, 230 |
| 1019-- | 235, 572 | 148, 510 | 1,468 | 283, 490 | 134. 389 | 116,296 | 11,780 | 128, 076 | 708,208 |
| 1020-土 | 537, 350 | 65,716 | 1,284 | 604, 360 | 96, 279 | 208, 688 | 17,091 | 225, 769 | 710,710 |
| 1921.... | 450,885 | 28,505 | 1,904 | 481, 443 | 112, 754 | 182,388 | 10, 868 | 102, 753 | 640,615 |
| 1023--- | 413, 250 | 38,585 | 2.029 | 454, 464 | 93, 688 | 259,671 | 0,477 | 969, 148 | 654,848 |
| 1023 | 294, 210 | 49,756 | 1,943 | 845, 008 | 68, 668 | 109,708 | 9,080 | 208, 780 | 536, 178 |
| 1924 | 366, 318 | 48, 544 | 2036 | 410,897 | 45, 004 | 187, 171 | 9,052 | 196,223 | 510. 160 |

PRIVATE BANES

|  | Ansets |  |  |  |  | Liablities |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Domestle } \\ \text { bllif } \end{gathered}$ | Loanis (gasingt securt tigs. maer. ohandise, etc.) | $\left\lvert\, \begin{gathered} \text { Advances } \\ \text { on curs } \\ \text { rent } \\ \text { ecount } \\ \text { (rverer } \\ \text { drat } \end{gathered}\right.$ | Total domenestic los disenn gnd advances | Forelgn net forelgn balancos | $\begin{gathered} \text { Giro } \\ \left.\begin{array}{c} \text { (transfer) } \\ \text { Bccounts } \end{array} \right\rvert\, \end{gathered}$ | Deposits on curaccount | Deposits, time and subjeet to notice | $\underset{\substack{\text { Total } \\ \text { (not } 3 \mathrm{~m}}}{ }$ $\underset{\text { clavings }}{\substack{\text { clating }}}$ deposits) |
| 1911 | 586, 054 | 1,032, 218 | 478, 214 | 2,091,486 | 83,814 | 112,044 | 95, 155 | 096, 801 | 1,202, 700 |
| 1912 | ${ }^{576,868}$ | 1,007, 772 | 409, 395 | 2, 143, 535 | 15, 951 | 180, 531 | 52,578 | 1,038, 044 | 1, 249, 151 |
| 1918 | - 53578 | 1, 1850,702 | ${ }_{518} 50817$ | , 2351,383 | \% | 168 785 | ${ }_{68,608} 68$ | 1, 1435,468 | 1,319,777 |
| 1915. | 657, 252 | 1, 310,261 | 510, 281 | 2, 48B, 774 | 8i, 760 | 277, 684 | 84, 865 | 1, 178, 419 | 1, 535,098 |
| 1916 | 773, 528 | 1, 407, 981 | 567, 067 | 2,743, 575 | 188, 788 | 401, 628 | 116, 624 | -1,206, 189 | 1, 814, 339 |
| 1017 | ${ }^{\text {930, }} 358$ | 1, 077,410 | 728,84 | 8, 338, 112 | 350, 353 | 614, 280 | 146, 132 | 1, 517,461 | 2, 277, 888 |
| 1918 | 1, 300, 455 | $2{ }^{2} 079,511$ | 1, 180, 100 | 4, 6050,102 | 851, 500 | 913, 482 | 156, 888 | 2, 138, 491 | 8,207, 35 |
| 1919 | 1, $1,821,20088$ | ${ }^{2} 2837,016$ | ${ }^{1} 1,647,889$ | -5,600, 802 |  | 1, $1,050,070$ | ${ }_{27}^{188} 8295$ | 2369, 188 | 8, 8 , 144,8698 |
| 1921 | $12,617,428$ | $2 \mathrm{BSO}, 808$ | ${ }_{1}^{1}, 648,12$ | 8,948, 238 | 202, 782 | ${ }^{867}$, 4338 | 271, 224 | 2,829, 010 | 4,188, 515 |
| 1922. | 1, 1763,492 | 2013,300 | 1,230, 203 |  | 170,058 | ${ }^{798,348}$ | 841, 638 | 2066,470 | 3, 807,519 |
| 182\%------- | ${ }_{93,} \mathbf{3}, 72$ |  | -90, 88 | 4, 740, 018 | 63, 681 | 586, 568 | 483, 234 | $2{ }^{2} 272430$ | 3, 330,2252 |
|  |  | 4 6ro, 0 | 681, 259 | [4, 200, 88 | 32, 36 | 44, 610 | 436, 232 | , 178,469 | 2,038, 812 |

Before the war the three Scandinavian countries had similar currencies in accordance with the Scandinavian Monetary Union, and the various coins circulated interchangeably in the three countries. However, when the currencies of Norway and Denmark became depreciated in Sweden, and when gold shipments were interfered with, the silver coins were sent to Sweden. Large quantities of fiduciary silver currency appeared in Sweden. The traffic was then stopped and Norway and Denmark bought back their silver at considerable expense. ${ }^{2}$

By the end of 1915, the average of wholesale prices in Sweden had risen more than 50 per cent as compared with the pre-war average; by the third quarter of 1916 the average had risen by 91 per cent; and by the third quarter of 1917 by 149 per cent. The accompanying chart (No. 63) shows the course of prices in Sweden since the middle of 1914. Except for the critical three weeks in August, 1914, the bank rate was not raised above 6 per cent until December 12, 1917, when it was raised to 7 per cent. In spite of this, high rate inflation continued until the end of 1918. The first peak in price inflation was reached in December, 1918, when the index number showed an average increase of 272 per cent over the pre-war level.

After the armistice, there was an appreciable fall in prices, which continued through most of 1919. The market almost immediately discounted an increase in the supply of commodities which soon took place. Furthermore, business men for several months were apprehensive as to the immediate effect of peace upon business activity and prosperity. However, the credit of the Riksbank showed little tendency to decline, making allowance for seasonal variations, and the average of loans and discounts in 1919 was even greater than in 1918.

Beginning in the latter part of 1919, there was a further expansion of credit, and another upward movement of prices. In June, 1920, loans and discounts of the Riksbank reached $726,000,000$ kronor, as compared with $478,000,000$ kronor for the corresponding month of the previous year; note circulation reached $736,000,000$, as compared with $728,000,000$, and current account deposits reached $280,000,000$ as compared with $124,000,000$. Prices reached their maximum about June, 1920, when the index number was 366 . There was no very appreciable drop until September. From the latter part of 1920 to about the middle of 1922 the note circulation showed a gradual decline. Since the middle of 1922 the circulation has not shown a pronounced tendency either up or down.

The fall of wholesale prices in Sweden was even more preeipitate than the fall in England and the United States. According to the Handelstidning index, prices fell from 362 in September, 1920, to 182 in September, 1921. After that there was a less precipitous fall lasting until the autumn of 1922-the index reached 155 in October. From the latter part of 1922 to the present, prices in Sweden have remained relatively stable at about 150 .

[^72]

## III. FOREIGIT TRADE

Before 1914, Sweden regularly had an excess of merchandise imports, as can be seen from the accompanying chart (No. 64). The excess of imports for the years 1904-1913 averaged nearly $100,000,000$ kronor. The excess in the latter part of this period had been becoming smaller. Another debit in the balance of international payments was interest and dividends to be paid by Sweden on her securities held abroad. Swedish Government bonds held abroad in 1913 amounted to about $570,000,000$ kronor, which was by far the greater part of the Government debt. ${ }^{1}$

On the credit side of the international balance of payments, the two most important items (in the net) were shipping receipts of Swedish vessels obtained from foreigners, and payments to Sweden for Swedish securities sold abroad. The amounts of the net shipping receipts and also the net credits or debits resulting from both the foreign trade in merchandise and the foreign shipping are given in the following table.

Sweden-Balance of merchandise trade and foreign shipping receipts
(Boniree: syofart Berattelse For Ar 1022 av Kommerskollegium and Gwedish Statistical Year Book, 1024. Amounts in thousands of lronor]

|  | Exceas of merchandise |  | Foreign shipping recelpts | Not debits | Net credlts |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imparts | Exparts |  |  |  |
| 1913. | 20,191 |  | 124,460 |  | 195, 269 |
| 1914 |  | 45447 | 116, 553 |  | 162,000 |
| 1015. |  | 177, 859 | 240, 768 |  | 414. 8287 |
| 1916. |  | 417,810 | 412, 892 |  | 830,702 |
| 1917. |  | 500, 941 | 285, 482 |  | 870,423 |
| 1918. |  | 117, 123 | 463,860 |  | 870,083 |
| 1919. | 958,280 | 11. | 476,400 | 484,700 |  |
| 1920. | 1,035, 816 |  | 482916 | 652, 900 | - |
| 1921. | 101,48 | 39,540 | 182,708 171,768 | 211, 280 | - |
| 1923. | 762,479 | 30, 0 | 17, 108 | 21, 317 |  |

As to the sale of securities abroad, there has been, of course, some movement both ways; but in the net, Sweden has been a borrowing country. Capital in Sweden is scarce relative to other productive forces, and Sweden has borrowed from countries such as England where capital was relatively more plentiful. Another credit item of some importance is the remittances of Swedish emigrants to their relatives in Sweden.

During the war there was a very noticeable shift in Sweden's balance of merchandise trade. Belligerent countries' made large purchases in Sweden, and during the five years 1914-1918 there was a balance of exports amounting in round numbers to $1,345,000,000$ kronor. As ocean freight rates were high during the war, there was a large increase in foreign shipping receipts. If we consider both items,

[^73]there was a credit balance for the five-year period of $2,855,000,000$ kronor. Furthermore, there was a large reduction in the net amount of interest payable abroad on account of the return to Sweden of Swedish securities previously held abroad.

CHART 4

[Specisl imports, i. e., imports for domestic consumption; specis] exports, I. e., exports of domestic merchsndise]


This large increase on the credit side of the international balance of payments was, of course, offset by a corresponding increase on the debit side; but the items can not be given in detail. However, some of the outstanding debit items can be given. The excess of imports of gold and silver coin and bullion for the five years amounted to $200,000,000$ kronor. Also there was a heavy increase in the foreign credits extended by the Riksbank and by the private banks. In December, 1913, foreign bills and foreign balances of the Riksbank amounted to $94,000,000$ kronor. This item increased to $147,000,000$
in February, 1919-an increase of $53,000,000$. The private banks in December, 1913, were creditors (in the net) as regards foreign bills, and foreign balances to the amount of $22,000,000$ kronor; while in February, 1919, they were creditors to the amount of $462,000,000$. The net increase in the foreign credits extended by all banks during the five-year period was therefore about $490,000,000$ kronor. Another important debit item already mentioned in another connection, was the return to Sweden of Swedish securities previously held abroad. At the end of 1913, the Swedish State debt held abroad amounted to about $570,200,000$ kronor; while at the end of 1918 this amount had decreased to $465,500,000$ - $\&$ decline of 104,700,000. Altogether between July 1, 1914, and December 31, 1913, not less than 418,000,000 kronor of foreign-held State bonds were repurchased by Swedish nationals. ${ }^{2}$ Also, large amounts of municipal and mortgage bank bonds and industrial securities were returned to Sweden. Finally, considerable investments were made by Sweden in foreign securitiesprincipally British, French, and German. The accompanying chart (No. 65) shows the monthly imports and exports of Sweden from the first of 1913 to date.

The great increase in Swedish foreign trade in 1919 and 1920, shown clearly on the chart, was one phase of the post-war business boom, and was made possible largely by the partial removal of trade restrictions in Europe and the United States. In both of these years the values of imports, exports, and the balance of imports passed all records. This expansion was to a large extent due merely to very high prices. The following table gives an index number of imports and exports of important commodities computed on the hasis of 1913 prices. ${ }^{\text {? }}$
Sweden- Index number of imports and exports of important commodities on the basie
[10cursar Etronomisk översith. Base [s corresponding month in 1018]

${ }^{2}$ Riksgidakiontoret Arsbok $102 a-34$, p. 68.
 largely ellominated, assuming the variation in liviz was representative.

Sweden-Index number of imports and exports of important commodities on the basis of 1915 prices-Continued

|  | lmports | Exports |  | Imports | Exporta |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1922 |  |  | 1920 |  |  |
| Jannary. | 83.0 | 58.1 | March. | 120.8 | 85.8 |
| Pebruary | 52.5 | 40.6 | April. | 108.1 | 63.5 |
| March. | 108.1 | 87.3 | May | 98.8 | 70.5 |
| April. | 91.7 | 50.7 | June... | 115.3 | 9.4 |
| May. | 74.7 | 55.0 | July | 110.4 | 80.5 |
| Jupe. | 92.3 | 85.5 | August | 118. 3 | 82.5 |
| July.... | 75.3 | 83.5 | Sepiember. | 133.6 | 79.5 |
| August.... | 95.9 | 98.4 | Oclober.... | 123.4 | 79.3 |
| September | 98.6 | 94.2 | November | 134.6 | 80.9 |
| October- | 91.9 | 98.0 | December | 129.3 | 108.4 |
| November | 108.5 | 109.1 |  |  |  |
| December | 129.5 | 108.8 | A verage. | 117.5 | 809 |
| A verage. | 91.2 | 823 | 1924 |  |  |
| 188 |  |  | February | 12.0 | 87.3 |
| January. | 108.8 | 828 | March.. | 111.2 | 05.2 |
| February... | 104.9 | 66.8 | April. | 148.9 | 723 |

Such an index should represent fairly well the change in the physical volume of imports and exports. The index shows an increase of imports of 23.4 per cent over 1913 for 1920. As regards exports, the index indicates that physical quantities in 1920 were much below quantities in 1913. The table in the back of the report shows imports and exports with everything reduced to tons. According to this table, both imports and exports measured in physical amounts were much less during the prosperous years of 1919 and 1920 than in 1913; and no larger than the average for the years 1916, 1917, and 1918; although this measure of the physical volume of trade appears less significant than the index computed from quantities weighted by 1913 prices.

The excess of import values for 1919 and 1920 amounted to $2,000,-$ 000,000 kronor. Nearly all stocks of imported commodities had become very low during the war, and with the power of buying abroad which Sweden possessed, it is not surprising that there should have been a large excess of imports. This excess of merchandise imports was paid for to the extent of about $1,000,000,000$ kronor by foreign shipping receipts. The height of ocean freight rates during 1920 may be judged from the following: The rate on coal from England to Sweden in 1920 was 47.50 kronor per ton, while in 1923 it was only 5.55 kronor per ton. The rate on lumber from Sweden to England in 1920 was 182.50 kronor per standard; in 1923, 40.25 kronor.

Another credit which helped to pay for the large excess of imports during 1919 and 1920 was the liquidation of foreign assets by the Riksbank and private banks. From February, 1919, to March, 1921, there was a decline in the amount of such assets of $346,000,000$ kronor. Also, trade credits were granted Swedish importers by New York and London.

There was a heavy decline in import and export values after 1920; and the trade was restored to something like the pre-war normalafter allowing for the difference in prices. The decline in the physical quantities of imports and exports in 1921 was very much less than the decline in values imported and exported. By 1923 the physical quantities of imports as measured by the index numbers were well

ISpecial Importa, 1. e., imports for domestio consumption; spealal exports, I. e., exporta of damestio merchandise]

above the 1913 level-practically the same as for 1920 . The physical quantities of exports, though considerably above the 1921 level, were still below the level for 1913.

The following table gives an estimate of the items in the balance of international payments for 1923 .

## Sweden-Balance of international payments, 192S

[Viestaik Finansov, Mascow, November, 1024, p. 287-268]

| Debirs $\quad \begin{gathered}\text { Millions } \\ \text { of kronor }\end{gathered}$ | $\text { CREDIT } \quad \text { Mullons }$ |
| :---: | :---: |
| 1. Imports of merchandise.........-.--....---- 1, 295 | 1. Exports of merchandise.................... 1,142 |
| 2. Lmports of gold and silver-.............-.-- ${ }^{\text {a }}$ | 2. Exports of gold and silver .-................. 31 |
| 3. Imports of foreign securities....-. | 3. Sales of Swadish securities abroad...-...-- 20 |
| 4. Redemption of foreigr-held SFedish secur- 48 | 4. Otter Imports of foreign capital.. |
| Interest on and amoritzation of oreignheld 48 | 5. Interest and amortization received from ${ }_{\text {abrond......................... }}$ |
| Swodish State debt. .-................ 10 |  |
| 6. Interest on and amortizstion of forelgn-held | 7. Net freight earnings of Swedish merchant |
|  |  |
| 8. Expenditures for charities abroad....-....-- 15 |  |
|  |  |

Swedish exports were severely affected by the depression beginning in 1920. Exports of lumber declined from $568,000,000$ kronor in 1920 to $173,000,000$ kronor in 1921; unmanufactured metals declined from $149,000,000$ kronor to $58,000,000$ kronor; wood pulp from $475,000,000$ kronor to $175,000,000$ kronor. The foreign demand for wood pulp soon improved, due in no small degree to increased buying in the United States. The advance of reconstruction work contributed to increased foreign purchases of lumber in 1922. The following figures show the imports and exports of sweden according to principal countries:

## Sweden-Imports and exports by principal countries

[Source: Statistiak Årabok for Averige. 000 omitted]

|  | 1913 | 1923 |  | 1913 | 1983 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| mponts |  |  | EXPORES |  |  |
| Germany | $\begin{aligned} & \text { EGOnOT } \\ & 280,002 \end{aligned}$ | $342003$ | Great Britain | $\begin{aligned} & \text { İronop } \\ & 207.885 \end{aligned}$ | Eronop $3 \pi 8,548$ |
| Great Britain. | 206,814 | 234, 335 | United States. | 34, 403 | 128,442 |
| United States | 76,583 | 213,700 | Germany. | 179,078 | 80, 849 |
| Denmark | 51,823 | 103,332 | France. | 86,240 | 88,534 |
| Netherlands | 20,884 | 51, 716 | Denmart. | 70, 282 | 80.850 |
| France | 35, 284 | 38,403 | Norway. | 54, 034 | 72737 |
| Argentina | 16, 888 | 34, 050 | Spain. | 11, 219 | 36,308 |
| Norway. | 25,928 | 33, 583 | Netherlands | 19.203 | 34, 506 |
| Brazil. | 17,687 | 29,815 | Belgium. | 18, 598 | 33, 579 |
| Belgium | 13, 398 | 23, 115 | Russia. | 32.438 | 33, 547 |
| Finland | 21, 258 | 22, 405 | Finland. | 14,540 | 25,406 |
| Italy. | 5,643 | 10, 791 | Argentha | 8,785 | 9,518 |
| Spain. | 3,906 | 5,595 | Italy.... | 4,443 | 7,767 |
| Russia. | 29,262 | 3, 124 | Brazil. | 2234 | 4,998 |
| All other corntries | 31,078 | 85, 204 | All other comnt | 63,872 | 137,683 |
| Total | 946, 638 | 1, 24, 571 | Total | 817,347 | 1,142,005 |

The United States in 1923 was Sweden's second best customer, Swedish exports to Germany have declined considerably, owing to the industrial disorganization of Germany and other disturbances. Exports of iron ore to the Ruhr were especially affected, which is one reason why recovery in the Swedish iron-ore industry has been de-
layed. Exporters of ore have had to push their sales in other markets The United States has been a large buyer of Swedish iron ore recently.

The chief exports of Sweden are wood pulp, lumber, ships, electrical apparatus, and iron ore. The chief imports consist of coal and coke, textile manufactnres, automobiles, and other manufactured articles. The following table shows the principal articles imported and exported by Sweden:

> Sueden-Imports and exports of merchandise, by principal commodities 1918, 1920, and 198s
[Source: Statistisk Àrsbok for Everige. See chart. 000 omittei]]

| Commodities | Imports |  |  | Exports |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1913 | 1880 | 1923 | 1918 | 1890 | 1988 |
|  | Esenor | Kronor | Frontor | IIfomar | Liramor | Krow |
| Live antrants | 3,413 | 28,877 | 998 | 19, 922 | 2,998 | 0,576 |
| Animal foods. | 28,827 | 152,075 | 48, 785 | 73,452 | 36, 137 | 45,393 |
| Cereals and their products. | 65, 220 | 141, 185 | 108, 837 | 11, 031 | 19,425 | 6,498 |
| Colonial prodiucts (sugar, colita, ete) | 60, 068 | 233,350 | 90, 538 | 686 | 8,781 | 897 |
| Fruits, nuts, and other vegotable products | 17,015 | 64,377 | 45,333 | 875 | 7,910 | 875 |
| Alcohalie drinks | 9,830 | 50,256 | 17,736 | 776 | 4,502 | 228 |
| Textile materials | 60, 138 | 151, 053 | 87, 189 | 2,374 | 6,890 | 1,963 |
| Yarn, thread, and cordager | 21, 633 | 116,588 | 39,473 | 2,688 | 3,381 | 4,217 |
| Tertile mannfactures. | 02002 | 868, 173 | 119, 650 | B, 692 | 23,241 | 16,635 |
| Hides, hair, bones, horms, ste ---.---.------- | 47, 646 | 134, 013 | 52,700 | 23,234 | 32,978 | 21, 676 |
| Mannfactures of hides, hatr, bounes, horns, ote- | 5,735 | 43,088 | 12,773 | 396 | 2,443 | 1,632 |
| Tallow, ofls, tars, resinous substances, etc.-.-- | 67,081 | 189, 019 | 7,195 | 5,404 | 34,729 | 10, 313 |
| Mandfactures of tallow, oils, eto- | 7,779 | 42,273 | 15,484 | 8,358 | 4,100 | 4,967 |
| Wood, timber, and intiber (inciuding palp Food) | 15,355 | 17.627 | 18,918 | 20,883 | 48,975 | 32, 950 |
| Wood, bawed not planed | 2,009 | 8,448 | 8,589 | 137,987 | 463, 103 | 203, 578 |
| Other wood products menu | 3,568 | 10. 518 | 4,104 | 56,552 | 114, 403 | 74, 675 |
| Prints and dyea. .-.....----. | 7,286 | 28, 791 | 17, 122 | 814 | 2,715 | 913 |
| All other vegetahie materlals (lnciuding ail, etc.) | 48, 192 | 70,454 | 46,505 | 2,084 | 8,070 | 6, 171 |
| Wood pulp, paper board, mad manurlactures of- | 4,948 | 48,304 | 13, 112 | 142,784 | 789, 812 | 811,758 |
| Other Tegetable prodncts --.-.-.---.-.-.-.- | 4,444 | 16, 250 | 7,083 | 765 | 2,767 | 779 |
| Minerals, crude and pertly worked (imeluding coal and cose) | 148,807 | 659, 335 | 180,362 | 94, 142 | 123,346 | 97,382 |
| Minerals, manufacturs of. | 8,888 | 46,277 | 20, 121 | 87,349 | 110, 161 | 88,784 |
| Metals, raw and partly $w$ | 48,766 | 180,970 | 65,265 | 78.623 | 149, 287 | 82,088 |
|  | 40,845 | 149,806 | 57,045 | 29,543 | 118, 168 | 4, 150 |
| Shipa, vehicles, locluding antomobilea, electrical apparatus, instruments, watches, ste-. Other articles. | $\begin{aligned} & 51,207 \\ & 10,648 \end{aligned}$ | $\begin{array}{r} 225,584 \\ 31,386 \end{array}$ | $\begin{gathered} 119,283 \\ 20,386 \end{gathered}$ | $\begin{gathered} 62,966 \\ 3,008 \end{gathered}$ | $\begin{array}{r} 213,860 \\ 11,035 \end{array}$ | $\begin{array}{r} 114,101 \\ 4,182 \end{array}$ |
| Total. | 846,598 | 3,314,111 | 1,204, 571 | 817,347 | 2,278,295 | 1, 142,006 |

## IV. EXCHANGE RATES AND PURCHASING POWER PARITLES

Swedish exchange, unlike French and British, did not go to a premium in New York at the outbreak of the war or during 1914. The rate continued to sag from month to month, reaching a low point of 25.12 cents per krona in 1914, and a low of 24.28 in February, 1915. (The gold par is 26.8 cents per krona.) The explanation of the depreciation is in part that both dollars and kronor were at a discount in London and Paris. Thus individuals in New York could not avoid paying the premium on sterling by purchasing kronor and selling the kronor in London. The demand in New York for kronor, therefore, did notraise this currency to a premium. The various rates appear to have been imperfectly arbitraged, which is not very surprising considering the derangement of the exchange market at that time.

In Sweden, sterling, franes, dollars, and guilders all continued to rise from the outbreak of the war until February or March, 1915. There was then a sharp drop, followed by a slight recovery. By the end of the year all except guilders were below par. German marks went below par in October, 1914, and continued to sag through 1915. Russian rubles were already below par at the beginning of August, 1914, and fell very rapidly after that. Some general idea of the situation can be gathered from the following figures:

Sweden-Percentage rales of exchange, Stockholm on various countries
[Source: Report of the Bank of Sweden]

|  | Hfgh, | $\begin{gathered} \text { High, } \\ 1915 \end{gathered}$ | Low, 1915 |
| :---: | :---: | :---: | :---: |
| Great Britain. | 105.73 | 107.88 | 90. 58 |
| France. | 107. 64 | 103.38 | 82.92 |
| United States. | 103.68 | 109.34 | 03.80 |
| Netherlands. | 108. 67 | 109. 34 | \%6. 01 |
| Germany. | 100. 48 | 98.73 | 78.78 |

The explanation of the discount which attached to Swedish currency in the world's financial center in the early period of the war is found largely in the fact that London was the creditor of other financial centers both in the short time money market and in the long time capital market. London could regularly bring sterling exchange to a premium in foreign markets by calling in loans outstanding in other parts of the world. Under pre-war conditions this sort of pressure was seldom exerted. However, under conditions of the war, the restriction of credit to other markets became unusually severe. New York was placed in the same embarrassing position as Stockholm, and the rate for the pound sterling in dollars went unusually high. But while bankers in New York made strenuous efforts to send gold to meet their obligations, the Swedish Government prohibited the export of gold. Swedish exchange, therefore, remained at a discount longer in the London market than
did dollars in London. It followed logically that dollars, being soon brought close to par in London, rose to a premium in Stockholm. As the war progressed, the demand for Swedish imports by Great Britain and her allies increased. At the same time exports to Sweden were seriously curtailed. The result was that Swedish exchange went to a high premium in London-sterling to a heavy discount in Stockholm. The following figures show the per cent which sterling was of par from 1914 through 1924:

Sweden-Percentage rates for the pound sterling in Stockholm (sight drafts)
[Source: Annual reports of the Baniz of Bweden]

| Year | Eigh | Low | A pergig | Year | High | Low | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1914. | 105. 78 | 100.08 | 101. 65 | 1920 | 102.43 | 94.38 | 9874 |
| 1915. | 107.38 | 90.58 | 101.05 | 1821. | 97.74 | 00. 31 | 04.28 |
| 1918. | 96. 09 | 84. 53 | 91.41 | 1022 | 95. 87 | 00.80 | 98. 23 |
| 1917 | 90.04 | 60.57 | 81.72 | 1023. | 97.63 | 89.50 | 94. 94 |
| 1918. | 92.17 | 72.58 | 80.62 | 1094 | 68.81 | 88.98 | 01.74 |

It is necessary to consider exchange relations between Sweden and Great Britain in order to understand exchange relations between Sweden and the United States. Great Britain took measures to protect sterling in the United States. The other allied countries, aided by Great Britain, took similar measures to protect their exchanges. After a sharp drop in the early autumn of 1915 the sterling rate in New York remained at about $\$ 4.76$ compared with par of \$4.86. Before the United States entered the war sterling, francs, etc., were supported by gold sent to this country and by credits obtained through American banking houses. After the United States entered the war the necessary support was furnished by United States Treasury advances to the allied governments. Inasmuch as the allied exchanges were supported in New York, bills drawn on London, Paris, etc. , originating in other markets, including Sweden, were sent to New York to be disposed of. If the dollar funds thus obtained by bankers and merchants in Sweden could have been freely turned into gold, the gold sent to Sweden and coined at the Swedish mint, obviously no considerable discount on dollar exchange could have arisen in Sweden. But a good deal of the time these conditions did not exist. There was great risk in sending gold from the United States to Sweden. Besides, there was an embargo on gold exports from the United States from September 7, 1917, to June 30, 1919. And then if the gold had reached Sweden, it could not have been coined after April 28, 1916.

Another factor which tended to depreciate dollars in Sweden had to do with the various restrictions placed on commodity imports into Sweden and commodity exports from the United States. Before the United States entered the war the chief hindrance on foreign trade was the allied restrictions on imports into Sweden. After the United States entered the war there was the additional hindrance of American restrictions on exports from the United States. Prices in the United States were not so high that a low rate for dollar exchange was required to attract purchasers of dollar drafts. On the con-
trary, prices were much higher in Sweden than in either Great Britain or the United States. The large supply of dollar drafts in relation to the demand for such drafts was due especially to the trade restrictions which interfered with the importation of American and other goods into Sweden. The accompanying chart (No. 66) shows the high and low exchange rates in New York for Swedish kronor since 1914.

After the United States entered the war in 1917 the premium on the krona increased. In November, 1917, the krona was selling for over 47 cents, as compared with par of 26.8 cents. The decline from this high point was rapid, although a reaction took place in the spring and summer of 1918 when the allies were meeting with military reverses.

After August, 1918, the krona began to fall in New York-dollar exchange in Sweden began to rise rapidly. The krona reached par in March, 1919, and continued to decline rapidly, since it was in this month that the artificial support in New York was withdrawn from the pound and other allied currencies. The noon rate for cable transfers fell to 17.70 cents per krona February 4, 1920, and, after recovering to 22.35 cents in April, fell again to 18.60 cents November 8, 1920. The decline during the last half of 1920 was due in part to the business depression in the United States. The United States had become a creditor nation. American merchants and banks were holding large quantities of foreign bills, and when the credit stringency came endeavored to cash in on their holdings.

The value of the krone in New York recovered rapidly in the early part of 1921, reaching over 23 cents in March, April, and May, but fell again in the summer, and in July and August was down nearly to 20 cents per krona. However, this marked the end of depreciation of much extent, and beginning in August, 1921, the rise was continuous until par was practically touched in February, 1922. A slight reaction took place in July, but by November, 1922, the krona was a little above par. Since that time the depreciation has been minor, although until the end of 1924 the krona was slightly under par. Sweden returned practically to the gold standard in April, 1924, and exchange rates have thus been within the "gold points."

The rapid fall of the krona in 1919 was due in large measure to the fact that prices in Sweden were relatively higher than in the United States, and higher also than in some other countries when exchange rates are considered. Swedish merchants began to take advantage of these lower foreign prices soon after the armistice. The relatively greater depreciation of the krona in Sweden than of the dollar in the United States is shown in purchasing-power parities between the dollar and the krona. These are computed according to the index numbers of prices in the two countries and represent the parities of the two currencies on the basis of purchasing power each within its respective country.

The accompanying chart (No. 67) shows the purchasing-power parities between Sweden and the United States from the first of 1919 to the present. It will be noticed that the wide discrepancy between exchange rates and purchasing-power parities at the first of 1919 rapidly became less. However, until May, 1922, the krona in New York was overvalued; i. e., was not as greatly depreciated on the ex-

change market as warranted by the relative internal purchasing powers of the two units. This undervaluation of the dollar, or overvaluation of the krone, was due partly to liberal grants of credit in the United States up until about the middle of 1922, after which time less credits were granted. This greater depreciation of purchasing-power parities than exchange rates can be seen in the chart.

From May, 1922, until the latter part of 1924 exchange rates most of the time were below purchasing-power parities. Since the fall of 1924 the two curves have been close together, which is as would be expected. Various factors prevent emplete agreement in the curves, but under normal conditions the tendency is for the curves to come close together.
 vuoxy rad mueo



## V. RETURN TO GOLD STANDARD

On March 29, 1924, the Swedish Parliament voted to resume specie payments effective April 1. Accordingly, the Riksbank was required to redeem in gold, and the embargo on the export of gold was removed. Importations of gold, however, was prohibited except to the Riksbank. As a matter of fact, the right to export gold was not completely free, although nominally there were no restrictions. For some time after the resumption of specie payments, April 1, 1924, the dollar was above the gold export point for dealers in exchange, although perhaps not for other individuals. The Riksbank requested dealers who might have exported gold with profit not to do so. Later all restrictions on gold exports were removed so that at present the exportation of gold is free to all parties.

As regards the restrictions on gold imports, the Minister of Finance gave assurances that they would soon be removed. The reason for including that feature in the act was the fear that there might be a large influx of gold and another period of inflation. If such inflation did occur, the Government did not want the Swedish currency to take part in it. Representatives of labor interests in Parliament were and still are strongly opposed to any policy which would lower appreciably the purchasing power of the krona. They realize that wages do not promptly become adjusted to rising prices. They therefore feel that a rise of prices would put the Swedish workingman in a less favorable position, unless existing wage agreements could be readjusted at the same time. Such a readjustment of wage agreements would be attended with difficulties. There is thus pronounced opposition in Sweden against rising prices.

When Sweden returned practically to the gold standard in April, 1924, prior to other European countries, fear was expressed in Sweden and also in Great Britain that the country was subordinating itself to the price policy of the United States. The krons was being tied to the dollar, it was said. The United States at that time was the only large country upon the gold standard. The United States had not permitted the value of gold to become depreciated, but had maintained prices at a more or less stable level. The United States did not inflate on the large gold reserve in the country, since the gold was not looked upon as a permanent possession and since inflation would have been disturbing to the economic life of the country.

The criticism directed against Sweden's policy was that the United States might not be able or would not continue to hold prices relatively stable, and that if Sweden were on the gold standard she would be powerless to prevent a rise in prices in Swden should general depreciation of gold take place. These fears did not gain much headway, and subsequent events have shown them to have been unfounded. The United States had no desire to depreciate gold, and since the spring of 1921 prices in the United States have been relatively stable.

The early return to the gold standard in Sweden was made possible by the extremely rapid liquidation of credit and prices that occurred
during and after the business crisis of 1920. One of the most important conditioning factors of this rapid liquidation was the high discount rate maintained by the Bank of Sweden. The Bank of Sweden maintained its high discount rate of $71 / 2$ per cent from September 17, 1920, until April 27, 1921. The rate was then lowered by degrees, but it did not reach 5 per cent until March 10, 1922. The index number of wholesale prices fell from 362 in September, 1920, to 182 in September, 1921; and toward the end of 1922, prices relative to the pre-war base were approximately the same in Sweden as in the United States.

This rapid rise in the internal value of the krons was the most important influence tending to increase the value of the krona in the exchange market. The rate was very close to par in August, 1922; and by November, it tended to stay a little above par. Cable transfers, as quoted in New York, touched 27 cents January 3, 1923.

The Riksbank did not welcome this tendency of exchange rates to go above par, and so began to accumulate a large amount of foreign assets in the latter part of 1922 . Its holdings of foreign bills and securities and foreign bank balances increased from $166,763,800$ kronor December 2 to $247,914,100$ kronor on December 30, 1922. By February, 1923, there was a slight tendency for the krona to go below par. The Riksbank then supported the rates by selling some of its foreign assets. Total foreign assets-bank balances, bills, and securities-amounted to 247,313,500 kronor on January 5, 1923. By November 24, 1923, this total had declined to $122,652,000$ kronor. Foreign bills, after reaching $56,953,500$ kronor on February 10, 1923, declined quickly to $1,599,400$ kronor on June 30, 1923.

The latter part of 1923, and in 1924, the Riksbank was convinced that the dollar rate in Sweden was higher than underlying conditions warranted. It therefore sold exchange to importers, but not to speculators, below the market rate. However, the difference between the two rates was not great.

In spite of the support given the krona by the Riksbank, the rate continued a little below par after the early part of 1923. At the close of the year it was at an average discount of about 2 per cent; although the discount rate at times was as high as 3 or 4 per cent. The Riksbank raised the bank discount rate from $41 / 2$ to $51 / 2$ per cent on November 9, 1923. The effect of this measure seems to have been to keep the krona from sagging further. Prices were falling in the United States at this time.

At present the burden of stabilization of the krona is thrown upon the bank. Credits in New York were arranged in 1924 after resumption was begun, in order to facilitate exchange stabilization. The bank exported gold and the gold reserves declined from about $271,000,000$ kronor at the end of March to about 237,000,000 at the end of December, 1924. The foreign assets of the bank declined from about $100,000,000$ kronor at the end of March to about $66,000,000$ early in June. By the end of the year they had been restored to about $136,000,000$ kronor. Seasonal exports which begin in the summer months created a greater supply of bills so that the value of the krona rose, and the bank was assisted in its efforts to sustain exchange rates. Foreign loans also contributed to the increase in the bank's holdings of foreign assets in the latter part of the year. The following average figures show the reduction in the bank's foreign assets in 1924.

## Sweden-Foreign assets of the Bank of Sweden

[Source: Annual reports of the Bank of Sweden. Yearly average of monthly totals. In thousands of kronor]

|  | Foreign <br> government se | Foreign bills | Current sceaunt balances abroad (net) | Tatal |  | Foreign governcurities | Foreign bills | Current Bccount balances abroed (net) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1915 | 41,407 | 63,987 | 23,783 | 129, 158 | 1920 | 41,398 | 54, 140 | 41,908 | 1 137, 554 |
| 1916 | 68,876 | 112, 695 | 36,781 | 208, 352 | 1821 | 13,039 | 70,677 | 40, 888 | 124,806 |
| 1917. | 63,903 | 113, 684 | 22, 114 | 180, 701 | 1922. | 60, 313 | 61, 246 | 40, 270 | 181,829 |
| 1918-7.-.---- | 51, 941 | 100, 043 | 32, 448 | 184, 427 | 1023 | 119,497 | 14,332 | 45,601 | 170. 520 |
| 1919.-. | 49,507 | 80,982 | 53, 606 | 184,086 | 1024 | 56, 403 | 1,179 | 40, 130 | 06,718 |

1 Includes a "special account" of (average) 22.2 thousand Eronor.
The government finances in Sweden have been in better shape since the outbreak of the war than those in most other European countries. Sweden found it necessary to increase expenditures considerably as a result of war-time conditions. However, revenues were increased at the same time, and in some years revenues increased to even a greater extent than did expenditures so that a surplus resulted. For the years 1920 to the present expenditures have been greater than revenues, although the deficits have not been sufficiently large to cause much disturbance to currency or exchange conditions.

The total debt of Sweden is now about three times what it was before the war. At the end of 1913 the total debt amounted to 648,287,000 kronor, while at the end of 1923 it amounted to $1,643,000,000$ kronor, all of which latter amount was funded debt with the exception of about $46,000,000$ kronor. The condition of the Government's finances is thus not such as to lead to inflation. The following tables show the receipts and expenditures since 1912 and the condition of the debt at the end of each year since 1910.

Sweden-National debt, 1900-1924
[Source: Rlksgaldskantoret-ísbok, 1923-24]

| Year | State bonds | Other funded debt | Flosting | Total debt |
| :---: | :---: | :---: | :---: | :---: |
|  | Troner | Eronor | Ereaer | Eromor |
| 1000 | 337,800,000 | 5, 191, 000 |  | 343, 050, 000 |
| 1001 | 340, 132,000 | E, 145, 000 |  | 354, 277,000 |
| 1002 | 346,623, 000 | 7,347, 000 |  | 354, 010,000 |
| 1003 | 345, 214, 000 | 7, 297, 000 |  | 352, 311,000 |
| 1904. | 383,944, 000 | 7,240,000 |  | 391, 150, 000 |
| 1905 | 408, 158,000 | 6,085,000 |  | 412, 243, 000 |
| 1906 | 420,852, 000 | 6,055, 000 |  | 420,907,000 |
| 1007 | 464,360, 000 | 3, 743,000 |  | 468, 102,000 |
| 1908 | $515,376,000$ | 3,005,000 |  | 519,071, 000 |
| 1909 | 548, 128, 000 | 6, 047,000 |  | 854, 173,000 |
| 1910 | 537, 428,000 | 5, 957,000 |  | 643, 883,000 |
| 1911 | 600, 006, 000 | 5,883, 000 |  | 611, 040,000 |
| 1912 | 602, 200, 000 | 8, 784,000 |  | 607, 084,000 |
| 1913 | 622, 5601,000 | 5,662,000 | 20,054, 000 | 648, 878,000 |
| 1914 | 685, 835, 000 | 5,556,000 | 43,084, 000 | 744, 455, 000 |
| 1915 | 812,609, 000 | 5,483,000 | 36, 819,000 | 854, 871, 000 |
| 1916. | 930, 217,000 | 5,325,000 | 67,708,000 | 056, 246, 000 |
| 1917 | 997,909, 000 | 10,916,600 | 140,311,000 | 1, 140, 220,000 |
| 1918 | 1, 066, 197,000 | - 11, 6at, 000 | 859, 313, 000 | 1. 656, 179,000 |
| 1819 | 1,271, 118,000 | 10, 40\%,000 | 285, 474, 000 | 1,508, 008, 000 |
| 1920. | 1, 270, 411,000 | 10, 143, 000 | \% 215, 941,000 | 2, 406, 524,000 |
| 1921. | 1, 423, 485, 000 | 9,802,000 | ${ }^{2} 77.630,000$ | 2, $510,987,000$ |
| 1922 | 1, 453, 379,000 | Q, 837.000 | : 80, 448,000 | 1, 551, 464,000 |
| 1923 | 1,560 651,000 | $\begin{array}{r}88,299,000 \\ \hline 40,519,000\end{array}$ | $46,106,000$ $85,873,000$ | $1,648,088,000$ $1,634,008,000$ |
| $184{ }^{2}$ | 1, 567, 316,000 | 140,549,000 | 85,872,000 | 1,034, 038,000 |

Sweden-Receipts and expenditures, 1918-1982
[Soarco: Statistisk Arsbok; 000 omittad]

| Year | Ordinary reve nine | Net nevenus from publice enter prises and prodno qive funde | Total recelipts notiscluding ceeds from loans) | Ondnary епреди: diture (not includlag interast and amortiration of debs) | Deficlt | Sarplus | Capital expenditure | Proceeds trom nowns | Amor Hzation of debt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kromar | Eromer | Ktomor | Kronor | Kronar | $\overline{\text { Ironor }}$ | Kronor | Yrandr | Ironor |
| 1912 | 194, 588 | 54, 109 | 248, 735 | 196, 098 |  | 62, 629 | 51, 298 | 41,608 | 6,204 |
| 1913 | 203, 834 | 60, 404 | 284, 238 | 205, 320 |  | 58,918 | 47,396 | 40,429 | 6,377 |
| 1914 | 198, 111 | 63, 391 | 261, 402 | 215, 458 |  | 45,944 | 47, 177 | 37,705 | 7,099 |
| 1915 | 288, 655 | 76, 232 | 364,887 | 278, 714 |  | 86,173 | 127,680 | 49,345 | 5, 106 |
| 1916 | 331,047 | 81, 422 | 413,369 | 361, 265 |  | 62, 201 | 68, 667 | 58,605 | 4,839 |
| 1917 | 535, 243 | 100, 444 | 635, 687 | 395, 329 |  | 240, 358 | 247,446 | 347, 685 | 4,977 |
| 1918 | 749,407 | 68, 489 | 817,905 | 904, 959 | 87,054 |  | 645, 397 | 723,085 | 167,901 |
| 1918. | 845, 298 | 16,740 | 862, 038 | 668, 604 |  | 198,434 | 179,879 | 179, 840 | 5,454 |
| 1920. | 802,458 682,929 | 32, 609 | 759, 161 | 722, 494 |  | 112,068 | 183, 745 | 186, 540 | 38,388 5620 |
| 1920 | 642, 652 | 109,440 | 652,092 | 778,913 | 126, 821 |  | 173,449 | 89,591 | 7,045 |

Sweden-Receipts and expenditures (budget estimates) for 1925-84 and 1884-25 ${ }^{1}$
[Source: Statistisk Arsbok for Sverige. Thousands of kronor]

|  | 1928-24 | 1824-25 |
| :---: | :---: | :---: |
| Taxes: micmpes |  |  |
| Income tax and tax on capital. | 130,000 | 135,000 |
| Stamp duties. | 48,000 | 40,000 |
| Customs dutien. | 117,000 | 123,500 |
| Sugar tax - | 26,000 | 25,000 |
| Spirits, malt, and ean de vie. | 89, 700 | 88,000 |
| Bundry taxes .................. | 27, 829 | 16, 63 A |
|  | 478, 524 | 472, 134 |
| Revenues from pablic entarprises:1 |  |  |
| Postal service. - | 10,000 | 18, 000 |
| Telegraph service | 18,000 | 17,000 |
| Rasways -------- | 28,000 | 36, 000 |
| Waterfalls and canals | 8,300 | 10,000 |
| Public dombin --...- | 30,000 | 13,000 |
| Revenue from Iron ore properties and tobacco m | 12,380 | 12,290 |
| Revenue from government loan fund..----.-- | 7,285 | 7,884 |
| Revenue from spirits fund. | 2,200 18,000 | 14,000 |
|  | 138, 145 | 127,074 |
| Revenue balances and surglus from provious loans. Proceeds from now loans. | $\begin{aligned} & 70,778 \\ & 94,202 \end{aligned}$ | $\begin{aligned} & 34,034 \\ & 41,196 \end{aligned}$ |
| Tatal recalpte | 775,649 | 674,488 |
| Ordinary erpenditure: . Experiditubin |  |  |
| Civit list.....-. | 1,778 | 1,797 |
| Department of Justice. | 13,407 | 12,951 |
| Tareign offlice......-.- | 6,224 | 5,621 |
| Ministry of defense. | 149,943 | 147,512 |
| Ministry of social wolfars. | 76,980 | 77,590 |
| Ministry of commumitations. | 19,702 | 10,783 |
| Ministry of floanca--..ur wo | 42,483 122,117 | 41, 792 122,550 |
| Ministry of agriculture.... | 121,859 | 21, 238 |
| Ministry of commeroe. | 11,632 | 10,883 |
| Pensiona | 32,589 | 33,937 |
| Otherer expenditure.... | 88,170 $B, 240$ | 79,172 8,966 |
|  | 687, 122 | 581,633 |

1 The fiscal year was changed in 1923 from the calendar year to the year anding June 30.
: Only net emounta to be actually turned over to the treatury are foluded.

Sweden-Recoipts and expenditures (budget estimates) for 1929-24 and 1924-26Continued

|  | 1923-24 | 1824-26 |
| :---: | :---: | :---: |
| Capital expenditure: Expendiruesg-continued |  |  |
|  |  |  |
| State enterprises, manopolies, public domain, etc. | 52, 102 | 29,046 |
| Amortization of national debt | 7,634 | 7,009 |
| Temperance fund... | 26, 500 | 27,900 |
| Repayment of loans... | 49,181 |  |
| Investments............. | 15,000 31,390 | 4, 21, 050 2, |
| Appropristions for loan fund | 151,390 6,710 | 21, 2, 000 |
|  | 188, 628 | 92,804 |
| Total expenditures.. | 775,648 | 674,438 |

## SWITZERLAND ${ }^{1}$

## 1. PRE-WAR CURRENCY

Before the war Switzerland was -upon the gold standard. The standard monetary unit was the gold franc, containing 0.32258 of a gram of gold 0.900 fine, and worth 19.2948 oents in American money. Switzerland was a member of the Latin Monetary Union, established in 1865 (ratified by Switzerland March 5, 1866). The Latin Monetary Union gave the countries the bimetallic standard at a mint ratio of silver to gold of 15.5 to 1 . Before 1867 silver was undervalued at that ratio, and was therefore being gradually displaced by gold. But after 1867 gold was undervalued and began to be displaced by silver. After about 1873 the price of silver fell to such an extent that large quantities of silver were brought to the mints of the various countries to be coined, and the circulation began to be flooded with silver money. In Switzerland, however, free coinage of silver had never been allowed, and the coinings there were very moderate compared to those in France, Belgium, and Italy.

In 1874 the countries of the union agreed to limit the coinings of silver 5 -frane pieces (écus) to $140,000,000$ francs for that year. For 1875 the limit was raised to $155,000,000$ francs, then reduced to $120,000,000$ for 1876.2 Italy in July, 1875, suspended the free coinage of silver to private individuals, and France in August 1876 adopted a similar measure. Belgium in December, 1876, prohibited the free coinage of silver from the 1st of January, 1877. Free coinage of silver, as already noted, did not exist in Switzerland. A monetary conference in 1878 suspended completely the coinage of 5 -franc pieces. However, the convention in 1885 restored the right of coining 5 -franc pieces to the different States, but each State was obliged to redeem its own silver coins in gold on demand of any other contracting State.
Although Switzerland had stopped the coinage of silver, the silver 5 -franc pieces continued to be legal tender,' but their value no longer tended to conform to the value of their bullion content. They were not redeemable in gold, but were kept on a parity with gold because of the limitation of their supply. Thus Switzerland to all purposes had been upon the gold standard before the war from some time in the seventies.

The situation was very much like that in the United States after 1878. The banks in the United States had and still have the legal right to redeem their obligations in silver dollars, but in practice it has always been possible to get gold without paying any premium. This was the case in Switzerland, and the Swiss National Bank, the central bank of issue since 1907, has not followed the practice of some central banks of exercising its option to redeem in silver at times when gold was leaving the country and charging a slight premium for gold.

[^74]The national bank was not legally required to buy gold at a fixed price, but it usually did buy at the rate of 3 francs per gram of gold 0.900 fine. The bank also frequently entered the foreign exchange market as a buyer or seller of bills in an effort to keep exchange rates as steady as possible.

At the end of 1913 there had been coined $161,600,000$ francs of gold coin and $59,200,000$ francs of silver coin, of which $10,600,000$ were 5 -franc pieces struck in accordance with the agreement with the other countries of the Latin Union. Besides these amounts there were $13,100,000$ of nickel and a small amount of copper coin. It is not possible to say just how much of this money had been lost and sent abroad and how much foreign money was circulating in Switzerland. In addition to the metallic money, there were also in circulation at the end of 1913 about $314,000,000$ francs in notes of the Swiss National Bank.

Banking was decentralized in Switzerland before 1907. Most of the cantons had their own banks of issue, and the notes usually did not have a wide circulation. The Federal Chambers passed an act October 6, 1905,4 creating the Swiss National Bank. This bank was given the exclusive right of note issue (after three years) and other powers commonly given to central banks.

No limit was set to the amount of the note issue, and no tax was laid upon any of the notes. The bank was simply required to keep a reserve against its notes of not less than 40 per cent. The reserve might be either gold or coined silver, but in practice the reserve has consisted largely of gold. The bank was required to redeem its notes unconditionally in either gold or silver. Before August, 1914, the notes were not legal tender, but government offices were required to accept them. The bank has several offices, but they are all coordinate and have in common one board of directors, which is selected by the Federal Council. The bank is thus under the general supervision of the Federal Government. The Federal Government and the cantons participate in the profits of the bank. The bank has a paid-in oapital of $25,000,000$ francs and a surplus of $6,941,000$ francs.

The bank is authorized to hold demand and time deposits and to discount domestic and foreign bills of exchange. It is also authorized to buy treasury bills and to make loans on collateral security terminable in 10 days. It is not restricted to business with other banks and the Government, but it may carry on a general banking business with private customers. It is not allowed to deviate from its official rates in such business as does the Bank of England, and as do the Federal reserve banks in their open-market dealings.

In general, it can be said that the Swiss National Bank provides a means of control over the credit structure of Switzerland. Its notes, and the deposit credits on its books constitute a large part of the reserves of the private banks. If the central institution enlarges its note circulation and deposits (either through the receipt of gold and silver or through the purchase of eligible paper), the basis exista for an expansion of the deposit credits of the private banks. On the other hand, when the central institution curtails its credit by curtailing its loans and discounts, which it does by giving them on less attractive terms, the private banks have to curtail also.

[^75]
## CURRENCY AND FINANCLAL CONDITIONS-SWITZRRLAND 269.

The bank is a bank of rediscount, but it controls the supply of credit in other ways than through influencing the amount of rediscounting. The official rates are usually higher than the rates charged by private banks for the better class of paper, and consequently the banks are discouraged from rediscounting any more than necessary. A large part of the paper which the bank holds is not that which commands the low rate quoted in the market but paper less well known (though doubtless just as secure) which commands a less favorable rate, and which the bank takes from its private customers. By regulating the amount of business it does of this character, the bank controls the supply of funds given to the market as effectively as by regulating the amount of rediscounting it does for banks. To the extent that the bank holds deposits of private individuals and firms, the multiple effect of credits granted is not felt.

Since the bank held most of the gold in the country not in hand to hand circulation, it had to bear the burden of any demand for gold for export whenever exchange on other countries went above the gold export point. In order to protect its gold reserve it endeavored to keep foreign exchange rates within the gold export point. The bank watched business and credit conditions with special reference to developments that might affect the exchanges.

## II. CURRENCY, CREDIT AND PRICE MOVEMENTS, 1914-1925

As in other European countries, immediately after the outbreak of the war there was a shortage of currency in Switzerland. Note circulation, as can be seen from the chart (No: 68) increased very sharply in the middle of 1914 from an average of $282,800,000$ francs in July, 1914, to an average of $437,900,000$ in August, 1914. Current accounts and deposits ${ }^{\text {a }}$ of the Swiss National Bank increased from

CHART 68
Namonal Bany of Switzerland-Note Circulation, Gold and Silyer, Rebebyed, Current Accounts and Deposits and Notes, Montely, 1912-1925

End of month

$47,700,000$ to $77,700,000$ during the same interval. These increases were not on account of greater business activity, but to a large extent on account of hoarding of both coin and bank notes. Gold soon began to disappear from circulation. Part of it went into private hoards, and part of it went to increase the gold reserve of the national bank. The notes of the bank were made legal tender and the suspension of specie payments was authorized July 30, 1914.

[^76]An immediate effect of the war upon Switzerland was to depress business. Discounts and advances, which had increased sharply at the outbreak of the war, soon declined. In the second half of 1915 business began to improve, stimulated by orders for supplies from belligerent countries. The demand for credit increased. The chart shows the monthly incresse in the credit issued by the Swiss National Bank.

Inasmuch as the notes of the bank can be used as till money by the private banks, and deposit credits with it can be used by them as reserve, an increase in the credit issued (both in the form of notes and deposits) by the bank tends to generate a concurrent increase in the credit issued by the private banks. The credit expansion in the Bank of Switzerland and in the private banks is illustrated by the following table, which gives amounts as of the end of the year.

Switzerland-Expansion and contraction of credit, 1912-1983
[Borrce: Btatements of the Swien National Bank and das Sch weirsarishe Bankwesen im Jahre 1024. Piguree are as of the end at December of eech year; 000 amitted]

| Year | Ewriss National Bank |  |  | Other banka |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Note circulatlon | Current accounte and depoalts | Discounts and advances | $\begin{aligned} & \text { Number of } \\ & \text { banks ! } \end{aligned}$ | Current accounts and deposilts | Discounts and current as counts debitory |
|  | Pranct | Tranes | Praner |  | Framich | Pranes |
| 1012 | 339,240 | 65, 491 | 197,310 | 814 | 1,557,360 | 8, 116, 697 |
| 1018. | 313,821 | 88,050 | 174,802 | 300 | 1, 587,969 | 3, 250, 028 |
| 1914 | 455,889 | 70,930 | 215,749 | 320 | 1, 619,634 | 3, 008, 791 |
| 1915 | 465, 609 | 81, 688 | 210, 889 | 319 | 1, 981, 781 | 8, 261, 205 |
| 1916. | 538, 518 | 128, 916 | 24, 276 | 819 | 2, 451, 441 | 3,726, 089 |
| 1917 | 702,303 | 137,324 | 406,702 | 317 | 3, 017,240 | 4, 263,434 |
| 1918 | 975, 708 | 183,706 | 624, 181 | 316 | 8, 534,031 | 4,761,309 |
| 1919 | 1, 0388 | 175, 308 | 544, 107 | 342 | 8, 932,544 | 5, 611, 295 |
| 1920 | 1,023, 712 | 183, 166 | 811, 24I | 340 | 4, 0088,278 | 8. 782,071 |
| 1021 | 1,009,204 | 128,765 | 453, 819 | 840 | 8, 640,684 | 5,218,944 |
| 1922 | 976, 48 | 165,031 | 486, 56\% | 343 | 8, 397, 245 | 4,816,859 |
| 1023 | 981,988 | 104,860 | 439,283 | 336 | 8, 458, 354 | 4,772,100 |
| 1924 | 013,912 | 120, 000 | 881, 522 | - |  |  |

1 Groupe of banks Included in 1023: 24 Kantonalbanken; 8 Groesbanken; 7 Lokal-und Mittelbanken; 68 Spar-und Leflkassen; I Reltelsenkesse; 18 Hypothekenbanken; 118 Sparkassan; 25 Trustbanken; 1 Uberseebank.

The reserve basis for the increase of credit during and after the war was furnished by gold, and by silver coin imported from the belligerent countries. Large emounts of gold were sent in by the various Governments-taken from the reserves of the central banks-and additional amounts were brought in by private individuals who were able to evade the embargo of the country of export. The gold reserves of the national bank at the end of 1913 amounted to about $170,000,000$ francs. By the end of 1915 this had increased to $250,000,000$; at the end of 1918 to $415,000,000$; at the end of 1921 to $550,000,000$, which was the high point. At the present time the gold reserve amounts to about $505,000,000$ francs and the silver reserve to about $90,000,000$.

There was especially a strong tendency for silver 5 -franc pieces (6cus) to gravitate to Switzerland after the outbreak of war. These coins were "official money" in all the countries of the Latin Monetary Union, regardless of which member of the Union had struck them.

Swiss exchange was at a premium in most of the other countries of the Union, and profits could be made by shipping the silver currency to Switzerland, although it was illegal to do so. Moreover, there was no tendency for the 5 -franc pieces to go outside the Latin Union, becruse their monetary value (down to 1919 and again later) was much greater than the value of their bullion content. ${ }^{2}$ The following table shows gold and silver imports into Switzerland by years:

Switzerland-Gold and silver imports and exports, 1910-1928
[Bource: Statistiv des Auswartigen Handels der Schwelz. Thousands of france]

| Year | Gold coln and bullion |  |  | Silver coin |  |  | Ellver bullion |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inports | Exports | Net imports | Imports | Exports | Net Imports | Imports | Exports | Net imports |
| 1910 | 82,697 | 24,350 | 58,347 | 23,012 | 7,411 | 14,601 | 7,453 | 1,097 | 6,356 |
| 1911 | 68, 275 | 27, 722 | 40,353 | 23, 175 | 7,021 | 16,154 | B, 040 | 099 | 7,041 |
| 1912 | 78, 728 | 27,822 | 50,908 | 49,920 | 8,581 | 41,330 | 8,700 | 756 | 7,953 |
| 1813 | 88, 270 | 28, 378 | 29,892 | 62,726 | 9,836 | 42,890 | 7,333 | 1,116 | 6, 217 |
| 1914 | 58, 532 | 6,144 | 52,388 | 15,702 | 4,517 | 11, 185 | 6,061 | 827 | 5,244 |
| 1915 | 16, 764 | 1,739 | 15,025 | 27, 840 | 2,303 | 25, 837 | 8,673 | 2,013 | 3,600 |
| 1918 | 118, 634 | 828 | 117, 706 | 23,779 | 1,385 | 22,414 | 10,315 | 1, 158 | 9, 150 |
| 1017 | 36, 0002 | 2,834 | 33, 168 | 9,919 | 1,094 | 8,825 | 11,361 | 991 | 10,370 |
| 1918. | 84, 668 | 1,408 | 83.148 | 1,463 | 1,386 | 83 | 5, 215 | 29 | 5,186 |
| 1919. | 67,369 | 116 | 57,253 | 12.114 | 3,888 | 8,231 | 8, 346 | 71 | 8, 276 |
| 1020 | 30, 513 | 1.884 | 37, 289 | 40, 401 | 40, 416 | 114 | 0,064 | 881 | 8, 198 |
| 1921 | 475, 291 | 376, 238 | 99, 055 | 6.775 | 3, 416 | 3,360 | 8.812 | 6.57 | 6, 056 |
| 1022 | 179,853 | 79,992 | 99,61 | 822 | 2,607 | 11,785 | 6, 400 | 1, 108 | 4,391 |
| 1828 | 163, 091 | 94,307 | 68, 784 | 1,110 | 10,457 | 19,347 | 3, 643 | 420 | 3,213 |
| 1824. | 22,563 | 129, 657 | 1 107, 094 | 912 | 132 | 480 | 7,170 | 12,442 | 15,276 |

## 1 Net exports.

Gold imports during the war period, largely in the shape of coin, came chiefly from Germany and Austria, for the purpose of effecting payments and supporting exčhange. These imports were particularly heavy in 1916. Gold exports, which were permitted only under license, were insignificant. The very large importe and exports of gold in 1921 represent chiefly a movement of Russian gold brought from Sweden and, to a small extent, from Russia direct. This gold, when in coin form, was melted, stamped, and then reexported to the United States. In 1922 and 1923 the gold imports include considerable amounts of German gold deposited as collateral by the German Reichsbank.

The reserve held against the notes has been much greater than the legal minimum of 40 per cent. This increase of the reserveespecially gold-was somewhat of a stimulus to credit inflation, because the business community had become accustomed to considering the reserve ratio as an important indicator of the amount of credit that may be issued. The accompanying chart (No. 69) shows certain

[^77]items of the national bank plotted on logarithmic scale. The chart shows especially the relative credit expansion of the bank since 1914.

Government financing also had some effect upon the amount of inflation which took place, but it is impossible to judge how much

CHART 60
 MONTHLT, 1912-1924

End of month

effect. The Federal budget has not balanced since the war began, but an unbalanced budget does not necessarily mean inflation of the currency, since the deficits may be met out of savings. Switzerland has had good credit continuously, and at no time has the treasury borrowed from the national bank because it could not borrow else-
where. Nevertheless, treasury bills have been discounted at the bank in large amounts. The legal limit for three-month bills which the bank may hold was placed in 1923 at $200,000,000$ francs for the Confederation and $150,000,000$ for the Federal railways. The following table shows the amount of treasury bills held by the bank at the end of each year:

## Switzerland-Treasury bills ${ }^{1}$ discounted by the Swiss National Bank <br> [Source: Statements of Swiss National Bank, Millions of france]

| Year | Amounts discounted by the national bank during the year | Amounts sold by the bank in the open marLet during the year | A mounts held by the bank at the end of the year | Year | Amounts discounted by the nationsl bank during the year | Amounts sold by the bank in the open maryet during the year | Amounte held by the bank at the end of the year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1914. | 124.0 | 1.5 | 68.5 | 1920 | 1,949.0 | 1,494.0 | 280.0 |
| 1915. | 444.1 | 175, 5 | 75. 3 | 1921 | 1,884.0 | 1,463.0 | 1770.0 |
| 1918. | 853.7 | 519.1 | 12.8 | 1922 | 1,053.0 | 290.0 | 1217.0 |
| 1917 | - 1,3920 | 880.0 | 233.0 | 1923 | 1,420.0 | 1,011.0 | 178.0 |
| 1918. | 1,962 0 | 1,293.0 | 3120 | 1924. | 181.0 | 188.0 | 10.0 |
| 1019. | 2,365.0 | 1,321.0 | 301.0 |  |  |  |  |

${ }^{1}$ Includes short-time obligations of the Federal railways.
' Excludes noninterest-bearing Fedoral obligations representing the difference between the nominal Falue and the bullion value of silver coin retired from clrculation-1921, 117,300,000 francs; $1022,108,100,000$; 1923; 76,800,000; 1024, 78,000,000.
An abundant supply of funds kept discount rates at a low figure most of the time during the war, especially prior to 1918. Capital flowed into Switzerland from belligerent countries, since Swiss investments were considered more secure. The following table shows the discount rates of the national bank and also the discount rates of private institutions. The private rates are only for the better class of commercial bills. It will be noticed that the private rates are uniformly below those of the national bank. During the period immediately following the war the rate of the national bank was $51 / 2$ per cent. This was lowered to 5 per cent in the fall of 1919. At this time the bank was carrying a large amount of government securities, prices were rising, and the premium on dollar exchange was increasing. The rate was lowered by gradual steps until it reached 3 per cent in August, 1922, being raised to 4 per cent in July, 1923, where it still remains.

Switzerland-Discount rales (monthly averages), 1917-1923
[Source: Statistisches Jabrbuch der Schweiz and dats furnished by the Swise National Bank]

| Month | 1917 |  | 1918 |  | 1919 |  | 1920 |  | 1921 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Swiss $\mathrm{Na}-$ tional Bant | Private | Bwis? <br> Nar <br> tional <br> Bank | PriVate | 8wist Na thonal Bank | $\underset{\text { vate }}{\text { Pri- }}$ | Smiss Nstional Bank | Prt vate | 8wist Na thenal Bank | Privale |
| January | 4.50 | 3.50 | 4.50 | 419 | 6.50 | 6.15 | 3. 00 | 4.74 | 3.00 | 4.33 |
| February | 4.50 | 3.09 | 4.50 | 416 | 6.50 | 4.83 | 3.00 | 4.65 | 6. 00 | 4.23 |
| March. | 4.50 | 235 | 4.30 | 3.92 | 6. 50 | 4.72 | 5. 00 | 46 | 5.00 | 4.17 |
| A pril. | 4.50 | 203 | 4.50 | 3.69 | 650 | 4.67 | 5.00 | 4.68 | 4.00 | 8. 00 |
| May. | 4.50 | 1.84 | 4.50 | 3.37 | 6. 50 | 471 | 6.00 | 4.68 | 450 | 3. 62 |
| Juna | 4.50 | 1.82 | 4.50 | 2.28 | 6. 50 | 4.61 | 5. 00 | 447 | 4.50 | 3.52 |
| July. | 4.50 | 1.73 | 4.50 | 2.52 | 5.50 | 4.55 | 5.00 | 4.61 | 4.50 | 3. 24 |
| August | 4.50 | 1.70 | 4.50 | 2.85 | 632 | 4. 62 | 3. 00 | 4.53 | 4.15 | 295 |
| September. | 4.50 | 203 | 4.50 | 4.16 | 8.00 | 4.52 | 5. 00 | 4.34 | 4.00 | 280 |
| October | 4.50 | 3.34 | 5.45 | 5. 02 | 5.00 | 4.60 | 5. 00 | 4.44 | 4.00 | 260 |
| November | 4.50 | 4.22 | 5.50 | 6. 27 | 6. 00 | 4.62 | 5. 00 | 4.48 | 4.00 | 2.75 |
| December. | 4.50 | 431 | 5. 50 | 530 | 6. 00 | 4.60 | 4.00 | 4.48 | 400 | 284 |
| Yearly aver age. | 4.50 | 260 | 4.75 | 4.15 | 5. 32 | 4.60 | 500 | 450 | 4.44 | 3.30 |

Swizerland-Discount rates (monthly averages), 1917-192s-Continued

| Month | 1022 |  | 1988 |  | 102\% |  | 1085 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Bwiss } \\ \text { National } \\ \text { Bant } \end{gathered}$ | Private | $\begin{aligned} & \text { Briss } \\ & \text { National } \\ & \text { Bank } \end{aligned}$ | Private | Swiss Nationsl Bank | Private ${ }^{1}$ | $\underset{\substack{\text { Swion } \\ \text { Bankal }}}{ }$ | Private ${ }^{1}$ |
| nuary | 400 | 268 | 3.00 | 220 | 4.00 | 3.58 | 4.00 | 268 |
| sbruary | 4.00 | 230 | 8.00 | 186 | 4. 00 | 8. 58 | 4.00 | 225 |
| :arch | 2.58 | 201 | 3.00 | 1.38 | 4.00 | 8.69 | 4.00 | 245 |
| pril | 850 | 1.72 | 3.00 | L. 25 | 4. 00 | 2.69 | 400 | 2.50 |
| sy-...-- | 8.60 | 1.44 | 8.00 | 1.45 | 4. 00 | 3.33 | 4.00 | 2.47 |
| line... | 8.50 | 1.36 | 8.00 | 215 | 4.00 | 8.22 |  |  |
| 19.--- | 250 | 122 | 3.58 | 287 | 400 | 8.64 |  | $\cdots$ |
| agust.-. | 3.20 | 1.12 | 400 | 8.62 | 400 | 8.67 |  | - |
| ptember | 3.00 | 1.10 | 4.00 | 3.71 | 4. 00 | 3. 69 |  |  |
| ctober--- | 3.00 | 118 | 400 | 8.72 | 400 | 8.58 |  |  |
| ovember | 2.00 | 183 | 4.00 | 8. 67 | 400 | 8.30 |  |  |
| ecember | 2.00 | 220 | 4.00 | 8.50 | 4.00 | 8.03 |  | ---.-. |
| Yearly averam | 3.30 | 1.68 | 2.47 | 263 | 400 | 8.63 |  |  |

1 Averages of 4 weekly quotations published by the Swiss National Bank.
$\cdot$
CHART 70
 [Inder numbers of Dr. J. Lorenz, 71 commoditise, firnt of month; July, 1014-100]


Prices in Switzerland rose very greatly following the outbreak of war, food prices reaching their maximum in October, 1920. In 1920 prices began to fall and fell rapidly down to the middle of 1921. After a short period of recovery they continued to fall until June, 1922. The course of prices since the first of 1921 is shown in the accompanying chart (No. 70).

The fall of prices was relatively greater than the decline of notes and deposits at the national bank, which fact is accounted for partly by a decline in the velocity of circulation. People preferred to hold their money longer before spending it when it was increasing in value. Also, considerable amounts of both notes and bank deposits were
held by nationals of Germany, Austria, and other countries where unstable currency existed. The London Economist quotes an estimate that of the total of $856,000,000$ of notes then in circulation, $130,000,000$ to $150,000,000$ were held abroad.

A rise of prices of considerable magnitude began in the second half of 1922 and continued until May, 1923. The Swiss National Bank July 14, 1923, raised its discount rate from 3 to 4 per cent and its Lombard (collateral loan) rate from 4 to 5 per cent.

This increase in rates contributed to a short and rather sharp drop in prices; the drop, however, had already started before the change in money rates took place. In September, 1923, prices began to rise again, and continued to do so until the end of the year. Since the middle of 1924 prices have remained relatively stable, accompanying relative stability in the note circulation.

## III, FOREIGI TRADE

Switzerland normally has an excess of merchandise imports. In only one year (1916) since 1890 have merchandise exports exceeded. imports, and in that year, if gold and silver coin and bullion are included, there was a balance of imports. The accompanying chart (No. 71) shows imports and exports since 1890, both value and

OHART 71

[Gpental imposts, i. en imports for domentic consumption; spechal exports, is en erports of domentio merchandise]
[For flgaras ase Table 121]

quantity. It has been drawn to logarithmic scale in order to show the relative movement of physical quantities and values.

The balance of imports in the merchanduse trade is offset by a balance of exports among the invisible items. The principal invisible items are tourists' expenditures, interest and profits on foreign investments, loans made to foreign countries, and loans received from foreign countries. In the case of the first two, the balance is decidedly
"in favor of" Switzerland. In the case of capital movements, there has been no uniformity of late years; sometimes foreign loans have exceeded borrowings and sometimes borrowings have exceeded loans. Prior to about 1919, Switzerland was (in the net) a lending country. Since that time, there have been times when borrowings considerably exceeded loans. Invisible credit items of less importance are receipts on through traffic passing over Swiss railways, and electric power furnished other countries.

For convenience we can list the net result of the items entering into the balance of international payments as follows:
Credits:
Intereat and profits on old inveatments.
Tourists' expenditures.
Receipts for railway services and for electric power furnished other countries (amall in comparison with the first two items).
Debits:
Excess of merchandise imports.
Excess of gold and silver coin and bullion imports.
Loans to other countries (in excess of borrowings most of the time).
This list is not all inclusive, but includes the important items. No trustworthy figures for the actual amounts are available. It is obvious, however, that the balance of the invisible items (when all of them are included) must equal the balance of the visible items.

The accompanying chart (No. 72) shows merchandise imports and exports by quarters from 1910 to 1925. The first effect of the war, it will be observed, was to curtail both imports and exports; the former more than the latter. But this continued only for a few months, and as the war progressed exports increased heavily-largely because of war orders from belligerents. Imports also increased, but not so much as exports. Import quantities, however, actually declined, which indicates that the higher price level which prevailed was an important factor in the increased trade.

Switzerland received payments for part of the increased exports in coin and bullion. Also, Switzerland granted gold credits to various belligerents, totaling $600,000,000$ francs, which are an offset to exports. In addition, Swiss private investors bought considerable amounts of foreign securities. Foreigners acquired Swiss funds in this way with which to help pay for Swiss goods.

After the close of the war in 1919 and 1920 importe increased to figures far above previous records, so far as values are concerned, but not so far as physical quantities are concerned. Exports were correspondingly large in 1919, but not in 1920. The greater part of Swiss imports are in the form of raw materials, while the greater part of the exports are manufactured goods. The strong demand for manufactured goods of the previous months had encouraged heavy purchases of raw materials at high prices. While the materials were in the process of manufacture and handling, prices fell. The sale of the manufactured goods in 1920 did not yield the amounts expected. Consequently, there was a record balance of merchandise imports. Large credits, as a result of bond sales in the United States, were indirectly available to help pay for this excess of imports. During the first part of 1921 imports and exports fell very sharply.

The great drop in the value of both imports and exports since 1920 was one phase of the decline in general business activity. A very considerable portion of Switzerland's exports are regarded as lux-

uries-for instance, silk cloth, the finer grades of cottons, embroidery, ribbons, watches, and jewelry. When business became depressed in Europe and elsewhere the demand for such goods declined relatively more than the demand for other things. Even the export of dairy products, measured in physical amounts, was much less than before the war. Although the depression was of relatively short duration in the United States, the American import duties prevented a great increase in sales to this country. However, exporte to the United States are now much larger than before the war. The decline in exports to Germany where purchasing power was reduced was very marked.

The decline in foreign trade in 1921 seriously affected industry. It was estimated in 1921 that 70 per cent of the people usually engaged in the manufacture of watches were out of employment. In 1922 the number of those unemployed belonging to all industries ranged from 50,000 to 100,000 . The State at this time spent large sums in unemployment doles.

In connection with foreign trade, some attention should be given to the tariff. Switzerland before the war, like most of the countries of continental Europe, had a general tariff, and a conventional tariff, or tariff based on treaties. The duties of the general tariff schedule were seldom applied, because in the first place there were treaties with several countrios giving, along with "most favored nation" treatment, concessions for certain commodities. In addition, there were treaties with most of the other countries with which Switzerland had trade relations giving simply "most favored nation" treatment. Since the concessions to certain countries covered a wide variety of products, and since any concession granted to one country was given automatically to all "most favored" countries, the practical outcome was that the actual rates were usually below the nominal rates-somewhat the same as if Switzerland had had a maximum and minimum schedule of duties. In the rates fixed by convention, the commodities were usually so defined, or were of such a special nature, that other countries not parties to the convention but which enjoyed merely "most favored nation" treatment, in many cases did not receive much benefit from the concessions.

During or after the war all these treaties were renounced-some by Switzerland, as in the case of those with Germany, AustriaHungary and Serbia; and some by the other countries concerned, as in the case of those with France, Spain, and Italy. But temporary working arrangements were continued down to July 1, 1921.

The duties in force in Switzerland were specific and so efforded less protection with prices at the postwar level than they afforded before the war. During the war no need for protection was felt. After the war, however, many Swiss producers feared especially the competition of countries with greatly depreciated currencies. An emergency tariff measure was enacted and became effective July 1, 1921. Duties on the common cereals, machinery, and tin plate were doabled. Those on boots and shoes were trebled. Duties on some of the raw materials were heavily increased-for instance, those on cotton and copper.

There was much opposition to this law, so that it barely passed. Switzerland at the time was having a heavy budget deficit, and the measure was partly the result of the needs of the treasury as well as
that of the demand for protection. In April, 1923, a bill for lowering the tariff was referred to the people, but failed to pass. A new tariff treaty was signed with Spain May, 1922, and one with Italy January, 1923.

Germany is the chief source of imports into Switzerland and is followed by France, Italy, Great Britain, the United States, and Belgium. On the export side Great Britain ranks first as the leading customer for Swiss goods. Next in order are France, the United States, Germany, and Italy.

The principal imports into Switzerland are raw materials and grains. Cotton, silk, and wool are imported and manufactured into textile materials which are exported. Manufactures of silk and cotton are the leading exports of Switzerland from the standpoint of value. Next in importance are clocks and watches. - The following tables show the principal countries with which Switzerland trades, and the chief commodities imported and exported:

Svitzerland-Imports and exports, by principal countries, 1915, 1982, 1925
-
[Bource: Statietili des Austartigen Handels der Bchwes. 000 omitted]

| Countries | Imports |  |  | Exparts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1918 | 1829 | 1988 | 1918 | 1028 | 1923 |
|  | Prancs | Pranre | Prancs | Prance | Prene: | Prancs ${ }^{363}$ |
| Grast Britain- |  | 173,917 | 181, 395 |  | 847, 947 | 883, 214,102 |
| Unilted sititer | 117, 8 | 190, 252 | 177,856 | 130,48 | 215, 367 | 209, 485 |
| Germany. |  | 385, 588 | 418, 835 |  | 182801 | 123,443 |
| Itsly |  | 224, 464 | 201,945 |  | 92, 569 | 103,783 |
| Austris |  | 24, 788 | 31,025 |  | 47,797 | 64,589 |
| Spain. | 29, 210 | 48,689 | 34, 908 | 30, 607 | 59.546 | 4, 588 |
| Japan. | 19,257 | 24, 505 | 2.700 | 8,818 | 41, 808 | 61, 708 |
| Canada.. | is, ${ }^{\text {87 }}$ | 68, 601 | 80, 624 | 30,065 | 48, 098 | 45, 770 |
| Belglum. | 35, 110 | 83,578 | 83,890 | 28, 188 | 47,934 | 4, 045 |
| Argentine. | 36,943 | 54, 588 | 65,747 | 29,884 | 26.920 | 38, 261 |
| Crechoslovatia |  | 34,133 | 88, 604 |  | 17.380 | 29,130 |
| Netherlands | 23, 35 | 41, 858 | 49, 628 | 11,589 | 40,003 | 29, 966 |
| Bweden- | 23380 | 12.709 | 9,507 | 9, 114 | 22, 017 | 24, 328 |
| All other combtries | 1,521, 101 | 250, 080 | 349,988 | B64, 598 | 288, 894 | 800,304 |
| Total. | 4,918,816 | 1,914,486 | 2,268,081 | 1,374, 809 | 1,761, 674 | 1,760,211 |

Switeerland-Importe and exports by principal commodities, 191s and 1924
[Source: Btatisisisk des Answitrtigen Handels der Echwrels]

|  | 1018 | 1024 |  | 1018 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Daromes |  |  | Exporm |  |  |
| Grains, ste. | 232, 250, 000 | 243, 44, 000 | Gilk, manufactura of- | $271,276,000$ | $\begin{aligned} & \text { Franft } \\ & 850,652,000 \end{aligned}$ |
| Cettan $\qquad$ Minerals (anmanit | 131, 848, 000 | 205, 005, 000 | Cotton, manulac- |  |  |
| Minermas (anmantr | 128,037,000 | 188, 767, 000 | Clocks and watches-- | $200,480,000$ $109,410,000$ | $308,803,000$ $202,905,000$ |
| 8fly | 101, 822,000 | 185,880,000 | Machinest-.......... | 98,725,000 | 160, 797,000 |
| Fool. | 74, 895,000 | 144, 997,000 | Food products of |  |  |
| Colontel produca. | 102, 889,000 | 124, 350,000 | animal origin...- | 121, 348, 000 | 103, 841,000 |
|  | 108, 285,000 | 63, 682, 000 | Dyes_-x-.-...-....... | 29, 588,000 | 69,075,000 |
| Chemicala and chamical product |  | 83, 255,000 | Contecthonery --.....-- | 22, 767,000 | 60,543, 000 |
| Seeds, plants, etc. | 85, 850,000 | 60, 099, 000 | Precions metala, bui- | 17, 27, 000 | 0,083,000 |
| Hides and sinina. | 56, 284, 000 | 84,476,000 | 110n.-...-....------ | 29,651,000 | 48, 423,000 |
| Food. | 41,704,000 | 50, 332, 000 | Wood. | 8,368,000 | 42, 787,000 |
| Drints. | 87, 708,000 | 57,858,000 | Instroments and apparatus. <br> Iron. | $\begin{aligned} & 16,191,000 \\ & 82,802,000 \end{aligned}$ | $\begin{aligned} & 85,731,000 \\ & \$ 1,515,000 \end{aligned}$ |

## IV. EXCHANGE RATES AND PURCHASING POWER PARTIES

Exchange rates in New York on Switzerland, like those on France and Great Britain, went to a rather high premium at the outbreak of the war in 1914. The par value of the Swiss franc according to gold contents is 19.29 cents. The highest rate recorded in July, 1914, was 21.505 cents. It is possible that even higher rates were paid, for the market was very much disorganized. The cause of the high rates was largely the panic in London and Paris. Bankers in those markets refused to discount bills for Now York at a time of the year when large amounts were usually discounted. The supply of sterling and francs in New York being thus seriously curtailed, rates for these currencies went to very high figures. In London and Paris Swiss exchange was at only a slight discount. Consequently, in New York bills on Switzerland also went to a high premium, since they were an acceptable means of payment in London and Paris.

In the autumn of 1914 the Swiss franc was down to par again in New York, and even went a little below par toward the end of the year. In 1915 the rates most of the time were below the point where, under ordinary conditions, gold would have moved from Switzerland to the United States. But on account, of the war, gold could not be easily shipped. Besides, after July, 1915, the Swiss Government maintained an embargo on gold exportations. During 1916 exchange rates for Swiss francs were sometimes above and sometimes below par. The high rates for Swiss francs at the close of 1916 were doubtless due to the support given sterling and French francs by American financial interests, combined with the difficulty of shipping gold from the United States to Switzerland. Also, the increasing probability of American participation in the war doubtless prevented dollar exchange from receiving the speculative support it might otherwise have received.

The New York rates for Swiss francs began to advance sharply in the early summer of 1917. They continued upward, reaching a maximum of 25.81 cents in May, 1918, which was about 33.8 per cent above par. But as soon as the military fortunes changed and favored the Allies in the middle of 1918 the rates began to decline. The noon rate for cable transfers was down to 19.92 cents on November 4,1918 . The accompanying chart (No. 73) shows the high and low rates for Swiss francs from the first of 1914 to 1925.

On account of the embargo on gold exportations from the United States the high premium in New York on Swiss francs could not be reduced through shipments of gold as in normal times.' There was also an embargo upon the exportation of many kinds of commodities from the United States. Another factor and perhaps the most important one responsible for the premium on Swiss francs had to do with the "pegging" of exchange rates in New York on Allied countries. For example, the great supply of sterling bills which originated in Switzerland on account of supplies purchased there by the Allies was sent to New York, since that was the best market in which to dispose of them. Sterling in New York was fixed artificially at about $\$ 4.76$ to the pound. As a result of the sending of sterling bills

[^78]
to New York in this way dollars became plentiful in Switzerland and their price declined. If the dollar credits received for the sterling bills could have been turned into gold and shipped to Switzerland, Swiss exchange would have remained near par.

Commodity prices in the United States at that time were not relatively as high as in Switzerland. If Swiss importers could have availed themselves of those prices in the United States-if they could have bought commodities freely in the United States and shipped them without interference from the American embargo regulations and the German submarines-Swiss exchange in that case also would doubtless have remained near par. But in the absence of the right to turn dollar funds into either gold or goods to be taken to Switzerland, and in the absence of sufficient Swiss credits at the disposal of the United States, Swiss francs went to a premium-dollars to a discount.

The exchanges of the allied countries were "unpegged" in March, 1919. The United States Treasury discontinued further advances to the fiscal agents of the allied Governments, and in the absence of such advances the allied Governments discontinued the purchase in New York of sterling, francs, and lire at artificially high rates. Also, exports from the United States greatly increased during the same time. Rates for Swiss francs, therefore, declined during these two years.

On June 5, 1919, the noon rate for cable transfers on Zurich went below par in New York. By an order of June 30, the embargo on gold exports from the United States was removed. Consequently, it was no longer possible for Swiss francs to go to any appreciable premium in New York, regardless of the balance of payments. But since there still was an embargo upon gold exports from Switzerland (since July, 1915) dollars might go to a premium in Switzerland, or Swiss francs to a discount in New York. As a matter of fact, the rate of francs went below 18 cents in July, 1919 (par is 19.3). It is probable that the removal of the embargo indirectly helped to hasten this drop, because the export of gold from the United States following the removal of the embargo was a factor in bringing down other neutral exchanges which had proviously been at a premium in New York. By means of arbitrage transactions, dollar exchange was made dearer, not only in those countries to which gold was shipped, but in other countries as well, including Switzerland.

The underlying reason why exchange rates in New York for Swiss francs were so greatly depreciated in 1919 and 1920, after the dollar was relieved of carrying the burden of the pound, the French franc, and other currencies, was that prices in Switzerland had risen to a relatively greater extent than in the United States. The relationship between the price levels in the two countries is expressed in purchas-ing-power parities, computed from index numbers for the two countries. These parities, based upon the purchasing powers of the two currency units each within its own country, give an approximation to what exchange rates might be expected to be. Thus, if prices in Switzerland are depreciated 10 per cent as compared to prices in the United States, as indicated by index numbers, Swiss francs should be about 90 per cent of parity or 17.36 cents. There are, of course, many factors which influence exchange rates aside from the purchasing powers of the respective currency units, so that pur-chasing-power parities are not to be taken absolutely as a guide to exchange rates. Borrowing gives support to a country's exchange
and, conversely, foreign lending or the payment of former debts tends to depreciate it. Furthermore, the demand in the world markets for a country's commodities might change independently of capital movements. An increase in demand for a country's goods tends to be reflected in higher exchange rates, and vice versa. In other words, the country would trade with the rest of the world on different terms than before, and the change in exchange rates would be the mechanism by which the alteration in terms took place.

The rate foreign traders are willing to pay for exchange on a country depends to a large extent on how much the currency of that country will buy. Therefore, the relative greater price inflation in Switzerland was the principal factor in the depreciation of the franc. The balance of merchandise trade may influence exchange rates temporarily, but more fundamental than this is the purchasing power of the currency.

The accompanying chart (No. 74) shows purchasing-power parities between the Swiss franc and the dollar since the first of 1921, and also, for comparative purposes, current exchange rates. It will be noticed that until the middle of 1922 exchange rates were not depreciated as much as might seem to be warranted by purchasingpower parities. Relative prices in Switzerland at the first of 1921 were so much higher than those in the United States, that the pur-chasing-power parity at this time was down for a while to a little over 13 cents.

Since the middle of 1922 purchasing-power parities and exchange rates have been relatively close together, as can be seen in the chart. This agreement indicates more normal and healthy conditions. At the first of 1925 both exchange rates and purchasing-power parities were close to par.

Exchange rates for Swiss francs depend not only upon conditions in Switzerland but also upon conditions in the United States. In 1920 there were two drops in foreign currencies in general in the United States, one in February and another in December. The Swiss franc was involved in both of these. . American merchants and bankers were holding large amounts of foreign bills, especially sterling. In February, 1920, and again in December they endeavored to realize substantially upon their holdings. The result was a fall in exchange rates on London and consequently upon other centers dependent upon London. The liquidation of December, 1920, was exaggerated by the general business crisis in the United States. Not only commodities and securities but foreign bills were in the process of liquidation at this time.

It is probable that Swiss exchange would have gone even lower in 1920 had it not been for loans placed in New York. The following data give the amounts (in dollars) of Federal and local government loans floated in New York during recent years:

| Date | Borrower | Amonat | $\begin{gathered} \text { Nominal } \\ \text { rete } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  |  |  | Per cent |
| Auguat. 1910. | Swies Confedaration. | 530,000, 000 | 81/ |
| July, 1020 | -do | 25,000,000 | 8 |
| Oetober, 1020 | City of Zurioh. | 6,000,000 | 8 |
| November, 1020 | City of Berne--- | 6,000,000 | 8 |
| Aprust, 1024.... | Swisa Confoderaslon | $20,000,000$ $80,000,000$ |  |

In 1921 Swiss francs began to improve rapidly. The price index fell from 238 at the beginning of the year to 176 at the end of the year. This was only the continuation of the fall in prices that had begun in 1920. The effect of this fall on exchange rates was tempered by the fall of prices elsewhere. However, the price drop in Switzer-

land was enough greater than in the United States to raise the purchasing power parity from 13.62 in January, 1923, to 15.51 in December, or from 13.17 in February to 15.05 in May.

In 1921 various factors contributed to improve exchange rates. As a result, partly of the relative fall of Swiss prices, the excess of
merchandise imports fell from $927,000,000$ frances in 1920 to 484,000,000 in 1921. ${ }^{2}$ Also, gold loans previously granted by Switzerland to belligerent countries to the amount of $600,000,000$ francs fell due and were repaid. There was an "inflow of funds" from countries with greatly fluctuating currencies. That is to say, there were purchases of bills on Switzerland to be exchanged for Swiss bank deposits. As a result of these influences, and of speculative support as well, the franc reached par again in New York in December, 1921.

In February, 1922, Swiss exchange was higher than that of any other country in the London market. It reached 19.6 cents in New York, a little above par. For a short time in 1922 the Swiss National Bank redeemed its notes in specie; about 200,000,000 francs in gold were put into circulation. But other influences were at work tending to depress the Swiss franc, and the bank, instead of using its gold reserve to protect exchange, together with a tightening of the money market, suspended specie payments. It had already lowered its disCount rate from 4 to $31 / 2$ per cent in March, and on August 17, 1922, it lowered the rate further to 3 per cent. In May, 1922, the Swiss franc went below par again in New York, and continued to sag, except for slight recoveries, for the next 18 months.

One influence tending to depress the Swiss franc in the latter part of 1922 and in 1923 was the rise of prices in Switzerland which began in the middle of 1922 and lasted for nearly a year. Another depressing influence was the outflow of capital. Several foreign loans were placed in Switzerland. One for the Paris-Orleans Railway amounted to $50,000,000$ francs. Also, there was a "repatriation" to Switzerland of dollar securities issued by Switzerland and previously sold. in the United States. These dollar loans to Switzerland had been a valuable support to Swiss exchange at the time they were made, but their repurchase by Swiss investors now had a depressing effect on exchange rates.

In the autumn of 1922 a bill was introduced by the Socialists providing for a levy on capital. The bill was voted on by the electorate December 3, 1922, and although it failed to pass the possibility of its passage accelerated the "flight of capital." However, the flight of capital continued in 1923. There was a withdrawal of bank deposits by Germans as the Swiss franc continued to sag. The Germans offered bills on Swiss banks for bills on London and New York, where the currency was more stable (sterling was rising slightly).

The Swiss Government in August, 1923, placed a loan in New York for $\$ 20,000,000$ in an effort to support the Swiss franc. The effectiveness of the loan was reduced, since Swiss investors immediately began to repurchase the bonds just sold. In fact, they preferred Swiss dollar obligations to Swiss franc obligations.

On July 14, 1923, the Swiss National Bank raised its discount rate from 3 to 4 per cent and its collateral loan rate from 4 to 5 per cent. Exchange rates immediately responded. On July 14 the franc in New York wes worth 17.39 cents; by July 25 it had risen to 17.89 . In August and early September it was above 18, but began to decline again after that.

[^79]During the first half of 1924 the Swiss franc was fluctuating around 17.5 cents. In July and August a marked rise took place, the franc rising from 17.76 cents in July to 19.01 in August. The franc went a little above par in November, 1924, and since that time has remained practically at par. Since Switzerland is preparing to return to the gold standard, very great depreciation appears to be ended.

## V, RETURN TO GOLD

The Swiss franc has been practically at par since October, 1924. As late as April, 1924, it was down to about 90 per cent of par, but by August had recovered to over 97 per cent of par. The franc has now become stabilized at its pre-war level, and underlying conditions are such as to facilitate the maintenance of this level. The price level in Switzerland has shown practically as much stability as the price level in the United States for recent years, and since the ond of 1924 the two have been in relatively close agreement.

One of the most important factors in the recovery of the Swiss franc in 1924, rising from about 17.25 cents in January to 19.48 cents in December, was the fall of prices in Switzerland, coupled with a slight rise of prices in the United States. Stated in another way, the purchasing power parity of the franc rose from 17.19 cents in January, 1924, to 18.73 cents in December, 1924, and in April, 1925, was $19.06^{\prime}$ cents. Contributing to the rise in the franc was the loan of $\$ 30,000,000$ floated in the United States in April, 1924.

In the spring of 1924, when the franc was considerably depreciated, much opinion in Switzerland feared that the fall in prices necessary to restore the franc to par would involve business depression, unemployment, and a lower level of physical production. The discount rate of the national bank wes retained at 4 per cent during the entire year, where it had been since July, 1923, when it was raised from 3 per cent. The rise in the franc during 1924 took place without much deflation or business depression.

The national bank at the end of March, 1925, hald a gold reserve of $481,000,000$ francs, which is about 58 per cent of the note circulation on that date of $836,000,000$ francs. The silver reserve on the same date amounted to about $90,000,000$ francs. The bank also has held for some time large amounts of foreign credits payable on demand and which are as useful as gold in maintaining exchange rates. These credits were reduced to less than $5,000,000$ francs in May, 1924, when the franc was low on the exchange market. At the end of the year, however, they had risen to about $47,000,000$ francs. At the end of March, 1925, foreign credits amounted to about $16,000,000$ francs. The total cover at the end of March (gold, silver, and foreign credits) amounted to about $587,000,000$ francs, or about 60 per cent of the outstanding circulation. This compares with total reserves at the end of June, 1914, of 193,000,000 (of which $176,000,000$ was gold) against a circulation of $260,000,000$, or, in other words, a reserve of about 74 per cent.

From the above it can be seen that Switzerland is in a position to return to the gold standard and that the country would have little difficulty in maintaining the gold standard once this standard was restored. Switzerland is planning to return soon to the gold standard. The return of Great Britain, Holland, Sweden, and other countries to the gold basis, as well as the stabilization with reference to gold by most countries of Europe, makes an early return to the gold standard in Switzerland very desirable, and also makes easier this return. The restoration of the gold standard in Switzerland will increase confidence and have a stimulating effect upon the trade and prosperity of the country.

During the period when most other European countries were experiencing very great depreciation and wide fluctuations in their currencies, the Swiss franc, which was more stable and of more cartain value, was used extensively throughout Europe, so that its position as one of the important world currencies has been strengthened. This has increased the importance of Switzerland as a financial center. With the return of other countries to gold, competition is becoming keener, and if the Swiss franc is not to lose what it has gained, it must promptly be mado a gold unit; a free gold market should be established in Switzerland.

The condition of the Government finances in Switzerland has not been very serious, and in the last year or two the budget deficits have been greatly reduced. The deficit in 1923 amounted to about $45,000,000,000$ francs (about $\$ 9,000,000$ ). The Government is not indebted to the bank, and Government financing in Switzerland during the last year or two has not led to much inflation. In fact, for some time inflation has not been taking place in Switzerland.

The indebtedness of the Government has been increasing gradually and at the end of 1923 amounted to $4,694,180,000$ francs, more than half of which was the debt of the Federal railways. This total indebtedness at the end of 1923 compares with a figure of $1,674,843,000$ at the end of 1913, of which $1,564,000,000$ was railway debt. The following tables show the receipts and expenditures of Switzerland since 1911 and the condition of the debt at various dates since 1850:

Switverland-National debt, 1850-182s

| Year | $\begin{aligned} & \text { Funded } \\ & \text { debt } \end{aligned}$ | Floatingdebt | Federal rallway |  | Total Indebted ned |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Funded } \\ & \text { debt } \end{aligned}$ | $\begin{aligned} & \text { Floatlog } \\ & \text { debt } \end{aligned}$ |  |
| 1850 | 3,853 | 790 |  |  | 4.643 |
| 1890 | 4,250 |  |  |  | 4250 |
| 1870. | 13,750 | 6,700 |  |  | 20,450 |
| 1880. | 34, 754 |  |  |  | 24,754 |
| 1000 | 64, 837 |  |  |  | 4, 150 64,437 |
| 1805 | 82248 |  | 1,018,883 | 109,283 | 1,210, 294 |
| 1910 | 91, 150 | .-..----- | 1,388, 818 | 120, 008 | 1,575,874 |
| 1911 | 87, 700 | -..-.-..... | 1, 457, 213 | 63, 634 | 1, 008,477 |
| 1913 | 111, 170 |  | 1, 474, 388 | 60, 600 | $1,623,194$ $1.674,843$ |
| 1914 | 180, 310 | 68, 000 | 1, 540, 750 | 34,429 | 1,836, 400 |
| 1915 | 848, 510 | 106, 500 | 1, 561, 827 | 83, 375 | 2,006, 212 |
| 1916 | 543, 019 | 222, 500 | t, 568, 811 | 64, 61 | 2,390,291 |
| 1917 | 714, 153 | 319,400 | 1, 570, 847 | 100. 704 | 2,714, 101 |
| 1918. | 1,049,232 | 428, 600 | 1, 677, 419 | 175,098 | 2, 291, 000 |
| 1919 | 1. 360.015 | 435,046 | $1,742,445$ | 214. 202 | 8,752,708 |
| 1920 | 1, 587,007 | 311, 638 | 1,700, 142 | 252, 072 | 4, 041,54 |
| 1922 | $1,743,931$ $1,889,205$ | 372,645 200.497 | 2000.048 | 274, 575 | 4. 400.190 |
| 1923 | 2,042,905 | 217, 508 | 2, 2238,664 | 260,470 150,158 | 4.173, 8100 |

${ }^{1}$ Lés money in sinking fund.
Suitzerland-Receipls and axpenditures, 1811-1824
[Source: Btatistischea Jabrbach der Schweis]

|  | Becelpts | Expenditures | Deflets |  | Receipts | Expeoditures | Defiret |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Franes | Frence |  | Premer | cmer | Praner |
| 1911 | 98, 041,100 |  | 1 201,048 | 1918 | 221, 705, 030 | 288, 360, 767 | 61.804 .687 |
| 1913 I | 90, 957, 112 | 105,310,651 | 6, $353,5 \%$ | 198 | , 858, 352 | -82, $43,088,080$ | $95,635,687$ |
| 1914 | 78,310, 727 | 100, 843, 815 | 2. 532118 | 1921. | 340, 850, 350 | 508, 431, 225 | 127, 371.870 |
| 1915 | 77, 628, 364 | 90, 177, 861 | 31, 551, 507 | 1022. | 425, 863, 950 | 506, 271, 440 | 70, 407, 680 |
| 1916 | 178, 582, 014 | 193, 227, 400 | 18, 64t, 455 | 1983.1 | 253, 445, 119 | 298, 913,877 | 48, 408, 75 |
| 191 | 185, 655,900 | 236,403, 765 | 50, 747, 885 | $1924{ }^{13}$ | 250, 915, 000 | 205,179,000 | 28,204,000 |

[^80]
# PART II STATISTICAL TABLES <br> <br> aUGMria 

 <br> <br> aUGMria}

Tablex 1.-Austro-Hungarian Bank, 1980-192s
f(Borree: Weekly Beports of the Oesterretchisch-Ungarische Baplx. See chart 2. End of month; thousends of Eronem)

| Month |  | Silver coln | $\begin{gathered} \text { Foreign } \\ \text { exchange } \\ \text { and } \\ \text { carrency } \end{gathered}$ | Loans and discounts | Notes in direalation | Depoeits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1920-December | 53 |  | 8,754 | 23,760, | 80,645,658 | 8,780 |
| 1921-Jamury | 54 |  | 8, 103 | 27,359,620 | 34,535,65 | 8, 832.85 |
| Febrnary | 61 |  | 11,721 | 30,918, 752 | 38, 352, 648 | 4,838,401 |
| March. | 6 |  | 3,858 | 24,518,796 | 41,067, 200 | 6, 025,352 |
| April | 64 | 1 | 5,569 | 14, 731, 400 | 45, 038, 723 | $8,161,867$ |
| May | 65 | 1 | 7,031 | 5,885, 448 | 45, 583, 194 | 0,798,443 |
| June. | 67 | 2 | 6,585 | 1,805, 718 | 49,685, 140 | 0, 713,367 |
| July- | 67 | 5 | 10,023 | 1,593, 419 | 84, 107, 281 | 8, 390, 828 |
| Aurust. | 68 | 5 | 6,810 | 1,671, 672 | 58, 533,768 | 8, 074,083 |
| Beptambe | 74 | 5 | 11,248 | 4,042,282 | 70, 170,798 | 5,442,927 |
| October. | 75 | 5 | 5,305 | 6,553, 909 | 90, 904, 390 | 6,635, 689 |
| November | 78 | 5 | 6,862 | 18,944, 127 | 120,612,825 | 7,148,084 |
| December | 8 | 8 | 9, 036 | 30, 040, 275 | 174, 114, 747 | 10, 503,181 |
| 1020-Janmary | 44 | 5 | 2,459 | 30, 704, 924 | 221, 015, 025 | 16,618, 745 |
| February | 4 | 5 | 1,460 | 49, 604, 549 | 250,931, 138 | 16, 878,778 |
| March | 45 | 5 | , 862 | 70, 688,364 | 304,003, 042 | 18, 263, 305 |
| April. | 45 | 20 | 1,014 | 95, 518, 607 | 846, 697,776 | 23, 808,76 |
| May | 45 | 20 | 1,605 | 124,856, 171 | 397, 829, 818 | 25,417,377 |
| Juno. | 45 | 20 | 1,851 | 176, 881, 680 | 549,915, 678 | 81, 325,388 |
| July. | 45 | 21 | 1,328 | 256,331, 478 | 780, 225, 601 | 80, 688,850 |
| August | 45 | 21 | 751 | 532, 433, 577 | 1,353,403, 637 | 110, 011, 372 |
| Eeptembe | 45 | 21 | 698 | 784, 916, 252 | 2,277, 677,738 | 249, 971,029 |
| Oetober- | 45 | 21 | 298 | 877, 621, 743 | 2,970, 016,607 | 109, 206, 383 |
| November | 45 | 8 | 420 | 721, 946, 803 | 8, 417, 786, 4 约 | 207, 846, 051 |
| December. | 46 | 8 | 308 | 782, 262, 180 | 4,080, 177, 238 | 827,901, 000 |

Table 2.-Austrian National Bank, 1928-1925
[Source: Weekly reports of the Oeaterreliohische National bank. Bee chart 2. End of month; milliton of kronend

| Month | Gold | Foreign exchange and chrtency | $\begin{gathered} \text { Loans } \\ \text { and } \\ \text { discounts } \end{gathered}$ | Treasary bllis | Notas in drculation | Depoolte |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1090-January | 49, 804 | 1,058,244 | 731,040 | 2, 580.848 | 4.110, 351 | 279,098 |
| Pebruary | 83, 138 | 1, 029, 134 | 728,984 | 2, 652,682 | 4,207,902 | 178, 758 |
| March | 80, 007 | 1,336, 385 | 821,397 | 3 550, 150 | 4, 459, 117 | 320, 100 |
| April | 73, 270 | 1,439,909 | 741,858 | 2, 650,159 | 4,577,382 | 226,275 |
| May | 73, 391 | 1,682, 209 | 875, 942 | 2, 650,150 | 4,887, 142 | 343, 339 |
| June. | 73,301 | 2,532,316 | 730, 848 | 2,547, 212 | 5, 432, 619 | 382, 237 |
| July. | 73,391 | 2,947,216 | 858,986 | 2,538,777 | 5, 884,134 | 605, 121 |
| August. | 78, 811 | 3,050, 085 | 647,936 | 2, 538,719 | 6,894,786 | 413, 388 |
| Septemb | 73, 801 | 3, 128, 609 | - 803,317 | -2,537,661 | $8.295,109$ | 873, 678 |
| October | 62.117 | 3, 350,232 | 1, 089,340 | $2,536,604$ | 6. 807,889 | 414, 892 |
| Novemb | 02117 | 3,504,652 | 1,094,620 | 2, 536, 617 | 6, 577, 816 | 617, 321 |
| Decembe | 83,177 | 2,832, 182 | 1,325,380 | 2, 594,490 | 7, 125, 756 | 649, 424 |
| 1024-January. | 91,274 | 8,811, 148 | 1, 253, 110 |  |  | 536, 888 |
| Fobruar | 1050398 | 3,921, 594 | 1,237,334 | 2,532,379 | 7, 364,441 | 558, 800 |
| Mareh. | 109,663 | 8,853, 872 | 1,733,400 | 2, 205, 488 | 7, 144, 901 | 752, 814 |
| Aprit | 107, 059 | 8,669, 283 | 2, 181, 084 | 2294,171 | 7,316, 471 | 638, 141 |
| May. | 107, 43 | 3,344,337 | 2860,440 | 2,259,839 | 7, 554, 680 | 641, 001 |
| June | 107, 762 | 3, 178, 389 | 8,082,470 | 2,237,794 | 7,774,988 | 741, 400 |
| July. | 108,342 | 3,254,477 | 8,304,876 | 2,231, 173 | 7.995, 617 | 896, 032 |
| Augrast | 108, 250 | 8, 453, 177 | 8,200,003 | 2, 219,459 | 8,002142 | 997, 677 |
| Beptembe | 108, 950 | 8,724, 916 | 2,652, 688 | 2,210,627 | 7,098,509 | 850, 587 |
| October | 109, 327 | 4, 038,485 | 2,379,700 | 2, 202, 106 | 8, 213, 003 | 502, 579 |
| Novembe | 110,648 | 4, 312,365 | 1,945, 627 | 2, 198, 181 | 8, 072, 021 | 484, 750 |
| 1905-Decombe | 110,800 | 4,770, 548 | 1, 881,508 | 2, 178, 185 | 8,387, 787 | 653, 450 |
| 1025-January. | 111,814 | $8,337,911$ | $1,545,295$ $1,285,158$ 1, | $2,172,491$ $8,150,151$ | $7,002,217$ $7,057,242$ | 438, 380 315,711 |
| Februar March. | 111,474 | $8,310,032$ $3,202,802$ | $1,285,158$ $1,047,719$ | $2,150,151$ $2,107,940$ 2,18 | $7,957,242$ $7,807,792$ | 315, 771 |
| Aprdi. | 112,168 | 3,474, 772 | 1, 059,009 | 2, 008, 777 | 7,976,420 | 236, 95 |

## Table 3.-Austria-Total nole circulation, 1914-1925

[1014-1918, monthly aperages; 1910-1924, ond of month. The Austrian National Bank came foto extstence Jan. I, 1923, and took over the Austrian section of the former Austro-Hungarian Bank which was placed in licuidation Jan. 1, 1920 . In 1918 notas of tha Austro-Huagarian Bank were circulating in all of the succession States, although they were gradually erchanged tor national currency in these statas or
stamped with the national stamp. See charts 1 and 3 j
[Source: "The Austilan Crown," J. Fan Walre de Hordes, and weekiy bank otatements. coo omittedl


Tablex 4.-Auatria-Retail prices, 1981-1924 (on paper basis and on gold basis)
[Index mumbers of Btatistische Nacharichten, 58 commodities; monthly aperages, Jemuary, $1981-100$. The index numbers have been converted to a gold bagis by applying to them the percentages which the corresponding sverage monthly exchange rates for doliars are of parj

\begin{tabular}{|c|c|c|c|c|c|}
\hline Month \& On paper currancy \& \begin{tabular}{l}
Corted \\
to gold \\
beais
\end{tabular} \& Month \& On paper currency basis \&  \\
\hline 19x-January - \& 100 \& 1. 250 \& 1929-October- \& 18, 567 \& 1.288 \\
\hline February \& 114 \& 1. 370 \& November \& 17, 881 \& 1.220 \\
\hline March. \& 12 \& 1. 505 \& December \& 17,409 \& 1.298 \\
\hline April \& 116 \& 3. 235 \& 1923-January.. \& 17,528 \& 1.211 \\
\hline Msy \& 121 \& 3.034 \& February \& 17, 851 \& 1.234 \\
\hline Jane \& 150 \& 1. 481 \& March \& 18,205 \& 1. 258 \\
\hline July \& 143 \& 2012 \& April \& 10, 128 \& 1.312 \\
\hline Angust \& 167 \& 1. 030 \& M \(\mathrm{By}^{\text {- }}\) \& 20,450 \& 1.418 \\
\hline Septomber \& 215 \& . 076 \& June-. \& 20,482 \& 1.415 \\
\hline October-- \& 333 \& . 987 \& Joly--- \& 19,368 \& 1.389 \\
\hline November \& 506 \& 1.000 \& Augurt \& 18,511 \& 1. 279 \\
\hline Decamber \& 942 \& 1.813 \& Beptomber \& 20, 955 \& 1.48 \\
\hline 102s-Jsmuary \& 1,142 \& 1.832 \& October-- \& 27, 166 \& 1.408 \\
\hline Febraary \& 1,428 \& 1881 \& November \& 21.479 \& 1.484 \\
\hline March. \& 1,457 \& 1. 079 \& 190, December \& 21,849 \& 1. 610 \\
\hline April \& 1, 619 \& 1.071 \& 1024-January - \& 22,041
23,388 \& 1.585
1.618 \\
\hline May- \& 2.028 \& 1.121 \& February. \& 23,386
23,338

23, \& 1.618 <br>
\hline Jnna \& 8, 4,831 \& L. 125 \& March. \& 23,338
23,301 \& 1.613
1.614 <br>
\hline August \& 11, 046 \& . 927 \& May \& 28,797 \& 1,644 <br>
\hline Septamber- \& 20,090 \& 1. 2888 \& Juns \& 24,207 \& 1.677 <br>
\hline
\end{tabular}

Table 5.-Austria-Wholesale prices, 192s-1925
[Inder numbers of Statistische Nachrichten. 47commoditien; prices on the 5th of eachmonth. See chart 6]
[Jampary-A prif, 1914=100]

| Month | Indar | Month | Inder |
| :---: | :---: | :---: | :---: |
| 109\%-Jampary | 1, 008,600 | 1984-Aprll | 1.948,500 |
| February | 1, 721.500 |  | 1,946,500 |
| March. | 1.852, 100 |  | 1,828,200 |
| April. | 1,875,800 |  | 1,913,300 |
| May-... | 1,894,500 |  | $2,013,600$ |
| June- | 1, 833,900 | Beptember | 1, 937,300 |
| Jaiy.-- | 1. 789,300 | October | 2,008, 600 |
| August | 1, 857, 400 |  | $2,076,900$ $2.075,400$ |
| October-- | 1, 759, 700 | 10\%-Jannary- | 2118, 100 |
| Novamber | 1,779, 600 |  | 2, 103, 100 |
| December | 1, 818, 100 |  | 2,054,800 |
| $\begin{array}{r} 1031-\text { January } \\ \text { FBbruary } \end{array}$ | $\begin{aligned} & 1,874,800 \\ & 1,916,800 \end{aligned}$ |  | $\begin{aligned} & 2,005,800 \\ & 1,085,400 \end{aligned}$ |

Table 6.-Austria-Exchangs rates, Vienna on Now York, 1914-1924
[Eropen per doilar. Monthly averagea throagh 1918; 1910-1020 avarage of last weak of month; 1901-1981 Late day of month. Bee chart 1]
[Elourse: "The Anstrian Orown," X. van Walre do Bordes, and ourrant pubiteations]

|  | 1014 | 1018 | 1016 | 1917 | 1018 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Januery - |  | 5.85 | 8.14 | 0.44 | 8.17 |
| Pebruary |  | 6.07 | 7.92 | 9.74 | 8.16 |
| Mareh |  | 6.54 | 816 | 2. 83 | 806 |
| April. |  | 6.56 | 7.99 | 10.38 | 8.00 |
| May... |  | 6.57 | 7.75 | 10.87 | 8.25 |
| Jone.- |  | 6.62 | 7.88 | 11. 24 | 0.17 |
| July... | 4.05 | 8.66 | 805 | 11.30 | 0.87 |
| August | 5.21 | 6.67 | 8.18 | 11. 19 | 10.61 |
| September | 5.31 | 6.71 | 8.54 | 11.4 | 12. 01 |
| October.- | 8.54 | 0.98 | 8.59 | 11.50 | 11.11 |
| Novernber | 5.81 | 7.04 | 0.47 | 11. 19 | 14.38 |
| Decsmber | E. 76 | 7.58 | 2.81 | 9. 48 | - 18. 18 |

Table 6.-Austria-Exchange rates, Vienna on New York, 1914-1984-Contd.

|  | 1919 | 1020 | 1921 | 1022 | 1023 | $10 \% 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jañary | 17.00 | 271.48 | 654.00 | 7, 375.09 | 71, 800.00 | 70,760.00 |
| February | 20.72 | 250.00 | 722.50 | 6, 250.00 | 71,150.00 | 70,760.00 |
| March. | 25.85 | 208.86 | 676. 00 | 7,487. 50 | 71,000.00 | 70,760.00 |
| April. | 28.08 | 200.00 | 661.00 | 7,987. 50 | 70, 850.00 | 70.760.00 |
| Mey | 24. 75 | 155.83 | 604. 00 | 11, 100.00 | 70,800.00 | 70,760.00 |
| June | 29.63 | 145.00 | 720.00 | L8, 900.00 | 70,800.00 | 70,760, 00 |
| July. | 37.24 | 165,00 | 957.00 | 12,350. 00 | 70,760.00 | 70, 760.60 |
| August | 42.50 | 237. 14 | 1,081. 50 | 77, 300. 00 | 70, 760. 00 | 70, 760.00 |
| Beptember | 68.50 | 255.00 | 2,520.00 | 74, 210.00 | 70,760. 00 | 70, 760. 00 |
| October.- | 90.50 | 358.33 | 4,355.00 | 73, 550.00 | 70, 760.00 | 70, 760.00 |
| November | 130.00 | 489.66 | $8,520.00$ | 71,400.00 | 70,760. 00 | 70, 760.00 |
| December | 155.00 | 659.40 | 5, 275.00 | 70, 025.00 | 70,700.00 | 70, 760. 00 |

Table 7.-Austria-Exchange rales, New York on Vienna, 1014-1984
(January, 1014-Febrtary, 1017, sight drafts: March, 1917-Jniy, 1010, represent a combination of cable
rates, New York on Amsterdam and spot quotations in Amsterdam of Aust ins currency; AugustDeeamber, 1919 cable transtors; 1920, efght drafts; January Jone, 1921 , cable transterd; July, 1921, to date, noon brying rates far cable transfars. Average rates, January, 1914 , to October, 1918, ere midpoints between the monthy high and low ratea; trom November, 1918, to date, the averages are monthly average of daily rates.)
(Sowure: Federel Reserve Board, Financial Review, and Annual Reports of the Nederlapdsohe Bank. Rer: 20.26 cents per krone]

| Month | Centa per krons |  |  | Month | Cents per y rone |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hlgh | Low | Average |  | High | Low | Averagg |
| 1914-Janary..- | 20.28 | 20. 10 | 20. 21 | 1018-Japuary. | 14.38 | 11.40 |  |
| February. | 20.28 | 20.21 | 20.20 | February. | 13.42 | 11.77 | 1280 |
| March | 20.28 | 20.24 | 20.20 | March... | 13.02 | 11.47 | 12.25 |
| April. | 20.29 | 20.25 | 20.27 | April...- | 1278 | 12.28 | 12.18 |
| May | 20.38 | 20.27 | 20.30 | May..... | 1281 | 11.41 | 1212 |
| June.....-. | 20.32 | 20.28 | 20.29 | Juno-- | 1221 | 9.87 | 11.04 |
| July......-. | 20.38 | 20.15 | 20.37 | July..--- | 106 | 9.57 | 10.10 |
| August ..... | 20.38 | 20.31 | 20.35 | August.-. | 9.9 | g. 01 | 0.4 |
| September- |  |  |  | September | 888 | 8.00 | 8.47 |
| October-.--- |  | 17.85 | 18.87 | October-.. | 11.61 | 7.85 | 9.72 |
| November.- | 17.88 | 17.45 | 17.67 | November. | 8.05 | 2.37 | 7.21 |
| 2015-Janumary... | 18.00 | 17.30 17.35 | 17.85 17.48 | 19-Janember. | 6. 50 | 6.00 | 6. 34 |
| February. | 17.35 | 15.95 | 16.65 | February. | 6.50 5.88 | 5.88 | 6.38 |
| March...- | 15. 88 | 15. 50 | 15.60 | March.-- | 5.88 5.04 | 488 | ${ }^{5} 28$ |
| April. | 15.56 | 15. 40 | 15. 48 | April | $\begin{array}{r}4.8 \\ 425 \\ \hline 108\end{array}$ | 2.67 3.40 | 4.36 |
| May- | 16.70 | 15.45 | 16.58 | May. | + 4.80 | 3.48 | 4.8 |
| Junc. | 15. 18 | 15. 65 | 15.37 | Juns. | 430 | 2.78 3.13 | 3.72 |
| July... | 15. 18 | 15. 10 | 15. 14 | July- | 8.42 | 2. 37 | 2.0 |
| August - .-.- | 15.20 | 14.7 | 15. 00 | Augat. | 2.11 | 200 | 2.86 |
| Spetember | ${ }_{15} 88$ | 14.97 | 15. 26 | September | 2.15 | 145 | 180 |
| October-- | 15.85 | 14.68 | 15. 10 | October-. | 1.70 | . 88 | 1.20 |
| November | 14. 70 | 12.00 | 14.30 | November | 1.02 | . 70 | . 88 |
| 1010-January | 14. 10 | 12.28 | 13.68 1268 | 190-December. | . 76 | . 58 | . 68 |
| Februsry...- | 14.25 | 12.50 | 12.88 | isk-janusry. | . 64 | . 30 | -4, |
| March. | 12.20 | 1235 | 1278 | March | . 60 | . 20 | . 38 |
| April.-.-.-- | 13.80 | 1235 | 13.08 | April..... | . 50 | . 80 | . 55 |
| Mby | 13.45 | 12.10 | 13.28 | May...-- | .91 | . 80 | . 70 |
| June. | 13.25 | 126 | 28.8 | June... | . 85 | . 68 | . 77 |
| July---.---- | 12.06 | 1230 | 12 管 | July | .75 | - 50 | .68 |
| Augrat - .-. | 12.45 | 12.80 | 1233 | Angust | . 57 | . 44 | . 51 |
| September | 1218 | 11.9 | 1200 | 8eptember. | .50 | . 42 | 4 |
| October-- | 1200 | 11.87 | 11.9 | October... | . 44 | . 31 | . 28 |
| November | 11.80 | 11.70 | 11.80 | November. | . 35 | - 28 | . 28 |
| Decamber---- | ${ }^{13.25}$ | 10.98 | 12.12 | December. | . 32 | . 22 | . 27 |
| 1017-Japuary | 11. 11.15 | 10.65 10.60 | 11.23 | 1981-January... | . 38 | .19 | -28 |
| March...... | 11. 15 | 10.60 9.92 | 10.80 | Februsry. | . 28 | .21 | . 25 |
| April........- | 0.90 | 923 | 106 | March. | . 31 | .20 | . 28 |
| M8y.......... | 9.74 | 9.60 | 0.67 | May.- | 30 | . 21 | 28 |
| June.-........- | 0.60 | 840 | 96 | June. | 25 | .25 | 20 |
| July | 9.20 | 871 | 80 | July | 17 | .12 | 15 |
| August......- | 913 | 800 | 0.09 | Augrest | .14 | 11 | 18 |
| Spetember--- | 960 | 874 | 887 | September. | .13 | . 06 | . 10 |
| October------ | 0.14 | 830 | 87 | October... | .07 | . 05 | .08 |
| November..- | 283 | 885 | 9.39 | November. | . 05 | . 03 | 04 |
| December...- | 1208 | 10.41 | 11. 22 | December. | . 0.0 | . 08 | $0 \cdot$ |

Table 7.-Austria-Exchangé rates, Nievo York on Fienna, 1914-1924-Contd.

| Month | Cente per krone |  |  | Month | Cents por mrane |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eigh | Low | Average |  | High | Low | Avtrage |
| 1982-Jamants. | .ceso | . 0287 | . 0525 | 1923-October | . 0014 | . 0074 | . 0014 |
| Fintrant | -0830 | . 010190 | .0281 | November-.-- | . 00014 | .0014 |  |
| April | .0137 | . 0127 | . 0134 | 2t-Januery-. | . 0014 | . 0014 | . 0014 |
| May -- | .0125 | . 0096 | . 0112 | Pebruary ---- | . 0014 | . 0014 | . 0014 |
| June.t. | -0003 | . 0048 | . 00007 | March------ | . 014 | . 0014 | 0014 |
| July | -003 | .0012 | .0018 | May | - 01014 | 004 | . 0014 |
| Auguat | .0015 | -0013 | . 0014 | Jume-- | . 0014 | . 0014 | . 014 |
| October- | . 0014 | . 0014 | . 0014 | Jaly.---- | . 0014 | . 0014 | . 0014 |
| Navember--- | . 0014 | . 0013 | . 0014 | Anguse | . 00014 | . 0014 | . 0014 |
| 188-Janary | -0014 | .0014 | . 0014 | Oetober. | . 00014 | . 6014 | . 0014 |
| Pebruary. | . 0014 | . 0014 | . 01014 | November.- | . 0014 | . 0014 | . 0014 |
| March..- | . 016 | .0014 | . 0014 | 109\%-Jannary ${ }^{\text {D }}$-.. | .0014 | . 0014 | - 0014 |
| April. | .0014 | .0014 | . 014 | 10\%- Pabruary | .014 | 0014 | 0014 |
| Jump-- | . 0014 | . 0014 | . 0014 | March-..-- | . 0014 | . 0014 | 0014 |
| Jaly | . 0014 | . 0014 | . 0014 | April... | . 0014 | . 0014 | . 0014 |
| $\underset{\text { Aldgust }}{ }$ | .0014 | . 0014 | . 00014 | May---.---- | . 00014 | . 00014 | . 0014 |

Tables 8.-Austria-Purchasing power parities, 198s-19e4
(Actording to index numbers of Statistisoho Nechrichten for Austria, January-Apri, 1914-100, and Federal Retarve Board index numbers for Datted States, average for 1918=100. See Ohart'5)

| Month | United States index of prices | Anstrian Index of prices | Purchasing powtr parities $\left(\frac{\text { U. B. findex } \times \text { par }}{\text { A wistrian index }}\right)$ | $\begin{gathered} \text { Avarage } \\ \text { axchange } \\ \text { rates (cemts } \\ \text { per krane) } \end{gathered}$ | Per cent purchasing power paritles airs of axchange |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1988-Jenuars | 106. 158 | 1,088,000 | a 001, 988 | 0.0014 | 141.57 |
| Pebrtary | 169.301 | 1,721,500 | .001,958 | . 0014 | 130.8\% |
| March. | 100.374 | 1,852,100 | .001,853 | . 0014 | 13236 |
| April. | 170.055 | 4,875,800 | .001, 837 | . 0014 | 131.21 |
| May. | 167.088 | 4.894,500 | , 001, 787 | ,0014 | 127.64 |
| June. | 164.065 | 1,883,900 | . 001, 812 | . 0014 | 129. 43 |
| July.. | 150.488 | 4,769,300 | . 001,805 | . 0014 | 129.00 |
| August | 159.069 | 1,657, 400 | .001, 044 | . 0014 | 138.86 |
| Septambe | 163.387 | L 779,400 | .001,800 | . 0014 | 132.80 |
| October | 108.142 | 1,789, 700 | -001, 878 | . 0014 | 13414 |
| November | 168460 | 1,76, 500 | .001,861 | . 0014 | 1328 |
| December | 183.042 | 1,818, 100 | .001, 817 | . 0014 | 120.70 |
| 109\%-January | 162.745 | 1,874,800 | . 001, 750 | . 0014 | 125.64 |
| February | 162519 | 1. 915,800 | .001, 719 | . 0014 | 12279 |
| March | 159.522 | 1,912,000 | .001,000 | . 0014 | 1207 |
| April. | 157.676 | 1,946,500 | . 001, 41 | . 0014 | 117.21 |
| May. | 156. 148 | 1,946, 500 | .001, 025 | . 0014 | 11607 |
| Juno | 151. 394 | 1,888,200 | .001, 711 | . 0014 | 122.21 |
| July | 158.383 | 1,913, 300 | .001, 858 | . 0014 | 118.28 |
| August | 157.038 | $2,013,000$ | .001, 589 | . 0014 | 11360 |
| September | 158.278 | 1,937, 300 | - 001, 034 | . 0014 | 110.71 |
| October | 158073 | 2008, 600 | . 001,601 | . 0014 | 114.30 |
| Novamber | 160.074 | 2,076,000 | .001, 868 | . 0014 | 11200 |
| December | 164. 618 | 2, 715,400 | -001, 607 | . 0014 | 114.78 |
| 388-January | 167. 782 | 2,118,100 | .001,605 | . 0014 | 1146 |
| Febrasty | 107.086 | 2,108, 100 | .001, 000 | . 0014 | 114 |
| March. | 10285 | 2,054,800 | .001, 670 | . 0014 | 1192 |
| April | 164.000 | $2,005,800$ | .001, 656 | . 0014 | 118.21 |
| May | 168.000 | 1, 1855,400 | .001, 683 | . 0014 | 118. 78 |

Table 9.-Austria-Gold value of total note circulation, 1991-1984
(On basis of arehange ratee and on basis of parohasing power parities. See Oharts 8 and 4)

| Month | Total note cliculation (milltons of kronen) | Average exchange rates (New York on Vienna) (eents per krone) | Gold value of circulatlon on basls of exchange rates (thousands of dollars) | Parchasing power parttles (cents per krone) | Gold value of circula tlon on basis of purchesing power parittes (thousands of dollars) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1021-Januery ...... | 34,520 | 0. 255 | 88, 041 |  |  |
| February...- | 38,353 | . 245 | 93, 965 |  |  |
| March. | 41,007 | . 250 | 102, 068 |  |  |
| April | 46, 037 | . 565 | 284,459 |  |  |
| May... | 45, 688 | . 608 | 231, 682 |  |  |
| June--- | 49,685 | . 200 | 99,370 |  |  |
| July | 54, 107 | . 2885 | 78, 670 |  |  |
| August | 58,634 | . 125 | 69,831 |  |  |
| September | 70, 171 | . 092 | 65,680 |  |  |
| October-.. | 00, 004 | . 057 | 50,907 |  |  |
| November. | 120,613 | . 038 | 43,421 |  |  |
| December | 174, 115 | . 039 | 67,388 |  |  |
| 1923-January... | 227.016 | .0325 | 73, 780 |  |  |
| February | 239, 031 | . 0281 | 73, 041 |  |  |
| March | 304,004 | . 0150 | 45,610 |  |  |
| April. | 346, 698 | . 0134 | 46,488 |  |  |
| May.- | 397, 829 | . 0012 | 44, 657 |  |  |
| June.- | 549, 916 | . 0087 | 36,844 |  |  |
| July.. | 788, 220 | . 00038 | 29,877 |  |  |
| August | 1, 353, 404 | . 0017 | 23,008 |  |  |
| Septembe | 2, 277,678 | . 0014 | 31,887 |  |  |
| October-- | 2,970, 917 | . 0014 | 41,696 |  |  |
| November | 8, 417,788 | , 0014 | 47,849 |  |  |
| 102\%-January. | 4, 110,1851 | . 0014 | 57, 324 | $0.001,082$ |  |
| February | 4,207, 992 | . 0014 | 58, 912 | . 001 , 958 | 82,392 |
| March. | 4,459, 117 | . 0014 | 62,428 | .001, 853 | 82,627 |
| April | 4,577, 382 | . 0014 | 64, 083 | .001,887 | 84, 087 |
|  | 4,837,042 | . 0014 | 67,719 | . 001,787 | 86, 488 |
| June... | 5, 432, 619 | . 0014 | 76,057 | .001, 812 | 98, 439 |
| July.-- | 5, 884, 134 | . 0014 | 79, 578 | .001,800 | 102.655 |
| August. | 5,894,786 | . 0014 | 82, 527 | , 001,044 | 114,506 |
| September | 6,225, 109 | . 0014 | 87, 152 | .001,960 | 116,787 |
| October | 6, 007,839 | . 0014 | 92,510 | .001. 878 | 124,096 |
| December. | 7, 1277 , 75.5 | . 0014 | 92,087 | .001,861 | 122, 406 |
| 1920-Jenuary.. | 6, 7 , 75,109 | . 0014 | 89, 262 | . 0001,760 | 112,138 |
| February | 7,364, 411 | . 0014 | 103, 102 | .001, 719 | 120,696 |
| March. | 7,114,901 | . 0014 | 98, 600 | -001, 080 | 120, 242 |
| April | 7. 316,471 | . 0014 | 102, 417 | . 001, 641 | 120, 047 |
| May | 7, 554,620 | . 0014 | 106, 706 | -001, 825 | 122, 788 |
| July. |  | . 00014 | 108, 819 | .001, 711 | 138, 000 |
| August | 8, 002,142 | -.0014 | 112,069 | .001, 850 | 132, 154 |
| September | 7,098, 600 | . 0014 | 111,970 | . 001,031 | 130, 60\% |
| October. | 8,213, 008 | . 0014 | 114,982 | . 001,601 | 131,490 |
| November | 8, 072,021 | . 0014 | 113,008 | . 001, 568 | 128, 369 |
| 1025-Jecember | 8 8887, 767 | . 0014 | 117,429 | 001, 007 | 134, 791 |
| 1925-January- | 7,902, 217 | . 00014 | 110, 631 | -001, 005 | 128, 831 |
| March | 7,897, 992 | . 00014 | 110, 800 | .001, 060 | 132,703 |
| April. | 7,976,420 | . 0014 | 111,670 | .01, |  |

Table 10.-Austria-Imports and exports of merchandise by countries, 1982 (excluding gold and siloer)
(Source: Statistix des answeirtigen Handels Österredehs.)
[In thousande of gold crowns]

|  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

TaBle 11.-Austria-Imports and exports of merchandise, 1920-192s (by principal commodities)
(Bowroe: Btatiotigebe tharsiehten Abar den auswartigen Handa)
[Quantity in metric toms; vaine in thousands of gold crowns]

| Commodities | 1979 |  | 1921 |  | 1897 |  | 1923 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qubn- | Value | Quan- | Valus | $\begin{aligned} & \text { Quan- } \\ & \text { tity } \end{aligned}$ | Value | $\begin{aligned} & \text { Quan- } \\ & \text { Ity } \end{aligned}$ | Value |
| Imports: ${ }^{\text {a }}$. |  |  |  |  |  |  |  |  |
| Cotton, Farn and goods | 23,103 | 158, 151 | 48, 489 | 188, 028 | 48,493 | 25\% 026 | 43, 190 | 209, 627 |
| Conl. | 8,908, 207] | 131,778 | 5,842,9781 | 185, 850 |  |  |  | 182, 083 |
| Wool, yarn and goods | 6,940, | 155, 208 | 10,851 | 194, 143 | 15, 283 | 177,323 | 16,532 | 172, 093 |
| Graln | 201, 681 | 133, 874 | 602, 222 | 189, 886, | 413,275 | 100, 818 | 487, 496 | 117, 641 |
| Draft amimals and catcle for |  |  |  |  | 108, 915 | 88,008 | 114, 804 | 110,602 |
| Flour--.-.-...... | 200,357 | 157, 811 | 128, 543 | 58,182 | 210, 027, | 92, 140 | 283,885 | 130,534 |
| Silk sad alit goods. | 7807 | 60,003, | 1,530 | 81, 165 | 1, 132 | 8.516 | 1, 144 | 85, 211 |
| Fralts, vegatables, and pl | 281.915 | 33,482 | 20, 081 | 61,954 | 180, 471 | 35, 359 | 241,381 | 50, 500 |
| Gugar. | 68, 638 | 32,800 | 95,388 | 50, 101 | 120,871 | 60, 501 | 102602 | 47,792 |
| Fate | 64,1741 | 114,781 | 52,797 | 54,950 | 68, 151 | 58,770 | 73, 422 | 81,023 |
| Exponts: |  |  |  |  |  |  |  |  |
| Cottox, yers and moodia | 10, 628 | 112,346 | 18, 744 | 78, 824 | 24,004 | 134,974 | 21,390 | 128,790 |
| Irom and hron goods.--- | 101,852 | 122, 116 | 190,840 | 100,290 | 230,497 | 100, 817 | 351, 280 | 12, 462 |
| Prper and paper goods | 96, 706 | \$5, 855 | 116259 | 65, 578 | 168, 904 | 78,781 | 214,858 | 91, 230 |
| Ready-made clothing | 11,968 | 73, 650 | -1,236 | 61, 204 | 12,185 | 70,013 | 1,454 | 61,811 |
| Wool, yart and goods --.....-- | 2.461 | 28, 552 | 3, 061 | 38, 435 | 4,231 | 61, 288 | 6,730 | 68, 260 |
| Machines, apparatus, and perts.. | 41,164 | 50, 057 | 84, 812 | 60,806 50,208 | 41,720 | 58,425 | 28,074 | 38, 674 |
| Wooder poods <br> Electrical machines, froluding bolbs | 28, 130 |  | 40, 660 | 50,288 408 | 41,745 | 44, 428 | 28,114 | 81,870 |
| gawed tirab | 881, 680 |  | $\begin{array}{r} 11,784 \\ 206,165 \end{array}$ | 34, 643 | $\begin{gathered} 11,881 \\ 640,880 \end{gathered}$ | $\begin{aligned} & 51,870 \\ & 67,742 \end{aligned}$ | 047,077 | 88,250 |
| Bame metats and | 13, 912 | 20,74, | 19,200 | 38, 641 | 3,209, | 60,402 | 20,830 | 62, 610 |

[^81]
## BELGIUM

Table 12.-Bank of Belgium, 1919-1924
[Source: Weaky stataments of the Banque Natlonale de le Belgque. Bee ohart 7. End of month; thousands of francel

|  | Gold | Slivar | Dincounts | Notes In crcculation | Current bo counts and deposits |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1019-July. | 206,027 | 30,986 | 350,520 | 4,606, 815 | 2,508, 499 |
| August | 288,038 | 34, 338 | 288, 739 | 4,800,783 | 2,410, 508 |
| September | 288, 052 | 29, 067 | 272, 100 | 4, 687,684 | 2, 397, 101 |
| October | 286, 238 | 26,715 | 324, 030 | 4, 8880,095 | 2, 34, 871 |
| November | 288, 410 | 20, 221 | 341, 225 | 4,670, 896 | 2,467,919 |
| Decenaber | 268, 409 | 28,902 | 392, 308 | 4,763, 802 | 2, 433, 618 |
| 1980-January | 266, 418 | 27, 523 | 407, 207 | $4,902,641$ | 2,304,718 |
| Fobruary | 206, 424 | 20, 975 | 457, 085 | 4,978, 691 | 2, 042, 185 |
| March. | 268,425 | 27,537 | 685, 175 | 4,947,095 | 2, 155, 767 |
| April | 266, 430 | 27, 541 | 743, 860 | 6,123, 174 | 2, 180, 218 |
| May. | 266, 483 | 27,191 | 731,747 | 5,068, 978 | 2,271,500 |
| June | 206,487 | 28,225 | 623, 420 | 5, 166, 370 | 2,087, 69 |
| July. | 266,488 | 20,711 | 590, 171 | 5,387, 198 | 1,79,394 |
| August | 260, 407 | 28, 685 | 882, 441 | 8, 530, 332 | 1,620, 4187 |
| Soptembe | 260, 499 | 24,785 | 600, 74 | 6, 736, 066 | 1,420,302 |
| October- | 266, 504 | 27,070 | 619,580 | 5,792, 820 | 1, 778,812 |
| November | 266, 512 | 27,804 | ${ }_{703} 712$ | 8, 845, 8002 | 1, 357,419 |
| December | 268, 519 | 27, 920 | 768, 687 | E, 119, 239 | 1,173, 774 |
| 192-January. | 206, 534 | 28, 106 | 705, 409 | 6,224, 107 | 1, 104,783 |
| February | 268, 537 | 29, 948 | 813, 814 | 8,008, 007 | 1,41,943 |
| Msrch | 286, 583 | 35, 321 | 735, 409 g | 6, 104, 823 | 1, 185,958 |
| April | 266,567 | 37, 182 | 694,575 | 6, 105, 858 | 1,135, 817 |
| Mry | 266, 578 | 37, 523 | 691, 969 | 6, 141,088 | 4, 115, 029 |
| June | 200, 509 | 38, 600 | 641, 661 | 6,110, 162 | 1,004, 596 |
| July | 200, 571 | 39,002 | 561, 803 | 6,138, 109 | 900, 706 |
| August | 236, 581 | 39,655 | 611, 219 | 6, 152,046 | 1,034, 137 |
| September | 288, 5.92 | 39, 730 | 467, 973 | 6,212, 237 | 821, 237 |
| October | 286, 582 | 40, 045 | 424,223 | 6, 110, 722 | 901, 91 |
| November | 286, 588 | 40,013 | 418,061 | 8, 127, 138 | 889 , 809 |
| December | 208, 688 | 40, 490 | 425, 972 | 8,289, 776 | 675, 018 |
| 1022-January. | 206, 694 | 40,409 | 411, 830 | 6, 301,911 | 676, 198 |
| February | 280, 684 | 40,418 | 444,848 | 8,250, 132 | 808.380 |
| March. | 208, 564 | 40,408 | 497,483 | 6,312,943 | 774, 5006 |
| April. | 230, 389 | 40,916 | 463,744 | 6, 302,032 | 731,472 |
| May | 286, 590 | 41, 123 | 474, 680 | 6, 108, 065 | 1, 155,070 |
| June | 288, 507 | 41,905 | 404,358 | 6, 228, 202 | 818,498 |
| July | 206, 507 | 4, 478 | 406,353 | 6, 327, 881 | 722, 250 |
| August. | 264, 598 | 43,094 | 497, 620 | 6, 527, 662 | 517,688 |
| September | 286, 598 | 47, 378 | 506, 520 | 2, 517,769 | 84, 585 |
| October- | 288, 5988 | 51,497 | 557, 484 | 6, 543, 145 | 708,855 |
| Novembar. | 288,916 | 52.352 | 618,404 | 8, 704, 738 | 517, 989 |
|  | 208,916 | 54,887 | 634, 546 | 6, 700, 888 | 498, 231 |
| 1023-January- | 288,917 | 57, 889 | 625, 508 | 6, 770, 618 | 200, 102 |
| Pebrusry | 208,917 | 62307 | 601, 763 | 8, 870, 616 | 306,011 |
| March | 268,918 | $59,3.50$ | 703, 191 | 6,884,334 | 316, 167 |
| April. | 268,920 | 01, 680 | 601, 371 | 6,800, 523 | 304,491 |
| May | 288, 920 | 62.210 | 725, 018 | 6,815, 150 | 2400, 654 |
| Juno | 208,920 | 62,361 | 778,901 | 6,718,838 | 520,301 |
| July... | 299, 723 | 62,425 | 821, 386 | 6, 888, 836 | 346, 170 |
| August | 260, 725 | 60, 374 | 1, 015, 800 | 7, 198, 628 | 304, 195 |
| September | 2049, 730 | 50,774 | 1,077, 765 | 7, 150, 206 | 382, 338 |
| October- | ${ }^{289} 9890$ | 68, 720 | 1,024, 505 | 7, 281, 186 | 354, 316 |
| November | 28096 | 64,722 | 2,051,602 | 7,277, 557 | 334.351 |
| 1924-Janusty | 270,486 | 74,340 | 1,210,341 | 7,345, 431 | 428,325 |
| 1024-January- | 270.487 | 78, 548 | 1,353,022 | 7,589, 582 | 397,813 |
| February | 270, 487 | 71,094 | 1,372, 628 | 7, 051,830 | 367, 300 |
| March | 270, 488 | 70,253 | 1,388, 182 | 7.651. 704 | 414,820 |
| April | 270,488 | 68, 92 | 1,379, 148 | 7,622, 338 | 382, 039 |
| May. | 270, 488 | 68080 | 1, 20, 124 | 7, 619,450 | 817,098 |
| Juno. | 270,488 | 67, 018 | 1, 313,228 | 7.524, 228 | 329\% 530 |
| July-. | 270.488 | 65,830 | 1,388,904 | 7,764, 487 | 252,713 |
| A | 270.460 | 66, 020 | 1.308,407 | 7,640, 931 | 313,048 |
| Septembe | 270,480 | 68, 901 | 1,327,04 | 7,528, 065 | 281. 738 |
| October | 270, 489 | 68,094 | 1,346, 152 | 7, 229,583 | 201, 435 |
| November | 270, 400 | 09, 112 | 1, 211,775 | 7, 603,345 | 209,081 |
| December | 272, 24\% | 00, 263 | 1,478,650 | 7.590, 216 | 436, 38 |
| 1924-January. | 772,285 | 74, 207 | 1, 845,294 | 7,047, 007 | 405, 90 |
| Pebrusry | 272. 282 | 74.747 | 1,324,757 | 7,508,873 | 259,764 |
| March | 722, 283 | 75, 502 | 1,317, 876 | 7, 457, 360 | 315, 754 |
| A pril | 272, 288 | 73, 231 | 2,574,000 | 7,604, 420 | 237, 451 |

Table 13.-Belgium-Wholeale pricea, 1981-1984
(Index numbers of the Mintstry of Labor, 128 commodities; last hall of $A$ pril $1914=100$. The indax numbers have been converted to a gold basis by applying to them the parcasitagee which the correspanding average monthly axehame rates for doilars ane of par. See Chait B .) .
[ On paper beala and on gold basis]

| Manth | $\begin{gathered} \text { On paper } \\ \text { currency } \\ \text { hesta } \end{gathered}$ | Convarted to gold basid | Month | $\left.\begin{array}{\|c\|} \text { On papar } \\ \text { carrineney } \\ \text { benja } \end{array} \right\rvert\,$ | Cors verted bavia |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21-Angust | 847 | 135 | -July. | 501 | 129 |
| September.- | ${ }_{372}^{368}$ | 137 138 138 | August | 529 | 128 |
| Novermber- | 872 | 135 | Oeptamber | ${ }^{615}$ | ${ }_{136}^{131}$ |
| December.- | 369 | 14 | November- | 631 | 130 |
| 1028-January -. | - 368 | 148 | December | 845 | 129 |
| Fobruary | 350 | 154 | 1924-January- | 880 | 120 |
| March | 850 | 153 | February | 692 | 128 |
| April | 348 | ${ }_{151}$ | Aprll ------------------- | S65 | 120 |
| Janb | 858 | 152 | May.- | 857 | 10 |
| July...- | 360 | 146 | June. | 805 | 13 |
| August-... | 300 | 141 | July--- | ${ }^{860}$ | 184 |
| Septomber------- | ${ }_{365}$ | 187 | ${ }_{\text {Alepust }}$ | 547 | 141 |
| November | 408 | 135 | October. | 655 | 138 |
| Despmber- | 407 | 140 | November. | ${ }^{669}$ | 149 |
| 1923-Janaary- | 434 | 133 | 1025-January. | 806 | 148 |
| March. | ${ }_{482}^{474}$ |  | 1025-Jamuary-......---------- | 659 | 147 |
| April.---- | 480 | 143 | March..- | 646 | 14 |
| May | 474 | 141 | April. | 638 | 141 |
| Juno--.-.-.....- | 484 | 135 | May | 537 | 140 |

Tabls 14.-Belgium-Sxchange rates, 1019-1924
(New York on Bruseels, January-July, 1918, sight drafts; Angust-December, 1019, cable tramsfert; Jannary, 1920-June, 1021,"dght drafts; July, 1921, to date, noon buying rates for cable transfers, Average rates ere monthly averages of dally rates. Bee Chart 10.)
[8ounca: Federal Reservo Board. Par: 10.29 cents per frano]

| Month | Cents per franc |  |  | Month | Centa per trane |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | Average |  | High | Low | Average |
| 1019-Jantary. | 17.86 | 17.54 | 117.70 | 1929-April. | 8.62 | 8.40 | 8. 69 |
| February | 17.76 | 17. 61 | 1 17. 4 | - May------------- | 8.40 | 8.8 | 8.36 |
| March... | 17.04 | 15.92 | ${ }^{1} 16.78$ |  | 8.4 | 7.94 | 8.27 |
| Aprli.. | 16. 05 | 15.58- | 15.87 | July. | 8.02 | 7.4 | 7.81 |
| May. | 15.77 | 14. 81 | 15.48 | Angust | 7.78 | 7.18 | 7.55 |
| June. | 18. 60 | 1488 | 15.18 | 8eptembar- | 7.15 | 7.10 | 7.23 |
| July... | 14.89 | 18. 25 | 13.90 | October-..-- | 7. 4 | 6.39 | 6.80 |
| August | 18. 25 | 11.70 | 11247 | November. | 6.76 | 5.04 | 6.37 |
| Geptemb | 1255 | 11. 11 | 1247 | December. | 6.98 | 6.42 | 6. 68 |
| October | 11. 98 | 11. 61 | 11.76 | 1023-January... | 0.81 | 5.12 | 6.18 |
| November | 1202 | 10.68 | 11. 15 | - February. | 568 | ${ }_{5}^{6} .11$ | 5. 40 |
| December | -10.64 | 88.88 | 9. 64 | March | 6.94 | E. 21 | 5. 48 |
| 1901-January. | 9.37 | 7.13 | 8.51 | April. | 5. 80 | 5. 50 | 6. 78 |
| Fobruary | 7.85 | 6. 72 | 7.28 | May | 5,81 | 6. 62 | 5.72 |
| March.- | 7.88 | 7. 24 | 7. 88 | June | 5.81 | 8.14 | 5. 40 |
| April. | 7.88 | 6. 28 | 6. 89 | Suly...-...-n.w--- | 6,0 4 48 | 4.77 | 4.88 |
| May | 8.17 884 | 6.38 | 8.18 | August...---.---- | 4.78 | 4.35 | 4.65 |
| July.. | 0.08 | 7.97 | 864 | October. | 5. ${ }^{68}$ | 4.91 | 5.09 |
| August. | 8.08 | 7.31 | 7.87 | November | 5.01 | 4.45 | 4.7 |
| September | 7.41 | (189 | 7.16 | Decamber | 4.69 | 4.48 | 4.58 |
| October | 7.09 | 6.78 | 6. 90 | 1824-Jamary- | 448 | 4.02 | 4. 18 |
| November | 6. 70 | 6.07 | 6.37 | February- | 4 | 3.42 | 8.81 |
| December. | 6.48 | 612 | 6.8 | March | 437 | 8. 18 | 3.87 |
| 1921-January. | 7.71 | 6.18 | 6.7 | April. | 5.72 | 4.72 | 5. 23 |
| February | 7.78 | 7.31 | 7.00 | May. | 580 | 4.43 | 4.80 |
| March | 7.52 | 7.22 | 7.85 | Jane-.- | 480 | 4.38 | 480 |
| April. | 7.73 | 7.78 | 7.4 | July....w-0.-.... | 464 | 4.4 | 4. 56 |
| Mang | 877 | 7.82 | 8.37 | August.a.---.---- | 5.25 | 404 | 8.02 |
| June. | 8.89 7.97 | 7 7 7 78 | 8.08 7.64 | September | 3.00 4.85 | 4.79 4.76 | 4.90 |
| August | 7.64 | 7.32 | 7.68 | November | 4.80 | 4.80 | 4.8 |
| September | 7.64 | 6.84 | 7. 17 | Decamber | 5.08 | 4.91 | 4.9 |
| October-. | 7.8 | 6.98 | 7.18 | 1926-Janairy. | 8,22 | 4. 07 | 6. 0 |
| November | 7.18 | 0.68 | 0.94 | February | 5. 18 | 6. 00 | 5.08 |
| December | 7.88 | 6.9 | 7.54 | March. | 5. 16 | 6. 01 | 8.07 |
| 1929-January. | 8.00 | 7.59 | 7.81 | April.---------- | 8.08 | 8.08 | 5.06 |
| February | 8.78 88 8 | 7.95 8.10 | 8 |  | 5. 08 4.90 | 4.00 48 | 5. 4.70 |

[^82]Table 15.--Belgivm-Purchasing power parities, 1921-1984
(According to index numbers of the ministry of labor for Belglum and Federal Reeerve Board indar numbars for the United States. See Ohart 11)

| Month | United States index of prices | Belgisa Index of prices | $\begin{gathered} \text { Purchasing power } \\ \text { parities, } \\ \left(\frac{\text { U. B. Index } \times \text { par }}{\text { Begglan index }}\right) \\ \text { (cents per franc) } \end{gathered}$ | Average exchange rates cables In $\mathrm{New}^{\mathrm{m}}$ York (cents per (ranc) | Per cent purchesing power parities are of exchange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1021-August | 147 | 347 | 8.18 | 7.58 | 109.63 |
| Soptember. | 147 | 368 | 7.71 | 7.17 | 107. 83 |
| October- | 148 | 372 | 7. 88 | 7.18 | 106.31 |
| November | 145 | 374 | 7.48 | 6.94 | 107.78 |
| December. | 143 | 369 | 7.48 | 7.54 | 99.20 |
| 1022-January.. | 142 | 366 | 7.49 | 7.81 | 95.09 |
| February. | 148 | 3365 | 7.91 | 8.32 | 95.07 |
| March.. | 147 | 350 | 8. 11 | 8.43 | 96. 20 |
| April. | 149 | 344 | 838 | 8.82 | 98. 12 |
|  | 158 | 348 | 8.76 | 8.36 | 104. 78 |
| June..... | 181 | 356 | 8.73 | 8.22 | 100.20 |
| July... | 105 | 300 | 8.86 | 7.81 | 113.32 |
| August. | 166 | 380 | 8. 90 | 7.65 | 117.88 |
| Scptember | 164 | 368 | 8. 60 | 7.28 | 120. 18 |
| Octaber-..- | 165 | 385 | 8.87 | 8. 86 | 120. 56 |
| - November. | 164 | 408 | 7.78 | 6. 37 | 121.88 |
| 1020 Docamber. | 165 | 407 434 4 | 7.82 | B. 64 | 117.77 |
| 102-January. | 168 | 434 | 7.38 | B. 88 | 121.38 |
| March.. | 160 | 482 | 6.77 | 6.48 8.48 | 122, 54 |
| April.- | 170 | 480 | 6.84 | 8.76 | 118.76 |
| May | 167 | 474 | 6.80 | 8. 72 | 118.88 |
| June-...- | 164 | 484 | 6.54 | 8.40 | 121. 11 |
| July ....-.. | 168 | 504 | 6. 099 | 4.88 | 124.80 |
| August | 150 163 | 529 | 5.80 | 4.35 | 127. 47 |
| October-ar. | 163 | ${ }_{514} 815$ | 6. 12 | 4. 90 | 124.60 |
| November. | 163 | 531 | 5.98 | 4.74 | 125.11 |
| ${ }^{\text {cose }}$ Docambur. | 163 | 545 | 5. 77 | 4.58 | 125.98 |
| 1924-Jnntary | 163 | 540 | 5. 42 | 4.18 | 129.67 |
| February March | 163 | 642 | 490 | 3.84 | 127.00 |
| March <br> Apri | 160 | 625 | 494 |  | 127.65 |
| April...... | 158 | ${ }_{85}^{655}$ | 8.49 | 5. 23 | 104.97 |
| Muy-------- | 156 | 667 565 | 5. ${ }^{48}$ | 4.88 | 111.38 |
| July....-. | 156 | 568 | 6. 38 | 458 | 116.38 |
| August | 158 | 547 | 8. 57 | 5.02 | 110.90 |
| September. | 156 | 850 | 8. 47 | 49 | 110.73 |
| October--- | 159 | 555 | B. 53 | 480 | 115. 21 |
| November | 160 | 549 | 5. 48 | 488 | 112.42 |
| 1985-January | 165 | 568 | 5.62 | 4.97 | 113.08 |
| 102\%-January... | 168 | 559 | 5. 80 | 5.08 | 114. 6 |
|  | 167 | ${ }_{541} 5$ | 5. 85 | 5. 08 | 116. 16 |
| March. <br> Apri | 169 | 540 | 5. 97 | 5.07 | 117.76 |
| Aprilamer---- | 184 | 538 | 8.88 | 8, 06 | 116. 44 |
|  | 168 | 537 | 8. 88 | 5.02 | 11076 |

Tabls 16.-Belginm-Gold balue of total note circulation, 1919-1984
IOn bada of exehange ratas and on bastí of purchasing power parities. Bee Ohart 12]

| Month | Total note circulation thousands of francs) | Avergge Axchange rates (conts per (ranc) | $\begin{aligned} & \text { Gold value } \\ & \text { of circula- } \\ & \text { tion on } \\ & \text { besis of } \\ & \text { enchange } \\ & \text { rates } \\ & \text { (thousinds } \\ & \text { of dollarga) } \end{aligned}$ | Purahasing powar per (ranc) | Gold value of cireuletion on parchasine power parties (thoudollara) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1919-Joly | 4, 005, 315 | 18,90 | 653.878 |  |  |
| Aurgost. | 4, 40807 , 763 | 12,47 | [684, 838 |  |  |
|  | 4, 680,005 | 1175 | 84, 9008 |  |  |
| November | 4,670, 895 | 11, 15 | 520, 805 |  |  |
| 1020-Jacembery | 4, 8002,641 | 8.51 | 417, 215 |  |  |
| February | 4, 8288891 | 7.28 | 356, 34 |  |  |
| March |  | 7.48 | 870,043 342,740 |  |  |
| Mву | 5,008, 378 | 7.18 | 383, 653 |  |  |
| June. | ${ }^{5}$, 188, 370 | 8.30 | 428,809 |  |  |
| July -- | S, ${ }^{5}, 387,103$ | ${ }^{8} 8$ |  |  |  |
| Suplemb | 5, 336,056 | 7.18 | 424, 170 410,702 |  |  |
| October | 5,782, 828 | 6.90 | 399, 705 |  |  |
| November | 5,45, 802 | a. 37 | 372, 378 |  |  |
| 2I-Jeember | 6,110, 239 | ${ }_{\substack{6 \\ 8.25 \\ 8.77}}$ | ${ }_{421}^{882} 852$ |  |  |
| Fobruary- | 5,968,667 | 7.50 | 477, 850 |  |  |
| March- | 5, 104, 823 | 7.35 | 448,704 |  |  |
| April. | 8, 105, 858 | 7.45 | 454, 278 |  |  |
| May--- | 8,112, 162 | ${ }_{8}^{8.85}$ | S14, 4009 4060 |  |  |
| July... | 6, 138, 109 | 7.04 | 468, 052 |  |  |
| August. | 6,153,046 | 7.88 | 403, 249 | 8 | 803,237 |
| Septemb | 6,212, 237 | 7.17 78 | 45, 417 | 7.71 | 178989 |
| November | 6, 127, 136 | 8.95 | -436, 2028 | 7.68 7 | -468, 310 |
| December | 8, 289, 676 | 7.54 | 474,234 | 7.48 | 470,400 |
| 1929-January. | 6,301, 911 | 7.81 | 402170 | 7.40 | 472,013 |
| Febriary- | 6. ${ }^{6.259,132}$ | 8,32 | 520 780 | 8.91 | 495, 097 |
| April.... | 0, 302,032 | 8.52 | 536, 838 | ${ }_{8} 86$ | 526, 850 |
| May. | 6, 103, 006 | 8.38 | 510,216 | 8.76 | 634, 028 |
| July | 6, 387,881 | ${ }_{7.81}$ | 491, 208 | -8.78 | 660,017 |
| Augast, | 8, 527,662 | 7.55 | 402838 | 880 | 688, 982 |
| October. | 8,543,145 | ${ }_{6} 7.88$ | 471,238 <br> 48888 <br> 88 | ${ }_{8}^{87}$ | S68, 81118 |
| Novembar | 8, 704, 738 | 6.37 | 427,002 | 7.76 | 520, 288 |
| Decembe | 6, 700, 886 | 6. 68 | 416, 270 | 7.82 | 524,009 |
| Tebruar | ${ }_{8}^{6}, 780,616$ | 6. 40 | 371.013 | 6.78 | 404,454 |
| March- | 0,884, 334 | 5.48 | 877, 202 | 6.77 | 406, 069 |
| April | 6,889, 583 | 5.78 | 385, 685 | ${ }^{6} 88$ | 489, 878 |
| June. | 8,718,838 | ¢ 40 | 862, 817 | ${ }_{6} .54$ | 439,412 |
| July | 6, 888, 838 | 4.88 | 336, 175 | 6.09 | 410, 630 |
| Aurust- | 7,198, 628 | 4.05 | 8850,360 |  | - 4 47, 698 |
| Oetober. | 7,281,186 | 5.09 | 870, 612 | 6.11 | 44,880 |
| November | 7,277,567 | 4.4 | 844,958 | 5. 88 | 431,659 |
| Dicosmber | $7,345,481$ <br> $7,889,588$ | 488 4.18 | -330421 | ${ }_{5}^{5} 77$ | 423, 831 |
| February | 7, 661,180 | 8.8 | 212, 830 | 4.20 | 374,040 |
| March.. | 7, 55i, 704 | 8.87 | 209, 121 | 4.04 | 877,004 |
| April. | 7,622,338 | 5. 23 | 398, 648 | 5. 48 | 118.406 |
| Jome- | 7, 7124,238 | 486 | 372, 145 | 5.20 | ${ }^{395}$ |
| July. | 7, 7404,487 | 4.50 | 851,001 | 6. 32 | 413,071 |
| August | 7,640, 931 | 502 | 383, 575 | 6.67 | 425,600 |
| Beptemb | 7, 528, 885 | ${ }_{4}^{4.94}$ | 871,789 | 6.47 | 411,677 |
| October- | $7,626,580$ <br> $7,803,353$ | ${ }_{4}^{4.80}$ | 368,220 3672 | ${ }^{4} \times 48$ |  |
| November | $7,603,353$ 7690,210 | 4 | - 3878 | ${ }_{5.62} 5$ | 4128, 478 |
| 1025-January | 7, 617, 2007 | 5. 06 | 888, 087 | 5.80 | 461, 230 |
| Februsy | 7, 6888873 | ${ }^{5} 88$ | 886, 023 | 5.85 | 44.654 |
|  | 7,457, 8 , 80814 | 5.07 6.08 | $\begin{aligned} & 378,099 \\ & 888,109 \end{aligned}$ | 5.88 | 443, 427 |

Table 17.-Belgium-Imports and exports. of merchandise; annually, 1881-182s (Special imports, i. e., imports for domestic consumption; speclal exports, i. e., exports of domentic merchandise)
[Source: Commerce Exterileur de la Beláique. See Chart 9 . 000 omitted]

| Year | Quantity |  | Vatue |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports | Exports | Imports | Exports | Erceas of Importa |
|  | Ellograms | Kilograma | Fran | Pranes | Erance |
| 1882. |  |  | 1, $1,060,585$ | 1, $1,304,551$ | 286,094 |
| 1833 |  |  | 1,462, 353 | 1,308, 182 | 154,171 |
| 18885 |  |  | $1,282,123$ <br> 1,3887 | 1, $1.306,763$ | 73, 1300 |
| 1888 |  |  | 1, 110,746 | 1, 1788 | 132, 35 |
| 1887 |  |  | 1,488, 588 | 1,239, 336 | 187,061 |
| 1888 |  |  | 1,619, 262 | 1,249,416 | 276, 846 |
| 1889 |  |  | 1,520, 883 | 1,453,734 | 67, 129 |
| 1800 |  |  | 1, 655, 500 | 1,430, 918 | 224,598 |
| 1891 |  |  | 1,754,608 | 1,102,227 | 242, 171 |
| 1892 |  |  | 1, 5007,800 | 1,347, 501 | 159,289 |
| 1888. |  |  | 1,522, 104 | 1, $1,337,091$ | 185, 373 |
| 1895. |  |  | 1,052, 980 | 1,340,072 | 303,908 |
| 1880 |  |  | 1,723,303 | 1,433,229 | 250,034 |
| 1807. |  |  | 1,794, 008 | 1,601, 324 | 289,484 |
| 1888 |  |  | 1,970, 239 | 1,706, 804 | 288,345 |
| 1890 |  |  | 2,180, 779 | 1, 860, 713 | 310, 96 |
| 1900 |  |  | 2,109,711 | 1,007, 455 | 262, 256 |
| 1901 | 13, 467, 537 | 14,275, 231 | 2, 190, 532 | 1,807, 630 | 301,902 |
| 1000. | 14, 817 7, 71 |  | 23600880 | 1,914, 604 | 446, 258 |
|  | $16,836,534$ <br> $18.083,636$ | - $15.170,281$ | 2,621, 733 <br> $\mathbf{2}, 755,807$ | 2,087, 634 <br> $\mathbf{2}, 187,154$ | - 834.009 |
| 1905 | 19,530, 285 | 15, 572,408 | 2, 044, 477 | 2,314,105 | 720, 372 |
|  | 20, 064, 186 | 16, 609, 308 | 3, 237,488 | 2,681,409 | 656,077 |
|  | 21, 527, 354 | 16,777, 235 | 3, 665, 818 | 2, 825, 0000 | 880,718 |
| 1908 | 21,003, 719 | 16,3560,172 | 3,237, 119 | 2,478, 284 | 789, 185 |
| 1910 | $23,340,025$ $25,765,748$ | 17, ${ }^{187898}$ | 3, $000 \times 177$ | 2,751, 070 | 8530,707 |
| 1911 | 28, 340,463 | 19,633, 309 | 4, 1212984 | 3, 535,543 | 777, 141 |
| 1912 | 29, 8999,772 | 20,616.670 | 4, 660,733 | 3,001, 000 | 759, 133 |
| 1913. | $\begin{array}{r}300,7783,948 \\ 4,752 \\ \hline 188\end{array}$ | ${ }^{20} 8884,7788$ |  |  | 1,002, 024 |
| 1920 | 13,331,008 | 10, 585 ; 262 | 12, 2355 | 8,852,09 | 4,083, 468 |
| 1921 | 17.858, 590 | 17, 228,231 | 10, 196, 402 | 7,284,438 | 2,830,500 |
| 1922 | 22, 558, 424 | 17,000, 320 | 0,451,745 | 6, 388,228 | 3,053, 516 |
|  | 23, 608, 129 | 16, 974,341 | 12, 204,780 | 0, 725,054 | 3, 479, 720 |

Table 18-Belgium-Imports and exports of merchandise, monthly 198s-84 (including gold and silver)
[Quartity in metric tons; value in thousands of trancs]
[Soarco: Builetin Mensual du Commerce spectal]

| , | Qusntity |  | Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Luposts | Exports | Imparts | Exports | Encess of imports |
| 3-Janmary. | 2, 183,192 |  |  |  | 443, 210 |
| February <br> March | $\begin{aligned} & 1,79,743 \\ & \mathbf{n}^{\prime}, 701,851 \end{aligned}$ | $\begin{aligned} & 1,200,686 \\ & 1,308,170 \end{aligned}$ | $\begin{aligned} & 805,320 \\ & 8 \times 8 \\ & 8 \times 8 \end{aligned}$ | 560, 409 715,353 | 216, ${ }^{217}$ |
| April | ${ }^{2}, 608,011$ | 1, 56, 055 | 973,736 | 700, 323 | 273,343 |
| May | 1,807, 013 | 1, 108, 240 | 898, 165 | 570, 237 | 218,908 |
| Juna. | $2,281,1882$ | 1, 386, 878 | 1,185,768 | 758,506 | 437,237 |
| August | 2198780 | 1, $1,5012.818 .6$ | 1,023,184 | 732, 158 | 201, ${ }^{26182}$ |
| Beptember | 3,204,243 | 1,520, 481 | 1,000, 378 | 825, 120 | 274, 28 |
| October- | 2,230, 538 | 1,481,002 | 1,107, 741 | 834.442 | 273, 209 |
| November | 23288020 | 1,380, 877 | 1, 124, 242 | 888.45 | 258,797 |
| - Jenuarry. |  | - | 1,207, 1838 |  | 247,380 |
| February | 2, 020.100 | 1, 500, 210 | 1,488,496 | 1,086, 100 | 352,330 |
| March. | 2923588 |  |  | 1,250, 000 | 209,676 |
| April. | 2, 749, 236 $\mathbf{2} 2888$ | 1, 633240 |  |  | 222,350 |
| June | 2582704 | 1,000, 855 | 1, 380, 323 | 1,079, 78 | 300.515 |
| July-. | 2,754,42 | 1, 818,058 | 1, 498, 511 | 1,104,007 | 820,414 |
| August. | 3, 8200708 | 1,774, 314 | 1,304, 038 | 1,008, 18 | 355,902 |
| October | 3, ${ }^{3}, 009,931$ | 1,750,308 | 1,778, 1 , 104 | 2, 184, 168 | 49, 3170 |
| November | 1,821, 223 | ${ }^{1} 906381$ | , 78,502 | ${ }^{2}$ 633, 846 | 125,716 |
| December | 3, 976, 2011 | 1,673, 278 | 1,68, 002 | 1,47, 760 | ${ }^{1250} 300$ |
| Fabras | $\begin{gathered} 2,876,178 \\ 2,507,114 \end{gathered}$ | 1,519,072 | $\begin{aligned} & 1,872,0000 \\ & 1,20,720 \end{aligned}$ | $\begin{aligned} & 1,04,008 \\ & , 950 \\ & \hline \end{aligned}$ | 317, 30818 |

Tasle 19.-Belgium-Imports and exports of gold and silver, onnually, 1881-198s
[Quantity in kilograms; value in thowsands of francs]
[Source: Commerce Exttriemr de is Belgique]


1 Includes trade of Grand Dechy of Inuxambarg.

Table 20.-Belgium-National debt
[Eource: Apnuialre Etatistlque de la Eelgique]
[000 omitted]

| Dec. 31- | Hoating | Total in. debtednees |
| :---: | :---: | :---: |
| 1900-Belgian franes | 57, 051 | 2,708, 419 |
| 1910-Belgian francs | 138,205 | 4,201,717 |
| 1914-Belgian franos. | 604,380 | 4, 982,472 |
| 1919-Belgian franes. | 12,431,200 | 18, 767, 338 |
| Pounds sterling | 7,598 | 17,469 |
| French francs... | 338,831 | 338,881 |
| Dollars. | 218,060 | 213,060 |
| 1920-Belgian frares | 14,224, 831 | 22,925, 430 |
| Pounds sterling | 14, 488 | 23, 2081 |
| French francs. | 233, 831 | 333,831 |
| 21-Bollars ${ }^{\text {- }}$ - ${ }^{\text {Pancs }}$ | 242, 613 | 293,613 |
| 21-belgian ranes.- | 10, 347,374 | 27, 404, 780 |
| French france.- | 333, 831 | 333, 831 |
| Dollars. | 238, 838 | 315,708 |
| 1022-Belgian franes- | 18, 225, 732 | 29,827,835 |
| Pounds starling | 11,368 | 20, 027 |
| French framcs. | 133, 831 | 383,831 |
| 1090 Dollars. | 15, 222, 503 | 305, 878 |
| 1028-Belgian franes. | 16, 436,722 | 31, 199, 638 |
| Pounds steriling. | 9,930 | 18,271 |
| French francs. | 207, 279 | 697, 279 |
| Dollars | 282, 409 | 2002,284 |
| Duteh florins. |  | 44,893 |

Table 21.-Belgium-Receipts and expenditures
[Source: Annasire Statistique de Ia Belgique]
[ 000 omiltted]
1910-1918


[^83]${ }^{2}$ Inctoder monparmanemt, ocenpation and other.

Tanle 22,-Banking office of Ceechoslovakia, 1919-1984
[Alource: Btatamants of the Benking Offlee of the Ministry of Finance. Sea Ohart 18. End of momth; thounands of Ozoohoslopak cropnas]

|  |  | Etate notes In droulstion | Oold and silver | Poreiga currency and balancea sbroad | Total rebarves (gold, silver. forelgn currency. and balanoet abroad) | Paresitage total remarves are of note droulation | Loanl and disoounts |  |  | Dapoalte and current account |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monch |  |  |  |  |  | $\begin{aligned} & \text { Advineer } \\ & \text { onllateral } \end{aligned}$ | $\begin{aligned} & \text { Bills and } \\ & \text { and } \\ & \text { securfities } \end{aligned}$ | Total losns and discounta | Deposits | Cortiflateo retention not diaposable |  |
|  | 1910-Apr1. |  |  | 6,457 | 6,457 |  |  | 20,410 | 20,410 | 2,24,018 |  |  |
|  | May |  |  | 0.661 | 0, 801 |  | 680, 171 | 26,348 | 656, 614 | 2,331, 762 |  |  |
|  | Jaly. | 171, 108 |  | 8,265 | 8,265 | 8.18 | 120,291 | 26,500 | 460, 797 | 2,166,715 |  |  |
|  | August | 681,997 |  | 8, 570 | 8.670 | $\underline{120}$ | 425,301 | 26, 664 | 451,865 | 1, 762, 100 |  |  |
|  | Saptembar | 1,443, 570 |  | 8,435 | 8, 485 | . 58 | 428,840 | 77,386 | 450, 298 | 1, 281,617 |  |  |
|  | October- | \%, 512, 190 |  | 9, 580 | $0_{6} 680$ | . 38 | 43,238 | 28,288 | 451, 621 | 1, 369, 829 |  |  |
|  | Novernber. | 8, 513, 405 |  | 11,789 | 41,789 | . 34 | 437,615 | 29, 430 | 467,045 | 1,400,232 |  |  |
|  | Dedamber | 4, 723, 303 |  | 13, 054 | 18,984 | . 80 | 502,319 | 79,588 | 681, 887 | 1,127,287 |  |  |
|  | 1920-January. | 8, 574, 6888 |  | 25, 887 | 25, 887 | . 48 | ${ }^{609}$, 188 | 150,886 | 220,074 | 1, 0989.480 |  |  |
|  | February | 6,462, 825 |  | 25, 871 | 56,871 | . 88 | \% 838,304 | 245, 828 | 1, 184, 132 | 1, 256, 477 |  |  |
|  | March | 7, 216, 488 |  | 25,943 | 254,948 | 8.65 | 1, 770,099 | 530, 239 | 1, 601,268 | $\mathbf{1}, 370,979$ |  |  |
|  | April. | $7,965,635$ $8,268,895$ |  | 283, 419 | 263,419 878,484 | 8.31 458 | 1, 2286,807 | 509, 492 755,985 | 1,836, 859 | $1,082,740$ $1,338,453$ |  |  |
|  | May | $\begin{aligned} & 8,268,095 \\ & 8,2923 \end{aligned}$ |  | 878,484 | 678, 68118 | 4.58 | $1,486,779$ $1,828,858$ | 765,965 | $2,222,744$ $2,520,188$ | $1,338,458$ $1,458,602$ |  |  |
|  | July. | 0,267, 774 |  | 649, 308 | 640, 808 | ${ }_{5}^{6} 98$ | 1, 1288,837 | 724,841 | 2,711,788 | 1, 171, 084 |  |  |
|  | August. | 9, 814,920 | 2,808 | 447,597 | 450, 405 | 489 | 2, 14, 140 | 797, 800 | 2, 030,509 | 1, 147, 878 |  |  |
|  | geptembe | 10,310, 228 | 8,067 | 708,838 | 711, 005 | 8.00 | 2,270,112 | 1,065, 077 | 3, 345,039 | 1,262 199 |  | 12,607 |
|  |  | 10, 920, 514 | 4,231 | 389, 478 | 393, 709 | 8.61 | 2, 2086, 898 | 1, 695, 646 | 8, 901,430 |  |  | 63,671 |
|  | November | 10, 946, 053 | 40,311 | 254,772 | 299, 583 | 269 | 2, 14, 120 | 1,70, 8585 | 8, 943,978 | 1, 109, 360 | 71, 135 | 112,168 |
|  | ${ }^{1927}$ December | 11, 288, 512 | 162819 | 485, 598 | 609, 415 | 8.39 | 2,822, 714 | 2,015,520 | 4,338,240 | 1, 144, 224 | 177, 1818 | 157, 081 |
|  | 1021-January- | 10, 888, 319 | 164,491 | 165,383 | 320, 874 | 8.08 | 2,200, 043 | 1,794, 018 | 4, 000,901 | $\cdot 857,075$ |  | 205, 08 |
|  | Fobruary | 10, 1814.788 | 175, 238 | 832,744 518,745 | 508,280 | 466 | 2095, 838 | 1,672,862 | $3,768,400$ 865315 | 948, 647 | 628,328 | 247, 618 |
|  | April | 10, 921, 056 | 215, 685 | 518,745 | 734, 380 | ${ }_{8}^{6.72}$ | 1, 885 , 6582 | 1,667, 168 | 3,653, 715 | 787, 484 | 488, 983 | 283,094 |
|  | Msy | 20,88, 408 | 248806 | 780, 155 | 1,028,781 | Q. 48 | 1,058, 688 | 1, $1,085,250$ | $8,308,807$ $3,177,44$ | 6665, 284 | 421, 1874 | 320, 388 |
|  | June. | 11,167, 515 | 2404,501 | 783,42 | 1,088,038 | 0.74 | 1,098, 012 | 1, $085 \mathrm{5}, 254$ | 8,083, 286 | 739,405 | 420,241 | 420, 463 |
| 8 | July- | 11, 134,877 | 820,708 | 507,407 | 1828,205 | 7.44 | 2,354, 950 | 1, 088, 071 | 3,438, 930 | 723, 353 | 430, 790 | 443,603 |
| 0 | August | 11, 455, 175 | 887,009 | 945,934 | 1, 188, 548 | 10.34 | 2, 399, 533 | 810,245 | 3, 300,779 | 777, 683 | 441, 010 | 460,705 |
|  | Septembe | 11, 570, 881 | 351, 181 | 540,942 | 898, 120 | 7.76 | 2 Cas , 830 | 984, 878 | 3, 403, 205 | 606, 767 | 451, 811 | 483,404 |
|  | October- | 12,327, 159 | 874,795 | 599, 738 | 974, 5288 | 7.91 | 2, 451,297 | 1,751, 344 | 4,200, 631 | 651, 657 | 40, 648 | 526, 747 |
|  | Novemb | 11, 871, 647 | 685,284 | 488,720 | 1,024,004 | 8.83 | 1,758,870 | 2, $\mathbf{2} 82,610$ | 4, 339,488 | 745, 321 | 428, 003 | 501, 76 |
|  | Decamber | 12, 120, 678 | 552, 280 | 532, 692 | 1,084,001 | 8.04 | 1,714,631 | 2,511,818 | 4,225, 858 | 652, 826 | 389,121 | 603,276 |

Table 22.-Banking office of Czechoslovakia, 1919-1924-Continued


Table 23.-Czechoslonakia-Wholeale prices, 1988-1984
(On papar basis and on gold basis)
Central Burean of Statistics index numbers; 128 commoditias; fgares are as lst of month. The index nimbers have been converted to a gold basis by applying to them the percentages which the corresponding average monthly exchange rates for dollars are of par. See Chart ith. July, 1914-1001

| Month | On paper currency | $\begin{gathered} \text { Converted } \\ \text { to gald } \\ \text { besis } \end{gathered}$ | Month | On paper currency batis | Converted to gold basia |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1929-7anasty .-. | 1,675 | 143 | 192\%-October- | 878 | 143 |
| February. | 1,500 | 139 | November | 965 | 138 |
| March | 1, 552 | 133 | Decembar | 984 | 148 |
| April | 1, 491 | 144 | 1024-January-- | 974 | 189 |
| May | 1,471 | 139 | February. | 809 | 143 |
| Juna- | 1.471 | 140 | March | 1,021 | 146 |
| July- | 1,464 | 158 | April..-. | 1,008 | 147 |
| August | 1.386 | - 290 | Msy.... | 1,018 | 147 |
| September.- | 1,155 | 172 | June. | 98 | 142 |
| October | 1,059 | 172 <br> 150 | Augrast. | 658 988 | 185 |
| December | 999 | 158 | Septamber | 298 | 145 |
| 1025-January. | 1,003 | 141 | Octaber- | 099 | 147 |
| February | 1,019 | 149 | November | 1,018 | 140 |
| March | 1,023 | 151 | - Decamber | 1,024 | 158 |
| April | 1,081 | 158 | 19\%-J8mary.. | 1,045 | 156 |
| May | 1,030 | 181 | Februery. | 1,048 | 163 159 |
| Jund | 1,001 | 1148 | March..... | 1,031 1,010 | 159 |
| August | 958 | 139 | May--- | 1,000 | 147 |
| Septamber. | 957 | 141 |  |  |  |

Table 24.-Czechoslowakio-Exchange rales, 1919-1924
[New Yorit on Prague. July, 1919, alght drafta; August, 1919, to March, 1921, eable transfara; Aprll to June, 1021 , sight drafts; July, 1921, to December, 1924, noon buying rates for cable transfers. Average rates, Aprl, 1019, to June, 1021 , are mid points between the monthly high and low rates; from Jaly, 1921 , to November, 1924, the rater are monthly averages of defly ratos. ©ee Chart 16]
[Source: Federal Reserve Board]
(Nominal par: 20.20 cents per crown)

| Month | Cents per crown |  |  | Month | Cents per crown |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eigh | 20\% | Aver: age |  | Eigh | Low | AverBge |
| 1910-January |  |  |  | 1828-April | 2039 | 1. 857 | 1. 000 |
| $\cdots$ February |  |  |  | May | 1. 049 | 1.801 | 1. 021 |
| March. |  |  |  | June. | 1.948 | 1.908 | 1.924 |
| Arilo- | 4. 870 | 8. 600 | 6. 185 | July. | 2412 | 1.910 | 2186 |
| May... |  |  |  | August. | 8.757 | 2430 8.002 | 2902 |
| June |  |  |  | Septamber | 3. 5008 | 8. 002 | 8.231 |
| July | 6. 750 | 6. 500 | 5.625 | October. | 3. 692 | 3.100 | 3.288 |
| August | 5. 500 | 8.650 | 4.575 | November | 3.24 | 2150 | 3.176 |
| Septambe | 4000 | 8.850 | 3. 425 | ${ }_{\text {10ga-January }}$ | 8. 188 | 2728 | 3.007 |
| October- | 2. 850 | 2850 | 3.100 | 196-January | 3. 098 | 2.771 | 2856 |
| November | 2400 | 1.500 | 1. 950 | February | 2.978 | 2872 | 2958 |
| December | 2. 100 | 1.700 | 1. 800 | March | 2880 | 2.965 | 2.969 |
| 1090-January. | 1.750 | 1. 100 | 1. 422 | Aprli. | 2987 | 2.968 | 2978 |
| Fobruary | 1. 060 | . 900 | . 975 | May. | 2008 | 2.971 | 2979 |
| March. | 1. 500 | 1.050 | 1. 275 | June. | 8. 006 | 2982 | 2088 |
| April | 1.710 | 1. 850 | 1. 630 | Juy | 3. 025 | 2.968 | 2997 |
| May | 2810 | 1. 680 | 2.195 | August | 2944 | 2.918 | 2.934 |
| Jama. | 2500 | 2.170 | 2335 | Septambe | 3.014 | 2954 | 2905 |
| July | 23380 | 2010 | 2195 | October- | 8002 | 2931 | 2971 |
| Auguat | 2020 | 1. 600 | 1. 810 | November | 2,929 | 2.880 | 2000 |
| Seplomb | 1.900 | 1. 170 | 1. 635 | December. | 2.883 | 2.911 | 2.925 |
| October | 1.880 | 1. 130 | 1. 245 | 109\%-January-- | 2.808 | 2.878 | 2888 |
| Novembe | 1330 | 1. 000 | 1. 185 | February | 2907 | 2885 | 2902 |
| Decembe | L. 250 | L. 180 | 1.190 | March. | 2,998 | 2879 | 2902 |
| 1041-January | 1. 600 | 2. 100 | 1. 300 | April. | 2 S 81 | 2028 | 2057 |
| Febrama | 1.350 | 1.230 | 1. 290 | May.. | 2958 | 2.828 | 2.039 |
| March | 1.305 | 1248 | 1.307 | Juns. | 2.957 | 2.919 | 2.036 |
| Aprli | 1410 | 1.320 | 1. 868 | July. | 2977 | 2928 | 2.053 |
| May | 1. 650 | 1. 370 | 1.400 | August | 8. 001 | 2950 | 2970 |
| June | 1.480 | 1. 350 | 1420 | Beptember | 8.000 | 2885 | 2.908 |
| July. | 1.360 | 1.251 | 1. 312 | October. | 2.987 | 2.877 | 2.981 |
| August | 1.200 | 1170 | 1. 2295 | November | 3. 014 | 2880 | 2989 |
| Beptemb | L. 219 | 1.000 | 1. 160 | December- | 3.031 | 8. 084 | 3. 018 |
| October | 1,000 | . 987 | 1.049 | 1025-January. | 8.02 | 2.07 | 8.00 |
| Novem | 1.079 | . 924 | 1. 038 | February | 2.07 | 295 | 2.06 |
| 1gan-Jacemar | 1. 1.971 | 1.085 1.548 | 1.249 1.732 | Maroh | 2.87 297 | 208 | 2.97 |
| February | 1.932 | 1. 069 | 1.855 | Mey | 296 | 2.06 | 2.00 |
| March. | 1.808 | 1. 621 | 1.733 | Jane | 2.96 | 200 | 200 |

Tably 25.-Czechoslovakia-Purchasing power parities, 1928-1984
[According to index numbers of Cenow6 Zprafyy for Czeahoslovailia snd Federal Revarve Board Index nura bers for the Vilted States. See Ohart 17]


Tabla 26.-Czechoslovakia-Gold value of total note circulation, 19e0-1824
[On basif of exchange rates and an bade of parchasing power paritlea. Bee Chart 18]

|  | Total nots clrealation (thousands of crownis) | Average rates (conts y | Oold valuo of clrealation on basis of oxebsinge ratea (thousande of dollars) | Purchasing Doweer partilet (centiper crowni | Gold value of cireculation on basis of purchasing DOWer (thoressands of dollent) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1020-Juna | 8,720, 228 | 2335 | 208, 827. 6 |  |  |
| July.... | 9, 167, 877 | 2195 | 201,2340 |  |  |
| August | -9,814, 2020 | 1.810 <br> 155 | 173, ${ }^{15050} 1$ |  |  |
| Oetober--.. | 10, 920,514 | 1.245 | 136, 0501 |  |  |
| November | 10,946, 653 | 1.165 | 127, 523,5 |  |  |
| isan-Janumby..- | ${ }_{10}^{11,28888812}$ | 1180 | 134, 8383 | .......... |  |
| Pebruary | 10,014,786 | 1. 200 | 140, 800.7 |  |  |
| March | 10,921, 856 | I. 306 | 142, 64.7 |  |  |
| April | 10,928, 560 | 1.368 | 140, 172.8 |  |  |
| May. |  | 1.460 1420 |  |  |  |
| July. | 11, 134, 327 | 1. 312 | 148,082 |  |  |
| Angust | 11, 455, 175 | 1225 | 140,324, |  |  |
| September |  | 1.160 1.049 | 134, 2222 |  |  |
| November | 11, 871,647 | 1.038 | 123,227.7 |  |  |
| December. | 12,120, 578 | 1.29 | 151,429. 4 |  |  |

[able 26.-Crechoslovakia-Gold value of total note circulation, 1920-1924-Con.

|  | Total note circulation (thousands of erowns) | Average exchange rates (cents per crown) | Gold value of circulation on basts of exchange rates (thomsands of dollars) | Purchasing power parities (cents per (crown) | Gold value of circulation on basis of purcheaing powar paritics (thousands of dollars) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 922-January | 11,230,065 | 1. 732 | 194,504. 7 | 1. 718 | 102,932 5 |
| Febrimary | 10, 743, 958 | 1855 | 100, 300, 4 | 1.948 | 200, 077.4 |
| March | 10,323, 060 | 1. 733 | 178, 898 | 1.919 | 188,099. 7 |
| April. | 10, 075,757 | 1.950 | 197, 481.8 | 203 | 203, 832.6 |
| May. | 0,717,760 | 1.921 | 188,678.0 | 2.179 | 211,4582 |
| Juns | 9, 838, 205 | 1.824 | 189, 287.1 | 2.218 | 218,211. 4 |
| July | 9,910, 077 | 2. 185 | 216, 806.3 | 2.283 | 226,394.0 |
| August. | 10, 171,383 | 2.902 | $295,173.5$ | 2412 | 245,333, 8 |
| Soptembe | 10, 198,880 | 8.281 | $329,461.2$ | 2.877 | 263, 284.2 |
| October | 10, 139,368 | 2. 285 | 833, 078.2 | 3. 167 | 320, 099.8 |
| November | 9,986, 550 | 3. 178 | 317,490 4 | 8. 287 | 328, 5887.8 |
| December | 10, 064,049 | 3.097 | 811, 688.8 | 8.856 | 334, 730.8 |
| 928--Jantuary. | 0, 222, 434 | 2.856 | 293,302.7 | 8.353 | 309, 298. 2 |
| February | $8,047,988$ | 2.958 | 264,081.6 | 8. 300 | 295,283. 6 |
| March | 9, 157,407 | 2969 | 271, 888.4 | 8. 331 | 306,033.2 |
| April | 9,567, 309 | 2.978 | 239,916. 2 | 8.341 | 319,645. 8 |
| May | 0, 327, 676 | 2979 | $277,871.8$ | 8.288 | 308,694.0 |
| June | $0,875,901$ | 2.989 | 220, 623.4 | 8. 319 | 811, 189.1 |
| July -- | 9,448, 086 | 2. 007 | 288, 169.1 | 3.328 | 314, 432.8 |
| August | 9,218,475 | 2. 924 | 270,470.1 | 8. 368 | 310,017. 8 |
| Eeptamber | 0,311, 378 | 2995 | 278, 875.8 | 8.451 | 321,335. 7 |
| October. | 9,278, 909 | 2.971 | 275, 878. 1 | 8394 | 314,929.2 |
| November | 9, 250,688 | 2.906 | 288, 823.0 | 8.488 | 316,928. 6 |
| December | 9,558, 003 | 2.925 | 288, 767.9 | 3. 366 | 322139.2 |
| 984-January. | $8,810,088$ | 2808 | 255, 316.5 | 3.391 | 298,750.8 |
| February | $8.508,407$ | 2.202 | 246, 857.7 | 3. 300 | 281,223.8 |
| March. | $8,280,300$ | 2902 | 240, 290.0 | 8. 175 | 262,902, 4 |
| April. | $8,188,653$ | 2967 | 242, 434.2 | 3.176 | 256.781.8 |
| M8y-... | 8,078, 418 | 2939 | 227, 20.7 | 3. 114 | 251, 661.9 |
| June--- | 8,061, 108 | 2986 | 277, 26018 | 8. 180 | 256,979.2 |
| July | 8,090, 034 | 2963 | 228, 808 7 | 3.318 | 208.285 .5 |
| August. | $8,139,782$ | 2979 | 242, 484.4 | 8. 246 | 264, 217.7 |
| September | $8,228,658$ | 2.958 | 246, 104. 2 | 8. 219 | 284, 087.4 |
| Octover-..- | 8 8,585, 80047 | 2981 2989 | 255, 2084.1 | 8.220 | 278, 298.6 |
| November. | 8,810, 357 | 2. 8020 | 266, 072.8 |  | $272,030,1$ $287,570.1$ |
| 0as-January. | 7,916, 540 | 2. 000 | 277, 406. 2 | 8.257 | 257,841.7 |
| February | 7, 727, 880 | 2060 | 228, 745.2 | 2.228 | 240,458, 6 |
| March. | 7,680, 867 | 2.070 | 238, 121.7 | 8.811 | 254,313.6 |
| April. | 7, 526,034 | 2.900 | 220, 767.0 | 8.261 | 246, 420,7 |

Table 27.-Czechoslovakia-Imports and exports of merchandise, 1980-1984 (including gold and siver)
[Elource: Zahranional Obchod Repablicy Cueakoalovenske]

| Year | Imparts |  | Experts |  | Excese of exports |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quintala | $\begin{gathered} \text { Thousends of } \\ \text { ecowns } \end{gathered}$ | Quintals | Thousands of crowns | Quintala | Thousands of crowns |
| 920. | 39, 101,600 | 23, 884 412 | 09, 022,209 | 27, 860,415 | 29,920,649 | 4,185,003 |
| 921 | 39,011,748 | 22, 433, 293 | $\therefore 97,427,834$ | 27, 311, 588 | 67, 515,611 | 4,878, 293 |
| 922 | 81,942, 150 | - 12, 685,516 | 94,902,825 | 18, 088,349 | 62, 060,475 | 5, 380, 833 |
| 983 | 41,914, 808 | 1b, 134, 615 | 118, 097, 725 | 12, 518,811 | 71, 182,917 | 2,388, 986 |
| 984 | 56, 658, 440 | 15, 898, 208 | 124, 298, 258 | 17, 022, 201 | -67, 641,818 | : $12,159,053$ |

Table 28.-Czechoslovakia-Imports and exports of merchandise, monthly, 19211924
[Source: Zahraničini Obohod Republiky Ceskoslovenske. See Chart 15. Quantity in thousands of quintals
valus lai thousands of crowns]

| Month | Imperts |  | Exports |  | Excess |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Imports | Exports |  |
|  | Quantity | Value |  |  | Quantity | Value | Quantity | Value | Quantity | Value |
| 1921 |  |  |  |  |  |  |  |  |
| January .-.--* | 3,278 |  | ${ }_{5}^{5} 552$ |  |  |  | 2,273 |  |
| March. | 4, 044 |  | 8, 501 |  |  |  | 4,456 |  |
| April | 4, 369 |  | 8, 147 |  |  |  | 3,779 |  |
| Msy | 2,390 |  | 7,576 |  |  |  | 5, 186 |  |
| June. | 3.501 |  | 9,298 |  |  |  | 8, 797 |  |
| $J \mathrm{uly}$ | 2.758 |  | 9,285 |  |  |  | 6,629 |  |
| August.a- | 2,088 |  | 9,587 |  |  |  | 6.600 |  |
| September. | 2,676 | -------* | 8888 |  |  |  | 6. 181 |  |
| Ootober-... | 3,600 8,120 |  | 7,390 |  |  |  | 3,780 3,087 | --...... |
| December--- | 8,120 | ------- | 8, 496 |  |  |  | 8,377 | ------* |
| 1928 |  |  |  |  |  |  |  |  |
| January -.... | 2.989 |  | 6,951 |  |  |  | 3,982 |  |
| February | 2,384 | ------ | 4,264 |  |  |  | 1,880 |  |
| March. | 3,838 <br> 3,247 |  | 8,309 |  |  |  | 5,475 4,944 |  |
| May | 2,763 |  | 9,201 |  |  |  | 8,488 |  |
| June. | 2,373 |  | 9,350 |  |  |  | 6,977 |  |
| July... | 2988 |  | 10,602 |  |  |  | 7,516 |  |
| August | 2.084 |  | 7,926 |  |  |  | 5,843 | ...... |
| September | 2.019 |  | 7,058 |  |  |  | 5,034 | .-*.** |
| October-. | 2,058 | -37*-..- | 8,788 |  |  |  | 8, 680 | .....-* |
| November. | 1,769 | .-...-.-- | 7, 082 | ----- |  |  | 8,328 |  |
| December... | 3,105 |  | 8,972 |  |  |  | 6,868 |  |
| 1923 ! |  |  |  |  |  |  |  |  |
| January-.-- | 1,609 | 402, 688 | 7, 108 | 767,344 | 5,490 |  |  | 364, 768 |
| Febriasty- | 2,037 | 54, 699 | 8,977 | 881,955 | 6,940 |  |  | 314, 256 |
| March. | 2.070 | 750,308 | 10, 233 | 801, 749 | 8.163 |  |  | 141,442 |
| April. | 2,977 | 837, 169 | 8. 570 | 1,044, 739 | 8,503 |  |  | 207, 670 |
| 3 My . | 2,489 | 680, 678 | 11, 551 | 986, 171 | 0.062 | --....- |  | 405, 408 |
| June | 3,001 3,413 | 713, 050 | 10, 014 | 906, 636 | 7,944 | -....... |  | 388, 360 |
| August | - $\begin{array}{r}3,413 \\ 4,174 \\ \hline\end{array}$ | 678,828 741,001 | 11,156 10,210 | 998,039 | 7,742 |  |  | 319.212 230,860 |
| September | 4,506 | 828,095 | 6,052 | 880, 726 | 1, 428 |  |  | 67,631 |
| October-- | 6, 216 | 987, 260 | 6, 638 | 1,008,081 | , 122 |  |  | 19, 717 |
| November- | 4,014 | 971, 715 | 9,182 | 1,229,383 | 5,168 |  |  | 257, 068 |
| December | 5,289 | 1, 411,821 | 12,482 | 1,700, 221 | 7,198 |  |  | 297, 400 |
| 1024 |  |  |  |  |  |  |  |  |
| Yanuary-.. | 2.478 | 809, 788 | 7,293 | 800,274 |  | 9,514 | 4.816 |  |
| February | 3,316 | 1, 245, 519 | 2, 574 | 1,254, 178 |  |  | 6, 268 | 8,654 |
| March. | 8, 159 | 1, 124,189 | 10,74 | 1,341, 958 |  |  | 7, 615 | 317, 700 |
| April | 3,620 | 1, 774,165 | 10,891 | 1,508, 770 |  |  | 7,256 | 233, 015 |
| May | 5,203 | 1, 875.688 | 11,612 | 1, 600,164 |  |  | Q, 439 | 24.476 |
| June. | 4,889 | 1,230, 125 | 12,013 | 1,327,023 |  |  | 7,124 | \% 0 , 908 |
| Joly | 4868 | 1, 220, 527 | 10,431 | 1,311, 898 |  |  | 8, 768 | 82,363 |
| August - | ${ }_{5}^{5} 5820$ | $1,220,941$ | 9,254 | $1,111,008$ |  | $\begin{aligned} & 10,98 \\ & 2719 \end{aligned}$ | 2,783 |  |
| September | 8, 291 | $\begin{aligned} & 1,456,382 \\ & 1,354,700 \end{aligned}$ | 8, 8 830 | $\begin{aligned} & 1,428,463 \\ & 1,461,813 \end{aligned}$ |  | $27,910$ | 3,589 3,678 | 108, 918 |
| Novambe | 6, 748 | 1, 815,785 | 10, 034 | 1,765, 427 |  |  | 4,886 | 240,648 |
| December. | 6,377 | 1,881.642 | 12,888 | 2,12,180 |  |  | 7, 581 | 200,547 |

[^84]Table 29.-Czechoslovakia-Receipts and expenditures, 1919-1925
[Excinsive of expenditares for capital improvemanta covered by loans] 3oturte: Doouments of the International Financial Confarence, Brussals, 1920, and Department of Commarce]
[Millions of crowns]


Proviatonal.

## DENMARE

Table 30.-National Bank of Denmark, 1915-1995
[Source: Weakly statements of the Nationalbanken I Kobenhavn. See chart 19. End of month; 000 omitted]


Table 30.-National Bank of Denmark, 1918-1925-Continued

|  | Month | Gold | Balances nbread | Loans, discounts, and advances | Note circulation | Current accounts and deposits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1918 | Kroner | Fromer | Froner | Kroner | Eroner |
| January |  | 173, 706 | 44,028 | 221, 141 | 228, 809 | 51,549 |
| Pebruary |  | 173, 641 | 48,813 | 205, 568 | 3324003 | 62, 081 |
| March |  | 184, 835 | 68, 881 | 104, 125 | 350,978 | 62, 016 |
| Aprit. |  | 184, 113 | ${ }^{62,795}$ | 225, 458 | 347, 702 | 108, 100 |
| May |  | 184, 111 | 66,668 | 231,087 | 844,943 | 112,028 |
| Juma |  | 188, 867 | 68, 021 | 230,629 | 872,435 | 83,788 |
| July |  | 180, 778 | 84, 000 | 225, 460 | 865, 335 | 84, 809 |
| August |  | 188, 582 | 70,255 | 239,738 | 391,008 | 74, 160 |
| Septamb |  | 188, 182 | ${ }^{65} 695$ | 261, 770 | 402, 425 | 78,048 |
| October- |  | 188,373 | 87,270 | 248,488 | 424,107 | 78,181 |
| Novembe |  | 187, 643 | 106, 274 | 248384 | 40,202 | 67,287 |
| Decambe |  | 194, 893 | 119, 156 | 205,348 | 450,035 | 90, 460 |
| 1019 |  |  |  |  |  |  |
| January |  | 187, 800 | 126,308 | 271, 636 | 430, 848 | 121, 819 |
| February |  | 187, 202 | 124, 297 | 288, 602 | 421,235 | 145, 516 |
| March. |  | 186, 821 | 103,298 | 220,605 | 434,484 | 64,488 |
| April. |  | 188, 732 | 102, 682 | 247,988 | 434, 080 | 87, 880 |
| May |  | 186, 390 | 91, 658 | 279,025 | 433, 971 | 109, 332 |
| Juna |  | 187,788 | 81,157 | 312, 801 | 435, 905 | 126, 493 |
| July. |  | 187, 380 | 7,173 | 206, 002 | 428, 502 | 115, 170 |
| August |  | 186, 870 | 73,706 | 318,304 | 435,670 | 127,046 |
| Septemb |  | 187, 484 | 69, 062 | 387, 568 | 465, 016 | 67, 051 |
| October- |  | 191, 405 | 63,240 | 412,738 | 41,407 | 60,209 |
| Novemb |  | 212, 170 | 54,658 | 373, 082 | 471,743 | 43,208 |
| Decembe |  | 226, 898 | 55,033 | 409, 063 | 480,847 | 72,102 |
|  |  |  |  |  |  |  |
| January. |  | 2208818 | 42.480 | 374.838 | 474,747 | 34, 536 |
| February |  | 228,741 | 37, 87 | 377, 248 | 475, 131 | 69, 698 |
| March |  | 228,008 | 37, 555 | 3946008 | 624, 217 | 36, 600 |
| April. |  | 258,578 | 48,675 | 372, 000 | 521, 678 | 28, 203 |
| May. |  | 227, 487 | 61, 053 | 252,363 | 615, 651 | 38,748 |
| Jund |  | 228, 030 | 60, 694 | 367, 531 | 688,680 | 43,451 |
| July. |  | 227, 840 | 64, 688 | 361, 670 | 841, 192 | 46,752 |
| August |  | 227, 679 | 56,488 | 408, 217 | 5423838 | 64, 487 |
| Septemb |  | 227, 600 | 61,089 | 442, 615 | 559, 408 | 60, 995 |
| October |  | 227, 560 | 51,694 | 470,282 | 578, 045 | 54, 416 |
| Novembe |  | 227, 588 | 45, 968 | 462, 602 | 656, 270 | 60, 139 |
| Decembe |  | 227, 682 | 41,823 | 476,200 | 656,703 | 65, 745 |
| 1921 |  |  |  |  |  |  |
| Japuary |  | 227, 678 | 50,738 | 348,327 | 522, 163 | 63,059 |
| Pebruary |  | 227, 578 | 45,989 | 353, 8.59 | 508500 | 64, 230 |
| March. |  | 227, 672 | 53,691 | 329, 203 | 617,019 | 63, 560 |
| April |  | 227, 671 | 18,229 | 344, 743 | 632, 108 | 68, 680 |
| May |  | 227, 870 | 80, 671 | 311, 289 | 490,688 | 60, 205 |
| June |  | 227, 604 | 43,288 | 328, 728 | 408, 213 | 67,910 |
| July. |  | 227, 654 | 51, 871 | 306, 152 | 481, 881 | 75, 256 |
| August |  | 227, 548 | 54,874 | 314, 685 | 480, 689 | 83, 405 |
| Saptomb |  | 228, 328 | 45, 828 | 339, 001 | 481, 391 | 88, 028 |
| October. |  | 228, 238 | 40, 146 | 363, 111 | 488,380 | 103, 324 |
| November |  | 228, 236 | 35,605 | 379, 791 | 485, 041 | 138,908 |
| Decambe |  | 228,330 | 39,306 | 408, 821 | 470, 086 | 120,078 |
| 1023 208 20 |  |  |  |  |  |  |
| January |  | 228, 330 | 32,752 | 417, 260 | 450, 018 | 127, 210 |
| February |  | 228, 330 | 23,796 | 134, 127 | 440,822 | 124, 731 |
| March |  | 228, 325 | 21,460 | 44, 018 | 446, 103 | 132,092 |
| April |  | 228,325 | 17,782 | 461, 388 | 451, 790 | 128,858 |
| May |  | 228, 324 | 18, 583 | 420, 198 | 438,748 | 114,769 |
| Juns. |  | 228, 311 | 28, 278 | 888.401 | 441, 941 | 119, 029 |
| July. |  | 228, 304 | 28,443 | 410, 041 | 432,308 | 142,399 |
| August |  | 228, 304 | 19, 119 | 421, 615 | 423, 751 | 147,015 |
| Septarnbar |  | 228290 | 15, 029 | 516,884 | 488, 858 | 111,085 |
| Octobar |  | 228, 301 | 10, 790 | 800, 609 | 478, 134 | 181, 481 |
| November |  | 228,290 | 12, 470 | 462035 | 459,310 | 169, 211 |
| December |  | 228, 257 | 7,541 | 467, 590 | 459,354 | 163,710 |
| 1828 |  |  |  |  |  |  |
| January |  | 228, 241 | 11, 422 | 482,788 | 412,872 | 164, 744 |
| Fobruary |  | 228, 244 | 4,013 | 408, 448 | 447,946 | 70, 804 |
| March. |  | 228, 237 | 2,861 | 409, 785 | 460, 033 | 66, 082 |
| April |  | 278, 225 | 6, 088 | 408, 258 | 476,216 | 35, 460 |
| May. |  | 228, 213 | 4,057 | 375, 185 | 456, 277 | 48,471 |
| June. |  | 228, 104 | 15,929 | 309, 236 | 482, 301 | 41,767 |
| July..- |  | 209, 682 | 24, 297 | 360, 838 | 447, 269 | 45,800 |
| August |  | 209,672 | 85,120 | 363, 989 | 449, 258 | 42,583 |
| Septemb |  | 209, 654 | 20,382 | 382896 | 458,881 | 48, 433 |
| October- |  | 200,031 | 18394 | 307, 54 | 471,258 | 41,73 |
| November |  | 209, 013 | 40, 066 | 304, 719 | 472,005 | 52,764 |
| December |  | 200, 694 | 15,896 | 460,472 | 42, 625 | 78, 244 |

Table 30.-National Bank of Denmark, 1919-1995-Continued

| Month | Cold | Balances sbroad | Ioans, discounts, and advances | $\begin{aligned} & \text { Note } \\ & \text { elrculation } \end{aligned}$ | Current aecountia deposite |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 | Eroner | Kroner | Kroner | Kroner | Eroner |
| January | 209, 581 | ${ }_{19}^{19,027}$ | 475, 433 | 446, 152 | 79, 717 |
| March... | 209,578 209,507 | 19,973 29,208 | 485, 090 | 452, 631 | 73, 313 |
| April. | 209, 562 | 23,683 | 472, 443 | 468, 767 | 62,327 |
| May.-. | 209, 562 | 20,644 | 480,042 | 480, 879 | 60, 688 |
| June. | 209, 5154 | 8 8,893 | 510,451 | 477, 411 | 78, 888 |
| July- | 209,554 | 21,48 | 480, 1010 | 470,344 | 84,359 |
| August | 270, 544 | 30. 619 | 499, 883 | 471, 089 | ${ }_{8,054}$ |
| Septomber | 209, 540 | 40, 880 | 478, 731 | 472, 728 | 70, 542 |
| October- | 209, 529 | 31, 333 | ${ }^{514,683}$ | 4950122 | 78, 788 |
| November. | 200.508 | 31,112 | ${ }^{495}$, 568 | 470, 324 | 71,701 |
| December. | 209,495 | 48,686 | 463,950 | 478,258 | 81,782 |
| 1825 |  |  |  |  |  |
| January - | 209,478 | 33,763 | 447,401 | 455,739 | 67, 506 |
| Pebruary | 209, 4109 | 29,778 41,158 | 448,456 | 458, 487 | 63,749 |
| April.. | 209, 45B | 44,508 | 421, 315 | 466, 001 | 20,045 |

Table 31.-Denmark-Wholesale, prices, 1920-1925
[On paper basis and on gold basls. Index nutabers of Finanstidende, 33 commodities; July 1, 1912-June 30, 1914mil0. The index numbers have been converted to a gold basis by applying to them the percentages which the correaponding sverage monthly exchange retes for dollars are of par. See chart $20 /$

| Month | $\left\lvert\, \begin{gathered} \text { On } \\ \text { paper } \\ \text { currency } \\ \text { basis } \end{gathered}\right.$ | Converted to gold basls | Month | $\begin{gathered} \text { On } \\ \text { paper } \\ \text { carrenoy } \\ \text { basfs } \end{gathered}$ | Convertad to gold bagta |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January - 1980 | Kroner 340 | Kroner 202 | November. 1022 | Tronkr | Eyoner 135 |
| February |  |  | December. | 182 | 140 |
| March.... |  |  |  |  |  |
| April |  | --- | 192 |  |  |
| M85- |  |  | January . . . . - . | 181 | 125 |
| June |  |  | Februsry... | 192 | 148 |
| July. | 353 | 245 | March.-. | 190 | 157 |
| August | 385 | 215 | Apríl. | 200 | 188 |
| Geptember. | 394 | 208 | May | 204 | 183 |
| October... | 388 | 208 | June. | 202 | 188 |
| Novamber. | 408 | 242 | July. | 237 | 180 |
| December-- | 274 | 207 | August | 207 | 166 |
|  |  |  | September | 202 | 150 |
| 1021 |  |  | October..- | 205 | 154 |
| Jenuary -- | 341 | , 230 | Novembar. | 207 | $15 \%$ |
| February. | 290 | 201 | December. | 210 | 162 |
| March. | 280 | 181 |  |  | - |
| April.-. | 270 | 182 | 1924 |  |  |
| May - | 257 | 173 | Jantary . - . . . . | 210 | 138 |
| June. | 284 | 163 | February. | 223 | 138 |
| Juy... | 253 | 149 | March.... | 227 | 133 |
| August | 254 | 153 | April. | 228 | 142 |
| September | 224 | 148 | May.- | 225 | 142 |
| October-. | 202 | 143 | Jupe-.. | 219 | 137 |
| November. | 186 | 129 | Juy... | 220 | 132 |
| Decamber. | 188 | 137 | August ... | 288 | 141 |
| 1902 |  |  | Beptembar. | 231 | 140 |
| January 192 |  |  | Oetober-... | 294 | 151 |
| Fapuary | 178 | 138 | November-- | 231 | 151 |
| March.-- | 182 | 143 | December . | 322 | 153 |
| April | 178 | 141 | 1925 |  |  |
| May - | 177 | 141 | January | 244 | 180 |
| Jupe- | 170 | 185 | Pebruary... | 234 | 153 |
| July --- | 180 | 145 | March... | 230 | 156 |
| Angust | 180 | 145 | April.e. | 220 | 151 |
| September .-. | 178 | 140 | May-.- | 216 | 102 |
| Octaber -.-...-- | 176 | 133 |  |  |  |

## Tabix 32.-Denmark-Kxehange rates, 1914-1985

(New Yort on Copenhagenh. January, 1014-June, 1091, elight drafts; July, 1021-December, 1924, noon buying rates for cable trausters. Ayerage rates, January, 1914-October, 1018, are mid points between the monthy high and low rates; from Novarnbar, 1018 to date, the averagee are monthly averages of daily rates. Dee Chart 23. Source: Federal feserve Boardl

| Month | Cents per Lrone |  |  | Month | Centa per krone |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | Average |  | Eligh | Low | Average |
| 1914 | $\begin{aligned} & 20.88 \\ & 28.88 \\ & 26 \\ & 2686 \\ & 2088 \\ & 2688 \\ & 26.90 \\ & 26.90 \\ & 77.50 \\ & 27.50 \end{aligned}$ | 28.4820.8228.80228428.842682268127.38 | 28.7828.8526.8326248628.86268627.1627.1627.48 | 1919 | 21.20 <br> 19. 00 | $\begin{aligned} & 20.00 \\ & 17,45 \end{aligned}$ |  |
| January, |  |  |  | November |  |  | $\begin{aligned} & 20.88 \\ & 18.78 \end{aligned}$ |
| March |  |  |  |  |  |  |  |
| April |  |  |  | January 1820 |  |  |  |
| May |  |  |  | Februa | 15.65 | 14.40 | 14.80 |
| Jung. |  |  |  | March | ${ }^{18} 86$ | 15.00 | 17.28 |
| Augut |  |  |  | ${ }_{\text {April }}$ | ${ }^{18.80}$ | 16.92 | 18. DI |
| pten |  |  |  | Jung | 17.15 |  |  |
| Novel | $\begin{aligned} & 25.88 \\ & 25.25 \end{aligned}$ | $\begin{aligned} & 25.13 \\ & 25.00 \end{aligned}$ | $\begin{aligned} & -5.5 \\ & \text { 25. } 51 \\ & \text { 25. } 18 \end{aligned}$ | July | ${ }^{16.73}$ | ${ }_{15}^{16}$ | 16,87 16.48 |
| December |  |  |  | Augu | 15.70 | 14.00 | 14.06 |
|  |  |  |  | Seprem | 14 |  |  |
| January | $\begin{aligned} & 25.00 \\ & 20.81 \\ & 25.50 \end{aligned}$ | ${ }_{24}{ }^{4} 138$ | 24.85 | Novembar | 13.75 | ${ }_{13.05}^{13.82}$ | 13.87 |
| February |  |  |  | Decamber | 15.75 | 18,70 | 13.818 |
| March. |  | ${ }_{25}^{25}$ | ${ }_{25,50}^{24.95}$ | 1827 | 20.10 | 15.60 |  |
| May. | ${ }_{25.95}^{25}$ | 25.75 | 25.85 | January |  |  |  |
| June | 2042 | $2{ }^{2} 56$ | ${ }_{36} 18$ | February-.-------------- |  | 17.85 16.15 |  |
| July | ${ }_{20}^{20} 35$ | 25806 | 38.00 |  |  | 17.80 | 18. 54 |
| gust | 25.90 |  |  |  |  | ${ }^{17} 70$ |  |
| preme | $\begin{aligned} & 20.30 \\ & 26.20 \\ & 28.05 \end{aligned}$ |  | 22. 75 28.05 |  |  |  | 18. 07 17.21 |
| Octo |  |  | 2.0527.1327.15 | July-.------------ | 17.882 | 10.77 1.10 | 18.2116.7816.10 |
| Desember | 28.0528.00 | $\begin{aligned} & 20.20 \\ & 20.20 \\ & 28.30 \end{aligned}$ |  |  | 17.85 | 15.10 |  |
|  |  |  |  | September------------------178 |  | 17.15 17.67 |  |
| nuary | $\begin{aligned} & \text { 27. } 90 \\ & 28.25 \end{aligned}$ |  |  |  |  | ${ }_{18}^{17.87}$ | $\begin{aligned} & 18.86 \\ & 18.47 \\ & 19.52 \end{aligned}$ |
| Pebraary |  | ${ }_{27}^{27.25}$ | 27.75 27.75 |  |  |  |  |  |
| March | $\begin{aligned} & 29.00 \\ & 20.20 \\ & 30 \end{aligned}$ | $\begin{aligned} & 27.90 \\ & 28.40 \\ & 20 \end{aligned}$ | $\begin{aligned} & 28.45 \\ & 20.30 \end{aligned}$ |  |  |  |  |
| April |  |  |  |  |  |  |  |  |
| 8y | $\begin{aligned} & 30,80 \\ & 30,10 \end{aligned}$ | $\begin{aligned} & 20.70 \\ & 28.00 \end{aligned}$ | $\begin{aligned} & 30.25 \\ & 30050 \end{aligned}$ |  |  | ${ }^{10.79}$. 18.87 |  |
| July | $\begin{aligned} & 20.10 \\ & 28.70 \end{aligned}$ | 28.05 | 298.05 |  |  |  |  | ${ }^{20} 0.64$ |
| Augusi |  |  | 28.05 |  | 21.30 | $\begin{aligned} & 20.87 \\ & 21.87 \\ & 2107 \end{aligned}$ | ${ }_{21}^{21.11}$ |
| pte | 27.75 | ${ }^{27.40}$ |  |  |  | 21.16 | 60 |
| Octo | $\begin{aligned} & 21.40 \\ & 27.15 \\ & 27.80 \end{aligned}$ | 27. 10 | 27.0877.40 | Juny- | 22.18 21.70 |  |  |
| November |  | 28.9027.00 |  | Angust | 21.63 |  | 21. 63 |
| December |  |  |  | Septembe | 21.47 | 21.27 |  |
| nu |  |  |  | October | 20.59 | 10. 92 | 20.10 |
| January | 27.70 | 27.20 27.30 | 27.45 77.43 | November $\qquad$ | 20.4120.69 | $20.13$ | 20.6720 |
| February |  |  | $\begin{aligned} & 28.53 \\ & 28.50 \end{aligned}$ |  |  |  |  |
| April. | 29.60 | 28.10 |  |  | $\begin{aligned} & 20.55 \\ & { }_{18}^{50.52} \end{aligned}$ | 18.78 |  |
| ay | - 28.70 | $\begin{aligned} & 28.10 \\ & 28.60 \end{aligned}$ | 28.40 |  |  |  |  |
| no |  |  |  | Jenbary-7---------------------- | ${ }_{19}^{19.31}$ | ${ }_{19}^{18.64}$ | 19.09 |
| Auly |  | ${ }_{20}^{2075}$ | 30.0880.68 | April---------------------- | 19. 15 18. 85 | 188. ${ }^{181}$ | 18.82 |
| Igast | ( 30.40 |  |  |  |  |  |  |
| Octob | $\begin{aligned} & 81.10 \\ & 86.76 \\ & 88.76 \end{aligned}$ | $\begin{aligned} & 30.20 \\ & 31.13 \\ & 32.50 \\ & 32 . \end{aligned}$ |  | June------------------------ | 18. 51 | ${ }^{17} 788$ | 17.96 |
| Novernber |  |  |  |  |  | 17.10 | 17.8 |
| cambe | $\begin{aligned} & 88.78 \\ & 83.76 \end{aligned}$ | $\begin{aligned} & 32.50 \\ & 81.50 \end{aligned}$ | $\begin{aligned} & 35.80 \\ & 32.63 \end{aligned}$ |  | $\begin{aligned} & 18.69 \\ & 18.29 \end{aligned}$ |  |  |
| ¢ 1018 | $\begin{aligned} & 81.76 \\ & 8 \mathrm{~L} .00 \end{aligned}$ |  |  |  |  | 17.15 | 18.16 17.68 |
| January.-.----- |  | 20.25 <br> 30. 50 | $\begin{aligned} & 81.00 \\ & 80.75 \end{aligned}$ |  | 17.77 | 16.6 | 17.20 |
| March. |  |  |  | December-----.-. | 18.00 | 17,71 | 17.82 |
| pril | $\begin{aligned} & 81.75 \\ & 81.75 \\ & \hline 8 \end{aligned}$ | $\begin{aligned} & 30.00 \\ & 31,00 \end{aligned}$ | 30.88 <br> 81.38 | 1924 17 58 |  |  |  |
| May | 31.50 | ${ }^{31} 1.00$ | 31.25 | Fanuary...--.---.........- | 17.58 | 18.02 | 18.94 |
| ne | ${ }_{8} 81.25$ |  | ${ }^{81.08}$ |  |  |  | 18.00 |
| ugus | $81.30$ | 30.80 81.18 | 3.10 31.14 | Mpril --.--------.--- | 16.87 | 18. 20 | 15.68 |
| Septemb | 80.7528.75280 | 29.40 | 30.08 | May | 17.04 | 14.79 | 16.92 |
| clob |  |  | 27.75 | June | 16.01 | 18. 89 | 10.78 |
| Novemb | 28.80 | 28. 50 | 28.90 | Juy | 16. 21 | ${ }^{18.76}$ | 18.06 |
| , | 27.00 | 23, 80 | 77.06 | August. | 18.42 | 16. 10 | 16.21 |
|  |  |  |  | - | 17. |  | 11. |
| January |  | 25.90 |  | Novem | ${ }_{17} 17.81$ | ${ }_{17.88}$ | 17.38 |
| Pebruary | ${ }^{28.13}$ | 25.90 | ${ }^{24} 13$ | Decembe | 17.76 | 17.48 | 17.84 |
| April. | 25.3 | 2. | ${ }_{2}^{20}$ | 1825 |  |  |  |
| Msy |  |  | 24.32 |  | 17.82 | 17. 67 | 17.81 |
| June. | 24.68 | 23.30 | 22.80 | Fabrue | 17.87 |  |  |
| July | ${ }^{23.50}$ | 22.06 | 2283 |  | ${ }_{18}^{18.3}$ |  | 18.07 |
| nqust |  |  |  |  | 18.96 | 18.71 | 18.81 |
| tobe | 21.75 | 21. 20 | 21.6 |  | 20.16 | 18.78 | 19.11 |

Table 33.-Denmark-Purchasing-power parities, 1820-1925
[According to Index numbers of the Finanstidende for Denmark and Index numbert of Federal Reeorve Board for the United States. See chart 24]

| Month | Wnited index of prices | Danish index of prices | $\begin{aligned} & \text { Purchasing-power } \\ & \text { paritlez } \\ & \left(\frac{\text { U. S. Index } \times \text { par }}{\text { Danish index }}\right) \end{aligned}$ | $\begin{gathered} \text { A verage } \\ \text { exchange } \\ \text { ratea } \\ \text { (cablea } \\ \text { (r New } \\ \text { York) } \end{gathered}$ | Per cont purchas lng-powes parities exchange Fstes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1020 |  |  |  | Cents per krone |  |
| January -.-...----..... | 247. 615 | 340 | Crus per brone 52 | 17.00 | 110.91 |
| Mebruary |  |  |  | 16.0 |  |
| April. | 267.375 |  |  | 18.01 |  |
| May.- | 208831 |  |  | 16. 83 |  |
| June- | 262263 |  |  | 18.87 |  |
| July | 254.417 | 388 | 17.80 | 16. 42 | 108.40 |
| August. | 2339.8972 | 295 | 11.688 | 14.98 | 111.50 |
| September | 231.902 | ${ }^{394}$ | 14.77 | 14.01 | 1125 |
| October | ${ }^{214} 120$ | 398 | 14.42 | ${ }^{123} 87$ | 10907 |
| November. | 188. 453 | 103 | 13.07 | 13.41 | ${ }^{97.40}$ |
| December. | 178. 080 | 374 | 1282 | 14.85 | 86. 38 |
| 1921 |  |  |  |  |  |
| February | 167.723 | 341 | 13.18 | 18.08 | 728 |
| March.. | ${ }_{152} 289$ | 280 | 11.68 | 18.81 | 84.23 |
| ${ }^{\text {A prill }}$ | 145.505 | 270 | 14.14 | 18.08 | 70.82 |
| May | 145. 618 | 257 | 15.17 | 18.07 | 92. 05 |
| Junly- | 12.818 | 254 | 15.07 | 17.21 | 87.07 |
| August. | 146.685 | 254 | 15.48 | 16.19 | ${ }_{06} 6.61$ |
| Septomber | 140.962 | 234 | 17.68 | 17.67 | 00. 49 |
| October- | 143. 682 | 202 | 19.33 | ${ }^{18.92}$ | 10217 |
| November | 145. 284 | 188 | 20.93 | 18.47 |  |
| Deoember | 16274 | 188 | 20.35 | 19.52 | 104.25 |
| 1822 |  |  |  |  |  |
| February | 142. 277 | 178 | 21.42 | 19.87 | 107.26 |
| March | 147. 308 | 178 | 22.129 | 20.11 | 10275 |
| April. | 149. 130 | 178 | 22.45 | 21.22 | 105.80 |
| May... | 158.182 | 177 | 20.05 | 21.40 | 111.8 |
| June. | ${ }^{161.246}$ | 179 | 24.14 | 21.60 | 111.45 |
| July-rast | 185.417 | 180 | 2483 | 21.54 | 114.35 |
| ${ }_{\text {Septemi }}$ Augur | ${ }^{165 .} 888$ | 180 | 24.70 | 22.53 | 1142 |
| October.- | 184, 312 |  | 24.74 | 21.08 | 117,47 |
| October- | 165. 185 | 178 | 25.16 | 20.19 | 124.57 |
| December.-.-- | 164.015 | 180 | 24.42 | 20.27 | ${ }_{1220} 88$ |
| 192 |  |  |  |  |  |
| January |  |  |  |  |  |
| February | 166. 391 | 102 | ${ }_{22} 2.2$ | 10.09 | 121.68 |
| March. | 189.374 | 190 | 22.81 | 19.20 | 118.80 |
| April. | ${ }^{270.055}$ | 200 | 2789 | 1882 | 120.45 |
| May | 167.098 | 204 | 21.95 | 18.85 | 117.00 |
| Jnne- | 164.086 | 202 | 217 | 17.08 | 121.21 |
| Aug.ist | 159.488 | 207 | 20.45 | 17. 84 | 117.73 |
| August. | 150.039 | 207 | 20.50 | ${ }_{18}^{18}$ | 111.38 |
| October. | 163. 1487 | 205 | 21. 28 218 | 17.88 | ${ }_{121.68}$ |
| November | 163.460 | 207 | 21. 16 | 17. 20 | 123.02 |
| December. | 188.012 | 210 | 20.81 | 17.82 | 116.78 |
| 19 |  |  |  |  |  |
| January. | 162745 | 210 | 20.77 | 16.94 | 122.61 |
| March | 182 <br> 159 <br> 1592 <br> 18 | 223 | 18.83 | ${ }_{15} 16.00$ | 12200 |
| April. | 157. 676 | 228 | 1850 | 10.4 | 111. 20 |
| May.... | 159.148 | 228 | 18.00 | 10.92 | 100.98 |
| Juna.- | 154.394 | 219 | 18.89 | 10.78 | 1125 |
| Juy. | 150.388 | 220 | 19.06 | 10.06 | 118.6 |
| Angust | 157.060 | 238 | 18.17 | 18.21 | 11208 |
| Beptember | 150276 | 231 | 1818 | 1895 | 10080 |
| Octaber | ${ }^{158} 878$ | 224 | 18.17 | 17. 38 | 10685 |
| Novamber--- | 160.074 | 231 | 18. 57 | 17. 56 | 10381 |
| Decamber-.-...-- | 16.615 | 228 | 12.01 | 17.04 | 107.77 |
| 1926 |  |  |  |  |  |
| Jitbruary | ${ }_{167.088}^{157}$ | 234 | ${ }^{19.22}$ | 17.81 | 1167.47 |
| March_ | 109.305 | 230 | 19.74 | 1807 | 100.31 |
| April. | 102000 | 220 | 12.98 | 18.4 | 10835 |
| May-------- | 168,200 | 218 | 2920 | 18.84 | 107. 68 |

Tablex 34--Denmark-Gold value of tolal note circulation, 1914-1925
[On basis of exchange rates and on basts of parchasing-powor parities. see chart 25]


Table 34.-Denmark-Gold value of tolal note circulation, 1914-1825


Table 35.-Denmark-Imports and exports of merchandise, 1900-1924
[Sourco: Statistisk Aarhog. See chart 21. 000 omitted]

| Year | $\underset{\text { (not) }}{\text { Import }}$ | Exparts | $\begin{aligned} & \text { Reen- } \\ & \text { ports } \end{aligned}$ | Ercess of imports | Year | $\underset{\text { (net) }}{\text { Imports }}$ | Exporta | $\begin{aligned} & \text { Rear- } \\ & \text { portas } \end{aligned}$ | Ercess of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| 900 | 418, 1 |  | 112 | 134, 259 | 1913 |  |  |  |  |
|  | 800, 908 | 290, 604 | 116,439 | 106,300 | 1914 | 77,791 | ${ }^{780} 8283$ | 87, 230 | 162, 435 |
|  | 133, 54 |  | 188.658 | 115, 277 | 1915 | 1, 028,398 | ${ }^{978} 989$ | 150 279 | 50, 12 |
| 803 | 44,783 | ${ }^{352} 283$ | -142,08 | 91, 572 | 1916 | 1,248, 612 | 1, 177,328 | 131, 500 | 7, 284 |
| 804 | 465 710 | 358, 629 | 132,207 | 107, 081 | 1917 | 1,023, 838 | 988, 502 | .98,72 | 54, 330 |
| P05 |  | 300, 018 | 142638 | 91, 618 | 1918 | 910, 211 | 70.400 | 47,958 | 109,721 |
|  | S59, | 393, 1812 | 165,908 | 165818, | 1910 | 2383, 65 | 740,001 | 267,048 | ci, |
| 1007 | ${ }^{601} 12$ | 416,883 | ${ }^{188} 0059$ | 184238 | 1930 | 204338 | 1,591, 08 | ${ }^{370} 872$ | 1, 352, 314 |
| ${ }^{008}$ | 550, | 年30,518 | 17,425 | - 112, | 1921 | 1,548,099 | 1, 410,200 | 154, 184 | ${ }^{138} 8080$ |
| 1010 | 567, 186 | 40, 4002 | 162, 700 | 88, 704 |  | \% $2 \times 380$ | 1,543,383 | 150, 81 | 487, 688 |
| 191 | 623,314 | ${ }^{530} 8047$ | 90, 114 |  | 193 | 2,300, 675 | 1,973, 514 | 188, 187 | 387, 161 |
| [12- | 738, 685 | 500, 723 | 85,350 | 141,091 |  |  |  |  |  |

1 Rxeass of axports.
Tabla 36.-Demmark-Imports and exports of merchandise, 1919-1925
[Sourcs: Vereomsestringen med udlandet. See chart 2ą


Table 36.-Denmark-Imports and exports of merchandise, 1919-1925-Con.

| Month | Imports | Exports | Reerports | Excese of |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Imperts | Exports |
| 1923 | EToner | Xroner | Eroner | Kroner | $\boldsymbol{K}$ roner |
| January | 137, 801, 090 | 102,891, 000 | $\overline{8,492,000}$ | $34,910,000$ |  |
| February | 147, 712,000 | 112, 310,000 | 10,846,000 | 36,402, 000 |  |
| March. | 161, 109, 000 | 129,576, 000 | 11,291,000 | 31, 833,000 |  |
| April. | 160, 383, 000 | 109, 794,000 | 11, 7301000 | 80, 698,000 |  |
| May.. | 148, 998,000 | 127,014,000 | 11,901, 000 | 18, 884,000 |  |
| July. | 156, 688, 000 | 121, 231, 000 | 10,490,000 | 35, 457,000 |  |
| August | 164, 318, 000 | 134, 223, 000 | 11,955,000 | 30, 0n6,000 |  |
| September | 150, 507, 000 | 130, 000, 000 | 13, 6200,000 | 29,537,000 |  |
| October. | 166, 461, 000 | 140, 047, 000 | 15, 632, 000 | 28, 414,000 |  |
| November | 172, 343,000 | 180, 273, 000 | 15, 335,000 | 12, 070,000 |  |
| December | 172, 698,000 | 132, 330, 000 | 6,902, 000 | 40,368,000 |  |
| 1924 |  |  |  | $\therefore 000$ |  |
| January | 155,830,000 | 135, 518,000 | 11, 145, 000 | 20,312,000 |  |
| Februbry | 153, 401,000 | 151, 759.000 | 15,233,000 | 1.642,000 |  |
| March | 178, 621,000 | 155,043, 000 | 16,822,000 | 23, 578,000 |  |
| April. | 183, 714,000 | 162, 630,000 | 16,995,000 | 21,084, 000 |  |
| May | 204, 704, 000 | 172, 391, 000 | 14,471,000 | 32, 403,000 |  |
| June | 188, 243, 000 | 136, 195,000 | 10, 505,000 | 82, 0428,000 |  |
| August | 184, 345, 000 | 174, 0000,000 | 15, 407,000 | 10,276, 000 |  |
| September | 182, 070,000 | 185, 533,000 | 17, 738,000 | 10,273, | 3, 463, |
| Octobar- | 181, 913,000 | 186, 267,000 | 17, 734, 000 |  | 4,354, |
| November | 195, 558, 000 | 172, 136,000 | 15, 837,000 | 23, 422,000 |  |
| December | 211,028,000 | 165, 110, 000 | 14,000,000 | 45,918,000 |  |
| 1825 |  | 170, - |  |  |  |
| January | 191, 794,000 | 170, 312,000 | 12,323,000 | 21,482000 |  |
| Fobruary | 174, 6881,000 | 152, 220,000 | 13, 806,000 | 22, 441, 000 |  |
| March | 187,005,000 | 172,000.000 | 14,038, 000 | 15,006,000 |  |

Table 37.-Denmark-National debi, 1910-1929
[Source: s̀tatistisk Aarbog]

| Mar. $31-$ | Internal debt | $\begin{gathered} \text { External } \\ \text { debt } 1 \end{gathered}$ | Total Indebtednees | Mar. 81- | $\begin{gathered} \text { Internal } \\ \text { debt } \end{gathered}$ | Erternal debt ${ }^{1}$ | Total Indebtedneen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eroner | Kromer | Kromer |  | Kroner | Kroner | Kroner |
| 1910 | 81,887,000 | 219,887, 000 | 301, 754, 000 | 1917. | 325, 778,000 | 363, 310,000 | SEI, OAR, 000 |
| 1911. | 81,673, 000 | 254, 167,000 | 335,860, 000 | 1918. | 343, 037,000 | 290, 321, 000 | 603, 358,000 |
| 1912. | 81, 511,000 | 270, 467,000 | 351, 978,090 | 1919 | 523, 174, 000 | 257,338,000 | 780, 507,000 |
| 1913 | 84,3,52, 000 | 272, 287, 000 | 350,699,000 | 1920 | 671,916,000 | 254, 34, 000 | 925, 280,000 |
| 1914. | 88,397, 000 | 272, 482, 000 | $360,879,000$ | 1921 | 089, 8868000 | 404, 772, 000 | 1, 074, 858, 000 |
| 1915 | 123, 0000000 | 209, 576, 000 | 392, 636,000 | 1922-..... | 267, 805 , 000 | 334, 582, 000 | 1,202.427,000 |
|  | 194, 657,000 | 206, 208, 000 | 460,955,000 | 1923...... | 669, 888, 000 | 531, 182,000 | 1, 201, 870,000 |

${ }^{1}$ The foregg debt hes been converted Into kroner at par with the following exceptions: $\mathbf{2 5 , 0 0 0 , 0 0 0}$ loan of 1920 at 16.6 A cents per $\mathbf{r}$ rone; $\$ 30,000,000$ loan of 1921 at 22.58 cents per krone.

Table 38.-Denmark-Receipts and expenditures, 1911-182s
[sourse: statistlet Aarbog; 000 omitled]

| Year endingMar. $11-2$ | Recaipta |  |  | Expenditures |  |  | Defleit (excludling new loang and amortiza tion of debt) | $\begin{aligned} & \text { Froceeds } \\ & \text { from new } \\ & \text { loans } \end{aligned}$ | Amortszation of debt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current revenas (including surplus from publio onterprises) | Capital recoipts (loans) | Total receipts | Current expenditure (taclading intarest) | Capltal expenditure (less amartiza tion al debt) | Total expendture |  |  |  |
| 1911 | $\begin{aligned} & \text { Kroater } \\ & 91,354 \end{aligned}$ | Kroner 52, 083 | Troner <br> 143,437 | Eroner 108, 755 | Kromer 34,993 | $\begin{aligned} & \text { Kroner } \\ & 138,748 \end{aligned}$ | $\begin{aligned} & \text { Kroner } \\ & 14,680 \end{aligned}$ | Kroner | Kroner 1. 748 |
| 1012 | 102, 102 | 09.833 | 171, 835 | 107, 003 | 68, 230 | 173,033 | 1,008 |  | 1,725 |
| 1913 | 114, 176 | 9,470 | 123, 655 | 103, 232 | 81, 923 | 188, 257 | 64,602 | 70, 864 | 1,676 |
| 1914 | 128,875 | 1,392 | 125,267 | 111,404 | 10,435 | 121,859 | 13,408 | 2.817 | 1.731 |
| 1915 | 121, 781 | 12,346 | 134, 127 | 156, 130 | 12,395 | 169, 525 | 35,348 | 22,348 | 3,003 |
| 1916 | 142. 179 | 1.788 | 143,945 | 185, 247 | 27, 336 | 212,583 | 68, 038 | 80, 888 | 4. 500 |
| 1917 | 242315 | 152,858 | 305.173 | 230,609 | 鹪417 | 203, 116 | ${ }^{1} 1020087$ | 88, 624 | 4.300 |
| 1918 | 775, 129 | 4,491 | 379,920 | 388, 582 | 58,035 | 428.647 | 48,727 | 59,400 | 4.323 |
| 1919 | 462, 218 | 4,360 | 460, 578 | 615, 762 | 36,880 | 052, 572 | 185,904 | 176, 050 | 4,260 |
| 1920 | 588, 894 | 12,097 | 605,901 | 532,558 | 85.847 | 598, 405 | 17.556 | 148, 000 | 4. 101 |
| 1921 | 408, 849 | 6, 58\% | 504, 225 | B55, 150 | 201, 061 | 756, 207 | 251,972 | 149,905 | 4198 |
| 1232 | 409.297 | 37,048 | 446,345 | 490, 382 | 131. 205 | 630,687 | 144,342 | 131, 550 | 4,188 |
| 1923 | 428,985 | 83, 154 | 460,070 | 428, 503 | 04,936 | 810, 430 | 50,300 | Q,200 | 10,118 |

1 Surplas.

## HUNGABY

Table 39.-Hungarian National Bank, 1981-1985
Prior to June, 1924, flgares are of the State Note Institute. The Hungarian National Bank opened June 24, 1094, and took over the affairs of the Institute. Source: Weexly statements of l'Office Nationale d'Emission dn Royanme do Hangrio and since June, 1024, of Magyar Nemzati Banx; 000,000 omitted. See chart 26]

| Month | Gold coin and bullion | Sinver coin | Forelgn currency and axchange | Bills disconnted | Ad. vancee onseeluritiea | $\begin{gathered} \text { Advances } \\ \text { to } \\ \text { treas } \end{gathered}$ | Notes in circulation | Cutrent accounta and depasies |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1021 | Kromes | Kronen | STomen | Eromen | Eromen | Erener | Eronem | Eronem |
| Tanusry |  |  |  | 10,924 | 195 |  | 15, 200 | 3,851 |
| Tebroary |  |  |  | 13,202 | 162 |  | 15, 671 | 5,531 |
| March. |  |  |  | 12,862 | 100 |  | 16,650 | 5, 248 |
| A prij |  |  |  | 12,178 | 110 |  | 13, 114 | 6,802 |
| May |  |  |  | 11,847 | 111 |  | 13,686 | 5,760 |
| Tune. |  |  |  | 11,683 | 108 |  | 18,090 | 1,162 |
| Iuly. |  |  |  | 11,787 | 107 |  | 15,799 | 3, 532 |
| August | 4 | 1 |  | 17,799 | 1,199 |  | 17, 328 | \%, 975 |
| Beptembar | 5 | I |  | 20, 994 | 1,194 |  | 20, 845 | 2,407 |
| Oetober-- | 12 | 1 |  | 22, 408 | 1, 185 | 000 | 23,648 | 2, 154 |
| November | 12 | 1 |  | 23,650 | 1, 176 | 1,000 | 24,742 | 2.353 |
| Decambar. | 12 | 1 |  | 23,850 | 1,158 | .900 | 25, 176 | 2,240 |
| 1922 |  |  |  |  |  |  |  |  |
| January.-- | 13 | 1 |  | 24.195 | 1,147 | 1,300 | 25,680 | 2,488 |
| Pebruary | 13 | 1 |  | 23,052 | 1,504 | 1,900 | 28,758 | 2,354 |
| March | 13 | 1 |  | 24, 674 | 1,565 | 3,000 | 29,327 | 2,24 |
| April. | 13 | 1 |  | 25,120 | 1,565 | 4,100 | 30,580 | 2,901 |
| May. | 13 | 1 |  | 25,326 | 1,560 | 6,500 | 31.830 | 3, 289 |
| June- | 13 | 1 |  | 25, 445 | 1,658 | 6,800 | 33,600 | 3, 741 |
| July | 13 | 1 |  | 28,783 | 1, 648 | 7,200 | 38,357 | 3,929 |
| Augtut. | 13 | 1 |  | 87,617 | 1,773 | 7,600 | 46, 242 | 5,417 |
| Beptember | 14 | 1 |  | 46,983 | 1,848 | 8, 000 | 58,458 | 5, 128 |
| October... | 14 | 1 |  | 51,631 | 1,728 | 12000 | 70,005 | 5, 189 |
| November | 15 | 1 |  | 49, 216 | 1,861 | 12,500 | 72;016 | 6, 108 |
| Decamber | 16 | 1 |  | 50, 702 | 2,016 | 18, 800 | 75, 887 | 4.761 |
| 1923 |  |  |  |  |  |  |  |  |
| Jamuary. | 14 | 1 |  | 54.816 | 2,007 | 20,000 | 78,717 | 6, 888 |
| Februg | $\stackrel{28}{3}$ | 1 |  | 58,358 | 2,018 | 24,000 | 75, 135 | 6, 000 |
| March. | 23 | 1 |  | 71,294 | 2,584 | 29,000 | 82, 205 | 11,152 |
| Apri. | 23 | 1 |  | 85.800 | 2817 | 87,000 | 100, 101 | 9,793 |
| May. | 23 | 1 |  | 83,396 | 1,763 | 47,200 | 119,285 | 10,609 |
| Jnne | \% | 1 |  | 128, 818 | 2,480 | 60,700 | 154, 996 | 12,742 |
| July | 22 | 1 |  | 165,927 | 1,762 | 79,700 | 223, 235 | 21,977 |
| August | 22 | 1 |  | 278, 405 | 1,789 | 143,000 | 309, 487 | 23, 629 |
| September | 22 | 1 |  | 350, 454 | 1,776 | 243,000 | 588,810 | 60, 240 |
| Ochber. | 23 | 1 |  | 404, 501 | 1,603 | 289,000 | 744,026 | 60, 178 |
| November | 28 | 1 |  | 531.408 | 1,047 | 300, 000 | 853,989 | 74, 970 |
| Decamber | 20 | 1 |  | 682, 117 | 985 | 401,000 | 981, 337 | 84,791 |
| 1821 |  |  |  |  |  |  |  |  |
| Jenuary. | 9 | 1 |  | 654,794 | 9,346 | 528,000 | 1,084, 017 | 105, 481 |
| February | 2 | 1 |  | 746,471 | 84,023 | 699,000 | $1,278,437$ | 164, 838 |
| March | 24 | 1 |  | 802,750 | 4,598 | 824,000 | 1,606,876 | 253,035 |
| April | 24 | , |  | 1,125, 888 | 12,456 | 944,000 | 2,008, 091 | 308, 121 |
| May | 24 |  |  | 1, 420, 385 | 18,437 | 1,054,000 | 2,486, 257 | 527, 187 |
| June 1 | 24t,947 | 9,883 | 1881, 288 |  | 17,506 | 1, 88000000 | 2,883, 710 | 1, 135, 710 |
| July. | 441,832 | 13, 545 | 1,110, 1228 | 1,257, 007 |  | 1,080, 000 | 3,277,043 | 1, 424,678 |
| August. | 40,945 | 13, 558 | 1,382,885 | 1, 438,454 |  | 1,978, 130 | 3,659,757 | 1,473,231 |
| Septernber | $540,425$ | 13, 600 | 1, 388, 889 | 1, 758, 630 |  | 1,977, 2009 | 4, 115,926 | 1, 416,400 |
| October | ${ }_{608} 817$ | 13,301 | 1,658, 674 | 1, 872, 388 |  | 1,978, 455 | 4,605,000 | 1, 465, 350 |
| November | 508, 411 | 13,301 | 1,816, 102 | 1,984,540 |  | 1, 075, 881 | 4, 442, 644 | 1, 829,764 |
| Decomber | 532,812 | 12,289 | 1, 933, 856 | 4,976,888 |  | 1, 974,781 | 4,518, 000 | 2, 060, 468 |
| 1025 |  |  |  |  |  |  |  |  |
| January | 509, 848 | 12, 372 | 1,967, 314 | 1,848,620 |  | 1,978, 989 | 4, 448, 650 | 2,188, 029 |
| February | 506, 234 | 12374 | 1,089, 096 | 1,076, 599 |  | 1,973, 163 | 4,237,1085 | 2, 542,262 |
| March | 660, 107 | 12,374 | 1,094, 006 | 1, 514, 532 |  | 1,969,809 | 4, 270, 009 | ${ }^{2} 562762$ |
| April. | 653, 684 | 12, 168 | 2,081, 088 | 4,485,898 |  | 1, 068, 087 | 4,628, 216 | 2,470,507 |

AAfter this date gold and ailiver holdings are shown in tarms of paper crowns. Other changes werte also made in the presentation of accounts after the opening of the now Hangarien National Bank in June.

## Table 40.-Hungary-Prices, 1821-1925

[From July, 1921, to November, 1923, the indez numbers (from the Pester Lioyd) cepresent retall pricen and are based on 60 commodities, with July, 1014, equal to 100 . From Decomber, 1023, to date the figurea are the new index numbers of wholesale prices compated by the Eungrifan Central Statistical Office. are the new index numbers of wholesale prices computed by the Hungarian Central statistical ofrica. They refer to prices of about 52 commodities on the last day of the month. The ycar 1013 equals lad: The conversions to the gold basis have been ma
cated by current exchange rates. Gee chart 29. .)

| Month | On paper currency basis | Conto gold basis | Month | On paper currency bable | $\underset{\text { verted }}{\text { Con- }}$ to gold basis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 |  |  | 1923 |  |  |
| July.. | 4,200 | 69 | June. | 144, 800 | 100 |
| August | 5,400 | 70 | July... | 286, 000 | 137 |
| September | 6, 250 | 60 | August -. | 462, 500 | 128 |
| October-- | 6,750 | 48 | Septomber. | 654, 0000 | 150 |
| November | 8,300 | 44 | October. | 597, 000 | 116 |
| December- | 8,250 | 62 | November | 636, 000 | 169 |
| 1922 |  |  | December | 791, 500 | 122 |
| January .-...- | 8, 100 | 61 | 1924 |  |  |
| February. | 8,500 | 63 | January | 1,036,600 | 123 |
| March. | 9, 900 | 61 | February | 1,839,100 | 331 |
| April. | 10,750 | 87 | March. | 2, 076, 700 | 130 |
| May-- | 11,000 | 68 | April... | 2.134, 000 | 125 |
| June.- | 12,000 | 69 | May .- | 2,260,600 | 119 |
| July .... | 17,400 | 65 | June.... | $2,207,800$ | 138 |
| August. | 21,400 | 63 | July.. | 2,204, 500 | 145 |
| September | 20,600 | 86 | August -- | 2, 242,000 | 145 |
| October-- | 32,900 | ${ }_{68}^{65}$ | September | 2,236,000 | 142 |
| November | 32,600 | 66 | Octobet- | 2, 255, 2000 | 149 |
| Decomber. | 33,400 | 71 | November | 2,309, 500 | 154 |
| 1923 |  |  | December | 2,348,800 | 160 |
| Januery.- | 38,500 | 74 | 1025 |  |  |
| February | 41,800 | 82 | January. | 2,307. 500 | 169 |
| March... | 60,000 <br> 83 <br> 100 | 94 | February. | 2, 218,700 | 163 |
|  | 94,000 | 89 | March..... | 2,117,800 | 143 |

Table 41.-Hungary-Exchange rales, 1921-1925
[New York on Budapest, Noon buylng rates for cable transfers. Average rates are monthly averages of daily rstes. See chart 28. Sourcer Federal Reserve Board. Par: 20.28 centa per kromel


Table 42.-Hungery-Purchasing-power parities, 1981-1985
[According to indar mombers ahown in Table $\{0$ for Hungery and Inder numbere of Federal Reserve Board tor the United Étates. Bee chart 30]

| Month | United <br> 8tates indar of prise | $\left\|\begin{array}{c} \text { Honge- } \\ \text { rian inder } \\ \text { of prices } \end{array}\right\|$ | $\begin{aligned} & \text { Purchasing-powsir } \\ & \left(\frac{\text { paritiog }}{\text { B. ingriax } \times \text { par }}\right) \end{aligned}$ | $A$ verage axchange rates (cables in New Yock) | Per cont pur-chasingpower parities are of axchange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 145, 803 | 4,200 | Cente per krone 0.7036 | $\begin{gathered} \text { Cents } \\ \text { per krone } \\ 0.3323 \end{gathered}$ |  |
| August | 146. 686 | 5,400 | . 51509 | 0.3629 .2629 | 209.35 |
| September | 146. 062 | 6, 250 | - 4764 | .1944 | 245.05 |
| Octobar... | 145. 602 | 8,750 | . 4374 | . 1432 | 305.28 |
| November | 145.294 | 8300 | . 3546 | . 1078 | 328.94 |
| December | 122.74 | 8,250 | . 3505 | .1512 | 281.81 |
| 1098 |  |  |  |  |  |
| January.. | 122.277 | 8,100 | . 8580 | .1526 | 22934 |
| Febrasry. | 146. 101 | 8,500 | . 8488 | . 1407 | 13260 |
| March. | 147.306 | 0,900 | . 3015 | . 1256 | 240.05 |
| April | 149, 130 | 10,750 | -2911 | . 1268 | 220.45 |
| May.-. | 158.182 | 11,000 | . 2913 | . 1281 | 231.01 |
| Jung | 161.246 | 12.000 | . 2632 | . 1079 | 294.66 |
| July | 185.417 | 17, 400 | . 1926 | . 0760 | 253.48 |
| August | 166.880 | 21,400 | . 1670 | . 0595 | 283.87 |
| September. | 16.312 | 20,600 | . 1251 | . 0423 | 206. 75. |
| October | 165. 185 | 32,000 | . 1017 | . 0402 | 252.99 |
| No vember | 164.015 | 32,000 | . 1019 | . 0413 | 246. 73 |
| Decomber | 164327 | *3,400 | . 0987 | . 0130 | 231.86 |
| 1923 |  |  |  |  |  |
| Jannary. | 160. 153 | 38,500 | . 0874 | . 0392 | 228208 |
| Fabruary | 168. 301 | -41,800 | . 08008 | .0395 | 20405 |
| March. | 160.374 | 66,000 | . 0520 | . 0289 | 178, 03 |
| April | 170. 055 | 88,500 | . 0418 | . 0217 | 100.32 |
| May | 167.088 | 19,000 | .0380 | . 0191 | . 188.48 |
| Juno | 164.065 | 144, 500 | . 02280 | . 0140 | $\because 164.29$ |
| Jaly. | 150.488 | 238,000 | . 0113 | , 00097 | - 110.50 |
| Augrist | 150.059 | 482, 500 | . 0070 | . 0058 | - 125.00 |
| Septembe | 169.357 | 854,000 | .0060 | . 0055 | 109.09 |
| October- | 163. 142 | 687, 000 | .. 0056 | . 0054 | 103. 70 |
| November | 163.460 | 635,000 | . 0052 | . 0055 | 98. 30 |
| December | 168.042 | 714,000 | . 0048 | . 0052 | . 88.45 |
| 1024 |  |  |  |  |  |
| Januery | 162.745 | 1,028, 000 | . 0032 | . 0089 | 82051 |
| February | 162.519 | 1, 839,100 | . 0018 | . 0038 | 64. 545 |
| March | 169. 522 | 2,078,760 | . 0016 | . 0015 | 108, 686 |
| Aprli. | 157. 678 | 2, 134, 600 | . 0015 | . 0014 | 107.143 |
| May | 158. 148 | 2.230, 600 | , 0014 | . 0012 | 116. 667 |
| Jupana | 154.304 | 2,207, 800 | . 0014 | . 0011 | 127. 273 |
| July | 150.383 | 2, 294,500 | . 0014 | . 0012 | 110.457 |
| August | 157.969 | 2,242,000 | . 0014 | ,0013 | 107.809 |
| Beptamber | 168.276 | 2, 236,600 | . 0014 | .0013 | 107.602 |
| October- | 158.673 | 2, 285, 200 | . 0014 | .0013 | 107.692 |
| November. | 180.074 | 2,309, 500 | . 0014 | . 0013 | 107. 602 |
| Decomber. | 164.815 | 2,348,600 | . 0014 | . 0013 | 107.002 |
| $10 \% 5$ |  |  |  |  |  |
| Janusy | 167.758 | 2,807, 500 | . 0015 | . 0014 | 107.148 |
| February | 167.088 | 2, 218,700 | . 0015 | . 0014 | 107.143 |
| Merch | 100.885 | 12,117,800 | ,0016 | .0014 | 41288 |

Table 43.-Hungary-Gold value of total note circulation, 1821-1925
[On basls of exchange rates and on basis of purchasing-power parities. Bee chart 21]


TABLE 44.-Hungary-Imports and exports of merchandise, 1911-1925
fSource: Statsetikai Havi Kbalemenyek. In gold kronen, calcalated an the basis of dollar exehange rates. Bee chart 27.000 amitwed]

|  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^85]Table 45.-Hungary-National debt
(Paper kronen)
[Source: Magyar Kir. Penzugyminister]

|  | Internal | Brtersal 1 | Total |
| :---: | :---: | :---: | :---: |
| Dee. 31- |  |  |  |
| 1913 - | 2, 161, 011,624 | 5, 945, 449,618 | 8,007, 361, 212 |
| 1919 | 17,474, 94, 131 |  | 84, $343,762,328$ |
| 1820 | 27, 488, 558, 021 | 98, 854, 227, 244 | 124, 342,780, 265 |
| 1821 | $50,800,376,509$ | 128,047, 219, 386 | 187, 347, 695, 064 |
| 1822 | 82, 397, 517, 719 | 424, 246,457,875 | 506, 643,975, 594 |
| 1823 | 416, 302, 267, 640 | 3, $270,669,310,696$ | 3,787, 061, 578, 325 |

${ }^{1}{ }^{1}$ Debts expressed in gold or foreign currences have been converted into paper kronem at rates of exchange in Zurich on the last day of the corresponding year.

TabLe 46.-Hungary-Receipts and expenditures, 1919-1884
[Source: Magyar Kir. Penangyminister; 000 omitted]

|  | Budget estimates |  |  |  | Closed accopnts I |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Receipts | $\begin{gathered} \text { Erpendi- } \\ \text { tures } \end{gathered}$ | $\begin{aligned} & \text { Sur- } \\ & \text { plus } \end{aligned}$ | Defict | Recsipta | Erpent ditures | Gurplus | Defcit |
| 1913. | Kronen 2,073 | Zronen $2073$ | Srones | Kronen | Kronen | $\left.\begin{array}{\|r\|} E_{\text {ronsen }} \\ 2.319 \end{array} \right\rvert\,$ | Kronen 228 | Eronen |
| 1914 (January-June) ${ }^{\text {a }}$ | 1,073 | 1,111 |  | 38 | 1,356 | 1,444 |  | 88 |
| 1914-15-1 | 2,264 | 2,264 | ---.-. | -...-.-...-- | 7,285 12,089 | 6,659 | 600 | 159 |
| 1916-17 ${ }^{3}$ |  |  |  |  |  |  |  | 10 |
| 1017-18 | 3,469 | 3,443 | 25 |  |  |  |  | - |
| $1918-19$ (February-J....-- | 1,950 | 4.749 |  |  |  |  |  |  |
| 1920-21 7 ................ | 10, 521 | 20, 211 |  | 9,600 |  |  |  |  |
| 1921-22 ${ }^{1}$ | 20,315 | 28,784 |  | 6,409 |  |  |  |  |
| 1922-234. | 152,802 | 193, 485 |  | 40,088 |  |  |  |  |
| 1023-24 ${ }^{\text {4 }}$ | 2, 168, 140 | 2,307,099 |  | 1,128,959 |  |  |  |  |

[^86]Table 47.-Hungary-Net receipts and expendifures, 1924-25
[Source: Monthly Reports of Commbasioner-General for Hangary. Gold kroneo]
Estimated budget, July 1, 1924-June 30, 1925:
Eronen

Resolits first 8 months.

|  | Receipts | Erpendi- | Defictt | Surplus |
| :---: | :---: | :---: | :---: | :---: |
| 1924 |  |  |  |  |
| July- | 17,900,000 | 30,500, 000 | 12,000,000 |  |
| August | 20, 500,000 | 23, 804, 000 | 4,300, 000 |  |
| September | 30,901, 000 | 26,700,000 | 5, 800, 000 |  |
| October- | 35, 600, 000 | 33, 700,000 |  | 1,900,000 |
| Novembar | 49,200, 000 | 34,000, 000 |  | 15, 200, 000 |
| December. | 44,900,000 | 37, 200,000 |  | 7, 700,000 |
| Total for six months. | 208,000,000 | 205,900,000 | ---.......--- | $12,100,000$ |

## 1 Net.

Noti.-Net recoipts and expenditures erchade (a) revanues other than taxation collected by different dopartments of the Government; (b) railway trafic tax; (c) worling expenses of tho tobecto monopoly.

NETEERLANDS
Tasle 48.-Netherlands Bank, 1918-1985
[Eourcas Annasi Reports of the Notherlanda Bank. See chart 82. End of month; 000 oruitted]


Table 48.-Netherlands Bank, 1912-1825-Continued

| Month | Gold | Silver | Discounts |  | Advances |  | Total digcounts and advanced | Notes in circulation | Depoalts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Domestic bllls discounted | Foreign bills in porttolta | Advances to the Government | Other advances |  |  |  |
| 1017 |  | Ouilders | Guliders | Guilders | Guilders | Guilders | Ouilders |  |  |
| January. | $\begin{array}{\|c\|c\|} \hline \text { Guilders } \\ 589,561 \end{array}$ |  |  |  |  |  |  | Guflders | Ouildere |
| February | 691, 565 | 6,577 | 58, 722 | 8, 007 | 12,871 | 86, 208 | 165, 898 | 732,694. | 78, 38 t |
| March | 500,615 | 6,917 | 77, 637 | 8,209 |  | 86, 849 | 172, 505 | 745, 049 | 70, 106 |
| April | 596, 527 | 6, 858 | 85,942 | 8,084 | 11, 658 | 88, 083 | 194,377 | 773, 582 | 69,492 |
| May | 506, 278 | 7,393 | 69, 661 | 8,110 | 14,952 | 85, 307 | 177, 830 | 750, 650 | as, 913 |
| June | 626,728 633,301 | 7, 454 | 52, 64.5 | 7,807 | 4; 5881 | 79, 148 | 144, 186 | 784, 224 | 68, 898 |
| August | 656,910. | 7, 375 | 31,950 | 8,228 | 12,341 | 74, 621 | 140, 1448 | 766, 687 | 86, 803 8871 |
| Septambe | 675, 917 | 7,264 | 67,628 | 7,913 | 14,046 | 72, 055 | 151, 642 | 808, 812 | 67,907 |
| Oetober- | 685, 231 | 7, 388 | 64.248 | 8,113 |  | 82,748 | 156, 104 | 824, 873 | 63, 639 |
| December | ${ }_{608} 6983$ | 7,028 | 81, 820 | 8,039 | 12, 768 | 107, 448 | 1787, 306 | 852,847 | 80, 104 |
| 1918 |  |  |  |  |  |  |  |  |  |
| January | 707, 000 | 7,170 | 76, 114 | 8,141 | 11,250 | 00, 518 | 186,029 | 871.586 | 74.999 |
| February | 714, 678 | 7, 2895 | 30, 575 | 8.198 |  | 116,029 | 154, 790 | 945, 856 | 81, 220 |
| March | 722,184 | 7,285 | 19, 186 | 7, 104 | 14,704, | 116, 737 | 156, 771 | 889, 682 | 66, 754 |
| April. | 725, 771 | 7,274 | 48,520 | 3,816 |  | 153, 825 | 204, 261 | 938, 472 | 69,305 |
| May | 721.439 | 7,799 | 60,096 | 7,478 |  | 131, 743 | 189, 317 | 919,182 | 70,859 |
| Juna | 717, 5099 | 7,002 | 43,816 | 7,753, | 4. 5600 | 122,068, | 178,223 | 927,338 | 48, 614 |
| July- | 715, 122 | 7,703 | 62, 139 | 8,678 | 12,663 | 112, 209\% | 188, 777 | 909, 750 | 78,779 |
| Argust. | 709, 317 | 7,953 | 75, 116 | 8,435 | 3,887 | 104.715 | 192, 153 | 946.382 | 43,300 |
| September | 709, 708 | 8,042 | 117,418 | 7.802 |  | 112, 782 | 238, 002 | 971, 657 | 60, 490 |
| October. | 706,477 | 8,154 | 142,996 | 8,690 | 14,900 | 119, 685 | 286, 274 | 985, 317 | 94, 614 |
| Novomber | 688, 392 | 8,230 | 225, 288 |  |  | 144,307. | 377, 045 | 1,032, 164 | 74,000 |
| December | 689, 441 | 8, 845 | 213, 691 | 8,830 | 3,720 | 139, 515 | 385, 865 | 1,068,947 | 88, 478 |
| 1910 |  |  |  |  |  |  |  |  |  |
| January- | 654. 309 | 8,791 | 221,961 | 8,567 | 14, 544 | 135, 057 | 380, 129 | 1,058, 608 | 89,095 |
| February | 677,316 | 9, 105 | 92, 519 | 8.546 | 14, 932 | 182, 230 | 298, 227 | 1,000, 190. | 88.050 |
| March | 600, 334 | 9,750 | 110, 689 | 8,765 | 14,921 | 195, 746 | 329, 121 | $1,011,223$ | 80, 308 |
| April | 083, 348 | 8,114 | 139, 716 | 27,080 | 14, 004 | 225, 975 | 407, 675 | 1,034, 638 | 92,094 |
| May. | 661, 008 | 7, 838 | 117,371 | 27, 582 |  | 234, 150 | 370, 103 | 1,023, 062 | 81,962 |
| une | 657, 722 | 8.214 | 108, 941 | 25,546 |  | 225, 146 | 250, 673, | 1, 018,076 | 69.876 |
| July. | 651, 103 | 6, 417 | 112, 536 | 25,476 | 13, 503 | 208, 158 | 385,8731 | , 0083, 290 | 68, 087 |
| August | 636,503, | 5,823 | 111, 649 | 44,126 | 9,283 | 2316, 647 | 401, 705, | 1,002,879 | 70,800 |
| Soptember | 631, 763 | 5,008 | 123, 673 | 47,300 | 14.471 | 216, 578 | 402,113 | , 000, 138 | 65, 033 |
| October | 632, 167 | 4.907 | 141, 166 | 48,273 | 7,265 | 238,915 | 435, 6494 | $1.010,411$ | 90,023 |
| November | 632, 150 | 6. 325 | 146,036 | 48,550, | 14,630 | 202, 004 | 472. 18091 | 1,048,307 | 81, 128 |
| Decemb | 637, 323 | 6,108 | 168,881 | 48,354 | 12,241 | 250, 115 | 479, 571 | 1,062,732 | 102,343 |
| 1920 |  |  |  |  |  |  |  |  |  |
| January. | 631, 845 | 8,220 | 232, 621 | 48,504 | 12.687 | 214,005 | 807, 6771 | ,039,002 | 114,852 |
| February | 633, 240 | $9.390^{\prime}$ | 212,008 | 54, 783 | 14,985 | 190, 825 | 611, 68111 | ,028, 540 | 128, 130 |
| March. | 634,166 | 10, 428, | 195, 890 | - 60, 192 | 13,342 | 201, 154 | 466, 5877 | , 013,315 | 105, 267 |
| April | 635, 171 | 11, 323 | 232, 329 | 53,882 | 8,045 | 101.075 | 485, $33 \mathrm{~L}, 1$ | ,048, 048 | 183, 358 |
| May. | 635, 805 | 12,646 | 149, 150 | 71, 356 |  | 309,858 | 530, 37311 | , 020,820 | 162.845 |
| June | 636, 304 | 13, 898 | 117, 252 | 49, 6088 | 13,64 | 296, 977 | 477, 5741 | , 004,808 | 143, 717 |
| July. | 638,388 | 15,015: | 90, 255 | 41,068 |  | 232, 237 | 403, 68011 | , 017, 208 | 123,009 |
| August. | 636, 340 | 16. 530 | 95, 257 | 46, 484 | 3,205 | 312,002 | 450, 9481 | ,028,023 | 81, 228 |
| Septembe | 636, 348 | 17,732 | 101, 917 | 30, 435. | 178 | 213, 042 | 455, 7721 | 030,310 | 67, 832 |
| October | 636, 141 | 18,945 | 138.024 | 20,041. | 6,523 | 308, 193 | 476, 7811 | 067,317 | 98,348 |
| November | 636, 141 | 20, 171 | 182, 934 | 4.415 | 14,951 | 264, 131 | 500, 431 1. | 078,032 | 87, 882 |
| December. | 626, 141 | 24, 100 | 108,824 | 52,754 | 12, B32 | 247, 000 | 611,016 1, | ,072, 140 | 86, 281 |
| 1921 |  |  |  |  |  |  |  |  |  |
| January | 636, 141 | 23,456 | 208, 121 | 48,017 | 4.930 | 238, 056 | 492,7241, | 072, 100 | 67, 618 |
| February | 636, 141 | 20,302 | 180.086 | 35, 992 | 14, 573 | 221, 777 | 458, 4281 | ,033, 417 | 40,172 |
| March | 621,004 | 16, 687 | 192.008 | 18,706 | 14.740 | 215, 687 | 441, 7841 | ,036,816 | 41, 570 |
| April | 810, 976 | 14, 434 | 244, 148 | 89, 502 | 14,916 | 196,016 | 404, 582.1 , | , 043,276 | 00.798 |
| May. | 605, 9065 | 13,005 | 220, 013 | 48, 695 | 13,498, | 183,928 | 471, 157, 1 , | ,029, 565 | 57,814 |
| Jupe... | 605, 9800 | 12,331 | 230,117 | 49,234 | 1,276 | 154, 854 | 123, 481] | 901.920 | B0, 638 |
| July... | 005,900 | 11, 150 | 250,224 | 18.583 | 12, 138 | 131,777 | 453, 7221 | ,012, 700 | 53,438 |
| August | 605,960 | 10,560 | 223, 674 | 47.895, | 14. 957 | 158,777 | 445,3031, | 004, 120 | 48,977 |
| Septeraber | 605, 000 | 10,327 | 236,348 | 尔,094 | 14, 254 | 128.458 | 122, 764 | 904,046 | 32.851 |
| October. | 605,960 | Q,921 | 317,985 | 39,707 | 13,500 | 120,204 | 500,4651 , | ,056, 405 |  |
| Novernber | 608.900 | 8,614 | 278, 618 | 88,500 | 14,329 | 117,763 | 449,2181, | ,021,065 | 31, 448 |
| Decamber. | 603,900 | 8,241, | 270, 180 | 38,741 | 13, 474 | 121,354 | 442, 008.1, | 012,87e | 30,573 |

Table 48.-Netherlands-Bank, 1912-1925-Continued.


## Tabli 49.-Netherlands-Wholesale priceb, 1980-1905

[Inder numbers of Central Bureau of Ststistics; 63 commodities; 1913- 100. The Index numbers have been
converted to a gold besis by applying to them the percentages which the corresponding everage monthly exchange rates for dollars are of par. See chart 33]

| Month | On paper currency besals | Converted to gold basis | Month | On paper curreacy begls | Converted to gold basis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1020 |  |  | 1922 |  |  |
| January. | 297 | 270 | November. | 158 | 164 |
| February | 233 | 283 | December | 150 | 164 |
| March | 236 | 262 |  |  |  |
| Aprif... | 298 | 270 | 1928 | 167 |  |
| June... | 208 | 267 | January.-.- | 157 | 168 |
| July.... | 296 | 267 | March....-. | 156 | 103 |
| August. | 288 | 236 | Apri | 156 | 152 |
| September | 287 | 223 | May...... | 149 | 145 |
| October- | 283 | 217 | June.... | 149 | 145 |
| November | 260 | 195 | Juy | 145 | 142 |
| December. | 238 | 179 | August | 142 | 131 |
| 1921 |  |  | September | 145 | 142 |
| Jsouary. | 213 | 174 | November | 158 | 145 |
| February | 197 | 168 | December. | 154 | 146 |
| March... | 188 | 161 |  |  |  |
| May... | 182 | 161 | Jsnuary . $19 .$. | 150 | 45 |
| June. | 182 | 151 | February... | 158 | 147 |
| July.. | 176 | 139 | March..... | 156 | 143 |
| August. | 180 | 139 | April........ | 154 | 142 |
| September | 180 | 142 | May.... | 158 | 142 |
| October--- | 169 | 141 | June... | 151 | 141 |
| November. | 105 | 144 | July | 151 | 143 |
| Decamber. | 165 | 149 | August. | 151 | 146 |
| 1022 |  |  | September. | 188 | 151 |
| January | 168 | 149 | Novenber. | 101 | 100 |
| February. | 105 | 154 | December. | 160 | 161 |
| March... | 164 | 154 |  |  |  |
| April.-.-- | 163 | 154 | 1926 |  |  |
| June...... | 165 | 159 | January -...- | 160 | 161 |
| July | 164 | 158 | March | 148 | 150 |
| August.... | 156 | 151 | April. | 151 | 161 |
| September. | 152 | 147 | May-...- | 151 | 151 |
| October--- | 165 | 150 |  |  |  |

Table 50.-Netherlands-Exchange rates, 1914-1925
[New York on Amsterdam. January, 1014-June, 1921, sight Grafts; July, 1921, to dete, noon buying rates for cable transters. Average ratea, Janunry, 1914-October, 1018, are midpoints between monthly high and low rates; from November, 1918, to date, the everages are monthly averages of daily rates. Bee chart 35. Source: Federal Reearve Board. Par, 40.2 eents per guilder]

| Month | Cents par grilder |  |  | Month | Cents per guilder |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | $\underset{\text { Aver- }}{\text { Aver }}$ |  | High | Low | Average |
| 1914 |  |  |  | 1915 |  |  |  |
| Jamuary | 40.31 | 40. 13 | 40.22 | January.- | 40.54 | 40.06 | 40. 28 |
| February. | 40.25 | 40. 25 | 40.25 | Feloruary. | 40. 31 | 39. 75 | 40.08 |
| March | 40.25 | 4.2. 25 | 40.25 | March. | 40. 08 | 39. 50 | 39. 75 |
| Apris. | 40. 31 | 40.31 | 40.31 | A perl | 80. 60 | 39.31 | 34. 41 |
| May. | 40.31 | 40.31 | 40.31 | May.. | 33.68 | 35.44 | 38. 50 |
| June- | 40.31 | 4010 | 40.25 | June.. | 39.94 | 30.50 | 39.72 |
| July | 41.25 | 40.19 | 40.72 | July | 49.08 | 30.04 | 40. 00 |
| August | 4200 | 40.75 | 41.38 | August. | 40.80 | 39.68 | 40. 22 |
| September. | 11. 75 | 40.13 | 40.94 | Geptember. | 40.38 | 30.43 | 38. 91 |
| Octoter... | 42.50 | 40.63 | 41. 57 | Octaber... | 41. 50 | 40.38 | 40.94 |
| November | 40.88 | 40.50 | 40.69 | November. | 4200 | 41.38 | 41. 60 |
| December. | 40.63 | 40.38 | 40.51 | December | 43,50 | 4.88 | 42.60 |

Table 50,-Netherlands-Exchange rates, 1914-1985-Continued


Table 51.-Netherlands-Purchasing-power parilies, 1820-1825
According to index numbers of the Central Burean of Statistics for Netheriands and Burean of Labor 8tatistics Inder numbers for the United Statee.
[8ee chart 38]

| Month | United index of prices | Datch index of prices | $\begin{aligned} & \text { Purchasing power } \\ & \left(\frac{\text { D. } \mathrm{p} \text { indtex } \mathrm{X} \text { Par par }}{\text { Dutch index }}\right) \end{aligned}$ | Averaze exchang rates canhen in New Yortit | Per cont parchasparittes are of rstes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1920 |  |  | Cente per oruider | Gentaper guilder |  |
| Fenuary... | 238 | 287 | ${ }_{32} 88$ | \%7830 | ${ }_{88.38}$ |
| March. | 234 | 288 | 3288 | 38.70 | 88.40 |
| April. | 245 | 222 | 23.78 | 37.12 | 90. 87 |
| Juna. | 243 | 203 | 33.23 | 36.80 | 026 |
| July | 241 | 296 | 3273 | 3. 97 | 96,50 |
| August. | 231 | 238 | 32.24 | 3200 | 97. 99 |
| Septembe | 228 | 287 | ${ }^{31.66}$ | ${ }^{32} .27$ | 101.25 |
| Octaber | 211 | 288 | 20.97 | 30.87 | ${ }^{97}$. 08 |
| November-.- | 198 179 | 2280 | 30.30 38 | 30.19 30.98 | ${ }^{100 .} 36$ |
| 1021 |  |  |  |  |  |
| Januery. | 170 | 213 | 3208 | 32.88 | 97.57 |
| February- | ${ }_{100}^{100}$ | 197 | ${ }^{32} 814$ | 32.20 | 96. 47 |
| April.. | 148 | 178 | 33880 | 3.75 | 97.27 |
| May | 145 | 182 | 32.08 | 23.56 | 90.07 |
| June.. | 142 | 182 | 31.23 | ${ }^{33.28}$ | 94.23 |
| August | 142 | 180 | ${ }^{13} 171$ | 31.80 31.00 | 1020 |
| September | 141 | 180 | 31.49 | 31.06 | 90. 40 |
| October- | 142 | 180 | 33.78 | 33.45 | 100.09 |
| November- | 141 |  | 34. 35 | 34.97 | 98. 23 |
| December- | 140 | 165 | 3.11 | 36.31 | 98 |
| 1022 |  |  |  |  |  |
| January- | 188 | 163 | 3.03 | 3 c .68 | 0278 |
| March. | 141 142 | 1165 | 34.85 | 87.81 77.85 | ${ }^{91} 97$ |
| April. | 148 | ${ }^{163}$ | 3837 | 37.88 | 9209 |
| May--- | 148 | 168 | ${ }^{30} 08$ | 38.68 | 9830 |
| Jaly. | 155 | 165 | 30.58 | ${ }_{88}^{387}$ | 9.42 |
| August | 155 | 156 | 39.94 | ${ }_{38} 88$ | 10281 |
| September | 158 | ${ }_{152}^{158}$ | 40.47 | 38.70 | 10. 38 |
| Oclober-- | 134 | 158 | 39.04 | 3880 | 19252 |
| December. | 156 | ${ }_{158}^{158}$ | ${ }^{30.48}$ | 30.77 | 101.07 |
| 1923 |  |  |  |  |  |
| January.- | 150 | 157 | 30.94 | 39.56 | 10098 |
| March. | ${ }_{150} 15$ | 156 | 40.48 |  | 10235 |
| April. | 159 | 156 | 40.97 | 20. 18 | 10.57 |
| May- | 156 | 149 | 4200 | 32.12 | 107. 56 |
| Juna-- | 153 | 149 | 41. 288 | 29. 20 | 10631 |
| August. | 150 | 145 | ${ }^{4 .} 86$ | 39.23 | 10070 |
| September. | 154 | 145 | 1270 | 39.30 | 108 05 |
| October-- | 153 | 148 | 41.56 | 39. 13 | 108. 21 |
| November- | 152 | 153 | 30.08 |  | 10606 |
| December. | 161 | 154 | 30.42 | 280 | 10808 |
| 1934 |  |  |  |  |  |
| Jenuary - | 151 | 150 | 3801 | 77. 35 | 104. 18 |
| February- | ${ }^{152}$ | 158 | ${ }^{38} 67$ | 77.42 | 103. 35 |
| March_- | 150 | 155 | 38.00 | 37.07 | 1040 |
| April. | 148 | 154 | 388 | 37. 19 | 108.88 |
| May. | 147 | 153 | 328 | 87.41 | 10.25 |
| June | 145 | 151 | 等 60 | 87.4 | 10.11 |
| Juls. | 147 | 151 | 30. 13 | 87.94 | 108. 18 |
| Bugust-:- | 150 | 151 | 20.18 | 38, | 10280 |
| October. | 152 | 161 | \%7.05 | 38.10 | ${ }_{67} 06$ |
| November | 153 | 162 | 87. 98 | 408 | O4. 78 |
| Decamber. | 157 | 100 | 32.45 | 44.4 | 97. 00 |
| 1925 |  |  |  |  |  |
| January -- | 180 | 180 | 4020 |  | 90. 48 |
| February | 161 | 158 | 40.8 | 40.17 | 101.9 |
| Mpril. | ${ }_{158}^{181}$ | 155 | 41.76 4188 | ${ }^{32} 8$ | ${ }_{102}^{108}$ |

## Taslas 52.-Netherlands-Purchasing power parities, 1980-1925

According to lndax numbers of the Central Hurasu of Btatigtics for Netherlands and Federal Keserve Board index numbers for the United Statea
[8ee qhart 30 ]


Table 53.-Netherlando-Gold value of total note circulation, 1914-1925
[ On basts of exchange rates and on basis of purchasing power parities]

|  | Month | Total note circulation (000 omilted) | Average exchange rates | Gold value of circalation on basis of oxchange rates (000 omitted) | $\begin{gathered} \text { Purchasing } \\ \text { power } \\ \text { paritle } \end{gathered}$ | Gold value of circulagtion on basis of purchasing power parities (000 omitted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1914 | Guilders | Cents per oullder | Dollars | Cente per puidder | Dollara |
| January. |  | 315, 437 | 40.22 | 126,869 |  |  |
| Februsry |  | 305,874 | 40.28 | 123,114 | --6.en-.-- |  |
| March |  | 297.894 | 40.25 | 110,002 | --.-------- |  |
| April. |  | 320,090 | 40.31 | 120, 028 |  |  |
| May. |  | 316.636 | 30.31 | 127, 636 |  |  |
| June. |  | 306, 14 | 40.25 | 123, 227 |  |  |
| July--- |  | 310, 437 | 40.72 | 128,410 | -------.... |  |
| August |  | 444,238 | 41.38 | 183, 824 |  |  |
| September |  | 440, 445 | 40.94 | 180, 482 |  |  |
| October- |  | 478,986 | 41.57 | 190, 114 |  |  |
| November |  | 481,145 | 40.69 | 195, 778 |  |  |
| December. |  | 473, 107 | 40.51 | 191, 850 | ----------- |  |
|  | 1915 |  |  |  |  |  |
| Janusry. |  | 492,280 | 40.28 | 198, 290 |  |  |
| February |  | 457,055 | 40.03 | 182, 859 |  |  |
| March |  | 459,084 | 39.75 | 182, 486 |  |  |
| April. |  | 470,088 | 39.41 | 185, 281 |  |  |
| Juny... |  | 485,131 483,850 | 39.50 | 191.627 |  |  |
| July |  | 512,708 | 40.00 | 192, 083 |  |  |
| August |  | 513,706 | 40.22 | 208, 913 |  |  |
| September. |  | 522,056 | 30.91 | 208,353 |  |  |
| Octobar. |  | 569,850 | 40.94 | 233, 297 |  |  |
| November |  | 666,479 | 41.69 | 236, 748 |  |  |
| December |  | 577,056 | 42.69 | 246,345 |  |  |
|  | 1916 |  |  |  |  |  |
| January- |  | 581,722 | 44. 19 | 257,063 |  |  |
| February |  | 677,978 | 42.25 | 24,254 | ------ |  |
| March |  | 588,443 | 42.50 | 250,088 |  |  |
| April |  | 681,884 | 42.68 | 290.679 |  |  |
| May |  | 636,983 | 41.44 | 263,966 |  |  |
| July.-. |  | 630,911 661,679 | 41.60 41.41 | 274,001 |  |  |
| August |  | 657,109 | 41.25 | 271.057 |  |  |
| September. |  | 700, 782 | 40.94 | 288, 000 |  |  |
| October. |  | 730,338 | 41.07 | 299,950 |  |  |
| November. |  | 736,284 | 40, 88 | 300, 093 |  |  |
| December |  | 758,379 | 40.82 | 309,570 |  |  |
|  | 1917 |  |  |  |  |  |
| January. |  | 732,759 | 40.78 | 298,810 |  |  |
| Febrnary |  | 732,64 | 40.67 | 297.254 |  |  |
| March. |  | 745,649 | 40.41 | 301, 317 |  |  |
| April. |  | 773,592 | 41.16 | 318,410 |  |  |
| May. |  | 750, 5130 | 41.08 | 307,981 |  |  |
| June. |  | 764,224 | 41.12 | 314, 225 |  |  |
| July.-- |  | 767, 152 | 41.30 | 316,834 |  |  |
| Augrast |  | 766,607 | 41.94 | 321, 540 |  |  |
| Septamber |  | 808.812 | 4201 | 239, 737 |  |  |
| October.. |  | 824.973 | 43.94 | 382, 483 |  |  |
| November. |  | 852, 847 | 44.13 | 376,361 |  |  |
| Decamber. |  | 890,273 | 4400 | 391,720 |  |  |
|  | 1018 |  |  |  |  |  |
| January. |  | 871, 565 | 48.63 | 380, 273 |  |  |
| February |  | 845,856 | 4.76 | 378, 521 |  |  |
| March |  | 899, 685 | 45.75 | 407,034 |  |  |
| April. |  | 933,472 | 47.38 | 443, 700 |  |  |
| May |  | 919,162 | 49. 18 | 451,594 |  |  |
| June |  | 927,335 | 50.88 | 467, 191 |  |  |
| July |  | 909,750 | 51.13 | 465, 155 |  |  |
| August |  | 946,392 | 51.88 | 400, 288 |  |  |
| Septamber. |  | 971,557 | 48.38 | 470, 039 |  |  |
| October.- |  | \% 55.317 | 44. 38 | 437.284 |  |  |
| November |  | 1.002, 164 | 42.15 | 450, 132 |  |  |
| December. | ---- | 1,068, 947 | 42.67 | 450, 120 |  |  |
|  | 1919 |  |  |  |  |  |
| January. |  | 1,053, 508 | 4231 | 445,739 |  |  |
| February |  | 1,000, 194 | 41.35 | 413,580 |  |  |
| March. |  | 1,011,223 | 40.87 | 413,287 |  |  |
| April. |  | 1,034, 638 | 40.48 | 418,304 |  |  |
| May |  | 1,025,962 | 39.88 | 408, 641 |  |  |
| June. |  | 1,018,076 | 39.12 | 8188,271 |  |  |
| July |  | 1,000,200 | 38.60 | \$81,250 |  |  |
| August. |  | 1,002,879 | 37.2 | 873,272 |  |  |

Table 53.-Netherlands-Gold value of total note circulation, 1914-1925-Contd.


Table 54.-Netherlands--Imports and exporls of merchandise, 1880-1984 [Ercluding gold and silver]
[Special Imports, i. e., imports for domestic consumption; special erports, 1. e., exports of domeatic merchandise. Source: Official Reports. See chart AJ] $^{2}$

| Year | Imports | Exporta | Ereass of Imports |
| :---: | :---: | :---: | :---: |
|  | Guilders | Ouilders | Ouilders |
| 1809 | 1,906, 294, 000 | 1, $667,214,000$ | 339, 080, 000 |
| 1900 | 1,950, 563,000 | 1, 691, 792,000 | 258, 771,000 |
| 1902. | 2,029,300,000 | 1,730,053,000 | 299, 337.000 |
| 1903 | 2239020000 | 1, 324.826000 | 32. 89.000 |
| 1904 | 3, 102, 237,000 | 1, 088, 088, 000 | 419, 169,000 |
| 1905 | 2,665, 019,000 | 1, 889, 459,000 | 675, 560,000 |
| 1906 | 2,519, 823,000 | 2,078,080,000 | 441,800, 000 |
| 1907. | 2,659, 207,000 | 2, 188, 915,000 | 460, 292,000 |
| 1908 | 2, 809, 852,000 | 2, 171,041,000 | 638, 211,000 |
| 1909 | 3, 103, 105,000 | 3,448, 799,000 | 659, 300,000 |
| 190 | 3,233, 65, 000 | 2, 620, 875,000 | ${ }^{812,770,000}$ |
| 1911 | 3, 315, 817 7,000 | 2, 713,588,000 | $602,251,000$ 872,195000 |
| 1913. |  |  | 472, $837,347,000$ |
| 1914 | 2, 828, 617,000 | 2, 483, 839,000 | 332, 778,000 |
| 1915 | 2,874, 100.000 | 1, 739,088,000 | 1, 135, 102,000 |
|  | 1,714,772,000 | 1,344,018,000 | 370, 754,000 |
| 197 | 984, 731,000 | ${ }^{819,245,000}$ | 145, 486,000 |
| 1918 | 608, 356,000 | 381, 209,000 | 227, 147,000 |
| 1920 | 2, $825.739,000$ | 1, 111,308,000 | 1,14,431,000 |
| 1921 | 2, 2150 | 1, $781.592,000$ | 97082000 |
| 1922 | 2,027, 688,000 | 1, 221, 231,000 | 800, 307,000 |
| 1023 | 2, 000, 228,000 | 1,303, 221,000 | 700, 005, 000 |
| 1924 | 2,364, 029,000 | 1, $6600,670,000$ | 708, 1500,000 |

Table 55- Netherlands-Imports and exports of merchandise, 1820-1925
[Excluding gold and silver]
[Source: Leagne of Nations Monthly Bulletin of Statistics]

| Month | Imports | Exports | Month | Imports | Exports |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 | Guuldert | Gutlders | 1922 |  |  |
| Janmary. | 256, 207, 615 | 135, 832,785 |  | Ouldere | Guflders |
| Fobruary | 233, 591,043 | 113, 309,645 | October- | 186, 643,442 | 112,003, 008 |
| March. | 187, 918, 138 | 68, 210, 408 | November. | 172, 205, 111 | 104, 350, 396 |
| April | 203, 5982.812 | 90, 448, 337 | December | 163, 762, 355 | 100, 225, 239 |
| May | 298, 514, 102 | $170,398,137$ $170,478,445$ | 1928 |  |  |
| July | 314,861, 866 | 177, 114, 162 | January . | 178, 045,89 | 01, 487, 819 |
| August | 267, 956, 122 | 130,018, 883 | February | 182, 189, 535 | 94, 0101,855 |
| Beptember | 317, 388, 670 | 185, 965,509 | March. | 165, 440, 620 | 106, 977, 347 |
| Octaber- | 337, 338, 332 | 148, 140, 438 | April. | 160, 839,064 | 97, 005,415 |
| November | 270,811, 334 | 156, 537, 011 | May. | 160, 129, 701 | 104, 128,702 |
| December | 302, 154, 125 | 156, 922, 883 | June | 159, 533,444 | 97. 900,285 |
|  |  |  | July.. | 157, 464, 022 | 96, 603,019 |
| January 182 |  |  | Augurt | 150, 976, 038 | 107, 233,082 |
| February | 170, 360, 270 | 120, 956,488 | October | 192, 52, 258 | 125, 848, 400 |
| Msrch. | 213, 830, 220 | 107, 204, 662 | Novembe | 176, 006, 045 | 126, 123, 548 |
| Aprli. | 105, 773, 602 | 108, 819, 607 | December | 174, 760, 818 | 127, 889,001 |
| May. | 168, 114, 551 | 98,818, 710 |  |  |  |
| June. | 188, 350,719 | 120, 815, 908 | 1924 |  |  |
| July. | 170, 674, 007 | 105, 420, 129 | January. | 177, 384,058 | 116, 522,007 |
| August | 186,640, 179 | 142, 544, 088 | February | 185, 507, 111 | 125, 405, 290 |
| September | 197, 271, 439 | 135, 749, 785 | March | $188,545,160$ | 131, 900, 705 |
| October | 179, 043, 171 | 114, 8184,641 | April | 189, 679, 735 | 134, 430, 618 |
| November. | 175, 800, 364 | 104, 623, 879 | May | 218,728, 134 | 135, 531, 201 |
| December. | 180, 000, 908 | 97, 115, 318 | June. | 188, 781, 540 | 110, 784,000 |
|  |  |  | July | 188, 162,000 | 134, 417,000 |
| Ianuary 192 |  |  | Auczast | 174, 417,000 | 137, 772,000 |
| January. | $152,495,668$ | 80, 108, 447 | Beplember | 189, 840,000 | 162, 791, 000 |
| February | 152, 353, 594 | 84, 204, 218 | October. | $218,082,000$ | 173, 157, 000 |
| March. | 180, 388, 763 | 112,879, 878 | Noverm | 217, 680.000 | 159,377,000 |
| April. | 107, 451, 702 | 02, 729,811 | Decem | 210,616,000 | L36, 235,000 |
| Muy | 19, 080,257 | 108, 423, 679 |  |  |  |
| Jupe | $\begin{aligned} & 150,890,735 \\ & 163,860,700 \end{aligned}$ | 100, 040,830 | January 1925 |  |  |
| August | 178, 807, 927 | 99, 442,802 | February | 196, 853, 000 | 136, 318 000 |
| September | 164,610, 508 | 115, 612, 131 | March | 204, 000, 000 | 144, 000,000 |

Tabls 56.-Netherlands-Importe and exports of gold and sidver, 1881-198s
[Coin and buillion]
[Sourcs: Janrajlars voor Nederland]

| Year | Imparts | Exports | Year | Imports | Exports |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grilder | Guitiers |  | Cuilders | Cuilders |
| 1881 | 0, 068, 387 | 7,906,446 | 1808. | 8,080,829 | 6, 277, 234 |
| 1882 | 12, 625, 015 | 4,674, 517 | 1904 | 17, 283, 484 | $2 \mathrm{Es1}$, |
| 1889 | 30, 646, 188 | 1,044, $5 \times 3$ | 1805 | 18,481,346 | 4,340,835 |
| IRS | 15, 832, 663 | 3,062,025 | 1806. | 3, 617, 488 | 5.819, 610 |
| 1885 | 18,774, 279 | 1,762, 207 | 1907 | 32802,053 | 18, 084, 802 |
| 1888 | 20, 815, 634 | 1,945,658 | 1908. | 12,818, 053 | 0, 459,172 |
| 1887 | 3, 878, 858 | 119,484 | 1900 | 20,205, 457 | 6, 001, 138 |
| 1888 | 10,382, 824 | 17,872, 616 | 1010. | 81, 556, 495 | 11.624, 719 |
| 1888 | 3, 715, 508 | 15, 190, 308 | 1911 | 17,453, 104 | 18,803,729 |
| 1890 | $8,018,484$ | 5,882, 000 | 1912. | 45, 147, 790 | 17, 34, 401 |
| 1891 | 20,040,757 | 3,077,710 | 1918. | 15, 108, 013 | 17. 564.843 |
| 1892 | 15, 182, 517 | 4,233,080 | 1914 | 62, 588, 308 | 11, 361, 478 |
| 1893 | 20, 712,313 | 3, 628,000 | 1915. | 256,709,587 | 10, 112,360 |
| 1894 | 18, 650,057 | 2,299,890 | 1916 | 168, 228, 370 | 2, 982,101 |
| 1895 | 5,158,752 | 1,342,700 | 1917. | 117, 858,877 | 18, 250,488 |
| 1806 | 6, 356,799 | 78, 718 | 1918. | 29,069, 888 | 36, 297, 529 |
| 1897 | 22, 193, 521 | 80,809 | 1919. | 470, 348, 840 | 320, 413,080 |
| 1898 | 32, 858, 292 | 2371,655 | 1820. | 35, 344, 595 | 47,057, 180 |
| 1890 | 10,205, 539 | 15, 385, 866 | 1921 | $42.283,433$ | 101, 964, 974 |
| 1000 | 17,287, 191 | 3,507,809 | 1822 | 7, 142,009 | 35, 480,000 |
| 1001 | 17,710,306 | 3, 647, 395 | 1023. | 15, 563,000 | 12,206,000 |
| 1902. | 13, 767, 745 | 4,002, 752 |  |  |  |

Tabliz 57.-Netherlands-National debt, 191s-1925
[Soures: Jaardifers voor Nederland]

|  | Consolidated | Floating | Total <br> indebtedness |
| :---: | :---: | :---: | :---: |
| Jan. 1-12 | Guildere | Gualders | Guiders |
| 1013 | 1,156,000, 000 | 3,000,000 | 1,159,000,000 |
| 1914. | 1, 148,000, 000 | 18,000,000 | 1,181,000,000 |
| 1015 | 1, 140,000, 000 | 174, 0000000 | 1,314,000,000 |
| 1918 | 1,408,000, 000 | 188, 000, 000 | 1,574,000,000 |
| 1917 | 1, 608,000, 000 | 251, 000,000 | 1, 769,000,000 |
| 1918 | 1, $008,000,000$ | 335, 000,000 | 1,944,000, 000 |
| 1919 | 1, 851, 000, 000 | 614, 000, 000 | 2, 466, 000, 000 |
| 1070 | 2, 183, 000, 000 | 643, 000,000 | 2,828,000,000 |
| 1921 | 2, 500, 000, 000 | 514, 000, 000 | 3, 063,000,000 |
| 1022 | 2, $802,000,000$ | 839, 000,000 | 3,341, 000, 000 |
| 1023. | 2, 74, 000, 000 | 838, 000,000 | $3,583,000,000$ |
| 1024 | 2,789,000,000 | 388, 000, 000 | 3,371,000, 000 |
| 1825 | 2,929,000, 000 |  |  |

Table 58.-Netherlands-Receipts and expenditures, 1910-1925
[Source: Jaarejffers voor het Koninkryk der Nederianden; 000 omitted]


[^87]
## NORWAY

Tabla 59.-Bank of Notway, 1919-1925
[Soarce: Weoliy statements of the Bank of Nerway. Bee chart \%7. Fod of reonth; 000 omitted]


Table 59.-Bank of Norway, 1919-1925—Continued

| Month | Gold | Balances with Toreign banice | $\left\|\begin{array}{c} \text { Leans } \\ \text { and } \\ \text { dteconnts } \end{array}\right\|$ | Notes in circular tion | Demand deposits |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1919 | Kroner | Kroner | Kroner |  | $\mathrm{K}^{\text {ronat }}$ |
| June | 1188, 428 | 79, 272 | 341,444, | - | 70, 88.812 |
| July--1 | 148, ${ }^{148,258}$ | 108,042 90,087 | 311, 989 | 428, 756 | 63, 970 |
| August | 148, 148 | 82, 804 | 330, 218 | 435, 175 | 65,792 |
| Oeptober | 148, 004 | 81, 763 | 345, 722 | 430, 205 | 65, 108 |
| November | 147,886 | 79, 742 | 347, 911 | 430, 300 | 71, 468 |
| December | 147, 724 | 70,314 |  |  | 101, 152 |
| 1920 |  |  |  |  |  |
| cbruary | 14776 | 62, 834 | ${ }_{346,298}$ | 412,305 | 79,950 |
| March | 147,414 | 80, 367 | 355, 887 | 450, 046 | 76, 113 |
| April | 147,417 | 77,802 | 390, 354 | 44,838 | 103, 819 |
| May- | 147,379 | 70,895 88,807 | - 4028.585 |  | 1125, 34 |
| ${ }^{\text {June }}$ | 147,388 | 68, 665 | 445, 415 | 488,300 | 115,764 |
| August | 147,344 | 56.780 | 44, 308 | ${ }^{466,521}$ | 105,376 |
| October | 147,352 | 54, 405 60,883 | 469, 42 | ${ }_{478,450}$ | 107, 909 |
| Novemb | 147,296 | 47,289 | 443, 528 | 468, 17 | 82, 885 |
| Decemb | 147, 283 | 85, 10.5 | 500, 228 | 478, 376 | 12,736 |
| nuary................ 1921 | 147, 288 | 65, 747 | 467,054 | 420, 200 | 123, 681 |
| Fobruar | 147,292 | 47, 243 | 40, 885 | 417, 138 | 127, 880 |
| March | 147,298 | 52374 | 414,019 | 424,781 | 108,7898 |
| Apriil | 147,290 | 37, 4218 | 27, 2120 | 416, 184 | 105, 90 |
| June | 147,205 | 34, 233 | 440, 709 | 418,400 | 107, 124 |
| July. | 247,291 | 80,060 31 | 451, 8080 | ${ }^{428} 8$ | c9,083 |
| August | 147, 293 | 31,762 80,794 | -125,977 | ${ }_{4} \mathbf{4 1 5 , 5} 885$ | 84, 879 |
| October | 147, 203 | ${ }^{32} 230$ | 452, 539 | 411, 771 | 112, 908 |
| Novembe | 147,293 | 37,088 39,004 | 438, 416 | 490, 781 | 121,888 |
| December | 147, 203 | 39,004 |  |  |  |
|  | 147,294 | 43, 257 | 433, 212 | 378, 064 | 130, 767 |
| February | 147, 298 | 77, 383 | 428, 188 | 375, 8888 |  |
| March. | 147,292 | 45,968 41 41304 | 472, 427 | 285, 530 | 143, 312 |
| ${ }^{\text {April }}$ | 147202 | 42, 402 | 44, 396 | 376, 152 | 161.662 |
|  | 147,292 | 30,140 | 41, 128 | 384. 710 | 123,230 |
| July. | 147, 292 | 38,592 | 45, 281 | 382, 407 | 130,910 |
| August. | 147,292 | 37, 810 | 453, 100 | 34. 683 | 13, |
| Septe | 147, 282 | 42,789 3785 | 444.009 |  | 134, 812 |
| Octob | 147, ${ }^{1492}$ | 37,502 36,303 | 489,260 | ${ }_{371,50}$ | 141, 437 |
| Decemb | 147,291 | 伿, 408 | 470,354 | 34,775 | 1*3, 429 |
| 1923 |  |  |  |  |  |
| January- | 147,290 | 30, 888 | 455,748 | 258, 877 | 174, 251 |
| March | 147,299 | 23,825 | ${ }^{4603,} 959$ | 874.773 | 167, 66, |
| April | 147,289 | 34,887 | 300,959 517.055 | ${ }_{401,902}^{408}$ | 162, ${ }^{1694}$ |
| June | 147,288 | 22,702 | 190, 128 | 418, 033 | 128, 444 |
| July | 147, 277 | 24,085 | 475, 943 | 304, 819 | 177, $\mathrm{TH}^{6}$ |
| August | 147,287 | 10.923 | 482416 | 402, 109 | ${ }_{8}^{108,77}$ |
| Septembe | 147,287 | 19.700 | 483, | 401.000 | \% $\times 174$ |
| October. | 147.285 | ${ }^{18,895}$ | 453, 500 | 30,0,088 | \%, |
| Novarnb | 147, 288 | ${ }_{16}^{21,382}$ | 444, 404 | - 283,814 | 14, 1771 |
| Deceraber | 147, 254 | 16,737 | 479,005 | 205, 857 | 14, 171 |
| 1034 |  |  |  |  |  |
| Jankary | 147,294 | 15, ${ }^{15} 98$ | 473, 880 | ${ }^{2048} 888$ | 110.805 |
| March. | 147, 294 | 㐌, 875 | 412,860 | 380, 221 | P6, 201 |
| April | 147,244 | 19,500 | 124, $2 \times 8$ |  | 104, 075 |
| Jung | 147, ${ }^{148}$ | 20,120 | 424, 468 | ${ }^{\text {d735, }} 207$ | 107, 41 |
| July | 147, 235 | 10, 100 | 42,408 | 389, 838 | 7, 110 |
| August | 146, 238 | ${ }^{38,883}$ | 433, 870 | 380, 617 | 383, 212 |
| Sentember | ${ }_{147}^{14727}$ | 38,954 | 488801 | 380, 073 | 112882 |
| Noctoher- | 1477, 227 | 88,799 | ${ }^{1040} 883$ | ${ }_{878,343}$ | 111,780 |
| November | ${ }_{147}^{147}$ | ${ }_{34,657}$ | 409,682 | 291,300 | 104,847 |
| 1925 |  |  |  |  |  |
| Jamara | 147,228 | 22,030 | 300.04 | 300, 085 | 48 |
| March. | 1477,288 | 21, 249 81,438 | ${ }_{3}^{3,0,318} 3$ | 307, 312 | 107,017 |
| April | 147,228 | 80, 723 | ${ }^{315} 5158$ | 388, 288 | 110.789 |
| May | 147,228 | 60, 454 | 355,717 | 375, 405 | 106, 68 |

## Table 60.-Noraog-Wholesale prices, 1920-1925, on paper basia and on gold batis

Index numbers of ©koncansk Revnes; 92 commodities. The tudex numbers have been converted to gold besis by applying to them the pergentages which the correaponding averuge manthly arohange rates for dolliars exe of par. See chart 38." December, 1913Ju0e, 1914-100)

| Manth | $\left.\begin{array}{\|c\|} \text { On papper } \\ \text { caurrincy } \\ \text { basta } \end{array} \right\rvert\,$ |  | Month | $\left\lvert\, \begin{gathered} \text { On paper } \\ \text { currancoy } \\ \text { hads } \end{gathered}\right.$ | Con. to gold basts |
| :---: | :---: | :---: | :---: | :---: | :---: |
| .108 |  | * | 1022 |  |  |
| January --.-- | 238 | ${ }^{238}$ | Oetober. | 221 | 147 |
| March | ${ }^{312}$ | 223 | November | 220 | ${ }_{155}^{158}$ |
| April. | 354 | 202 |  |  |  |
| May.. | 889 | 250 | 1823 |  |  |
| June. | 409 | 252 | February | 224 | 155 |
| August. | 417 | 233 | March | 229 | 155 |
| September | 425 | 222 | Aprils. | 231 | 154 |
| October- | 419 | 216 | May-.--------------------- | 230 | 14 148 18 |
| Decamber------------ | 877 | 20 | July. | 235 | 142 |
| - 1021 |  |  | August. | ${ }_{204}^{204}$ | - $\begin{array}{r}141 \\ \hline 140\end{array}$ |
| Jannary --.-.-... | 34 | - 238 | October----..-----.------- | 237 | 137 |
| Pebruary | ${ }_{812} 819$ | ${ }_{1}^{212}$ | Novernber | 242 | 132 136 |
| April | 297 | 177 |  | - ${ }^{\text {- }}$ |  |
| May | 294 | 173 | January .-.-.-. | 250 | 131 |
| Junb- | ${ }_{300}^{204}$ | 150 | February | 280 | 129 |
| August. | 297 | 14. | April | 268 | ${ }_{137}$ |
| Septemb |  | 138 | May... | 263 | ${ }_{186}$ |
| October | 278 |  | Juno. |  | 133 |
| Deceamber......-- | 200 | 153 | Juy-uit | 271 | 138 142 |
| 1022 |  |  | Septernber | 275 | 142 |
| January. | 250 | 152 | October-. | 276 | 147 |
| February | ${ }_{22}^{253}$ | 157 | December.- | 278 | 150 |
| Aprin.- | 236 | 164 | 1925 |  |  |
| M9\% | 231 | 159 | January | 299 | 159 |
| June | 230 | 147 | February | 278 | 160 |
| August. | 227 | 148 | April. | 287 | 161 |
| Saptamber | 223 | 14 | May -------------------1-1- | 280 | 163 |

Table 61.-Norway-Exchange rates, 1915-1925
[New Yort on Oalo (Christianis), 1915-1918, Bantert' checks; January, 1910, to Jnme, 1091, gight dratts; July, 1021, to data, noon buylng rates for cable transfers. Avarage rates, January, 1918-Decambar, 1018, are midpotnta batween the monthly high and low rates; from January, 1910, to date the averages are monthly avarage of daily rates, See chart 40. Souroe: Flnancial keview and Federal Eeserve Boand. Par: 29.8 cants par Eronel

| Month | Cents per yrone |  |  | Month | Oents per mrono |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eligh | Low | A verage |  | High | Low | Average |
| 1015 |  |  |  | 1016 |  |  |  |
| Janunry...... | 28. 10 | 24.80 | 29.95 | January. | 28. 10 | 27.35 | 27. 78 |
| February | 24.90 | 24. 23 | 24.67 | February | 28.30 | 27.55 | 27. 83 |
| March | 25. 80 | 24.48 | 25.04 | March | 28.95 | 28.10 | 28. 63 |
| Aprli | 25.80 | 25.36 | 25. 68 | April. | 30.30 | 28.95 | 29.63 |
| Msy. | 20.09 | - 25.80 | 25.90 | May. | \$1.15 | 29.65 | 80.35 |
| Juno | 23. 47 | 28.00 | 28.34 | Jung.. | 30.05 | 27.95 | 99.45 |
| July. | 38.40 | 25.30 | 28.05 | July | 29.15 | 28.05 | ${ }^{28.60}$ |
| August. | 23.05 | 24.65 | 25.80 | August.... | 28.75 | 28.35 | \%. 59 |
| Septomber | 20.00 | 20.60 | 25.80 | Saptember | 28.70 | ${ }^{28.05}$ | 28.38 |
| October- | 28. 25 | - 25.85 |  | Noctober | 28. 28 | 27.65 | 28.00 |
| Novamber* | 28. 10 | -26. 25 28. 60 | 27. 18 | Novert | 27.78 | 27.65 27.69 | 27.70 27.92 |

[^88]Table 61.-Norway-Exchange rates, 1915-1925-Continued


Table 62.-Norway-Purchasing-power parities, 1920-1985
UAccording to indax mumbers of gkonomisk Revne for Norway and Indox numbers of Federal Reserve Board for the United Etater. Eee oberrinil


Table 63.-Norway-Gold value of total note circulation, 1919-1985
[On basis of exchange rates and on basis of purchesing-power parities]

|  |  | Total note circulation | Average exchange rates | Oold value of circulationon basis of exchange rates | Purchas-lag-power paritiea | Gold value of circulation on basia of pur-chasing-power parities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1010 | Kroner | Cents per krone | Dollara | Cents per krome | Dollars |
| April. |  | 434,067,000 | 25.90 | 112, 423,000 |  |  |
| May. |  | 429, 444, 000 | 25. 45 | 100, 290, 000 |  |  |
| June |  | 433, 332, 000 | 25.32 | 109, 720, 000 |  |  |
| July |  | 428,902,000 | 24.10 | 103, 365, 000 |  |  |
| August |  | 428,756, 000 | 23.42 | 100,415, 000 |  |  |
| Beptember |  | 435, 175, 000 | 23.24 | 101, 135,000 |  |  |
| October- |  | 439, 205, 000 | 23. 05 | 101, 237, 000 |  |  |
| November |  | 430, 308, 000 | 22.28 | 95, 786, 000 |  |  |
| December |  | 454,306,000 | 20.60 | 93,587,000 |  |  |
|  | 1920 |  |  |  |  |  |
| January |  | 413,542,000 | 19.19 | 79,359,000 | 10.98 | 82, 410,000 |
| Yebruary |  | 412,305, 000 | 17.30 | 71,320,000 | 19.42 | 80,070,000 |
| March |  | 450,046, 000 | 18. 18 | 81, 818, 000 | 19.30 | 88, 859,000 |
| April |  | 444, 838,000 | 19,83 | 88, 211,000 | 20.24 | 90,035,000 |
| May |  | 430, 954, 000 | 18.63 | 80, 237,000 | 19.67 | 94, 338,000 |
| June |  | 440, 684, 000 | 17.54 | 77, 200, 000 | 18.40 | 81, 088, 000 |
| Juy |  | 458,300,000 | 16. 32 | 75, 714, 000 | 18.67 | 76, 399,000 |
| August |  | 466, 521, 000 | 14.99 | 09, 931,000 | 15.40 | 71, 844,000 |
| Septembe |  | 478, 077, 000 | 13.99 | 68, 886,000 | 14.62 | 60, 8588,000 |
| Notober- |  | 478, 450, 000 $453,417,000$ | 13.79 | ${ }_{65,}^{6787,000}$ | 13.69 | 65, 500,000 |
| December. |  | 478, 378,000 | 14. 74 | 70, 513,000 | 1272 | $66,262,000$ $60,849,000$ |
|  | 1921 |  |  |  |  |  |
| January |  | 423, 209,000 | 17. 63 | 74, 622,000 | 13.67 | 85, 321,000 |
| February |  | 417,034,000 | 17.78 | 74, 149,000 | 13. 18 | 64, 205,000 |
| March |  | 424, 781, 000 | 16. 19 | 68, 772, 000 | 13.08 | 55, 561, 000 |
| April |  | 421,622, 000 | 15.97 | 67, 333, 000 | 13.13 | 65, 359, 000 |
| Msy |  | 418, 184, 000 | 15.77 | 65, 632,000 | 13.28 | 65, 186,000 |
| June |  | 418, 400, 000 | 14.61 | 61, 128, 000 | 13.02 | 54, 476,000 |
| July.- |  | 428, 427,000 | 13.38 | 67, 324, 000 | 13.08 | 65, 824,000 |
| August |  | 420,051, 000 | 13.07 | $55,018,000$ | 13. 24 | 65, 734,000 |
| October. |  | 415, 885, 000 | 12.86 | 58, 48, 000 | 13.72 | 67, 050,000 |
| Novernber |  | 205,393, 000 | 12.64 14.12 | $61,077,009$ $55,828,000$ | 12. 14.11 | $66,152,600$ $65,769,000$ |
| December |  | 409,781,000 | 15. 23 | 62, 110,000 | 1422 | 58, 281,000 |
|  | 1922 |  |  |  |  |  |
| January. |  | 378,004, 000 | 15. 66 | 59, 206,000 | 14.60 | 55, 421,000 |
| Februs |  | 375, 986, 000 | 18. 66 | 62, 639,000 | 15.48 | 68, 200, 000 |
| March |  | 383, 104, 000 | 17. 62 | 67, 855,000 | 16.45 | 63, 300,000 |
| A Mril |  | 385, 580, 000 | 18. 61 | 71, 745,000 | 16.93 | 65, 209, 000 |
|  |  | 375, 152, 000 | 18.47 | 60, 291,000 | 18.35 | 68, 840,000 |
| July |  | 384, 710,000 | 17.07 | 66, 670,000 | 18.70 | 72, 287, 000 |
| August |  | 382, 407, 3000 | 16.68 17.18 | 65, 685,000 | 19.11 | 73,078, 000 |
| September |  | 383, 571, 000 | 17.18 | 66, 689,000 | 19.58 | 75, 321,000 |
| October- |  | 383, 393, 000 | 17.86 | 68, 474,000 | 19.67 20.08 | 78, 704, 000 |
| Novamber. |  | 371, 650, 000 | 18.37 | 68, 272,000 | 10.80 | 73,021,000 |
| December |  | 284, 775, 000 | 18.9 | 72, 876,000 | 20.02 | 77,032, 000 |
|  | 1923 |  |  |  |  |  |
| Jannary' |  | 349,853,000 | 18.87 | 65, 230, 000 | 20.24 | 70.770,000 |
| February |  | 353, 877, 000 | 18. 58 | 65, 64, 000 | 19.91 | 70,437,000 |
| April.- |  | 374,773,000 | 18.15 | 68,04, 000 | 19.82 | 74, 250,000 |
| May |  | 408, 808, 000 | 17.84 | 72, 6178,000 | 19.76 | 80, 7760,000 |
| June. |  | 415,033,000 | 18.64 | $60,461,000$ | 19.12 | 70, 754,000 |
| July. |  | 404, 849,000 | 10.20 | 65, 588,000 | 18.10 | 73, 64, 000 |
| August |  | 402, 100.000 | 18. 30 | 66, 554, 000 | 18.45 | 74,210,000 |
| September |  | 401, 9400000 | 16.88 | 64, 040,000 | 1871 | 73,212,000 |
| October-. |  | 304, 078, 000 | 15. 50 | 61, 062, 000 | 18.5 | 72, 707,000 |
| November |  | 383, 614.000 | 14.65 | 54.190 .000 | 18. 10 | 60, 434,000 |
| December |  | 305,857,000 | 14.91 | 50,020,000 | 17.91 | 70, 808,000 |

Table 63.-Norway-Gold value of total note circulation, 1919-1985-Continued

|  | Total note circulation | $\left\|\begin{array}{c} \text { Avergage } \\ \text { exchange } \\ \text { rittes } \end{array}\right\|$ | Gold value of circulation on basis of exchange rates | Purchasparitios | Gold value ot arculation on basis of pur$\underset{\substack{\text { paritles }}}{\text { chasing power }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ron |  | cents por |  |
| January......-...--... | Kroner $364,721,000$ | rone 1408 | Dollara | krone $17.45$ | Dollars 63, 644,000 |
| Februery | 3888898, 000 | 13.32 | 40, 137, 000 | 16.75 | 61, 790,000 |
| March | 380, 221,000 | 13. 55 | $51,530,000$ | 10.07 | 61, 1020000 |
| April | 370, 801,000 | 13.78 | ${ }^{62} 3838,000$ | 15.83 | 60, 132,000 |
|  | ${ }^{3789}$, 2178000 | 13.87 | ${ }^{62}$,499, 000 | 15.91 | 60, 221,000 |
| July | 388, 8838,000 | 13.42 | 62, 316, 000 | 15.47 | 61, 308,000 |
| August | 300, 617,000 | 13.87 | 64,040,000 | 15.45 | 00, 108,000 |
| Sepremb | 389, 073,000 | 13. 83 | 53, 809, 000 | 15. 23 | 50, 256, 000 |
| October | 388, 401, 000 | 14.25 | 55, 062,000 | 15.41 | 50, 54, 000 |
| November | 278, 343, 000 | 14.72 | ${ }^{65,3888,000}$ | 15.40 | 88, 206,000 |
| Decamber | 301, 380, 000 | 15.06 | $58,839,000$ | 15. 87 | 62, 100,000 |
| 1025 |  |  |  |  |  |
| 7anuary | 360, 285000 | 15, 77 | ${ }^{65,122} 000$ | 16.12 | ${ }^{38,191,000}$ |
| February: | 367, 782,000 | 15. 25 | ${ }^{50,088,000}$ | 15.84 | 68, 688,000 |
|  | 380, 387,000 | 11.13 | 61,340,000 | 16.48 | 68, 585,20 |
| May | 375, 495, 000 | 18. 82 | 63, 168, 259 |  |  |

Table 64.-Norway-I mports and exports of merchandiee 1890-1924
[Special imports, i e. imports for domestic consumptlon; specis] exporta, I. e. exports of domontie mer * chandlse. Sonrce: Etatistisk Arbak for Kongeriket Norge. Eee chart 39]

| Year | Quantity |  | Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports (not) | Exports | Imports (net) | Exports | Exoess of Imports |
|  | Kilograms | Kilogramt | Eroner | Krozer | Kromer |
| 1880 | 1,093,000 | 2 130,000 | 201, 9985000 | 124,432,000 | 77, 863,000 |
| 1891 | 1, 876, 000 | 2081,000 | 218, 724, 000 | 124, 082, 000 | 94, 642,000 |
| 1892 | 1,884, 000 | 2, 117,000 | 102, 342, 000 | 118,779,000 | 73, 563,000 |
| 1893 | 1,941,000 | 2152,000 | 195, 201, 000 | 126, 720,000 | 68, 483,000 |
| 1894 | 2,130,000 | 2.114,000 | 108,028, 000 | 124,032,000 | 73,904,000 |
| 1896 | 2,224,000 | 2.120,000 | 213, 438, 000 | 128, 408,000 | 85,030,000 |
| 1896 | 2328, 000 | 2,419,000 | 230, 202,000 | 137, 758, 000 | 92, 446,000 |
| 1897 | 2,54,000 | 2,654,000 | 255, 700, 000 | 159,679,000 | 06, 021,000 |
| 1898 | 2,661,000 | 2,870,000 | 272,302, 000 | 151, 472,000 | 120, 830,000 |
| 1899 | 2,904,000 | 2,319,000 | 301, 130, 000 | 150, 032,000 | 151,088, 000 |
| 1900 | 2,956, 000 | 2,640,000 | 300, 452, 000 | 182, 745, 000 | 187, 707,000 |
| 1901 | 2,680,000 | 2,574,000 | 276,823, 000 | 154, 685, 000 | 122,138,000 |
| 1002 | 28866,000 | 2,771,000 | 270, 858, 000 | 170, 474,000 | 109, 379, 000 |
| 1003 | 2,968,000 | 2,808,000 | 273, 627,000 | 173, 624,000 | 90, 898, 000 |
| 1004 | 2,859,000 | 2,780, 000 | 271, 488, 000 | 170, 911, 000 | 100, 577,000 |
| 1906 | 2,963,000 | 2,894,000 | 234, 604,000 | 188, 020, 000 | 95, 774,000 |
| 1800 | 3, 108,000 | 3, 510,000 | 314, 895,000 | 214,856,000 | 100, 038,000 |
| 1907 | 3,334, 000 | 3, 200, 000 | 852, 678,000 | 219,971,000 | 132, 607, 000 |
| 1908 | 8, 644, 000 | 2,030,000 | 347, 360, 000 | 211, 247, 000 | 130, 058, 000 |
| 1009 | 8, 685,000 | 8,015, 000 | 356, 930, 000 | 234, 640, 000 | 122, 290, 000 |
| 1910 | 3,850, 000 | 3, 608,000 | 887, 355,000 | 287, 856, 000 | 119, 190, 000 |
| 1911 | 4,427,000 | 3,563,000 | 459,027, 000 | 258, 684, 000 | 170, 343,000 |
| 1912 | 4,666,000 | 3, 082,000 | 814, 685,000 | 324,622,000 | 100, 063, 000 |
| 1918 | 4,780,000 | 4,013,400 | 840, 624,000 | 350, 012,000 | 169,708, 000 |
| 1014. | 4, 2087,000 | 8,560,000 | 851, 645,000 | 294, 390, 000 | 157, 235,000 |
| 1015. | 5,683, 000 | 3,749,000 | 852, 204, 000 | 660,996,000 | 191, 208,000 |
| 1916 | 5,738,000 | $8,330,000$ | 1, 340, 807, 000 | 975, 476, 000 | 865, 331,000 |
| 1917 | 3,307,000 | 2,077, 000 | I, 657, 8551,000 | 788, 016, 000 | 869, 4335,000 |
| 1018. | 8, 285, 000 | 1,888, 000 | 1, 249, 541, 000 | 752,033, 000 | 497, 508,000 |
| 1919 | 4,080,000 | 1,913,000 | 2, 504, 985,000 | 730, 327, 000 | 1, 801, $858,000{ }^{\text {a }}$ |
| 1920 | $4,194,000$ | $: 2,870,000$ | 2, 971, 533,000 | t, 185,032,000 | 1, 788, 501, 000 |
| 1921 | 2716,000 | - 1,979,000 | 1,430, 887,000 | -605, 273, 000 | 825, 614,000 |
| $\begin{aligned} & 10223 i \end{aligned}$ | 4,065, 000 | 8,323,000 | 1, 292,005,000 | 765, 406, 000 | 625, 510,000 |
| 199 |  |  | 1, 547, 800,000 | 1,003,700,000 | 484, 100, 000 |

[^89]Table 65.-Norway-National debt, 1800-1984
[Source: Statlotist Arbok for Kongeriket Norge]

| Year ending June $30-$ | Domestic deb: | Foreign debt ${ }^{1}$ | Total debt | Year ending June $30-$ | Domeatic debt | Porelgn debt ${ }^{1}$ | Total debt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eroner | Kroner | Eroner |  | Kroner | Kroner | Eroner |
| 1900.- | 11, 002,000 | 210,103,000 | 231, 065,000 | 1917...- | 108, 643,000 | 346,801,000 | 458, 505, 000 |
| 1005. | 15, 522,000 | 289,401,000 | 304,924,000 | 1918. | 400, 222,000 | 330, 328,000 | 736, 000,000 |
| 1910 | 16, 341,000 | 312,957,000 | 329,298,000 | 1919. | 676, 176, 000 | 331,803,000 | 1,008,039,000 |
| 1911.. | 18, 648,000 | 349,004, 000 | 367, 053,000 | 1820. | 792, 268, 000 | 337, 339,000 | 1, 129, 005,000 |
| 1912. | 17,839, 000 | 344, 968,000 | 362,808, 000 | 1824 | 782, 249,000 | 438, 711,000 | 1, 216, 000.000 |
| 1913. | 21, 053,000 | 340, 791,000 | 362, 743, 000 | 1922 | $815,186,000$ | 402, 287, 000 | 1,307.473,000 |
| 1914-- | 20, 822,000 | 336, 473, 000 | 357, 394, 000 | 1823 | 883,010,000 | 535, 398,000 | 1, 419,407.000 |
| 1915--- | 67, 230,000 | 354,094, 000 | 421, 324, 000 | 1924. | 1,050,000,000 | 948, 700,000 | 2,007, 700,000 |
| 1918--- | 65, 745,000 | 357,231,000 | 422,975, 000 |  |  |  |  |

[^90]-
Table 66.-Norway-Reccipts and expenditures, 1910-1824
[Source: Statistisk Arbok for Kongerket Norge]

| Year anding Jone 20- | Recelpts not including lcana | $\left\lvert\, \begin{gathered} \text { Expenditures } \\ \text { less } \\ \text { amprtigetion } \end{gathered}\right.$ | Surpins | Deffit | Procesds from new loans | $\begin{gathered} \text { Amortization } \\ \text { of debt } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\boldsymbol{K}$ roner | Kroner | Eromer | Kroner | Kroner | Kroner |
| 1910. | 116, 431, 000 | 112, 245,000 | 4,186,000 |  | 5, 813,000 | 4,508,000 |
| 191 | 128,408,000 | 116, 307, 000 | 7,101,000 |  | 4,872,000 | 4, 598,000 |
| 1012 | 131, 013.000 | 128,085,000 | 6, 828,000 |  | 8, 817,000 | 4.847,000 |
| 1913 | 155,071,000 | 147, 944,000 | 7, 127, 000 |  | 6.804,000 | 5.082,000 |
| 1914 | 166, 921, 000 | 161, 467, 000 | 6, 454,000 |  | 9, 041,000 | 5,249,000 |
| 1915 | 182, 872,000 | 201, 187, 000 |  | 20, 205, 000 | 14,467, 000 | 6, 157, 000 |
| 1916 | 228, 656,000 | $212,092,000$ | 13, 964, 000 |  | 13, 727, 000 | 5, 608, 000 |
| 1917 | 374, 833, 000 | 298, 594,000 | 76, 230,000 |  | 19,843, 000 | 11, 471,000 |
| 1918 | 594, 503, 0000 | 543, 148, 000 | 51, 415,000 |  | 25,290, 000 | 14, 425,000 |
| 1919 | 718, 830, 000 | 708, 568, 000 | 10, 262, 000 |  | 68, 78, 000 | 8,957, 000 |
| 1920 | 704, 249,000 | 952, 138, 000 |  |  | 56, 235,000 | 5,964, 000 |
| 1921 | 750, 682,000 | 851, 788, 000 |  | 148, 228, 000 | 64. 601, 000 | 1, 409,000 |
| 1922 | 630, 007,000 | 758, 775,000 |  | 125,029, 000 | 75, 538,000 | 3,528, 000 |
| 1923 | 497, 356,000 | 633, 138,000 |  | 145,782,000 | 58, 806, 000 | 4.165,000 |
|  |  |  |  | 62,808,000 |  |  |

## POLANTD

Table 67.-Bank of Poland, 1918-1925 (Polish State Loan Bank prior to May, 1984)

3nd of month; 000,000 omitted. Sourea: October, 1918-December, 10pa, Roornik Etatystyki Reenypoapolitel Polatigj; 1023 to date, weekly statemant of the bonk, Gee chasts 22 and 48 ]

| Month | Gold : | Silver 1 (Including base coin) | Balances Fith foreign banks | Disconants | Advances |  | $\begin{gathered} \text { Note } \\ \text { circuila- } \\ \text { tion } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{gathered} \text { Commar- } \\ \text { cial } \end{gathered}$ | Government |  |
| 1018October---NovemberDecember |  |  |  |  |  |  |  |
|  | Marks | Marks | Mark | Markt | Marke | Mark | Marls |
|  |  |  |  | 7.0 | 180.8 | 18.9 | $850.2$ |
|  |  |  |  | B. 4 | 188.7 | 117.8 | 1,028.8 |
| January |  |  |  | 8.0 | 194.7 | 200.9 | 1,098.1 |
| Mebruary |  |  |  | 4.2 | 190.4 | 815.0 | 1,180.0 |
| March. | 8.7 | 4.2 | 3.9 | 8. 5 | 1897 | 400.0 | 1,223.2 |
| April | 3.7 3.7 | 48 | 8. 5.8 | 2.5 | 1928 | 575.0. | 1,346.0 |
| June | 40 | 14.8 | 14.6. | 1.3 | 186.9 | 1, 125.0 | 1,784.6 |
| July-- | 6.7 | 20.1 | 13. ${ }^{\text {a }}$ | 1.1 | 180.8 | 1,925.0. | 2,087. 9 |
| Angust. | 6.1 | 20.5 | 29.8 | . 7 | 197.4 | 2, 525.0 | 2,468.6 |
| Soptamber | 6.8 | 21.6 | 69.8 | . 1 | 218.8 | 8,225.0 | 2964 |
| October-. | 6. 5 | 24.3 | 01.0 | . 3 | 2424 | 4,375.0 | 3,728.6 |
| November <br> Decomber | 6.6 6 | 248 | 151. 6 | 8.4 | 270.2 | 8,375.0 | 4,238. 2 |
| $1970^{\circ}$ |  |  |  |  |  |  |  |
| January. | 0.6 | 25.5 | 24. 1 | 2.7 | 278. ${ }^{\text {c }}$ | 8, 275.0 | 6,719.9 |
| Yebrimay | 68 | 28.0 | 565.7 | a. 4 | 303.0 | 10,775.0 | 8,300.8 |
| Marcir | 6.8 | 25.0 | 685.4 | 8.2 | 819.1 | 14,775.0 | 10,600.6 |
| April | 68 | 26.0 | 685. 5 | 14.8 | 316.7 | 10, 375.0 | 18,027.9 |
| May | 6.8 | 25.0 | 565.7 | 47.2 | 320.0 | 22,875.0 | 17,934, 7 |
| Juno- | 6. 8 | 25.0 | 1, ${ }^{894} 97$ | 161.4 | 488. 2 | 77, 825.0 | 21, 730, 1 |
| August | b. 0 | 28.8 | 1,130.9 | 825.8.8 | 847.6 $1,468.1$ | 33, 875.00 | 28, 311.4 |
| September | 0.1 | 34.1 | 174.8 | 333.8 | 1,882. | 40, 025.0 | 83,208.8 |
| Oetober-- | 9. 5 | 34.4 | 2388 | 259.1 | 2,527.0 | 46, 925.0 | 38, 456. |
| November | 10. 1 | 36. | 208.8 | 2966 | 3,278. 4 | 49, 625.0 | 43, 236.2 |
| December | 12.4 | 87.6 | 80.7 | 611.6 | 8,999.2 | 69, 025.0 | 49,261.6 |
| 1921 |  |  |  |  |  |  |  |
| Januery | 127 | 89.2 | 205.8 | 1,040.2 | 4,100.2 | 65, 625.0 | 65, 079.8 |
| Pebruary | 128 | 89.2 | 476.0 | 035.1 | 4.148 .6 | 77, 125.0 | 62, 560.4 |
| Maroh. | 18.1 | 89.8 | 9085 | 781.0 | 4,746.7 | 08, 625.0 | 74,087, 4 |
| May. | 13.8 | 40.1 | 870.7 | 927.0 | 4,994. | 100, 625.0 | 88, 756.8 |
| Jame. | 14.8 | 41.1 | 490.8 | 1, $1,895.2$ | 8, 809.0 | 117, 625.0 | 04.575 .8 |
| July. | 19.1 | 41.6 | 601.3 | $2,604.2$ | 6,291.5 | 140,625.0 | 102, 607.8 |
| Angust | 10.2 | 420 | 368.7 | 2,885.4 | 7,776. | 158,000.0 | 138, 734.2 |
| September | 18.4 | 42. | 1,217.5 | 8,237, 8 | 0, 878. 8 | 178, 000.0 | 152,782. 1 |
| Octobar-- | 20.2 | 42.8 | $2,341.3$ | $0,529.6$ | 12,0228 | 198, 500.0 | 182,777.8 |
| November- | 228 | 488 | 7,040. 1 | 14,347, 2 | 16, 144.8 | 214,000.0 | 207,029.0 |
| Desember. | 24.8 | 43.0 | 12,707. 8 | 15, 384. | 10,300.0 | 221,000,0 | 229, 537, 6 |
| 1924 |  |  |  |  |  |  |  |
| Januars. | 20.8 | 44.28 | 18, 814. | 15,051.0 | 21,770.8 | 287, 850.0 | 259, 615. 8 |
| Fabruary | 28.88 | 44.4 | 14,207. 7 | 19, 656. 0 | 22, 827.7 | 230, 000.0 | 247 , 2009.5 |
| Marah. | 20.0 |  | 1, 156.4 | 25, 451. 1 | 25,473.8 | 232, 100.0 | 250, 605, 5 |
| April.- | 29.5 30.1 | 45.2 | 7,388.0 | 23, 6988 | 28.083 .7 | 220,000.0 | 280, 5588. |
| Junfos | 80.1 | 45.8 | 20, 2781.4 | 34, 585.0 | 23, 087.0 | 217,000.0 | 776, 001. 1 |
| July. | 81.6 | 4.4.4 | 21,741.0 | 47,601.2 | 24, 495.8 | 2350,000.0 | 800, 101.1 |
| Auguat. | 81.8. | 46.4. | 51,747.2 | 56, 368.6 | 24,079.0. | 295,000.0 | 385,76t. 6 |
| Beptember. | 824 | 45.4 | 67, 384, 1 | 64,083. 0 | 22, 239.4 | 342,000.0 | 463,708.0 |
| Octobar-- | 88.8 | 45.4 | 64,080. 0 | 81,781.0 | 26,576. 8 | 453, 500.0 | 679,972.7 |
| November | 88.8 | 45.4 | 79,059.0 | 107, 320.1 | 41,278. 1 | 618, 500.0 | 681,092 4 |
| Deamber | 41.0 | 45.4 | 48, 880.4 | 188, 400.8 | 17,004 1 | 675, 000.0 | 793, 437.5 |
| 1 Gold et por; silver ooin at face value |  |  |  |  |  | 347 |  |

Table 67.-Bank of Poland, 1918-1925 (Polish State Loan Bank prior to May, 1924)—Continued

| Month | Gold ${ }^{1}$ | Bilver ${ }^{1}$ <br> (including base coin) | Balances with forelgn banks | Discounts | Advances |  | Note clrculer thon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Commer- clal | Government |  |
| 1858 | Mark | Marks | Marks | Marke | Marki | Marke | Marks |
| January | 41.1 | 44.1 | 34,721.8 | 174,950. 1 | 81,899.9 | 799,500. 0 | 909, 180.3 |
| February | 41.4 | 4.12 | 72,883, 7 | 219,610.7 | 61,037.1 | 1,085,000. 0 | 1,177,300. 8 |
| March | 41.7 | 44.2 | 29,868. 7 | 274, 657.8 | 85, 323. 2 | 1,752,000.0 | 1,841, 205. 6 |
| Apris | 41.9 | 44.2 | 50,851. 9 | 304.725 .4 | 186, 815.4 | 2, 101,500.0 | 2, $232,306.8$ |
| May | 41.9 | 44 | 43,900.7 | 449, 440.7 | 217, 1623 | 2,377,000.0 | 3,733,7941 |
| June | 43.8 | 39.8 | 276,506. 3 | 627, 339.5 | 310, 862.7 | 2,906,500.0 | 8,560,649.1 |
| Juily. | 46.9 | 34.8 | 384,375. 1 | 758, 1128 | $300,850.9$ | 4, 190,500.0 | 4,478,709.0 |
| Augrast | 48.0 | 32.9 | 340, 354. 4 | 1,372, 150.9. | 637,288.2 | 6,473,000. 0 | 6,871,776.5 |
| Septernber | 53.2 | 20.7 | 857,094 3 | 2, 077, 128.6 | 670,019.6 | 10,205, 5000 | 11, 107, 737.8 |
| October- | 54.2 | 19.1 | 1,510,794. 3 | 2, 540, 434.4 | 1,836,7127 | 19, 080, 500.0 | 23, 080,4022 |
| November | 54.3 | 19.5 | 6,489, 791.5 | 8, 467, 033.7 | 3,951, 781. ${ }^{\text {g }}$ | 42, 854, 000.0 | $53,217,404.6$ |
| December - | 54.9 | 19.6 | 67, 480, 741. 7 | 70, 588, 037.9 | 28, 066, 398.8 | 11, $332,000.0$ | 125, 771, 086.3 |
| 192 |  |  |  |  |  |  |  |
| January | 66.2 | 19.8 | 91, $333,085.2$ | 43,916, 902. 8 | 64, 181, 445. 2 | 235,200,000.0 | 318, $650,830.0$ |
| February | 64.7 | 10.8 | 172, 623, 128.8 | 67, $216,289.7$ | 83, 829, 440.5 | 291, 700,000. 0 | 528, $913,418.7$ |
| March | 68.0 | 20.3 | $220,658,210.7$ | 138,649,934.8 | $81,231,988.5$ | 21, 700, 000.0 | 590, 24, 205.6 |
| April | 55.7 | 21.1 | 277, 340,925. 7 | 199, $248,066.1$ | 60, 589,081. 0 | 291, 700, 000.0 | 670, $057,650.8$ |

AFTER CONVEREION OF BTATE LOAN BANK INTO BANE OV POLAND
[Figures in gold zlotys; no ciphers omitted; 1 aloty-19.3 cents]

| May | 3 11, 084, 063 | 214, 191, 838 | 128, 522, 900 | 1,801,036 |  | 244,97t,010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June. | 1 83, 392, 914 | 256,972,386 | 138, 362,243 | 8,820, 071 |  | 334, 405, 730 |
| July.. | 3 93, 683, 430 | 272, 137, 898 | 166, 713, 469 | 8, 230,603 |  | 394, 262, 360 |
| August | , 98, 238, 32 | 286,390, 583 | 199, 710, 730 | $8,224,810$ |  | 130,283.045 |
| Geptomb | ${ }^{7} 90,000,015$ | 233,646, 5692 | 233,788, 177 | $9.230,850$ |  | 460, 383,770 |
| October | 100, 686, 6341 16.521,223 | 241.894, 738 | 245, 054, 984 | 12, 374, 342 |  | 503, 701, 830 |
| November | 102,809, 235 21,951,823 | 247,034, 974 | 249,560, 045 | 12,371, 168 |  | 407, 000,470 |
| Decamber | 103,362,870 27, 543, 608 | 260, 045, 551 | 254, 054,853 | 23,897, 766 |  | 550, 872, 060 |
| 1825 |  |  |  |  |  |  |
| January | 104, 249, 258 $77,658,749$ | 242, 115, 258 | 270, 423, 615 | 23,408, 820 |  | 553, 174, 686 |
| Febrias | 107, 022, $73522,481,371$ | 206, 317, 320, | 286, 228, 180 | 78.407, 930 | 18, 222, 212 | 549,6\%7, 420 |
| March | 116.019 .825 28, 156, 597 | 259,382, 902 | 306, 562, 600 | 25,477, 638 | 409, 364 | 863, 171,945 |
| April | 117, 428,697,28, 368,000 | 216, 114, 624 | 204, 832,506 | 27, 210,944 | 35, 977,680 | 607, 178,830 |

[^91]Tables 68.-Poland-Index numbers of wholesale prices, 1921-1925
Inder numbers from Rocrifik Statystyly Reecxypolitel Polskiel, January, 1014-100; January-Auguat, 1021, sre index numbers of retad prices of food, Joly, 1914-100, from the Economist, London, December 24, 1021 . Until the eloty currancy was introduced, the Index numbers have been convertod to a gold basis by applying to them the percantages which the corresponding syerage monthly exchangs ratel for dollars are of par. Gee chart 431


51142-25t—日ER 9, 7OL II——24.

Table 69.-Poland-Exchange rates, 1910-1926
[Now York on Warsaw, July, 1010, sight drafts; Algust, 1919, to date, cable transfers. Average rate 7 July, $1919-J u n e, 1921$, are mid-polnta between the bigh and low rates; from July, 1921, to date, the averages, are simple, arithmetic monthiy averages of daily rates. Slnce May, 1924 , rates aro in cents per zloty,
The par value of the zioty is 19.29 cents. The zloty is the equivalent of $1,800,000$ former marisp. gource: The par vaple of the zioty is 19.29 cents. The zloty is the equivalent of $1,800,000$ former mariss. gource: Federal Reserve Board. See chart 42)

| Month | Cents per Polish mary |  |  | Month | Cents per Pollsh mark |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | Average |  | High | Low | Average |
| 1019 |  |  |  | 1022 |  |  |  |
| July | 7.50 | 6. 25 | 6.88 | August......- | 0.01 .55 | 0.0112 | 0.0135 |
| August | 6. 75 | 4. 50 | 5. 63 | Soptember.-.- | . 0146 | . 0112 | . 0127 |
| September- | 4.50 | 3. 25 | 3.88 | October----- | . 0118 | . 0071 | . 00985 |
| October- | 3.85 | 2. 30 | 3. 88 | Novamber- | . 0072 | .0060 | . 0035 |
| November. | 2.35 | 1. 40 | 1.88 | December-..- | . 0060 | . 0064 | 0057 |
| Decamber.- | 1.65 | . 92 | 129 | $1923$ |  |  |  |
|  |  |  |  | January. | . 0057 | . 0027 | . 0048 |
| January...- | . 90 | . 50 | . 70 | February. | . 0029 | .0020 | . 0028 |
| February.- | . 70 | . 65 | . 68 | March... | . 0028 | . 0022 | . 0024 |
| March.--- | . 70 | . 68 | . 67 | April. - - ------ | .0028 | . 0020 | . 0022 |
| April | . 70 | . 50 | . 60 | May .-...-....- | . 0021 | . 0018 | . 0021 |
| May.-. | . 55 | . 46 | . 51 | June.-...-..-- | . 0019 | . 0007 | . 0013 |
| June.-.-. | . 65 | . 52 | . 59 | July | . 0000 | . 00048 | . 00007 |
| July....-- | , 68 | . 54 | . 61 | Angust.-.---- | . 00047 | . 00040 | . 0004 |
| August.-.-- | . 54 | - 40 | : 47 | September -.. | . 00041 | . 000028 | . 00036 |
| Septembar. | . 60 | . 38 | . 45 | October-...-- | . 00025 | . 00000225 | . 0001118 |
| October- | . 40 | . 34 | . 37 | November-.- | .000059 | . 000028 | .0000502 |
| November. December. | . 39 | . 12 | . 28 | Decomber-..- | . 0000308 | . 0000154 | . 0000234 |
| $1921$ |  | - 10 | . | 1924 |  |  |  |
|  |  |  |  | January.....-- |  | .0000009 | . 0000116 |
| Janmary--- | . 135 | . 125 | . 145 | February.....- | . 00000114 | . 0000102 | . 00000100 |
| Pebruary. | . 135 | . 125 | . 130 | March.-.-..-- | . 00000122 | .0000108 .0000109 | . 00000113 |
| April.---- | . 1135 | . 120 | . 132 | April.......... | ,0000116 | . 0000109 | . 0000114 |
| May...-- | . 140 | . 108 | . 121 | May........-- | Centa per | Cento per | Centapr |
| June-.--- | . 105 | . 058 | . 082 |  | ${ }^{2 l o t y}$ | 2loty | zalory |
| July----- | . 0598 | . 045 | . 0516 | Jane.......... | 19.37 | 19.24 | 19.29 |
| August | . 0563 | . 0398 | . 0485 | July ....-.---.- | 19.30 | 10.22 | 19.25 |
| September- | -0383 | . 0150 | . 0256 | Augrast-...--- | 19.27 | 19.18 | 19.23 |
| October--- | . 0256 | . 0156 | . 0212 | September.-- | 19.25 | 19.18 | 19.22 |
| November- | -0378 | . 0273 | . 0290 | October-...-- | 19.24 | 10. 19 | 10.22 |
| December | . 0338 | . 0285 | .0813 | Novernber-.- | 10.24 | 19.19 | 19.21 |
| 1922 |  |  |  | December...- | 10.24 | 19. 18 | 19.20 |
|  |  |  |  | 1925 |  |  |  |
|  | $\begin{aligned} & .00550 \\ & .0310 \end{aligned}$ | $\begin{array}{r} .0288 \\ 0027 \end{array}$ | . 0327 |  |  |  |  |
| March.... | . 00282 | . 02213 | . 0238 | January--.--- | 19.20 18.20 | 19.17 | 19. 18 |
| April.... | .0271 | . 0241 | . 02082 | March.....---- | 19.20 | 19.18 | 19. 18 |
| May | . 0259 | . 0244 | . 0249 | April.-......- | 19. 22 | 19.17 | 10.18 |
| June.....- | . 0205 | . 02280 | . 0237 | May | 19.27 | 10.14 | 19.19 |
| July.-...-- | . 0221 | . 0163 | . 0185 | June.-.-.....-- | 12.21 | 12. 17 | 10. 10 |

Table 70.-Paland-Purchasing-pquer parities, 1921-1924
[ On basis of Polish marli]
LAceording to Rocrnik Statystyt Rzeccypospolited Polacied for Poland (prices in terms of marks), and Federal Reserve Board inder numbers for Onited States. Par used was the pre-war value of the German mark, 23.82 cents par mark. See olwart 4 if

| Month | United States Index of prices | Polish index of prices | $\begin{aligned} & \text { Purchasing-power } \\ & \left(\frac{\text { U. B.inder } X \text { par }}{\text { Poilats inder }}\right) \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { exchange } \\ & \text { retes } \\ & \text { (cables in } \\ & \text { New Yorl) } \end{aligned}$ | Per cant purches-ing-power parities are of exchange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 167.723 | 25, 130 | Cenle per mark | $\begin{aligned} & \text { Centh } \\ & \text { per mark } \\ & 0.145 \end{aligned}$ | 109. 57 |
| February | 186.922 | 81, 827 | . 1174 | . 130 | 00.38 |
| March. | 162 299 | 32, 882 | 11029 | 132 | 83.5 |
| April. | 145.305 | 31, 710 | 10838 | . 130 | 8.10 |
| May | 145. 461 | 22, 839 | . 10324 | 124 | 85.68 |
| June | 142.818 | 35,392 | . 08823 | .088 | 117.35 |
| July.- | 145.883 | 45, 054 | . 07699 | .0.016 | 147.27 |
| August. | 146. 688 | 63, 100 | . 08574 | . 0489 | 134.44 |
| October | 146.962 | 60,203 65,639 | . 055812 | . 02026 | 227.08 |
| November | 146. 294 | 65, 683 | . 05007 | . 0290 | 203. 60 |
| December | 182. 744. | B7,046 | . 05955 | . 0813 | 190.28 |
| 1088 |  |  |  |  |  |
| January | 142277 | 80,221 | . 05717 | . 0827 | 174.88 |
| February | 146.101 | 63,415 | . 05479 | . 0288 | 191.57 |
| Merch | 147.306 | 76,465 | . 04788 | . 0238 | 20288 |
| April. | 149. 130 | 75, 106 | . 0474 | . 0289 | 180.92 |
| May | 158182 | 78, 634 | .04788 | . 0249 | 192.20 |
| June | 161. 246 | 87, 694 | . 04383 | . 0233 | 1849 |
| July. | 165.417 | 101, 587 | . 038888 | . 0185 | 209.80 |
| August. | 165. 880 | 135, 786 | . 02989 | . 01315 | 215. 36 |
| Eeptamber | 164. 312 | 153,400 | . 02873 | . 0127 | 20200 |
| October- | 166. 165 | 201,300 | . 01853 | . 0095 | 205.58 |
| Novamber | 164. 015 | 275, 600 | . 01417 | . 0085 | 218.00 |
| Decomber | 164.327 | 848,400 | . 01128 | .0067 | 108.07 |
| 1083 |  |  |  |  |  |
| Janusry. | 166.188 | 644, 700 | . 007285 | . 0043 | 108.96 |
| February | 186.391 | 881.880 | . 004088 | . 0025 | 185.00 |
| March | 180.874 | 088, 500 | . 004080 | . 0022 | 170.00 |
| April | 170.055 | 1,058,800 | .003825 | . 0028 | 168.30 |
| Mey | 167.098 | I, 125, 400 | .003537 | . 0021 | 168.48 |
| Juna. | 164. 065 | 1,884, 100 | . 002074 | . 0018 | 169.54 |
| July.- | 168. 488 | $3,070,000$ | . 001207 | . 0000724 | 170.88 |
| August | 150. 059 | 5, 356, 000 | .0007072 | . 00042 | 188.38 |
| Septamber | 168.387 | 7.302 .200 | . 0005331 | -00035 | 15231 |
| October- | 103. 142 | 27, 380,700 | . 0001419 | . 00001113 | 127.49 |
| November | 108.400 | 68,642,700 | .00005672 | . 0000502 | 11299 |
| December | 163, 042 | 142,201, 000 | . 00002730 | . 0000284 | 110.67 |
|  | 102745 | 252, 611, 000 | . 00001585 | . 0000110 | 182.88 |
| February | 102619 | 248, 430, 000 | . 00001558 | . 00000109 | 14294 |
| March | 159.622 | 245, 278, 000 | . 00001540 | . 0000113 | 137.08 |
| April...----... | 107.676 | 242,324, 000 | .00001650 | .000014 | 1366 |

Table 71.-Poland-P.urchasing power parities, 1028-1895
[On basis of 2loty]
[Aecording to index numbers of Rocznlk Statystykd Rxecypoapolite] Polskie] for Poland (prices in terms of ziotys), and Federal Reserve Board index nambers for tha United States. See chart 4b]

|  | United Btates Index of prices | Polish Inder of pricas (on zloty besis) | $\begin{aligned} & \text { Purchasing power } \\ & \left(\frac{\text { U. Darities }}{\text { Pollish lndex } \times \text { par }}\right) \end{aligned}$ | $\begin{gathered} \text { Erchange } \\ \text { ratas } \\ \text { (cablos in } \\ \text { New York) } \end{gathered}$ | Percentage purchasing power parltles are of exchange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1823 |  |  | Cents par zloty | $\begin{gathered} \text { Cende per } \\ \text { vloty } \end{gathered}$ |  |
| November | 168.460 | 81.1 | 38.88 |  |  |
| December ---- | 163.042 | 95.0 | 33.11 |  |  |
| 1824 |  |  |  |  |  |
| January-- | 162.745 | 111.2 | 28.23 |  |  |
| February | 162519 | 111.9 | 28.02 |  |  |
| March | 159.522 | 110.5 | 27.85 |  |  |
| April | 157.676 | 109. 1 | 27.88 |  |  |
| May | 156.148 | 104.0 | 28.98 |  |  |
| June- | 154.394 | 100. 6 | 29.60 | 19.29 | 153. 45 |
| July... | 158.388 | 1023 | 29.49 | 19.25 | 153.19 |
| August .-. | 157. 986 | 109.2 | 27.90 | 19.23 | 145.09 |
| Oetober.... | 166.276 158.873 | 1124 | 26.82 | 19.22 | 130. 54 |
| Novernber. | 158.678 100.074 | 116.4 | 25.48 | 19.21 | 138.84 |
| December. | 164.615 | 118.0 | 26.91 | 19.20 | 140.16 |
| 1925 |  |  |  |  |  |
| Japuary.-. | 187.782 | 120.0 | 28.07 | 19.18 | 140.62 |
| Pebruary -- | 167.086 | 121.0 | 28.64 | 19.18 | 138.89 |
| March | 189.305 | 1220 | 28.87 | 19.188 | 140.62 |
| April. | 144000 | 119.0 | 285,60 | 10. 18 | 13880 |
| May --.-- | 163,000 | 118.0 | 20.00 | 19.19 | 138.98 |

Tablex 72.-Poland-Gold value of total note circulation, 1921-1926
[On basia of axchange rates and on basis of purchasing power paritiles. See chart 4e]


Table 73.-Poland-Imports and exports of merchandise, 1月゙e0-1925
[Sourco: Office Central du Statistique de la Republique Polonaise; 000 omitted. See charts 40 and 47]


- Tabla 74.-Poland-National debt, 1919-1924
[End of year]
[Boarca: Rocanlk Btatystyld Ruecrypaspolttoj Polsidel. Millions of Polish marks]


$$
\begin{aligned}
& \text { 1 Figures furnished by the Polish Legation, Weahington. } \\
& \text { izlotys. As of Mar. 1, 1928, }
\end{aligned}
$$

Taske 75.-Poland-Receipts and expenditures, 1981-1985
[Converted from marks to eloty on following basis: 1921, 1 ajoty $=303.76$ marks. First quarter 1022, 1 \&loty -613.62 marks; second quartar, 091.40 makk; third quartar, $1,024.07$ marks; and fourth quartor, 1,038.97 marka. (In thousands of ziotya)]
[Source: Apnusire Statistique de ls Republique Folonaise, IIme Anné, 1923]

|  | 1021 | 198 | 19281 | 19241 | 1925 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | 201, 676 | 487, 879 |  |  | 1, 491,743 |
|  | 11,413 | 14, 556 |  |  | 133, 530 |
|  | 72, 222 | 47,898 |  |  | 858, 011 |
|  | 846, 311 | 530,488 | 428, 000 | 1,703,000 | 1,081,884 |
| Expmorwures |  |  |  |  |  |
| Adminiatration. <br> State entarprises <br> Monopolies : $\qquad$ | 785, 283 | 734, 810 |  |  | $\begin{array}{r} 1,830,231 \\ 106,343 \\ 45,010 \end{array}$ |
|  | 116,589 | 145,008 |  |  |  |
|  |  |  |  |  |  |
| Total. | 880, 852 | 879,313 | 1,119,800 | 1,629,000 | 1,981, 693 |
| Deflelt | 635, B41 | 848,886 | 082,000 | 74 |  |

[^92]Table 76.-Russian State Bank, 1914-1917



1 Data misging
Inelades " 4 dvancex to the tressury for food purchasen."

Table 77.-Russia-Soviet State Bank, condition of the is8ue department, November, 192L, to May, 1925
[In thousands of chervonter, of 10 gold rables each (85.148). Source: Offilal semimonthly bank atatements]


Table 78.-Russia-Banking statistics, 192e-1925
(In millions of chervonetr rubles)
[Source: Economle Bulletin of the Moseov Institute of Confuncture]

|  | State bank |  |  |  |  |  |  |  | Moscow Joint stock banks a |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans and discoranta 1 |  |  |  | Current aceounts and other deposita ${ }^{1}$ |  |  |  | Loans and ats |  |  | Current accounta and other deponits |  |  |
|  | 1928 | 1923 | 1984 | 1925 | 192 | 1923 | 1024 | 1925 | 1923 | 1981 | 1935 | 1023 | 1924 | 1905 |
| January 1 |  | 30.8 | 8187 | 640 |  | 23.9 | 125.8 | 20.1 |  | 1417 | 368.0 |  | 80.0 | 228.0 |
| February 1 |  | 34.2 | 333.3 | 6585 |  | 321 | 140.8 | 258.8 | 7. | $1{ }^{183} 4$ | 2838 | 38 | 97.7 | 252.3 |
| March 1. |  | 48.7 | 357.9 |  |  | 44. | 146. 2 |  | 15.5 | 181.6 | 425.6 | 8.8 | 987 | 277.0 |
| April ${ }^{\text {May }}$ |  | 74.2 | ${ }_{395}^{375}$ |  |  | 60.9 | 134.3 |  | 37.3 | 184.7 |  | 20.1 | 1008 |  |
| June 1 |  | 120.0 | 428 ${ }^{2}$ |  |  | 81.1 | 18.5 |  | 47. | 226.9 |  | 37.6 | 130.1 |  |
| July 1. |  | 1718 | 4704 |  |  | 89.4 | 1508 |  | 62. | 2520 |  | 40.1 | 151.4 |  |
| August 1 |  | 2122 | 468.5 |  |  | 89.2 | 160.2 |  | 77.9 | 200.4 |  | 53.5 | 170. 3 |  |
| Seprember |  | 2814 | 488.0 |  |  | 943 | 1720 |  | 19. | 287.6 |  | 56.8 | 1858 |  |
| October 1. | 336 | 281.8 | ${ }_{5}^{531} 5$ |  | 380 | 924 | 1968 |  |  | 3282 |  | 61.2 |  |  |
| November I | 229: | 307.7 305.3 | 565. 0.8 |  | 21.8 |  | 217.0 |  | 115.0 | 3421 |  | 60.9 | 217.6 |  |
| Deparaber 1 |  | 305.3 | 608. 9 |  | 227 | 117.7 | 231.2 |  |  | $250 . \mathrm{B}$ | - | 60.4 | 2141 | - |

[^93]Table 79.-Russia-Nominal amounts of paper meney in circulation, 1914-1982 -

(In millions of rublesj

[Pigures to Oct. 1, 1917, from annulal reports and statements of the (Imparial) State Bank; from Nov, 1. 1817, to Dec. 1, 1020, from B. B. Katzanellonbanm's Russian Currency and Banking, 1014-1024; 1021 and 1022, revised data of the Currency Administration, Viestnit Finansov (No. 11, 1924). Gee chart 50]

| First of month | 1914 | 1915 | 1016 | 1017 | 1918 | 1019 | 1820 | 1081 | 1922 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jamuary | 1,601.7 | 29480 | 5, 618.8 | 9, 097. 4 | 77, 813 | 61,625 | 225,016 | 1,108,507 | 17, 538,435 |
| February | 1, 621.1 | 2,059.1 | 5,709. ${ }^{\text {5 }}$ | 0, 3398 | . 20,200 | 65, 092 | 260, 232 | 1, 299, 829 | 29, 501, 340 |
| March | 1, 221.2 | 2,151. 5 | 5, 890.1 | $0,940.7$ | -30,648 | 69, 081 | 203, C54 | 1, 488, 223 | 48,393, 460 |
| April | 1,640,2 | 3, 3127 | 6, 078 | 10, 1800 | 33, 672 | 74, 834 | 340, 683 | 1, 686 | 80, 743, 960 |
| M8y | 1,620. 4 | 3,361.8 | 6,280. ${ }^{\text {a }}$ | 11, 457.1 | -37, 833 | 80,382 | 387, 707 | 1, 917, 267 | 129, 201, 877 |
| June | 1, 633.7 | $8,477.3$ | 6,379, 5 | 12, 175.7 | 40,290 | 02,280 | 450, 670 | 2, 123, 295 | 313, 714, 766 |
| July-- | 1, 830.4 | 3,765. 6 | $6^{8,688} 3$ | 13, 055.4 | 43, 281 | 100,319 | ${ }_{58,}^{511,817}$ | $2,346,138$ <br> 2,808 <br> 076 | $820,487,040$ $474,788,208$ |
| Augast | 2,321.1 | 3,902. 5 | 6876. 2 | 14, 125. 4 | 45, 021 | 112,350 | 580, 705 | $2,898,076$ | 474, 788, 2008 |
| Septemb | 2,553.6 | 4,210.8 | 7, 122.3 | 15, 307.5 | 48, 185 | 128, 208 | 851, 348 | 8, 510, 723 | 698, 141, 625 |
| October | $2,897.5$ | 4,893. 2 | 7, 587.1 | 177,290. 1 | 51, 021 | 147, 479 | 746, 148 | 4, 580, 428 | $851,486,889$ |
| Novemb | 2,791.0 | 5, 040.5 | 8, 083.4 | $22,448.0$ | ${ }^{63,773}$ | 170, 109 | 862, 766 | 6, 479, 722 | 1,095, 488.041 |
| Decembear | 2,840.0. | $5,201.8$ | 8,383, 5 , | 25,000.0 | 56,826 | 102,453 | 995, 887 | 2,845, 249 | 1,479, 218,791 |

${ }^{1}$ Least report of the Old (Imperial) State Bank dated Oct. 23, 1017, ahowed a total note olrculation of 18,917,000,000 rubles.

Table 80.-Russia-Amounts of money in circulation, 1929-1985
[In thousands of chervonate rables; 1 chervonets rable worth about 61.5 oents] ISourve; Economichetroys Oborrenilye No. 28-24, 1024, and No. 4, 1020

| Plirst of month | Soviet notes | State bank notes | Stato treas$\underset{\text { notes }}{\text { ury }}$ | Silver coln | Coppar coin | Tem Dorary fractional clure rency | Certif- <br> cates <br> of the <br> Com <br> mila- <br> sariat <br> of <br> poite- <br> tion | $\begin{gathered} \text { Total } \\ \text { car- } \\ \text { rency } \\ \text { In } \\ \text { cir- } \\ \text { cilis- } \\ \text { tion } \end{gathered}$ | Nomi- ngi amount of cer" tificates of the "Oen- tro- cassa" of the Com- mil sariat of nanos | Crand total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1083 |  |  |  | - |  |  |  |  | Thotsands of rublen |  |
| January | 113,000 | 2, 863 |  |  |  |  |  | 117, 852 |  | 117.539 |
| February | 127, 1314 | 8,546 |  |  |  |  |  | 136, 680 |  | 135,560 |
| March | 135, 139 | 16,040 25,677 |  |  |  |  |  | 151, 179 |  | 151, 179 |
| May. | 132, 073 | 27, 342 |  |  |  |  |  | 170, 516 | 8,600 | 179, 016 |
| Jupe. | 123,711 | 47, 483 |  |  |  |  |  | 171, 194 | 12,575 | 183, 769 |
| July | 118, 848 | 70,001 |  |  |  |  |  | 188, 849 | 22,872 | 211,721 |
| August. | 111,270 | 111,205 |  |  |  |  |  | 222,425 | 25, 322 | 247, 747 |
| September | 83, 422 | 164, 158 |  |  |  |  |  | 247, 680 | 31,042 | 279, 622 |
| October | [8, 750 | 207, 380 |  |  |  |  | 250 | 204, 365 | 88, 111 | 302,470 |
| November | 75, 501 | 224, 782 |  |  |  |  | 4, 172 | 305, 615 | 61, 268 | 350,778 |
| December.. | 72,145 | 220, 018 |  |  |  |  | 4,909 | 303, 157 | 61,805 | 865, 022 |
| 1091 |  |  |  |  |  |  |  |  |  |  |
| January... | 69, 503 | 237, 150 |  |  |  |  | 9, 178 | 306, 238 | 67, 816 | \$78, 684 |
| February | 40,612 | 259, 100 |  |  |  |  | 12, 484 | 312, 242 | 81, 402 | 393, 644 |
| March | 27, 101 | 280,883, | 19, 008 | 8,812 |  | 210 | 10, 313 | 350, 828 | 92, 074 | 448, 902 |
| April | 15, 310 | 229,668 | 54, 002 | 1,965 |  | 8,143, | 20,760 | 303, 447 | 85, 778 | 479, 225 |
| May. | 14,797 | 295, 099 | 86, 228 | 12,721 |  | 10,642 | 21, 054 | 439,542 | 60, 347 | 489, 889 |
| June. |  | 283,098 | 124, 088 | 16,650 |  | 15,703 | 20, 485 | 480, 023 | 54, 828 | 514, 801 |
| July.-- |  | 294, 578 | 143, 858 | 21,009 |  | 18, 353 | 3,051 | 480, 547 | 61, 636 | 532, 188 |
| Angust. |  | 290, 891 | 102, 148 | 34, 685 | 18 | 20,081 |  | 507, 781 | 61,344 | 569, 128 |
| Septemb |  | 312,116 | 181, 044 | 42,322 | 297 | 22, 723 |  | 668, 234 | 64, 288 | ${ }^{622} 508$ |
| Ootober |  | 346, 409 | 201, 763 | 48, 044 | 127 | 25, 317 |  | 623, 670 | 48, 728 | 671, 898 |
| November- |  | 370, 289 | 218, 469 | 59, 561 | 385 | 28,807 |  | 675, 501. | 49,721 | 725, 232 |
| December.... $1925$ |  | 308, 960 | 225, 876 | 67, 504 | 826 | 27, 486 | --.-- | 721, 070 | 58, 168 | 772, 838 |
| January |  | 410,832 | 220, 148 | 78, 651 | 1,320 | 27, 798 |  | 742, 40 | 68, 143 | 796, 798 |
| February |  | 365,002 | 233, 638 | 83,478 | 2,031 | 28, 275 |  | 710,515 | 58, 012 | 766, 527 |
| March |  | 376, 868 | 235, 030 | 91, 559 | 2,720 | 208034 |  | 730, 020 | 57, 594 | 787, 614 |
| April |  | 402,387, | 244, 640 | 05, 816 | 3, 321 | 10, 638 |  | 766, 714 | 57, 248 | 822, 082 |
| May |  | 408, 621 | 240, 050 | 101, 144 | 8,760 | 18, 580 |  | 780, 001 | 65, 047 | 848,008 |

Table 81.-Russia-Retail prices, 1916-1024
[According to the All-Russian index of the Central Burean of Labor Statistics. Firat of month data, 1913-1. Sotrce: Narodnoye 1 Gosudarstvennoge Khoziaistvo, and Statisticheskl Bbornik po Go sudarstvennomu budgetu, 1922-23, published by the Commissariat of Finanze. See ehnt 51)

|  | 1916 | 1917 | 1918 | 2019 | 1920 | 1921 | 1022 | 3028 | 1924 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January. | 1. 43 | 204 | 20.8 | 164 | 2,420 | 16,800 | 288, 000 | 21,20,000, | 5,400,000.000 |
| February | 1.55 | 3.10 | 27.0 | 203 | 3,000 | 21,600 | 545, 000 | 27, 700, 000 | 17, 100,000,000 |
| March. | 1. 57 | 3.15 | 33.0 | 258 | 3,810 | 27,600 | 1, 153,000 | 31, 100,000 |  |
| April. | 1.63 | 3.35 | 43.2 | 336 | 4,770 | 35, 700 | 2,524,000 | 39, 250,000 |  |
| Mey- | 1.71 | 3.80 | 57.5 | 414 | 5, 780 | 42,700 | 4,162,000 | 54, 740,000 |  |
| June. | 1. 79 | 4.60 | 70.6 | 816 | 6, 570 | 02, 000 | 5, 087, 000 | 79, 930,000 |  |
| July | 1.95 | 5. 76 | ${ }^{8} 6$ | 656 | 8,140 | 80, 700 | 6, 798, 000 | 117, 669,000 |  |
| August | 211 | 6. 5.5 | 101. 0 | 750 | 9,070 | 80,300 | 8, 589, 000 | 194, $870,000{ }^{\text {d }}$ |  |
| Beptember | 2.17 | 6. 80 | ${ }^{83} 5$ | 814 | 9, 230 | 76, 400 | 6,995, 000 | 235, 360,0001 |  |
| October--- | 2.35 | 7.40 | 93.5 | 923 | 9,620 | 81,900 | 7,342,008 | 659, 840.000 |  |
| Novamber | 257 | 10.20 | 107.5 | 1,360 | 10, 500 | 95, 500 | 11,561,000 | 1. $101,070,000$ |  |
| December. | 275 | 15. 45 | 135.0 | 1,780 | 12,000 | 138, 000 | 16, 972,720 | 2,314, 080, 000 | .... |

Table 82.-Russia-Exchange rales, 1914-1919
[Exchange rates on New York for bankers' sight blls. Boarce: Harvard Review of Economic Btatiszics July, 1919. See chart 52. Par=51,48 cents per ruble]

|  | Cents per ruble |  |  |  | Cents per rable |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eigh | Low | A verage |  | High | Low | Aversge |
| 1014 |  |  |  | 1916 |  |  |  |
| January | 51.75 | 51.60 | 51. 62 | October | 32.00 | 30.40 | 31.20 |
| February | 51. 69 | 51. 60 | 51.59 | November. | 30.85 | 29.40 | 30.12 |
| March. | 51.75 | 51.50 | 61.62 | Deecmber. | 30.30 | 29.25 | 29.77 |
| April. | 51.62 | 51.14 | 61. 53 |  |  |  |  |
| May--- | 51.36 | 51.25 | 51.40 | 1917 |  |  |  |
| June- | 51.56 | 51.38 | 51.47 |  |  |  |  |
| July | 51.56 | 51.00 | 51.28 | January.. | 30.00 | 28.00 | 29.00 |
| August | 51. 12 | 51.00 | 51.06 | February | 28. 95 | 28.20 | 28. 67 |
| Soptember |  |  |  | March. | 28. 55 | 27.00 | 28.07 |
| October-..- | 48.00 | 48. 00 | 48.00 | April. | 28.95 | 28.10 | 28.52 |
| November | 48.00 | 42.75 | 45.37 | May. | 28.40 | 28.30 | 27.35 |
| December. | 43.00 | 42.00 | 42.00 | June. | 28.35 | 22.36 | 24.35 |
|  |  |  |  | July... | 23.60 | 20.80 | 22.35 |
| 1015 |  |  |  | Angust. | 21.70 | 17.00 | 19.35 |
|  |  |  |  | Septembar | 17.75 | 11. 25 | 14. 50 |
| Janmary | 43.50 | 42.38 | 42.94 | October- | 18. 75 | 13.25 | 14.00 |
| Pebruary | 44.88 | 48.50 | 44. 19 | November | 15.60 | 11.00 | 18.00 |
| March. | 44.50 | 44. 80 | 44.60 | December | 12.75 | 12.25 | 13.00 |
| April | 44. 50 | 41.75 | 43.12 |  |  |  |  |
| May.. | 41.75 | 39.00 | 40.37 | 1918 |  |  |  |
| June.-. | 39,75 | 38,00 | 38.87 |  |  |  |  |
| July--- | 38.00 | 32.00 | 35.00 | January... | 13.25 | 12.78 | 13. 00 |
| August. | 37.00 | 81.00 | 34.00 | February | 118.00 | 113.00 | 118.00 |
| Septamber | 85.75 | 34.00 | 34.87 |  | ${ }^{1} 13.00$ | 12.0 | 13.60 |
| October- | 85. 50 | 33.00 | 34.25 | April. |  |  | 114.00 |
| November. | 33. 75 | 8200 | 32.87 | May.- |  |  | 114.00 |
| Decamber- | 3275 | 29.75 | 31.25 | June. |  |  | 114.00 |
|  |  |  |  | July.... |  |  | :14.00 |
| 1916 |  |  |  | Agrpust. |  |  | ;1400 |
| Jenuary. | 30.00 | 29.88 | 29.69 | October. |  |  | 114.00 |
| February | 32000 | 29.02 | 30.81 | November |  |  | 114.00 |
| March... | 32.00 | 31.50 | 31.75 | December |  |  | 114.00 |
| April | 31.75 | 30.25 | 31.00 |  |  |  |  |
| May | 81.00 | 30.62 | 30.81 | 1919 |  |  |  |
| Jane- | 30.75 | 30.25 | 30.55 |  |  |  |  |
| July | 30.80 | 30.32 | 30.56 | January |  |  | 114.00 |
| Angrast | 38.75 | 30.40 | 32.07 | February |  |  | 114.50 11400 |
| Boptember | 33.60 | 31.40 | 32.50 | March ${ }^{\text {2 }}$ |  |  | 114.00 |

4 Nominsl.
2 Foreign exchange basiness with Russis anspended after March, 1919.

Tabne 83.-Russia-Purchasing-power parities, 1916-1928

${ }^{1}$ Nominal.

Table 83.-Russia-Purchasing-power parilies, 1918-1928-Continued

|  | Onited index of prices | $\begin{aligned} & \text { Russian inder } \\ & \text { of prices } \end{aligned}$ |  | $\begin{array}{\|c\|c\|} \hline \text { Average } \\ \text { exchange } \\ \text { rates } \end{array}$ | Per cent purehasparition are of exchange ratel |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1821 |  |  | Cents per ruble | Centaper ruble |  |
| June--- | 142 | 4, 4 200,000 | -.00117 |  |  |
| July. | 141 | B, 070,000 | -000899 | --.....-- |  |
| August. | 142 | 8,030, 000 | . 0000910 |  |  |
| Oetober. | 141 | 7,640,000 | . 000049392 |  |  |
| November... | 141 | 9, 550,000 | . 000075 |  |  |
| December.... | 140 | 13, 800, 000 | . 000522 |  |  |
| 1022 |  |  |  |  |  |
| February | 138 141 | $28,800,000$ <br> $54,500,000$ | . 00002484 | . 000073818 | 103, 32 |
| March.. | 142 | 115,000,000 | . 000000338 | . 00000549 | 115.66 |
| April | 118 | 252,000,000 | . 00000232 | . 00000308 | 91. 81 |
| Juna- | ${ }_{150}^{148}$ | 510, 0000,000 | . 0000001515 | . 000002424 | ${ }_{57} 7.09$ |
| July | 155 | 857,000,000 | . 0000143 | .0000243 | 58. 86 |
| August | ${ }^{153}$ | 550,000,000 | . 00000145 | . 000007238 | 14. 16 |
| October.. | 154 | 888,0000000 $734,000,000$ | -. .00000150 | -0000128 | ${ }_{172.58}^{117.19}$ |
| November | 156 | 1,149, 700,000 | 00000969 | .0000047 | 146.80 |
| Decamber | 158 | 1,722, 000,000 | . 00000406 | .0000028 | 186.4 |

Table 84,-Rustia-Purchasing-power parities, 1923-1925
[FIrst of month and average monthly wholesale price Inder of the Rassian State Planning Commission (Gosplan) and average monthly wholesale price index of tho United States Bureat of Labor 8tatistles. See chart 53]

|  | United States index (average per month) | Rassian index |  | $\begin{gathered} \text { Purchasing power } \\ \text { paritles } \\ \left(\frac{\text { U. S.index } X \text { par }}{\text { Russian Index }}\right) \end{gathered}$ |  | Averageaxcbangerates(Mobcowquotfसons) | Per cent purchasingpower partities are of exchange rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First of month | $\begin{gathered} \text { A verage } \\ \text { per } \\ \text { month } \end{gathered}$ | Flrst of montb index | Average $\underset{\substack{\text { monthly } \\ \text { index }}}{ }$ |  | Basis- <br> Rusitan first of month Index | Buals- <br> Russian sverago monthly price Index |
| Yanuary 1028 | 168 | 96 |  | Cente per ruble | Cents per ruble | $\begin{gathered} \text { Centute } \\ \text { per ruble } \\ 43.0 \end{gathered}$ | 191.74 |  |
| February--- | 157 | 104 |  | 63.7 |  | 48.2 | 191. 18 |  |
| March. | 159 | 116 |  | 70.5 |  | 49.0 | 143.88 |  |
| April. | 159 | 115 |  | 71.2 |  | 424 | 157.92 |  |
| Mey | 150 | 109 |  | 73.3 |  | 36.8 | 205.00 |  |
| June | 153 | 120 |  | 62.5 |  | 41.4 | 150.97 | - |
| Jaly-- | 151 | 145 |  | 53.6 |  | 47.4 | 11308 |  |
| Augrst- | 150 | 158 |  | 48.8 |  | 47.0 | 103.83 |  |
| September | 154 | 157 |  | 60.5 |  | 47.5 | 104. 32 |  |
| October- | 153 | 157 | 148 | 50.2 | 62.8 | 49.2 | 102. 06 | 107.32 |
| November- | 162 | 149 | 152 | 52.5 | 81.5 | 454 | 115.64 | 113.44 |
| December.- | 161 | 157 | 182 | 49.6 | 447 | 45.3 | 100. 27 | 0888 |
| $\text { Janaary } 102$ | 151 | 169 | 174 | 45.9 | 4.7 | 45. 5 | 100.88 | 08.24 |
| February--- | 152 | 187 | 192 | 41.8 | 40.7 | 463 | 90.28 | 87.00 |
| March. | 150 | 193 | 186 | 40.0 | 41.5 | 80.0 | 80.00 | 83.00 |
| April | 148 | 181 | 178 | 421 | 428 | 83.2 | 79.14 | 80.45 |
| May | 147 | 175 | 171 | 43.2 | 44.2 | 61.5 | 83.8 | 88.8 |
| June. | 14.5 | 166 | 108 | 44.9 | 449 | 51.8 | 80.68 | 60.08 |
| Jtuly. | 147 | 169 | 178 | 44.8 | 83.7 | 61.6 | 86.9 | 84.85 |
| Angust | 150 | 175 | 176 | 441 | 43.9 | 51.5 | 88.68 | 85. 24 |
| September | 149 | 173 | 167 | 44.8 | 459 | 51.5 | ${ }^{86} 02$ | 80. 13 |
| October- | 152 | 184 | 164 | 47.7 | 47.7 | 61.5 | 92. 62 | 92.8 |
| November | 153 | 164 | 168 | 48.0 | 47.4 | 61.5 | 83.20 | 020 |
| Decamber. | 157 | 163 | 171 | 48.1 | 47.2 | 51.5 | 98.40 | 91. 6 |
| 1025 |  |  |  |  |  |  |  |  |
| January ---- | 160 | 172 | 174 | 47.8 | 47. 3 | 51.5 | 9282 | 91. 84 |
| Pebruary | 161 | 178 | 180 | 44.5 | 4.0 | 51.8 | 92.20 | 8.32 |
| March. | 161 | 189 | 188 | 45. 8 | 41 | 61.8 | 87. 88 | 86.63 |
| April. | 156 | 195 |  | 41.2 |  | 51.8 | 80.00 |  |
| May-----.- | 185 | 197 | ---*-* | 40.5 | ------* | 51.5 | 78.41 | -**-** |

Table 85.-Rubsia-Value of note circulution in tarme of pre-war tubles, 1916-1982
[Militions of rables. See Chart 50]

| First of manth | Note circulation | Retall prices | Value of circulation in terms of pre-war rubles | Firat of month | Note circulation | Retafl prices | Value of circulation in terms of pro-war rubles |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1016 |  |  |  | 1010 |  |  |  |
| January | 8,610.8 | 1.43 | 8,027.8 | July- | 100,319 | 656 | 158. |
| February---- | 5,700. 5 | 1.55 | 3,683, 5 | August, --.--- | 112,350 | - 750 | 150 |
| March_.-.--- | 5,890, 1 | 157 | 3,757.4 | September --- | 126,208 | 814 | 155 |
| April | 6,078.3 | 1.63 | 3,730. 0 | Octabar------ | 147,479 | 923 | 160 |
| May -.-.-.--- | 6,260. 8 | 1.71 | 3,681.8 | November- | 170, 109 | 1,360 | 125 |
| Juno.-...- | 8,379.6 | 1. 79 | 3,504, 0 | Decamber | 192, 463 | 1,790 | 108 |
| July---- | B, 6283 | 1.95 | 8,300.1 |  |  |  |  |
| August | $6,876.2$ | 211 | 3,258,9 | 1020 |  |  |  |
| September--- | 7,1223 | 217 | 3,282. 2 |  |  |  |  |
| October----- | 7, 587.1 | 235 | 3,2280 | Janusry -.....- | 225, 010 | 2,420 | 98 |
| November--- | 8,083. 4 | 2.57 | 8,146. 8 | February-..- | 260,232 | 3,090 | 84 |
| Decamber | 8,383.5 | 2.75 | 8,048. 5 | March | 293, 054 | 8,810 | 77 |
| $1017{ }^{*}$ |  |  |  | April | 340,663 | 4,770 | 71 |
|  |  |  |  | June.- | -457, 707 | 6, 780 | 69 |
| January.. | $0,097.4$ | 201 | 3,004.4 | July....------ | 611, 817 | 8.140 | 63 |
| Fobruary---- | 9,439.8 | 8. 10 | $3,045.1$ | August. | 580, 705 | 0,070 | 61 |
| March--- | 9,949.7 | 3.15 | 3.168 .6 | September -.- | 651,346 | 9,230 | 71 |
| April.-.----- | 10, 980.9 | 3. 3.5 | 3.277 .9 | October--...- | 746, 158 | 9, 620 | 7 |
| May ----- | 11,957. 1 | 8.80 | 3,015.0 | November--- | 802, 760 | 10,500 | 82 |
| June--------- | 12, 175.7 | 4.50 | 3,705. 7 | December | 195, 037 | 12, 000 | 79 |
| July--w-.... | 13, 055.4 | 5.76 | $2,268.6$ |  |  |  |  |
| August | 14, 125.4 | 6.55 | $2,150.5$ | 1021 |  |  |  |
| October | 16, 397.6 | 6.80 | 2204.3 |  |  |  |  |
| November---- | 22 4480 | 10.20 | 2380.6 | Fabruery | 1) 1208,829 | 12, 000 | 60 |
| Decamber...-- | 25, 000.0 | 15. 45 | 1,612.1 | March..-.--- | 1, 485,223 | 27, 000 | 54 |
|  |  |  |  | April. | 1,088, 083 | 35, 700 | 47 |
| 1018 |  |  |  | May -....----- | 1,917, 207 | 42,700 | 46 |
|  |  |  |  | June-------- | 2, 122, 205 | 62,000 | 34 |
| Japaary.---- | 27, 318 | 20.8 | 1,318 | July - - | 2,346, 139 | 80, 700 | 29 |
| February ---- | 29, 200 | 27.0 | 1,081 | August----- | 2,808, 076 | 80,300 | 35 |
| March. | 30, 618 | 83.0 | ${ }^{029}$ | Septambar - -- | 8,510,723 | 78, 400 | 46 |
| April | 33, 772 | 48.2 | 777 | Octobar ----- | 4,529, 428 | 81, 900 | 55 |
| May --.------- | 37, 833 | 57.5 | 658 | November--- | 6, 479, 722 | 05, 500 | 68 |
| July- | 43, 261 | 88.6 | 488 | December-an. | 9,845, 249 | 138,000 | 7 |
| August | 45,921 | 101.0 | 455 | 1822 |  |  |  |
| Soptember--- | 48, 185 | 88.5 | 515 |  |  |  |  |
| October-- | 51,021 | 03.5 | 546 | January......- | 17, 533,435 | 288,000 | 61 |
| Novamber-.. | 58, 773 | 107.5 | 500 | Fobruary --- | 29, 561,340 | 545,000 | 54 |
| Decamberan- | 58,828 | 135.0 | 421 | March. .-. | 48,388,465 | 1, 163, 000 | 98 |
| 1010 - |  |  |  | ApHI---2.as | $80,743,989$ $120,291,877$ | 2, 52, <br> $4,162,000$ | 32 |
|  |  |  |  | June.-.------- | 213, 714,756 | E,087,000 | 42 |
| Jamuary.-.... | 61,625 | 164 | 373 | July_-.-...-- | 320, 497, 040 | 8,798, 000 | 35 |
| February --- | 65, 007 | 208 | 321 | August....---- | 474, 793, 200 | 5, 588, 000 | 85 |
| March ------- | 60, 081 | 238 | 268 | Septembar--- | 606, 141, 628 | 5,995,000 | 116 |
| April | 74, 834 | 338 | 223 | October-....- | 851, 488, 383 | 7,342,000 | 118 |
| May - | 80,362 | 414 510 | 194 | November - - | 1, 095, 488, 941 | 11, 681,000 | 95 |
| Juns .---....... | 02,290 | 610 | 179 | Decomber-...- | 1, 479, 218,791 | 18, 072, 720 | 87 |

[^94]Table 86.-Russia-Gold value of total note circulation, 1916-1928
[On basis of exchange ratea and on basis of purchasing-power parittee. Bee chart 54]

| Month | Total note circulation ${ }^{1}$ ( 000 omitted) | Average exchange rates | Gold value of circulation on basis of exchange rates (000 omitted) | Purchasing power paritles | Gold value of circulation on bests of purchasingpower parities (000 orgitted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1016 | Rublet | Cento per ruble | Dollars | Cente per ruble | Dollars |
| Jannary. | 5, 818, 800 |  | 1,068,200 | 37.44 | 2, 108,700 |
| Tebruary | 5,709, 500 | 30.81 | 1,759, 100 | 37.98 | 2. 165, 600 |
| March | 5, 899, 100 | 31.75 | 1,873,000 | 38.76 | 2,280,500 |
| April. | 6, 078, 300 | 31.00 | 1,884.300 | 37.29 | 2, 256, 600 |
| May.- | 6, 250, 800 | 30.81 | 1,929,000 | 36. 51 | 2,220,200 |
| June. | 6, 379,500 | 30.55 | 1,940,000 | 34. 40 | 2, 194, 500 |
| July. | 6, 628,300 | 30,56 | 2,025,600 | 30.88 | 2,046.800 |
| August | 6,876, 200 | 3207 | 2, 205, 200 | 30.02 | 2,054,200 |
| Septembar | 7, 122,300 | 32.50 | 2, 316, 700 | 30.09 | 2, 185, 800 |
| October-- | 7, 587, 100 | 31.20 | 2,307, 200 | 27.77 | 2, 106,900 |
| November | $8,083,400$ | 30.12 | 2, 434, 700 | 28. 60 | 2,311,900 |
| December. | 8,383,500 | 29.77 | 2, 485, 800 | 23.72 | 2, 240, 100 |
| 1917 |  |  |  |  |  |
| Janusiy | 9,079,400 | 29.00 | 2,638,000 | 98. 24 | 2, 382,400 |
| Pebruary | 9, 439, 800 | 28.57 | 2,697, 000 | 28.75 | 2, 525, 100 |
| March | 9,949, 700 | 28. 07 | 2,792,900 | 25. 26 | 2,513,300 |
| April.a- | 10.980,900 | 28. 52 | 3,131, 800 | 28.18 | 2,874,900 |
| May | 11.457, 100 | 27.35 | 3, 138, 500 | 22.40 | 2,566,400 |
| June- | 12, 175,000 | 24.35 | 2,984, 800 | 19.88 | 2, 14,400 |
| July--- | 13, 055, 400 | 2235 | 2917,900 | 14.38 | 1,870,800 |
| Augrest..- | 14, 125,400 | 10. 35 | 2733,300 | 15. 82 | 2, 364,000 |
| September | 15, 397, 500 | 14. 50 | 2,232,600 | 13. 41 | 2,064.800 |
| October- | 17,280, 100 | 14.50 | 2,507, 100 | 12.47 | 2, 156,100 |
| November | 22,440,000 | 18.00 | 2,917, 200 | 7.33 | 1,844,900 |
| Decomber | 25,000,000 | 13.00 | 3,250,000 | 5. 19 | 1,217.500 |
| 1918 |  |  |  |  |  |
| Januery | 27,313,000 |  |  | 408 | 1,100,700 |
| Fobruary | 20, 200,000 |  |  | 3.15 | 919,800 |
| Mareh | 30, 648,000 |  |  | 270 | 827,500 |
| April. | 23,572,000 |  |  | 1.92 | 644.600 |
| Msy.-- | 37,833,000 |  |  | 1. 523 | 677, 000 |
| Jane-- | 40,208,000 |  |  | 1. 27 | 811,800 |
| July-- | 43,261,000 |  |  | 1.008 | 436, 100 |
| August | 45,921,000 |  |  | 1.009 | 463,300 |
| September | 48, 185,000 |  |  | 1.285 | 505, 100 |
| October- | 61, 021,000 |  |  | 1.019 | 519,900 |
| November | 53,773,000 |  |  | . 924 | 406,900 |
| Decomber. | 56,828,000 |  |  | . 662 | 388,200 |
| 1919 |  |  |  |  |  |
| January. | 61, 255,000 |  |  |  | 882,300 |
| February | 65, 002,000 |  |  | -400 | 318,300 |
| March | $60.681,000$ |  |  | . 300 | 280,400 |
| A Pril..... | 74,834,000 |  |  | . 304 | 227.500 |
| Msy. | 50, 352, 000 |  |  | . 281 | 201,760 |
| June- | 92, 280,000 |  |  | . 202 | 186,400 |
| July. | 100, 319,000 |  |  | . 164 | 164, 500 |
| Angust | 112,350,000 |  |  | . 148 | 166,300 |
| September. | 128, 208, 000 |  |  | . 188 | 167, 000 |
| November-.. | $147,479,000$ $150,109,000$ |  |  | . 117 | 172, 600 |
| Decembar. | 192.453, 000 |  |  | .0841 | 128, 400 |

I Note efreulation figures taken from the Statistical Yearbooks, published by the oontral statiatical office (Statisticlesti Yeahegodnik, Trudy Tsentralasvo Statistichaskavo Upravlénys, and checked by data given in the studias of Yurovgki and Katzenellenbsum. Figures given reprement amonnta cutstanding on the frst of each month and include amounts held in the exchange offices of the Commisariat of Pinancei also amonants in transit.
${ }^{2}$ Exchange rates to the end of 1917, taken from the Harvard Review of Ecoaomic Stetistles July, 1910, p. 240; exchange rates for 1g22-from the official Narodnaye i Gooudhrstvennoye Khoulaistvo 1022-2a, P. 589.

Purchasing-power paritics basod upon the retall price index computed by the Rusian oflice of lebor statistics and continnod by the Btate planning commisuion. and on the wholesale price lodex compated by the U. 8. Burean oflabor Statistics; Bussian Ggurva relate to the first of the month, while American fgares ere averages for the month.
[able 86.-Russia-Gold polue of total note circulation, 1916-1988-Continued

| Manth | Total note edrenlestion (000 comitted) | $\begin{aligned} & \text { Average } \\ & \text { exchange } \\ & \text { rates } \end{aligned}$ | Gold value of circule tion on besis of exchange rates $(000$ cmitted) | Purchesing Dower paritios | Gold value at circulation on. basis of purchasingpower parities (000 omitted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| anuery 1020 | $\begin{aligned} & \text { Rublet } \\ & 225,016,000 \end{aligned}$ | Cente par ruble | Dollart | $\begin{aligned} & \text { Centin } \\ & \text { per ruble } \\ & .0495 \end{aligned}$ | $\begin{aligned} & \text { Dollara } \\ & 112,400 \end{aligned}$ |
| Tebruary. | 200, 232,000 |  |  | 0388 | 100,400 |
| March | 203,054,000 |  |  | 0318 | 92, 000 |
| $t \mathrm{pril}$ | 840, 603,000 |  |  | . 0240 | 83, 800 |
| May | 387, 707,000 |  |  | . 0210 | 84,000 |
| -une. | 450, 670,000 |  |  | . 0180 | 85,600 |
| luly.- | 611, 817,000 |  |  | . 0159 | 77,800 |
| sugust | 500, 705,000 |  |  | . 0131 | 76, 100 |
| leptember | 651, 340, 000 |  |  | . 0128 | 82, 100 |
| Jetober-- | 745, 158,000 |  |  | . 0112 | 88,800 |
| November. | 802, 766, 000 |  |  | +0098 | 82, 800 |
| December-g | 905, 087,000 |  |  | . 00731 | 72,800 |
| 1021 |  |  |  |  |  |
| Tantrary | 1,108,507,000 |  |  | . 00580 | 60, 800 |
| Pebruary | 1,298,829,000 |  |  | . 003881 | 49,500 |
| March | 1,488, 228,000 | -r-m-*-*- |  | . 00218 | 83, 100 |
| 4pril | 1, 688, 683,000 | -------- |  | . 00213 | 36, 000 |
| May | 1,917,267,000 | -**-0-0-\% |  | . 00174 | 83, 400 |
| luno. | 2, 122,205,000 |  |  | -. 00117 | 24,800 |
| luly | 2,347, 134,000 |  |  | . 000089 | 21, 100 |
| tugust | 3, 808, 076,000 |  |  | . 000910 | 25, 000 |
| leptember | 8, $510,723,000$ | ----m- |  | . 000049 | 83, 800 |
| Sctober--- | 4, $520,488,000$ |  |  | .000298 | 40,400 |
| Vovember | 6, 479, 722,000 |  |  | . 000754 | 48,900 |
| Decamber | 0, 846,249,000 |  |  | . 00058 | 81, 400 |
| 1028 |  |  |  |  |  |
| Tanuary | 17, $638,485,000$ | . 0002381 | 41,747 | .000246 | 48, 100 |
| Pebramr | 29, $561,340,000$ | . 0001048 | 80,808 | . 000138 | 89, 200 |
| March | 48, 883, 465, 000 | . 0000549 | 30,730 | .0000638 | 30,700 |
| ${ }^{8} \mathrm{rrl}$ | 80, 748, 8089 | . 00000308 | 24, 869 | .0000292 | 23, 600 |
| May. | 129, 291, 877,000 | . 0000224 | 31,935 | . 00000188 | 23,700 |
| fana | 213, $714,758,000$ | - 00000764 | 68, 91 | . 00000151 | 32,300 |
| [uly.- | 880, 407, 040,000 | . 0000248 | 77, 881 | .0000148 | 45,800 |
| august | 474, 703, 206, 000 | . 00000228 | 107, 303 | . 00000145 | 68, 000 |
| 3 ptambar | 606, 141, 625, 000 | . 00000128 | 80, 106 | . 00000160 | 104,400 |
| Jetober Novamb | $851,486,889,000$ $1,096,488,941,000$ | $.0000002$ | 52,798 51,488 | - 00000107 | 91, 100 |
| December | 1,478, 218, 701,000 | .0000088 | 41,418 | .00000468 | 68,900 |

Table 87.-Ruseia-Gold value of total money in circulation, 1983-1985
[On bssis of exchange rates and on basis of purchasing power parities. See ohart 84]

| First of manth | Total money circular tion 1 beginning of month | Exchange rates ${ }^{\text {d }}$ |  | Gold value of eirculation on basis of exchange rates (000 omitted); on basis of- |  | Purchasing power parities : | Gold value of clrcular tion on basis of purchasing power pertices (000) milted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First of month | Average por month | First of month rates. | Averake monthiy rates |  |  |
|  | Thots sande of |  |  |  |  |  |  |
| 1923 | cher oonetz | Centsper | Centspar |  |  | Cents per |  |
| January.......... | rubles 117 , 632 | ruble | ruble | Dollars | Dollars | ruble ${ }_{\text {B3 }}$ | Dollara 28, 257 |
| February | 135, 560 | 41.8 | 46.2 | 60, 664 | 62, 629 | 77.7 | 105, 330 |
| March | 151, 179 | 51.8 | 49.0 | 78, 311 | 74,078 | 70.5 | 106, 881 |
| April | 177, 368 | 52.6 | 42.4 | 93, 298 | 75, 204 | 71.2 | 128,236 |
| May | 179, 015 | 41.8 | 35.6 | 74, 888 | 63.729 | 73.3 | 131. 118 |
| June-n | 183, 769 | 38.1 | 41.4 | 66,341 | 76,080 | 62.5 | 114.856 |
| July - | 211, 721 | 49.9 | 47.4 | 90, 2977 | 100, 356 | 53.8 | 113, 482 |
| August | 247, 747 | 47.2 | 47.0 | 116, 937 | 116, 441 | 48.8 | 120,901 |
| September | 270, 522 | 48.3 | 47.5 | 135, 009 | 132.773 | 50.5 | 141, 1.50 |
| October- | 302, 478 | 48.3 | 49.2 | 148, 0006 | 148, 818 | 60.2 | (51, 848 |
| Novernber | 356, 778 | 45. 5 | 45, 4 | 122,334 | 161,977 | 52.5 | 187, 308 |
| December | 306,022 | 45.6 | 45.3 | 160, 085 | 165,365 | 49.5 | 180,680 |
| 1924 |  |  |  |  |  |  |  |
| sanuary. | 373, 584 | 44.8 | 48.5 | 167, 386 | 169,981 | 48.9 | 171,476 |
| Febrtary | 303,644 | 45.7 | 46.3 | 179,805 | 182, 257 | 41.8 | 144, 548 |
| March | 448, 002 | 47.4 | 50.0 | 212,780 | 224, 451 | 40.0 | 179, 861 |
| April | 479,225 | 52.4 | 53.2 | 251, 114 | 254,948 | 42.1 | 201, 754 |
| May | 499, 889 | 51.3 | 31.8 | 256, 414 | 257, 443 | 43.2 | 215, 868 |
| June | 514, 881 | 52.6 | 51.8 | 270, 817 | 260, 608 | 44.9 | 231, 173 |
| July... | 522, 183 | 51.5 | 51.8 | 274,074 | 274,074 | 44.8 | 238, 418 |
| Septemb | 569, 128 | 51.5 | 51.5 | 203, 100 | 293, 100 | 44.1 | 270, 768 |
| Oetober. | 671,308 | 51.5 | 51.5 51.5 | 345, 770 | 345, 70 | 4 4 .7 | 320, 257 |
| November | 725, 222 | 51.5 | 51.6 | 373, 489 | 373, 489 | 48.0 | 348, 204 |
| December | 772, 832 | 51.5 | 51.5 | 308, 008 | 398, 008 | 48. 1 | 370,978 |
| 1026 |  |  |  |  |  |  |  |
| January. | 705, 792 | 51.6 | 51.5 | 410,629 | 409,833 | 47.8 | 380, 380 |
| February | 760, 527 | 51.5 | 51.8 | 394, 761 | 394, 761 | 40.5 | 356, 438 |
| March | 787, 614 | 51.1 | 51.5 | 404, 834 | 405, 621 | 45.3 | 350,780 |
| A May | 822061 | 51.4 | 51.6 | 423,002 | 423, 225 | 41.2 | 330,050 |
| May. | 946,008 | 51.4 |  | 434,848 |  | 40.3 | 342,683 |

${ }^{1}$ Circulation figurea, as of the 1 st of each month, include notea lssued both by the treasury and the 8 tate bank, silver and copper colns, and temporary scrip therefor, elso certificates issued by the Commissariats of Finance and of Means of communication. Amounts of treasury notes ontstamding have been reduced to their equivalents in terms of chervonetz (State bank notes) rubles.

Based upon "free" Moscow quotasions of the dollar.
${ }^{1}$ Purchasing-power parities are based upon 1st-of-month Index numbers of wholesale prices, published by the Russian State Flanning Commission, and on the avergep wholesale price inder numbers of the U. B. Hurean of Labor Statistica.

Table 88.-Russia-Tmports and exports of merchandise, annually, 1909-1984
[Quantities in millions of poods of 36.112 pounds each; values in millions of rubles on the basis of 1918 values. gource: Gosudsrstvennoye i Narbdnoye Khoziaistvo, U. S. 8. R., 1922-22, published by the Comminariat of Finance, and Economichestoye Obocrenlye, April, 1925]

|  | Imperts |  |  |  | Exporta |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantities |  | Values |  | Quantities |  | Valnes |  |
|  | Millions of poods | In persentiges of 1809 1913 | Millions of rubles | In percentares of 1000 1913 | Millions of poods | In percentage of 1900\% 1013 | Mimions of rubles | In nercoutaged of 1900 1013 |
| 1909-1013. | 656 | 100 | 1, 139.0 | 100 | 1,501 | 100 | 1, 801 | 100 |
| 1914.... | 649 | 90.2 | 1,0080 | 98.3 | 814 | 84 | 958 | 68.6 |
| 1015 | 240 | 35.0 | 1, 1386 | 90. 0 | 150 | 10.0 | 402 | 29.7 |
| 10181 | 250 | 34.4 | 1716.5 | 1506 | 144 | 9.1 | 476 | 31.7 |
| 1917 1- | 178 | 26. 0 | 1,9c5. 8 | 172.5 | 50.6 | 40 | 464 | 30.8 |
| 1918. | 11.5 | 17 | 61.1 | 5.3 | 1.8 | . 1 | 7.5 | ${ }_{3}$ |
| 1910. | -5 | . 1 | 30 | . 3 | -1 |  | 524 | 2.5 |
| 1920. | 52 | . 8 | 37.2 | 3. 2 | 8 |  | 1.1 | 1 |
| 1921 | 55.3 | 81 | 248.7 | 21.8 | 13.0 | . 9 | 21.3 | 14 |
| 1922 | 1286 | 18.5 | 274.5 | 24.1 | 51.3 | 2.8 | 81.8 | 5.6 |
| 1923 2 | 55.3 | 8.1 | 147.8 | 13.0 | 131.9 | 8.8 | 1332 | 28 |
| 1024 3... | 51.8 | 7.6 | 207.7 | 18.1 | 374.4 | 24.9 | 330.9 | 22.6 |

[^95]Tabli 89.-Rusaia-Imports and exports of merchandise, monthly, 1982-1924
Quantities in thonsandis of poods of 36.112 pornds each; Falnes in thousande or rubles on basin of 1913 pricesl

|  | Imports (commercial only) |  |  |  | Exports |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantitien |  | Valuea |  | Quantities |  | Valus |  |
|  | 1029-28 | 1082-24 | 1092-23 | 1023-4 | 1092-28 | 1093-24 | 1089-23 | 1023-24 |
|  | 12,386 | 7,061 | 24, 154 | 16,644 | 10,295 | 87, 811 | 12, 107 | 20,713 |
| November.-- | 6,877 | 8,920 | 18, 878 | 14.767 | 4,650 | 41,223 | 0.190 | 88,290 |
| December | 8, 877 | 8,611 | 11, 238 | 14,207 | 4,418 | 37, 420 | 6, 836 | 35, 500 |
| Vanuary------------ | 2, 504 | 8, 089 | 6,210 | 12,490 | 8,49 | 22, 645 | 8, 115 | 22, 871 |
| Febrasry-..-------- | 2,135 | 2,350 | 8, 838 | 13,388 | 4,634 | 22,231 | 6.095 | 24,878 |
| March. | 2,993 | 8, 324 | 8,170 | 12,015 | 7,478 | 29, 204 | 8,739 | 81,019 |
| April. | 1,788 | 8,037 | 8, 023 | 12,300 | 5,986 | 21,954 | 7,372 | 22, 109 |
| May | 1,833 | 1,885 | 8,747 | 15,090 | 12.989 | 31, 747 | 10,839 | 24,378 |
| Tune. | 7,623 | 8, 588 | 17,972 | 18,685 | 14,983 | 29, 041 | 15,875 | 25, 151 |
| July | 3,358 | 8,990 | 10, 178 | 23,511 | 21, 451 | 83, 088 | 17,080 | 29,700 |
| August-... | 8,628 | 4,721 | 10.574 | 28,615 | 21, 506 | 27,058 | 18, 103 | 24.00 |
| Beptembar-- | 6,808 | 8, 078 | 20,729 | 25,116 | 20, 143 | 32,091 | 18,000 | 28,106 |
| Total-.------- | 65, 810 | 161,750 | 147, 892 | ${ }^{1}$ 208, 808 | 131, 912 | ${ }^{1} 865,108$ | 138, 241 | 1932,941 |

[^96]Table 90.-Russia-Imports and exports, by countries, 1918, 1828, and 1984
[In thousands of rubles on the besill of 1013 prices]

|  | Imports |  |  | Exports |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { (calender } \\ \text { year) } \end{gathered}$ | $\begin{aligned} & \text { Years ending } \\ & \text { Sept. } 80- \end{aligned}$ |  | $\underset{\substack{\text { cealanalar } \\ \text { year) }}}{\text { 1013 }}$ | $\begin{aligned} & \text { Years ending } \\ & \text { Sept. } 30- \end{aligned}$ |  |
|  |  | 1923 | 1024 |  | 1928 | 1824 |
| Great Britaln | 178, 012 | 37, 130 | 58, 621 | 287, 801 | 28, 918 | 78, 848 |
| Germany... | 652, 209 | ${ }^{60,} 968$ | ${ }^{82} 81898$ | 463, 884 | 42,631 | 64, 0103 |
| Esthonia |  | 4,940 | ${ }_{6}{ }^{1} 1818$ |  | 88.486 | 14,791 |
| Netherlande | 21,380 | 2,369 | 2,667 |  | 7,148 | 21, 668 |
| Friniand. | 50,959 | 5,093 | 7,852 | 56,284 | 6,127 | 0,417 |
| Turkey-- | 18,440 | ${ }_{773}^{767}$ |  | 364,783 | S.168 | 24, 178 |
| Paland. |  | 8,907 | 8,861 |  | 8, ${ }^{1,135}$ | 9,481 |
| Austria-Eangary. | 35,698 |  |  | 65, 297 |  |  |
| Italy---..........-- | 16.808 | 748 | 1.067 | 78, 781 | 2,3802 | 15.288 |
| ${ }_{8}^{\text {France-- }}$ | 66, 80 | ${ }_{7}^{104}$ | 2,077 | 100, 879 | 581 | 14, 110 |
| Norway. | 16, ${ }^{187} 78$ | 8,208 | 1,062 | 8,696 | 799 |  |
| Denmark | 12, 867 | ${ }^{19}$ |  | 30, 425 | 1,794 | 10, 680 |
| Donited States | 73, 973 | ${ }_{2}^{4,428}$ | 42,838 | 14, 155 | ${ }^{1} 846$ | 6, 000 |
| Persla | 85,004 | 2,11 |  |  | 452 |  |
| humania. | 1, 403 |  |  | 21,692 | $3{ }^{6} 6$ |  |
| All other countrisa.. | 91,816 | 762 | 16, 881 | B6,088 | 2,732 | 31,027 |
| Total | 1,374,034 | 147, 808 | 207,601 | 1, 520, 135 | 123, 241 | 339, 868 |

On the basis of current prices imports for 1923 are estimated at $187,000,000$ rubles and exports at $235,600,000$ to $252,000,000$ rubles; imports for 1924 at $348,000,000$ rubles and exports at $480,400,000$ rubles.

## SPAIN

Table 91.-Bank of Spain-Circulation and reserves, 1914-1925
[Source: Weokly gtatements of the Bank of Spein, and Spaniab Finance and Trade, Special Agents' Eerles No. 202, Department of Commarce. See chart $50.000,000$ omittedj


Table 91.-Bank of Spain-Circulation and reserves, 1914-1925-Continued


## Table 92.-Spain-Wholesale prices, 1921-1925

[Indez numbers of the Institute of Geography and 8tatistics; 74 commoditles, 19iz=100. The toder numbers have been converted to a gold basis by applying to them the percentages which the correspond ing average monthly exchange rates for dollars are of the 1913 average exchange rate of 18.020 cents per peseta. See chart 61]

| Month | $\begin{gathered} \text { On } \\ \text { paper } \\ \text { currency } \\ \text { basis } \end{gathered}$ | Converted to gold basis | Month | $\begin{gathered} \text { On } \\ \text { paper } \\ \text { currency } \\ \text { basis } \end{gathered}$ | Converted to gold basis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 |  |  | 1823 |  |  |
| Japucry. | 219 | 245 | March. | 171 | 147 |
| February. | 203 | 230 | April.-... | 174 | 148 |
| March..- | 193 | 222 | Mag.......- | 171 | 144 |
| April.- | 191 | 215 | June.... | 170 | 141 |
| May | 187 | 210 | July | 170 | 135 |
| June | 186 | 208 | August | 171 | 130 |
| July. | 188 | 200 | September. | 174 | 131 |
| August | 183 | 195 | October- | 171 | 128 |
| September. | 183 | 193 | November. | 176 | 128 |
| October--- | 185 | 197 | December. | 176 | 127 |
| November | 184 | 202 |  |  |  |
| Deceraber. | 183 | 108 | 1024 |  |  |
| 1922 |  |  | January...... | 178 | 128 |
| January 182 |  |  | February.. | 180 | 127 |
| January-- | 180 | 180 | March... | 180 | 127 |
| February.- | ${ }_{179}$ | 173 | April-.... | 184 | 139 |
| March.- | 177 | 173 | May-... | 179 | 137 |
| April.. | 180 | 175 | June..... | 179 | 134 |
| May.-- | 178 | 168 | July | 182 | 134 |
| June... | 178 | 164 | Augrast. | 182 | 135 |
| July... | 175 | 155 | Seplember | 184 | 135 |
| August | 175 | 147 | October-.- | 166 | 138 |
| September. | 174 | 142 | November | 181 | 137 |
| Oetober-.. | 172 | 137 | December. | 188 | 153 |
| November. | 174 | 126 |  |  |  |
| December | 172 | 126 | 1925 |  |  |
| 1923 |  |  | January........ | 191 | 150 |
| January - | 170 | 148 | Mebruary. | 102 | 151 |
| February-........- | 170 | 148 | April -- | 190 | 151 |

Table 93.-Spain-Exchange rates, 1916-1925
1915-1917, Madrid on New York; 1918 to date, New York on Martrid. From 1916 to 1018, benkers' cheeks; January, 1919, to June, 1921, sight drafts; July, 192i, to date, noon buying rates for cable trans fars. Average rates, January, 1015, to October, 1918 , are mid points between the monthly high and low rates; from January, 1921, to date the averages are monthly averages of daily rates. Source: Financial Review and Federal Beserve Board. See Chart 69 . Par., 19.20 cents per peseta]

| Manth | Cents per peseta |  |  | Month | Cants per peseta |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | Average |  | High | InOW | A Terage |
| 1915 |  |  |  | 1910 |  |  |  |
| January | 19.24 | 10.22 | 19.28 | July. | 20. 25 | 20.07 | 20. 16 |
| Pebruary | 19.40 | 19.30 | 19.40 | August | 20.18 | 20.10 | 20.14 |
| March. | 19.78 | 19.51 | 19.65 | 8eptember | 20. 17 | 20. 10 | 20.14 |
| April. | 20.05 | 19.92 | 19.90 | October- | 20.30 | 20. 10 | 20. 20 |
| May- | 19.80 19.08 | 18.01 | 19.41 | Novembe | 20.60 21.35 | 20.22 20.55 | 20.39 20.06 |
| July | 12.28 | 18. 60 | 18.92 |  |  |  |  |
| Augast | 10.36 | 18.84 | 19.00 | 1917 |  |  |  |
| September. | 10.00 | 18.72 | 18.88 |  |  |  |  |
| October-. | 10.05 | 18.05 | 10.00 | January | 21.30 | 21.00 | 21.25 |
| November. | 10.03 | 18. 05 | 18. 90 | February | 21.30 | 21.00 | 21.15 |
| December- | 18. 00 | 18. 80 | 18.85 | March. | 21.70 | 21.08 | 21.30 |
|  |  |  |  | Apris. | 21.05 | 21.25 | 21.60 |
| 1916 |  |  |  |  | 2260 | 21.70 | 22.15 |
|  |  |  |  | June.- | 23.40 | 22.45 | 23. 78 |
| February .a. | 19.00 | 19.00 | 12.00 | Augnat | 22.90 | 22.10 | 22.50 |
| March.- | 10.20 | 19. 00 | 19.10 | Eeptember. | 24.00 | 22.05 | 23.08 |
| April. | 19.75 | 19.20 | 19.48 | October... | 23.60 | \%3. 25 | 23.43 |
| Mry | 29.00 | 19.55 | 10.78 | November | 23.70 | 23.40 | 23.65 |
| Jure. | 20.60 | 20.05 | 20.38 | December. | 24.45 | 23.70 | 24.08 |

"A8Ls 93.-Spain-Exchange rates, 1915-1985-Continued

| Month | Cents per peseta |  |  | Month | Centa par peeta |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eigh | Low | A Frarage |  | Eigh | Low | $\Delta$ verage |
| 1018 |  |  |  | 1901 |  |  |  |
| January | 24.45 | 24.05 | 24.25 | Octobar. | 12. 55 | 13.08 | 18. 25 |
| Tebruary. | 24.25 | 24.00 | 24.13 | November-*-.--.-- | 14. 07 | 13.36 | 18. 72 |
| March -- | 25.00 | 24.25 | 24.93 | Decamber | 16. 10 | 12.85 | 14. 65 |
| April...-- | 30.76 | 25.45 | 28.10 |  |  |  |  |
| June | 28. 50 | 27.50 | 28.00 | 1928 |  |  |  |
| July | 27.55 | 28.60 | \%7.08 | Jenuary | 16.18 | 14.85 | 14.88 |
| August | 28.75 | 23.00 | 24.88 | February -nion----- | 16.08 | 15.20 | 15.69 |
| Beptamber | 23. 40 | 2860 | 22.95 | March ------ | 16.98 15.58 | 15.36 15.27 | 16. 65 |
| October-- | 28.40 | 29.30 | 21.35 | May | 16.00 | 15.58 | 15.69 |
| November | 20.40 | 19.65 | 20.10 | Mune.- | 16.87 | 16.68 | 15.68 |
| Decamber | 20.20 | 10. 73 | 20.06 | July | 15.67 | 15.47 | 16.58 |
| 1910 |  |  |  | August --- | 15.85 | 15.49 | 15. 55 |
|  |  |  |  | September. | 15. 62 | 15. 10 | 15. 30 |
| January. | 20.14 | 20.05 | 20.17 | Octobar-...-------* | 15.39 | 15.18 | 15. 25 |
| February | 21.10 | 20.08 | 20.39 | November | 15. 79 | 15.16 15.26 | 15. 28 |
| - March . | 22.10 | 20.13 | 20.71 | Desamabar | 16.7 | 25.36 | 15.6 |
| April | 20.38 | 20.10 | 20.32 | 1023 |  |  |  |
| May | 20.25 | 20.00 | 20.24 | 102 |  |  |  |
| June. | 20.06 | 19.75 | 20.01 | January.---.------- | 15.79 | 15. 58 | 15.66 |
| Joly | 19.72 | 19.05 | 10. 10 | February--...-- | 15.81 | 15. 69 | 15.66 |
| August.... | 19.75 | 18.88 | 10.20 | March | 15.61 | 15.36 | 15.47 |
| Septamber | 19.25 | 18.80 | 10.06 | April | 15.36 | 15.26 | 15.32 |
| October-- | 19.28 | 19.68 | 19.21 | May | 15. 29 | 15. 20 | 15.28 |
| November | 20.10 | 19.28 | 19.78 | June. | 15. 20 | 14.49 | 14.92 |
| December | 19.80 | 18.00 | 19.61 | July- | 12. 50 | 14. 19 | 14.30 |
|  |  |  |  | August | 14. 18 | 13.28 | 12. 66 |
| 1030 |  |  |  | Soptamber. -------- | 14.19 | 18.33 | 13. 58 |
| Januser |  |  | 18.91 |  | 13.62 | 13.25 | 13.47 |
| Fobruary | 18.90 | 16.80 | 17.45 | December------------- | 18.09 | 12.91 | 18.04 |
| March | 17.00 | 17.25 | 17.60 |  |  |  |  |
| April | 17.90 | 18.95 | 17.48 | 109 |  |  |  |
| Mry | 18.97 | 18.40 | 18.80 |  | 12.88 | 12. 65 | 12. 75 |
| June | 16. 70 | - 16.25 | 16. 86 | February-n-an....-- | 12.89 | 12.58 | 12.74 |
| July- | 16. 52 | 16.32 | 15.90 | March | 13.68 | 12.18 | 12. 73 |
| August. | 15. 27 | 14.85 | 15. 10 | April.----....----- | 14. 16 | 13.08 | 12, 64 |
| Septamber | 14.95 | 14. 51 | 14.78 |  | 13.88 | 13,61 | 13.80 |
| Octobar.- | 14. 68 | 13. 71 | 14.33 | June.-e-nen-------- | 13.58 | 13.38 | 13. 46 |
| November. | 13.85 | 11. 81 | 13.03 |  | 13.40 | 13. 12 | 18.80 |
| Decamber | 13.81 | 1271 | 13.07 |  | 18.63 | 18.25 | 13. 41 |
| 188 |  |  |  | September..........- | 18.49 | 13.12 18.27 | 13.24 |
|  |  |  |  | November | 13.78 | 13.48 | 18.60 |
| January | 18.97 | 18.11 | 18.51 | Decamber | 14.20 | 12. 73 | 13.86 |
| February | 14.20 | 18.82 | 14.02 |  |  |  |  |
| March. | 14.04 | 18.81 | 18. 97 | ${ }^{1025}$ |  |  |  |
| April | 14.00 | 18.84 | 13.95 | January | 14.82 | 18.99 | - 14.18 |
| May. | 13.98 | 12.50 | 13.50 | February--------- | 14.31 | 14. 17 | 14. 20 |
| June.n- | 13.34 | 12.84 | 13.08 | March | 14. 28 | 14.17 | ) . 14.29 |
| July --. | 1294 | 1202 | 1282 | April | 14.57 | 14.20 | 14. 29 |
| Augast..- | 13.07 | 12.02 12.08 | 12.03 18.02 | May- | 14, 70 | 14, 42 | 14, 63 |

Table 94.-Spain-Purchasing-power parities, 1981-1925
(According to index numbers of Instituto Geografteo y Estadfstico for Spain, and of Federal Besarve Board for United Stales. Beo chart 60]

| Month | United States findex of prices | Spanish inder of prices | $\left\lvert\, \begin{aligned} & \text { Purchasing-power } \\ & \left(\frac{\text { D. } \text { paritices }}{8 \text { panish indax }}\right) \end{aligned}\right.$ | A verage exchange retes, cables in Now York | Per cent putchat- <br> log-power parities are of exchange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1021 |  |  | Cents par pestia | Cents per peteta |  |
| January .- | 168 | 219 | 13.83 | 18.51 | 68.57 |
| February. | 157 | 203 | 13.94 | 14.02 | 68. 37 |
| March..- | 152 | 183 | 14. 20 | 13.97 | 68. 67 |
| Agril | 148 | 191 | 13.78 | 13.95 | ${ }^{67} 818$ |
| Mry . | 145 | 187 | 12.98 | 13.39 | 60. 07 |
| June. | 143 | 186 | 13.80 | 18.08 | 69.27 |
| Jnly- | 148 | 186 | 14. 15 | 1282 | 72.94 |
| August. | 147 | 188 | 14.48 | 1289 | 76. 42 |
| Beptember | 147 | 183 | 14.48 | 13.62 | 75. 97 |
| October.-- | 148 | 185 | 14. 23 | 13. 25 | 74.08 |
| November | 145 | 184 | 14. 20 | 13. 72 | 71.79 |
| December. | 143 | 183 | 14.09 | 14.65 | 7222 |
| 1922 |  |  |  |  |  |
| January | 142 | 180 | 14.22 | 14.98 | 76. 20 |
| February | 146 | 179 | 14.70 | 15.69 | 94. 21 |
| March. | 147 | 177 | 14.97 | 15.65 | 85.06 |
| April | 149 | 180 | 14.02 | 15. 51 | 85. 28 |
| May.- | 158 | 178 | 16. 00 | 15. 68 | 95. 24 |
| June... | 1 A | 178 | 18.30 | 15. 69 | 99.43 |
| July.-. | 185 | 175 | 17.00 | 15. 58 | 10, 52 |
| August | 168 | 175 | 17. 10 | 15.55 | 113.25 |
| Septomber | 184 | 174 | 16.90 | 16. 20 | 115. 11 |
| October-- | 165 | 172 | 17. 29 | 16.25 | 120.60 |
| November | 164 | 174 | 16.99 | 15. 28 | 130.39 |
| December- | 185 | 172 | 17.29 | 15.64 | 13229 |
| 1928 |  |  |  |  |  |
| January.... | 166 | 170 | 17.80 | 15. 68 | 112.38 |
| February. | 186 | 170 | 17.80 | 15. 66 | 11239 |
| Mareh. ${ }^{\text {ch }}$ | 169 | 171 | 17.82 | 15. 47 | 115. 19 |
| April. | 170 | 174 | 17.61 | 15. 32 | 114.06 |
| May-. | 167 | 171 | 17.60 | 15. 23 | 115. 56 |
| Junc- | 184 | 170 | 17.39 | 14.02 | 116.55 |
| August | 159 | 170 | 16.86 16.76 | 14. 30 | 117.90 |
| Septamber | 163 | 174 | 16.89 | 13.66 13.68 | 12187 |
| October... | 163 | 171 | 17. 18 | 13.47 | 127.34 |
| November. | 183 | 176 | 18.69 | 12.08 | 127.60 |
| Decamber | 18 | 176 | 16.60 | 12.04 | 127.09 |
| 1924 |  |  |  |  |  |
| January - | 183 | 178 | 16. 81 | 12.75 | 129.49 |
| Febraary | 183 | 180 | 16. 32 | 12.74 | 128. 10 |
| March | 160 | 180 | 18.02 | 1273 | 125, 84 |
| April. | 158 | 184 | 15. 48 | 13.04 | 113.49 |
| May.- | 156 | 179 | 15. 71 | 13.80 | 113, 84 |
| June... | 154 <br> 156 <br> 158 | 179 | 15. 51 | 13. 46 | 115.23 116.17 |
| August | 158 | 182 | 15. 65 | 13. 41 | 118. 70 |
| \&eptember. | 156 | 184 | 15.28 | 13. 24 | 115. 41 |
| October-- | 159 | 186 | 15.41 | 13. 40 | 115. 00 |
| Novamber- | 180 | 181 | 15.98 | 13. 60 | 117.13 |
| December. | 105 | 198 | 15.02 | 13.96 | 107.60 |
| 1975 |  |  |  |  |  |
| January - | 168 | 191 | 15. 86 | 14.18 | 111.85 |
| February | 167 | 192 | 15.68 | 14.23 | 110.27 |
| March. | - 160 | 193 | 15.78 | 14.29 | 110.43 |
| April............ | 184 | 190 | 15. 56 | 14. 20 | 188.89 |

Note.-In place of the nominal par of exchange ( 19.29 cents), which has little practical significance, there was used in the computations the average value of the pesets in doliars for 1913, computed from Madrid rates on London and on Paris in 1913, namely, 18.028 cents per pesets.

Tabla 95.-Spain-Exchange rates and gold value of silver in 100 pesetas, 18081984
IFrchange rates, Madrid on Paris, sight drafts. Price of silver in Iondon, 1888-1914, and in Now Yoris, 1914-1824. Silver content of the 5 -peette piece was used; the $\delta$-peesta piece contalns 95 grams of silver 0.800 fine. See chart 55]


Tasle 98.-Spain-Imports and exports of merchandise, 1900-1888
Exclading gold and Eliver
SSpecial imports, 1. e., imports for donnestic consamption; apecial exports, I. e., exports of domentio mer-chandise- Source: Annario Estadistico do Expana. Bee chart 57]

| Year | Imports | Bixports | Ercees of |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Imports | Exports |
| 00 | Penctat $886,441,000$ | Pactos 838, 122, 030 | Petctas 150, 319, 004 | Peatas |
| 1801 | 933, 011,000 | 790, 545,000 | 152,856, 000 |  |
| 1808. | ${ }^{921,516,000}$ | $8501,636,000$ | 70,079,000 |  |
| 1004 | $\begin{aligned} & 975,880,000 \\ & 055,42,000 \end{aligned}$ | $\begin{aligned} & 945,978,000 \\ & 950,680,000 \end{aligned}$ | 20,002,00 | 1,207,000 |
| 1005 | 1,087,082,000 | 998,871,000 | 83, 101,000 | - |
| 1008 | 1,050,090, 0000 | 987, 9094,000 | ${ }^{118,906,000}$ |  |
| 1808 | 1,070, 383,000 | 060, 406,000 | 100, 807,000 |  |
| 1000 | 1,000, 900,000 | 1,019,254,000 | 30,746,000 |  |
| 1910 | 1,104,44, 000 | 1,075, 298,000 | 20, 156, 000 |  |
| 1911 | 1,071,821,000 | $1,101,280,000$ 1,145929000 |  | 20,930, 0000 |
| 1913 | 1,11,94,000 | $1,195,008,000$ | 2 ib , ${ }^{\text {a }}$ |  |
| 1014 | i, 110,860,000 | - 048,091,000 | 161, 775,000 |  |
|  | 1,222, 627000 | 1,288, 277,000 |  | 88,780 |
| 1916 | 1,328,786,000 | 1, 125, 772,000 |  |  |
| 1017 | 1, $550,182,000$ | 1,087, 104,000 | --.......-.-- | 8s6,922,000 |
| 1010. | 1. $123,880,000$ | 1,372,863, 000 |  | 238,973,000 |
| 1920. | 1,508, 705,000 | 1,008,725,000 | 408, 040,000 |  |
| 1827 | 1,281, 8877,000 | 1812,411,000 | 418, 856,000 |  |
|  | 3,060, 541,000 | $\begin{aligned} & 1,403,285,000 \\ & \mathbf{1 , 5 0 1 , 7 1 0 , 0 0 0} \end{aligned}$ | $\begin{aligned} & 1,686818,000 \\ & 1,507,829,000 \end{aligned}$ | $\cdots$ |

Tably 97.-Spain-Imports and exports of merchandise, 1910-1983
[Source: Resumenes Mensuales de Is Estadistlea dal Comerclo de Espafia. See chart 88 ]


Tasles 97-Spain-Imports and exports of merchandise, 1910-198s-Continued

| Month |  | Imparts | Esparts | Expess |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Imports |  | Exports |
|  | 1916 |  | Pesel | Pesetat | Pesatas | Pesetas |
|  |  |  |  |  |  |
| February |  | 74, 105, 441 | 111, 797, 309 |  | 37, 691 |
|  |  |  |  |  |  |
| April |  | 92,500, 313 | 125, 650,256 |  | 38, 158,948 |
|  |  |  |  |  |  |
|  |  | 67, 987 , 2055 | 99, 682, 856 |  | 31, 695, 651 |
|  |  |  |  |  |  |
| August |  | 71, 174, 602 | 102, 153, 802 |  | 30,979, 290 |
|  |  |  |  |  |  |
| October- |  | 74, 785, 814 | 134, 480, 555 |  | 59,700,741 |
|  |  |  |  |  |  |
| Depambe |  | 84,900,540 | 107, 946, 211 |  | 2, 065,671 |
| 1017 |  |  |  |  |  |
| January |  | 74, 9004,374 | 129,838,874 |  | 54, 434, 800 |
| February |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| May |  | 50, 500,017 | 125, 61, 385 |  | 68, 102, 368 . |
|  |  |  |  |  |  |
| July- |  | 58, 154, 045 | 130, 898,729 |  | 72, 842,884 |
| August - |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  | 115, 304,037 |  | 62, 397, 360 |
|  | 1018 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| May |  | 51, 290, 980 | 67, 186, 918 |  | 15,894, 938 |
|  |  |  |  |  |  |
| July. |  | 51, 472,474 | 101, 511, 831 |  | 50, 039,457 |
|  |  |  |  |  |  |
| Beptember |  | 48, 402, 248 | 97, 701, 219 |  | 49, 238,973 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 1919 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| April |  | 69, 574, 746 | 109, 047, 703 |  | 39,472,957 |
|  |  |  |  |  |  |
| June |  | 84,871,822 | 115, 626,009 |  | 31,054, 177 |
|  |  |  |  |  |  |
| Auruat |  | 61, 821,779 | 102, 211, 229 |  | 40,289,448 |
|  |  |  |  |  |  |
| October |  | 87, 070,611 | 121,882, 329 |  | 34, 821, 818 |
|  |  |  |  |  |  |
| - |  | 71,703,811 | 111,344, 408 |  | 39,580, 502 |
| 1920 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| April......................................... $100,424,344$ 94,080, 633 . 6 , 343, 811 |  |  |  |  |  |
| May |  | 119, 825,038 | 81, 342, 846 | 38, 482192 |  |
|  |  |  |  |  |  |
| July. |  | 120, 711, 544 | ${ }^{80} 9008678$ | 37, 804, 808 |  |
| Augut |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| November |  | 115, 008,118 | 奖, 2288 | 20,070,470 |  |
| December |  | 147, 968,095 | 70,052, 328 | 77,904,307 |  |
| 1021 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| May |  | 125, 458, 188 | 61, 733, 614 | 76, 718, 874 |  |
|  |  |  |  |  |  |
| July ......- |  | 80, 981,715 | - $62,902,444$ | 83, 099, 271 | - |
| Augist. |  | 175, 463, 051 | 67, 421, 353 | 108,042,508 | - |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 97.-Spain-Imports and exports of merchandise, 1910-198s-Continued

| Month | Imports | Exports | Exoses |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Importa | Exporta |
| puary-.----.-.-.-1922 | Pestats 240, 271, 034 <br> 211, 481, 72 | Pestas <br> 111, 259,644 | Pesctas 129, 011, 390 | Peretar |
|  |  |  |  |  |
|  | 231, 481, 722 <br> 109, 566, 153 <br> 196, 967, 443 | 108, 644,628 105, 315, 143 |  | ------.-.-. |
|  |  | $\begin{aligned} & 92,5855,096 \\ & 100,838,27 \end{aligned}$ | $104,382,357$ |  |
| June---- | $\begin{aligned} & 196,067,48 \\ & 214,220,253 \end{aligned}$ |  | t12, 382026 | --.............. |
| July | 201, 816,757 | 117, 685,951 | $\begin{aligned} & 102,958,403 \\ & 21,716,079 \end{aligned}$ | -1........... |
|  | 332, 180,356 | 120, 404, 277 |  |  |
| Septemb | 289, 1880,150 24080 | 125, 752, 218 | 163, 435, 946 110, 068, 603 | $\cdots$ |
| November | 374, 676, 836 <br> 299, 102, 467 | $\begin{aligned} & 130,183,058 \\ & 139,230,538 \end{aligned}$ |  | --------------- |
|  |  |  | 24, 513, 778 150, 931,032 |  |
|  |  |  |  |  |
| January.- | 277, 688, 180 | 120, 017, 237 | 148, 670, 052 |  |
| March. | 282, $246,888.85$ | 141, 7101029 | $140,40,736$ $127,121,200$ |  |
| April. | 247, 978,190 | 118, 689,623 | 120, 388,567 |  |
| May | 253, 380, 518 | 139, 134, 639 | 114, 265, 879 | -- |
| Jung- | 214, 811,213 | - ${ }^{88,7856,074}$ | $116,031,239$ <br> 83 <br> 893 | .-.------ |
| August | 210, 638,215 | 115, 316,351 | 95, 221, 864 |  |
| Septemb | 239, 445, 618 | 116, 237, 851 | 128, 207 , 667 |  |
| October | $230,238,271$ $310,674,961$ | $163,450,384$ $188,851,201$ | 116, 788,887 141888 |  |
| Decamber | 806, 354,924 | 175, 402,730 | 130, 1052,194 |  |

1 Unrevised Agurea.
Table 98.-Spain-Imports and exports of gold and silver bullion and coin annually, 1900-1923
[Source: Resumenes Mensualea de ls Estedistica del Comerclo Exterior ©e Eepana]


Table 99.-Spain-Imports and exports of gold and silver, monthly, 1910-1985
[Source: Restimenes Mensualea de le Estedistica del Comerclo Exterior de Rspafia]

|  | Gold |  |  |  | Silver |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imparts | Exparts | Exess |  | Imports | Exports | Exerss |  |
|  |  |  | Imports | Exports |  |  | Imports | Exports |
| 1910 | $\begin{aligned} & \text { Pesetas } \\ & 2.000 \\ & 3,0 \mathrm{pm} \end{aligned}$ | Perear | Pestas | $\begin{gathered} \text { Pestar } \\ 24,400 \\ 1,200 \end{gathered}$ | Pesseas | Pextat | Perdot | Pesetar |
| צebuary |  | 50, 400 |  |  |  |  |  | 492,318 |
|  |  | 10, 18.0 | 491,280 |  | 442, 080 | 1,074,153 |  |  |
| April----------------- | 35, 000 | 16,040, | 20.960 |  | 410,300 | 1,288, 839 |  | 858, 689 |
| May--------------------- | 10, 800 |  | 10, 800 |  | 545, 170 | 1,140, 637 |  | 696, 307 |
|  | 16, 4200 | 32, 280 |  | 15,000 | 178, 650 | 1,078 049 |  | 801, 399 |
| July | 14,400 | 23,680 |  | 69,680 | 113,285 | 1, 2094,84 |  | ${ }^{9011,599}$ |
| August------------ | 7, 200 | 8, 68. | 7,200 |  | 64, 180 | 1, 1242,035 |  | 1,397, 146 |
| October------.----- | 21, 800 | 30,720 |  | $0{ }^{2}$ | 87,000 | 1,075,000 |  | 1,888, 990 |
|  | $\frac{22,000}{18,000}$ | 18880 | 23 | 20,720 | 157, 100 | 1,571, 100 | ---------- | 1, 41, 000 |
| Novemberr-.---------- |  | 88,720 |  |  |  |  |  |  |
| ${ }^{6} 1011$ |  |  |  |  |  |  |  |  |
| January | 38000 |  | 82800 | 2000 | $\begin{gathered} 69 \\ 162 \\ 1620 \end{gathered}$ | 880, 120 |  | 916,000 |
| February |  | 12.800 |  |  |  |  |  | 671,920 |
|  | 84, 8800 | \% 36.460 | 80, 400 | 3.760 | 217,760 | 1, 220,960 |  | 1, $1,887,200$ |
| May | 39,600 | 34.560 | 5, 010 |  | 61, 125 |  |  | - 9868080 |
|  |  |  | 21, 7200 | ---- | 12, 180 | $1,004,500$ |  |  |
| July- | $97,200$ | 88, 81037,120 |  |  | 60, 20.20 | 1,314.010 | ---------- |  |
| September- |  |  | ------ | $19,120$ |  | 1, 2 271, 8730 | - | 1, $1,202,980$ |
| October-- | 7, 200 | 30, 300 |  |  |  |  |  | $\begin{array}{r} 902,530 \\ 1,1150 \\ 1,1020,710 \end{array}$ |
| November. | $\begin{aligned} & 21,600 \\ & 7,200 \end{aligned}$ | 4, 5080 | $240$ | $\mid---2,880$ |  | $\begin{aligned} & 1,340,880 \\ & 1_{1}, 802,210 \end{aligned}$ | ------ |  |
| 1912 |  |  |  |  | $\begin{array}{r} 34,330 \\ 1,020,200 \end{array}$ |  |  |  |
| January <br> Fobruary | $\begin{aligned} & 10,800 \\ & 25,200 \end{aligned}$ | 7.00 | $\begin{aligned} & 10,800 \\ & 17.580 \end{aligned}$ | -------- | 50,65078.620 |  | ------------ | ${ }^{\text {c }}$ 901, 730 |
|  |  |  |  | --------- |  |  |  | 1,218,970 |
| March-----.---------- | 938, 000 | - 30.300 |  |  |  | $1,070,110$ | ----------- |  |
| May.....-.-......- |  | $\begin{array}{r}10,240 \\ 4.800 \\ \hline\end{array}$ | - |  | $\begin{aligned} & 1,890 \\ & 88,790 \end{aligned}$ |  |  |  |
|  | 14, 40010,800 |  | 20,400 | 10, 240 | - 220, 010 | ${ }^{925} 560$ | --...----- | 699,040 |
|  |  | 40,96080960 |  | $\left\|\begin{array}{r} -28,500 \\ 30,100 \end{array}\right\|$ |  | 1,250,008 | --------- | 803,000 840,229 |
| (eptomber------------- | 14,400 |  | --7, 160 |  | \% 403,780 | 1,250,003 | ---------- |  |
|  |  |  |  | 8, |  |  |  | 1,293, 653 |
| November-..-.-.----- | $\begin{aligned} & 28,800 \\ & 10,800 \end{aligned}$ |  | $\begin{aligned} & 3,200 \\ & 4,400 \end{aligned}$ |  |  |  |  |  |
|  |  | $\begin{aligned} & 25,800 \\ & 6,400 \end{aligned}$ |  |  |  | 1,671,040 |  | 1,269, 259 |
| 1018 | 14,400 |  |  |  |  |  |  |  |
| January <br> February |  | 5. 5120 | $0,2800$ | ------------ | 336, 474 | $\begin{aligned} & 1,764,950 \\ & 753,485 \end{aligned}$ | -...-.----- | $\begin{aligned} & 1,428,478 \\ & 620,230 \end{aligned}$ |
|  | 25,200 |  |  |  |  |  |  |  |
|  |  |  | 8,320 |  | 146, $588{ }^{+}$ | 3, 453, 770 | ---------- |  |
|  | 14,400 |  | --18, $8^{\text {a }}$ | 12, 100 | ${ }_{127,530}^{148}$ | 1,997, 500 |  | 1,818,978 |
|  |  |  |  | 11, 620 | 16a, 320 | 8,095, 190 |  | 2,934,870 |
| July | 25, 200 | 810810 |  | 285, 40 | 127, 680 | 1, 110, 750 |  | 988,090 |
| - Augurt Beptember | 14, 180 | -67, ${ }^{600}$ |  | 120,880 | 108,750 | 1,256,770 |  | 1,177, ${ }^{\text {a }}$ |
| Octoher- | 25,200 | 122, 530 |  | 87, 320 | 121,200 | 1, 005 , 502 |  | 1, 884, 212 |
| November- | 10, 800 | 21,840 |  | 11, 040 | 228, 200 | 2,000, 110 |  | 1,774,710 |
| December. | 18,000 | 65, 200 |  | 47, 200 | 1, 1221,170 | 1,800, 520 |  | 288, 360 |
| 1014 |  |  |  |  |  |  |  |  |
| Jmaury |  | 28, 820 |  | 20,820 | 81,880 | 1,273, 670 |  | 1,192,200 |
| February | 80, 400 | 6, 400 | 88,000 |  | - 137, 140 | 78, 29 |  | 680, 754 |
| Arril | - ${ }^{6,802}$ | 128,000 |  | 117,200 | 228, 220 | 2,509, | 0, 800 |  |
| May. | \% 5200 | 6,400 | 18,800 |  | 145, 930 | 527, 148 |  | 381, 158 |
| juno.. | 1020800 |  |  | 10,800 | 2088800 | ${ }^{878} 78$ |  | ${ }^{6729} 871$ |
| August. |  | 5, 120 |  | 612 | ${ }^{0} 4.330$ |  |  | 835, 100 |
| Eeptemb | 520.000 | 2,000 | 512.00 |  | 282, 600 | 87, 73 |  |  |
| Novem |  |  | 9. |  | - 5336 |  | 221, |  |
| Decomber.-.-.-. | 4,818,450 |  | 4,818,480 |  | 7, 300 | 2, 749, 680 |  | 2, 677, 270 |

Table 99.-Spain-Imports and exports of gold and silver, monthly, 1910-10esContinued

|  | Gold |  |  |  | Bilver |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports | Exports | Excess |  | Imports | Exports | Excees |  |
|  |  |  | Imports | Exports |  |  | Imports | Exports |
| 1915 | Pesters | Pesctas |  | Pestas | Pesctas | Pesctat | Pesetat |  |
| January | 7, 200, 000 |  | 7, 200, 000 |  | 48,392 | 365, 685 |  | 317,203 |
| February | 4, 53, 240 |  | 4,53,240 |  | 657, 735 | 3388.608 | 349, 007 |  |
| March. | $4,414,880$ 5,760 | 39,040 19,200 | 4, 375, 840 |  | 446, 910 | 1,308,480 | 27,430 |  |
| May. | 37, 470,760 | 19,200 16,000 | 37, 463, 040 | 13, 440 | 44, 751 | 1,341, 108 |  | $1,2904,855$ 667,680 |
| June. | $5,005,840$ |  | B, 005,840 |  | 82.420 | 1,336, 287 |  | 1,262, 817 |
| July | 496, 200 | 64,000 | 432, 200 |  | 91, 000 | 313, 672 |  | 1, 221,772 |
| August | 14,578, 080 | 62,720 | 14, 514, 360 |  | 122, 170 | 116, 888 | 8,582 |  |
| September | 27,093, 100 | 14,720 | 27, 078,3880 |  | 5, 044 | 272, 013 |  | 200,000 |
| October-- | 65, 216, 860 | 48,000 | 63, 168,880 |  | 3, 297, 086 | 500, 825 | 2,791, 161 |  |
| Novernber | 48,249,760 |  | 148, 249, 760 |  | 2,710,968 | 1,234, 250, | 1, 476, 718 |  |
| Decamber. | 22, 505, 820 | 28,800 | 22, 477, 120 |  | 11, 191, 665 | 8, 475,836: | 2,716,700 |  |
| 1016 |  |  |  |  |  |  |  |  |
| January |  |  |  |  | 4.600, 740 | 310,917 | 4, 280, 823 |  |
| February | 53, 334, 640 |  | 53, 334,640 |  | 3,328, 200 | 354, 407 | 2,973,788 |  |
| March. | 18,750, 134 |  | 18,750, 134 |  | 1, 108, 463 | 1, 126, 3009 |  | 17,840 |
| April. | 27, 055,400 |  | 27, 955,400 |  | 203, 772 | $1,453,031$ |  | 1,231,16\% |
| May. | 31,881, 500 | 23,040 | 31, 858,480 |  | 046, 790 | 221, 887 | 724,905 |  |
| June | 34, 858, 700 | 51,840 | 24, 804, 860 |  | 271, 240 | 1, 130.921 |  | 80,681 |
| July. | 38, 43, 027 | 30,480, | 38,396, 547 |  | 392,823 | 1,659,690 |  | 1,266, 807 |
| August. | 70, 375, 355 | 8, 120 | 70,370,225 |  | 806, 010 | 5, 094, 282 |  | 4,407,372 |
| Septeraber | 23, 159,681 | 2,560 | 25, 157, 121 |  | 232, 004 | 1,041, 008 |  | 800, 290 |
| October. <br> November | 11, 48, 595 | 14,080 | 11, 470, 515 |  | 164,520 | 59, 542 | 104, 978 |  |
| December. | 41, 083,175 |  | 41,983, 175 |  | 740, 847 | 1, 47, 40, |  | $\begin{array}{r} 1,288,774 \\ 706,648 \end{array}$ |
| 1917 |  |  |  |  |  |  |  |  |
| January | 40, 330, 251 |  | 40, 830, 251 |  | 232,573 | 797, 850 |  | 404,977 |
| February | 32, 007784 |  | 32, 2077 |  | 150,800 | 456, 282 |  | 305, 482 |
| March. | 30, 857, 962 |  | 30, 657, 982 |  | 178, 946 | 700. 060 |  | 583, 134 |
| April. | 32, 671, 126 |  | 32, 671, 126 |  | 200,607 | 1,395,758 |  | 1, 105, 151 |
| May | 52.884 .670 | 10,240 | 52, 854, 430 |  | 28,730 | 688.250 |  | 659, 528 |
| June. | 93, 789, 12 |  | 93, 789, 212 |  | 11,500 | 837, 697 |  | 628. 197 |
| Jniy--1 | 119,978, 1100 |  | 119,976,700 |  | 131, 433 | 755, 820 |  | 023, 987 |
| September | 113, 5708,470 | 720 | 113,407,750 |  | 117, 625 | 2.002 .840 |  | 2 485, 015 |
| October. | 10, 780, 500 | 3,600 | 10, 778, 900 |  | 88, 7400 |  |  | 2, 144, 201 |
| November | 2, 228,780 |  | 2,623, 790 |  | 68, 640 | $1,171,350$ |  | 1, 108, 210 |
| December. | 3,600, 2005 | 720 | 3, 608, 498 |  | 106, 501 | 1, 122,045 |  | 816, 141 |
| 1918 |  |  |  |  |  |  |  |  |
| Jepuary | 1, 163, 250 |  | 1,103,250 |  | 127,840 | 008.170 |  | 508, 200 |
| February | -87, 1201 | 3, 800 | 182, 520 |  | 67, 8\% | 911, 100 |  | 843, 221 |
| March. | 671,010 |  | 671,040 |  | 37,050 | 856.340 |  | 618,290 |
| April. |  |  |  |  | 37,570 | 1, 003, 829 |  | 988, 250 |
| Muy | 8.000 | 18.000 |  | 10.000 |  | 908, 110 |  | 908, 110 |
| Jung-.. | 19,050 | 3,000 | 15,450 |  |  | 517,760 . |  | 517,780 |
| Aug.at. | 12,854,000 | 16, 200 | 12, 837, 500 |  | 2,000 | 1, 196, 740k |  | 1. 194.746 |
| September | 25, 300 | 3200 |  | 2,200 | 12,500 | 2,647, 172 |  | 2,64,302 |
| October... |  |  | 23 |  |  | 12 L . 600 |  | 128, 000 |
| November. |  | 1,440 |  | 1,440 |  | 128,767 |  | 126,767 |
| December. |  | 123, 129 |  | 123, 120 |  | 1,117,077 |  | 1.117,077 |
| 1919 |  |  |  |  |  |  |  |  |
| January. |  |  |  |  |  | 1,020,530 |  | 1,000, 530 |
| February |  | 228800 |  | 221, 800 |  | 300, 820 |  | 260, 820 |
| March. | 848. | 01, 200 |  | 90, 352 | 28, 800 | 515, 8200 |  | 468, 建1 |
| April. |  | 57, 000 |  | 57, 000 | 73,380 | 765, 170 |  | 601.500 |
| May. |  | 11,520 |  | 11,529 |  | 353, 450 |  | 736. 450 |
| Jume. |  | 81, 320 |  | 31, 320 | 24, 180 | 237, 2000 |  | 238.120 |
| July-.. | 73, 921,000 | 67, 520 | 73, 833, 430 |  | 42.640 | 47,550] |  | 4,919 |
| August.... | 52, 038,800 |  | 52, 038, 800 |  | 28.840 | 7\% | 28072 |  |
| Septeraber | 19, 6103,5200 |  | $19.000,520$ |  | 1. 824 | 308, 530 |  | 204, 604 |
| October | 5,000, 000 | 28,980 | 4,973, 000 |  | 14,120 | 37,670 | 124,460 |  |
| November | 33, 50, | 112, 2100 | 3, | 11,200 | 111, 191 | 2,473, 440 |  |  |

Table 99.-Spain-Imports and exports of gold and silver, monthly, 1910-1985Continued


2 No figares pobliahed.
2 Unrevised figures.
Tabli 100.-Spain-National funded debt, 1900-1928
[Bopurce: Anyurio Eletadistioo de Espalia]


Table 101.-Spain-Receipts and expondiures, 1909-1bes
[Source: Anmario Estadistico de Espaifa. 000 omitted]
RECEIPTS

|  | Direct taxas | Indirect taxes | $\begin{gathered} \text { State } \\ \text { monopo- } \\ \text { lies ets } \end{gathered}$ | Feea, etc. | Mincellaneous | Total recelpts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pesetas | Pesetas | Pesetos | Pestas | Pentas | Peselay |
| 1009 | 457, 398 | 375, 016 | 182,770 | 10,020 | 81, 385 | 1, 1055,870 |
| 1010. | 460,391 | 398, 363 | 207,496 | 18, 356 | 86, 634 | 1, 171,240 |
| 1911 | 475, 105 | 408,439 | 198, 834 | 21;800 | 73, 989 | 1,177, 174 |
| 1912 | 488, 129 | 415,383 | 207, 808 | 23,363 | 27,047 | 1,181,724 |
| 1913 | 496. 117 | 478, 272 | 311, 572 | 20, 710 | 187, 260 | 1,504, 061 |
| 1914. | 383, 567 | 435, 661 | 308,270 | 19, 819 | 05, 984 | 1, 243, 002 |
| 1915 | 481,024 | 363, 882 | 304, 283 | 116, 760 | \$11.474 | 1, 916, 108 |
| 1916. | 617, 948 | 381, 311 | 332,283 | 90, 027 | 425, 740 | 1,750,904 |
| 1917 | 840, 571 | 778, 128 | 348,361 | 43,778 | 050, 039 | 2, 260, 877 |
| 1918. | 573, 238 | 380, 502 | 349, 655 | 88,825 | 442,673 | 1,820, 892 |
| 1919 (arst quarter) | 143,996 | 116,520 | 80, 688 | 27,425 | 297,674 | 683,023 |
| 1010-20 | 631, 876 | 633, 067 | 377, 242 | 100,735 | 1,377, 631 | 8, 020, 651 |
| 1020-21 | 710,605 | 685, 214 | 306, 734 | 148, 552 | 887, 237 | 2,798, 621 |
| 1921-22. | 816,823 | 845, 104 | 501, 330 | 122,383 | 2,072,228 | 4,357,874 |
| 1922-23. | 888, 717 | 945, 678 | 545, 404 | 51, 012 | 511,288 | 2,952,972 |

EXPENDITURES

|  | State | War | Navy | Governzneat | Pablit in. struction, Treasury and Labor | Total errpenditures | Deaclt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pesclat | Peatas | Pesuay | Pestat | Puetas | Pcestor | Peretas |
| 1909. | 250,000 | 64,875,000 | 273,000 |  | 731,000 | 66, 129, 000 | 64. 063,480 |
| 1910 | 200,000 | 64,010,000 |  |  | 875,000 | 65, 085,000 | 53, 913,760 |
| 1911 | 667,000 | 73, 759,000 | 1,920,000 |  | 679,000 | 77,025,000 | 76,847.828 |
| 1912 | 2,309,000 | 84,050,000 | 1,872,000 |  | 722,000 | 89, 013,000 | 87,851, 276 |
| 1913 | 2,089, 000 | 101,009,000 | 1,436,000 | 181,000 | 3, 523,000 | 108, 18,000 | 107, 131,060 |
| 1914 | 1,768, 000 | 134,054,000 | 2,226, 000 | 1,153,000 | 3, 805, 000 | 143, 006, 000 | 142, 662,908 |
| 1915 | 1,122,000 | 134, 840,000 | 1,098,000 | 745,000 | 3, 586, 000 | 143, 201, 000 | 143064.697 |
| 1916 | 12, 468,000 | 131, 773, 000 | 1,816, 000 | 1,300,000 | 2,942,000 | 150, 005, 000 | 148, 248, 196 |
| 1917 | 4, 823,000 | 103, 271,000 | 1, 014,000 | 845, 000 | 8,030, 000 | 113, 388, 000 | 111, 122, 173 |
| 1918. | 8,534,000 | 111,802,000 | 1,689, 000 | 973, 000 | 2,963,000 | 125, 911, 000 | 124. 121, 108 |
| 1919 (tist quarter) ${ }^{\text {a }}$ |  | 20, 248,000 | 471,000 | 183,000 | 710,000 | 30,612, 000 | 29,945, 977 |
| 1919-20...-mi* | 6,701,000 | 130,454,000 | 1,829,000 | 1,062,000 | 2,901,000 | 141,947, 000 | 128, 986,440 |
| 1920-21 | 9, 883, 000 | 173, 047,000 | 3, 22, 000 | 2,347,000 | 288\%,000 | 101, 206, 000 | 108, 437,479 |
| 1921-22 | 7,304,000 | 502, 005,000 | 4,003,000 | 2,039,000 | 3,012,000 | 519, 053, 000 | 515, 325, 120 |
| 1920-20. | 54, 803,000 | 447, 131,000 | 4,900,000 | 2,851,000 | 6,908,000 | 520, 782, 000 | 617,820,088 |

1 Fiseal year was changed trom calendar year to year ending Mar. 11; later wat changed to year coding June 30. Thas year $1022=24$ was from Mar, 31, 1928, to June 20,1024 .

## GWEDEN

Table 102．－Swedish Riksbank，monthly，1915－1985
［Source：Btataments of the Everiges Rilsbbank．Find of month； 000 omitted．See chart 00］

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Month \& Gold \& $$
\begin{array}{|c|}
\hline \text { Balaneess } \\
\text { ebrood } \\
\text { and } \\
\text { forelgn } \\
\text { demand } \\
\text { bills }
\end{array}
$$ \& $$
\left|\begin{array}{c}
\text { Govern- } \\
\text { ment } \\
\text { secturities }
\end{array}\right|
$$ \& $$
\begin{gathered}
\text { Yoans } \\
\text { and } \\
\text { discounts }
\end{gathered}
$$ \& $$
\begin{gathered}
\text { Note } \\
\text { clrouls } \\
\text { alon }
\end{gathered}
$$ \& Deposts－2 <br>
\hline 1916 \& Kroner \& Kroner \& Кголот \& Kronor \& Krotar \& Kroncr <br>
\hline Jambary \& 108， 592 \& 15，350 \& 27，878 \& 188， 897 \& 257， 479 \& 74，800 <br>
\hline February \& 113， 186 \& 17， 394 \& 32， 488 \& 106， 220 \& 778，905 \& 59，883 <br>
\hline April \& 112， 220 \& ${ }_{23,708}$ \& 81， 8.53 \& 200， 285 \& 278，377 \& 70，46 <br>
\hline May． \& 113，488 \& 19，083 \& 81， 255 \& 180， 713 \& 275， 511 \& 65， 513 <br>
\hline June \& 113 451 \& 28，689 \& 40， 321 \& 200，423 \& 203， 321 \& 73， 182 <br>
\hline August \& 113，401 \& 34,749

41,575 \& 60，086 \& －176， 362 \& 2782， \& <br>
\hline Beptember \& 113，416 \& 4，207 \& 66， 302 \& 188， 821 \& ${ }^{309} 534$ \& 62，920 <br>
\hline October \& ${ }^{113} 3788$ \& 48，222 \& 64， 005 \& ${ }^{170} 1089$ \& 888，719 \& 75， 313 <br>
\hline Decembiber－－－．－．－． \& 113， 29 \& 61，034 \&  \& 288，${ }^{181}$ \& 327,880 \& 80，
128， 515 <br>
\hline 1018 \& \& \& \& \& \& <br>
\hline Jspary \& 142， 278 \& 4，786 \& 40，600 \& 182， 537 \& 200， 507 \& 108.418 <br>

\hline Matruay \& | 160,908 |
| :--- |
| 180 |
| 183 | \& 47， 151 \& 60， 688 \& 162， 103 \& 303,587

231509 \& <br>
\hline April \& 164， 931 \& 66，406 \& 7， 210 \& 169， 884 \& 322，302 \& 102， 515 <br>
\hline May－ \& 186， 311 \& 41， 555 \& 73， 945 \& 161， 564 \& 228，812 \& 85， 684 <br>
\hline Jane． \& 188， 131 \& 41,681 \& 78，091 \& 173，484 \& 363 775 \& 91，795 <br>
\hline August \& 185，750 \& 49，489 \& 88,104
88,34 \& 174，${ }^{184}$ ， 719 \& 845， 847 \& 113，${ }_{6}^{1022}$ <br>
\hline Beptember \& 170，047 \& 62， 216 \& 67， 677 \& 191， 518 \& 388， 885 \& 74，479 <br>
\hline October \& 177，952 \& － 49,764 \& ${ }_{68}^{6850}$ \& 200， 513 \&  \& 90， 771 <br>
\hline December \& 183， 620 \& 30，070 \& 62，911 \& 204，931 \& 417， 817 \& 148， 20 <br>
\hline 1917 \& \& \& \& \& \& <br>
\hline Jamuary \& 188， 682 \& 易723 \& 68， 877 \& 200，324 \& 876，189 \& 100， 238 <br>
\hline Februar \& 191， 874 \& 33，763 \& 67， 875 \& 189， 000 \& 888 \& <br>
\hline April \& 104，281 \& 20，450 \& 88，715 \& 271，007 \& 434， 383 \& 124，178 <br>
\hline May \& 202， 41 \& 18，742 \& 88， 72 \& 275，492 \& 488， 838 \& 121，310 <br>
\hline Juns \& 202701 \& 21， 938 \& 91， 152 \& 248，882 \& ${ }^{468,081}$ \& 113，838 <br>
\hline Aury \& 204，${ }^{638}$ \& 23，718 \& 69， 602 \& 279， 101 \& ${ }_{4}^{44,} 4188$ \& 144， 837 <br>
\hline Eeptembe \& 214，554 \& 22，730 \& 51， 537 \& 812,749 \& 520， 062 \& 90，825 <br>
\hline Octobar \& 223，404 \& 19，264 \& 100， 628 \& 263， 738 \& 622， 832 \& 101，001 <br>
\hline November \& 8， \& 18，362 \& 114，961 \& 208，400 \& ${ }^{5035} 001$ \& 130， 8000 <br>
\hline 1918 \& \& \& \& \& \& <br>
\hline 号 \& ${ }_{225}^{258,258}$ \& 24，884 \& －82，850 \& ${ }^{302}, 000$ \& ${ }^{804,602}$ \& 130，367 <br>
\hline March \& 268，071 \& 28，204 \& \& 893， 215 \& ${ }^{630} 0$ \& 127， 122 <br>
\hline April． \& 257，080 \& ${ }^{31}$ 243 \& 69， 910 \& 345， 742 \& 614 \& 90， 001 <br>
\hline Mays \& ${ }^{25878}$ \& \％ 2 ， 329 \&  \& ${ }_{3 \times 8,180}^{33,150}$ \& ${ }_{607} 898$ \& 10， 816 <br>
\hline July． \& 257， 388 \& 35， 269 \& 05， 000 \& 322 \％73 \& 64， 188 \& 88，092 <br>
\hline August． \& 203，306 \& 35， 890 \& 106， 803 \& 418， 45 \& 688， 683 \& 62， 202 <br>
\hline Oeptamber \& 273，003 \& 37， 884 \& 115， 513 \& 461， 483 \& 781,678 \& 120， 830 <br>
\hline October－ \& 274，458 \& 45， 337 \& 106， 1218 \& － 431,169 \& 761， 034 \& 131． 14.8 <br>
\hline December． \& 285， 560 \& 45，687 \& 54， 18 \& 531，313 \& 818， 21 \& 134，103 <br>
\hline 1010 \& \& \& \& \& \& <br>
\hline Jananry． \& 270，700 \& 60， 759 \& 54， 818 \& 439，178 \& 720 \& 108，000 <br>
\hline  \& \& 70， 3 \％ \& 54，618 \& ${ }_{4}^{415,415}$ \& 721，648 \& <br>
\hline April \& 287， 44 \& 缷， 318 \& 54，04 \& 472， 740 \& 722179 \& 110， 822 <br>
\hline May． \& 290，013 \& 68， 210 \& 51， 815 \& 488，934 \& 702，670 \& 119，750 <br>
\hline Junly． \& 288， 348 \& 60， 600 \& 52,576

54.651 \&  \& | 777,050 |
| :--- |
| 683 |
| 135 | \& 124， 807 <br>

\hline Aupuist \& 800， 388 \& 62， 219 \& 83， 414 \& 453， 717 \& 694， 161 \& 138， 605 <br>
\hline Bepremb \& 300，088 \& ${ }^{50,1839}$ \& 81，90 \& 507， 096 \& 761，067 \& 128，370 <br>
\hline Ovam \& 200， 2055 \& 80， 689
88074 \&  \& 480， 817 \& 732，812 \& 12，${ }^{185}$ <br>
\hline  \& 201， 150 \& \％，750 \& 43，359 \& 621，736 \& 747， 662 \& 213， 725 <br>
\hline
\end{tabular}

${ }^{1}$ Not Imeluding dopolle hiabnisice to forefor baike．
61142－25t－8Es 9，vOL II－26

Tablim 102.-Swedish Riksbank, monthly, 1915-1925-Continued

| Month | Gold | Balances abroad and forelgn demand bllls | Government secturlties | $\begin{gathered} \text { Loans: } \\ \text { sind } \\ \text { discounts } \end{gathered}$ | Note elrcula tion | Deposits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1920 | Kronor | Eronot | Kronor | Kronar | ITronor | E'tonor |
| January. | 271,476 | 45,046 | 48,348 | 553, 276 | 673, 255 | 196.014 |
| February | 285, 244 | 40,184 | 48,320 | 571, 530 | 685, 536 | 184. 258 |
| March. | 261,062 | 28,470 | 45,877 | 727,400 | 741, 622 | 377, 810 |
| April. | 261,011 | 30,013 | 45, 444 | 711, 771 | 718, 273 | 270, 247 |
| May | 251,013 | 29,766 | 45, 444 | 696, 890 | 708,201 | 271, 174 |
| June. | 261,070 | 38, 834 | 45, 899 | 723,435 | 736,458 | 280,386 |
| July. | 231, 201 | 33,389 | 48,351 | 692, 408 | 724,782 | 253,785 |
| August | 281, 357 | 61,262 | 45, 351 | 684,058 | 742, 192 | 238, 372 |
| September | 279, 813 | 44,443 | 45, 851 | 702,097 | 779, 767 | 208,299 |
| October- | 232,410 | 64, 181 | 44, 934 | 633,370 | 772, 908 | 177.838 |
| November | 282,353 | 90, 510 | 33,342 | 585, 288 | 752,838 | 182.691 |
| December | 281,777 | 73,561 | 12,696 | 588,415 | 789,877 | 171,818 |
| 1821 |  |  |  |  |  |  |
| Jenuary. | 281, 865 | 53, 223 | 12,696 | 508, 210 | 672, 607 | 224,057 |
| February | 281,786 | 53, 511 | 12, 696 | 627, 055 | 687, 623 | 228,351 |
| March | 281,711 | 46,398 | 12,696 | 644, 239 | 716,876 | 246,770 |
| ${ }^{\text {April. }}$ | 281, 853 | 52, 180 | 12,696 | 674,756 | 680, 500 | 191,697 |
| May | 281,570 | 52,809 | 14,003 | 827, 938 | 651,076 | 177,681 |
| June | 281,424 | 50,764 | 16, 014 | 527,190 | 678,810 | 156, 698 |
| July | 280,335 | 42,640 | 13, 134 | 513,028 | 629, 414 | 177, 174 |
| Augrast | 284, 880 | 33,403 | 19,768 | 500,854 | 632,437 | 152, 097 |
| Septemb | 275,948 | 38, 214 | 20,681 | 494,142 | 672,396 | 113,448 |
| October- | 276,479 | 33,139 | 20, 754 | 497,883 | 850,345 | 128, 361 |
| November | 274,986 | 36,970 | 20,720 | 626,794 | 628,061 | 187. 659 |
| December | 274,743 | 55,351 | 16,498 | 638,903 | 627,609 | 331,350 |
| 1022 |  |  |  |  |  |  |
| January | 274,455 | 58,919 | 15,888 | 601,731 | 503,039 | 227.298 |
| February | 274,403 | 48,311 | 17,440 | 617,022 | 579,077 | 245, 762 |
| March | 274, 355 | 37,018 | 63,376 | 503,788 | 626,073 | 311,468 |
| April. | 274, 328 | 45, 800 | 72.208 | 526,480 | 588,211 | 300, 560 |
| May | 274,107 | 38, 682 | 72.184 | 525,409 | 567, 378 | 298.088 |
| Juns. | 273,980 | 38, 812 | 72,485 | 484, 182 | -585,437 | 246,524 |
| duly. | 273,928 | 32. 804 | 72,843 | 465,404 | 550,973 | 243,390 |
| August | 273,801 | 32,913 | 73,045 | 444,724 | 558, 510 | 212, 517 |
| Septemb | 273, 616 | 33,489 | 73,988 | 445,258 | 004,016 | 180, 196 |
| October | 273,505 | 38, 372 | 73, 911 | 415,823 | 668, 517 | 178, 141 |
| November | 274,033 | 49,708 | 92,819 | 309.087 | \$75, 313 | 191, 413 |
| December. | 273,084 | 120,020 | 92,648 | 622,742 | 884, 191 | 280,400 |
| $19 \%$ |  |  |  |  |  |  |
| January | 273, 060 | 72,348 | 122,828 | 419,8** | 520, 259 | 315,451 |
| February | 273, 875 | 64, 4.51 | 122,828 | 357,912 | 537, 765 | 285,674 |
| Msrch | 273, 508 | 59,410 | 136.421 | 422,754 | 588,900 | 250.254 |
| April | 273,438 | 44,313 | 148,310 | 375,281 | 568,534 | 240.179 |
| May | 273,234 | 36,129 | 148,066 | 348,817 | 538,830 | 224,426 |
| June | 273,057 | 42,802 | 151, 120 | 343,020 | 580,211 | 18,405 |
| July.-- | 272,860 | 42,339 | 143,866 | 279,098 | 543, 329 | 140,485 |
| August | 272,752 | 86,461 | 130, 118 | 271, 570 | 500, 944 | 127,002 |
| September | 272, 558 | 49,74 | 135, 720 | 209, 790 | 600, 168 | 117,407 |
| October. | 272,324 | 36, 175 | 120.410 | 328, 311 | 560,480 | 184,128 |
| November | 272,112 | 37, 329 | 104,797 | 384, 803 | 5e7,881 | 162, 124 |
| December | 271,830 | 4.3, 255 | 115,605 | 407,853 | 576,200 | 205,320 |
| 1904 |  |  |  |  |  |  |
| January | 277,687 | 39,782 | 88, 101 | 396, 110 | 509, 202 | 232, 147 |
| Pebruary | 271,408 | 29,112 | 84097 | 389, 560 | 522,665 | 197, 823 |
| March. | 271,235 | 23,568 | 91,225 | 421, 170 | 657, 179 | 201, 202 |
| April | 284, 989 | 29,344 | 76,038 | 441, 407 | 621,790 | 200, 712 |
| May. | 247, 514 | 21,801 | 62, 290 | 498,508 | 522,732 | 254.601 |
| June. | 247,320 | 21,463 | 56,724 | 494,008 | 557,489 | 203,825 |
| July. | 249,201 | 67.741 | 56, 158 | 368, 858 | 515.4P0 | 148, $2 \times 2$ |
| August | 250,858 | 59.490 | 56, 114 | 491.371 | 528.184 | 148,923 |
| Septamber | 248, 701 | 56,725 | 55.876 | 303, 146 | 504.222 | 129,150 |
| October. | 240, 155 | 63,465 | 56.123 | 387.874 | 5386.421 | 123.238 |
| Novernber | 238,905 | 51, 702 | 54, 302 | 378, 944 | 587,085 | 132,706 |
| December. | 236,070 | 94, 813 | 80,001 | 505, 275 | 577, 202 | 208, $7 \times 7$ |
| 1025 |  |  |  |  |  |  |
| Janurry | 234,470 | 9281 | 50,207 | 441.114 | 482.577 | 277.240 |
| February | 234,077 | 97, 980 | 55, 128 | 438, 745 | 408.255 | 788, 717 |
| March.. | 233, 732 | 67.714 | 54,422 | 48.511 | 520.794 | 235, 060 |
| April | 203,404 24.385 | 60,843 88,000 |  | 407,977 439,847 | 488,242 400.500 | 255130 212 |
| May-- | 24,385 | 0,002 | S3, 187 | 43,817 | 40.3.500 | 24, 0.0 |

Tables 103.-Swëdieh Riksbank, annually, 1911-1985
[Source: Annasl reports of the Averigea Ritrbank. Yearly averages. 000 omitted]


Table 104.-Sweden-Private banks, annually, 1911-1984
[Bource: Annual reports of the Sverigas Rilksbank. Yearly averages. 000 omitted]

| Year | Domes tic bills | Loans securities, mardise, etc. | Ad- <br> vances <br> ope <br> current <br> noo <br> connte <br> (over- <br> drafts) | Total domesbilla, loans, and vancea | $\begin{aligned} & \text { Foreign } \\ & \text { bill } \\ & \text { and } \\ & \text { net } \\ & \text { foreige } \\ & \text { bal- } \\ & \text { ances } \end{aligned}$ | $\begin{aligned} & \text { Ciro } \\ & \text { (trangfer } \\ & \text { ao } \\ & \text { countos) } \end{aligned}$ | De posits on current as count |  | Total deposits and Giro accounts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kron | Kron | Kro |  | Kro | Kro | Kro | Kro | 2 Kro |
| 1911 | 588, 034 | 1, 032, 218 | 478,214 | 2,091, 406 | 33, 814 |  | 95, 165 | 905, 601 | 1,209,700 |
| 1912 | 578, 388 | 1,027, 772 | 469, 395 | 2, 143,535 | 15, 951 | 160, 531 | 52, 578 | 1,035, 044 | 1, 249, 151 |
| 1913 | 857, 692 | I, 188, 082 | 608, 178 | 2, 251,853 | 9,688 | 188, 795 | 85, 524 | 1,085, 458 | 1,310,777 |
| 1914 | 658, 614 | 1, 250, 70\% | 618, 917 | 2, 356, 234 | 12, 658 | 181. 675 | 68,608 | 1, 143, 628 | 1, 398,911 |
| 1915 | 657, 258 | 1, 310,281 | 619,201 | 2, 488,774 | 81, 750 | 271, 681 | 84, 865 | $1,178,549$ | 1,636,098 |
| 1916 | 773, 628 | 1, 407, 081 | 687, 067 | 2,748, 675 | 198, 708 | 401, 520 | 116, 634 | 1, 206, 189 | 1, 814, 339 |
| 1917 | 930, 658 | 1, 677,410 | 728,844 | 3, 338, 912 | 350, 353 | 614, 239 | 146, 132 | 1, 617,461 | 2,277, 889 |
| 1918 | 1, 305, 456 | 2,079,512 | 1,180, 196 | 4,565, 102 | 351, 500 | 913, 482 | 155, 388 | 2, 188, 491 | 3,207, 855 |
| 1019 | 1, 621,297 | 2, 387, 616 | 1, 647, 889 | $5.1006,802$ | 419, 535 | 1, 050, 070 | 188, 205 | 2, 689, 188 | 3,877, 4603 |
| 1820 | 1, 800, 557 | 2, 545, 783 | 1, 1203,145 | 8, 008, 298 | 215, 728 | 1, 105, 574 | 271,372 | 2, 768,023 | 4, 144, 860 |
| 1021 | 1, 617,428 | 2, 680,896 | 1,648, 912 | 5, 948, 236 | 202,782 | 067, 432 | 271, 224 | 2,929,900 | 4,168, 556 |
| 1922 | I, 176, 482 | 2,913,306 | 1, 228, 623 | 5, 816, 421 | 170,053 | 799, 349 | 841, 693 | $2,686,470$ | 3,807, 512 |
| 1023 | 983, 143 | 2,835, 899 | 940, 986 | 4, 740, 008 | 63, 481 | 664, 658 | 1483, 284 | 2,272, 430 | 3,330, 252 |
| 1934. | 193, 972 | 2, 673, 108 | 881, 259 | 4, 400, 338 | 49,046 | 474, 610 | 485, 232 | 2,078,409 | 3, 038, 811 |

Tablif 105.-Szeden-Unemployment, 1918-1995
[Number of applications for every 100 vecancien. Source: Kommeratelle Meddelanden]

| Month | 1018 | 1918 | 1018 | 1820 | 1921 | 1028 | 1028 | 1984 | 1925 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January. | 153 | 187 | 170 | 125 | 248 | 482 | 846 | 239 | 298 |
| February | 133 | 167 | 162 | 112 | 801 | 470 | 308 | 214 | 258 |
| March. | 110 | 158 | 111 | 91 | 240 | 381 | 231 | 177 | 207 |
| April. | 97 | 143 | 111 | 80 | 203 | 368 | 165 | 1.61 |  |
| May | 99 | 136 | 99 | 84 | 213 | 257 | 135 | 131 |  |
| Juna. | 112 | 186 | 100 | 92 | 258 | 215 | 146 | 132 |  |
| July... | 107 | 147 | 101 | 94 | 281 | 203 | 141 | 141 |  |
| Ausust | 96 | 131 | 97 | 05 | 225 | 172 | 140 | 185 |  |
| Geptember | 89 | 115 | 22 | 98 | 227 | 165 | 128 | 128 | --*--- |
| October | 88 | 109 | 92 | 110 | 283 | 177 | 129 | 148 |  |
| November | 120 | 125 | 113 | 155 | 384 | 260 | 101 | 220 |  |
| December. | 117 | 189 | 20 | 158 | 473 | 821 | 105 | 825 |  |

Tablim 106.-Sweden-Index numbers of wholesale prices, 1864-102s
[According to Karl $\mathbf{A}^{(m a r z}$. Soarce: Arshok for Everige. 1881-1885-100]

| Year | Index | Converted to 1913 base | Year | Index | Cons. verted to 1918 base |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1884.-. | 128 | 108, 17 | 1894. | 84 | 71.19 |
| 1865 | 122 | 108.39 | 1895. | 88 | 70.34 |
| 1866 | 112 | 97.46 | 1890. | 84 | 71.19 |
| 1867. | 114 | 96.61 | 1897. | 86 | 7288 |
| 1898. | 112 | 94. 92 | 1898.-- | 90 | 76. 27 |
| 1869 | 110 | 93.22 | 1899. | 96 | 81.36 |
| 1870 | 109 | 92.37 | 1900. | 100 | 84.75 |
| 1871 | 112 | 94. 92 | 1901 | 97 | 82.20 |
| 1872 | 125 | 105. 83 | 1902. | 96 | 8J. 30 |
| 1873 | 134 | 113.58 | 1903 | 96 | 81.30 |
| 1874 | 128 | 106. 78 | 1904. | 07 | 82. 20 |
| 1875. | 120 | 101.69 | 1905. | 08 | 88.00 |
| 1876. | 116 | 98. 31 | 1906.- | 104 | 88. 14 |
| 1877 | 115 | 97.46 | 1907.-. | 100 | 9287 |
| 1878. | 104 | 88.14 | 1908.- | 104 | 88.14 |
| 1879 | 102 | 88.44 | 1909. | 106 | 8888 |
| 1880 | 108 | 91.53 | 1910. | 108 | 91.58 |
| 1881 | 105 | 88.68 | 1911. | 111 | 94. 07 |
| 1882 | 104 | 88.14 | 1912 | 116 | 98. 31 |
| 1883 | 101 | 85. 59 | 1913 | 118 | 100.00 |
| 1884 | 97 | 82.20 | 1914 | 128 | 10847 |
| 1885 | 83 | 78.81 | 1915. | 188 | 151.68 |
| 1888. | 89 | 75.42 | 1916 | 216 | 18220 |
| 1887. | 85 | 7203 | 1917. | 288 | 233, 83 |
| 1888-2 | 04 | 70.66 | 1918. | 394 | 333.90 |
| 1889 | 94 | 79.66 | 1919. | 383 | 324. 68 |
| 1890 | 97 | 8220 | 1920. | 408 | 341.53 |
| 1891. | 97 | 8220 | 192 L. | 246 | 207.63 |
| 1892 | 91 | 77.12 | 1922. | 188 | 169.32 |
| 1883-..... | 88 | 74.58 | 1923-... | 182 | 154.24 |

## Table 107.-Sweden-Wholesale prices, 1814-1825

【Inder numbers of Eandelstidning; 47 commodities; July, 1913, to June, 1914-100; 1914-1917, quarterly figures; 1918 to date, middle of each month. The fndex numbers have been converted to a gold basfa by applying to them the percentages whlch the correspondlog average monthly exehange ratee for dol lars are of par. See chart 63.]

| Month | $\left\lvert\, \begin{gathered} \text { On paper } \\ \text { currency } \\ \text { basis } \end{gathered}\right.$ | Converted to sold basio | Month | On paper currency bandia | Converted to gold bacid |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1914 |  |  | 1916 |  |  |
| Fobruary |  |  | January .-. |  |  |
| March...- |  |  | Mebruary | 16 |  |
| April. |  |  | April. |  |  |
| May. |  |  | May.... | 175 |  |
| June |  |  | Jano...- |  |  |
| July-. |  |  | July |  |  |
| August | 111 | ------** | August -- | 101 |  |
| Septomber |  |  | Sepiemiber |  |  |
| Oetober -- |  |  | October--- |  |  |
| November | 120 |  | November | 200 |  |
| Deomiber. |  | --6.0----- | December |  |  |
| Yearly averag | 116 |  | Yeeris avera | 185 | ...-0.-...- |
| 1915 |  |  | 1917 |  |  |
| Jamary- |  |  | January.. |  |  |
| February | 135 |  | Pebruary | 205 |  |
| March |  |  | March. |  |  |
| April. |  |  | April.... |  |  |
| May-- | 143 |  | May... | 229 |  |
| June. |  |  | June |  |  |
| July -- |  |  | July..... |  |  |
| August | 147 | -------- | August | 249 | --.0.-.- |
| Septamber- |  |  | September |  |  |
| October-November | 155 |  | October-. | 272 |  |
| December. |  |  | December. |  |  |
| Yearly averag | 145 |  | Yearly avernt | 24 |  |

Tarls 107-Sweden-Wholesale prices, 1914-1925-Continued


## Tably 108.-Sweden-Exchange rates, 1915-1925

[New York on Stockholm. 1915-1917, bankers' checks; January, 1918, to June, 1921, sight drafts; July, 1921, to December, 1924, noon buying rates for cable transfers. Average rates, January, 1916, to Octo ber, 1018, are midpoints between the monthly high and low rates; from November, 1918, to date the averages are monthly averages of dally rates. See chart 68. Par; 20.8 cents per krons]


Table 109.-Sweden-Purchasing-power parities, 1980-1925
Averiding to Fedaral Resarve Board index numbers for tho United States and the Kommera-Kollegiam index numbers ioc Bwedgm. Bee chart or]

|  | United inder of pricas | Swedish index of prices | $\begin{aligned} & \text { Purchasing-power } \\ & \left(\frac{\text { D.s.Intides }}{\text { Bwedish indarar }}\right) \end{aligned}$ |  | Percent purchasparitios are of erahange rates |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1920 |  |  | Centr per lirosa | Centasper |  |
| January | 248 | ${ }^{948}$ | 19.38 | 20.70 | 98.6 |
|  | 248 | ${ }_{368}^{857}$ | ${ }_{18}^{18,62}$ | 18. 30 | ${ }^{100.0}$ |
| April.-. | 267 | 87 | 19.29 | 21.87 | 88. |
| May- | 209 | 874 | ${ }^{19} 28$ | ${ }_{21}^{2128}$ | 90.9 |
| June | ${ }_{254}^{262}$ | 878 | 18.10 | ${ }_{21.85}^{21.88}$ | ${ }_{828}^{85}$ |
| Auguist- | 240 | 375 | 17. 15 | 2.89 | 838 |
| September. | 238 | 870 | 16.80 | 20.21 | 831 |
| October-- | 234 | 358 | 18.02 | 19.70 | 81.8 |
| November- | 198 | 838 | 16. 54 | 10. 10 | 818 |
| Decamber $\qquad$ | 179 | 306 | 15.68 | 20. 50 | 80.0 |
| 202I |  |  |  |  |  |
| ${ }_{\text {Sanuary }}$ | 108 | 272 | ${ }_{16}^{16.85}$ | 21.40 | 77.8 |
| March | 152 | ${ }_{240}^{258}$ | 10.88 | ${ }_{22} 2_{83}$ | 71.7 |
| April.-. | 148 | 239 | - 16.37 | 23.67 | 69.4 |
| May- | 145 | 230 | 18.90 | 23, 49 | 71.8 |
| ${ }_{\text {June }}$ | 143 | 216 | 17.19 | ${ }^{23} 56$ | $8 \mathrm{7a}$ |
| August- | 147 | 211 | 18. 67 | 21.11 | 884 |
| September. | 147 | 201 | 19,60 | 21.78 | 90.0 |
| October | 140 | 194 | 20.17 | 229 | 87.9 |
|  | 148 | 188 | ${ }_{20} 80$ | ${ }_{24}^{24}$ | 88.1 |
| 1022 |  |  |  |  |  |
| January. | 142 | 181 | 21.08 | 2485 | 84.8 |
| March. | 147 | 177 | 2228080 | 26.16 | 88.1 |
|  | 149 | 178 | 22.82 | 28.05 | 87 |
| Mune | 191 | 176 | 20 20 | 25.81 | \% |
| July | ${ }^{165}$ | 178 | 25.86 | 25.91 | 8 |
| August | 166 | 178 | $4{ }^{28} 78$ | ${ }^{20} 34$ |  |
| Beptember | 189 | 170 | -26.85 | 2.48 | 97.7 |
| October-- | 186 | 189 | ${ }^{2} 17$ | 28.85 | 88.2 |
| November. | ${ }_{165}^{186}$ | 188 163 | 28.06 | 28, 28.89 | 100.0 |
| 1028 |  |  |  |  |  |
| January. | ${ }^{166}$ | 188 | 27.20 | ${ }^{20.85}$ | 101.8 |
| March | 160 | ${ }_{168}^{186}$ | ${ }^{28} 96$ | ${ }_{26}^{20.60}$ | 100.4 |
| April. | 170 | 168 | 27.12 | 28.4 | 101 |
| May | 187 | 186 | 28.98 |  | 1101. |
| Juna | ${ }_{159}^{184}$ | 164 | 28. 80 | ${ }^{28} 5$ | 100.8 |
| Augusit | 150 | ${ }_{162}$ | 22.30 |  | ${ }_{08}$ |
| Soptember | 103 | 182 | 28.97 | 20.56 | 101. |
| October- | 168 | 181 | 27. 18 | 2880 | 1028 |
| November-------- | ${ }_{163}^{183}$ | 160 | ${ }^{77} .38$ | ${ }_{38}^{28.29}$ | ${ }_{1008}^{108} 1$ |
| Docamber--.-------- | 163 | 180 | 27.30 | 28.88 | 108.7 |
|  | 183 |  |  |  |  |
| February | 103 | 162 | 23. 187 | 23.18 | 100.0 |
| Maral | 160 | 162 | 3847 | 20.20 | 1007 |
| May | 156 | 160 | 28.18 | 20.50 | 8 |
| June. | 154 | 158 | 26.12 | 23.54 | \% 4 |
| July | 158 | 157 | 20.68 | 28.00 | 100.1 |
| August. | 158 | 180 | ${ }_{25}^{29.47}$ | ${ }_{20}^{20.01}$ | 99.5 |
| October. | 159 | 167 | ${ }_{26} 52$ | ${ }_{28} 61$ | 95. |
| November. | ${ }^{180}$ | ${ }^{167}$ | 25.68 | 28.81 | 968 |
| Decamber-...---... | 165 | 168. | \% 23 | 28.95 | 87.7 |
| Jannary 1925 |  |  |  |  |  |
| Jannary. | ${ }_{167}^{168}$ | ${ }_{169}^{169}$ | ${ }_{20}^{20.64}$ | 28.04 | ${ }_{68} 88$ |
| Maroh. | 169 | 168 | ${ }^{20.98}$ | 20.05 | 100.04 |
|  | $\begin{aligned} & 164 \\ & 168 \end{aligned}$ | $\cos _{108}^{108}$ | $\begin{array}{r} 20.96 \\ 20.07 \end{array}$ |  | $\begin{aligned} & 100,07 \\ & 1000_{89} \end{aligned}$ |

Table 110.-Sweden-Gold value of total noto circulation, 1915-1925
[On basis of exchange rates and on basls of purchasling-power paritiea]

|  | $\begin{aligned} & \text { Total } \\ & \text { note } \\ & \text { circule } \\ & \text { tion } \\ & \text { (0000 } \\ & \text { omltred) } \end{aligned}$ | Average exchange rates | Gold value of pirculation on basia of exchange rates (000 omitted) | Purchas-Ingpower paritien | Gold value of clrculation on basis of purchas. lagpowar parities (000 omitted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Krona <br> 287,479 | Cent: per krons 25.00 | $\begin{gathered} \text { Datlars } \\ 66,870 \end{gathered}$ | Cente per krone | Dollars |
| February | 276,905 | 24.62 | 68, 174 |  |  |
| March. | 202, 388 | 25.09 | 73, 360 |  |  |
| April. | 278,377 | 25, 60 | 71, 265 |  |  |
| May | 275, 541 | 25.90 | 71,365 |  |  |
| June- | 293,321 | 28.21 | 76,967 |  |  |
| July. | 276, 180 | 26.05 | 71, 940 |  |  |
| Argust | 282, 070 | ${ }^{25} 80$ | 72,774 |  |  |
| Beptamber | 800, 334 | 25.80 | 79,800 |  |  |
| October-- | 208, 719 | 27.10 | 80, 376 |  |  |
| November. | 302,600 | 27.18 | 82, 247 |  |  |
| Decamber. | 287,886 | 27.33 | 80,611 |  |  |
| 1016 |  |  |  |  |  |
| January | 293, 507 | 27.78 | 81, 414 |  |  |
| Pabruary | 303,587 | 27. 83 | 84,782 |  |  |
| March. | 831, 606 | 28.55 | 94, 874 |  |  |
| April. | 322,392 | 29.68 | ${ }^{88} 686$ |  |  |
| May.- | 828, 812 | 30.43 | 100, 057 |  |  |
| July | 324,798 | 28.63 | 92, 088 |  |  |
| August | 346, 547 | 28.00 | 98,828 |  |  |
| Beptamber | 284,895 | 28.45 | 109, 901 |  |  |
| October- | 375, 084 | 28.40 | 108, 770 |  |  |
| November | 280, 745 | 28.35 | 107, 91 |  |  |
| December | 417, 817 | 28.82 | 120,746 |  |  |
| 1917 |  |  |  |  |  |
| January | 576,138 | 29.48 | 110, 89 |  |  |
| Pebruary | 893, 468 | 29. 50 | 116,078 |  |  |
| March. | 438, 828 | 29.38 | 128,977 |  |  |
| April | 434, 333 | 29.68 | 128, 603 |  |  |
| May | 433, 338 | 29.75 | 128,918 |  |  |
| June | 466, 021 | 20.20 | 140, 738 |  |  |
| Angust | 442, 488 | 32. 18 | ${ }_{154}^{120,139}$ | -...-...- |  |
| September | 850, 962 | 33.68 | 175, 304 |  |  |
| October- | 622, 632 | 23.38 | 200, 586 |  |  |
| November. | ${ }^{635}, 001$ | 4178 | 223,363 |  |  |
| Decamber - | 672, 723 | 3 LC | 201, 805 |  |  |
| 1018 |  |  |  |  |  |
| January | 524,002 | 23.38 | 175, 172 |  |  |
| February | 600, 200 | 8288 | 184, 194 |  |  |
| March... | 630, 069 | 2288 | 207, 204 |  |  |
| April | 614,880 | 34.18 | 200, 802 |  |  |
| May | 624, 915 | 34.20 | 213, 936 |  |  |
| Jung. | 667, 518 | 34.80 | 232, 298 |  |  |
| July | 645, 108 | 36. 40 | 2283898 |  |  |
| August. | 688, 603 | 36. 50 | 244,475 |  |  |
| Geptember | 761.678 | 8808 | 251293 |  |  |
| October- | 761, 034 | 30.an | 228, 539 |  |  |
| November. | 789,09 | 23. 20 | 231,035 |  |  |
| December. | 813,534 | 29.11 | 238,800 |  |  |
| 1919 |  |  |  |  |  |
| Jenmary | 720,483 | 2880 | 208,202 |  |  |
| Pebruary. | 721, 648 | 2827 | 209, 649 |  |  |
| March. | 75a, ama | 27.77 | 2188 |  |  |
| Aperin | 722, 179 | 2. 90 | 194,284 |  |  |
| May-- | 70.570 | 25.94 | 188, 247 |  |  |
| Jane. | 727, 950 | 28.83 | 188, 308 |  |  |
| Jaly | 683, 135 | 23. 00 | 179.784 |  |  |
| Augast. | \%04, 101 | 28.67 | 171, 230 |  |  |
| Septamber. | 751,087 | 24.50 | 194,467 |  |  |
| Octabar--- | 732,812 | 年30 | 178, 763 | -0-*** |  |
| Novamber | 728,485 747,502 | 28.0 | 167,033 |  |  |

Tablim 110.-Stweden-Gald value of total note circulation, 1916-1925-Continued

|  |  | Total note circulstion (000 amitted) | Average exchange rates | Gold value of circulation on basts of exchange rates (000 amitted) | $\left.\begin{gathered} \text { Purches- } \\ \text { ing" } \\ \text { pormer } \\ \text { parities } \end{gathered} \right\rvert\,$ | Gold value of circuila tion on basis of purchas-ingpower. parities (000 onitted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1020 | Tronte | Cents per kronts | Dollarz | $\begin{aligned} & \text { Cents } \\ & \text { per } \\ & \text { krona } \end{aligned}$ | Dollers |
| Jannary. |  | 673, 265 | 20.70 | 138, 364 | 19.38 | 130,477 |
| February |  | 685, 538 | 1860 | 127, 510 | 18.62 | 127,647 |
| March. |  | 741, 622 | 20.37 | 151, 008 | 18.58 | 137, 92 |
| April |  | 718, 273 | 21.87 | 157, 086 | 19.20 | 138, 565 |
| May |  | 708, 291 | 21.20 | 150,299 | 19.88 | 136, 569 |
| Juma |  | 786, 458 | 21.83 | 160,709 | 18.67 | 137, 997 |
| July- |  | 724,782 | 21.85 | 158,305 | 18. 10 | 131, 180 |
| Angust |  | 742.192 | 20.69 | 152, 817 | 17. 15 | 127, 280 |
| Septomber |  | 779, 767 | 20.21 | 157, 591 | 10.80 | 131, 001 |
| October- |  | 772, 808 | 10.70 | 152, 248 | 16.02 | 123, 804 |
| November |  | 752,888 | 19. 10 | 142, 792 | 15.54 | 118, 931 |
| Decamber. |  | 759,877 | 19.59 | 148,880 | 15.68 | 118, 140 |
| January | 1021 | 672507 | 21.40 | 148,918 | 16.55 | 111,800 |
| February |  | 587, 623 | 22.20 | 130, 805 | 16.44 | 90, 005 |
| March |  | 716,876 | 22.83 | 168, 683 | 18. 38 | 117, 281 |
| April. |  | 680, 505 | 28. 57 | 180,395 | 10.37 | 111,399 |
| May |  | 851, 078 | 238. 49 | 152,983 | 18.10 | 110,032 |
| Jume |  | 678,810 | 22.60 | 153, 140 | 17.19 | 115,687 |
| July. |  | 629, 414 | 21.04 | 132,429 | 18.11 | 113, 887 |
| Augrat |  | 632.437 | 22.11 | 133, 507 | 18.67 | 118,076 |
| Septemb |  | 672,306 | 21.78 | 146, 418 | 18.60 | 131, 700 |
| October |  | 650,344 | 289 | 149, 189 | 20.17 | 131, 174 |
| November |  | 628,031 | 23.23 | 145,892 | 20.56 | 129, 128 |
| December- |  | 627,099 | 24.58 | 153, 975 | $\underline{00} 39$ | 127, 888 |
|  | 1022 |  |  |  |  |  |
| January. |  | 563,039 | 24.95 | 140,478 | 21.68 | 118,407 |
| Februar |  | 579, 027 | 28.15 | 151, 416 | 21.86 | 126, 1775 |
| March. |  | 828, 073 | 28. 10 | 163,781 | 2228 | 139, 364 |
| April_s |  | 588.211 | 28.05 | 153, 229 | 2288 | 134,200 |
| May |  | 567, 378 | 25.77 | 146, 213 | 24.20 | 137, 305 |
| Yunem |  | 585, 487 | 25.81 | 151, 101 | 24.80 | 145, 188 |
| July- |  | 650, 973 | 25.95 | 142, 077 | 25.58 | 140,829 |
| August. |  | 658, 510 | 23.34 | 147, 112 | 25.71 | 143,59 |
| Septemb |  | 604, 016 | 28.40 | 150, 681 | 25.85 | 156, 293 |
| Oetober- |  | 568, 547 | 26. 6.5 | 151, 618 | 27.17 | 148,789 |
| Novamber |  | 575,313 | 20,84 | 154, 414 | 20.96 | 155, 104 |
| December |  | 584, 101 | 20.95 | 157,439 | 28.96 | 157, 498 |
|  | 1823 |  |  |  |  |  |
| January |  | 820, 259 | 23.88 | 139,749 | 27.20 | 141, 079 |
| Pebruar |  | 637, 785 | 24.60 | 143,048 | 20.96 | 144,981 |
| March |  | 5898950 | 28.60 | 156, 139 | 28.98 | 158, 253 |
| April |  | 559584 | 28.64 | 148, 268 | 27.12 | 150, 1838 |
| May. |  | 688,830 | 28.65 | 143, 698 | 23.90 | 145,209 |
| Jund. |  | 688, 211 | 29. 66 | 155, 698 | 28.80 | 157, 105 |
| July |  | 613, 329 | 23.53 | 144, 145 | 28.30 | 142,899 |
| Augut |  | 60, 044 | 28.69 | 140,379 | 28.30 | 147, 638 |
| Septamber |  | 600, 165 | 22.65 | 150,344 | 28.97 | 161, 885 |
| October Novembe |  | ${ }^{600,480}$ | 28.40 | 147, 067 | 27.18 | 152,058 |
| November |  | 876, 88.8 | 23.29 | 149,200 | 27.38 | 155,480 |
|  | 109 |  |  | 10, 70 |  | 8 |
| Jannary |  | 600,802 | 20.18 | 188,885 | 27. 18. | 188, 174 |
| February |  | 622, 695 | 28.18 | 138, 842 | 2897 | 140,971 |
| March |  | 657, 179 | 20.27 | 148, 488 | 23.47 | 147, 488 |
| April |  | 621, 700 | 28.38 | 137, 648 | 20.30 | 137, 231 |
| May |  | ${ }^{529} 732$ | 28.60 | 138, 824 | 23. 18 | 138, 690 |
|  |  | E57, 480 | 20.54 | 147, 958 | 28. 12 | 145, 616 |
| Juyg-ris |  | 518, 400 | 28.60 | 137, 112 | 20.08 | 137 <br> 139207 <br> 10 |
| Septambe |  | 664, 222 | 20.60 | 150, 088 | 23.6 | 14,723 |
| October |  | 536,421 | 20.61 | 142,742 | 25.52 | 136,895 |
| Novemb |  | 687, 085 | 96.81 | 143, 908 | 20.32 | 141, 301 |
| Decamb |  | 637, 298 | 28.08 | 154,800 | 28.32 | 141, 416 |
|  | 1025 |  |  |  |  |  |
| January. |  | 488. 677 | 20.95 | 139,058 | 23.64 | 128, 610 |
| Mebruar |  | 498, 258 | 2894 | 182, 888 | 28.48 | 180, 614 |
| March |  | 599, 704 493,24 | 28.96 28.94 | 140,364 132,879 | 2808 | 140,406 132,978 |
| May |  | 400, 060 | 28.75 | 433, 638 | 23. | 12,78 |

Table 111.-Sweden-Imports and exports of merchandise, 1898-198S
[ Special Imports, i. e., imports for domestic consumption; special exports, i. e., erports of domestic marchandise. Source: Statistik Arsbok for sverige. See chart ©a]

| Year | Quantity |  | Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports | Exports | 1mports | Exporta | Exces |  |
|  |  |  |  |  | Imports | Exports |
|  | Medric tons | Metric tons | 550, 890 | $\underline{\text { Krone }}$ | Eronor | Eronor |
| 1887 |  |  | 358, 899,000 | $340,219,000$ $358,106,000$ | $10,1850,000$ $10,722,000$ |  |
| 1898 |  |  | 446, 271,000 | $344,900,000$ | 101, 371,000 |  |
| 1889 |  |  | 503, 116,000 | 358, 158,000 | 144, 858,000 |  |
| 1900 |  |  | 525, 556,000 | 391, 312,000 | 134, 244,000 |  |
| 1901 |  |  | 459,679,000 | 353, 403, 000 | 106, 186,000 |  |
| 1902. |  |  | 502, 252,000 | 392, 366,000 | 109, 886,000 |  |
| 1903 |  |  | $529,767,000$ | 41, 3858,000 | 88, 282,000 |  |
| 1904. |  |  | 572012000 | 414, 718,000 | 157, 206,000 | --1--1-1 |
| 19905. |  |  | $573,804,000$ <br> 6383 <br> 133,000 | 450, 211,000 | 123, 503,000 |  |
| 1907. |  |  | 673, 841,000 | 524,603, 000 | 149, 17830000 |  |
| 1908 |  |  | 507, 509,000 | 482, 016,000 | 115, 493, 000 |  |
| 1909 |  |  | 613, 002,000 | 472,978,000 | 140, 624,000 |  |
| 1910 |  |  | 669, 211,000 | 592, 853,000 | 76,358,000 |  |
| 1911 |  |  | 090, 499,000 | 083, 536, 000 | 28,913,000 |  |
| 1912 | 7,700, 795 | 15, 128, 063 | 782, 894,000 | 700, 489,000 | 22, 426, 000 |  |
| 1913 | 8, 649,141 | 15,964, 318 | 8480,538,000 | 817, 37, 31000 | 20, 191, 000 |  |
| 1914. | 7, $2 \times 230,3782$ | 12,633,944 | $\begin{array}{r}728,908 \\ \hline 1,12000 \\ \hline\end{array}$ | $\begin{array}{r}\text { 72, } \\ \text { I, 316, } 354,0000 \\ \hline\end{array}$ |  | 173, 447,000 |
| 196 | $8,866,832$ | 13, 1785,411 | $1,138,567,000$ | 1, $556,377,000$ |  | 177,810,000 |
| 1917. | 3, 708,032 | 10, 863, 172 | 758,610,000 | 1, 349, 5151,000 |  | 590,941,000 |
| 1919 | 4, 400 , 558 | 8,770,973 | 2, $5338,877,000$ | 1, $1750,607,000$ | 958, 280,000 | 117, 12, 000 |
| 1220 | 6,000, 662 | 11,052,002 | 3, 314, 111, 000 | $2788,296,000$ | 1,035, 818, 000 |  |
| 1921 |  | $8,729,131$ 12940 | 1, 258,719,000 | 1,007, 271,000 | 161, 488,000 |  |
| 10231 | 7, 153,250 | 12,823, 373 | 1,291, $1,161,000$ | 1, 142,093, 000 | 152,476,000 |  |

${ }^{2}$ Preliminary Agures.
Table 112.-Sweden-Imporis and exports of merchandise, 191s-1924
ISpectal imports, 1. e., Imports for damestic consumption; special exports, i. e, exports of domestic metchandise. Source: Kormersleils Meddelanden. See chart ©, 000, 000 omitted]

| Month | $\begin{aligned} & \text { Im- } \\ & \text { porta } \end{aligned}$ | Exports | Excest of |  | Month | Im- | Exporta | Excese of |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Im- | $\underset{\text { Ex- }}{\text { ports }}$ |  |  |  | Imports | $\begin{aligned} & \text { Ex- } \\ & \text { porte } \end{aligned}$ |
| 1913 |  |  |  |  | 1914 |  |  |  |  |
|  | Kronor | A 48.8 | Eronor | Kroner |  | Eronor | Eromor | Kroner | Sronar |
| Fannary-. | 60.5 | 44.7 | 13.8 |  | August | 76.7 42.1 | 78.2 27.2 | 14.9 |  |
| March. | 62.8 | 45.4 | 17.1 |  | Geptember | 45.6 | 62.3 |  | 16.7 |
| April. | 3.2 | 63.8 | 0.6 |  | Ochaber. | 65. 6 | 85.9 |  | 21.3 |
| May.- | 74. 6 | 87.3 |  | 10.7 | November | 64. 5 | 73.6 |  | 9.1 |
| Jume.- | 621 | 73.4 |  | 11.3 | December | 67.7 | S8. 1 | 9.6 | ...-... |
| July..- | 727 | 79.9 |  |  |  |  |  |  |  |
| August. | 728 | 79.4 |  | - 0.6 | 1915 |  |  |  |  |
| September | 75.7 | 7.5 |  | . 8 |  |  |  |  |  |
| October. | 88.2 | 85.1 | 3.1 |  | Jamanty. | 63.3 | 484 | 14.9 |  |
| November | 77.4 | 724 | 5.0 |  | February | 88.8 | 50.7 | 38.1 |  |
| December | 640 | 6.0 | 10 |  | March. | 116.5 | 57.8 | 58.9 |  |
|  |  |  |  |  | April. - | 110.4 | 53.4 | 60.0 | .,.....- |
| 1914 |  |  |  |  | June. | 6.8 | 79.9 | 28 | 120 |
| Janusry. | 00.7 | 45.0 | 15.7 |  | July. | 71.4 | 1004 |  | 26.0 |
| Febrasy | 64. 1 | 44.8 | 9.6 |  | Augrast | 61.8 | 983 |  | 348 |
| March. | 67.3 | 48.2 | 19.1 | --.-.-. | geptember | 660 | 98.5 |  | 29.5 |
| April.. | 75.6 | 50.5 | 12.1 |  | Octoher | 725 | 92 |  | 25. 7 |
| May-- | 80.3 | 8.7 72.8 |  | 3.4 | Norember | 61.3 | 80.8 | 83 | 12.2 |

Tasys: 118-Swoden-Imports and exports of merchandise, 1918-1984-Contd.


Table 113.-Sweden-Imports and exports of gold and silver coin and bullion, 1911-1983
[Source: Statistisk Arsbok for Sverige; 000 omitted]

| Year | Imports |  |  |  |  | Exports |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gold bars | Gold coin | Sllver bara | Silver and other coin | Total imports | Cold bars | Gold coin | Allver bars |  | Total orparts |
| 1011 | $\begin{gathered} \text { Zroner } \\ 860 \end{gathered}$ | Zronor $4,081$ | Kronor | Krontor | $\begin{gathered} \text { Krontor } \\ 6,168 \end{gathered}$ | Sronor | Kronor | Irronor 38 | Eroner | Eronor |
| 1012. | 784 | 8,878 | 1,180 | 168 | 10, 820 | 25 |  | 131 |  | 156 |
| 1013. | 5, 251 | 5,180 | 1,437 | 256 | 12, 125 |  |  | 293 |  | 293 |
| 1914 | 617 | 6, 937 | 1,888 | 218 | 9. 6.59 | 41 |  | 71 | 2 | 114 |
| 1915. | 3,466 | 46, 871 | 3, 148 | 1,452 | 54, 937 | 78 |  | 542 | -...... | 620 |
| 1916 | 5.036 | 13, 100 | 3,157 | - 3 | 21, 896 | 95 | 4 | 1, 208 |  | 1,304 |
| 1917. | 11, 100 | 63, 580 | 5,751 | 9 | 80, 499 | 202 |  | 693 |  | 896 |
| 1918 | 0,923 | 25,793 | 8.5 | 12 | 36, 383 | 221 |  | 839 |  | 870 |
| 1919 |  | . 16 | 1,788 | 828 | 2,774 | 130 |  | 144 |  | 775 |
| 1920. | 68, 252 | 209,758 | 2,738 | 31 | 280, 780 | 38,488 | 25, 236 | 382 | 2 | 64, 108 |
| 1021 | 38, 233 | 644,734 | ${ }^{617}$ | 139 | 684, 722 | 254, 053 | 680, 337 | 378 | 43 | 034, 809 |
| 1922. | 3,309 | 209, 954 | 1,390 | 1,478 | 290, 130 | 92, 652 | 237, 708 | 609 | 259 | 231. 227 |
| 1823. | 2,398 | 18 | \% 419 | 368 | E, 187 | 888 | 1,978 | 1,085 | 16,810 | 20, 561 |

Table 114.-Stoeden-National debt, 1900-1984
[Source: Riksgalddskontoret Arsbok, 1923-24

|  | State bonds | Other fonded debt | Floating debt | Total dobt |
| :---: | :---: | :---: | :---: | :---: |
|  | Kromer | Kronor | Eromer | Eroner |
| 1500 | 337,899,000 | 6, 191, 000 |  | 343, 090,000 |
| 1901. | 349, 132,000 | 5, 145, 000 |  | 354, 277,000 |
| 1902. | 346, 0903,000 | 7, 347,000 |  | 354, 040,000 |
| 1908 | 245, 214,000 | 7,297, 000 |  | 252, 511,000 |
| 1004. | 383, 944,000 | 7, 246.000 |  | 301, 100,000 |
| 1005. | 406, 158, 000 | 4,085, 000 |  | 412, 243,060 |
| 1000 | 420, 852,000 | 6, 055, 000 |  | 420, 907, 000 |
| 1907. | 464, 360, 000 | 3, 743, 000 |  | 4488, 102, 000 |
| 1808. | 815, 378,000 | 3, 698, 000 |  | 519, 717,000 |
| 1810 | $548,120,000$ $537,128,000$ | 8,047,000 |  | 554, 173, 000 |
| 1911. | 608, 096,000 | 8, 863, 000 |  | 611, 005, 000 |
| 1912 | 602, 200,000 | 8, 764, 000 |  | 607, 984, 000 |
| 1913. | 622, 561, 000 | 8,062,000 | 20,004,000 | 648,287,000 |
| 1014. | 695, 835, 000 | 6, 558, 000 | 43,004,000 | 744, 455, 000 |
| 1915. | 812,009,000 | 5, 44, 000 | 34,819,000 | 854, 871, 000 |
| 1916. | 833, 217, 000 | 3,325,000 | 57,7c9,000 | 993, 246, 000 |
| 1917. | 907, 909, 000 | 10,918, 000 | 140,311,000 | 1.140, 228,000 |
| 1818. | 1,088, 197, 000 | 11, 609,000 | $550,313,000$ | 1, 850, 179,000 |
| 1919. | 1, 271, 116, 000 | 10, 408,000 | 285, 474,000 | 1. $566,086,000$ |
| 1820. | 1,270, 411,000 | 10, 143, 000 | ${ }^{1} 215,941,000$ | 1,496, 624,000 |
| 1821. | 1, 433, 465,000 | 9,892, 000 | 177,630000 | 1,510,987,000 |
| 1922 | 1, 455, 379,000 | 9,887,000 | $188,448,000$ | 1, $351,464,000$ |
| 1023 | 1,567, 516,000 | $20,260,000$ <br> $40,58,000$ | 46, $36,872,000$ | 1, 64, $0 \times 8,000$ |

1 Includes loan from State persion inatitution.
2 June 30.

Table 115-Stueden-Receipts and expandittures, 1912-1988*
[Source: Statistisì Årabol; 000 omitted] \#


## SWITZERIAND

Table 116.-Swiss National Bank, 1912-1925
ISource: Statisches Aulirhnech der Bohwiiz and Wewkly Statements of the Swiss National Banir. Figurus


| Month | Gold rescrves | Silver reservos | $\underset{\text { reserves }}{\text { Total }}$ | Forcien craditis payable on domand | Thans and discounts | Notes in urculation | Current acconnts fui other deposits | Note circale. tion curvent accourits and deposits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1912 | Francs | France | brancs | Fratact | Francs | France | Fitancs | Francy |
| Janukry. | 163, 640 | 11,820 | 172, 743 |  | 132, 145 | 268, 154 | 49,161 | 319, 351 |
| Pebruary | 160, 211 | 13, 271 | 175, 499 |  | 107, 186 | 249, 884 | 41, 637 | 291, $5 L_{1}$ |
| March | 151, 402 | 10,778 | 17a, 56 |  | 107,357 | 452, 612 | 35, 725 | 298,337 |
| April | 180, 028 | 10.728 | 173, 224 |  | 116. 494 | 2558,033 | 38, 321 | 296, 354 |
| May | 160.0n3 | 12, 129 | 171, 807 |  | 118, 0¢2 | 260, 820 | 38, 151 | 209,071 |
| June | 1682.0110 | 10, 760 | 172, 987 |  | 113,289 | 264, 020 | 40, 380 | 294, 000 |
| Jaly | 1.68 .578 | 13,398 | 178.244 |  | 117,238 | 268,709 | 34.828 | 300, 587 |
| Angust. | 178, 257 | 14.004 | 188.193 |  | 113,658 | 246, 570 | 43, 280 | 311,869 |
| Septerat | 174, 729 | 14,887 | 190, 924 |  | 121, 728 | 273, 117 | 43, 914 | 317,001 |
| October | 174, 119 | 16, 716 | 100,930 |  | 132, 746 | 282, 307 | 47, 142 | 327,449 |
| Novembe | 179,088 173,138 | 10,620 12,76 | 101, 032 |  | 150,203 | 295, 620 | 51,367 | 346, 987 |
| December.... 1913 | 173, 138 | 12,7i6 | 189, 375 |  | 157, 198 | 298, 290 | 50, 740 | 349, 040 |
| Sanusry | 170.280 | 17, 502 | 186,881 |  | 149,499 | 291,502 | 47,719 | 339,281 |
| February | 187, 780 | 15, 514 | 185, 611 |  | 124, 518 | 275,552 | 38,807 | 312,419 |
| Mareh | 173, 007 | 14,498 | 184, 161 |  | (15, 949 | 270,423 | 3म, 845 | 301, 268 |
| April | 172, 657 | 13.847 | 188, 164 |  | 114,800 | 270, 5124 | 35,265 | 308, 789 |
| May | 172, 233 | 24, 299 | 110.914 |  | 113, 012 | 204, 348 | 40, 3 k 9 | 304,735 |
| Ju | 160, 453 | 24, 275 | 198,540 |  | 104, 406 | 262, 244 | 44,814 | 307, 058 |
| August | 168, 1686 | 20, 20 | 197, 382 |  | 113, 277 | 271, 003 | 48, 8.33 | 318, 430 |
| Septembe | 170, 238 | 24, 213 | 200, 433 |  | 10\%',927 | 271, 969 | 49,014 | 319, 233 |
| Occaber. | 171, 413 | 27, 3 A3 | 200, 301 |  | 116, 820 | 277, 92 | 50,671 | 324, 593 |
| Novenber | 171, 343 | 25, 780 | 199,185 |  | 114, 886 | 272, 175 | 49,042 | 321, 207 |
| December | 169, 9515 | 27, 838 | 195,323 |  | 121, 823 | 270, 101 | 49,600 | 319,707 |
| 1914 |  |  |  |  |  |  |  |  |
| Jarumiy | 170, 265 | 21,633 | 193792 |  | 127,617 | 274, 160 | 000002 | 324,252 |
| Fsbrtary | 169, 000 | 19,697 | 198.208 |  | 113,316 | 259, 464 | 49,267 | 309, 231 |
| Mareh | 169, 819 | 16, 46.5 | 188, 740 |  | 108,018 | 250, 468 | 51, 482 | 311,450 |
| April. | 169, 474 | 17,840 | 187, 730 |  | 106, 1095 | 2465435 | 40, 695 | 307, 130 |
| May | 171, 188 | 18.351 | 188.950 |  | 104, 601 | 274, 338 | 47, 557 | 311,895 |
| June | 175, 843 | 17,788 | 192, 930 |  | 101, 142 | 250, 224 | 41, 467 | 301, 691 |
| July | 191, 841 | 5, 442 | 194, 525 |  | 125, 65 | 282,832 | 49, 731 | 319, is3 |
| Auctist | 215, 031 | 7,406 | 212,850 |  | 209, 104 | 437, 444 | 77,640 | 515, 643 |
| Septembe | 224, 307 | 11,748 | 229.103 |  | 289, 125 | 140,697 | $78,5 \mathrm{fi3}$ | 519, 260 |
| Octoher | 233, 332 | 16, 450 | 243, 096 |  | 251, 700 | 125, 620 | 76, 154 | 502, 030 |
| Noveruber | 237, 701 | 20, in 1 | 259, 505 |  | 205, 408 | 411,765 | 64, 824 | 470, 504 |
| Descern | 237, 036 | 24,913 | 261.030 |  | 189,596 | 412,377 | 72,022 | 464, 899 |
| 1915 |  |  |  |  |  |  |  |  |
| Jantuar | 240, 266 | 25,30.4 |  |  |  |  |  |  |
| February | 238, 535 | 31,31. |  |  |  |  |  |  |
| Mareh | 240,910 | 84, 958 | 275, 838 |  | 153,619 | 414, 943 | 56.375 | 471, 018 |
| April | 240, 318 | 38, 870 | 279.769 |  | 132, 172 | 408,910 | 48,344 | 457, 254 |
| May | 240, 460 | 49.052 | 290, 421 |  | 145, 531 | 419,3] 6 | 10,439 | 499,795 |
| June | 240,218 | 54, 090 | 2044, 308 |  | 185, 288 | 422, 5677 | 744410 | 486.037 |
| July | 240, 048 | 50, 64 | 24i6, 692 |  | 162,511 | 410, 173 | 93, 140 | 503, 313 |
| August | 240, 763 | 50, 634 | 300, 447 |  | ${ }^{154,445}$ | 407. 648 | 82,670 | 480,618 |
| Septemb | 243, 150 | 61,539 | 3 $31+590$ |  | Te9, 217 | 438,789 | 73, 198 | 501, 980 |
| October | 244,254 | 50, 590 | 3133, 548 |  | 168, 248 | 443, 112 | 69, 771 | 312, 853 |
| November | 247, 535 | 56, 283 | 302, 846 |  | 158,220 | d27,481 | 74,576 | 003, 035 |
| Decembe | 250, 132 | 51,288 | 301,370 |  | 210, 839 | 463, 605 | 81, 680 | 647, 298 |
| 1915 |  |  |  |  |  |  |  |  |
| Temuary | 253,320 | 60, 452 | 303,774 |  | 181,285 | 42, 372 | 100,740 | 63土. 112 |
| February | 252, f88 | 48,714 | 801, 3444 |  | 12\%, ${ }^{\text {Bra }}$ | 410.38: | 91, 327 | 502, 210 |
| March. | 252, 233 | 49, 463 | 302200 |  | 179.163 | 431,250 | 83, 18 | 229, 268 |
| April. | 257, 738 | 31, 609 | 308, 747 |  | 32, 2,401 | 431.186 | 130,496 | :061, 672 |
| Muy- | \% 5 5it, 975 | 63, 720 | 303, 938 |  | 173, 190 | 425, 213 | 109, 458 | 83-3, 60 |
| June- | 254.755 | chi, 475 | 811,230 |  | 198,429 | 473, 164 | 125, 129 | [588 234 |
| July, | 283, 728 | 6, $0^{817}$ | 322, 405 |  | 172,353 | 425.73 | 171, 080 | 0383 |
| Supilember | 872, 382 | 67, 458 | 329,774 |  | 217, 572 | 431, 605 | 152,074 | 583, 711 |
| October | -8f, 86 | 54, 148 | 340, 4.45 |  | 20,118 | 475 | ${ }^{138}$ | 50, 163 |
| Novernber | 3isk, 572 | 54, 720 | 363, 293 |  | 192, 817 | 479,176 | 113, 287 | 5182, 403 |
| Dcrember.- | \%f4, 9 | 62,451 | 397,462 |  | 344,270 | 536,5i.5 | 129,910 | 365, 424 |

Table 116.-Swiss National Banh, 1912-1925

| Month | $\begin{aligned} & \text { Gold } \\ & \text { reserves } \end{aligned}$ | silver reserves | $\begin{aligned} & \text { Total } \\ & \text { reserves } \end{aligned}$ | Foreign oredis payable on de- mand | Loans and discourts | Votes in circulstion | Currest accuunts sind ulber deposits | Note circulation curread accounts and deposits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1817 | Nos | Fremes | Francs | Fronts | Franta | Erancs | Fituts | rancs |
| Jithuary | 444, 022 | 52, 84, | 396, 615 |  | 181, 980 | 503.186 | 109, 350 | 612,566 |
| February | 343, 033 | 51,99\% | 395, 628 |  | 205223 | 508, 770 | 114,980 | 623, 760 |
| March | 343, 167 | 50, 015 | 303, 782 |  | 196.858 | 528,217 | 81,87] | 610,088 |
| Apri] | 342, 366 | 51,044 | 293, 410 |  | 219.019 | 528, 832 | 118, 026 | 6495908 |
| May | 311,758 | 52.0182 | 393,811 |  | 185.236 | 615, 513 | 83, 575 | 619.194 |
| June | 3111,478 | 52,085 | 8922.5165 |  | 216892 | -441, 168 | 102,897 | 643,055 |
| July | 334.204 | 52,598 | 391.902 |  | 242, 513 | 534, 181 | 132,590 | $6 \mathrm{mf}, 071$ |
| Augus. | 343.050 | 53, 428 | 3996.488 |  | 232.947 | 537, 791 | 1117, 192 | 6 6i4, 986 |
| Seplembe | 316, 677 | 52, 681 | 309.358 |  | 258, 182 | 550, 200 | 111, 125 | 691,631 |
| Oetober | 800, 866 | 53, 097 | 403, 657 |  | 239, 010 | 613, 104 | 85. 995 | 722,099 |
| Nuyember | 850, 760 | 53, $6 \overline{3} 1$ | 404.406 |  | 272, 736 | [827, 190 | 82.251 | 709.851 |
| Decerriber | 854,641 | 51, 830 | 400, 474 |  | 406,702 | 702, 303 | 137, 304 | $839,60{ }^{1}$ |
| 1918 |  |  |  |  |  |  |  |  |
| January | 361, 013 | 55,433 | 417,348 |  | 306, 154 | 633, 102 | 138, 148 | 771, 250 |
| Februng | 364, 523 | 56,1032 | 422,585 |  | 259,744 | 646,1069 | 70,937 | 723,656 |
| Mareh | 371, 652 | 54, 840 | 126,492 |  | 340, 0388 | 695, 329 | 109,398 | 805,025 |
| April | 376, 529 | 65, 819 | 132,348 |  | 325041 | 700, 215 | 82,882 | 783, 097 |
| May | 381, 070 | 57, 359 | 435429 |  | 336. 187 | 705,026 | 305,979 | 811,405 |
| Jinc. | 384, 400 | 56, 899 | 141, 299 |  | 376.802 | 721, 164 | 153,948 | 875,142 |
| Jtily | 382,620 | 64, 380 | 137, B06 |  | 347.279 | 713,776 | 114, 527 | 828, 303 |
| Angrest | 384, 375 | 50, 952 | 435,327 |  | 3 mm | 762,694 | 130,725 | 8493, 419 |
| September | 382, 533 | 52.245 | 135, 478 |  | 453, 43.5 | 813, 451 | 121,385 | 934, 836 |
| October | 380, 897 | 35.215 | 436, 112 |  | 527, 133 | 891, 540 | 133, 723 | 1,025,263 |
| November | 378, 767 | 56,569 | 435, 336 |  | 376, 928 | 031, 564 | 129, 2431 | 1,063, 855 |
| December | 414,719 | 58412 | 473,131 |  | 624, 181 | 975, 706 | 183,706 | 1,159, 412 |
| 1919 |  |  |  |  |  |  |  |  |
| Sanuars | 412, 615 | 62, 846 | 47in, 461 | 53, 157 | 475,435 | 882, 374 | 124, 563 | 1, 008, 957 |
| February | 410, 480 | 64, 501 | 474,981 | 31, 127 | 484, 177 | 892, 0654 | 05, 218 | 987, 282 |
| March | 418, 281 | 65, 362 | 483, 643 | 24, 188 | 512,260 | 940, 187 | 78, 604 | 1., 018, 751 |
| April | 420, 040 | 65,815 | 485, 855 | 26, 019 | 567, 142 | 962, 748 | 105,413 | 1,068, 101 |
| May- | 4.8. 510 | $67,58.5$ | 523,095 | 18, 659 | 520,074 | 920,583 | 134, 842 | 1,055, 425 |
| June. | 471,420 | (68, 882 | 540, 302 | 15, 814 | 510, 008 | 930,349 | 14, 8122 | 1,051, 171 |
| July | 467, 050 | 67, 789 | 535,439 | 13, 508 | $468,21.1$ | 909, 995 | 03, 213 | 1, 008, 208 |
| August | 467, 393 | 64, 802 | 532.285 | 53, 395 | 4.11. 032 | 81!,729 | 105.370 | 1,017,099 |
| Scptembe | 471, 331 | 62, 922 | 534, 249 | 77, 748 | 410,883 | 840, 292 | 99.970 | 1,010,262 |
| October | 475, 128 | 60, 788 | 536,316 | 65, 390 | 477, 777 | 974, 447 | 95, 238 | 1, 039895 |
| Novemb | 491, 137 | 68,767 | 549,904 | 77. 187 | 4x3, 176 | 960,984 | 153,413 | 1, 111, 397 |
| Decemb | 516,992 | 7331849 | 590,64. | 70, 182 | 64, 207 | 1,038,123 | 175,308 | 1, 211,431 |
| 1920 |  |  |  |  |  |  |  |  |
| January | 520, 161 | 82, 159 | 611. 620 | 74, 159 | 410, 841 | 948,320 | 155, 153 | 1,108,473 |
| Februmy | 528,821 | 84, 86.5 | 613, 680 | 96, 725 | 312,094 | 级 0,54 | 114, 419 | 1,053, 1043 |
| March | 528, 724 | 86, 872 | 615, 190 | 94,703 | 358,819 | 973,637 | 102.800 | 1,076, 497 |
| April | 630, 864 | 80,389 | 630, 258 | 61, 765 | 359.827 | 96ifi, 06.6 | 92,543 | 1,058, 600 |
| May. | 6,30,685 | 91,173 | 822, 111 | 61.033 | 381,308 | 895, 902 | 120, 364 | 1,079,266 |
| Jun | [133. 121 | 87, 111 | 620, 235 | 53, 729 | 3 $\overline{515,847}$ | 9593, 510 | 105, 941 | 1, 059, 451 |
| July | [40,911 | 88, 783 | 629,694 | 67,987 | 355, 574 | 951, 073 | 120,941 | 1,072, 014 |
| Alugust | 539, 964 | 02.615 | 632,600 | 68, 451 | 352,096 | 951, 856 | 122,344 | 1,074,210 |
| Septoinbor | 540,479 | 98, 224 | 639, 403 | 78,850 | 352,038 | 989,979 | 105, 199 | 1.045, 178 |
| Oetoher. | 540, 810 | 103, 134 | 643, 944 | 58, 718 | 380. 148 | 807,125 | 96, 174 | 1,033, 299 |
| Navemb | 540,963 | 112, 373 | 653,336 | 36, 464 | 3611901 | 96S. 503 | 99, 688 | 1,068, 201 |
| December | 542, 903 | 121, 571 | 661, 174 | 3, 114 | 511, 241 | 1, 023,712 | 163, 156 | 1,186,808 |
| 1021 |  |  |  |  |  |  |  |  |
| January | 74.3, 000 | 131,995 | 674, 999 | 3, 209 | 383, 808 | 488, 926 | 118,000 | 1,056,926 |
| Fehrilary | 84, 155 | 167, 513 | 710, 668 | 3, 317 | 330,458 | 547,396 | 80,906 | 1,025,302 |
| March | 54,3,410 | 217, 928 | 751, 337 | 2870 | 333, 622 | 985, 493 | 86, 132 | 1, 671, 685 |
| April | 543, 612 | ${ }^{1} 111,146$ | 654,758 | 6. OnP | 411, 102 | 971,466 | 120,837 | 1,008, 303 |
| May | 543, 84.3 | 111, 107 | 654,950 | 4, 686 | 409,854 | 044, 575 | 120,266 | 1, 0 fit, 811 |
| Jume. | 544,076 | 110,784 | 654, 860 | 4, 892 | 425,004 | 841, 083 | 144, 320 | 1,085, 603 |
| July | 544, 380 | 110,711 | 655,093 | 8,707 | 343, 961 | 927, 041 | 79, 194 | 1,006,236 |
| Angust | 544, 511 | 110, 231 | 655,142 | 4,009 | 383, 424 | 927, 134 | 109,881 | 1,03.5, 994 |
| Septerab | 544,744 | 124, 02: | 668, 769 | 4,221 | 387, 518 | 970, 883 | 92, 152 | 1,012, 330 |
| Detober | 544, 870 | 124, 023 | (66\%) 895 | 5,254 | 423, 929 | 970, 013 | 131,030 | 1, 101,043 |
| November | 545, 123 | 115, 00.5 | 600, I28 | 7,931 | 305, 734 | 949568 | 90, 071 | 1, 039, 139 |
| Deceamber. | 549,521 | 108,240 | 6.57, 76il | 15,300 | 453, 819 | 1, 1000,204 | 128,768 | 1, 188, 629 |

[^97] of silver.

Table 116.-Swiss National Bank, 1912-1825-Continued

| Month | Gold reserve | Sllver reserve | Total reserve | Forelpt crediss payable on de- nasnd | Loang and discounts | Notes in elrculation | Current accounts and other depoatts | Note clreutathon cturrent accounts snd depositat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1022 | Francs | Franes | France | France | Francs | Francs | Frane | Erancs |
| January | 550, 011 | 108, 240 | 658, 261 | 11,069 | 415,409 | 800,128 | 105, 404 | 1, 0984.590 |
| Felmuary | 541, 181 | 108,000 | 652, 181 | 16, 411 | 332, 170 | 837, 728 | 161, 138 | 1098, 818 |
| March. | 545, 535 | 108, 000 | 653, 335 | 5,350 | 356, 181 | 830, 859 | 175, 090 | 1, 005,949 |
| April. | 543, 081 | 108,000 | 651, 081 | 7,604 | 774, 623 | 801, 616 | 242036 | 1, 044, 453 |
| May | 543, 943 | 107, 520 | 651, 468 | 14,490 | 372, 608 | 781, 701 | 288,762 | 1, 0600.584 |
| Juns | 530, 882 | 126, 865 | 647, 747 | 16,901 | 300, 841 | 780,083 | 188, 691 | 887, 675 |
| Jnly- | 519, 409 | 116.282 | 635,691 | 41,322 | 317, 834 | 789, 114 | 231, 288 | 1, 0000490 |
| August | 610,445 | 115, 222 | 625, 667 | 44,870 | 365, 009 | 771, 113 | 271, 840 | 1, 042, 053 |
| September | 505, 292 | 114, 689 | 619, 982 | 29, 199 | 311, 638 | 811, 008 | 178, 972 | 884, 981 |
| Octobar- | 520, 098 | 113,947 | 634, 047 | 33,639 | 252, 621 | 903, 874 | 148, 297 | 1,047,170 |
| Novemb | 581, 915 | 113,301 | 645, 303 | 25,904 | 779, 886 | 887, 98, | 79, 117 | 1,067, 103 |
| Decambar | 585, 146 | 103,885 | 639, 011 | 7,516 | 488, 567 | 976, 428 | 165, 061 | 1,141,467 |
| 1028 |  |  |  |  |  |  |  |  |
| January. | 529, 887 | 100,827 | 636,094 | 5,849 | 445, 707 | 878, 809 | 213, 365 | 1,092,284 |
| February | 535,088 | 105, 618 | 646, 708 | 15,693 | 491, 228 | 883, 832 | 288,789 | 1,142, 620 |
| March | 532,001 | 104,702 | 637, 602 | 13,921 | 520,041 | 820, 231 | 244, 187 | 1,164,398 |
| April | 534, 322 | 104, 365 | 638, 877 | 8,214 | 488, 107 | 015, 059 | 227, 858 | 1, 142,917 |
| May | 538, 056 | 108, 149 | 639, 205 | 4,471 | 328, 752 | 881, 728 | 118, 885 | 958,383 |
| Junse | 524, 481 | 102, 017 | 828, 501 | 28,851 | 316,683 | 888, 671 | 114, 814 | 1,008,285 |
| July- | 625, 651 | 101, 411 | 627, 062 | 7. 066 | 280, 821 | 880, 025 | 60, 688 | 940, 683 |
| August | 826,585 | 200,412 | 628,997 | 34,406 | 279,981 | 885, 868 | 75,565 | 961, 428 |
| September | 526, 908 | 07,028 | 024, 019 | 19,781 | 267, 988 | 930, 003 | 91,818 | 1,021,821 |
| October- | 527,498 | 94,885 | 623.382 | 16, 001 | 364,483 | 927,422 | 84.870 | 1,012,292 |
| November | 677, 283 | 88,098 | 625,382 | 11, 378 | 363, 238 | 919, 630 | 88,700 | 1,008, 300 |
| Decomber | 637, 144 | 60,741 | 677,884 | 0,766 | 434,283 | 981, 058 | 104,860 | 1,086,818 |
| 1024 |  |  |  |  |  |  |  |  |
| January | 636,830 | 80,001 | 025.011 | 17,340 | 210, 230 | 884,000 | 74,241 | 958,321 |
| February | ${ }^{636}{ }^{6} 263$ | 92, 19 | 628, 632 | 15,929 | 281, 900 | 878, 208 | 49,720 | 927,928 |
| March | 636,201 | 94,507 | 630, 731 | 25, 545 | 282,678 | 900.925 | 61,361 | 952,286 |
| April. | 536, 291 | 96,586 | 632,877 | 17, 765 | 343, 760 | 885, 632 | 111, 671 | 997, 200 |
| May | 629, 991 | 97, 821 | 627, 812 | 1,748 | 327,610 | 877, 219 | 89,009 | 966,308 |
| June | 612,872 | 99, 573 | 612,443 | 14, 169 | 819.308 | 877, 104 | 62.915 | 940, 019 |
| Augus | 505, 8088 | 98, 648 | 504.454 | 30,079 | 325, 324 | 860, 216 | 93,080 | 050,240 |
| Geptem | 804, 838 | 92,972 | 5097,810 | 23, 476 | 3403080 | 808,409 | ${ }^{80,681}$ | 935, 690 |
| October. | 505, 222 | 98, 219 | 5988, 451 | 41, 681 | 280.897 | 8891282 | -90,968 | 982, 818 |
| Novemb | 805, 44 | 93,83 | 608, 978 | 37, 976 | 350, 892 | 859, 113 | 122, 004 | 982, 017 |
| December | 605,910 | 87, 175 | 509,001 | 46,500 | 381,522 | 913,912 | 120,000 | 1,003,912 |
| 1925 |  |  |  |  |  |  |  |  |
| Jantuary. | 805,688 | 80, 468 | 595, 158 | 46,783 | 355, 798 | 828, 018 | 108,700 | 108, 7\%8 |
| F'ebrasary | 407, 953 | $80^{625}$ | 687, 889 | 18, 106 | 208, 692 | 819, 298 | 80, 887 | 899, 838 |
| March | 481,284 | 89,672 | 57a, 880 | 15, 800 | 223, 618 | 835, 640 | 70,458 | 900, 098 |
| April. | 480, 127 | 80,513 | 889,440 | 16,312 | 250,708 | 829, 034 | 75, 188 | 906.097 |
| May | 483, 035 | 80,217 | 571,252 | 12,604 | 260, 511 | 821, 983 | 72,826 | 1014,788 |

Tasls 117.-Stoileorland-Wholeale prices; 19:1-1905
On paper basis and on gold basis
[Index mambers of Dr. J. Lotent, 71 commodities; July, 1014 $=100$. The Index numbara have been converted to a gold besis by applying to them the parcantagee which the corresponding average monthly exchange rates [or collars are of par. See chart 70]

| Menth | On papercurrency basis | Converted to gold basis | Month | $\begin{aligned} & \text { On papar- } \\ & \text { currency } \\ & \text { besis } \end{aligned}$ | Oonverted to gald basle |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1021 |  |  | 1028 |  |  |
| Janmary.... | 298 | 103 |  | 181 | 174 |
| February-ame | 230 | 195 |  | 186 | 178 |
| March. | 219 | 194 | May--....- | 187 | 175 |
| April. | 208 | 187 |  | 181 | 188 |
| May. | 188 | 172 |  | 180 | 164 |
| Itane- | 185 | 163 |  | 175 | 164 |
| July.. | 179 | 153 |  | 173 | 160 |
| August. | 177 | 154 | Octobar---- | 181 | 168 |
| September. | 181 | 161 | November---------------- | 182 | 185 |
| October- | 184 | 174 |  | 183 | 165 |
| November | 182 | 177 | 1024 |  |  |
| Decamber--- | 178 | 170 | Jancary | 183 | 164 |
| - 1922 |  |  | Pebruary | 183 | 165 |
| Jamuary .mane. | 177 | 278 | March | 180 | 161 |
| February-. | 172 | 174 | April------------ | 182 | 168 |
| March.---- | 172 | 173 | May... | 180 | -160 |
| April | 165 | 166 | Juno- | 178 | 163 |
| May--- | 162 | 181 | August | 171 | 107 |
| $J$ Jun | 163 | 161 |  | 170 | 166 |
| July--- | 184 | 168 | October | 169 | 168 |
| August | 165 | 163 | November- | 169 | 169 |
| Oetobar.e. | 166 | 162 167 |  | 170 | 171 |
| Novamber | 171 | 188 | 1925 |  |  |
| December | 172 | 169 | Janurry . | 171 | 174 |
| 1028 |  |  |  | 170 | 171 |
|  |  |  | March_ner-r------------- | 170 | 170 |
| February | 175 | 170 |  | 163 | 103 |

Table 118.-Switzerland-Exchange rates, 1914-1925
[New York on 2urich. January, 1014-June, 1921, sight dratts; July, 1921, to date, noon buying rater for cable transfers. Average rates, January, 1014-October, 1018, are midpoints between high and low rates for each month; from November, 1918, to diste the averages are monthly averages of dally rates. See chart 73. Bource: Federal Reserve Board. Par: 18.29 cents per [ranc]

| Month | Cents par trane |  |  | Month | Cents per frams |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eigh | Low | A ver-日ge |  | High | $\mathbf{L}_{\text {OVF }}$ | $\begin{gathered} \text { Avar- } \\ \text { 日ge } \end{gathered}$ |
| 1014 |  |  |  | 1916 |  |  |  |
| Jaminary. | 19.28 | 19. 18 | 10. 28 | July | 18.68 | 18.88 | IR. 64 |
| February | 19.80 | 19.88 | 19.29 | August. | 18.88 | 18.38 | 18. 61 |
| March. | 19.82 | 10.28 | 10.80 | Soptomber | 19.05 | 18.35 | 18.70 |
| April | 19.87 | 10.38 | 10.35 | Octobar..- | 19.01 | 18, 68 | 18. 77 |
| May. | 19.80 | 19.37 | 19.38 | Novembe | ${ }_{10}^{18.83}$ | 1878 | 18.78 |
| Jupo. | 10.42 | 19.35 | 19.39 | Decamber | 19,08 | 18.74 | 18.91 |
| July-- | 21.61 | 19.35 | 20.48 |  |  |  |  |
| Augurt. |  |  |  | Janamry 1910 |  |  |  |
| October | 19.8 | 19.31 | 19.60 | Fanuary-- | 19.31 | 19.08 | 10.20 |
| November | 19.42 | 19.23 | 19.38 | March. | 10. 19 | 19.08 | 19. 14 |
| Decamber | 12.29 | 10.68 | 19.19 | Aptl | 10.84 | 19.17 | 10.28 |
|  |  |  |  | May. | 10.31 | 19.08 | 10. 20 |
| 2015 |  |  |  | Jume... | 10. 12 | 18.88 | 18.08 |
| January | 19. 14 | 18.89 | 19.02 | July... | 180 | 18.87 | 18.01 |
| February | 18.89 | 18.12 | 18.51 | August. | 1800 | ${ }^{18} 88$ | 18.89 |
| March. | 18.89 | 18. 10 | 18.40 | Oeptomb | 18.00 | 18.75 | 18.83 |
| April. | 18.79 18.80 | 18. 67 | 18.68 | Oetober- | 19.04 10.34 | 18.81 10.10 | 18. 93 |
|  | 10.01 | 18.42 | 18.72 | Decamber- | 20.28 | 19.38 | 18.80 |

Table. 118-Switzerland-Exchange rates, 1914-1925-Continued


Tabin 119.-Swilzerland-Purchasing-power parities, 1981-1985
[Averding to index numbers of Dr. J. Lerenz for Swftzerland and Indor numbers of Federal Recerve Board for the United States. Eee chart 74]

| Month | Unitod Stater indax of pricen | Swlas inder of prices | $\binom{\text { Purchasing-power }}{\left(\frac{\text { U. } 8 \text {. Index } X \text { par }}{\text { Bwiss Index }}\right.}$ | Average axchange rates (cables in NeF York) | Per cent purchas: ingpower paritles are of exchange rater |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1821 |  |  | Cents per frase | Cente por frone |  |
| January | 188 | 238 | Cent par 12.68 | 15.68 | 88.86 |
| Fobruary--- | 157 | 230 | 13. 17 | 16.36 | 80.50 |
| March. | 152 | 219 | 13.40 | 17.08 | 78. 45 |
| April -- | 146 | 208 | 13.55 | 17.36 | 78. 05 |
| May | 145 | 188 | 15.05 | 17.86 | 84.27 |
| Jupe-----..-- | 143 | 185 | 14.92 | 17.01 | 87.71 |
| July-- | 148 | 179 | 15.74 | 18.55 | 95.11 |
| August | 147 | 17 | 16.03 | 16. 82 | 95. 80 |
| September | 147 | 181 | 15. 68 | 17.20 | 91.18 |
| October--- | 146 | 184 | 15.31 | 18.23 | 83.88 |
| Novemter. | 145 | 188 | 15. 38 | 18.80 | 81.81 |
| Decomber. | 14 | 178 | 15. 51 | 19.30 | 79.99 |
| 1928 |  |  |  |  |  |
| January-------n-a | 142 | 177 | 15. 48 | 19.42 | 79.71 |
| Februsty-... | 140 | 172 | 16.38 | 19.50 | 88.91 |
| March | 147 | 172 | 16.49 | 10.45 | 84.78 |
| April | 149 | 165 | 17.43 | 19.45 | 80.61 |
| May | 158 | 162 | 18.82 | 18.21 | 97.97 |
| Juno- | 161 | 163 | 10.06 | 19.04 | 100.11 |
| July | 165 | 164 | 10.42 | 19. 10 | 101.88 |
| August. | 156 | 186 | 10.42 | 19.04 | 10200 |
| September. | 164 | 166 | 10.07 | 18.79 | 101. 49 |
| Oetober.- | 165 | 165 | 19.30 | 18.42 | 10478 |
| November.- | 164 | 17 | 18, 61 | 18.44 | 100.38 |
| Decamber -...- | 165 | 172 | 18.81 | 18,91 | 97. 88 |
| 1828 |  |  |  |  |  |
| Jannary- | 166 | 175 | 18.31 | 18.78 | 97.50 |
| February | 168 | 175 | 18.31 | 18.80 | 97.39 |
| March | 168 | 181 | 18.02 | 18.59 | 96.93 |
| April. | 170 | 188 | 17.64 | 18.2 | 98.71 |
| May-- | 187 | 187 | 17.23 | 18,08 | 95, 66 |
| Jun¢. | 164 | 181 | 17.49 | 17.94 | 97. 49 |
| July-. | 160 | 180 | 17.05 | 17.55 | 97. 15 |
| August. | 159 | 175 | 17.54 | 18, 05 | 97, 17 |
| Seplenber | 168 | 178 | 18.18 | 17.88 | 101.79 |
| October- | 168 | 181 | 17.38 | 17.87 | 97.20 |
| November | 163 | 182 | 17.29 | 17. ${ }^{\text {d }}$ | \$8. 69 |
| Decamber | 168 | 188 | 17.19 | 17.45 | 88.81 |
| 1024 |  |  |  |  |  |
| January | 188 | 188 | 17.10 | 17.32 | 99.26 |
| Fabruary------ | 168 | 188 | 17.10 | 17.37 | 98.90 |
| March | 100 | 180 | 17.16 | 17.29 | 90. 25 |
| April | 158 | 152 | 16.75 | 17.60 | 05.17 |
| Mung...- | 158 | 180 | 16.73 | 17.72 | 04.41 |
| Junc... | 154 | 178 | 16.70 | 17.68 | 94. 56 |
| July | 158 | 17 | 17.40 | 18.19 | 95.66 |
| August. ${ }_{\text {Soptember }}$ | 168 | 171 | 17.84 | 1882 | 94.70 |
| Oeptember | 155 | 170 | 17.71 | 18.88 | 93.80 |
| October- | 150 | 169 | 18.15 | 19.18 | 94. 63 |
| November-..-- | 160 | 169 | 18. 28 | 19.28 | 94.7 |
| Decamber. | 160 | 170 | 18.78 | 19.38 | 0465 |
| 1885 |  |  |  |  |  |
| January.- | 168 | 171 | 18. 95 | 10.34 | 97.88 |
| February | 167 | 171 | 18.84 | 19.26 | 07.81 |
| April | 180 | 170 | 19.18 | 19. 26 | 99.85 |
| M发 | 168 | 168 | 19.08 | 19.35 | 88.60 98.60 |

Table 120.-Switzerland-Gold value of total note circulation, 1914-1925
[On basis of exchange rates and on basla of purchaslog-power parities]

|  | Total note circulation (000) omitted) | Average exchange rates | Gold value -of circuletion on basis of exchange rates (050 omitted) | Purchaslng: power parities | Gold value of circular tion on baste of purchasingpower parl. ties ( 600 omitted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1014 | Pranet | Cents per franc | Dollars | Cents par frane | Dollara |
| January. | 274, 180 | 19.22 | 62, 694 |  |  |
| February. | 259,964 | 19.20 | 50, 147 | -------** |  |
| March | 259,968 | 10. 30 | 50, 174 | -**-*-*** |  |
| April | 260, 435 | 19.35 | 51, 555 | -............. |  |
| May | 274, 338 | 19.38 | 58.167 |  |  |
| June | 260,224 282,832 | 19.39 | 50,457 57,783 |  |  |
| August | 283,832 | 20.43 | b7, 783 |  |  |
| September- | 410, 607 | 19.9 | 88,051 |  |  |
| October -- | 425, 628 | 19.60 | 88, 423 |  |  |
| November | 411,765 | 19.38 | 70,504 |  |  |
| December. | 412,877 | 19. 19 | 70,231 |  |  |
| 1015 |  |  |  |  |  |
| January |  | 19.02 |  |  |  |
| February |  | 18.51 |  |  |  |
| March | 44,643 | 18.40 | 76,294 |  |  |
| Aprid. | 408,910 | 18.68 | 78, 384 |  |  |
| Jung | 419.356 | 18.82 | 78,923 |  |  |
| July- | 410, 173 | 18.54 | 76,046 |  |  |
| August. | 407, 648 | 18. 61 | 78, 863 |  |  |
| Septembex | 435, 768 | 18.70 | 81,489 |  |  |
| October- | 443, 112 | 18.77 | 88.172 |  |  |
| November | 427,481 | 1878 | 80, 277 |  |  |
| Decamber | 465, 609 | 18.91 | 88, 047 |  |  |
| 1918 |  |  |  |  |  |
| Janumry | 420,372 | 19.25 | 90,022 |  |  |
| Fobrtary | 420, 388 | 10.20 | 78,791 |  |  |
| March. | 431, 250 | 19. 14 | 82.541 |  |  |
| April | 431,186 | 18.26 | 83,046 | -*-*---*-* |  |
| Mane | 425, 213 | 18.20 | 81, 641 |  |  |
| July. | 483, 155 | ${ }_{18}^{18.98}$ | 82, 213 |  |  |
| August | 431, 605 | 18.89 | 81,542 |  |  |
| September | 471, 509 | 18. 88 | 88,785 |  |  |
| October- | 485, 518 | 18. 93 | 91, 909 |  |  |
| November | 479, 178 | 10. 22 | 92,088 |  |  |
| Decatmber | 536,518 | 19.80 | 108,231 |  |  |
| 1917 |  |  |  |  |  |
| January | 503, 188 | 19.84 | 99,832 |  |  |
| March | 608, 770 | 19.96 | 101,560 |  |  |
| April...- | 528, 217 | 19.89 | 105, 062 |  |  |
| May. | 528,882 | 19.80 | 103, 625 |  |  |
| Juno | 540.158 | 20.25 | 100,382 |  |  |
| July..... | 534,481 | 20.98 | 112. 134 |  |  |
| Angut. | 537, 794 | 22.83 | 122,778 |  |  |
| geptember | 580,200 | 21.51 | 124, 802 |  |  |
| October . | 613, 104 | 21.98 | 134, 760 |  |  |
| November- | 627,590 | 2263 | 142,024 |  |  |
| Deaqmber.-."e | 700, 203 | 22.14 | 162,613 |  |  |
| 1018 |  |  |  |  |  |
|  | 683, 102 | 22.61 | 143, 144 |  |  |
| February | 648,609 | 22. 29 | 144. 143 |  |  |
| March | 605, 629 | 2.75 | 168, 256 |  |  |
| A Prl | 700, 215 | 23.36 | 163, 570 |  |  |
| May.. | 705, 020 | 24. 82 | 174,987 |  |  |
| Junt. | 721, 164 | 25. 07 | 180,796 |  | -..-......-- |
| July. | 713,776 | 28.21 | 179,943 |  |  |
| Angust | 762,094 | 24.64 | 187, 185 |  |  |
| September | 813,451 | 2. 50 | 183, 00\% |  |  |
| October.- | 81,59 | 20.73 | 184, 816 |  |  |
| November | 934, 704 | 20.12 | 183, 034 |  |  |
| Decamber----000 | 976,706 | 20.62 | 201, 101 |  |  |

Tabis 120.—Switecrland-Gold value of total note circulation, 1914-1925-Contd.


Table 120.-Switzerland-Gold value of total note tirculation, 1914-1925-Contd.

|  | Total note circulation (000 omitted) | Average exchange rates | Gold value of circulstion on besis of exchange rates (000) omitted) | Purchasingpower parlties | Gold value of circulation on basis of purchasing powar paiftles (000 omitted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 | Francs | Cents par frane | Dollars | Centr per franc | Dollars |
| January. | 884, 080 | 17.32 | 153, 123 | 17.19 | 151,973 |
| February | 878, 208 | 17.37 | 152,545 | 17. 19 | 150, 064 |
| March. | 900, 025 | 17.29 | 155, 770 | 17.16 | 154, 509 |
| April | 885, 532 | 17.60 | 185, 854 | 16.76 | 148,377 |
| May | 877, 219 | 17.72 | 155,448 | 16.73 | 146, 759 |
| June.- | 877, 104 | 17.68 | 154,897 | 18. 70 | 146,476 |
| July... | 868,218 | 18. 19 | 157, 568 | 17.40 | 150,722 |
| August --. | 888, 009 | 18.82 | 163, 529 | 17.84 | 155, 018 |
| Septomber. | 801, 282 | 18.88 | 188, 274 | 17.71 | 157,848 |
| October. | 882,153 | 19.18 | 169, 197 | 18. 16 | 160, 111 |
| November. | 859,113 913,912 | 19.28 10.38 | 166,637 177,110 | 18. 28 | 168, 871 |
| December. | 913,912 | 10.38 | 177, 110 | 18. 73 | 171, 176 |
| 1025 |  |  |  |  |  |
| January... | 825, 016 | 19.34 | 150,588 | 18.98 | 158,341 |
| February. | 819.209 | 19.26 | 157, 797 | 18,84 | 154, 356 |
| March | 835,610 | 19.28 | 100,944 | 19. 18 | 100.276 |
| Aprll | 829,934 | 19.33 | 180, 428 | 19.06 | 168, 185 |
| May -- | 821,963 | 19.35 | 150,050 | 19. 29 | 158, 557 |

Table 121.-Switzerland-I mports and exports of merchandise and gold and ailver, 1890-1924
(Sorrce: Statistisehes Jahrbuch der Bchweiz and Etatistil des answartigen Handels der Bahwaiz. Bee chart 71. 060 omitted]

|  | Merchendise |  |  |  |  | Gold and sulver |  |  | Total exced of vistble importis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity ${ }^{1}$ |  | Value ${ }^{\text {2 }}$ |  | Exoess of imports | Vatue |  | Ercess of Imports |  |
|  | Imports | Exports | Imparts | Exporta |  | Imports | Exports |  |  |
|  | Quin tala | Quin- | Fratica | Pranca | Pranct | Francs | Franct |  | France |
| 1890 | 31,074 | B, 301 | 928,781 | 098, 800 | 226,981 | 75, 800 | 26, 273 | 49.597 | 276, 868 |
| 1891 | 34,453 | 4, 969 | P14, 023 | 466, 778 | 247,245 | 67,908 | 37,079 | 30,910 | 278, 164 |
| 1892 | 31,744 | 4. 094 | 840, 033 | 652, 787 | 197, 146 | 62, 653 | 25,203 | 27, 420 | 204, 650 |
| 1893. | 34, 886 | 4, 508 |  |  |  |  |  |  |  |
| 1894. | 36,904 | 4.894 | 800,337 | 816, 741 | 183, 596 | 80, 508 | 8, 115 | 24, 39 | 207, 099 |
| 1895 | 41, 962 | 4.217 450 | 889, 697 | 688,650 | 231, 047 | 90, 423 | 45.778 | 44, 645 | 275, 092 |
| 1897 | 45,186 4,143 | 4,530 | 956, 577 | 631, 962 | 274,818 | 105, 256 | 68.854 | 48, 401 | 223,010 |
| 1898. | 48, 419 | C,004 | 1,020,309 | 717, 851 | 308, ${ }^{\text {a }} \mathbf{1 7 5}$ | 127,874 | 75,628 | 52, 248 | 800,701 |
| 1899. | 50,385 | 5, 411 | 1,118, 100 | 789, 523 | 288, 577 | 165, 888 | 76, 144 | 89,744 | 418, 321 |
| 1900 | 49,748 | 6, 607 | 1, 068,089 | 829,783 | 238,305 | 138,721 | 65, 116 | 83, 005 | 321, 61 |
| 1901 | 47,300 | 5.983 | 1, 005, 914 | 829, 421 | 176,498 | 112,656 | 23,004 | 78,962 | 255, 455 |
| 1902. | 49,847 | ${ }_{6}^{6}, 673$ | 1,087,950 | 868, 138 | 218, 812 | 119, 298 | 48,778 | 70, 517 | 250,320 |
| 1903 | 53, 605 | 6, 158 | 1,150,148 | 881,897 | 277, 251 | 92,948 | 34,836 | 68, 110 | 335, 361 |
| 1904. | 56, 718 | 6,523 | 1.206, 401 | 888,349 | 323, 052 | 116,900 | 51, 215 | 65,093 | 338, 745 |
| 1905. | 00.63 | 0.537 | 1,339,875 | 950,745 | \%80, 150 | 118, 427 | 48, 078 | 70,349 | 450,499 |
| 1906. | 61, 191 | 7, 546 | 1,421,748 | 1,060, 205 | 361, 523 | 132,446 | 39,392 | 08.054 | 454, 577 |
| 1907. | 09, 312 | 6989 | 1,620, 488 | 1,140,021 | 486, 467 | 100,685 | 48, 850 | 60, 720 | 547, 198 |
| 1908. | 66, 520 | 7, 242 | 1, 42, 058 | 1,028, 112 | 402,946 | 104, 918 | 33, 091 | 71,271 | 474, 178 |
| 1809 | 68, 223 | 7,446 | 1,556, 208 | 1,089, 686 | 468, 520 | 85, 002 | 47,874 | 88,078 | 504, 348 |
| 1910 | 71, 168 | 8109 | 1, 674, 513 | 1,191, 272 | 483, 271 | 112, 282 | 32, 858 | 80,511 | 563, 758 |
| 1911 | 76, 206 | 8,458 | 1,743,61 | 1,253,054 | 100, 548 | 100, 202 | 35,743 | 64,459 | 555, 006 |
| 1912. | 80, 257 | 9.828 | 1, 902, 072 | 1,353, 575 | 548, 407 | 137.359 | 37, 360 | 90.009 | 648. 496 |
| 1913. | 80,778 | 9, 648 | 1.850,642 | 1,371, 477 | 488, 065 | 118,329 | 30, 232 | 78,907 | 667. 062 |
| 1914. | 65,321 | 8,524 | 1, 430,500 | 1, 183, 510 | 27,060 | 80, 008 | 11.488 | 68, 520 | 316, 600 |
| 1915. | 60,360 | 12.67 | 1,677, 454 | 1,666,857 | Q, 507 | 50,278 | 6,056 | 44.223 | 50,820 |
| 1916. | 59,805 | 19,029 | 2,307, 4\% | 2, 445, 730 | ${ }^{2} 78,235$ | 155, 5238 | 2,350 | 140, 78 | 71, 043 |
| 1917. | 43, 213 | 14, 051 | 2,392, 881 | 2,321, 129 | 71,752 | 57, 282 | 4. 917 | 52, 365 | 121, 117 |
| 1918. | 35,805 | 9. 122 | 2392, 168 | 1,002,735 | 429,433 | 01, 241 | 2,822 | 88,419 | 817, 850 |
| 1919. | 42.677 | 11, 123 | 8, 508, 765 | 3,297, 001 | 210,804 | 76, 8\%6 | 4,070 | 71,756 | 268, 620 |
| 1920. | 57, 538 | 10, 290 | 4, 201, 197 | 3,274,368 | 974,829 | 88, 966 | 48, 162 | 45, 804 | 972, 883 |
| 1921. | 44,203 | 6,091 | 2, 247, 512 | 1,78, 251 | 464, 432 | ${ }^{488}{ }^{88}$, 679 | 378. 372 | 115,307, | 500, 709 |
| 1922. |  |  | 1, 8283868 | 1, 688, 053 | 194.316 | 185, 971 | 83, 707 | 102, 284 | 290, 580 |
| 1923. | 03, 038 | 7.188 | 2,224,812 | 1.746, 101 | 508, 711 | 177,844 | 105, 190 | 72,854 | 601. 365 |
| 1984 | 0, 170 | 8,119 | 1,960,500 | 4,907,214 | -24,64 | 20, 045 | 142,892 | - 111, 887 | 142,532 |

a Quantity figure inclade gold and drex.
s Exeluding gold and eflver.

- Ereen of erports.

Tablix 122.-Stoitzerland-Imports and exports of merchandise and gold and silver,
1910-1925
Elource: 8tatistin des auswartigen Eandala der Bohweis. See ohart 72. 000 omitted


Table 122.-Switzerland-Imporls and exports of merchandise and gold and silver, 1910-1925-Continued


Table 123.-Switeerland- Imports and exports of gold and silver, annually, 19101923
[Source: Statistik des al1swătigen Handels der Schweiz. 000 omitted]

| Year | Gold coin and bullion |  |  | Eilver coin |  |  | Silver bullion |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports | Exports | $\begin{gathered} \text { Excess } \\ \text { of } \\ \text { imports } \end{gathered}$ | Imports | Exports | $\begin{aligned} & \text { Ercess } \\ & \text { of } \\ & \text { imports } \end{aligned}$ | Imports | Exports | $\begin{aligned} & \text { Excess } \\ & \text { of } \\ & \text { imparts } \end{aligned}$ |
|  | Prancs | Francs | Ftares | Fruace | Franc: | Franca | Franca | Francs | Prancs |
| 1910 | 82, 697 | 24,350 | 58, 347 | 22, 112 | 7,411 | 14, 601 | 7,453 | 1,007 | 6,356 |
| 1911 | 68, 275 | 27, 722 | 40, 553 | 23, 175 | 7, 021 | 16, 154 | 8,040 | 099 | 7,041 |
| 1912 | 78, 728 | 27, 822 | 50,906 | 49, 420 | 8,581 | 41,339 | 8,709 | 756 | 7,953 |
| 1913. | 58, 270 | 28,378 | 24, 532 | 52,726 | 9,838 | 42,840 | 7,313 | 1,116 | 6,217 |
| 1914 | 『8, 532 | 6, 141 | 52,338 | 15,702 | 4,517 | 11, 185 | 6,061 | 827 | 5,234 |
| 1915 | 16,764 | 1,739 | 15,025 | 27, 840 | 2, 303 | 25,537 | 5, 673 | 2,013 | 3,660 |
| 1916 | 118,534 | 828 | 117,700 | 23,779 | 1,365 | 22,414 | 10,315 | 1, 156 | 9,159 |
| 1917 | 36, 0.02 | 2,834 | 33, 168 | 4.919 | 1,094 | 8, 525 | 11,361 | 991 | 10,370 |
| 1918 | 84, 550 | 1,408 | 83.148 | 1,469 | 1,386 | 83 | 5,215 | 29 | 5,186 |
| 1919 | 57,369 | 116 | 57, $2 \times 3$ | 12,114 | 3, 883 | 8.231 | 6,346 | 71 | 6, 275 |
| 1920 | 39,513 | 1, 884 | 37, 203 | 40,4111 | 40,415 | 14 | 8,054 | 861 | 8,193 |
| 1921 | 475,291 | 376,236 | 99, 0 as | 6. 775 | 3. 115 | 3, 360 | 6, 612 | 557 | 6,005 |
| 1922 | 179,663 | 79,992 | 99, 6 fil | 822 | 2,607 | 11,785 | 5,489 | 1, 108 | 4,391 |
| 1923 | 163, 091 | 94,307 | 68,784 | 1,110 | 10, 457 | ${ }^{1} 4,347$ | 3,643 | 430 | 3,213 |

[^98]Table 124.-Switzerland-National ded, 1850-1923
[Source: Statistisches Jahrbuch der Schweiz; 000 omitted]


1 leass money in sinking fuad.
Table 125.-Switzerland-Receipts and expenditures, 1911-1924
[Hource: Itatistisches Jahrbuch der Bchweiz]

|  | Year | Rexeipts | Expmiditures | Deficit |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Francs | Frands | Francs |
| $1911{ }^{1}$ |  | 98, 044, 100 | 08,266, 046 | 251,016 |
| 1912 |  | 102, 338, 649 | 100, 033, 098 | 2 1, 405,551 |
| 1913 |  | 90, 957, 112 | 105, 310, 651 | 5, 353, 530 |
| 1914 |  | 78, 310, 723 | 160, 843, 815 | 22, 533, 118 |
| 19151 |  | 77, 326,354 | \%, 177, 861 | 21, 551, 507 |
| 1916 |  | 176, 582,014 | 193, 227, 469 | 16, 645,45, |
| 1917 |  | 185,635,900 | 236, 403, 765 | 50, 747, 865 |
| 1918 |  | 221, 705, 080 | 283, 509, 767 | 61, 844, 687 |
| 1919 |  | 246, 879, 263 | 382, 534,950 | 95, 655, 687 |
| 1920 |  | 343, 556, 352 | 443, 083, 082 | 99, 536, 730 |
| 1921 |  | 3同, 859,356 | [018, 431, 226 | 127, 571,870 |
| 1923 |  | 425, 863, 980 | 505, 271, 046 | 79,407, 668 |
| 1923 |  | 253,445, 119 | 298,913, 874 | 45, 468, 754 |
| 1924 |  | 2in, 915, 000 | 295, 170, 000 | 38, 264, 000 |

[^99]$$
51142--25 \dagger-\operatorname{SER} 9, \text { voL. II }-27
$$

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CHECKED
moerer


[^0]:    1 For tables throughoat the toxt consult the index.

[^1]:    ${ }^{1}$ New gold from the mine eonld be reexported mider a Heenet, according to arrangemente mide in 1919.

[^2]:    i Propared by E. Y. D. Withe.
    Inflation et defitation.

    * According to the pold tandard haw of Argust, 1omp the monetary unit, the lrone, was to cuntaln 0.sse7s:
    

[^3]:    Tbe Anstrian erown, Doctor de Bordes, D. 88 ,

[^4]:    1 Reonomiste Prancals, so Mart, 1018; p. 387.

[^5]:    ${ }^{2}$ The fisure of $500,000,000$ erowns tor the criculation of pretent Anstrata in 1913 ts an estimata by Dr. do
     crowns and estimates from popolation, besiness activity, and tar recurns thas the present Austris empiayed cae-fifth of this eirculation.

[^6]:    1TTe Amprian enver, Dr. *e Burden, B. If

[^7]:    

[^8]:    

[^9]:     mare been repald．

[^10]:    Immediately after the withdrawal of Germany from Belgium the Bocists Gendrale rastored the fistus
    departmont to the National Bank as previously contemplated.

[^11]:    61142-25t-min 8, voi IT-5

[^12]:    1 Prepared by John Parke Young.

[^13]:    

[^14]:    ${ }^{3}$ The words of the treaty are as follows:
    "1. Within two months of the coming fnto force of the present treaty, each one of the staten to witich territory of the former Austro-Hungarian monarchy is transferred, and each one of the states arising from the dismemberment of that monarchy. Including Austris and the present Hungary, shall. If ti has not already done so, stamp with the stamp of its own government the currency notes of tho Austro-Hungarien Bank existing in its territory.
    ''2. Within 12 months of the coming into force of the present treaty, each one of the States to which terrltory of the former Austro-Hungarian monarcliy is tranglerred, and each one of the Statee ariaing from the dismemberment of that monarchy, Including Austris and the present Hungary, shall repisce, as it may dismemberment of that monarchy, including austris and the present Hungary, shall repise, as it masy think fit, the stamped notes referred to atove by ity own or a mew extrency. (Treaty of peaco bo-
    tween the allied and associsted powers and Austria. Edition of H. M. Btationery Ofice, London, 1919, tween the
    art. 203.$)^{*}$

    - Par. 2 In see. 10 of the law provides that notes masy beisscied to the extert of onshalf the carrent aconints and treasury bills of the Anstro-Hangarian Bank taken over by Ceechoslovakia. The law doea not declare that notea might also be issued equal to the amount of the treassiry sccocinta with the Anstro-Hungarian Bank-also taken over-but by interpretation the banking offles conatidert aote listues not only to 50 per cemt bus to the full amount of these accounta loetcal and permiselbie. Note lssues only to one-haif of the other bccounts were allowed for, becanse hall of each of these acconnts wat retained at a forced loan, and would therefore not cause a dernand for currency. The Government scoounts with the bent, howiversmounting to $780,700,000$ kronen-could be withdrawn in notes, and therefore it is bold that ing taw eboukd be interpreted liberally and according to its purpose.

[^15]:    1 Include Danaig.
    IInciudes Grand Duchy of Laxemiturg.
    Includes Fivme.

[^16]:    : Compert the mocompanying chart (16) with that chowing auchange retes tor the mark. (Vol. I. Chart 37, p. 413.)

[^17]:    1 Ascording to an estimate of a Crechoslovar delegate at the Brnspele coniortencs in igat the total debt
    

[^18]:    1 Prepered by Mr. Elme Wood.
    
    

[^19]:    ${ }^{3}$ An act of Aug. 30, 1919, changed the legal reserve from 80 to $331 / \mathrm{per}$ cent. Of the total amount nat less than $121 / 2$ per cent must consist of legal coin and not less than 20 per cent must conaist of goid coin and ballion.

[^20]:    1 During the mane period there wat a hosvy decline in the value of stock-exchange seenrities.

[^21]:    ${ }^{2}$ Exchange in Hamburg went below par in October, 1914 exchange an Paris, in May, 1010; exchange
    on London, to June, 1915; exchange on New York, in Nown ber, 1915.
    The metallic resarve consisted almost entlrely of gold.

[^22]:    

[^23]:    IIn Janimery. 1985, these amounts were bibreased to $840,000,000$ and $55,000,000$.

[^24]:    ${ }^{1}$ The forejgen debt has been converted into kroner at par with the following exceptions: $\$ 25,000,000$ loan of

[^25]:    4 This moctlon was prepared by John Parks Young.
    
    The unit according to the law of 1867 was the florin. Forty-five florins wers to be minted out of 50 ? eramit of filos silver.

[^26]:    IIn addition to theee silver and gold coilias, there might be colned for fadividual scoocmt gold ducats and silver thalers of the Marla Therces type of 1780. Tbeta, howrever. Wero tor trade purpaces and Fers and cilver thalers of the Maras Thercse type of 1780 . Tbeta, however, Wert tor trade purpases and Fers
    
     tained 24 grams 0.500 fine.

[^27]:    "The amount of white notes fasued hat been entmated at 3,500,000,000 kroneb. Leages of Netion; Mümorendam of Currency, 1924.

[^28]:    - Reparation payments during the 20-year period, as axed by the commisslon and accopted by Hungary heghn with the peymant of $5,000,000$ gold crowns In 1027, and increase to 14,000,000 in 1842 The total amonnt of reparation Hungery is to pay under the treaty of Trision was not Axed.

[^29]:    
    
    

[^30]:    "During Fobraary the bank recelved about $00,000,000,000$ kronen. (paper) ta gold from the state rallways, which sequired it in the form of fares and freight receipts.

[^31]:    

[^32]:    ${ }^{1}$ This aection was propared largely by Mr. E. V. D. Wight. Oratatal acknowiedgment to made of the veluable assistance of Dr. Wubalm Mantnine, of the Rotterdamsche Bantverceniging.
    ${ }^{1}$ This fineness of tha coins whas reducod to 0.720 November 27 , 1919 , on account of ing high price of silver whech provalied of that dime.

[^33]:    The charter has been renowed at virious times and the preent chatter ruma unifl March ti, inec.
    4 At the outbreak of the wor this figure wee reduced to 20 per cent.

[^34]:    -The olrculation of the bant Incroased rapldiy, so that the sctual resarve fell to about 32 per cent in October, 1914. However, the sltuation changed so that the percentege of reserve roee to above 40 per cent in December, 1914.

[^35]:    * For a disenaion of purchasing-power paritles, ase Volume I, especially pp, 36-39.

[^36]:    2 Provisional. "Included in ordinary budges.
    Estimated recoipts; expenditurea es voted by the chambert. "Exalusive of ajnking-fund operathom.

    - Estimated recolita; expenditures acked by the treasury.

[^37]:    in This section was prepared by Mr. Elmer Wrod.
    the amount of the flduciary trsue has been raised at different times gince then. It was frst raised to $70,000,000$ kroner. The law of Nov. 28, 1920, fixad the amaunt at $250,000,000$ kroner; i royal decree of Feb. 8, 1022, ralsed the amount to $275,000,000$ lraner.

[^38]:    4 Rnchange ratea on Hamburg went bolow par October, 1914; exchange on Perts, May, 1915; axchange on London, Jupe, 1015, and axchange co New York, November, 1915.

[^39]:    1 Decomber figurs.

[^40]:    at the end of 1920 Norwiry borrowed $520,000,000$ in the United Btatea.

[^41]:    1 Converted to lrooger at the rate of 5 kroner to the dollar, with the exception of the 1924 flgure which 4s convertied tot the rate of exehange prevailint on June $20,19 \lambda$, which wis ebout 18.5 cents per trome,
     compared with fgares for the preceding yeara.

[^42]:    1 Thin esction was prepared by John Perite Young.

[^43]:    'A moratorium whe granted to protect the banks acaluat a withdrawal of their fugde.

[^44]:    

[^45]:    
     so tho gill per.

[^46]:    In Jamuary, 1025, a provisional dividend of 1234 por coat what agroed upan.

    - Contractis which epecify paymerit in fold coin mast be mold.

[^47]:    I Pligures furnished by the Polish Legation, Washington.
    :As of Mar. $1,1925$.
    ${ }^{4}$ This does not inchude obligations asesumed by Poland under the treaty of Versailes lo conpection with former German and Austrian Provinces given to Poland.

[^48]:    ${ }^{1}$ This nection was prepared by Mr. M, L. Jacobeon.

[^49]:    I Figure do not take socount of coina melted down or lont to chrculation in wase not abown by oflemi records.

[^50]:    ${ }^{n}$ Noritaky, Le Stock for de In Romsie in the collection of esaaya entitled "La Dette Pablame de in Rogale" (Paris, 1022), Dp. 208-200,

[^51]:    Matzenellenbaum A. B., Rusgian Currency and Banking, 1914-1924, London, 1904, D. 88.

[^52]:    4 Yuroviki, I. N. Op. clt., D. 17.

[^53]:    5 B. Preobrachengky, Five Fears of Finance and Currency in the Soviet Republic. Moscow, 1922 (in Collection of essay entitled "Za plat let" (A review of five years), Moscow, 1922 (in Rughlan), D. $\$ 21$.

[^54]:    ${ }^{1}$ Yuropskl, op. elt., p. 81.
    3 For a more detailed discusion of banking reform, bee D. 214 and followlag.

[^55]:    : Yurorbid, op cit., p. 49.

    - Katzenelleabanm, op. cit, p. 119.

[^56]:    According to E. Preobrajengki (Elve Yeart of Finance and Currency In the Soviet Republic, Moscow, 1922) the entire gold atock taken over by the Soviet authorities amounted to about $1,000,000,000$ rubles of which $651,000,000$ fell into the hands of Admiral Knichat. Of the latter amount only two-thirds (about 20,000 poodsem22,240 pounds) Fan recovered In siberit.
    "See chapter entitled "Le roci dror de la Russie " in the collection of essays under the general titie Le Probleme Financler Rusge, La det pe pubique de la Rusile, Paris, 1922,

[^57]:    1 Panvolaky and Moulton-flasaian Debta and Rurbian Reconstruction, N. Y. 1024, p. 16-20.

[^58]:    P Pasyoisky and Moulton op. cit., p. 32.
    E Enplanatory memorandup to the State Badget of the B. B, B. B. for the 1924-25 budget year, Part 2, p. 148 (in Rumian).

[^59]:    - Inchuding $\$ 187.729 .750$ of credlem obtalned from the United gtaten Trennury during the period July to November, 1917, on whlch interest of $\$ 82,486,284$ has acerued up to May 15, 1925.

[^60]:    Narodnoye 1 Gooudirstrennoye Khowinistro, 1922-23, pp. 8-9.
    League of Nations zeport on Bconomic Conditions in Eussia with epecial reference to the famine, 1921-1822, p. 41.

[^61]:    51142-25†-AEE 9, vOL II-15

[^62]:    1 Thin extion wes prepared by John Parke Youne.
    3 The smaller cluver colns contain lest aiver per pesedm.

[^63]:     Commercs, 1920.

[^64]:    BThe values are now faxed by the Conselo do la Economin Nacional, an organieation dating from Mar. 8, 1924, when the Junta de Aranceles $y$ de Valoraviones went out of existence. Prior to thls dite the Junt gred the veluet. The values for 1923 wece fixed by the Conselo de la inconomia Neclomal,

[^65]:    7 Customs duties are pagabis in gold but are actually paid in current petetas at offictal rated fixed tach month.

[^66]:    - Importations of gold irom Great Britain stopped early in 1916. Imports of gold from Prance, which had never been large, also caased aloout this time. Oofd from the United States continued to come in until the embarge in Beptember, 1017, upon its exportation from the United Btetes.

[^67]:    I Imports from the United Btates deellned, due largely to depressed conditlons In the Bpanish tartila Indastry, to that importations of raw cothon from the United States wore rediced.

[^68]:    1 A bout 200 million dollars in United States gotd coin are now hold by the Bank of Spain.

[^69]:    : This section was prepared by Mr. Elmer Wood.

    - 'The monetary convention between Sweden and Denmark wes signed in 1873 , and was extended to Norway in 1875. The sifer coins were not unlinited legal tonder in any of the three countries.

[^70]:    The monopoly of note fasue did not become effective until tha beginning of 1904 .

[^71]:    ${ }^{1}$ The rediscount rate was lowered to 6 per cent on Aus. 12, 1914, and to 531 per cent Aug. 26, 1914. Gince Apr. 9, 1920 , the Riksbank has discontinued the practice of haviog the discount rate ior private individuals and firms diferent from the rediscount rate for banks.

[^72]:    ${ }^{2}$ In February, 1924, Sweden declared the money of Denmark and Norway no longer valld in Ewreden.

[^73]:    1 Ninety-two per cent of the totel outstanding.

[^74]:    - This sectlon wres prepered by Mr. Elnuer Wood.

    Se Systemp Monetaire de la Sulast. Etude documentaire. Publication de la Banque nationale suisse $1825 . \mathrm{p}^{24}$.
    pirtue of Swise law.

[^75]:     1907.

[^76]:    i "Current accounts" are practlcally equivalent to demand deposta in the Unted States, and "deporits" are equivalent to time deposits callable at short notice.

[^77]:    ${ }^{3}$ This large Inflow of silver b-irane pieces became an emberrasment to the 8 wisa Government, and further inpports were probitited Oct. 4, 1620 . People preiferred the 5/rafic notes, so a large part of the gilver pieces found their way to the Swiss National Bank. At the monetary conference held in 1921 Bwitues land wes given suthority to put the Awisa stamp an ahout 68.7 million francs which bad formerly borne the stamp of other conntries. The remsinfog S-franc pleces, amountlog to $168,000,000$ france, are to be held for the countries of their origin. Those countries have agreed to take them up in installments, beginning in 1927 and continuing over a period not exceeding five years.
    By a decree of Feb. 18, 1921, the 8 wits National Bank was probibited from connting the alver s-frumo pieces at more than tholr bulion value. The Government gave the bank a note for the difference between their nominal and their bullon value. At the end of 1023 the bank ahowed $168,000,000$ franes in nominal value, which tit cartied in its cash eccount at $90,700,000$. At the end of 1924 the nominal amount of toreign
     5 -tranc pioces hald by the bant had dectined to $156,000,000$ frames, carried tn its cash account at $78,000,0$ for
    francs. By an act of Sept. 27,1923 , the 5 -frane pleces bearing the 8 wiss stamp (but not the one beld for
     connted at their bullion value, may not exceed one-fifth of the leges rewerve.

[^78]:    1 The Amerlcap embargo on gold weut into oflect September 7, 1917. Gold wes shilpped oat efter that date but only in such amounts the Govermment man is.

[^79]:    PHzelndint ballian and apecto.

[^80]:    Only net amonate for administration of posts and telegraphs are inciuded.

    - Budgel estimate
    - Surplas

[^81]:    1 Namber.
    In addition, 1,000,223 pleoce.
    In addition, 1,047,641 pleces.
    4 In addition, 1,930,600 pleces.

[^82]:    I Midpolnte betwean high and low mouthly rate.

[^83]:    1 Budget laws paseed.
    9 Budget ethmatel.

[^84]:    I Ineluding goid end silver.

[^85]:    1 Eetimate of Dr. Alotsios Buabbly, Dinector of Royal Hungarian Burean of Statistics.

[^86]:    1 Beginning with 1916-17, elosed accounts were not dealt with by legislation.
    ${ }^{2}$ Fiscal year changed from calendar year to year ending June 30.
    ' Finances were cartied on by means of indemnity acts.
    4 Budget estimates were prepared but finances were carried on by means of indemnity acte.

    - No budget was prepared on arcount of revolution and Botshevist regime.
    - Indemnity act for period indicated.
    ${ }^{7}$ Budget act for 1920-21.

[^87]:    Exolusive of sinking-fund operations.
    Provígional.
    Estimated receipts; expenditures as voted by the chambers.
    Estimated receipts; erpenditares asked by the treasary.

    - Included in ordinary budget.

[^88]:    

[^89]:    1 Bublect to revidion.

[^90]:    1 Converted to kroner at the rate of 5 kroner to the dollar, with the exception of the 1924 fgure which is converted at the rate of exchange pravalling on June 30 , 1924, which was about 13.6 cents per lrone, conEiderably below axisting rates. Thas, this figure for 1924 shows a very considerable increase when compared with flgures for the preceding years.

[^91]:    1 Gold at pari silver coln at face value.
    2 Gold and silver.

[^92]:    1 Yigures tarniaked by the Polish Legation, Washington.
    1 Praliminary.

[^93]:    1 From bank funds proper, exelusive of grain operations.
    ${ }^{1}$ From bant funds proper, ex Exasive of
    Vis, Bank for Indastry, All Rusian Cooperative Bank, Ruasian Banf tor Porelan Trade, Moseow Municipal Bank.

[^94]:    ${ }^{1}$ Last report of the old (Imperian) Btate Bank dated Oct. 23, 1917, showed a total note drculation of 28,017,000,000 rublen.

[^95]:    ${ }^{1}$ Figures of trade over tise European frontier only.
    Fiscal years end Sopt. 20; trade over European frontier only.

[^96]:    1 Exciusive of limports and exports by way of Black Bea porta, for which only annual figures are shown, Fis: Lmports, 1923-24, 81,000 poods, valued at B78, 000 pre-war rubles; axports, 1928-24, 0,266,000 poods, valued at 6,021,000 pro-war rubles.

[^97]:    1 Beginning with April, 1921, 5 -franc pieecs of the Latin Monctary Linion are shown at the market price

[^98]:    1 Exeess of exports.

[^99]:    1 Only net amounts for administration of posts and telegraphs are included.
    ${ }^{3}$ Surplus
    ${ }^{8}$ Budget estimates.

