

FEDERAL RESERVE BULLETIN

NOVEMBER, 1930



ISSUED BY THE
FEDERAL RESERVE BOARD
AT WASHINGTON

Recent Gold Movements
*Seasonally Adjusted Index of Factory Employ-
ment*
Condition of All Member Banks
Report of the Agent General for Reparations



UNITED STATES
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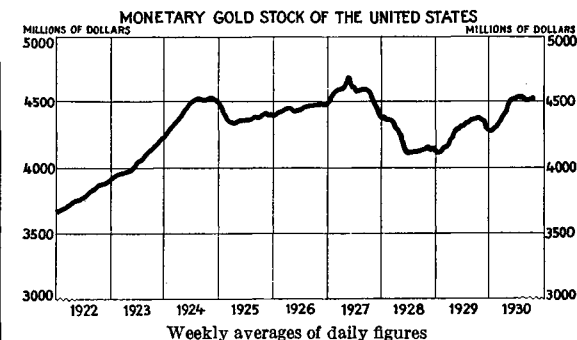
REVIEW OF THE MONTH

Gold holdings of the United States increased in October, as is not unusual at this season of the year when exports of American products are in largest volume and dollar exchange is at a premium. Recent gold imports, however have not come from Europe, but from the Orient and South America, where special conditions have resulted in particularly sharp declines of the exchanges. The total stock of monetary gold in the United States at the end of October was \$4,530,000,000, an amount \$140,000,000 above that of a year ago but \$150,000,000 below the peak figure of May, 1927. A survey of gold movements in the past year with some reference to earlier years is presented in this review.

The chart shows the monetary gold stock of the United States from 1922 to date. Between May, 1927, and June, 1928, the United States lost \$580,000,000 of gold as the result largely of a lower level of money rates in this country than prevailed in other parts of the world. This movement was reversed following the rise in money rates in the United States, which began early in 1928, and by October, 1929, this country's stock of gold had increased by \$280,000,000, most of the gold coming from Canada, England, Germany, and Argentina. Gold imports in the first 10 months of 1929 were on a large scale and were due to movements of funds to the United States caused by the prevailing high level of money rates, the increasing participation of foreigners in the American stock market, and the diminution in foreign capital flotations in this country. Toward the end of October, 1929, the fall in security prices and the accompanying rapid

decline in money rates was reflected in an outward movement of gold, particularly to France and England, causing a decrease of \$100,000,000 in the monetary gold stock of the United States by the end of the year.

Money rates abroad, which had been kept up largely to protect the reserves of foreign countries against the attraction of speculative and high-money conditions in the United States, declined rapidly when these conditions had changed. After the beginning of 1930 there was a cessation of the outward movement of



gold, and during the first half of the year gold movements between the United States and Europe were on a small scale. In the meantime, however, gold flowed into the United States in the amount of \$225,000,000, coming largely from Japan, China, Brazil, and other Central and South American countries. In the case of Japan the exports followed upon the return of the country to the gold standard, which involved removal of all restrictions on gold movements. Decreased exports of silk to the United States and of cotton goods to China and India contributed to the weakness of Japanese exchange. Taking the first 10 months of 1930 as a whole, gold imports to this country from Japan amounted to \$140,000,000. China

also contributed to the flow of gold to the United States, but in this case, since the country is on a silver basis, her exports of gold were in much smaller volume, amounting in all to about \$22,000,000. An important factor in this movement was the drop in the price of silver, which resulted in an increase to China in the cost of goods imported from abroad. Gold movements from Central and South America amounted to about \$138,000,000 during the first 10 months of the year, and reflected chiefly a decline both in the volume and in the prices of raw materials exported by these countries, following upon a long period of conditions in the United States unfavorable for the flotation of foreign bonds. Declining value of exports and the absence of the usual volume of borrowing from abroad left these countries no alternative other than to cover their unfavorable balance of payments through the export of gold.

During July and August gold continued to flow into the United States from the Orient and from South America, but there were at the same time exports of gold from this country to France and to Canada. The circumstances leading to these movements call for a brief explanation.

France has been the principal taker of gold in the world market since the spring of 1927,

soon after the value of the franc was stabilized at approximately its present level. During the

period immediately following stabilization, large foreign balances were accumulated by the Bank of France, the French commercial banks, and the Government, chiefly in consequence of repatriation of French capital as the confidence of the French people in the stability of their currency was reestablished. Until the spring of 1929 the Bank of France utilized a part of its foreign balances for the purpose of building up its gold reserves. From that time on, however, the bank has kept its foreign balances at an approximately constant level and has taken no direct part in the importation of gold. Gold movements into France, however, have continued with little interruption, the imports

being arranged by commercial banks, which have been under the necessity of meeting a growing demand for currency and have drawn upon their foreign balances for the purpose of importing gold to be exchanged for notes at the Bank of France. The increased demand for currency in France has been due in part to an increase in the country's business activity and its prosperity, but has also reflected a reduced velocity of circulation such as usually follows stabilization of a currency.

While the Bank of France has not directly imported gold since the spring of 1929, about \$550,000,000 of gold has been added to its reserves between that time and the autumn of 1930. French imports of gold during this period, not being in response to central bank policy, have come from different countries at different times, depending on market conditions. Between June and October, 1929, most of the gold came from England, where money rates at that time were lower than in the United States or Germany. After the break in the stock market in the United States in the autumn of 1929 and the subsequent decline in money rates in this market there was a considerable movement of gold to France from this country. There followed a period of several months during which gold movements to France ceased altogether, and there was even an export from France to Germany in response to the higher rates prevailing in that country. The movement toward France was soon resumed, however, gold once more being shipped from England. By the summer of this year the amount of gold imported from England to France was in such large volume that the Bank of England no longer paid out gold of the degree of fineness required by the Bank of France (995/1000 fine), but began to exercise its legal authority to pay out gold of lesser fineness, known as standard gold (916 $\frac{2}{3}$ /1000 fine). French purchasers of gold from the Bank of England were thus forced to pay the cost of refining it, and this fact, together with some tightening of money rates in London as a result of previous gold losses, led to a diversion of French purchases to the United States,

from which \$65,000,000 of gold was taken in July and August. Since that time the French demand for gold has once more turned to England and for a period to Germany.

From an international point of view, the significance of this movement is found in the fact that for several years France has had a continuous demand for gold, first from the central bank and later from the commercial banks, coupled with the ability to satisfy this demand by the use of large foreign balances. In these circumstances gold has moved to France in an almost uninterrupted stream, though the origin of this gold has shifted from time to time in response to changes in relative money-market conditions.

Gold movements between Canada and the United States are to a considerable extent seasonal in character. In the autumn months, when Canadian demand for currency is at its maximum, there is usually a movement of gold from the United States to Canada, while after the turn of the year, when currency returns from circulation, surplus funds are transferred to the United States, causing an export of gold from Canada to this country. Over a series of years the result of gold movements between the United States and Canada has been a net export from Canada of an amount of gold not infrequently approximating her annual production of about \$40,000,000. Movements during the past two years, however, have not followed the usual course. During 1928 the high level of money rates prevailing in the New York market caused Canadian banks, in addition to the usual exports, to borrow \$40,000,000 from the Finance Minister and to export this amount in gold, so that Canadian gold exports to the United States during that year were approximately twice as large as usual. In 1929 gold exports from Canada continued, and Canadian reserves declined to a point where informal measures for the cessation of further movements were adopted. During the period of high money rates in New York in 1929 Canadian balances were not withdrawn from this country, and

seasonal requirements were met by the Canadian banks through additional borrowing from the Finance Minister. In the autumn of 1929, after the stock-market break and the decline in money rates in this country, Canadian exchange continued to be low, owing to an unusually small volume of wheat exports and also to a movement of funds from Canada for the protection of margins in the New York stock market. After the turn of 1930, currency returning from circulation was used by the Canadian banks to reduce their indebtedness to the Finance Minister, and consequently the usual flow of funds and of gold from Canada to the United States did not occur in January of this year. The banks, in fact, drew upon their dollar funds to meet the unfavorable balance of payments arising from the decline in wheat exports. By the middle of the year, however, Canadian exchange, owing to the low level of rates in New York and to the flotation of Canadian securities in this market, advanced to the gold-import point, and about \$20,000,000 of gold was imported from the United States during the third quarter of the year, an unusual movement at that season, which in part restored the Canadian gold reserves diminished by the exceptionally large gold exports of 1928. More recently there have been additional gold exports to Canada, but in smaller volume and in accordance with the usual movements at this season.

The following table brings together the figures of gold movements between the United States and other countries for the past year. During that period the gold stock of the United States increased by \$140,000,000, of which \$122,000,000 represented net imports from abroad, the difference being accounted for by domestic production and a change in gold earmarked for foreign account. The table shows gold movements for the entire year and for the periods that have been discussed above—(1) November and December, 1929, when gold was exported, chiefly to France and England; (2) January to June, 1930, when gold was received largely from Japan and South

Canadian gold movements

Summary of figures

America; (3) July and August, 1930, when gold was exported to France and Canada; and (4) September and October, 1930, when once more there were gold imports from Japan and South America.

UNITED STATES GOLD IMPORTS (+) AND EXPORTS (-)
[In millions of dollars]

Country	1929	1930			1929-30
	November and December	January to June	July and August	September and October	November, 1929, to October, 1930
France.....	-62	-8	-65	-----	-136
England.....	-21	-----	-----	-----	-21
Switzerland.....	-10	-----	-----	-----	-10
Canada.....	+5	+16	-13	-15	-7
Japan.....	-----	+114	+8	+18	+140
Other Far Eastern countries.....	+2	+15	+8	+2	+27
Brazil.....	-----	+59	+6	+17	+83
Other Central and South American countries.....	+7	+26	+17	+5	+55
Other countries.....	-8	1	-----	-1	-8
Total.....	-88	+223	-33	+26	+122

As already stated, the net effect of gold movements during the past year on the United States has been to increase its stock of gold. The table below shows gold holdings of some of the principal countries of the world at the end of September, 1929 and 1930. Total monetary gold holdings of the 44 principal countries of the world, not including Russia, increased by about \$470,000,000 during the year, as the result of new production and the absorption into central reserves of gold previously held by commercial banks and by individuals.

GOLD HOLDINGS OF PRINCIPAL CENTRAL BANKS AND GOVERNMENTS
[In millions of dollars]

Country	Oct. 31, 1929	Oct. 31, 1930 ¹	Increase or decrease (-)
United States (Treasury and F. R. banks).....	4,023	4,183	160
France.....	1,570	1,992	422
England.....	643	782	139
Germany.....	531	519	-12
Italy.....	272	278	6
Netherlands.....	178	171	-7
Belgium.....	143	180	37
Switzerland.....	103	129	26
Argentina.....	476	429	-47
Brazil.....	151	43	-108
Australia.....	109	83	-26
Japan.....	541	418	-123
Canada.....	77	122	45

Partly estimated on basis of latest available figures.

In Europe there has been a large growth in the gold stock of France, the holdings of the Bank of France amounting now to about 50,000,000,000 francs, or \$2,000,000,000. The increase in the gold stock of the United States and France, however, has not been at the expense of other European countries. England's losses of gold to France and to Germany have been more than made up by the receipt of new gold from South Africa and by imports from Australia, where the decline in the price of wool and wheat has been largely responsible for an unfavorable balance of payments leading to a decline in the exchange value of the Australian pound and to exports of gold. Of the other major European countries, Germany's gold holdings increased considerably until June, but declined more recently to a level somewhat below that of a year ago. Gold reserves of the Netherlands also declined somewhat, while there was a substantial increase in the reserves of Switzerland, Belgium, and Canada, and a smaller increase in those of Italy. A characteristic of the year's gold movements has been a shifting of gold from outlying countries producing raw materials, which have felt the effects of the decline in the value of their exports, to France, the United States, England, and other important commercial countries.

Change of Agent at Chicago Bank

Mr. William A. Heath, who has served as Federal reserve agent and chairman of the board of directors of the Federal Reserve Bank of Chicago since January 1, 1917, has resigned, effective December 31, 1930.

The board has appointed Mr. Eugene M. Stevens, of Chicago, as class C director, with designation as chairman of the board of directors and Federal reserve agent, in succession to Mr. Heath, effective January 1, 1931.

Changes in Foreign Central Bank Discount Rates

The following changes have been made since the 28th of September in the discount rates of central banks in foreign countries:

September 29.—South African Reserve Bank, from 6 to 5½ per cent.

October 1.—Bank of Latvia, from 6–7 to 6 per cent.

October 3.—Bank of Poland, from 6½ to 7½ per cent.

October 7.—Bank of Estonia, from 8 to 7 per cent and Bank of Japan, from 5.48 to 5.11 per cent.

October 9.—German Reichsbank, from 4 to 5 per cent.

October 10.—Bank of Danzig, from 4 to 5 per cent.

CONDITION OF ALL MEMBER BANKS ON SEPTEMBER 24, 1930

Detailed figures of condition of all member banks on September 24, including the detailed classification of loans, are given on pages 753–761 of this issue of the BULLETIN, and in greater detail by States, cities, and class of bank in Member Bank Call Report No. 49.

During the third quarter of the year total loans and investments of member banks, amounting on September 24 to \$35,472,000,000, decreased by \$180,000,000, reflecting a decrease of \$475,000,000 in their loans and a further increase of \$290,000,000 in their investments. In comparison with a year ago—the call date of October 4, 1929—member bank loans decreased by \$1,425,000,000 and their investments increased by \$985,000,000.

The detailed figures for the third quarter of 1930 show the influence on the demand for bank credit of the continued business recession, since much the larger part of the decrease in loans was in the further decline of \$365,000,000 in loans to customers, exclusive of loans secured by stocks, bonds, or real estate. Customer loans secured by real estate showed little change during the quarter, while security loans to customers (exclusive of loans to banks) decreased by \$200,000,000. At the same time the member banks increased by \$43,000,000 their total holdings of paper purchased in the open market, including both acceptances and commercial paper, and increased their street loans at New York City by \$107,000,000. The open-market portfolio of the member banks at the end of the third quarter amounted altogether to \$14,000,000,000, including \$267,000,000 of acceptances, \$523,000,000 of commercial paper, \$2,472,000 of street loans, and \$10,734,000,000 of bonds and other securities. The following table shows the classified loans

and investments of all member banks on September 24 and the changes for the quarter and for the year:

ALL MEMBER BANKS—LOANS AND INVESTMENTS

[Preliminary figures in millions of dollars]

	Sept. 24, 1930	Change from June 30, 1930	Change from Oct. 4, 1929
Loans and investments—total	35,472	–183	–442
Loans to banks—total	466	–70	–175
On securities	175	–55	(1)
All others	291	–14	(1)
Loans to customers (exclusive of banks)—total	21,010	–555	–2,239
Secured by stocks and bonds—total	7,864	–196	–245
To brokers outside New York City	774	–45	–165
To other customers	7,090	–151	–79
Secured by farm land	387	+1	–5
Secured by other real estate	2,776	+7	+16
Otherwise secured and unsecured	9,882	–367	–2,006
Open-market loans—total	3,262	+149	+987
Purchased acceptances payable in United States	205	+36	+112
Purchased acceptances, etc., pay- able abroad	62	–16	–8
Commercial paper purchased	523	+23	+296
Street loans ²	2,472	+107	+587
Investments—total	10,734	+292	+985
United States Government securi- ties	4,095	+34	+74
Other securities	6,639	+258	+912

¹ Figures not available prior to Mar. 27, 1930.

² Loans on securities to brokers and dealers in securities in New York City.

These figures are shown separately elsewhere in this BULLETIN (p. 753) for banks in New York City, Chicago, other reserve cities, and outside such cities (country banks) for the whole period for which they are available—from October 3, 1928, to September 24, 1930.

SECURITY LOANS IN SEPTEMBER, 1930

By combining statistics from the quarterly member bank call report and monthly reports of the New York Stock Exchange, it is possible to arrive at quarterly data for aggregate loans secured by stocks and bonds that are more comprehensive than those available weekly or monthly. This aggregate, here designated as total reported security loans, includes those reported on call dates by all member banks and in addition that part of the brokers' borrowings at New York City reported by the stock exchange arrived at after subtracting the call

date figures of member bank loans to brokers in New York. It includes no security loans for nonmember banks or nonbanking lenders except those made at New York to members of the stock exchange. This compilation, now available for quarterly intervals from October, 1928, to September, 1930, is given in the following table, which shows separately security loans of member banks, by class of loan, and those of other lenders on securities.

The compilation shows that the total of reported security loans decreased further during the third quarter, by \$500,000,000, and that the total decrease from October, 1929, when these loans were at their peak, to September, 1930, amounted to \$5,450,000,000. For member banks the decrease in security loans for the quarter was \$150,000,000 and for other lenders included in the compilation it was \$350,000,000.

TOTAL REPORTED SECURITY LOANS

[In millions of dollars]

Call date	Total	By member banks					By other lenders ¹
		Total	To banks	To brokers in New York City	To brokers elsewhere	To others	
1928—Oct. 3.....	12,429	8,819	274	1,899	850	5,796	3,610
Dec. 31.....	14,062	10,172	269	2,556	975	6,373	3,890
1929—Mar. 27.....	14,613	9,693	274	1,879	1,014	6,526	4,920
June 29.....	15,144	10,094	335	2,025	921	6,813	5,050
Oct. 4.....	16,974	10,314	320	1,885	939	7,170	6,660
Dec. 31.....	12,835	10,505	357	1,660	803	7,685	2,330
1930—Mar. 27.....	12,644	10,334	260	2,344	796	7,024	2,310
June 30.....	12,015	10,655	230	2,365	819	7,242	1,360
Sept. 24.....	11,521	10,511	175	2,472	774	7,090	1,010

¹ Security loans to banks, not available separately prior to 1930, estimated for 1928 and 1929 at half of total loans to banks.

² Total borrowings at New York as reported for end of month by members of Stock Exchange minus loans to brokers in New York as reported for call dates by all member banks; resulting figures, except in December and June, reflect in part differences in these dates.

NATIONAL SUMMARY OF BUSINESS CONDITIONS

[Compiled October 21 and released for publication October 24]

Volume of factory production increased by about the usual seasonal amount in September, while factory employment increased somewhat less than in other recent years. The general level of prices, which had advanced during August, declined during September and the first half of October. At member banks in leading cities there was a liquidation of security loans, and a considerable growth in commercial loans and in investments.

Industrial production and employment.—Output of factories increased seasonally in September, while that of mines declined. The board's seasonally adjusted index of production in factories and mines, which had shown a substantial decrease for each of the preceding four months, declined by about one-half of 1 per cent in September. Production of iron and steel, lumber, and cement decreased, and the output of automobiles continued to be in small volume. Activity in the textile industries, including cotton, wool, and silk, increased substantially, and stocks of cotton cloth were further reduced. At bituminous coal mines there was an increase in output of more than seasonal amount; output of copper was larger than in August, and there was a further increase in stocks of copper. Anthracite coal and petroleum production and shipments of iron ore declined.

Employment in manufacturing establishments increased less than is usual at this season, the increase being chiefly in fruit and vegetable canning and in clothing industries, while reductions in number of employees were reported for the iron and steel, automobile, and lumber industries. Outside of factories increased employment was reported in retail establishments and coal mines.

Residential building increased materially in September, contrary to the usual seasonal trend, while the volume of contracts for commercial buildings and public works and utilities decreased. Total value of building contracts awarded, as reported by the F. W. Dodge Corporation, showed little change during the month. In the first 10 days of October there was an increase in the daily average volume of contracts awarded.

Department of Agriculture estimates based on October 1 conditions indicate somewhat larger crops than the estimates made a month earlier for cotton, corn, oats, hay, potatoes, and tobacco.

Distribution.—Freight car loadings continued at low levels during September, the increases reported for most classes of freight being less than ordinarily occur in this month. Dollar volume of department-store sales increased by nearly 30 per cent, an increase about equal to the estimated seasonal growth.

Wholesale prices.—The index of wholesale prices on the average for the month of September as a whole, according to the Bureau of Labor Statistics, was at about the same level as in July and August. The movement of prices, however, was upward in August, reflecting chiefly advances in the prices of livestock and meats, while in September the movement was downward, reflecting declines in a large number of commodities, including grains, livestock, meats, cotton, and copper. In the first half of October there were wide fluctuations in many agricultural prices, decreases in prices of nonferrous metals, and considerable increases in the prices of sugar and coffee.

Bank credit.—Security loans of reporting member banks in leading cities increased in the latter part of September, but declined rapidly early in October, the decline reflecting a large volume of liquidation in loans to brokers and dealers in securities. Commercial loans, which up to the last week in September had not shown the usual seasonal growth, increased by \$150,000,000 in the following three weeks. The banks' holdings of investments continued to increase.

In response to the seasonal demand for currency, outstanding volume of reserve-bank credit showed an increase of \$30,000,000 on the average between the weeks ending September 20 and October 18.

Money rates in the open market continued at low levels. The yield on high grade bonds declined further until early in October, when bond prices declined and there was a corresponding rise in yields.

SEASONALLY ADJUSTED INDEX OF FACTORY EMPLOYMENT

Employment in manufacturing industries fluctuates every year from month to month in response to seasonal requirements, and adjustment for these regular fluctuations is necessary in order to observe changes in employment that reflect variations in the general condition of business. For this reason the Federal Reserve Board's index of factory employment, which has been described in the BULLETIN for November, 1929, has now been adjusted to allow for seasonal variation, and the new general index, with component indexes, is presented in the accompanying tables and charts.

In making this adjustment measures of seasonal variation in employment have been deter-

mined for each of the 54 manufacturing industries currently represented in the general index, and these measures have been used in computing adjusted indexes for particular industries, which in turn have been combined into group indexes and into a composite index. The composite index, adjusted for seasonal variation, is shown in Table 1 and Chart I, and indexes for 13 industrial groups and for individual industries included in the composite are given in Tables 3 and 4.

While the amplitude of the purely seasonal swing varies slightly from year to year, it has been found that in general the monthly variation attributable to seasonal influences in the past 12 years has corresponded to that indicated by the curve in Chart II. This curve shows an index of average seasonal variation in employment in each month in relation to the average for the 12 months of a typical year. From the peak in mid-September to the low point of activity in mid-January the average seasonal change in number of workers employed in all manufacturing industries is about 4 per cent,

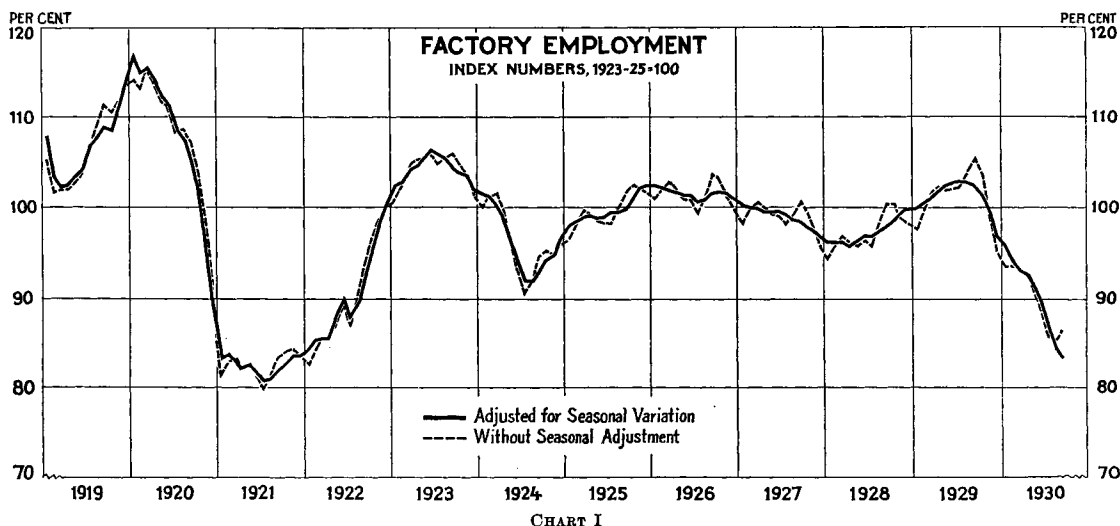


CHART I

mined for each of the 54 manufacturing industries currently represented in the general index, and these measures have been used in computing adjusted indexes for particular industries, which in turn have been combined into group indexes and into a composite index. The composite index, adjusted for seasonal variation, is shown in Table 1 and Chart I, and indexes for 13 industrial groups and for individual industries included in the composite are given in Tables 3 and 4.

Manufacturing industries, as a group, have two busy and two dull seasons each year. Working forces are enlarged in the spring and again in the autumn months, and are reduced in midsummer and in midwinter. This typical seasonal movement is evident in the recurring divergence of the Board's unadjusted index, represented by the broken line on Chart I,

employment in September being in a typical year about 2 per cent larger, and in January 2 per cent smaller than the average for the year. In terms of number of workers this seasonal fluctuation is equivalent to about one-third of a million, out of some 8,400,000 wage earners employed in factories, although the actual seasonal displacement of labor may be considerably greater than this, since it does not follow that those seasonally unemployed in one industry in excess of the average are absorbed by employment in some other industry. The relatively narrow range of the seasonal fluctuation in employment in manufacturing industries taken as a group results partly from the overlapping of slack and busy seasons which come in different months in different industries, and partly from a desire on the part of employers to keep their forces intact.

Although seasonal variations in employment are the rule, rather than the exception, regular changes of this character do not appear in all industries. Employment is relatively free of seasonal factors, for example, in the manufacture of electrical machinery and of paper and wood pulp. In certain machinery and metal industries seasonal variations in employment are smaller than in manufacturing industries taken as a group. This is true of foundries and machine shops, railway car building and repair shops, machine-tool factories, and steel works and rolling mills. The same is true also of newspaper printing. At the other extreme, showing regular and wide seasonal fluctuations, are the industries in which perishable raw materials are used—such as fruit and vegetable canning; those in which, as in the clothing industries, style is the dominant factor and in

(1923–1925=100) for each of the industries in the index. Reports of employment from which seasonal indexes were computed extend over a period of either 11½ or of 7½ years, the period covered by the data beginning in January, 1919, for 22 of the industries and for the remaining 29 in January, 1923.

In computing these measures of seasonality, the method used is the “ratio-to-moving-average” method, used also in the board’s indexes of production and trade, and described in the *FEDERAL RESERVE BULLETIN* for April, 1928. In the case of each industry, as a first step, the influence of long-time trend and of broad cyclical fluctuations was determined by computation of a 12-month moving average of the unadjusted relatives (1923–1925=100) for the industry. This moving average, centered at the seventh month, approximately measured non-seasonal influences, with exception of those which have been purely accidental or erratic. Each monthly relative of the original unadjusted index was then divided by the moving average for the month, the resulting ratios reflecting solely the influence of seasonal and accidental variations. These seasonal ratios were then grouped by months and arrayed in order of magnitude—those for January of different years in one array, and similarly those for each other month in separate arrays. The very high and low ratios were then struck out, in order to eliminate so far as possible the influence of erratic fluctuations. Finally, 12 monthly ratios were derived by averaging the remaining medium-sized ratios for each month, and these ratios, adjusted to average 100 for the 12 months, became the measure of seasonal movement.

It was found that seasonal fluctuations in employment have for the most part been fairly regular—that not only has the maximum and minimum of employment occurred in the same month year after year, but that the relative variation from month to month has been reasonably constant over a number of years. Where this has been the case, a single set of seasonal indexes, derived as described above, has given a fair picture of seasonality. In a number of industries, however, there was evidence of a shift in the periods of seasonal fluctuation. In such industries employment in certain months may have become progressively larger, and in other months progressively smaller over the course of several years, so that occasionally it happened that the month of greatest activity during the early part of the

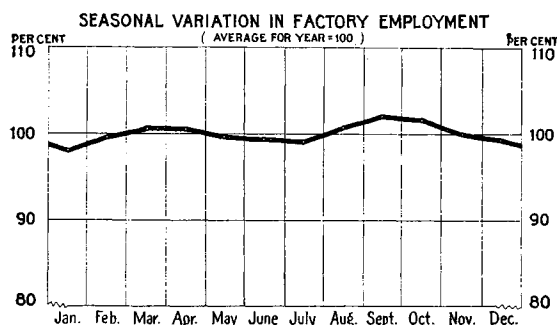


CHART II.—These figures were computed by (1) dividing the composite unadjusted index for each month by the adjusted index for the corresponding month, in order to determine monthly divergences due to seasonal factors, which vary somewhat from year to year, and (2) grouping these ratios by months—all the Januaries, all the Februaries, etc., and (3) selecting therefrom a set of 12 typical monthly ratios.

which, consequently, inventories may result in costly losses; and those in which demand is affected by weather—as, for instance, in the manufacture of ice cream.

The magnitude of fluctuation in individual industries is shown in Table 2, which gives the indexes of seasonal variation used in computing the Board’s adjusted index of factory employment. It is to be noted that these measures of seasonal variation apply to the number of wage earners employed in the pay-roll period ending nearest the 15th of the month—the period covered by the original reports collected by the Bureau of Labor Statistics and by the State departments of labor of New York and New Jersey—and are not necessarily representative of complete calendar months.

Method of seasonal adjustment.—The measures of seasonal variation given in Table 2 have been derived from the unadjusted relatives

period under review had gradually yielded first place to another month. In any industry in which the shift in seasonality was marked, changing seasonal indexes varying from year to year have been computed. The particular industries for which such indexes were computed are indicated in Table 2.

Adjusted indexes, in which the effect of seasonality is eliminated, were derived by dividing the unadjusted monthly indexes for each industry by the monthly index of seasonal change. These seasonally adjusted indexes were combined into group indexes and into a general index for all manufacturing industries.

TABLE 1.—INDEX OF FACTORY EMPLOYMENT, ADJUSTED FOR SEASONAL VARIATION
[Monthly average 1923-1925=100]

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
January.....	107.9	116.9	83.0	84.1	102.3	101.4	98.0	102.4	100.0	96.1	99.8	95.6
February.....	103.3	114.8	83.6	85.2	102.7	101.1	98.4	102.1	99.9	96.1	100.3	93.9
March.....	102.2	115.3	82.9	85.4	104.2	100.5	98.8	101.8	99.8	96.1	100.9	92.9
April.....	102.3	114.2	82.2	85.6	104.7	99.1	99.0	101.4	99.4	95.7	101.7	92.4
May.....	103.2	112.1	82.4	87.9	105.4	96.4	98.8	101.2	99.4	96.1	102.4	91.4
June.....	104.1	111.1	81.4	89.8	106.4	93.9	98.9	101.2	99.5	96.7	102.7	89.7
July.....	106.9	108.9	80.4	87.6	105.9	91.7	99.4	100.5	99.2	96.6	102.8	86.6
August.....	107.9	107.6	80.9	89.7	105.3	91.7	99.4	100.7	98.7	97.3	102.7	84.4
September.....	109.0	105.2	82.0	92.0	104.3	92.8	99.8	101.5	98.4	97.7	102.4	83.4
October.....	108.4	101.9	82.7	95.1	103.7	94.0	101.0	101.7	97.6	98.3	101.3	-----
November.....	111.1	96.7	83.5	98.0	103.3	94.7	102.1	101.4	97.1	99.3	99.3	-----
December.....	113.8	90.2	83.4	100.2	101.9	96.5	102.4	100.9	96.5	99.8	96.9	-----
Annual index.....	106.7	107.9	82.4	90.1	104.2	96.2	99.6	101.4	98.8	97.2	101.1	-----

TABLE 2.—FACTORY EMPLOYMENT: INDEXES OF SEASONAL VARIATION, BY INDUSTRIES

[Average for the year=100]

	Janu- ary	Febru- ary	March	April	May	June	July	August	Sep- tember	October	Novem- ber	Decem- ber
IRON AND STEEL AND PRODUCTS:												
Steel works and rolling mills.....	98.8	101.5	102.2	102.1	101.5	99.7	98.6	99.2	99.9	99.3	98.8	98.4
Hardware ¹	100.5	101.7	101.5	99.0	101.0	100.5	98.1	97.5	100.7	99.5	100.0	100.0
Structural iron work.....	97.1	97.7	97.4	97.8	99.4	100.9	101.3	103.4	103.3	102.3	100.2	99.2
Heating apparatus—												
Steam fittings.....	96.9	101.0	101.3	101.1	100.7	100.7	97.9	101.4	102.3	102.1	99.5	95.1
Stoves ¹	88.0	97.0	99.0	100.5	101.0	100.5	93.0	100.4	105.2	108.6	106.1	100.7
Cast-iron pipe.....	95.6	96.3	99.4	101.0	102.0	102.4	103.2	102.6	101.3	100.3	98.3	97.6
MACHINERY:												
Foundry, machine-shop products.....	98.0	100.5	101.8	101.6	101.0	101.1	100.5	100.2	99.8	99.2	98.1	98.2
Machine tools.....	100.0	101.8	101.9	100.9	100.2	99.2	98.6	98.9	98.8	99.7	99.9	100.1
Agricultural implements.....	103.4	106.4	107.4	106.3	103.1	99.3	94.7	94.7	92.8	95.3	96.9	99.7
TEXTILES AND PRODUCTS:												
A. Fabrics—												
Cotton goods ¹	101.5	102.5	102.0	100.0	99.6	99.0	96.8	95.6	98.5	100.8	101.6	102.1
Woolen, worsted manufactures—												
Woolen and worsted goods.....	102.1	102.0	99.9	98.4	97.8	98.2	95.1	97.9	98.9	102.4	103.9	103.4
Carpets and rugs.....	102.5	102.3	103.6	102.7	101.0	97.6	94.7	96.3	96.8	99.1	101.3	102.1
Hosiery and knit goods.....	99.0	101.2	102.1	102.2	100.9	100.2	95.7	97.3	99.0	100.7	101.4	100.3
Silk manufactures.....	99.4	101.5	102.7	101.4	100.4	98.7	97.8	98.4	99.1	100.6	99.8	100.2
Dyeing and finishing textiles ¹	100.7	102.5	102.5	103.0	99.8	99.0	96.5	96.0	97.5	100.2	100.8	101.5
B. Wearing apparel—												
Clothing, men's.....	99.9	102.7	102.0	96.9	95.1	100.3	100.9	103.0	102.4	101.1	97.4	98.3
Shirts and collars ¹	101.2	102.0	102.0	100.3	98.8	96.9	95.2	95.9	98.9	102.0	103.3	103.5
Clothing, women's.....	102.6	108.7	113.4	108.7	97.3	87.5	84.3	92.0	102.1	105.5	98.3	98.6
Millinery ¹	94.5	98.0	113.1	117.1	108.0	98.0	70.5	83.5	107.4	109.9	103.5	96.5
FOOD AND PRODUCTS:												
Baking ¹	97.6	98.2	99.4	98.4	99.4	101.9	100.7	99.5	101.4	103.2	101.1	99.2
Slaughtering and meat packing ¹	103.5	103.0	98.0	95.9	96.6	99.5	100.0	99.0	99.0	99.5	101.0	105.0
Confectionery.....	98.0	98.0	96.1	90.9	89.9	89.8	87.7	93.6	110.0	120.7	115.0	110.3
Ice cream.....	85.7	86.5	89.3	96.1	104.7	114.7	120.6	117.4	109.1	97.9	90.2	87.8
Flour ¹	99.5	100.0	99.2	95.5	96.0	96.2	99.7	102.0	103.9	104.5	102.8	100.7
Sugar refining, cane ¹	92.0	95.7	101.0	102.7	100.5	101.7	104.0	105.5	101.1	103.5	99.0	93.3
PAPER AND PRINTING:												
Printing, book and job.....	102.3	101.0	101.2	99.3	98.9	98.7	98.7	98.3	99.4	99.1	100.6	102.5
Printing, newspapers and periodicals.....	100.4	100.2	100.2	100.3	100.3	99.7	98.7	98.0	98.9	100.2	101.3	101.8
Paper boxes.....	99.4	98.6	98.7	97.2	96.2	96.3	97.2	98.4	101.6	105.4	106.8	104.2
LUMBER AND PRODUCTS:												
Lumber, sawmills.....	95.5	95.7	96.7	99.4	101.5	102.6	102.2	102.8	103.2	101.7	100.7	98.0
Lumber, mill work.....	97.5	98.6	99.8	100.6	100.8	101.1	101.4	102.0	101.4	99.9	98.4	98.5
Furniture ¹	99.0	98.8	99.2	96.8	94.5	94.6	96.5	100.0	103.5	108.0	106.4	102.7
TRANSPORTATION EQUIPMENT:												
Car building and repairing—steam.....	98.4	98.5	99.5	100.7	100.7	100.8	100.6	100.3	100.5	100.5	99.7	99.8
Automobiles ¹	95.0	101.5	104.6	106.3	108.5	102.2	99.7	102.5	103.0	100.0	89.2	87.5
Shipbuilding.....	103.0	105.6	106.2	106.1	102.5	101.2	97.7	94.6	93.2	93.8	96.1	100.0
LEATHER AND MANUFACTURES:												
Boots and shoes ¹	100.3	102.5	101.1	97.8	95.6	94.5	100.0	103.5	105.0	104.2	99.0	96.5
Leather.....	101.8	103.1	102.4	99.2	97.6	97.1	98.2	99.5	100.1	99.9	100.7	100.4
CEMENT, CLAY, AND GLASS PRODUCTS:												
Clay products—												
Brick, tile, and terra cotta.....	87.8	86.9	92.2	100.7	105.8	107.4	108.2	108.3	105.8	102.4	99.7	94.8
Pottery.....	98.1	101.2	102.0	101.5	100.9	100.2	96.3	98.9	99.8	100.6	100.2	100.3
Glass ¹	93.8	97.3	100.5	101.3	101.5	102.5	96.0	101.5	103.5	102.9	101.7	97.5
Cement ¹	91.5	90.8	93.5	98.3	102.0	104.7	105.2	107.0	105.3	104.0	101.3	96.4
NONFERROUS METAL PRODUCTS:												
Stamped and enameled ware.....	96.1	102.6	106.5	105.1	103.9	102.4	97.5	96.4	97.3	97.8	98.4	96.0
Brass, bronze, and copper.....	99.5	101.9	102.7	101.8	100.6	99.4	99.0	99.2	98.9	98.8	98.9	99.3
CHEMICALS AND PRODUCTS:												
Chemicals and drugs.....	100.7	102.0	101.3	100.9	98.5	98.0	96.6	97.5	99.9	101.0	101.9	101.7
Petroleum refining.....	98.1	98.7	99.0	100.0	99.8	100.9	102.2	101.9	101.8	99.8	99.0	98.8
Fertilizers ¹	98.0	105.8	148.0	160.8	91.0	68.4	68.5	77.0	99.0	97.0	94.5	92.0
RUBBER PRODUCTS:												
Automobile tires and tubes.....	97.9	100.4	101.4	101.7	102.0	101.9	101.9	102.9	102.8	98.4	98.6	95.1
Rubber boots and shoes ¹	103.5	102.0	98.0	97.5	95.5	94.5	95.0	95.5	102.0	104.0	105.5	107.0
TOBACCO MANUFACTURES:												
Cigars and cigarettes ¹	91.5	98.3	98.8	97.6	98.5	99.5	98.2	99.5	103.5	106.2	106.3	102.1
Chewing and smoking tobacco, snuff ¹	103.6	106.3	105.0	99.3	96.3	97.8	92.9	97.9	99.0	99.7	100.1	102.1
MUSICAL INSTRUMENTS:												
Pianos and organs.....	103.2	102.0	100.4	99.5	96.0	95.4	90.7	96.8	100.6	103.8	106.2	105.4

¹ In these industries there was evidence of progressive change in seasonal movement from year to year, and separate sets of seasonal indexes were computed for each year. They may be obtained from the Division of Research and Statistics; indexes shown are for the year 1929.

NOTE.—No seasonal variation in employment was evident in the following industries: Electrical machinery, paper and pulp, and electric car-building and car-repair shops.

TABLE 3.—FACTORY EMPLOYMENT: INDEXES BY GROUPS

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment	Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals	Rubber products	Tobacco products
1919—January	99.7	117.2	97.9	109.0	96.9	93.1	96.3	107.6	84.2	114.7	108.3	-----	113.0
1920—February	107.0	128.9	98.3	104.1	104.4	88.2	104.2	98.4	89.3	121.3	97.1	-----	111.8
1921—March	65.3	77.0	93.1	94.6	89.1	74.4	71.6	87.8	73.4	74.5	70.8	-----	110.4
1922—April	84.0	82.2	97.3	95.4	92.7	95.5	78.3	97.7	87.7	90.1	81.0	-----	107.2
1923—May	104.4	107.7	105.3	102.0	99.2	100.9	106.9	106.2	100.8	107.1	101.5	102.5	105.8
1924—June	97.2	93.6	95.1	100.0	99.8	98.1	94.8	96.3	99.0	95.0	95.9	91.8	98.8
1925—July	98.4	98.7	99.6	98.0	101.0	101.0	98.3	97.5	100.2	97.9	102.6	105.7	95.4
1926—August	101.3	107.9	97.8	98.4	103.6	100.5	98.3	96.8	101.9	99.5	108.9	104.6	90.8
1927—September	96.8	100.0	100.8	99.2	103.1	92.4	88.3	97.2	97.5	97.4	107.9	104.0	93.6
1928—October	95.4	98.8	95.1	98.7	101.7	88.1	90.7	93.5	92.4	96.7	105.3	108.7	93.6
1929—November	98.9	116.1	96.9	99.7	104.2	88.2	94.4	93.7	89.6	101.1	112.3	108.1	91.6
1919—January	109.7	121.0	90.4	114.8	95.4	86.3	97.4	103.9	73.3	110.3	128.9	-----	129.2
1920—February	103.3	118.2	82.9	112.5	95.1	86.0	94.5	102.6	73.9	107.2	124.9	-----	126.8
1921—March	98.6	114.5	84.9	110.2	95.2	87.7	92.4	100.4	75.1	104.4	117.2	-----	125.2
1922—April	93.8	113.2	90.3	110.4	94.9	86.7	91.2	101.4	81.4	105.4	110.6	-----	126.0
1923—May	92.2	110.2	95.8	108.0	93.4	87.6	91.2	104.4	85.7	109.2	107.4	-----	123.1
1924—June	93.9	107.9	99.4	107.4	96.0	87.4	91.8	105.4	89.3	111.8	106.2	-----	112.3
1925—July	101.0	108.7	105.5	108.0	97.5	91.1	95.1	107.8	82.4	118.8	103.7	-----	100.7
1926—August	103.0	114.2	104.7	106.8	98.4	94.2	95.9	109.0	121.1	121.6	101.7	-----	90.4
1927—September	102.8	117.9	103.6	107.4	98.2	98.3	99.0	110.8	89.0	120.7	100.4	-----	95.1
1928—October	91.3	122.4	103.6	106.3	97.7	102.0	99.9	112.7	91.7	121.1	99.0	-----	99.6
1929—November	100.3	126.8	105.8	107.3	98.9	103.7	102.4	115.4	88.5	122.1	99.1	-----	114.2
1920—December	106.7	131.2	107.6	109.3	101.3	106.7	105.1	116.9	88.4	123.8	100.4	-----	113.4
1920—January	111.6	134.8	109.0	111.3	103.6	105.8	112.4	116.2	91.9	127.4	101.1	-----	118.6
1921—February	110.8	133.0	105.9	107.4	102.5	105.4	109.4	112.3	93.3	122.1	98.1	-----	112.0
1922—March	111.8	135.6	107.7	106.8	104.3	104.8	108.9	111.4	90.5	127.2	98.5	-----	112.7
1923—April	110.1	134.3	108.8	107.8	104.8	97.8	106.3	111.9	87.9	126.8	97.9	-----	116.4
1924—May	105.1	132.0	108.8	107.4	104.7	90.4	105.8	110.3	88.7	123.5	97.8	-----	111.4
1925—June	109.2	133.0	105.6	107.0	104.8	83.9	106.0	105.3	90.2	128.5	98.0	-----	110.9
1926—July	110.4	133.7	99.4	106.1	106.8	77.7	106.0	98.0	89.4	128.4	101.2	-----	110.4
1927—August	107.7	131.0	96.2	103.6	106.7	85.2	106.3	93.5	88.6	126.7	100.8	-----	110.0
1928—September	108.4	128.0	94.0	101.7	105.9	82.3	103.7	84.7	88.6	126.6	95.9	-----	109.8
1929—October	107.2	123.2	89.6	98.7	105.3	80.3	98.8	82.4	87.1	123.5	97.3	-----	107.7
1920—November	101.7	117.8	81.7	96.6	103.4	74.8	95.0	78.5	89.0	108.0	92.7	-----	110.4
1921—December	90.0	110.4	73.0	94.4	99.8	70.4	92.2	76.0	86.4	86.6	86.4	-----	110.7
1921—January	73.4	103.0	70.9	92.4	95.8	71.4	75.0	73.4	77.8	78.3	80.9	-----	111.6
1922—February	74.9	94.8	81.9	93.9	94.9	73.8	71.2	78.4	70.6	69.4	74.4	-----	106.9
1923—March	71.6	89.7	86.4	94.3	93.6	74.7	68.4	80.4	71.1	68.5	74.5	-----	102.0
1924—April	64.8	84.0	91.2	93.7	89.3	74.9	67.8	82.0	71.8	70.6	70.3	-----	111.2
1925—May	64.6	78.6	94.4	94.2	83.9	74.4	69.0	86.6	72.9	72.9	70.4	-----	112.8
1926—June	61.0	74.3	96.0	93.7	84.5	74.0	67.4	91.3	73.1	72.4	70.2	-----	113.8
1927—July	54.5	68.6	98.6	94.2	85.2	72.4	69.4	92.8	72.5	69.5	68.6	-----	112.7
1928—August	57.9	67.0	98.7	93.3	86.5	71.1	72.0	93.3	72.6	75.3	66.3	-----	113.1
1929—September	60.2	66.0	100.8	95.8	87.2	73.4	73.8	94.4	74.6	76.2	65.1	-----	112.0
1920—October	64.3	65.0	100.3	97.2	88.4	75.0	74.6	93.8	74.1	80.4	69.5	-----	112.0
1921—November	67.9	65.4	99.2	97.9	89.9	78.3	75.8	93.1	74.3	80.9	71.2	-----	109.3
1922—December	68.6	67.3	98.4	94.9	89.9	79.1	74.9	94.4	75.1	79.8	67.9	-----	108.2
1922—January	66.0	70.0	97.8	94.4	92.6	87.3	73.6	94.4	76.0	78.2	69.0	-----	101.9
1923—February	70.1	71.0	98.0	95.0	92.3	91.3	73.7	94.5	77.0	78.0	69.2	-----	106.0
1924—March	72.1	74.5	94.1	95.1	91.1	94.4	74.8	91.5	81.4	78.8	72.5	-----	106.3
1925—April	77.0	76.9	92.3	93.0	89.3	92.8	75.4	91.0	83.2	80.1	73.8	-----	103.0
1926—May	80.7	79.8	93.3	93.4	91.5	96.3	78.3	91.5	87.1	85.4	77.8	-----	105.4
1927—June	85.9	80.6	93.9	93.6	91.2	98.8	82.3	94.8	87.8	88.4	78.2	-----	105.1
1928—July	88.1	80.8	96.1	95.3	91.7	98.3	57.2	97.7	88.8	93.1	83.4	-----	113.2
1929—August	88.6	82.0	97.1	96.9	93.7	97.8	66.3	98.7	91.4	96.2	85.7	-----	112.1
1920—September	89.2	87.1	98.4	95.0	94.0	96.2	77.0	101.9	93.1	96.8	86.8	-----	109.3
1921—October	93.6	90.3	99.2	95.7	94.4	97.3	88.3	103.2	94.0	99.3	89.3	-----	109.0
1922—November	96.6	94.1	102.4	98.7	94.4	93.1	93.7	105.3	95.7	102.8	92.3	-----	107.4
1923—December	99.4	99.0	104.7	98.2	95.7	96.9	98.6	107.4	96.7	104.4	94.2	-----	107.3
1923—January	101.5	101.9	105.7	97.6	96.1	98.8	104.7	108.3	98.1	106.3	99.7	111.0	109.0
1924—February	100.8	103.9	105.1	99.0	97.1	100.4	104.4	108.5	98.5	105.9	101.4	113.7	107.7
1925—March	102.0	106.5	106.8	100.7	99.3	100.4	105.9	107.8	98.6	107.3	102.3	114.7	107.8
1926—April	102.5	108.6	107.8	101.3	100.2	100.3	104.5	109.9	100.0	109.6	100.4	114.6	109.4
1927—May	104.3	109.6	108.7	101.6	99.7	100.6	105.3	108.7	101.2	110.3	105.7	114.5	107.1
1928—June	107.7	110.1	108.0	102.7	100.5	102.2	107.9	109.0	103.0	110.8	105.0	109.9	106.9
1929—July	106.8	111.1	107.4	102.8	100.1	103.2	107.2	104.8	101.9	110.4	103.9	102.3	104.7
1920—August	107.9	110.7	105.4	103.6	100.2	101.9	108.6	104.0	102.4	109.0	103.0	91.7	103.1
1921—September	106.4	110.0	104.0	103.8	99.4	101.0	108.0	104.0	102.2	105.0	100.0	85.9	103.8
1922—October	106.1	108.0	102.1	104.5	99.6	101.1	109.2	103.1	101.6	104.0	99.2	87.4	104.1
1923—November	104.7	107.3	101.4	103.7	99.4	100.8	110.0	103.7	100.3	102.8	99.1	91.0	103.4
1924—December	102.1	104.7	100.8	101.5	99.5	100.2	106.6	102.3	101.0	103.1	98.5	93.3	102.9
1924—January	103.9	101.4	100.7	101.4	100.1	99.5	104.6	100.3	102.1	103.4	99.3	92.5	102.8
1925—February	105.3	99.0	100.4	102.8	100.4	101.4	102.7	99.9	101.6	104.2	98.3	92.3	102.3
1926—March	106.2	98.6	99.2	102.4	100.4	100.7	101.0	100.2	102.9	102.6	97.9	91.7	100.9
1927—April	105.6	97.9	96.6	101.4	100.7	100.2	98.3	98.8	102.4	101.1	97.8	90.3	101.4
1928—May	99.1	94.4	94.6	100.6	100.3	99.3	93.7	95.7	100.6	96.7	97.8	89.6	98.6
1929—June	94.7	91.6	93.0	100.1	99.9	96.5	90.6	93.3	98.6	91.8	92.9	87.2	98.0
1930—July	90.6	88.2	89.2	99.6	98.3	95.5	90.0	91.3	95.9	88.1	93.0	84.2	99.3

TABLE 3.—FACTORY EMPLOYMENT: INDEXES BY GROUPS—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment	Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals	Rubber products	Tobacco products
1924—August.....	88.2	88.0	90.4	99.4	98.4	94.9	89.9	91.9	96.9	86.6	92.8	83.9	99.9
September.....	89.8	88.4	92.7	99.4	99.9	95.5	90.1	94.2	96.0	88.6	92.8	92.5	98.3
October.....	92.6	89.8	94.2	97.8	99.8	97.4	91.4	95.8	96.3	90.0	94.7	95.0	90.0
November.....	93.2	91.3	94.1	97.4	99.4	97.4	92.0	97.1	96.6	92.1	95.6	101.4	97.3
December.....	97.2	93.9	96.1	98.6	99.7	98.7	93.5	96.9	98.5	94.8	97.4	101.0	97.0
1925—January.....	100.8	95.0	97.1	99.0	100.1	100.8	94.8	97.7	99.1	96.6	97.5	99.7	97.4
February.....	100.3	95.2	98.3	99.2	100.6	102.1	94.4	97.9	99.6	96.1	98.7	101.4	96.9
March.....	100.3	95.4	99.0	98.1	101.3	100.9	95.4	98.5	100.4	95.1	100.7	101.7	96.9
April.....	98.3	96.4	99.6	97.2	101.2	100.9	96.7	98.7	100.7	94.8	101.6	102.9	93.9
May.....	97.2	96.5	99.4	97.3	100.5	100.2	96.8	98.4	100.0	97.3	100.2	106.4	96.9
June.....	96.6	96.8	99.8	98.2	100.4	100.6	96.8	96.0	99.7	98.4	102.0	108.0	95.3
July.....	96.4	96.9	100.7	97.3	100.7	100.3	98.0	96.4	100.4	97.9	103.9	110.1	95.5
August.....	96.0	97.8	100.2	97.5	100.5	100.0	98.4	97.0	99.3	98.0	103.7	109.8	95.7
September.....	96.0	99.8	99.2	97.3	100.7	100.8	99.7	98.2	100.0	98.5	104.8	107.9	94.3
October.....	97.6	102.4	99.9	98.1	101.7	101.9	101.9	98.2	100.6	98.9	105.3	104.5	94.7
November.....	99.2	105.3	100.9	98.3	101.8	101.8	104.3	97.2	100.8	100.8	105.8	106.6	93.6
December.....	101.8	107.1	100.4	98.6	102.0	102.2	103.3	95.6	102.3	102.2	106.4	109.1	94.3
1926—January.....	101.8	108.2	100.2	98.8	102.8	102.0	102.4	95.0	102.8	101.2	107.7	138.3	91.8
February.....	101.1	108.1	99.1	98.2	102.5	101.7	102.3	95.3	102.3	100.6	106.9	107.0	92.7
March.....	100.4	107.9	98.6	98.3	103.0	101.4	102.2	95.2	100.3	100.7	106.5	106.0	92.1
April.....	101.2	107.4	98.2	97.8	103.3	101.8	99.7	94.5	99.8	100.6	106.5	105.6	91.9
May.....	100.6	107.1	98.4	98.3	103.5	101.4	97.8	94.9	101.3	99.4	108.1	102.7	89.9
June.....	100.6	108.2	97.3	98.4	103.6	101.1	98.2	95.8	102.3	98.3	109.9	101.9	92.3
July.....	101.2	107.6	94.3	98.4	103.4	100.7	98.0	97.3	102.3	98.3	109.5	97.8	90.6
August.....	101.3	108.0	94.4	98.9	103.7	100.6	97.8	97.8	102.9	98.9	109.6	104.1	89.2
September.....	102.2	108.6	97.2	98.8	104.3	99.3	97.9	98.1	103.2	100.0	110.3	106.6	89.3
October.....	102.4	109.2	98.1	99.0	104.8	99.4	95.6	98.6	102.4	99.0	111.2	108.1	89.6
November.....	102.0	107.4	98.4	98.6	104.8	98.7	95.1	99.5	102.4	99.2	110.7	105.0	89.8
December.....	100.4	107.3	99.7	97.7	104.0	98.3	92.6	99.4	101.2	98.0	109.6	102.5	90.5
1927—January.....	98.9	105.4	99.9	98.4	103.2	96.0	90.2	98.4	99.7	97.7	110.6	101.0	90.3
February.....	98.0	104.7	100.0	98.4	103.9	94.7	92.2	97.5	99.8	95.4	109.7	107.0	91.6
March.....	98.6	103.3	100.1	98.4	103.7	93.7	91.6	98.0	100.6	97.0	110.2	101.4	91.7
April.....	98.4	102.0	100.1	99.2	103.7	92.4	90.6	97.3	100.0	97.9	109.5	105.4	92.7
May.....	98.3	100.6	100.7	99.0	103.0	92.7	90.1	97.7	99.0	100.3	108.7	108.7	93.0
June.....	98.2	100.5	101.2	101.0	102.9	92.4	89.7	98.2	98.3	98.9	108.3	107.8	94.6
July.....	97.5	98.9	102.1	100.0	102.4	92.2	88.0	98.8	98.1	99.4	107.8	105.7	96.3
August.....	96.1	98.8	102.4	99.4	103.2	92.0	87.4	98.3	95.1	99.2	107.0	104.1	91.1
September.....	95.5	98.0	102.3	99.8	103.1	91.7	86.2	97.5	95.1	97.4	106.4	102.8	95.6
October.....	94.9	97.4	100.7	98.7	102.9	91.2	85.3	96.6	94.4	96.5	105.9	102.7	96.0
November.....	94.0	95.7	100.8	98.8	102.9	90.5	84.2	94.2	95.5	95.0	105.6	103.0	95.4
December.....	93.5	94.6	99.6	98.4	102.6	88.8	84.4	94.5	94.4	94.2	104.8	104.3	94.4
1928—January.....	92.8	93.8	98.6	98.2	102.2	88.0	85.4	95.5	93.6	90.9	103.6	105.4	94.6
February.....	93.2	93.4	98.0	98.8	102.2	87.9	85.9	95.4	93.3	91.7	104.9	106.4	93.3
March.....	94.0	94.1	96.7	99.4	101.1	88.6	86.3	95.3	92.7	91.4	105.1	105.0	93.7
April.....	94.0	94.7	95.2	99.2	100.8	88.3	86.6	94.2	91.2	93.6	103.8	104.7	93.7
May.....	94.6	96.7	94.2	98.9	101.4	87.8	88.7	93.6	92.4	94.7	103.4	104.7	93.7
June.....	95.4	97.6	94.0	97.8	101.4	88.0	91.1	94.0	92.2	96.0	105.0	105.0	93.6
July.....	95.1	97.9	92.8	98.2	101.6	87.1	91.7	94.7	92.4	96.6	104.9	110.7	89.9
August.....	96.2	99.7	92.8	97.6	102.1	88.0	93.2	93.3	92.5	97.4	104.4	110.8	95.7
September.....	95.7	101.9	93.3	98.0	101.4	87.9	94.5	92.7	92.3	99.1	106.3	111.0	93.8
October.....	96.6	103.6	94.0	98.2	102.0	88.1	94.4	91.8	91.9	101.4	107.1	113.8	93.9
November.....	98.2	105.2	95.2	99.4	102.3	89.0	95.4	90.1	91.2	103.4	107.0	114.4	93.8
December.....	98.5	106.4	96.0	100.2	101.7	88.7	95.6	91.1	92.4	103.9	108.0	112.3	93.8
1929—January.....	99.0	107.8	95.2	99.9	101.7	88.4	96.9	91.4	91.9	103.6	108.0	113.2	90.8
February.....	97.6	109.8	95.4	99.8	103.2	88.4	98.6	91.7	90.9	104.0	109.5	111.4	92.9
March.....	97.8	112.0	97.4	99.5	102.8	88.5	98.0	91.5	90.0	104.2	110.4	112.6	92.6
April.....	98.5	115.2	97.5	99.6	103.0	89.3	98.0	92.4	89.9	105.1	112.0	113.3	93.3
May.....	99.5	118.3	98.1	100.0	103.6	89.7	97.0	94.1	90.2	104.0	112.2	114.6	91.9
June.....	100.8	120.1	98.6	99.4	104.2	89.8	96.2	94.1	89.9	102.9	111.8	114.7	92.0
July.....	101.3	121.5	96.6	100.1	104.8	90.1	96.4	94.9	89.6	101.9	113.4	113.8	92.6
August.....	101.4	119.6	97.8	99.9	105.4	90.5	94.5	94.4	89.7	101.2	114.4	110.3	93.6
September.....	136.2	123.1	98.7	99.9	106.3	89.1	93.7	95.6	89.9	100.1	114.0	105.6	90.9
October.....	99.1	119.5	97.9	99.8	105.6	87.2	90.4	96.0	89.7	99.9	115.8	102.9	89.9
November.....	97.4	116.4	96.2	99.1	105.2	85.0	87.3	95.1	88.4	94.8	113.4	94.4	90.9
December.....	93.6	113.3	93.4	98.7	105.0	82.1	86.0	92.6	85.0	91.1	111.9	90.8	87.4
1930—January.....	93.6	111.0	92.2	98.7	104.3	79.6	85.6	90.9	81.2	86.8	111.1	90.4	90.8
February.....	92.8	108.6	90.3	97.6	103.8	77.4	83.6	90.2	80.7	82.9	109.0	87.3	90.1
March.....	91.6	106.9	89.4	96.9	103.4	76.8	81.4	90.4	81.1	81.6	107.5	86.8	90.2
April.....	91.9	105.6	88.6	97.5	103.1	75.2	81.0	91.5	80.7	81.0	105.6	88.0	90.1
May.....	91.6	102.8	87.4	97.1	103.2	73.9	80.4	90.4	79.3	80.2	106.5	88.0	90.9
June.....	90.0	99.5	85.7	95.8	102.4	71.6	78.9	88.9	77.1	80.3	105.7	88.0	89.7
July.....	87.3	95.2	81.0	95.2	101.7	67.8	74.9	86.8	74.3	78.7	105.4	82.4	90.4
August.....	83.9	90.8	81.0	93.0	101.1	65.1	71.7	85.1	71.4	76.1	104.4	80.0	84.1
September.....	81.7	90.2	82.4	92.9	99.0	62.4	69.7	82.7	71.7	73.6	102.3	75.3	85.1

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Iron and steel group								Machinery group				
	Crude iron and steel					Heating apparatus			Total	Foundries and machine shops	Electrical machinery (unadjusted)	Machine tools	Agricultural implements
	Total	Steel works and rolling mills	Cast-iron pipe	Structural iron-work	Hardware	Total	Steam fittings, etc.	Stoves					
1919.....	100.5				106.1	88.4			117.2				
1920.....	108.9				105.2	96.7			128.9				
1921.....	64.2				70.8	67.2			77.0				
1922.....	81.9				91.2	90.0			82.2				
1923.....	104.4	104.9	95.9	104.6	104.2	104.0	102.1	105.8	107.7	111.1	99.9	108.3	110.0
1924.....	97.3	97.0	102.0	97.7	97.0	96.8	97.9	95.8	93.6	92.1	97.8	91.5	87.9
1925.....	98.2	98.1	102.1	97.7	98.8	99.2	100.0	98.4	98.7	96.8	102.3	100.2	102.1
1926.....	101.6	100.8	106.9	107.6	97.7	102.9	102.5	103.3	107.9	105.1	111.6	119.8	115.4
1927.....	97.3	96.3	100.0	106.6	92.7	97.6	99.5	95.9	100.0	96.9	102.6	114.5	118.7
1928.....	96.6	95.7	91.3	108.9	90.6	91.9	90.9	92.9	98.8	94.4	99.6	126.2	140.7
1929.....	100.7	99.8	86.6	117.0	93.6	91.8	86.9	96.4	116.1	106.7	125.6	161.8	159.1
1919—January.....	114.5				103.8	84.8			121.0				
February.....	107.1				104.4	77.3			118.2				
March.....	101.4				103.6	75.9			114.5				
April.....	95.4				101.7	75.2			113.2				
May.....	93.3				103.3	74.5			110.2				
June.....	95.9				96.5	78.2			107.9				
July.....	102.8				101.1	89.9			108.7				
August.....	104.1				107.4	91.3			114.2				
September.....	103.3				110.3	92.4			117.9				
October.....	86.6				110.7	102.1			122.4				
November.....	97.2				114.4	106.7			126.8				
December.....	104.4				116.3	111.8			131.2				
1920—January.....	110.2				117.7	114.5			134.8				
February.....	110.4				117.8	105.2			133.0				
March.....	112.4				114.7	104.4			135.6				
April.....	109.9				112.0	109.2			134.2				
May.....	105.2				103.6	106.2			132.0				
June.....	111.4				106.3	97.1			133.0				
July.....	111.5				106.9	106.8			133.7				
August.....	109.3				105.8	99.0			131.0				
September.....	112.2				102.8	89.2			128.0				
October.....	112.2				98.1	84.9			123.2				
November.....	107.5				91.7	74.0			117.8				
December.....	94.2				85.1	68.2			110.4				
1921—January.....	75.9				69.7	61.3			103.0				
February.....	76.4				71.2	69.2			94.8				
March.....	72.2				72.2	67.0			89.7				
April.....	63.2				72.4	66.2			84.0				
May.....	63.4				73.1	65.6			78.6				
June.....	60.3				71.6	55.8			74.3				
July.....	52.4				66.3	55.6			68.6				
August.....	55.4				66.9	65.3			67.0				
September.....	57.5				69.3	68.5			66.0				
October.....	62.1				70.4	72.3			65.0				
November.....	65.4				72.4	79.2			65.4				
December.....	66.0				73.4	80.6			67.3				
1922—January.....	62.4				74.8	80.2			70.0				
February.....	66.9				79.9	81.7			71.0				
March.....	69.3				82.1	80.5			74.5				
April.....	75.1				85.4	81.3			76.9				
May.....	79.1				88.7	82.7			79.8				
June.....	84.6				91.3	83.7			80.6				
July.....	86.6				94.5	91.3			80.8				
August.....	86.6				97.2	93.7			82.0				
September.....	86.8				97.3	97.0			87.1				
October.....	92.4				98.5	95.7			90.3				
November.....	95.4				100.9	99.7			94.1				
December.....	97.4				103.4	107.3			99.0				
1923—January.....	99.8	100.4	90.9	97.7	103.5	110.4	102.3	117.7	101.9	105.9	93.0	100.9	103.7
February.....	100.0	100.4	92.7	98.1	104.4	102.5	100.3	104.6	103.9	107.4	95.4	103.6	113.1
March.....	101.3	101.5	92.5	102.9	104.4	104.6	103.4	105.8	106.5	109.6	98.4	108.2	116.9
April.....	101.7	101.9	92.8	103.3	105.0	105.6	103.3	107.6	108.6	111.9	99.8	113.4	117.8
May.....	104.0	104.5	93.1	103.9	104.4	105.8	103.8	107.7	109.6	113.2	99.8	115.8	118.8
June.....	108.5	109.1	96.4	107.4	103.8	106.3	103.6	108.7	110.1	114.2	99.3	115.9	117.8
July.....	106.4	107.1	97.8	104.4	106.3	109.3	106.1	112.3	111.1	115.6	100.8	113.6	114.6
August.....	108.7	109.2	97.3	108.8	107.1	103.6	102.7	104.3	110.7	115.4	100.6	111.5	109.5
September.....	107.1	107.4	96.9	108.2	106.1	101.8	101.1	102.4	110.0	113.9	102.3	107.6	106.6
October.....	107.4	107.8	98.6	107.6	103.8	100.1	100.0	100.2	108.0	111.0	102.4	106.1	100.5
November.....	106.2	106.3	100.4	107.8	100.5	99.4	98.7	100.2	107.3	109.6	103.9	101.3	101.1
December.....	102.7	102.6	100.9	105.1	100.5	99.5	99.8	99.2	104.7	105.7	103.4	101.1	99.9
1924—January.....	104.9	104.9	104.5	104.8	102.2	98.9	99.9	97.9	101.4	101.0	103.1	98.0	100.0
February.....	106.5	106.8	106.5	104.0	104.4	98.0	97.6	98.3	99.0	97.3	102.7	98.1	99.1
March.....	107.9	108.6	104.9	101.9	102.1	99.1	100.3	98.1	98.6	96.2	103.9	98.6	98.5
April.....	107.1	107.9	104.7	100.2	101.3	99.9	102.4	97.6	97.9	95.8	103.3	97.2	92.7
May.....	99.1	98.8	104.0	99.2	99.6	98.8	100.4	97.2	94.4	92.8	99.1	94.4	86.1
June.....	94.1	93.4	101.4	97.8	96.3	97.3	98.6	96.0	91.6	90.7	95.0	93.1	78.2
July.....	89.9	88.8	99.6	96.8	91.3	94.7	98.1	91.4	88.2	87.5	91.5	87.1	75.3

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Iron and steel group								Machinery group				
	Crude iron and steel				Hardware	Heating apparatus			Total	Foundries and machine shops	Electrical machinery (unadjusted)	Machine tools	Agricultural implements
	Total	Steel works and rolling mills	Cast-iron pipe	Structural iron-work		Total	Steam fittings, etc.	Stoves					
1924—August.....	87.1	85.7	100.7	95.2	89.4	94.4	95.5	93.5	88.0	86.7	92.3	86.1	77.7
September.....	88.6	87.5	98.6	95.0	92.8	94.7	95.2	94.2	88.4	86.4	94.0	85.4	81.3
October.....	92.0	91.6	101.3	91.3	93.7	95.3	95.6	95.0	89.8	87.5	96.0	85.0	85.0
November.....	92.6	92.4	100.4	91.1	94.5	95.6	96.1	95.0	91.3	90.0	95.3	86.4	88.6
December.....	97.7	98.0	97.8	94.7	96.2	95.2	94.4	95.8	93.9	92.9	96.9	88.8	92.6
1925—January.....	101.8	102.4	100.4	96.4	96.5	98.2	99.4	97.2	95.0	94.0	97.9	91.8	91.0
February.....	101.0	101.1	103.4	95.9	97.7	97.8	97.3	98.3	95.2	94.0	98.6	92.0	93.6
March.....	100.9	101.2	102.4	96.7	98.7	97.7	97.1	98.2	95.4	94.1	98.8	91.6	96.0
April.....	98.8	99.0	100.9	96.3	97.7	95.3	96.3	94.4	96.4	95.0	100.0	93.1	97.9
May.....	97.3	97.1	101.9	97.1	98.6	95.9	96.2	95.6	96.5	95.5	98.8	94.7	98.2
June.....	96.3	95.9	100.9	99.0	98.3	96.9	96.3	97.4	96.8	96.2	97.7	97.6	98.4
July.....	96.0	95.4	100.5	100.6	97.7	97.8	99.4	96.4	96.9	96.0	98.2	100.1	99.4
August.....	95.1	94.6	102.1	97.4	99.2	98.4	98.4	98.5	97.8	96.2	99.8	102.4	105.1
September.....	94.8	94.3	102.7	96.7	99.8	99.6	99.7	99.4	99.8	97.2	103.6	104.4	109.5
October.....	96.7	96.2	103.2	98.8	99.9	101.7	103.7	99.9	102.4	99.2	108.2	107.7	109.8
November.....	98.3	98.0	102.8	98.5	100.4	104.4	106.5	102.4	105.3	101.4	112.2	111.9	112.7
December.....	101.1	101.2	103.9	99.1	101.2	106.6	110.8	102.8	107.1	108.0	114.2	115.4	113.0
1926—January.....	101.4	101.3	105.6	100.7	100.9	105.5	106.9	104.1	108.2	104.7	114.0	117.6	113.9
February.....	100.7	100.3	107.4	102.3	101.0	103.8	104.8	102.9	108.1	104.9	113.4	116.2	113.3
March.....	100.1	99.6	105.9	103.2	99.8	102.9	103.4	102.4	107.9	104.9	112.8	117.9	111.6
April.....	101.1	100.4	105.8	106.1	99.2	103.9	103.1	104.6	107.4	107.0	110.4	118.8	112.8
May.....	100.7	100.0	105.0	106.4	98.4	102.3	102.1	102.5	107.1	105.0	109.7	118.4	112.9
June.....	101.0	100.2	106.4	107.2	95.8	102.7	102.9	102.4	108.2	106.6	109.4	119.2	115.2
July.....	101.5	100.0	109.3	112.7	96.8	103.9	102.8	105.0	107.6	105.9	108.8	120.0	114.7
August.....	101.7	100.6	108.2	110.6	96.9	102.9	101.8	103.8	108.0	105.9	109.7	120.4	118.1
September.....	102.9	101.8	109.7	111.4	96.9	102.4	101.4	103.3	108.6	105.7	111.7	121.4	120.6
October.....	103.4	102.4	108.4	110.5	96.7	102.0	100.7	103.1	109.2	105.2	115.2	122.1	118.4
November.....	102.9	102.1	107.3	110.0	96.0	101.7	100.1	103.1	107.4	103.3	113.3	122.8	118.4
December.....	101.3	100.3	104.2	109.8	93.6	101.2	100.1	102.2	107.3	104.6	110.4	122.3	115.9
1927—January.....	99.4	98.4	104.8	107.7	93.4	100.2	98.8	101.5	105.4	103.3	106.9	121.7	113.0
February.....	98.4	97.4	103.8	107.4	93.8	99.2	99.3	99.2	104.7	103.1	105.3	118.8	113.6
March.....	99.2	98.2	103.7	107.4	94.4	98.8	98.3	99.3	103.3	101.8	103.6	117.4	113.6
April.....	99.2	98.1	102.7	108.1	93.9	98.1	99.0	97.4	102.0	100.1	102.9	116.7	112.8
May.....	99.0	98.0	103.9	107.1	94.0	98.3	98.6	97.6	100.6	98.4	101.7	114.8	114.4
June.....	98.8	97.9	102.0	107.1	93.3	98.7	99.7	97.9	100.4	97.2	103.8	115.0	118.1
July.....	98.1	97.2	99.8	106.7	93.5	97.2	103.4	91.5	98.9	96.3	100.3	112.7	120.0
August.....	96.8	95.7	98.2	106.6	90.1	97.5	100.6	94.7	98.8	95.9	100.4	112.5	122.6
September.....	95.6	94.6	95.8	105.9	92.0	98.2	101.6	95.0	98.0	93.9	102.0	112.8	123.1
October.....	95.1	94.3	94.4	104.4	92.1	96.4	99.8	93.3	97.4	92.4	103.1	111.7	124.1
November.....	94.4	93.4	94.6	105.0	90.9	94.8	97.4	92.4	95.7	90.4	102.0	110.1	123.1
December.....	93.8	92.6	96.1	105.5	90.8	94.1	96.9	91.5	94.6	90.0	98.9	110.0	126.4
1928—January.....	93.8	92.6	95.1	105.9	89.0	90.1	92.2	88.1	93.8	90.0	96.0	109.9	127.0
February.....	94.2	93.1	92.0	105.9	89.2	90.7	91.0	90.4	93.4	89.9	94.8	110.7	127.9
March.....	95.1	94.3	92.5	105.2	89.5	91.3	92.0	90.7	94.1	90.3	95.4	113.0	130.6
April.....	95.1	94.2	92.2	105.4	88.7	91.9	92.2	91.7	94.7	91.2	94.8	117.1	132.1
May.....	95.7	94.6	94.2	107.5	88.9	92.8	92.7	92.9	96.7	93.5	95.6	121.2	136.2
June.....	96.6	95.6	94.0	108.9	89.9	93.3	92.4	94.1	97.6	93.9	96.9	124.6	142.2
July.....	96.4	95.7	89.1	108.2	89.0	92.6	91.1	94.0	97.9	94.3	96.2	127.2	145.4
August.....	97.2	96.3	89.5	110.4	91.9	94.1	94.6	93.7	99.7	95.2	100.2	130.6	144.6
September.....	97.0	96.1	91.2	108.9	91.5	91.8	89.6	93.7	101.9	96.6	104.0	134.3	146.6
October.....	97.9	97.0	90.5	110.5	92.3	92.3	89.8	94.6	103.6	97.9	106.0	137.4	150.3
November.....	99.9	99.2	88.0	112.6	93.2	91.8	88.2	95.0	105.2	99.7	106.8	142.2	151.3
December.....	100.4	99.4	86.7	116.9	94.0	90.7	84.7	96.2	106.4	100.3	108.8	146.7	153.7
1929—January.....	100.4	99.6	87.3	115.2	93.4	95.3	92.6	97.7	107.8	101.8	109.8	149.4	154.1
February.....	98.4	97.6	81.7	114.4	94.9	94.6	92.3	96.7	109.8	103.2	112.6	151.9	156.6
March.....	98.8	97.8	84.1	115.4	95.6	93.8	90.2	97.1	112.0	104.9	116.1	157.4	158.3
April.....	99.7	98.9	84.0	115.6	95.6	93.4	89.1	97.6	115.2	107.5	119.9	159.8	166.0
May.....	101.4	100.8	84.9	115.7	94.3	92.0	85.9	97.7	118.3	109.7	125.3	161.7	167.7
June.....	103.3	102.7	87.4	116.3	94.0	91.1	84.1	97.4	112.1	109.9	130.6	165.9	168.0
July.....	103.9	103.2	88.8	118.0	95.1	90.4	82.3	97.8	121.5	110.4	134.0	168.1	169.4
August.....	104.3	103.6	90.7	118.4	93.4	90.4	83.6	96.8	119.6	107.4	134.7	168.7	161.2
September.....	102.7	101.6	91.9	119.4	93.3	91.0	83.4	98.0	120.1	108.4	135.2	169.8	154.6
October.....	101.0	99.7	90.1	119.8	94.2	92.1	85.7	98.0	119.5	108.0	134.3	169.4	151.8
November.....	99.7	98.4	85.8	118.8	90.5	90.0	87.2	92.6	116.4	105.6	129.8	164.4	150.8
December.....	95.1	93.6	82.3	116.6	89.1	87.7	86.0	89.3	113.3	103.4	125.0	154.9	150.7
1930—January.....	95.7	94.5	79.4	115.0	89.0	84.0	79.4	88.2	111.0	101.6	122.0	148.7	150.1
February.....	95.1	94.2	80.0	111.1	86.8	83.8	78.3	88.9	108.6	99.5	119.0	142.4	149.8
March.....	94.0	93.0	80.5	110.3	85.6	81.8	76.4	86.7	106.9	97.5	118.1	139.4	149.2
April.....	94.6	93.6	81.4	111.0	86.3	79.8	75.2	83.9	105.6	97.0	115.9	136.1	141.8
May.....	94.9	94.1	80.9	110.0	82.9	78.4	74.3	82.1	102.8	95.2	111.5	133.1	136.3
June.....	93.6	92.6	81.0	109.0	80.8	75.7	68.8	82.0	99.5	92.3	108.6	130.5	121.1
July.....	90.7	89.6	77.6	108.2	78.6	74.1	68.2	79.5	95.2	88.8	103.9	120.6	110.2
August.....	86.8	85.8	76.1	101.9	76.8	72.6	67.6	77.1	90.8	84.4	101.0	115.9	95.9
September.....	84.5	83.3	75.4	101.0	74.6	70.1	67.4	72.6	90.2	83.3	101.3	111.7	98.8

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Textiles and products group										
	Fabrics						Wearing apparel				
	Cotton goods	Woolen and worsted manu- factures			Hosiery and knit goods	Silk manu- factures	Dyeing and fin- ishing textiles	Clothing, men's	Shirts and col- lars	Clothing, women's	Millinery
		Total	Woolen and worsted goods	Carpets and rugs							
1919.....	96.7	89.9			92.9	101.9	84.9	96.5	92.1	131.2	95.1
1920.....	97.0	84.2			96.8	104.4	80.5	101.6	106.8	123.6	98.0
1921.....	92.5	87.7			87.4	97.8	77.9	90.6	97.7	114.1	100.2
1922.....	92.3	96.7			103.8	95.1	83.3	100.1	108.4	104.8	103.3
1923.....	106.0	108.7	109.7	103.9	104.9	99.6	97.0	106.9	107.5	105.7	100.9
1924.....	93.9	97.2	97.3	96.2	94.3	94.9	94.9	97.6	93.7	93.9	99.0
1925.....	100.1	94.1	93.0	99.9	100.8	105.5	108.1	95.5	98.8	100.4	100.1
1926.....	99.9	86.7	84.6	97.6	101.1	102.8	109.9	89.2	101.2	104.0	97.8
1927.....	105.0	88.9	87.4	96.6	102.9	101.2	113.2	79.8	105.2	123.0	102.4
1928.....	95.2	86.1	84.6	93.4	99.6	99.7	112.5	71.5	105.4	123.4	84.5
1929.....	95.5	87.8	85.7	98.9	103.3	100.6	115.2	71.3	106.0	133.2	83.5
1919-January.....	94.1	72.0			87.3	95.3	84.2	80.0	87.9	126.2	92.6
February.....	88.6	48.2			79.8	90.8	75.9	82.0	87.2	114.6	93.3
March.....	89.7	60.9			79.5	92.0	73.9	83.3	84.5	112.8	93.2
April.....	91.4	77.8			80.4	100.7	79.5	89.6	83.0	120.5	90.8
May.....	97.7	88.4			85.6	104.3	82.6	93.4	85.7	119.9	101.7
June.....	98.3	101.8			92.0	103.1	85.9	93.3	88.1	127.9	98.8
July.....	99.0	108.7			100.9	107.2	86.9	99.2	87.7	159.2	99.4
August.....	100.4	170.3			101.5	108.0	87.8	96.9	92.4	145.9	98.1
September.....	99.3	106.6			98.6	100.9	87.9	102.9	96.5	139.3	97.0
October.....	99.3	102.4			101.2	102.0	89.2	108.2	99.1	135.1	90.2
November.....	99.4	102.3			101.7	107.7	92.1	118.3	104.5	134.9	90.6
December.....	103.4	101.7			106.4	111.0	93.2	111.3	108.8	137.8	94.9
1920-January.....	103.6	108.2			108.8	113.2	93.5	110.9	109.2	135.5	99.6
February.....	100.1	105.4			105.6	111.2	92.4	109.1	107.7	129.4	95.2
March.....	102.6	109.8			108.1	108.2	89.0	114.7	108.4	126.9	94.6
April.....	102.7	110.3			109.2	112.1	86.3	123.0	109.0	122.0	95.2
May.....	100.3	111.0			110.6	113.6	83.7	125.3	109.4	123.3	96.6
June.....	100.5	100.2			107.2	112.2	83.8	114.4	110.2	124.2	97.4
July.....	102.2	61.9			107.5	107.3	82.8	108.7	111.6	123.3	96.1
August.....	100.2	57.8			103.3	102.8	81.5	101.4	110.0	123.4	94.8
September.....	96.8	68.2			93.8	98.0	75.7	96.2	109.8	120.4	99.0
October.....	92.8	68.4			80.9	95.4	68.4	86.4	108.6	121.5	102.8
November.....	84.8	59.1			68.6	93.1	66.1	73.3	98.8	118.7	103.3
December.....	77.7	49.7			57.9	86.1	63.3	55.4	88.7	115.1	100.9
1921-January.....	75.8	44.0			54.6	82.8	61.0	61.0	84.1	112.2	96.6
February.....	89.3	61.5			66.8	84.9	70.7	73.2	93.3	111.8	104.3
March.....	89.2	74.3			75.6	90.0	73.7	78.3	96.6	115.5	103.7
April.....	89.4	89.8			81.4	95.2	76.0	87.3	97.8	116.1	102.8
May.....	91.3	96.7			86.8	98.8	79.1	87.8	100.4	121.4	99.2
June.....	91.9	99.2			90.1	102.2	80.9	90.8	97.8	120.6	102.1
July.....	94.5	101.9			91.3	104.5	80.4	97.7	95.6	125.1	98.6
August.....	96.5	100.4			93.7	102.4	81.6	101.8	73.1	123.4	98.3
September.....	97.9	100.8			97.6	104.7	82.5	101.9	104.9	119.0	99.1
October.....	98.3	96.1			101.7	103.4	82.7	102.0	107.3	114.1	98.3
November.....	98.6	93.9			104.2	101.9	84.1	102.6	109.0	99.2	98.7
December.....	97.5	93.8			105.0	102.2	81.3	103.4	112.7	90.7	100.2
1922-January.....	97.7	89.9			105.5	103.1	82.5	102.2	112.3	88.7	100.6
February.....	93.9	91.0			106.9	101.0	77.8	99.1	111.7	110.3	101.0
March.....	81.4	91.7			106.3	99.7	79.4	99.9	111.1	109.9	101.2
April.....	82.0	89.1			105.4	93.8	71.2	96.2	110.5	107.3	104.0
May.....	84.2	92.0			103.9	91.7	73.2	96.2	109.6	108.4	104.7
June.....	85.5	94.2			103.9	91.0	77.2	97.7	109.2	105.6	103.1
July.....	88.8	97.6			102.8	91.3	80.7	99.6	107.2	109.4	107.2
August.....	91.4	97.6			104.3	90.3	82.9	98.3	110.7	109.3	105.4
September.....	94.8	102.2			100.6	91.4	90.0	99.5	106.8	105.6	103.2
October.....	97.6	102.8			100.9	92.7	92.1	100.3	103.3	101.9	103.4
November.....	103.7	105.1			101.7	96.4	95.6	103.4	103.3	102.2	102.7
December.....	106.7	107.0			103.7	98.7	97.4	108.3	105.2	99.0	103.7
1923-January.....	106.2	106.2	107.0	102.0	105.0	99.1	99.6	109.2	108.0	107.8	105.6
February.....	106.1	107.1	108.4	100.4	104.2	99.1	98.9	108.8	107.3	105.4	97.3
March.....	108.1	109.9	111.8	100.1	105.0	99.4	97.8	111.6	107.8	106.4	102.4
April.....	109.6	112.3	114.5	100.6	105.6	100.9	99.7	109.8	107.0	108.6	100.6
May.....	110.9	113.1	115.2	102.4	107.0	101.5	99.5	111.1	107.3	108.9	100.7
June.....	110.7	112.3	113.5	106.1	106.6	101.6	98.6	107.8	107.0	109.0	99.2
July.....	108.3	114.6	115.4	109.9	107.2	100.9	98.4	107.2	107.9	107.8	98.4
August.....	105.8	110.4	110.9	107.9	106.0	100.7	94.6	104.6	109.0	106.4	100.9
September.....	104.6	107.8	107.9	106.9	103.2	99.9	93.0	104.9	108.1	104.3	100.9
October.....	100.7	104.4	104.3	105.2	102.9	97.9	94.7	103.2	107.9	105.6	102.2
November.....	100.7	103.8	103.9	103.2	103.0	97.5	94.3	102.5	107.2	101.4	101.9
December.....	100.8	103.2	103.3	102.2	103.2	96.8	94.9	102.4	105.7	96.2	100.9
1924-January.....	98.8	102.4	102.6	101.1	103.4	97.3	89.5	106.3	104.7	100.4	100.6
February.....	98.6	102.4	102.4	102.3	102.4	97.4	93.6	106.6	101.4	99.4	98.0
March.....	96.1	103.6	103.6	103.5	102.7	95.8	93.5	103.7	100.9	97.2	99.9
April.....	94.4	99.2	99.2	98.7	100.8	94.2	94.1	96.9	97.9	96.3	97.5

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Textiles and products group										
	Fabrics						Wearing apparel				
	Cotton goods	Woolen and worsted manu- factures			Hosiery and knit goods	Silk manu- factures	Dyeing and finishing textiles	Clothing, men's	Shirts and collars	Clothing, women's	Millinery
		Total	Woolen and worsted goods	Carpets and rugs							
1924—May	92.5	96.8	97.1	95.4	97.7	92.7	93.1	95.8	95.7	93.7	98.0
June	91.5	92.4	92.9	90.1	93.4	92.4	93.9	98.5	91.7	89.7	96.3
July	90.0	90.6	91.0	88.4	83.5	90.4	93.3	97.0	86.8	75.7	96.8
August	90.5	89.8	89.6	90.8	85.0	93.4	93.5	94.1	83.4	87.5	101.0
September	90.3	94.2	94.4	92.9	87.8	95.3	96.5	92.9	89.2	97.0	105.4
October	93.4	97.1	97.5	94.7	89.3	96.4	97.2	92.8	90.0	97.7	99.0
November	92.6	97.7	98.0	96.3	91.0	96.5	98.9	92.0	90.4	95.9	98.4
December	96.2	99.7	99.7	99.2	94.0	96.2	101.6	93.4	90.5	95.7	97.0
1925—January	98.0	98.8	98.7	99.7	96.4	98.1	104.4	94.5	92.0	92.8	99.1
February	99.0	97.9	97.4	100.4	98.4	98.6	104.9	96.3	93.7	95.8	102.4
March	99.4	97.5	97.0	100.0	99.3	99.4	106.9	95.5	94.9	102.4	99.8
April	101.0	97.5	96.8	101.3	99.6	101.3	107.7	95.4	96.5	99.8	99.0
May	101.8	95.4	94.1	102.0	100.3	103.3	108.3	93.2	99.4	97.7	98.5
June	102.1	94.3	92.6	102.0	100.1	106.2	107.2	94.8	99.3	97.2	101.1
July	100.9	94.9	94.0	99.4	102.9	108.6	109.2	95.3	101.4	101.1	103.1
August	100.3	92.7	91.4	99.4	101.4	109.8	108.9	95.5	101.9	100.9	103.0
September	97.5	92.1	90.7	99.4	101.4	110.1	108.9	95.8	101.9	103.1	96.2
October	100.4	89.9	88.4	97.6	102.8	109.6	110.1	95.6	100.3	103.2	96.9
November	101.1	89.6	87.8	98.9	103.0	110.7	110.2	97.6	102.4	106.7	99.7
December	100.0	89.2	87.3	98.8	103.4	110.8	110.1	96.9	102.1	105.2	102.6
1926—January	99.9	89.2	87.4	98.9	103.6	111.5	111.4	95.3	102.3	103.7	99.3
February	100.2	84.4	81.7	98.5	102.6	108.4	110.3	94.3	102.3	105.6	97.6
March	100.9	84.3	81.5	98.8	102.1	104.0	110.6	93.0	102.4	104.7	97.2
April	101.1	85.0	82.3	99.0	100.7	101.9	109.4	91.4	99.8	103.7	102.3
May	100.8	84.8	82.4	97.0	100.4	99.8	108.9	90.1	100.7	111.1	105.8
June	99.3	84.1	81.9	95.6	100.0	99.2	109.6	89.2	100.8	111.2	95.1
July	97.8	86.3	84.6	95.3	98.6	99.2	107.5	85.8	101.3	87.0	92.7
August	97.0	84.9	82.6	97.0	99.8	100.4	110.2	86.7	99.9	89.7	90.6
September	100.4	87.7	85.8	97.6	99.8	101.4	110.4	85.7	101.2	101.9	94.5
October	100.4	89.5	87.9	98.1	101.3	102.4	109.5	85.9	101.8	104.1	98.3
November	100.3	89.9	88.4	97.9	101.7	103.1	110.7	85.7	101.6	106.2	100.3
December	100.2	89.8	88.3	97.4	103.0	102.3	110.2	87.8	100.4	119.0	99.3
1927—January	101.2	90.6	89.2	97.8	103.5	102.1	110.2	84.8	101.3	117.9	103.1
February	101.8	91.1	89.8	97.9	102.1	100.5	110.3	85.0	101.6	117.3	107.1
March	103.0	90.0	88.8	96.4	101.3	101.3	111.1	83.2	101.6	118.2	108.3
April	104.3	89.1	87.8	96.3	101.4	102.4	111.5	80.8	101.8	118.1	104.2
May	105.1	88.2	86.6	96.2	102.3	102.6	112.6	80.3	102.8	122.0	104.0
June	106.4	88.8	86.9	98.7	102.9	101.7	113.0	80.0	104.4	121.8	102.4
July	109.2	88.5	86.2	100.3	101.4	101.4	113.9	79.1	106.1	125.1	103.3
August	109.1	89.2	87.7	97.6	101.6	102.0	114.9	79.1	107.4	125.9	101.2
September	108.5	89.3	87.9	96.6	104.1	101.6	115.4	78.0	108.1	124.9	101.4
October	105.7	87.2	85.9	93.9	104.2	99.2	115.0	77.5	108.1	122.7	102.0
November	104.7	87.1	86.0	93.0	105.2	98.8	115.4	75.8	109.3	131.0	96.2
December	101.4	87.3	86.0	94.4	104.8	100.6	114.4	74.5	109.3	131.0	95.8
1928—January	100.4	86.7	85.6	92.6	103.8	100.4	114.1	74.4	109.3	127.1	92.6
February	98.8	86.4	85.0	93.8	103.0	101.9	114.0	74.0	108.0	127.9	90.9
March	97.0	85.1	83.7	92.2	101.3	101.8	112.8	73.3	108.8	128.1	85.6
April	96.6	84.6	83.2	92.0	98.9	98.2	110.1	71.6	106.0	125.0	85.1
May	92.8	86.0	84.8	92.2	98.9	99.3	111.6	71.2	104.8	124.8	83.0
June	92.6	87.0	86.1	92.1	98.7	100.0	110.8	71.4	104.3	120.1	86.8
July	93.0	86.6	85.3	93.3	97.7	97.4	111.7	69.6	104.3	115.8	77.6
August	92.7	86.0	84.7	92.5	97.1	97.8	111.9	70.3	102.3	116.3	82.7
September	92.6	83.8	82.1	92.3	98.3	98.6	112.0	70.6	104.0	122.0	81.8
October	93.6	85.9	83.9	96.2	98.5	100.3	112.2	70.4	104.8	121.4	82.0
November	95.4	87.2	85.6	95.9	99.2	99.9	114.3	70.8	104.1	123.5	83.3
December	96.2	87.4	85.6	96.6	99.9	100.5	114.5	70.4	104.1	128.3	82.9
1929—January	97.1	87.7	85.9	97.4	98.7	98.5	114.6	69.4	103.4	120.9	81.2
February	96.7	87.4	85.3	98.1	99.3	99.2	115.4	69.7	103.7	123.0	83.0
March	96.7	88.0	86.1	97.9	100.1	100.1	116.0	71.3	105.8	139.8	84.8
April	96.7	89.4	87.8	98.4	100.7	102.0	114.6	71.2	106.1	135.4	85.4
May	97.2	90.3	88.8	98.6	102.3	101.6	116.9	71.8	107.2	133.3	86.7
June	97.8	89.4	87.3	100.6	102.6	102.0	116.1	72.4	107.5	136.6	88.0
July	96.6	89.9	87.9	100.2	106.1	102.9	116.6	72.0	106.9	113.5	85.2
August	95.8	90.3	88.2	101.0	105.1	102.8	115.4	72.2	108.6	129.9	87.1
September	95.4	89.6	87.8	99.3	106.9	101.8	116.9	72.3	108.6	141.9	84.3
October	94.0	88.3	85.7	101.9	107.9	100.3	115.6	71.6	106.1	141.9	83.5
November	92.3	83.3	80.3	99.0	106.4	99.7	113.2	71.8	104.4	144.0	78.7
December	90.1	80.0	77.2	94.6	103.1	98.6	110.4	70.2	104.0	137.8	74.1
1930—January	89.3	79.2	76.8	91.9	98.2	97.5	111.6	68.7	102.4	133.4	82.4
February	86.6	76.7	74.1	89.9	97.3	98.3	110.8	67.8	101.8	128.9	82.9
March	86.0	72.9	70.3	86.3	94.0	97.3	110.2	66.0	100.5	136.6	83.4
April	86.9	69.8	66.7	85.6	93.7	96.7	107.7	65.5	99.3	133.3	79.4
May	84.2	72.4	71.2	79.4	93.8	91.4	107.5	64.1	94.3	135.1	79.1
June	82.1	72.9	72.5	74.8	93.4	89.8	103.3	63.1	94.3	129.8	72.8
July	78.3	71.6	72.4	67.2	89.0	82.7	98.7	61.1	91.3	111.8	72.5
August	76.3	71.3	71.4	70.6	86.1	81.4	102.1	60.0	88.1	124.4	78.2
September	75.7	70.0	70.4	68.2	89.4	79.1	99.2	61.6	88.9	140.2	79.7

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Food products group						Paper and printing group						Lumber and products group			
	Bak- ing	Slaugh- tering and meat pack- ing	Confectionery and ice cream			Flour	Sugar refin- ing, cane	Printing			Paper and pulp (unad- justed)	Paper boxes	Lumber			Furni- ture
			Total	Con- fec- tion- ery	Ice cream			Total	Book and job	News- papers and period- icals			Total	Saw mills	Mill work	
1919.....	87.0	127.0	111.7			135.2	124.0	98.1			93.7	98.2	96.4			81.7
1920.....	95.3	111.8	100.1			122.2	116.5	102.5			108.3	104.3	87.7			90.2
1921.....	92.0	94.3	93.9			105.5	106.0	91.8			86.9	81.8	75.1			72.4
1922.....	91.9	92.2	97.3			107.1	122.5	95.1			90.1	87.3	98.2			85.9
1923.....	99.7	104.7	100.6	101.0	99.6	105.2	103.4	98.8	98.3	99.3	99.8	100.3	101.7	102.9	96.6	98.1
1924.....	101.0	100.3	98.3	97.4	100.7	99.7	98.2	100.9	100.7	101.1	97.6	99.5	98.6	98.6	98.6	96.1
1925.....	99.3	95.0	101.1	101.6	99.7	95.1	98.4	100.3	101.0	99.6	102.6	100.2	99.7	98.5	104.8	105.8
1926.....	101.8	93.2	103.1	105.1	98.3	91.5	94.8	103.1	104.9	101.0	105.6	101.8	97.7	96.6	102.6	110.4
1927.....	105.6	93.9	99.1	100.6	94.9	89.6	95.0	104.5	107.1	101.6	101.9	99.4	87.6	86.7	91.5	108.8
1928.....	106.2	94.3	96.0	96.4	91.7	89.7	88.6	104.5	106.7	102.1	98.1	96.8	82.9	81.8	87.7	106.0
1929.....	107.4	95.7	95.4	95.8	94.3	91.4	91.4	107.9	101.3	105.1	99.2	98.9	81.8	81.1	85.3	110.0
1919-January.....	87.0	142.3	119.1			132.0	121.0	95.0			93.0	102.8	89.4			75.6
February.....	86.6	134.5	120.2			132.4	121.0	95.8			90.4	102.0	89.0			75.4
March.....	85.4	131.2	119.6			123.9	118.5	96.3			91.1	99.0	90.9			76.4
April.....	86.7	126.1	122.2			133.4	118.8	97.4			88.2	97.9	89.4			77.4
May.....	86.8	123.1	111.2			138.7	124.1	97.7			82.1	99.3	89.9			79.9
June.....	86.6	125.4	105.3			138.4	125.4	98.6			90.1	97.4	90.1			78.3
July.....	85.6	124.6	111.3			137.3	127.0	99.8			82.9	97.4	93.9			81.3
August.....	85.5	125.0	106.1			136.4	122.1	100.4			94.4	97.8	97.3			83.6
September.....	86.0	124.0	107.1			138.3	132.8	100.0			98.5	90.0	102.1			84.9
October.....	86.6	121.9	103.5			139.7	128.9	97.4			99.4	95.1	106.3			87.1
November.....	89.1	120.6	107.6			136.4	127.0	97.9			101.7	97.2	107.9			89.0
December.....	91.8	124.9	107.2			135.6	120.9	100.4			102.7	102.1	111.3			90.7
1920-January.....	95.2	121.1	116.4			135.0	121.5	103.5			103.6	104.2	109.0			95.0
February.....	94.8	119.7	104.2			126.7	117.9	102.9			102.4	101.3	108.9			93.6
March.....	94.5	119.4	102.3			128.0	113.0	103.0			107.2	103.8	108.4			92.2
April.....	95.3	119.6	107.2			122.1	116.4	103.3			107.2	105.8	99.4			92.4
May.....	96.2	115.3	109.4			120.6	121.4	102.4			108.5	106.3	90.1			91.3
June.....	95.6	114.8	105.9			129.4	122.3	102.4			109.2	105.6	81.4			92.2
July.....	96.2	110.7	106.4			127.7	124.4	103.4			111.3	111.5	73.4			92.5
August.....	97.4	109.0	96.2			121.3	128.3	103.1			112.0	111.6	83.4			91.4
September.....	95.4	107.4	96.8			117.3	114.6	102.0			111.8	110.6	79.5			91.3
October.....	94.7	103.7	89.1			117.1	112.9	102.6			112.0	103.0	77.9			88.4
November.....	94.4	101.4	87.4			108.9	103.4	102.1			109.4	96.2	72.3			83.3
December.....	93.8	99.6	79.3			112.8	101.9	99.1			104.9	92.1	68.1			78.4
1921-January.....	91.5	94.9	82.9			108.0	99.2	95.7			99.9	87.2	73.1			65.9
February.....	89.9	97.1	89.8			109.4	100.2	95.0			97.6	88.6	75.0			69.5
March.....	88.9	96.9	91.3			110.1	111.6	94.1			95.2	88.2	75.9			70.6
April.....	89.9	95.7	89.2			110.0	108.1	90.4			87.6	88.1	75.4			73.0
May.....	91.3	98.4	89.6			103.1	97.7	87.0			78.4	82.1	74.6			73.4
June.....	92.9	94.1	92.0			99.7	97.0	90.4			77.4	73.9	74.1			73.4
July.....	93.1	94.9	89.0			109.0	97.7	90.3			79.9	73.7	72.4			72.9
August.....	93.6	93.1	87.3			103.1	104.9	90.7			81.4	78.9	72.1			72.2
September.....	93.5	91.7	102.7			103.4	99.2	91.2			82.8	79.1	73.8			72.4
October.....	94.4	93.4	103.5			104.6	108.0	92.9			84.3	77.0	75.7			72.6
November.....	93.7	94.3	105.2			104.3	118.2	92.3			88.8	81.4	78.9			76.1
December.....	91.8	87.1	104.1			101.2	130.0	92.0			88.7	83.1	79.6			77.3
1922-January.....	92.3	89.9	94.8			104.2	132.4	97.2			88.0	82.4	89.4			79.9
February.....	91.6	89.4	100.6			104.7	125.1	95.7			89.5	83.2	94.2			81.5
March.....	92.1	89.4	99.0			109.2	123.9	94.0			88.5	84.3	98.1			81.9
April.....	89.4	89.9	93.7			106.9	123.3	92.5			85.6	83.1	96.0			82.0
May.....	90.2	90.1	93.0			110.0	121.4	94.7			87.9	85.4	100.1			83.0
June.....	90.9	91.2	90.6			110.2	124.3	93.7			88.9	85.4	102.8			84.9
July.....	94.2	91.7	93.4			106.2	125.7	93.0			90.5	88.3	102.0			85.4
August.....	92.0	91.9	105.8			104.0	127.3	96.0			89.9	91.1	101.0			86.4
September.....	91.2	94.0	94.3			105.6	125.0	96.4			90.7	90.4	98.6			87.9
October.....	91.8	94.1	99.2			105.0	110.1	95.7			93.8	90.0	99.3			90.1
November.....	93.8	96.2	104.4			110.3	114.2	95.5			93.7	90.9	99.7			92.4
December.....	93.1	99.1	99.1			109.5	117.3	96.6			94.7	93.3	97.6			94.8
1923-January.....	93.9	99.9	96.3	98.7	89.9	103.7	113.2	97.1	96.1	98.2	94.6	94.7	99.1	100.2	94.4	97.5
February.....	97.1	100.1	97.1	99.4	90.5	103.8	112.0	97.7	97.6	97.7	96.5	96.1	101.1	102.5	94.4	97.9
March.....	98.3	101.7	100.2	102.4	94.0	105.0	112.4	97.9	97.7	98.1	102.1	99.8	101.2	102.3	95.9	97.7
April.....	98.1	103.3	100.4	101.7	97.1	106.9	112.8	98.4	99.0	97.7	103.8	100.4	101.0	101.9	96.7	98.0
May.....	98.9	104.5	99.1	98.6	100.6	106.4	110.8	98.0	97.0	99.2	102.7	100.9	101.0	102.0	97.1	99.1
June.....	100.5	105.1	102.0	100.1	107.0	105.2	104.3	98.7	98.4	99.1	103.4	102.4	102.8	103.8	98.5	99.9
July.....	102.1	106.1	99.1	97.6	103.0	105.1	99.4	99.1	99.3	98.9	100.9	102.7	103.8	105.0	98.4	101.2
August.....	101.9	108.0	100.8	101.1	99.8	108.8	89.8	99.0	98.5	99.6	101.5	102.3	102.4	103.6	97.2	100.2
September.....	101.8	108.7	101.4	101.7	100.8	105.1	95.0	99.3	98.6	100.2	98.5	101.3	101.9	103.4	95.3	98.1
October.....	102.9	107.4	103.0	103.0	102.8	105.6	103.4	100.1	99.5	100.7	97.7	101.2	102.1	103.4	96.0	97.4
November.....	99.8	106.3	107.1	108.1	104.5	104.4	103.2	100.1	99.2	101.0	97.4	100.4	102.1	103.2	97.4	96.3
December.....	100.8	104.9	100.1	98.0	105.6	102.9	84.7	99.9	99.0	100.9	98.4	100.4	102.0	102.9	97.9	94.0
1924-January.....	101.3	104.9	99.4	97.1	105.3	102.6	84.9	101.2	100.2	102.3	97.5	101.0	101.2	101.9	97.8	94.0
February.....	103.3	105.1	98.7	96.4	104.8	103.2	100.3	100.9	100.2	101.7	98.8	101.6	103.1	103.8	100.0	95.8
March.....	102.3	104.5	100.7	99.2	104.6	102.6	96.4	100.9	100.1	101.7	98.7	102.1	102.0	102.3	100.4	96.4
April.....	101.3	103.4	98.9	96.7	104.7	102.4	97.1	101.1	100.1	102.2	98.9	102.3	101.3	101.3	101.4	96.1
May.....	101.7	100.8	96.3	93.6	103.6	101.8	102.3	101.3	101.0	101.7	98.6	99.4	100.2	100.2	100.1	96.1
June.....	101.7	99.2	98.0	98.3	96.9	100.2	102.7	100.9	100.8	101.1	98.0	99.1	97.1	96.8	98.2	94.4

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Food products group							Paper and printing group					Lumber and products group				
	Bak- ing	Slaugh- tering and meat pack- ing	Confectionery and ice cream			Flour	Sugar refin- ing, cane	Printing				Paper and pulp (unad- justed)	Paper boxes	Lumber			Furni- ture
			Total	Con- fec- tion- ery	Ice cream			Total	Book and job	News- papers and peri- odicals	Total			Saw mills	Mill work		
1924—July.....	99.7	99.1	98.8	93.8	98.4	100.8	103.7	100.5	100.1	101.0	94.7	96.0	96.0	96.0	95.7	94.1	
August.....	99.6	98.3	100.9	101.4	99.7	97.0	102.4	100.2	99.5	101.0	95.1	97.9	95.3	95.3	95.4	93.8	
September.....	100.2	98.1	99.7	99.6	99.7	97.1	105.7	101.7	101.4	102.0	96.3	99.2	95.4	95.2	96.6	95.8	
October.....	99.6	95.6	97.9	97.8	98.2	96.7	99.2	100.9	101.8	99.9	97.8	99.4	97.2	97.0	98.4	97.8	
November.....	100.7	95.9	94.5	93.6	97.0	96.9	91.4	100.3	100.9	99.7	98.2	98.3	97.0	96.6	98.8	98.6	
December.....	101.0	98.4	96.3	96.5	95.4	95.9	92.2	100.7	101.8	99.6	98.1	98.6	98.2	97.6	100.7	100.6	
1925—January.....	101.0	98.2	97.6	98.3	95.3	98.7	92.2	101.0	102.4	99.6	98.4	99.4	100.0	99.6	101.7	103.5	
February.....	100.5	97.3	100.0	101.0	97.0	99.4	96.8	100.4	101.8	98.8	100.6	101.4	101.4	101.1	102.9	104.4	
March.....	98.4	96.3	100.3	101.4	97.1	97.3	98.6	100.5	101.4	99.4	103.4	100.0	99.7	99.1	102.4	104.8	
April.....	98.4	94.2	99.7	100.6	97.4	95.4	97.8	100.0	101.2	98.7	103.5	101.2	100.0	99.1	103.6	104.1	
May.....	98.4	94.3	100.3	101.3	97.8	94.6	98.0	99.4	100.0	98.8	102.7	100.6	98.9	98.1	102.4	104.6	
June.....	99.0	94.2	104.0	102.0	109.2	94.4	97.3	100.3	100.4	100.2	101.3	99.4	99.4	98.8	102.2	104.7	
July.....	98.0	94.0	101.5	101.6	101.2	95.0	99.0	100.2	100.4	99.9	102.6	98.7	99.1	98.0	104.0	104.6	
August.....	97.7	94.7	103.4	105.2	98.4	91.6	99.2	100.2	100.3	100.0	102.4	98.2	98.3	97.0	104.4	106.0	
September.....	98.0	94.9	101.1	100.4	102.8	93.4	98.0	100.2	100.4	100.0	101.9	100.1	99.2	97.7	106.3	106.2	
October.....	100.9	94.6	99.7	99.4	100.3	93.8	99.2	100.6	101.3	99.8	104.5	100.4	100.1	98.3	108.4	107.9	
November.....	100.1	94.5	102.3	103.2	99.5	93.7	98.8	100.7	101.4	99.8	104.6	100.9	99.6	97.4	109.3	109.2	
December.....	100.4	93.4	103.3	104.6	99.8	93.9	105.8	100.5	100.7	100.3	105.3	101.5	100.3	98.2	109.6	108.7	
1926—January.....	100.1	93.4	105.6	108.0	99.0	93.4	102.6	101.6	102.7	100.3	105.5	102.3	99.8	98.0	107.8	109.5	
February.....	99.0	93.2	106.4	108.9	99.9	90.7	101.4	101.2	101.9	100.4	105.7	101.8	99.3	97.6	106.9	110.1	
March.....	100.7	92.6	105.2	107.7	98.6	91.3	97.8	102.0	103.0	100.8	105.9	101.6	98.6	96.8	106.6	111.1	
April.....	100.9	92.1	103.0	105.4	96.4	90.6	96.9	102.1	103.6	100.3	106.4	101.8	99.3	98.3	103.5	110.7	
May.....	101.4	92.7	104.6	105.9	101.4	90.4	93.8	102.4	103.8	100.7	106.6	102.1	98.8	98.1	102.2	110.4	
June.....	102.6	92.7	103.2	104.0	101.1	91.0	93.6	102.8	104.9	100.4	106.0	102.1	98.5	97.9	101.7	109.7	
July.....	102.7	92.7	103.2	105.3	97.4	91.3	90.8	102.8	104.9	100.4	104.8	102.6	98.2	97.5	101.2	109.4	
August.....	102.6	94.1	102.2	103.6	98.4	93.7	91.9	103.3	105.2	101.1	105.1	102.6	97.9	97.3	100.7	109.9	
September.....	102.6	94.4	102.1	104.6	95.3	92.1	91.4	104.2	106.7	101.3	105.7	101.6	95.8	94.9	100.1	111.0	
October.....	102.8	94.4	102.6	104.1	98.3	91.2	91.3	105.0	107.3	102.3	106.0	101.1	95.8	94.6	101.3	111.9	
November.....	102.7	93.4	101.8	103.6	97.0	92.2	93.7	105.4	108.0	102.4	105.4	101.4	95.1	93.8	101.3	110.9	
December.....	103.0	92.4	99.2	99.9	97.3	90.2	92.1	104.7	107.2	101.9	103.8	100.9	94.7	94.0	97.9	110.4	
1927—January.....	103.7	93.0	101.4	102.9	97.4	89.7	92.6	103.6	104.9	102.1	103.7	100.7	92.2	91.3	96.2	109.1	
February.....	104.4	93.4	99.9	100.8	97.4	88.8	89.6	104.9	106.8	102.7	103.7	99.6	90.6	89.9	93.8	108.8	
March.....	104.4	93.3	99.4	100.1	97.4	89.4	90.8	105.0	107.4	102.4	103.4	98.5	89.2	88.6	92.1	109.2	
April.....	105.6	94.1	99.6	101.1	95.4	89.5	92.6	104.9	107.1	102.3	103.2	99.5	87.5	86.5	92.2	109.1	
May.....	104.3	94.3	99.4	100.9	95.4	91.4	96.4	104.8	107.3	102.0	100.9	99.6	87.9	87.0	92.0	109.1	
June.....	106.2	96.8	101.6	104.4	94.0	91.4	97.9	104.7	107.2	101.8	100.6	99.7	87.4	86.2	92.6	109.7	
July.....	105.1	96.9	98.5	100.6	93.0	90.7	98.7	103.9	105.8	101.8	100.7	99.4	87.2	86.2	91.8	109.4	
August.....	106.3	94.1	98.4	100.4	92.8	88.9	97.5	104.7	107.6	101.4	101.7	99.5	87.0	86.1	91.3	109.0	
September.....	107.1	93.6	99.6	102.4	92.1	89.5	96.6	104.4	107.7	100.8	101.7	99.8	86.8	86.0	90.1	108.8	
October.....	106.4	93.0	96.6	97.7	93.5	89.0	97.6	101.4	107.1	101.3	101.6	99.4	86.3	85.6	89.8	108.1	
November.....	106.7	92.7	97.1	97.7	95.5	88.5	95.2	104.4	108.2	100.3	101.3	99.0	85.2	84.4	89.0	108.8	
December.....	107.1	91.4	97.1	97.9	94.7	88.6	95.1	104.7	108.0	100.9	100.3	98.4	83.6	82.7	87.7	106.8	
1928—January.....	106.4	91.9	96.7	97.4	94.7	89.8	88.3	104.4	107.4	101.1	99.2	98.2	82.7	81.8	87.1	106.3	
February.....	105.7	94.9	96.9	97.9	93.9	89.6	88.6	105.2	108.9	101.0	98.2	97.5	82.2	81.3	86.5	107.3	
March.....	105.2	97.5	96.9	97.6	95.1	90.4	86.2	103.4	105.3	101.2	98.2	97.3	83.0	82.4	85.7	107.7	
April.....	105.8	95.7	97.2	97.9	95.4	90.8	87.0	103.3	104.6	101.9	97.6	96.6	83.1	82.2	87.2	106.3	
May.....	106.6	94.2	96.8	97.8	94.2	91.0	83.4	104.5	106.9	101.8	97.1	96.8	82.5	81.2	88.6	105.7	
June.....	105.4	94.2	95.4	96.4	92.6	88.2	81.2	104.2	106.1	102.1	97.7	97.2	83.0	81.7	89.1	105.1	
July.....	105.7	94.2	95.3	95.0	95.9	88.0	88.7	105.2	107.7	102.4	97.1	95.6	82.1	80.6	89.0	104.2	
August.....	105.8	93.0	93.4	92.3	96.7	89.0	88.6	105.7	108.5	102.5	98.0	95.0	83.2	81.9	89.4	104.2	
September.....	107.3	92.5	93.7	93.3	94.6	88.6	89.4	104.2	105.6	102.5	98.3	95.8	83.0	81.8	88.2	105.0	
October.....	105.9	93.2	95.6	96.0	94.3	89.0	91.1	104.8	106.7	102.7	98.3	97.2	83.2	82.4	86.9	104.6	
November.....	106.6	94.7	97.0	97.8	94.9	89.8	94.4	104.8	106.3	103.0	99.2	97.8	83.8	82.6	89.1	106.8	
December.....	107.6	95.6	96.9	97.8	94.4	91.8	96.0	104.7	105.8	103.4	97.8	96.7	82.9	82.2	86.2	108.4	
1929—January.....	106.4	97.0	96.1	96.3	95.5	91.1	95.5	104.8	105.9	103.5	98.1	95.6	82.4	81.2	87.7	109.0	
February.....	107.7	95.1	95.3	95.8	93.9	93.3	93.9	106.7	109.5	103.6	98.7	96.8	82.0	80.9	87.0	110.6	
March.....	107.6	95.0	94.7	95.4	92.7	91.8	94.4	106.2	108.9	103.2	98.7	96.7	82.4	81.2	88.4	109.3	
April.....	107.6	95.3	95.9	95.8	96.2	91.8	92.8	106.0	108.1	103.6	99.0	98.5	83.2	82.1	88.6	110.0	
May.....	108.0	96.0	96.7	97.1	91.9	90.4	91.4	107.0	109.7	104.0	98.7	99.1	83.4	82.2	89.0	111.2	
June.....	107.1	95.3	95.7	96.0	95.0	90.4	93.2	107.5	109.9	104.8	99.4	99.7	83.4	82.4	88.7	111.4	
July.....	108.3	95.7	95.5	96.1	94.0	92.6	90.2	108.7	112.0	105.1	99.1	99.8	83.7	82.7	88.2	111.9	
August.....	108.2	95.7	94.8	95.0	94.3	92.2	91.4	109.6	112.7	106.0	99.8	99.6	84.1	83.4	87.4	112.5	
September.....	108.4	96.3	94.8	94.1	96.4	91.8	86.1	110.7	114.1	106.9	100.0	100.4	82.1	81.4	85.2	113.1	
October.....	107.2	96.6	95.2	95.3	94.9	91.3	90.9	109.0	110.4	107.4	100.6	101.4	80.4	80.0	82.1	110.6	
November.....	106.7	95.5	95.1	95.7	93.6	90.2	89.2	109.0	111.1	106.5	99.7	100.4	78.4	78.6	77.7	107.6	
December.....	106.1																

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Transportation equipment group					Leather and products group		Cement, clay, and glass group				
	Auto-mob-iles	Car building and repairing			Ship-build-ing	Leather	Shoes	Clay products			Glass	Cement
		Total	Steam	Electric (unad-justed)				Total	Brick, tile, etc.	Pottery		
1919	85.3	104.5				132.4	101.5	74.2			112.8	68.5
1920	88.3	116.0				118.5	93.5	75.6			119.8	83.2
1921	52.7	85.6				91.9	88.3	69.9			82.4	69.4
1922	72.0	82.9				106.1	95.6	82.4			97.4	89.6
1923	100.6	110.7	111.1	105.0	113.8	108.4	105.6	100.1	100.7	98.5	105.2	95.0
1924	93.4	96.0	95.9	97.2	93.1	95.3	96.6	100.3	98.9	104.1	95.4	100.9
1925	106.0	93.3	93.0	97.8	93.1	96.3	97.8	99.6	100.4	97.4	99.4	104.1
1926	104.7	93.4	93.4	97.0	98.9	97.0	96.7	101.3	102.6	97.9	103.3	101.6
1927	91.5	84.8	84.2	94.8	100.1	95.6	97.6	98.9	99.1	98.3	94.3	98.3
1928	109.1	78.5	77.9	87.8	77.6	92.6	93.7	93.3	90.7	100.4	91.4	90.6
1929	113.8	79.7	79.4	85.0	98.9	89.5	94.7	89.4	85.9	98.9	93.0	83.8
1919—January	79.7	110.5				119.1	100.2	60.7			110.2	51.2
February	77.2	107.3				117.8	99.0	58.4			115.5	53.6
March	76.4	104.2				120.7	95.4	59.2			115.0	59.8
April	76.3	102.3				125.7	95.5	69.7			116.3	60.1
May	76.4	102.1				131.5	97.8	76.7			116.3	62.0
June	80.1	100.5				136.2	97.9	79.4			117.3	73.4
July	82.9	104.1				133.4	101.6	82.0			87.1	75.3
August	86.1	103.2				138.7	101.8	83.3			118.0	76.2
September	90.4	105.2				140.8	103.4	78.9			115.5	77.0
October	95.9	102.8				141.1	105.8	80.2			121.8	78.0
November	100.1	104.0				141.6	109.1	79.5			111.6	78.7
December	102.1	107.3				143.0	110.6	81.6			108.6	76.0
1920—January	109.7	114.4				143.0	109.7	85.0			109.4	84.4
February	106.2	111.9				136.4	106.4	86.1			114.7	80.0
March	103.1	113.2				135.8	105.5	81.0			116.1	78.1
April	97.0	113.1				134.6	106.4	75.1			115.9	83.2
May	91.7	116.1				132.6	104.9	75.9			116.2	84.9
June	90.1	117.7				126.0	100.3	74.8			123.6	85.2
July	89.4	118.2				122.0	92.1	74.3			123.9	81.8
August	85.1	121.9				114.0	88.6	72.6			124.4	81.2
September	80.3	121.0				104.6	79.9	71.9			125.0	82.5
October	73.2	117.7				99.3	78.3	68.9			125.7	82.4
November	67.3	115.4				90.0	75.7	71.8			125.8	84.0
December	66.1	111.4				83.9	74.1	70.3			116.5	91.0
1921—January	34.4	104.9				80.2	71.7	64.8			103.8	78.0
February	40.0	94.2				81.3	77.7	65.4			88.4	56.8
March	46.7	84.4				85.5	79.2	64.3			87.7	65.2
April	55.9	76.6				81.0	82.2	68.2			77.8	74.0
May	56.4	78.2				87.9	86.3	68.7			81.0	73.4
June	55.7	76.0				95.4	90.3	71.4			77.0	70.1
July	55.3	79.7				97.8	91.6	73.8			70.3	72.1
August	56.6	83.4				97.0	92.4	73.2			78.1	59.6
September	57.4	85.9				96.4	93.9	75.7			74.7	70.5
October	58.3	86.6				97.1	93.0	74.3			75.1	71.3
November	58.2	88.7				99.3	91.6	70.4			84.1	70.0
December	57.0	88.0				103.7	92.2	68.4			90.1	72.0
1922—January	57.4	85.5				103.9	92.1	65.7			99.1	71.2
February	58.6	84.9				105.0	91.9	64.9			98.5	82.0
March	60.0	85.8				102.3	88.9	73.9			95.2	84.2
April	63.0	84.5				102.1	88.3	77.1			93.4	86.7
May	67.7	86.2				102.1	89.0	82.9			94.2	89.5
June	73.9	88.4				103.7	92.6	85.1			90.4	93.1
July	75.6	43.6				105.6	95.8	84.2			96.3	92.2
August	78.1	57.4				108.0	96.4	87.0			98.6	94.5
September	79.0	75.4				100.7	100.0	89.6			99.1	95.0
October	79.7	94.6				109.2	101.7	90.8			100.3	94.5
November	83.2	101.4				110.4	104.0	92.4			101.8	96.3
December	87.7	106.7				111.4	106.4	94.6			101.4	95.8
1923—January	93.0	112.8	113.7	98.4	111.1	111.8	107.4	95.7	96.9	92.6	105.2	93.4
February	96.1	110.0	110.8	98.9	108.2	112.0	107.7	95.9	97.3	92.3	104.8	96.3
March	98.0	110.9	111.6	100.1	115.2	111.7	106.8	97.5	99.1	93.2	102.4	95.7
April	98.4	108.0	108.6	99.1	115.2	113.5	109.0	99.8	101.8	94.4	104.4	92.8
May	99.0	108.9	109.5	100.4	115.5	111.0	108.2	99.9	101.0	97.1	108.3	92.6
June	101.2	111.8	112.4	102.0	117.6	110.9	108.5	100.6	101.2	99.1	112.8	93.4
July	99.9	111.5	111.8	107.4	117.7	109.0	103.8	101.0	101.8	99.0	107.7	94.4
August	100.4	113.8	114.1	109.7	115.7	106.1	103.5	102.1	101.7	103.2	107.5	94.2
September	101.4	112.2	112.2	112.1	113.8	104.4	103.8	102.6	102.4	102.9	105.4	94.9
October	103.8	112.6	112.7	111.2	115.0	104.3	102.8	102.7	102.7	102.7	103.3	94.1
November	107.6	111.4	111.3	111.7	114.2	104.3	103.6	100.9	100.7	101.7	100.9	97.0
December	108.7	105.0	104.8	108.9	106.9	101.9	102.3	101.8	101.2	103.6	99.2	101.0
1924—January	110.2	100.7	100.7	100.6	101.2	100.7	100.2	103.2	102.3	105.7	98.2	105.3
February	109.2	97.9	97.9	98.1	102.2	99.9	99.9	101.9	101.4	103.0	99.3	105.4
March	107.4	96.4	96.4	97.3	99.6	99.6	100.4	103.7	102.8	106.0	100.8	103.9
April	101.1	96.3	96.2	96.9	97.2	98.6	98.9	103.4	102.2	106.8	100.7	101.8
May	91.0	96.0	95.9	97.3	90.2	95.3	95.9	101.6	100.8	104.0	98.4	100.8

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Transportation equipment group					Leather and products group		Cement, clay, and glass group				
	Auto-mob-iles	Car building and repairing			Ship-build-ing	Leather	Shoes	Clay products			Glass	Cement
		Total	Steam	Electric (unad-justed)				Total	Brick, tile, etc.	Potttery		
1924—June	85.1	94.6	94.4	96.9	90.6	92.8	93.4	99.9	98.5	103.6	96.0	99.0
July	83.8	94.3	94.2	96.2	91.6	89.0	91.8	97.3	95.3	103.0	91.7	98.3
August	84.5	94.1	93.9	96.0	87.3	88.8	92.6	98.8	95.7	107.1	92.1	98.8
September	84.4	94.4	94.3	95.7	87.7	92.9	94.5	97.7	94.9	105.6	91.3	98.6
October	85.7	95.6	95.5	97.6	89.7	94.2	96.2	98.0	96.7	101.5	92.3	97.3
November	87.4	95.7	95.6	97.4	88.7	94.7	97.7	98.2	97.2	100.9	91.2	100.9
December	90.4	96.2	96.2	96.3	88.6	96.7	97.0	100.4	100.0	101.4	92.7	102.7
1925—January	91.7	97.3	97.4	94.6	91.9	96.4	98.0	99.5	99.7	98.9	96.3	102.8
February	90.1	97.9	98.0	95.9	92.4	96.5	98.3	100.7	100.5	101.4	95.7	102.5
March	93.3	97.2	97.1	98.4	93.5	97.0	98.8	102.4	103.3	99.9	95.4	102.4
April	99.0	95.2	95.0	98.6	95.2	97.4	99.0	102.0	102.1	101.8	96.4	104.3
May	104.2	91.6	91.1	98.4	94.9	96.4	98.8	101.0	101.5	99.6	96.1	103.4
June	104.7	91.4	90.9	99.1	92.0	96.4	95.8	99.7	100.2	98.3	98.0	103.1
July	107.2	91.4	91.0	97.1	96.1	94.1	97.0	98.9	99.4	97.4	101.4	103.9
August	107.9	91.7	91.5	95.2	95.9	94.4	97.7	96.8	97.5	95.0	101.4	104.7
September	112.2	91.0	90.5	97.7	93.7	96.1	98.8	97.7	98.7	95.2	101.7	105.4
October	118.8	90.5	90.0	98.9	90.3	96.9	98.5	93.1	99.1	95.6	103.2	105.1
November	124.2	91.0	90.4	99.7	90.1	96.8	97.3	98.4	100.2	93.8	103.6	104.8
December	118.8	93.1	92.6	100.1	91.3	96.7	95.3	100.3	103.2	92.4	104.1	106.3
1926—January	114.7	94.2	93.8	99.1	93.8	96.9	94.6	101.6	104.6	93.4	104.8	103.6
February	112.9	95.3	95.1	98.4	94.4	96.4	95.0	101.9	104.6	94.7	102.2	103.6
March	111.6	95.9	95.7	98.6	95.2	97.2	94.7	99.2	100.8	94.8	102.8	99.6
April	106.1	95.8	95.6	99.3	91.8	97.8	93.7	98.7	99.2	97.4	102.4	99.2
May	101.4	95.4	95.2	98.8	94.6	97.4	94.3	100.8	102.1	97.2	102.5	100.6
June	104.3	94.1	93.9	96.3	95.0	95.1	95.9	101.7	102.8	98.6	104.2	101.1
July	104.6	93.2	93.0	96.3	98.1	95.8	97.7	102.1	103.2	99.0	102.7	102.1
August	104.5	92.6	93.4	95.3	99.7	97.1	98.0	102.8	103.8	99.9	103.4	102.4
September	104.4	92.6	92.4	95.2	102.7	98.2	98.1	102.9	103.8	100.2	104.5	102.3
October	100.2	91.4	91.2	95.6	103.0	98.2	98.7	102.0	103.2	98.8	103.3	101.8
November	98.8	91.2	90.9	95.0	107.2	97.5	100.0	101.7	102.1	100.7	104.2	101.8
December	93.0	90.4	90.1	95.7	110.7	97.0	100.1	100.9	101.3	99.6	102.1	100.6
1927—January	89.6	88.9	88.5	94.7	108.2	97.3	98.7	101.2	101.9	99.3	96.9	99.4
February	95.1	88.3	87.9	95.5	109.6	97.8	97.4	101.1	101.0	101.3	98.1	98.4
March	96.2	86.4	85.8	95.6	109.2	96.7	98.3	102.2	102.7	100.7	97.0	101.3
April	95.1	85.7	85.1	95.4	106.4	95.3	97.7	101.6	102.7	98.9	96.7	100.2
May	94.1	85.7	85.2	94.1	105.4	95.4	98.2	101.0	102.0	98.1	95.0	99.0
June	92.8	86.1	85.5	95.2	102.7	96.0	98.7	100.1	100.8	98.2	94.4	98.6
July	89.9	85.6	84.9	95.5	99.0	95.7	99.5	99.4	99.6	98.8	94.8	99.3
August	90.3	84.3	83.5	95.9	97.4	94.8	99.2	96.2	97.3	93.3	91.0	98.3
September	88.7	83.4	82.7	95.6	95.1	94.9	98.1	96.2	96.8	94.6	91.2	98.6
October	87.7	82.8	82.0	94.4	92.7	94.6	97.0	95.4	95.3	95.9	91.0	97.1
November	87.4	81.2	80.4	93.0	88.9	94.0	94.3	96.3	95.3	98.9	93.8	96.1
December	90.8	79.6	78.8	92.2	86.5	94.2	94.6	96.3	94.3	101.7	91.2	93.7
1928—January	94.4	79.1	78.4	90.6	81.2	94.6	95.7	94.9	93.0	100.2	90.9	93.4
February	96.9	78.8	78.1	90.8	75.0	94.1	95.7	95.8	93.6	101.8	88.7	92.3
March	98.1	79.1	78.3	90.9	72.2	94.0	95.6	94.4	92.4	99.7	89.7	92.2
April	99.0	78.8	78.1	90.0	73.4	93.8	94.3	91.6	98.0	98.8	90.8	90.4
May	103.0	79.4	78.8	89.0	75.5	95.3	93.1	92.4	89.9	99.5	93.0	90.8
June	108.9	79.4	78.9	88.3	75.7	94.4	93.9	92.6	89.6	100.6	92.0	90.9
July	111.7	78.4	77.9	87.0	76.9	93.9	94.9	92.6	89.7	100.5	93.2	90.8
August	115.4	78.5	78.0	86.4	77.4	93.2	93.4	92.6	89.8	100.4	93.2	91.0
September	119.2	77.9	77.4	85.8	78.8	92.4	92.8	92.7	90.0	100.1	93.0	89.4
October	119.8	77.3	76.7	85.7	79.6	91.4	91.9	93.1	90.0	101.5	90.9	88.9
November	121.2	77.8	77.3	85.2	80.5	87.6	90.7	93.2	90.3	101.1	89.0	88.2
December	121.7	77.6	77.2	83.8	84.4	86.4	92.3	93.7	91.2	100.5	92.1	88.4
1929—January	124.6	77.7	77.3	83.8	85.4	86.6	92.6	91.7	88.4	100.7	94.0	88.5
February	127.6	78.7	78.4	83.8	83.5	86.0	93.0	89.6	86.3	98.8	95.0	88.2
March	125.3	78.8	78.3	86.7	89.1	85.3	93.0	88.4	84.4	99.7	94.0	87.5
April	123.6	79.3	79.0	84.4	95.0	87.5	93.6	89.1	85.3	99.6	93.8	85.3
May	119.8	79.9	79.4	86.4	99.2	88.7	95.3	90.2	86.6	100.0	93.1	84.8
June	118.0	79.7	79.4	83.9	99.3	90.0	95.1	90.0	87.1	98.1	92.5	84.3
July	112.2	79.8	79.4	85.8	103.0	92.1	95.6	90.3	87.4	98.0	91.0	84.4
August	109.8	80.5	80.2	85.9	104.0	92.0	96.3	90.1	87.4	97.4	92.7	82.5
September	109.8	80.5	80.3	84.6	106.2	92.4	96.4	90.6	88.1	97.3	92.5	82.5
October	101.3	80.8	80.4	85.4	105.8	93.5	96.6	90.1	87.2	97.9	93.9	80.4
November	93.8	80.4	80.1	85.7	108.0	90.9	96.1	88.3	84.1	99.6	93.4	79.4
December	91.0	80.1	79.8	83.8	108.1	89.4	93.4	84.5	79.0	99.6	89.9	77.6
1930—January	90.7	79.4	79.2	83.7	110.1	86.4	92.0	78.7	71.6	98.1	89.3	74.9
February	88.4	77.6	77.3	83.4	107.2	84.7	91.6	77.5	70.9	95.6	90.0	75.2
March	87.0	75.0	74.4	82.5	105.4	84.4	91.8	77.2	71.3	93.4	90.0	78.9
April	87.9	73.3	72.7	82.7	107.4	86.4	92.7	77.1	71.0	93.5	87.7	81.2
May	87.4	72.4	71.9	81.9	107.7	86.4	91.4	75.4	70.1	89.7	85.4	82.4
June	86.5	70.3	69.6	81.0	108.5	85.1	89.9	73.8	69.0	86.9	81.1	82.3
July	81.4	66.8	65.9	80.0	108.0	83.4	87.7	71.9	66.4	86.8	76.7	78.8
August	74.8	65.4	64.4	79.6	112.4	82.6	85.7	70.4	65.1	84.7	70.6	77.3
September	71.1	64.3	63.3	79.1	113.8	81.7	83.0	70.5	65.4	84.4	71.6	76.1

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Nonferrous metals group			Chemicals group			Rubber products group		Tobacco manufactures group			Musical instruments group	
	Total	Stamped and enameled ware	Brass, bronze, and copper	Chemicals and drugs	Petroleum refining	Fertilizers	Automobile tires	Boots and shoes	Total	Cigars and cigarettes	Chewing and smoking tobacco; snuff	Total	Pianos and organs
1919.....	114.7			108.3					113.0			130.4	
1920.....	121.3			97.1					111.8			138.4	
1921.....	74.5			70.8					110.4			86.8	
1922.....	90.1			81.0					107.2			98.8	
1923.....	107.1	114.0	104.7	100.9	102.9	100.8	97.6	117.2	105.8	106.2	102.8	110.4	104.8
1924.....	95.0	89.5	96.9	95.9	96.5	93.6	94.6	83.4	98.8	98.3	102.6	104.3	98.6
1925.....	97.9	96.5	98.4	103.2	100.6	105.6	107.8	99.4	95.4	95.5	94.6	85.3	96.6
1926.....	99.5	97.4	100.2	107.6	110.2	112.4	105.4	102.4	90.8	90.6	93.0	94.6	93.4
1927.....	97.4	92.4	99.1	107.7	110.2	101.0	103.4	105.8	93.6	95.0	82.3	78.9	76.6
1928.....	96.7	82.4	101.5	106.9	102.4	104.8	110.4	103.6	93.6	95.8	76.7	70.2	62.2
1929.....	101.1	79.0	108.6	111.2	116.4	104.3	111.9	100.0	91.6	94.1	72.0	68.4	53.7
1919—January.....	110.3			128.9					129.2			112.5	
February.....	107.2			124.9					126.8			117.6	
March.....	104.4			117.2					125.2			122.0	
April.....	105.4			110.6					126.0			129.7	
May.....	109.2			107.4					123.1			131.9	
June.....	111.8			106.2					112.3			137.4	
July.....	118.8			103.7					100.7			132.6	
August.....	121.6			101.7					90.4			132.8	
September.....	120.7			100.4					95.1			141.3	
October.....	121.1			99.0					99.6			134.1	
November.....	122.1			99.1					114.2			134.1	
December.....	123.8			100.4					113.4			139.1	
1920—January.....	127.4			101.1					118.6			139.6	
February.....	122.1			58.1					112.0			142.2	
March.....	127.2			98.5					112.7			146.3	
April.....	126.8			97.9					116.4			146.4	
May.....	123.5			97.8					111.4			144.9	
June.....	128.5			98.0					110.9			145.9	
July.....	128.4			101.2					110.4			151.6	
August.....	126.7			100.8					110.0			148.1	
September.....	126.6			95.9					109.8			142.0	
October.....	123.5			97.3					107.7			128.1	
November.....	108.0			92.7					110.4			117.3	
December.....	86.6			86.4					110.7			107.8	
1921—January.....	78.3			80.9					111.6			81.0	
February.....	69.4			74.4					106.9			79.7	
March.....	63.5			74.5					102.0			86.2	
April.....	70.6			70.3					111.2			82.7	
May.....	72.9			70.4					112.8			87.3	
June.....	72.4			70.2					113.8			86.9	
July.....	69.5			68.6					112.7			79.0	
August.....	75.3			66.3					113.1			82.6	
September.....	76.2			65.1					112.0			87.3	
October.....	80.4			69.5					112.0			92.4	
November.....	80.9			71.2					109.3			97.2	
December.....	79.8			67.9					108.2			99.4	
1922—January.....	78.2			69.0					101.9			99.7	
February.....	78.0			69.2					106.0			98.3	
March.....	75.8			72.5					106.3			96.2	
April.....	80.1			73.8					103.0			97.7	
May.....	85.4			77.8					105.4			96.7	
June.....	83.4			78.2					105.1			96.0	
July.....	93.1			83.4					113.2			97.2	
August.....	96.2			85.7					112.1			100.2	
September.....	96.8			86.8					109.3			99.7	
October.....	99.3			89.3					109.0			99.7	
November.....	102.8			92.3					107.4			100.5	
December.....	104.4			94.2					107.3			103.7	
1923—January.....	106.3	118.4	102.2	100.0	99.4	99.3	111.8	108.6	109.0	109.5	105.2	104.7	96.5
February.....	105.9	111.6	104.0	100.7	100.1	110.1	114.3	111.9	107.7	108.5	100.9	106.3	98.4
March.....	107.3	113.9	105.1	102.5	101.8	102.9	114.3	116.0	107.8	109.3	95.6	109.9	103.0
April.....	109.6	114.7	107.8	98.6	105.4	94.4	112.8	119.9	109.4	110.9	98.0	110.6	103.4
May.....	110.3	116.9	108.0	104.4	109.4	101.4	110.7	125.6	107.1	107.4	104.4	113.9	106.7
June.....	110.8	117.1	108.7	104.0	107.4	103.8	104.2	127.1	106.9	106.8	107.5	115.4	108.1
July.....	110.4	121.6	106.7	102.8	105.5	105.5	93.4	128.7	104.7	104.4	106.4	119.1	115.1
August.....	109.0	116.9	106.3	101.5	104.6	106.8	80.1	126.4	103.1	103.1	102.8	112.1	109.0
September.....	105.0	111.8	102.7	99.1	102.2	98.4	76.4	114.6	103.8	104.0	102.4	110.0	107.2
October.....	104.0	111.4	101.4	98.4	101.2	96.9	78.6	114.0	104.1	104.1	104.0	107.7	103.6
November.....	102.8	106.4	101.5	99.3	99.6	96.7	85.3	108.4	103.4	103.2	104.5	107.7	102.7
December.....	103.1	106.4	102.0	99.8	97.7	93.3	89.4	104.8	102.9	103.0	102.2	106.9	103.9
1924—January.....	103.4	108.6	101.7	100.4	97.8	97.4	90.0	100.0	102.8	102.4	106.0	114.9	105.5
February.....	104.2	108.6	102.7	99.4	98.0	92.3	90.9	96.6	102.3	101.9	105.2	115.0	104.6
March.....	102.6	105.8	101.4	99.6	97.8	87.8	91.7	91.5	100.9	100.3	105.3	113.7	105.4
April.....	101.1	98.8	101.8	99.0	97.7	90.1	91.2	87.8	101.4	100.7	107.0	109.1	102.0
May.....	96.7	85.7	100.4	97.8	98.2	96.9	90.3	87.3	98.6	98.0	103.7	105.4	96.4
June.....	91.8	77.1	96.8	91.3	97.2	88.0	87.9	85.1	98.0	97.8	99.6	103.0	92.8

TABLE 4.—FACTORY EMPLOYMENT: INDEXES BY INDUSTRIES—Continued

[Adjusted for seasonal variation. Monthly average 1923-1925=100]

Year and month	Nonferrous metals group			Chemicals group			Rubber products group		Tobacco manufactures group			Musical instruments group	
	Total	Stamped and enameled ware	Brass, bronze, and copper	Chemicals and drugs	Petroleum refining	Fertilizers	Automobile tires	Boots and shoes	Total	Cigars and cigarettes	Chewing and smoking tobacco, snuff	Total	Pianos and organs
1924—July	88.1	80.2	90.9	92.6	96.0	85.4	85.6	79.9	99.3	99.1	100.9	101.3	92.6
August	86.6	81.2	88.4	92.4	95.4	86.1	92.5	58.2	99.9	99.9	99.4	100.4	96.6
September	88.6	82.2	90.7	92.2	93.9	93.1	101.1	66.6	98.3	97.8	102.1	98.6	95.4
October	90.0	79.6	93.6	94.1	94.6	99.2	104.4	66.8	90.0	88.7	100.2	96.7	95.7
November	92.1	82.4	95.4	94.7	95.5	102.1	105.0	90.6	97.3	96.9	100.4	96.0	96.6
December	94.8	83.2	98.7	97.2	95.6	105.2	104.4	90.7	97.0	96.5	101.0	98.0	99.6
1925—January	96.6	90.3	98.7	98.6	96.0	96.3	101.4	94.8	97.4	97.5	96.0	86.3	99.2
February	96.1	92.9	97.2	98.7	96.4	106.7	101.9	99.9	96.9	97.0	96.4	84.4	98.9
March	95.1	89.6	97.0	100.9	96.1	115.4	102.5	99.3	96.9	97.6	92.1	83.8	99.9
April	94.8	91.6	95.9	101.8	96.6	117.9	104.4	98.4	93.9	94.2	91.7	81.8	98.9
May	97.3	95.4	97.9	102.0	97.4	98.5	109.4	97.5	96.9	97.2	94.2	81.4	98.9
June	98.4	97.1	98.8	102.7	99.2	107.7	111.1	98.7	95.3	95.4	94.6	81.9	99.0
July	97.9	93.8	99.3	104.8	100.8	109.3	112.3	103.7	95.5	95.4	95.9	80.2	96.1
August	98.0	96.4	98.4	103.9	102.2	107.9	113.4	99.0	95.7	95.6	96.7	77.6	81.7
September	98.5	99.1	98.4	105.4	103.8	104.4	110.2	101.2	94.3	94.2	95.0	89.6	95.9
October	98.9	99.3	98.8	106.1	105.4	100.4	106.3	99.2	94.7	94.6	95.7	90.7	97.4
November	100.8	104.7	99.5	106.3	106.4	100.4	109.3	98.5	93.6	93.6	93.1	90.8	95.8
December	102.2	107.7	100.4	106.8	107.2	102.2	111.3	102.4	94.3	94.4	93.7	94.9	97.4
1926—January	101.2	103.1	100.6	106.9	106.8	115.8	109.4	104.6	91.8	91.8	91.8	98.0	97.1
February	100.6	102.2	100.1	105.6	107.1	115.4	108.3	102.9	92.7	92.7	92.9	99.0	95.8
March	100.7	101.4	100.4	106.4	106.5	107.3	105.6	107.3	92.1	91.3	97.7	98.9	96.1
April	100.6	102.9	99.8	107.2	107.5	98.6	105.2	106.8	91.9	91.2	96.8	98.4	95.4
May	99.4	98.0	99.9	108.0	108.2	108.9	101.4	106.3	89.9	89.3	95.1	99.3	96.6
June	98.3	94.3	96.7	109.0	109.7	116.2	100.6	105.7	92.3	92.0	95.0	98.7	96.7
July	98.3	98.0	98.4	108.7	109.6	113.6	102.3	84.1	90.6	90.0	95.4	94.6	94.4
August	98.9	98.8	98.9	108.4	110.3	114.7	103.8	104.8	89.2	88.4	94.8	91.7	92.5
September	100.0	95.9	101.4	108.4	111.9	117.3	107.4	103.9	89.3	89.2	90.7	89.4	90.6
October	99.0	92.6	101.1	108.4	114.6	116.9	110.2	101.7	89.6	89.6	89.8	89.9	89.9
November	99.2	92.4	101.5	107.3	115.1	117.1	106.6	100.3	89.8	89.0	88.3	88.2	87.9
December	98.0	88.6	101.2	107.1	115.1	106.7	103.4	100.0	90.5	91.0	87.2	88.7	87.4
1927—January	97.7	88.6	100.8	107.8	117.3	104.7	100.9	101.4	90.3	91.1	84.7	90.2	84.9
February	95.4	88.5	97.8	106.6	117.6	101.9	100.2	102.8	91.6	92.3	86.0	84.7	82.1
March	97.0	91.8	98.8	108.1	118.3	95.9	100.8	103.1	91.7	92.4	85.9	83.4	79.9
April	97.9	92.5	99.7	108.3	114.7	98.8	106.3	102.8	92.7	94.0	82.4	81.3	77.0
May	100.3	96.4	101.6	107.0	112.4	106.3	109.9	105.0	93.0	94.4	82.1	80.1	77.4
June	98.9	95.7	100.0	108.4	110.3	100.8	108.0	107.2	94.6	96.4	81.3	78.4	77.3
July	99.4	99.0	99.5	108.6	108.9	98.8	105.9	105.2	96.3	98.4	79.8	76.3	76.4
August	99.2	94.7	100.7	108.2	107.3	98.5	103.9	104.8	91.1	92.4	80.6	76.8	75.8
September	97.4	91.3	99.5	107.8	105.4	101.0	100.7	109.1	95.6	97.7	80.0	75.6	74.1
October	96.5	91.4	98.2	107.7	104.5	99.4	100.8	108.3	96.0	97.7	82.6	75.0	73.4
November	95.0	90.8	96.4	107.7	103.0	101.3	101.2	108.5	95.4	97.2	81.8	73.5	71.8
December	94.2	87.7	96.4	106.1	102.4	104.6	101.9	111.2	94.4	96.2	80.4	71.5	68.4
1928—January	90.9	78.6	95.1	104.4	103.1	100.4	104.4	108.3	94.6	96.4	80.4	70.3	60.8
February	91.7	81.9	95.1	106.1	102.2	107.0	106.0	107.9	93.3	95.1	79.4	71.4	63.4
March	91.4	80.4	95.1	106.3	102.1	108.5	106.0	102.1	93.7	95.8	77.4	69.1	62.6
April	93.6	81.4	97.7	106.4	99.4	103.0	104.2	106.5	93.7	95.7	78.6	70.6	64.1
May	94.7	82.4	98.9	105.8	99.4	101.7	104.4	105.4	93.7	95.8	77.6	71.7	64.4
June	96.0	82.4	100.7	107.3	100.5	105.5	107.2	98.4	93.6	95.8	76.7	71.3	63.8
July	96.6	81.6	101.6	107.2	100.4	105.8	112.0	106.7	89.9	92.0	74.0	70.2	60.4
August	97.4	81.4	102.8	106.1	102.0	101.8	113.4	102.7	95.7	98.3	75.3	72.9	63.0
September	99.1	82.8	104.6	107.9	103.9	104.4	114.1	101.9	93.8	96.2	75.4	69.0	61.4
October	101.4	84.8	107.0	108.7	104.5	105.3	117.8	101.9	93.9	96.4	74.5	68.3	60.6
November	103.4	83.4	109.6	108.5	105.1	104.0	118.4	102.0	93.8	96.2	75.8	69.0	61.2
December	103.9	85.2	110.2	108.7	106.0	109.7	116.6	99.4	93.8	96.2	75.6	67.4	60.2
1929—January	103.6	85.3	107.9	109.8	106.0	103.2	118.0	98.8	90.8	92.9	74.0	58.0	59.6
February	104.0	83.6	110.9	112.0	108.1	98.9	116.4	96.6	92.9	95.4	73.0	56.6	58.7
March	104.2	84.2	111.0	111.7	110.3	103.0	117.3	98.4	92.6	95.2	72.4	55.9	57.8
April	105.1	82.2	112.9	111.7	111.9	114.6	118.6	97.7	93.3	96.2	71.5	59.6	57.1
May	104.0	81.2	111.8	111.4	114.6	108.9	120.0	98.2	91.9	94.5	71.6	68.8	55.8
June	102.9	79.4	110.9	111.4	115.3	102.3	119.3	101.0	92.0	94.7	71.8	68.3	54.5
July	101.9	79.6	109.4	112.0	117.4	108.3	117.1	104.1	92.6	95.3	72.0	82.0	54.7
August	101.2	79.4	108.6	112.9	119.7	105.3	111.2	107.5	93.6	96.7	69.4	81.1	48.2
September	100.1	77.1	107.9	111.7	121.8	101.0	106.2	103.8	90.9	93.3	72.7	82.7	52.3
October	99.9	76.6	107.8	112.7	124.9	103.9	103.2	102.0	89.9	92.6	69.4	81.3	51.6
November	94.8	70.9	102.9	108.8	124.9	103.2	93.7	96.2	90.9	93.4	71.0	67.4	50.6
December	91.1	67.7	99.0	108.1	122.4	99.6	89.1	96.0	87.4	89.0	74.7	58.5	43.7
1930—January	86.8	64.0	94.6	105.6	123.1	104.1	89.0	94.4	90.8	92.9	74.2	40.8	37.1
February	82.9	59.3	90.9	102.4	122.4	103.7	85.3	93.4	90.1	92.5	71.3	42.3	40.0
March	81.6	59.4	89.1	101.6	119.7	102.6	84.5	93.4	90.2	92.5	71.9	42.2	40.1
April	81.0	58.7	88.6	100.8	116.1	99.3	87.2	90.4	90.1	92.4	72.3	42.4	39.9
May	80.2	57.2	88.1	102.8	114.3	102.6	89.3	84.3	90.9	93.2	73.2	44.4	39.9
June	80.3	57.4	88.1	102.3	113.0	101.2	90.1	81.6	89.7	92.0	72.4	45.4	38.4
July	78.7	58.2	85.7	102.2	111.1	105.6	83.9	77.7	90.4	92.2	75.9	59.9	38.0
August	76.1	55.1	83.3	102.0	110.1	100.1	80.2	79.2	84.1	85.5	72.6	71.1	35.6
September	73.6	51.4	81.1	101.2	106.6	94.3	76.2	72.6	85.1	86.8	72.1	97.4	37.7

FEDERAL RESERVE BANK CREDIT



RESERVE BANK CREDIT OUTSTANDING AND FACTORS IN CHANGES

[Average of daily figures. In millions of dollars]

Month or week	Reserve bank credit outstanding					Factors of decrease ¹		Factors of increase ¹			
	Bills discounted	Bills bought	United States securities	Other reserve bank credit ²	Total	Monetary gold stock	Treasury currency (adjusted)	Money in circulation	Member bank reserve balances	Non-member deposits, etc.	Unexpended capital funds
1929—May.....	956	145	153	49	1,303	4,292	1,787	4,684	2,296	32	370
June.....	978	99	179	61	1,317	4,311	1,779	4,687	2,314	30	376
July.....	1,096	75	147	62	1,380	4,335	1,790	4,764	2,334	31	376
August.....	1,043	124	155	54	1,376	4,351	1,781	4,777	2,322	27	382
September.....	969	229	165	64	1,427	4,368	1,786	4,811	2,335	28	387
October.....	885	337	154	74	1,450	4,381	1,785	4,810	2,336	28	392
November.....	953	296	315	67	1,631	4,374	1,789	4,845	2,521	33	395
December.....	803	320	446	74	1,643	4,324	1,797	4,943	2,395	27	399
1930—January.....	501	314	485	57	1,357	4,283	1,784	4,652	2,349	27	394
February.....	378	285	480	38	1,181	4,319	1,781	4,556	2,305	27	393
March.....	274	246	540	35	1,095	4,395	1,797	4,533	2,330	27	397
April.....	231	266	530	45	1,072	4,443	1,781	4,518	2,350	28	400
May.....	247	182	529	38	996	4,505	1,779	4,497	2,356	29	398
June.....	251	141	571	37	1,000	4,528	1,775	4,489	2,392	27	395
July.....	226	154	583	40	1,003	4,532	1,789	4,483	2,417	35	399
August.....	214	153	599	32	998	4,496	1,787	4,476	2,392	28	385
September.....	189	197	597	33	1,016	4,503	1,785	4,492	2,397	26	389
October.....	196	185	602	37	1,020	4,520	1,787	4,501	2,407	27	392
Week ending (Saturday)—											
Oct. 4.....	205	195	599	39	1,038	4,508	1,782	4,517	2,395	25	391
Oct. 11.....	189	200	601	35	1,025	4,515	1,789	4,521	2,391	25	392
Oct. 18.....	197	193	602	46	1,038	4,519	1,783	4,520	2,395	34	391
Oct. 25.....	195	178	602	32	1,007	4,522	1,783	4,482	2,414	23	391
Nov. 1.....	204	164	602	22	992	4,530	1,713	4,467	2,430	27	391

¹ For explanation see BULLETIN for July, 1929, pp. 432-438.² Includes "other securities," amounts due from foreign banks, and reserve bank float; for explanation see BULLETIN for July, 1929.

Back figures.—See Annual Report for 1929 (Tables 1, 2, and 3).

ANALYSIS OF CHANGES IN MONETARY GOLD STOCK

[End of month basis. In millions of dollars]

Month	Gold stock at end of month	Increase or decrease (—) during month			
		Total	Through net gold import or export	Through ear-marking operations	Through domestic production, etc. ¹
1928—Total (12 mos.).....		—237.9	—392.0	119.6	34.5
1929—January.....	4,127	—14.4	47.2	—65.0	3.4
February.....	4,153	26.4	25.5	—	.9
March.....	4,188	34.4	24.8	7.5	2.1
April.....	4,260	72.4	23.1	48.6	0.7
May.....	4,301	40.6	23.6	16.1	0.9
June.....	4,324	23.4	30.2	—7.5	0.7
July.....	4,341	16.3	34.7	—22.0	3.6
August.....	4,360	18.9	18.4	—1.0	1.5
September.....	4,372	12.1	17.6	—6.6	1.1
October.....	4,386	14.4	17.5	—4.5	1.4
November.....	4,367	—19.2	—23.2	1.0	2.3
December.....	4,284	—82.9	—64.4	—22.0	3.5
Total (12 mos.).....		142.4	175.1	—55.4	22.7
1930—January.....	4,293	8.8	4.0	2.5	2.3
February.....	4,355	61.9	60.0	0.0	1.9
March.....	4,423	68.2	55.5	13.0	—0.3
April.....	4,491	68.5	65.7	0.5	2.3
May.....	4,517	25.9	23.5	2.0	0.5
June.....	4,535	17.6	13.9	2.0	1.7
July.....	4,517	—18.4	—19.6	—3.0	4.3
August.....	4,501	—15.5	—19.6	0.0	4.2
September.....	4,511	10.2	2.5	4.0	3.7
October.....	4,534	23.0	23.7	—6.1	5.5

¹ For explanation of this figure, which is derived from preceding columns, see BULLETIN for December, 1928, p. 831.² Preliminary.

GOLD MOVEMENTS TO AND FROM UNITED STATES

[In thousands of dollars]

From or to—	1930					
	October (preliminary)		September		January–September	
	Im-ports	Ex-ports	Im-ports	Ex-ports	Im-ports	Ex-ports
England.....					13	289
France.....					112	73,808
Germany.....				10	27	171
Italy.....				3,000	2	3,000
Netherlands.....					17	
Canada.....		9,000	982	7,059	19,082	22,706
Central America.....			103		1,315	
Mexico.....			1,147		18,571	415
Argentina.....	575				391	
Brazil.....	15,000		1,525		67,371	
Chile.....			10		213	
Colombia.....	1,017		140		5,124	
Ecuador.....					1,117	
Peru.....			87		6,318	
Venezuela.....			1,073	965	4,615	965
Uruguay.....			2,301		8,301	
China and Hong Kong.....	864	200	1,155	100	20,692	161
Dutch East Indies.....			146		1,235	50
Japan.....	13,750		4,577		126,609	
Philippine Islands.....			212		2,634	
New Zealand.....			22		157	
All other countries ¹	1,692	30	200		3,566	91
Total.....	232,898	29,230	13,680	11,133	287,482	101,657

¹ Includes all movements of unreported origin or destination.² At New York—imports, \$17,023,000; exports \$30,000. Elsewhere—imports, \$15,875,000; exports, \$9,200,000.

MEMBER BANK BORROWINGS AT FEDERAL RESERVE BANKS

[Monthly averages of weekly figures. In millions of dollars]

Month	Total ¹		Reporting member banks in leading cities				Member banks outside leading cities ¹	
			New York City		Other lead- ing cities			
	1929	1930	1929	1930	1929	1930	1929	1930
January.....	891	462	190	39	473	208	228	215
February.....	893	371	131	21	528	152	234	198
March.....	978	247	166	1	574	80	238	166
April.....	991	225	162	17	563	54	266	154
May.....	951	226	145	11	516	48	290	167
June.....	972	222	165	5	505	48	302	169
July.....	1,100	218	319	4	482	53	299	165
August.....	1,013	196	196	4	521	39	296	153
September.....	974	186	166	9	540	35	268	142
October.....	885	193	74	6	561	50	250	137
November.....	944	60	-----	-----	595	-----	289	-----
December.....	755	-----	80	-----	410	-----	265	-----

¹ Includes (in small amounts) discounts by Federal reserve banks for nonmembers: (1) Bills discounted for intermediate credit banks and (2) notes secured by adjusted-service certificates discounted for non-member banks.

FEDERAL RESERVE BANK RATES

DISCOUNT RATES

[Rates on all classes and maturities of eligible paper]

Federal reserve bank	Rate in effect on Nov. 1	Date established	Previous rate
Boston.....	3	July 3	3½
New York.....	2½	June 20	3
Philadelphia.....	3½	July 3	4
Cleveland.....	3½	June 7	4
Richmond.....	3½	July 18	4
Atlanta.....	3½	July 12	4
Chicago.....	3½	June 21	4
St. Louis.....	3½	Aug. 7	4
Minneapolis.....	3½	Sept. 12	4
Kansas City.....	3½	Aug. 15	4
Dallas.....	3½	Sept. 9	4
San Francisco.....	3½	Aug. 8	4

BUYING RATES ON ACCEPTANCES

[Buying rates at the Federal Reserve Bank of New York]

Maturity	Rate in effect on Nov. 1	Date established	Previous rate
1-15 days.....	1½	June 30	2
16-30 days.....	1½	do.....	2
31-45 days.....	1½	do.....	2
46-60 days.....	1½	July 21	2
61-75 days.....	1½	do.....	2
76-90 days.....	2	June 20	2½
91-120 days.....	2½	do.....	2½
121-180 days.....	2½	do.....	2½

NOTE.—Rates on prime bankers' acceptances. Higher rates may be charged for other classes of bills.

OPEN-MARKET RATES

RATES IN NEW YORK CITY

Month or week	Prevailing rate on—			Average rate on—		Average yield on—	
	Prime commercial paper, 4 to 6 months	Prime bankers' acceptances, 90 days	Time loans, 90 days ²	Call loans ¹		U. S. Treasury notes and certificates, 3 to 6 months	Treasury bonds ³
				New	Re-newal		
1929							
October.....	6¼	5½	7 -9	6.10	6.43	4.37	3.67
November.....	5¼-6¼	3¾-4½	4¾-6	5.40	5.44	3.47	3.45
December.....	5	3¾-4	4¾-5	4.88	4.83	3.03	3.46
1930							
January.....	4¾-5	3¾-4	4¾-5	4.31	4.64	3.39	3.51
February.....	4½-5	3¾-3¾	4¾-5	4.28	4.32	3.36	3.50
March.....	3¾-4¾	2½-3¾	3¾-4¾	3.56	3.69	2.95	3.40
April.....	3¾-4	¾-3	4 -4¾	3.79	4.00	3.00	3.46
May.....	3½-4	2¾-2¾	3¾-3¾	3.05	3.12	2.41	3.41
June.....	3¼-3¾	1¾-2¾	2½-3¼	2.60	2.62	1.89	3.37
July.....	3 -3½	1¾	2½-3	2.18	2.20	1.83	3.37
August.....	3	1¾	2½-2¾	2.22	2.21	1.53	3.38
September.....	3	1¾	2½-2¾	2.17	2.19	1.84	3.37
October.....	3	1¾	2½-2¾	2.00	2.00	1.90	3.34
Week ending—							
Oct. 4.....	3	1¾	2½-2½	1.90	1.90	1.99	3.34
Oct. 11.....	3	1¾	2½-2¾	2.00	2.00	2.00	3.34
Oct. 18.....	3	1¾	2½-2¾	2.00	2.00	1.96	3.34
Oct. 25.....	3	1¾	2½-2¾	2.00	2.00	1.94	3.34

¹ Stock exchange call loans; new and renewal rates.

² Stock exchange 90-day time loans.

³ 3 issues—3½, 3¾, 4 per cent; yields calculated on basis of last redemption dates—1947, 1956, and 1954.

⁴ Change of issues on which yield is computed.

⁵ Maturities of 6-9 months.

RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

[Weighted averages]

Month	New York City			Eight other northern and eastern cities			Twenty-seven southern and western cities		
	1928	1929	1930	1928	1929	1930	1928	1929	1930
January.....	4.56	5.74	5.64	4.73	5.87	5.88	5.53	5.94	6.12
February.....	4.44	5.73	5.35	4.76	5.86	5.66	5.53	5.96	6.04
March.....	4.59	5.81	5.22	4.81	5.91	5.47	5.54	6.04	5.98
April.....	4.72	5.85	4.91	4.91	6.00	5.22	5.54	6.07	5.86
May.....	4.97	5.88	4.74	5.04	6.09	5.13	5.56	6.10	5.75
June.....	5.09	5.93	4.59	5.36	6.02	5.06	5.67	6.16	5.69
July.....	5.38	5.88	4.48	5.57	6.08	4.81	5.77	6.17	5.62
August.....	5.56	6.05	4.41	5.59	6.11	4.79	5.80	6.22	5.57
September.....	5.63	6.06	4.29	5.80	6.24	4.74	5.82	6.27	5.54
October.....	5.63	6.08	4.26	5.80	6.25	4.75	5.87	6.29	5.53
November.....	5.56	5.86	-----	5.82	6.12	-----	5.90	6.29	-----
December.....	5.63	5.74	-----	5.91	5.94	-----	5.91	6.20	-----

NOTE.—Figures relate to rates charged by reporting banks to their own customers as distinguished from open-market rates (which are given in preceding table). All averages are based on rates reported for 3 types of customer loans—commercial loans, and demand and time loans on securities. The method of computing the averages takes into account (a) the relative importance of each of these 3 types of loans and (b) the relative importance of each reporting bank, as measured by total loans. In the two group averages the average rate for each city included is weighted according to the importance of that city in the group, as measured by the loans of all banks.

* Revised.

MEMBER BANK CREDIT

REPORTING MEMBER BANKS

[In millions of dollars. Monthly data are averages of weekly figures]

		Loans and investments					Bor- row- ings at F. R. banks	
		Total	Loans			In- vest- ments		Due to banks
			Total	On se- curi- ties	All other			
BY MONTHS								
Total:								
1929—	July.....	22,479	16,950	7,716	9,234	5,529	2,738	801
	August.....	22,465	16,969	7,578	9,390	5,496	2,604	717
	September.....	22,646	17,197	7,654	9,543	5,449	2,718	706
	October.....	23,124	17,706	8,008	9,608	5,418	2,914	634
	November.....	23,663	18,041	8,249	9,792	5,623	3,008	655
	December.....	23,012	17,444	7,908	9,476	5,567	2,886	490
1930—	January.....	22,368	16,821	7,794	9,027	5,548	2,828	247
	February.....	22,083	16,542	7,671	8,871	5,541	2,818	174
	March.....	22,352	16,746	7,964	8,781	5,607	2,898	81
	April.....	22,657	16,901	8,270	8,631	5,756	2,940	71
	May.....	22,662	16,825	8,312	8,513	5,837	2,870	59
	June.....	23,021	17,048	8,568	8,480	5,977	3,063	53
	July.....	23,101	16,906	8,398	8,508	6,194	3,404	53
	August.....	23,128	16,838	8,357	8,481	6,291	3,334	43
	September.....	23,220	16,859	8,390	8,469	6,361	3,505	44
	October.....	23,409	16,834	8,241	8,592	6,575	3,545	56
New York City:								
1929—	July.....	7,496	5,804	3,045	2,758	1,692	935	319
	August.....	7,407	5,688	2,845	2,843	1,720	827	196
	September.....	7,507	5,803	2,892	2,911	1,704	887	166
	October.....	7,837	6,108	3,191	2,916	1,729	1,023	74
	November.....	8,349	6,380	3,340	3,040	1,969	1,132	60
	December.....	8,001	6,021	3,112	2,909	1,981	980	80
1930—	January.....	7,664	5,705	2,945	2,760	1,959	931	39
	February.....	7,493	5,584	2,909	2,675	1,909	902	21
	March.....	7,649	5,720	3,115	2,605	1,929	952	1
	April.....	7,824	5,868	3,353	2,485	1,961	982	17
	May.....	7,852	5,878	3,459	2,418	1,974	931	11
	June.....	8,117	6,099	3,701	2,398	2,019	1,009	5
	July.....	8,078	5,984	3,558	2,426	2,094	1,100	—
	August.....	8,097	6,004	3,588	2,416	2,093	999	4
	September.....	8,089	5,998	3,584	2,415	2,090	1,076	9
	October.....	8,313	6,141	3,629	2,512	2,172	1,154	6
Other leading cities:								
1929—	July.....	14,983	11,146	4,670	6,476	3,837	1,803	482
	August.....	15,058	11,281	4,734	6,547	3,776	1,777	521
	September.....	15,139	11,394	4,762	6,632	3,745	1,830	540
	October.....	15,288	11,598	4,906	6,692	3,690	1,891	561
	November.....	15,314	11,661	4,909	6,752	3,654	1,875	594
	December.....	15,011	11,424	4,856	6,568	3,587	1,906	410
1930—	January.....	14,705	11,151	4,849	6,267	3,589	1,897	208
	February.....	14,590	10,958	4,762	6,196	3,632	1,916	152
	March.....	14,703	11,026	4,850	6,176	3,677	1,946	80
	April.....	14,828	11,033	4,888	6,146	3,795	1,959	54
	May.....	14,810	10,948	4,853	6,095	3,862	1,939	48
	June.....	14,907	10,949	4,866	6,082	3,958	2,054	48
	July.....	15,023	10,922	4,839	6,082	4,101	2,304	53
	August.....	15,031	10,834	4,769	6,065	4,198	2,336	39
	September.....	15,132	10,860	4,806	6,054	4,272	2,429	35
	October.....	15,096	10,692	4,612	6,080	4,403	2,391	50
BY WEEKS								
Total:								
1930—	Sept. 24.....	23,297	16,912	8,461	8,451	6,385	3,497	33
	Oct. 1.....	23,467	17,013	8,483	8,530	6,454	3,664	44
	Oct. 8.....	23,297	16,813	8,268	8,545	6,485	3,604	39
	Oct. 15.....	23,404	16,864	8,258	8,606	6,541	3,639	76
	Oct. 22.....	23,383	16,716	8,142	8,573	6,667	3,389	58
	Oct. 29.....	23,495	16,764	8,057	8,707	6,731	3,427	62
New York City:								
1930—	Sept. 24.....	8,092	6,033	3,619	2,414	2,059	1,086	—
	Oct. 1.....	8,325	6,244	3,796	2,448	2,081	1,224	—
	Oct. 8.....	8,236	6,127	3,660	2,466	2,110	1,147	2
	Oct. 15.....	8,318	6,175	3,640	2,535	2,143	1,160	29
	Oct. 22.....	8,273	6,046	3,550	2,496	2,227	1,099	—
	Oct. 29.....	8,414	6,116	3,500	2,616	2,299	1,138	—
Other leading cities:								
1930—	Sept. 24.....	15,205	10,879	4,842	6,037	4,326	2,411	33
	Oct. 1.....	15,142	10,769	4,687	6,082	4,373	2,439	44
	Oct. 8.....	15,081	10,686	4,607	6,079	4,375	2,457	37
	Oct. 15.....	15,087	10,689	4,618	6,071	4,398	2,478	47
	Oct. 22.....	15,110	10,670	4,592	6,078	4,440	2,290	58
	Oct. 29.....	15,081	10,648	4,557	6,092	4,433	2,290	62

* Revised.

BROKERS' LOANS

REPORTED BY THE NEW YORK STOCK EXCHANGE

[Net borrowings on demand and on time. In millions of dollars]

End of month	Total		From New York banks and trust companies		From private banks, brokers, foreign banking agencies, etc.	
	1929	1930	1929	1930	1929	1930
January.....	6,735	3,985	5,664	3,368	1,071	616
February.....	6,679	4,168	5,619	3,529	1,060	639
March.....	6,804	4,656	5,713	4,026	1,091	631
April.....	6,775	5,063	5,580	4,409	1,194	654
May.....	6,665	4,748	5,482	4,139	1,183	609
June.....	7,071	3,728	5,797	3,201	1,275	527
July.....	7,474	3,689	6,154	3,227	1,320	462
August.....	7,882	3,599	6,492	3,109	1,390	489
September.....	8,549	3,481	7,077	3,057	1,472	425
October.....	6,109	2,556	5,313	2,299	796	257
November.....	4,017	—	3,432	—	585	—
December.....	3,990	—	3,370	—	620	—

* Call loans, \$1,986,000,000; time loans, \$569,000,000.

MADE BY REPORTING MEMBER BANKS IN N. Y. CITY

[In millions of dollars. Monthly data are averages of weekly figures]

Month or date	Total	For banks			For others
		Total	In New York City ¹	Outside New York City ²	
1929—October.....	6,498	2,896	1,257	1,639	3,602
November.....	4,023	1,869	1,090	779	2,154
December.....	3,391	1,601	888	713	1,790
1930—January.....	3,351	1,706	844	862	1,644
February.....	3,459	1,913	942	971	1,546
March.....	3,741	2,310	1,210	1,100	1,430
April.....	4,115	2,740	1,557	1,183	1,376
May.....	4,030	2,727	1,665	1,062	1,302
June.....	3,825	2,748	1,831	917	1,078
July.....	3,224	2,378	1,631	747	846
August.....	3,150	2,351	1,659	692	798
September.....	3,174	2,426	1,676	750	748
October.....	3,269	2,212	1,675	537	557
Oct. 1.....	3,063	2,436	1,834	602	627
Oct. 8.....	2,905	2,295	1,740	555	610
Oct. 15.....	2,752	2,216	1,702	514	536
Oct. 22.....	2,613	2,101	1,590	511	512
Oct. 29.....	2,512	2,012	1,510	502	500

* Weekly reporting member banks in New York City.

* Member and nonmember banks outside New York City (domestic banks only); includes unknown amount for customers of these banks.

* Call loans, \$2,165,000,000; time loans, \$604,000,000.

ACCEPTANCES AND COMMERCIAL PAPER

[In millions of dollars]

End of month	Bankers' acceptances outstanding				Commercial paper outstanding			
	1927	1928	1929	1930	1927	1928	1929	1930
January.....	774	1,058	1,279	1,693	551	577	407	404
February.....	785	1,056	1,228	1,624	577	567	411	457
March.....	809	1,085	1,205	1,539	606	570	387	529
April.....	811	1,071	1,111	1,414	599	571	351	553
May.....	775	1,041	1,107	1,382	582	541	304	541
June.....	751	1,026	1,113	1,305	579	503	274	527
July.....	741	978	1,127	1,350	569	483	265	528
August.....	782	952	1,201	1,339	591	458	267	526
September.....	864	1,004	1,272	1,367	600	430	265	513
October.....	975	1,123	1,541	—	611	427	285	—
November.....	1,029	1,200	1,658	—	603	421	316	—
December.....	1,081	1,284	1,732	—	555	383	334	—

Figures for acceptances as compiled by American Acceptance Council for commercial paper as reported by about 25 dealers.

SECURITY PRICES, SECURITY ISSUES, AND BUILDING CONTRACTS

SECURITY PRICES

[Index numbers of Standard Statistics Co. Monthly data are averages of weekly figures]

Month or date	Common stocks (1926=100)														
	Bonds ¹	Preferred stocks ²	Selected groups of industrial issues												
			Total	Industrial	Railroad	Public utility	Auto-mobile	Building equipment	Chain store	Chemical	Copper and brass	Electrical equipment	Machinery	Oil	Steel
Number of issues.....	60	20	404	337	33	34	13	13	17	9	9	4	10	16	10
1929—October.....	95.1	126.4	202	194	157	277	196	152	139	305	259	345	172	161	217
November.....	95.7	123.9	151	145	135	195	134	114	104	214	204	227	135	131	169
December.....	96.5	126.4	154	147	136	201	134	113	106	228	196	241	143	132	170
1930—January.....	96.5	126.5	156	149	137	209	135	117	102	240	193	265	146	129	177
February.....	96.4	126.9	166	156	143	231	145	125	100	254	193	307	154	128	188
March.....	97.8	127.8	172	163	143	242	155	125	100	266	193	323	161	141	192
April.....	97.9	128.2	181	171	142	264	162	127	101	282	174	359	173	156	196
May.....	97.9	127.6	171	160	136	250	152	116	97	257	151	237	170	148	174
June.....	98.2	126.8	153	143	125	224	134	100	90	223	135	290	152	133	161
July.....	98.7	125.9	149	140	124	215	132	98	89	217	129	277	155	133	159
August.....	99.6	126.5	148	139	121	213	134	97	90	219	121	278	152	130	160
September.....	100.0	127.9	149	139	123	216	133	100	96	230	114	283	154	125	162
October.....	99.9	126.8	128	118	111	187	108	84	88	191	93	225	134	106	142
Oct. 1.....	100.5	128.2	137	127	117	200	118	87	91	207	100	257	143	113	151
Oct. 8.....	100.2	127.6	130	120	112	191	112	85	89	191	95	234	137	110	143
Oct. 15.....	99.7	126.2	128	118	111	188	107	85	89	191	93	229	134	108	142
Oct. 22.....	99.6	125.9	120	110	106	175	99	82	84	178	83	197	128	99	135
Oct. 29.....	99.6	125.9	124	114	109	182	105	81	87	187	91	208	132	102	137

¹ Average price of 60 high-grade bonds adjusted for differences in coupon rate and maturity.² 20 high-grade industrials; average price.

DOMESTIC CAPITAL ISSUES

[In millions of dollars. Source: Commercial and Financial Chronicle]

Class of issue	September, 1930		January–September			
	New	Re-funding	1930		1929	
			New	Re-funding	New	Re-funding
Total.....	375.6	58.6	5,102.5	438.8	7,769.4	1,251.8
Corporate issues.....	283.9	57.3	4,055.8	408.4	6,865.6	1,242.9
Bonds and notes.....	177.6	49.9	2,264.5	328.6	1,545.1	475.3
Long-term.....	44.5	7.4	399.4	65.0	143.3	43.9
Short-term.....	61.8	—	1,391.9	14.8	5,177.2	723.7
Stocks.....	15.0	—	45.5	—	—	—
Farm-loan issues.....	76.7	1.3	1,001.2	30.4	903.8	8.9
Municipal issues.....	—	—	—	—	—	—
Total new and re-funding.....	434.2	—	5,541.1	—	9,021.2	—

FOREIGN CAPITAL ISSUES

[In millions of dollars]

Class of issue	September, 1930		January–September			
	Gov-ern-ment	Cor-po-rate	1930		1929	
			Gov-ern-ment	Cor-po-rate	Gov-ern-ment	Cor-po-rate
Total.....	57.8	0.2	693.7	321.2	237.5	414.1
New issues.....	7.6	.2	555.5	321.2	220.1	398.6
Europe.....	1.0	—	135.3	36.6	84.1	82.5
Canada and Newfoundland.....	6.6	.2	109.4	76.0	63.3	96.4
Latin America.....	—	—	147.1	17.6	70.7	49.7
U. S. insular possessions.....	—	—	106.5	—	2.0	7.7
Miscellaneous.....	—	—	57.3	190.9	—	162.2
Refunding issues.....	50.2	—	138.2	—	17.5	15.5
Total Government and corporate.....	58.0	—	1,014.8	—	651.6	—

BUILDING CONTRACTS AWARDED, BY TYPES OF BUILDING

[Value of contracts in millions of dollars]

	Total		Residential		Industrial		Commercial		Public works and public utilities		Educational		All other	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January.....	410.0	324.0	138.1	66.6	63.1	38.3	100.4	54.1	66.5	112.1	17.7	19.0	24.1	34.0
February.....	361.3	317.1	129.5	74.8	56.1	33.5	68.3	72.9	57.6	85.8	22.6	21.2	27.3	28.8
March.....	484.8	456.1	197.2	101.5	55.8	74.3	75.6	77.0	71.5	105.3	37.5	35.4	47.2	62.6
April.....	642.1	482.9	256.8	123.1	68.2	38.1	78.0	73.2	152.1	149.7	29.9	35.2	57.1	63.5
May.....	587.8	457.4	192.0	116.6	80.8	54.6	86.5	73.3	139.4	134.9	38.2	36.9	50.9	41.1
June.....	545.9	600.6	189.8	96.8	70.0	93.6	80.9	59.1	120.8	251.9	43.4	48.9	40.9	50.2
July.....	652.4	367.5	199.9	84.3	66.6	35.2	91.3	46.9	194.5	114.9	48.0	42.7	52.0	43.5
August.....	488.9	347.3	146.1	82.7	75.3	20.7	72.0	50.9	119.3	124.2	32.3	25.9	43.9	43.0
September.....	445.4	351.9	118.4	98.5	52.6	31.7	76.9	31.1	117.2	101.4	29.8	28.2	50.4	40.8
Year to date.....	4,618.5	3,684.7	1,567.7	844.9	588.6	420.0	729.8	538.6	1,039.0	1,180.2	299.5	293.4	393.9	407.6
October.....	445.6	—	137.7	—	60.9	—	67.7	—	85.1	—	36.9	—	57.3	—
November.....	391.0	—	113.5	—	39.7	—	101.8	—	72.4	—	25.7	—	38.0	—
December.....	316.4	—	114.0	—	67.4	—	33.4	—	51.8	—	19.8	—	29.9	—

Figures for building contracts awarded are for 37 States east of the Rocky Mountains, as reported by the F. W. Dodge Corporation.

PRODUCTION, EMPLOYMENT, CAR LOADINGS, AND PRICES

[Index numbers; 1923-1925 average=100. The terms "adjusted" and "unadjusted" refer to adjustment for seasonal variation]

Year and month	Industrial production *						Build- ing con- tracts award- ed	Factory em- ployment			Fac- tory pay rolls	Freight car loadings *				Commodity prices †	
	Total		Manufactures		Minerals							Total		Merchandise in less-than-car- load lots		All com- mod- ities	Farm prod- ucts
	Unad- justed	Ad- justed	Unad- justed	Ad- justed	Unad- justed	Ad- justed		Unad- justed	Unad- justed	Ad- justed		Unad- justed	Ad- justed	Unad- justed	Ad- justed		
1919	83		84		77		64	107			98	84				139	158
1920	87		87		89		63	108			118	91		72		154	151
1921	67		67		70		57	82			77	79		87		98	88
1922	85		87		74		81	90			81	86		93		97	94
1923	101		101		105		84	104			103	100		96		101	99
1924	95		94		96		95	96			96	98		99		98	100
1925	104		105		99		122	100			101	103		104		104	110
1926	108		108		108		130	101			104	107		107		100	100
1927	106		106		107		128	99			102	103		105		95	99
1928	111		111		106		135	97			102	103		104		98	106
1929	118		119		115		117	101			108	106		104		97	105
1926																	
May	107	106	108	106	103	104	134	101	101	104	106	107	108	105	101	101	102
June	106	108	106	108	109	106	133	101	101	104	110	109	108	107	101	101	101
July	103	107	102	107	110	107	126	99	101	99	111	108	106	106	100	99	99
August	109	110	108	111	115	109	148	101	101	104	113	108	107	106	99	97	97
September	113	112	112	112	119	110	137	103	102	105	122	109	112	107	100	99	99
October	114	111	112	111	124	114	126	103	102	108	123	109	112	107	99	98	98
November	110	108	108	106	123	118	119	101	101	105	113	109	110	108	98	95	95
December	101	105	99	103	113	119	131	100	101	104	98	107	103	108	98	95	95
1927																	
January	105	106	104	105	112	116	94	98	100	99	97	105	100	108	108	97	97
February	111	108	110	107	113	117	96	100	100	105	100	109	104	109	104	96	95
March	113	111	113	110	111	118	151	100	100	106	102	108	108	107	107	95	94
April	110	109	112	109	96	107	147	100	99	105	100	108	108	107	104	94	94
May	112	111	113	111	108	109	135	99	99	104	105	106	106	104	104	94	96
June	107	108	107	109	108	105	154	99	100	102	106	104	105	104	104	94	97
July	102	106	102	107	103	100	130	98	99	99	104	101	104	104	104	94	98
August	105	107	104	107	111	106	135	99	99	102	109	104	105	104	104	95	102
September	107	105	106	105	111	104	127	101	98	102	116	104	110	104	104	97	106
October	105	103	104	102	112	105	137	99	98	103	114	101	109	105	105	97	105
November	101	99	100	99	105	101	114	97	97	98	101	97	106	104	104	97	104
December	96	100	95	99	97	103	116	95	97	99	88	95	98	103	97	104	104
1928																	
January	105	106	106	106	100	103	104	94	96	96	92	100	98	106	106	96	106
February	111	109	114	110	99	103	113	96	96	101	94	102	101	105	105	96	105
March	112	110	115	111	98	103	144	97	96	103	97	102	105	104	104	96	104
April	110	109	113	110	94	105	157	96	96	100	96	104	105	104	104	97	108
May	110	109	111	109	104	105	163	96	96	101	104	105	106	104	104	99	110
June	108	109	109	111	104	101	158	96	97	101	103	102	105	103	103	98	107
July	105	110	106	111	103	101	142	96	97	98	105	102	104	104	104	98	107
August	110	112	110	113	111	105	126	98	97	103	109	104	104	103	103	99	107
September	116	114	116	116	115	107	143	100	98	104	119	106	109	104	100	109	109
October	118	115	117	115	123	114	145	100	98	107	119	106	109	105	105	104	104
November	115	113	115	113	117	113	115	99	99	104	108	104	106	104	104	97	102
December	108	113	109	114	106	112	105	98	100	104	95	103	100	105	105	97	104
1929																	
January	116	117	116	117	114	118	100	97	100	101	95	104	97	105	105	97	106
February	120	117	120	116	116	120	88	100	100	108	99	107	101	105	107	105	105
March	121	118	125	120	101	107	118	101	101	111	98	103	106	105	108	107	107
April	124	122	127	123	104	115	156	102	102	111	102	111	107	106	107	105	105
May	125	124	127	125	116	116	143	102	102	111	110	111	108	108	108	96	102
June	125	127	126	129	116	113	133	102	103	110	109	108	105	104	104	96	103
July	119	124	119	126	118	114	159	102	103	116	111	108	105	105	105	98	108
August	121	123	121	125	121	115	119	104	103	111	114	109	106	105	105	98	107
September	123	122	122	122	127	118	108	105	102	112	121	108	110	105	105	98	107
October	120	117	119	117	127	118	109	103	101	111	118	104	109	105	105	96	104
November	108	106	107	105	114	110	95	99	99	103	102	99	106	104	104	94	101
December	95	99	92	96	110	116	77	95	97	99	90	97	96	101	94	102	102
1930																	
January	103	104	102	102	107	112	79	93	96	94	89	97	94	102	93	101	101
February	109	107	110	106	104	109	77	93	94	98	92	99	98	102	92	98	98
March	106	104	109	105	91	96	111	93	93	98	90	95	101	100	91	96	96
April	107	106	110	107	93	104	118	93	92	97	93	101	101	100	91	96	96
May	105	104	106	104	102	102	111	91	91	94	97	98	101	99	89	89	83
June	99	100	99	100	102	100	146	89	90	91	95	94	98	97	87	89	89
July	90	94	89	93	100	97	89	86	87	83	95	92	94	94	84	84	83
August	90	92	88	91	101	96	85	85	84	82	96	91	95	94	84	84	85
September	92	90	90	90	100	94	81	86	83	83	99	89	99	95	84	85	85

* Average per working-day, except for annual indexes.

† Wholesale price index of Bureau of Labor Statistics; 1926=100. Index numbers for all major groups of commodities are given on p. 745.

‡ Preliminary. Revised.

INDUSTRIAL PRODUCTION, BY INDUSTRIES

[Index numbers of the Federal Reserve Board. Adjusted for seasonal variation. 1923-1925 average=100]

Industry	1929						1930								
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
MANUFACTURES															
IRON AND STEEL.....	152	143	140	124	100	90	99	119	113	114	111	110	93	93	86
Pig iron.....	131	128	122	118	107	95	94	101	102	102	104	101	91	86	80
Steel ingots.....	154	144	142	125	100	90	100	120	114	115	112	111	93	94	86
TEXTILES.....	118	120	116	118	108	96	103	99	98	96	90	84	84	81	88
Cotton consumption.....	119	119	115	117	104	90	102	94	94	100	91	85	82	78	79
Wool.....	97	101	98	101	89	77	78	76	71	72	70	71	69	67	69
Consumption.....	109	114	106	109	94	80	85	81	77	80	74	78	80	76	78
Machinery activity ¹	85	86	89	91	82	74	72	73	65	62	69	73	65	62	67
Carpet, rugloom activity ¹	83	90	90	96	88	75	69	70	66	66	60	49	43	47	49
Silk.....	146	150	148	148	145	140	141	145	150	125	117	100	113	109	139
Deliveries.....	156	161	158	158	153	148	145	149	155	123	121	99	120	117	158
Loom activity ¹	127	130	128	130	128	124	133	138	140	128	111	102	98	91	101
FOOD PRODUCTS.....	96	100	98	96	96	95	96	94	90	97	98	93	94	91	93
Slaughtering, meat packing.....	94	93	101	97	95	91	89	92	85	94	94	90	89	89	92
Hogs.....	96	94	106	104	101	96	89	93	80	93	94	88	85	85	91
Cattle.....	88	88	91	86	82	81	87	86	88	89	88	90	89	89	88
Calves.....	90	85	99	88	88	91	97	92	92	100	89	86	93	95	97
Sheep.....	124	126	126	125	125	113	116	132	141	147	142	137	139	143	146
Flour.....	101	107	99	91	92	94	92	97	101	105	104	104	101	103	98
Sugar meltings.....	94	113	84	99	106	111	127	94	90	96	105	84	106	84	86
PAPER AND PRINTING.....	125	125	130	126	123	118	122	122	121	122	119	117	111	108	109
Wood pulp and paper.....	121	119	121	120	118	113	118	116	116	116	113	108	105	101	100
Newsprint.....	91	95	94	94	92	93	95	97	91	86	89	88	84	83	80
Book paper.....	138	134	143	145	139	139	140	125	128	133	120	115	111	105	104
Fine paper.....	122	118	119	119	120	116	118	118	121	116	111	105	106	100	99
Wrapping paper.....	101	101	101	96	97	95	93	92	99	98	99	95	89	89	87
Paper board.....	136	131	128	130	131	107	127	131	125	132	132	122	123	114	115
Wood pulp, mechanical.....	103	101	100	91	85	91	96	111	106	89	90	98	88	92	87
Wood pulp, chemical.....	117	120	120	118	113	116	115	119	117	114	115	110	103	107	106
Paper boxes.....	152	169	178	156	144	125	147	147	149	149	151	173	146	151	159
Newsprint consumption.....	131	135	148	139	133	134	131	137	130	132	132	132	124	123	126
TRANSPORTATION EQUIPMENT:															
Automobiles.....	142	143	133	113	81	49	103	110	109	109	104	98	75	67	68
Locomotives.....	59	55	49	57	45	32	39	40	48	51	43	42	40	38	---
Shipbuilding.....	156	175	101	75	69	97	170	102	80	128	147	164	347	310	---
LEATHER AND PRODUCTS.....	114	117	116	113	106	93	96	96	98	99	94	100	100	102	100
Tanning.....	105	103	105	108	103	99	93	93	98	99	99	103	107	102	102
Sole leather ¹	86	93	94	94	95	94	99	101	97	99	100	100	100	99	102
Upper leather—															
Cattle.....	75	80	87	98	88	83	76	66	80	79	72	77	73	67	68
Calf and kid.....	111	108	102	100	88	70	68	76	80	85	95	92	106	101	90
Goat and kid.....	158	136	144	147	145	151	129	127	136	131	128	145	154	143	151
Boots and shoes.....	120	125	123	117	108	90	98	97	97	99	91	98	96	162	98
CEMENT AND GLASS:															
Cement.....	118	122	118	113	109	110	108	110	111	108	119	119	116	117	111
Glass, plate.....	164	168	174	172	149	117	124	122	117	131	143	114	105	65	---
NONFERROUS METALS ²	127	122	125	122	119	113	105	101	104	105	100	95	95	94	97
Copper (smelter).....	133	126	127	125	126	122	110	103	103	103	101	94	95	92	94
Tin (deliveries) ¹	123	120	131	125	112	106	99	92	117	132	107	99	103	101	111
FUELS, MANUFACTURED:															
Petroleum refining.....	171	176	173	178	171	166	163	168	168	174	173	170	166	164	165
Gasoline ¹	205	209	208	215	209	201	199	204	204	214	213	210	206	205	207
Kerosene.....	95	108	95	103	93	90	89	96	99	93	90	90	85	84	78
Fuel oil ¹	138	142	141	142	136	132	121	125	117	121	123	117	113	109	112
Lubricating oil ¹	123	131	123	121	110	115	120	126	130	138	133	126	126	124	117
Coke (by-product).....	151	152	147	146	139	131	132	136	135	138	137	132	123	119	114
RUBBER TIRES AND TUBES.....	141	119	116	114	94	80	106	107	105	123	121	119	93	96	84
Tires, pneumatic.....	146	123	120	117	97	82	109	110	108	127	125	122	96	98	87
Inner tubes.....	105	87	90	87	74	70	85	85	84	97	96	93	71	79	64
TOBACCO PRODUCTS.....	131	133	136	135	130	133	131	133	128	136	134	141	137	130	125
Cigars.....	97	99	100	99	96	83	84	92	87	92	94	91	88	89	85
Cigarettes.....	160	163	168	168	160	172	167	166	161	172	167	183	177	164	158
MINERALS															
COAL:															
Bituminous.....	102	99	103	103	98	104	100	92	81	97	92	89	86	82	85
Anthracite.....	72	78	102	116	92	121	106	101	69	73	81	78	82	88	80
Petroleum, crude.....	143	145	140	140	131	132	132	135	125	128	127	124	120	117	114
Iron ore shipments.....	119	121	121	107	98	---	---	---	---	---	104	108	95	96	79
Copper (mined).....	122	119	125	123	118	115	101	95	88	90	90	86	83	84	89
Zinc.....	124	127	120	119	106	98	104	98	96	94	94	99	92	94	94
Lead.....	114	107	119	115	114	105	92	106	107	104	97	92	96	99	---
Silver.....	88	91	89	94	114	87	88	98	89	88	80	75	69	70	72

¹ Without seasonal adjustment.² Includes also lead and zinc; see "Minerals."³ Preliminary.⁴ Revised.

NOTE.—The combined index of industrial production is computed from figures for 58 statistical series, 50 of manufactures, and 8 of minerals most of which are shown in this table. Adjustments have been made in the different industries for the varying number of working days in each month and for customary seasonal variations, and the individual products and industries have been weighted in accordance with their relative importance. The sources of data and methods of construction were described in the BULLETIN for February and March, 1927.

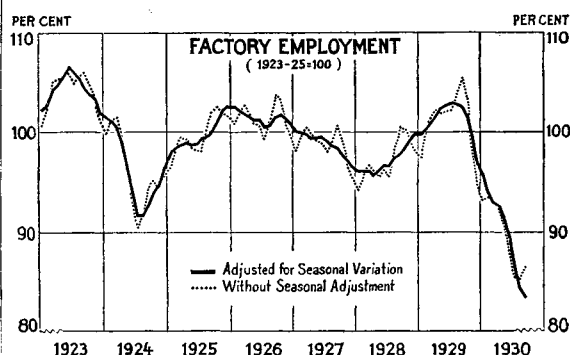
FACTORY EMPLOYMENT AND PAY ROLLS

INDEXES OF FACTORY EMPLOYMENT AND PAY ROLLS

[Without seasonal adjustment. Monthly average 1923-1925=100]

Month	Factory employment				Factory pay rolls			
	1927	1928	1929	1930	1927	1928	1929	1930
January.....	98.1	94.2	97.5	93.2	98.6	95.7	100.8	94.4
February.....	99.7	95.7	99.8	93.3	104.8	101.1	108.1	97.7
March.....	100.4	96.6	101.4	93.1	106.3	102.5	110.8	98.2
April.....	99.8	96.0	102.1	92.6	105.0	100.3	111.4	97.1
May.....	99.1	95.7	101.9	90.9	104.3	100.8	111.4	94.5
June.....	99.0	96.2	102.0	88.8	102.5	100.9	109.7	90.7
July.....	98.0	95.7	102.1	85.5	98.6	98.3	105.7	82.6
August.....	99.2	98.3	104.0	85.1	102.2	102.5	110.6	81.7
September.....	100.6	100.3	105.4	86.5	101.9	104.2	111.9	83.0
October.....	99.3	100.2	103.3	-----	102.5	107.5	110.9	-----
November.....	96.9	98.8	98.9	-----	98.5	103.6	102.5	-----
December.....	95.5	98.1	95.2	-----	99.4	104.2	99.1	-----
Annual index.....	98.8	97.2	101.1	-----	102.0	101.8	107.7	-----

* Revised.



FACTORY EMPLOYMENT: INDEXES BY GROUPS

Month	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Nonferrous metals	Chemicals		Rubber products	Tobacco products
							Group	Automobiles				Group	Petroleum refining		
1929-June.....	100.8	120.8	96.3	99.2	103.2	90.0	97.6	120.6	89.4	93.8	102.9	107.9	116.4	115.0	91.4
July.....	99.8	121.5	91.5	99.8	103.6	90.5	96.4	117.8	94.6	91.6	100.5	108.9	120.0	114.2	90.5
August.....	101.0	119.4	94.2	99.7	104.1	92.2	95.5	115.0	98.1	93.8	99.8	111.2	121.9	111.5	93.0
September.....	101.0	119.5	98.4	102.4	106.0	91.8	94.8	113.1	99.5	93.6	98.6	114.5	124.0	108.3	93.7
October.....	99.4	118.7	99.8	104.2	106.1	90.1	90.2	101.3	99.3	91.9	98.5	116.1	124.6	102.7	95.0
November.....	97.0	115.0	97.1	101.6	106.7	86.7	82.9	83.7	94.4	88.9	93.6	113.8	123.7	91.2	96.1
December.....	92.2	112.1	94.3	100.5	106.9	81.6	81.3	79.6	90.0	82.3	89.9	111.8	120.9	89.2	89.2
1930-January.....	91.7	109.9	92.8	97.4	105.1	76.8	83.2	85.7	91.4	74.7	85.9	110.6	120.8	89.7	84.2
February.....	93.5	109.3	92.9	96.7	104.0	75.0	83.9	89.7	92.4	75.3	84.6	110.2	120.9	87.9	88.9
March.....	92.8	108.5	92.9	95.0	103.7	75.0	83.2	91.0	91.5	78.4	84.3	112.5	118.5	87.2	89.6
April.....	93.0	106.9	90.3	94.0	102.6	74.2	84.0	93.9	89.8	81.2	82.9	111.7	116.1	88.6	88.0
May.....	92.7	103.6	86.8	94.5	102.4	73.4	84.0	95.3	86.8	81.7	81.2	104.6	114.1	88.3	89.4
June.....	90.0	100.1	83.6	95.6	101.5	71.7	80.2	88.8	84.5	80.4	80.2	101.8	114.0	88.0	89.2
July.....	86.1	95.2	76.6	95.0	100.5	68.2	74.8	81.0	86.6	75.8	77.7	101.0	113.6	82.7	88.2
August.....	83.6	90.7	77.9	92.9	99.7	66.5	72.1	76.3	87.4	74.8	75.1	101.5	112.2	81.0	84.0
September.....	82.3	89.8	82.2	95.2	98.6	64.5	70.3	73.2	86.1	74.5	72.5	102.7	108.5	77.4	87.7

FACTORY PAY ROLLS: INDEXES BY GROUPS

Month	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Nonferrous metals	Chemicals		Rubber products	Tobacco products
							Group	Automobiles				Group	Petroleum refining		
1929-June.....	109.9	131.6	97.8	105.6	113.6	92.2	107.9	130.9	89.8	92.5	117.0	111.2	120.0	120.6	88.5
July.....	103.5	128.2	90.4	105.6	111.4	93.5	97.1	110.2	97.8	86.1	112.6	111.2	123.3	115.1	87.9
August.....	109.3	127.5	97.4	105.0	112.8	94.7	106.8	128.0	105.0	91.2	113.2	113.0	125.1	110.9	90.6
September.....	108.9	127.9	103.0	108.1	116.3	96.6	103.3	120.3	104.3	91.3	112.1	116.0	129.3	104.9	93.4
October.....	107.9	129.0	104.8	108.8	117.8	96.8	99.8	108.0	100.0	90.6	112.5	118.2	129.4	100.9	94.2
November.....	100.0	121.6	96.2	105.5	117.2	89.2	89.4	84.3	83.9	86.4	99.6	115.6	126.3	85.9	94.3
December.....	93.5	119.9	93.8	105.5	118.2	82.7	85.6	72.9	84.1	80.2	96.1	114.0	124.8	85.0	88.8
1930-January.....	90.5	113.8	92.2	102.5	114.9	72.8	80.9	74.0	85.4	67.3	91.5	109.3	121.1	88.9	77.0
February.....	98.1	115.2	94.1	101.6	114.9	72.6	89.8	92.7	86.2	70.2	91.7	110.0	125.0	92.1	80.0
March.....	97.1	115.1	96.6	99.7	115.0	74.6	90.6	97.3	85.2	73.4	91.0	111.6	123.1	90.0	81.0
April.....	97.7	113.4	89.3	99.7	113.5	73.8	92.0	100.8	81.6	77.1	88.3	110.9	122.1	94.5	77.1
May.....	95.5	108.3	82.7	100.7	113.3	73.2	91.1	101.7	75.6	76.9	84.4	106.6	120.5	95.4	82.1
June.....	90.8	102.7	77.8	102.3	111.9	70.9	83.8	89.2	73.8	76.1	85.0	105.3	121.7	88.3	84.4
July.....	78.6	90.9	69.2	100.2	107.3	63.0	71.7	72.4	78.6	66.4	76.0	100.8	118.1	80.8	81.9
August.....	77.5	85.6	73.2	97.6	106.9	61.6	66.3	58.1	80.0	66.4	72.0	100.7	117.2	77.6	77.2
September.....	75.4	84.2	81.2	100.8	106.3	60.9	66.0	62.4	76.2	66.4	70.7	101.3	113.8	71.8	80.0

* Revised.

NOTE.—These tables contain index numbers of factory employment and factory pay rolls for certain months, together with group indexes for important industrial components. The nature and sources of basic data and the method of construction were described and the indexes for the period January, 1919, to November, 1929, were published in the BULLETIN for November, 1929, pp. 706-716.

DEPARTMENT STORES—INDEX OF SALES

[Daily average sales, ¹ 1923-1925=100]

Month	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Without seasonal adjustment:												
January.....	60	82	83	73	79	86	84	90	91	91	90	88
February.....	59	74	76	69	77	84	85	87	89	88	91	89
March.....	65	90	88	77	93	88	94	97	95	97	107	93
April.....	77	91	87	90	97	103	105	102	109	105	103	110
May.....	73	101	91	89	100	98	103	109	105	107	109	105
June.....	76	96	86	85	99	97	98	100	101	102	108	98
July.....	59	73	64	64	73	71	75	77	76	80	79	71
August.....	60	73	63	66	75	72	76	82	85	81	84	77
September.....	76	88	75	85	94	96	97	104	103	113	117	103
October.....	89	102	95	102	111	105	122	120	117	118	122	-----
November.....	101	112	97	108	117	117	122	124	126	125	125	-----
December.....	137	146	135	152	164	166	176	184	182	192	191	-----
Year.....	78	94	87	88	98	99	103	106	107	108	111	-----
With seasonal adjustment:												
January.....	66	90	92	83	91	99	99	106	107	108	110	107
February.....	71	89	92	83	93	101	103	105	108	106	111	108
March.....	72	93	89	84	95	99	103	101	106	107	112	110
April.....	72	93	89	87	100	98	102	105	106	106	110	105
May.....	69	96	87	87	98	97	102	109	105	107	109	105
June.....	76	96	87	86	101	100	102	105	106	107	113	103
July.....	80	98	87	86	98	96	101	106	105	110	109	100
August.....	80	97	84	88	101	96	101	108	111	107	111	102
September.....	83	95	82	91	100	101	101	106	104	112	114	99
October.....	81	92	86	93	101	96	111	109	107	108	112	-----
November.....	86	96	83	92	100	100	104	106	108	108	108	-----
December.....	86	92	84	93	99	99	104	108	106	111	108	-----

¹ The figures of daily average sales were computed on the basis of the number of week days and the number of Saturdays in each month—Saturday being considered equivalent to one and one-third days—and allowance has been made for the number of Sundays in each month and for six national holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.

SEASONAL ADJUSTMENT FACTORS USED IN INDEX OF DEPARTMENT-STORE SALES

[Average for year=100]

Month	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
January.....	91	91	90	88	87	87	85	85	85	84	82	82
February.....	83	83	83	83	83	83	83	83	83	83	82	82
March.....	89	97	98	91	98	89	91	96	90	91	96	85
April.....	106	98	97	104	97	105	103	97	103	99	94	105
May.....	105	105	104	103	102	101	101	100	100	100	100	100
June.....	99	99	99	99	98	97	96	95	95	95	95	95
July.....	74	74	74	74	74	74	74	73	73	73	72	71
August.....	75	75	75	75	75	75	75	76	76	76	76	76
September.....	92	92	92	93	94	95	96	98	99	101	103	104
October.....	110	110	110	110	110	110	110	110	109	109	109	109
November.....	117	117	117	117	117	117	117	117	116	116	115	115
December.....	159	159	161	163	165	167	169	170	171	173	176	176

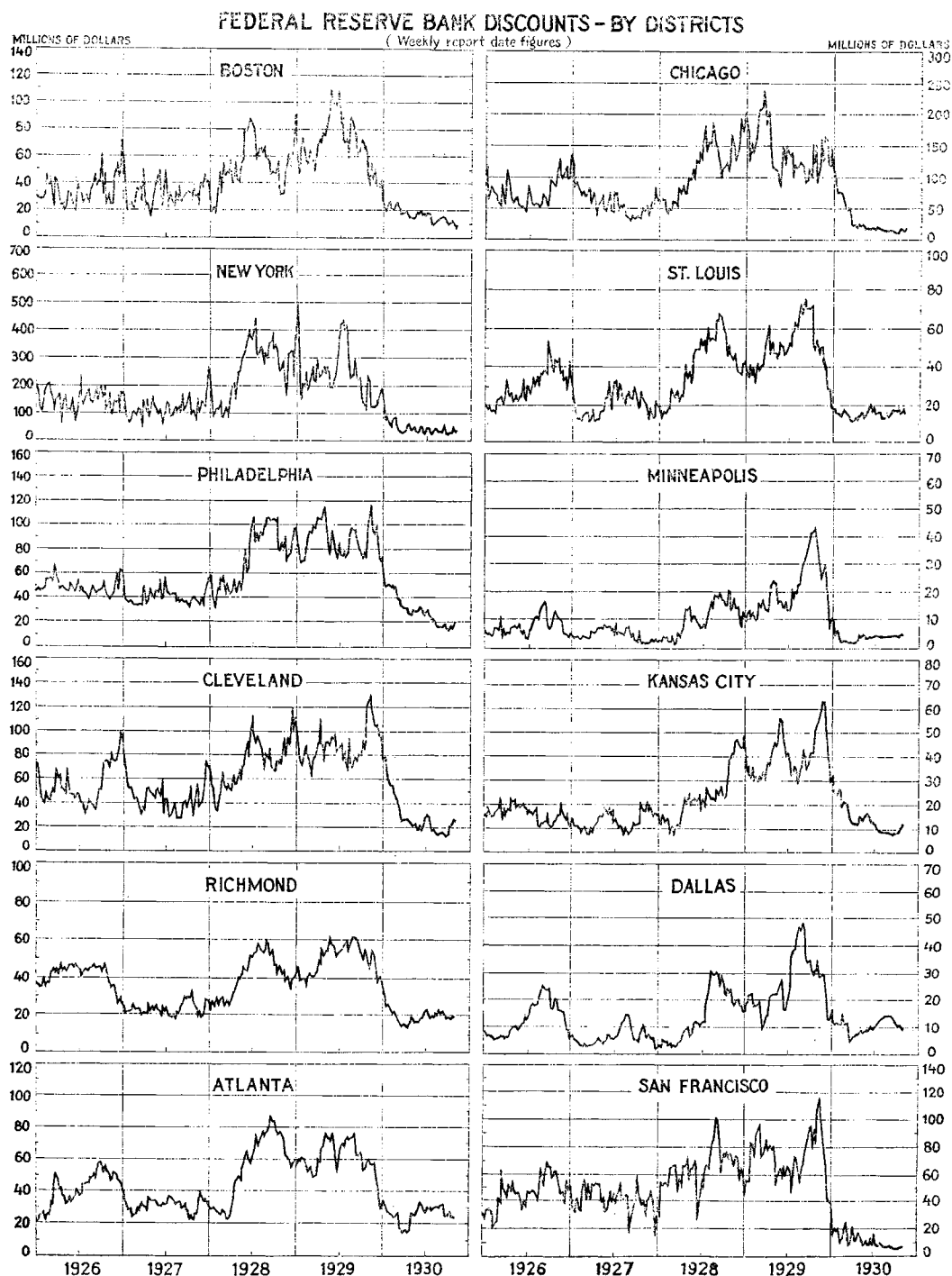
¹ Adjustment has been made for the effects of changes in the date of Easter.

DEPARTMENT STORES—INDEX OF STOCKS

[Stocks at end of month; 1923-1925 average=100]

End of month	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Without seasonal adjustment:												
January.....	65	86	78	80	83	89	90	93	93	92	89	88
February.....	68	96	82	84	90	96	96	98	98	98	95	93
March.....	72	107	88	91	98	105	105	107	107	105	102	100
April.....	73	110	90	91	101	107	106	107	107	106	103	101
May.....	72	107	89	88	99	103	103	104	104	102	101	98
June.....	70	104	86	85	93	97	98	98	98	96	95	93
July.....	73	103	84	82	91	93	94	93	95	93	92	87
August.....	82	108	89	86	96	96	98	97	98	97	96	87
September.....	92	117	97	93	105	105	107	107	108	103	104	95
October.....	98	119	100	96	110	111	112	114	114	112	112	-----
November.....	100	114	101	100	113	112	115	117	117	115	115	-----
December.....	87	90	83	85	94	94	97	96	96	94	94	-----
Year.....	79	105	89	89	98	101	102	103	103	101	100	-----
With seasonal adjustment:												
January.....	73	97	88	90	93	100	102	105	104	103	100	99
February.....	71	101	86	89	94	101	101	104	103	103	100	98
March.....	70	104	85	89	95	102	102	104	103	101	99	97
April.....	70	106	87	87	97	103	102	103	103	101	99	97
May.....	71	105	87	86	97	101	101	102	102	100	99	96
June.....	72	107	88	88	96	100	101	101	101	99	98	96
July.....	78	110	90	88	97	100	101	100	102	100	99	94
August.....	85	113	93	90	100	100	102	101	102	101	100	91
September.....	88	113	93	90	101	101	103	102	104	99	100	91
October.....	89	108	91	88	100	101	101	104	104	102	101	-----
November.....	88	101	89	89	100	99	102	103	104	102	102	-----
December.....	93	96	89	90	99	100	103	102	103	100	100	-----

BANKING AND BUSINESS CONDITIONS IN FEDERAL RESERVE DISTRICTS



FEDERAL RESERVE BANKS—RESERVES, DEPOSITS, NOTE CIRCULATION, AND RESERVE PERCENTAGES

[Averages of daily figures, amounts in thousands of dollars]

Federal reserve banks	Total cash reserves			Total deposits			Federal reserve notes in circulation ¹			Reserve percentages		
	1930		1929	1930		1929	1930		1929	1930		1929
	October	September	October	October	September	October	October	September	October	October	September	October
Boston.....	231,162	225,566	284,096	152,110	149,618	153,337	133,214	133,538	204,451	81.0	79.7	79.4
New York.....	1,075,039	1,023,300	1,088,080	1,025,170	1,007,221	982,447	230,458	196,209	341,006	85.6	85.0	82.2
Philadelphia.....	224,670	231,514	196,120	143,966	143,948	137,010	119,814	124,912	140,639	85.2	86.1	70.6
Cleveland.....	314,241	334,141	235,101	201,073	205,210	188,188	184,906	190,290	178,388	81.4	84.5	64.1
Richmond.....	97,825	92,518	89,847	67,715	67,049	69,367	67,318	64,484	84,811	72.4	70.3	58.3
Atlanta.....	143,440	131,391	141,543	62,300	62,180	65,596	122,262	114,523	154,908	77.7	74.4	64.2
Chicago.....	418,852	436,337	511,615	346,907	352,577	361,646	152,245	163,358	306,142	83.9	84.6	76.6
St. Louis.....	99,876	100,395	111,738	76,882	77,512	80,539	62,855	64,937	82,321	71.5	70.5	68.6
Minneapolis.....	72,923	71,750	68,447	53,358	52,486	55,004	50,633	51,339	67,685	70.1	69.1	55.8
Kansas City.....	111,818	112,629	112,727	90,095	90,321	92,329	66,898	68,478	82,700	71.2	70.9	64.4
Dallas.....	57,216	53,441	71,806	61,163	60,744	67,443	34,604	35,085	52,521	59.7	55.8	59.9
San Francisco.....	288,335	293,729	246,815	183,667	182,996	185,081	155,574	158,921	177,022	85.0	85.9	68.2
Total.....	3,135,397	3,108,714	3,157,885	2,464,406	2,451,862	2,437,987	1,380,781	1,366,074	1,872,594	81.5	81.4	73.3

¹ Includes "Federal reserve notes of other Federal reserve banks" as follows: Latest month, \$18,092,000; month ago, \$20,774,000; year ago, \$26,067,000.

ALL MEMBER BANKS—DEPOSITS SUBJECT TO RESERVE, RESERVES HELD, AND INDEBTEDNESS AT FEDERAL RESERVE BANKS

[Averages of daily figures. In millions of dollars]

Federal reserve district	Net demand deposits		Time deposits		Reserves held				Indebtedness at Federal reserve banks	
	September	August	September	August	Total		Excess			
					September	August	September	August		
									September	August
Boston.....	1,334	1,335	1,025	1,014	146.8	146.4	2.2	2.1	11.6	12.6
New York.....	7,241	7,262	3,446	3,434	989.6	983.3	21.1	12.4	32.1	47.6
Philadelphia.....	1,176	1,177	1,167	1,161	141.2	140.9	3.2	2.9	16.5	18.2
Cleveland.....	1,612	1,617	1,720	1,701	200.8	200.7	3.8	4.0	14.6	15.7
Richmond.....	530	528	566	562	63.4	63.4	1.4	1.7	20.0	21.3
Atlanta.....	511	504	441	439	59.9	59.2	2.3	2.2	28.2	30.0
Chicago.....	2,543	2,574	2,221	2,200	348.5	350.8	9.8	9.6	14.4	16.5
St. Louis.....	649	653	537	538	75.7	76.2	2.1	2.1	17.7	14.9
Minneapolis.....	423	413	449	448	51.3	49.7	2.8	2.0	4.1	4.4
Kansas City.....	817	823	394	376	88.2	88.4	4.6	4.9	8.7	9.2
Dallas.....	593	579	238	241	58.5	57.6	2.1	2.1	13.2	13.9
San Francisco.....	1,278	1,281	1,733	1,722	173.4	175.7	3.9	6.4	7.5	9.4
Total.....	18,707	18,746	13,936	13,835	2,397.1	2,392.2	59.2	52.3	188.5	213.8

DISCOUNTS OF FEDERAL RESERVE BANKS, BY WEEKS

[In thousands of dollars]

Federal reserve bank	Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29
Boston.....	12,512	9,519	9,067	6,117	9,147
New York.....	26,392	25,649	57,749	31,838	38,547
Philadelphia.....	16,914	15,281	17,414	18,838	19,783
Cleveland.....	20,412	21,086	24,071	27,049	25,884
Richmond.....	18,374	17,747	18,002	18,997	18,836
Atlanta.....	26,497	24,203	24,208	24,433	23,618
Chicago.....	16,631	15,096	13,580	13,945	17,293
St. Louis.....	19,064	15,834	16,013	18,161	16,370
Minneapolis.....	4,012	3,941	4,299	4,813	4,148
Kansas City.....	8,803	9,214	10,130	10,835	12,054
Dallas.....	10,633	10,316	10,579	9,984	9,449
San Francisco.....	5,672	5,280	5,327	6,974	6,474
Total.....	185,916	173,166	210,439	191,984	201,603

DISCOUNTS OF FEDERAL RESERVE BANKS BY MONTHS

[Averages of daily figures. In millions of dollars]

Federal reserve bank	1930		1929
	October	September	October
Boston.....	8.9	11.6	60.7
New York.....	36.7	32.2	160.0
Philadelphia.....	17.5	16.4	78.7
Cleveland.....	25.0	14.6	95.2
Richmond.....	18.9	20.0	33.1
Atlanta.....	24.7	28.2	57.6
Chicago.....	15.8	14.4	120.2
St. Louis.....	17.3	17.7	54.7
Minneapolis.....	4.3	4.1	41.2
Kansas City.....	10.3	8.8	44.6
Dallas.....	10.2	13.2	31.6
San Francisco.....	6.7	7.6	86.9
Total.....	196.4	188.7	884.5

FEDERAL RESERVE BANK DISCOUNT RATES

[Rates on all classes and maturities of eligible paper. For back figures see Annual Report for 1929 (Table 32).]

Date effective	Federal reserve bank											
	Boston	New York	Philadel- phia	Cleve- land	Rich- mond	Atlanta	Chicago	St. Louis	Minneap- olis	Kansas City	Dallas	San Franc- isco
In effect Jan. 1, 1930...	4½	4½	5	5	5	4½	4½	5	5	4½	5	4½
Jan. 16.....			4½									
Feb. 7.....		4			4½							
Feb. 8.....				4½			4		4½		4½	
Feb. 11.....								4½				
Feb. 13.....	4											
Feb. 15.....				4						4		
Mar. 14.....		3½										
Mar. 15.....												
Mar. 20.....			4									
Mar. 21.....												4
Apr. 8.....											4	
Apr. 11.....					4							
Apr. 12.....						4		4				
Apr. 15.....									4			
May 2.....		3										
May 8.....	3½											
June 7.....				3½								
June 20.....		2½										
June 21.....							3½					
July 3.....	3		3½									
July 12.....						3½						
July 18.....					3½							
Aug. 7.....								3½				
Aug. 8.....												3½
Aug. 15.....										3½		
Sept. 9.....											3½	
Sept. 12.....									3½			
In effect Oct. 31, 1930.	3	2½	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½

RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

Federal reserve bank or branch city	Prime commercial paper			Loans secured by prime stock-exchange collateral			Loans secured by warehouse receipts			Interbank loans		
	August	Septem- ber	October	August	Septem- ber	October	August	Septem- ber	October	August	Septem- ber	October
Boston	3¼-4¼	3¼-4	4-4¼	4¼-5	4¼-5	4½-5	5-6	5½	5-5½	4	4	4-4½
New York	4-4¼	4	3¼-4	4½-5	4-5	4-5	4½	4½-5	4-5	4-4½	4-4½	4-4½
Buffalo	5-6	5½-6	5-6	5½-6	5½-6	5½-6	6-6½	6	5-6	5-6	5	5
Philadelphia	3½-4½	3½-4½	4-4½	4½-6	4½-6	4½-6	5-6	5-6	5-6	4-5	4-5	4-4½
Cleveland	4-5½	4-6	4-5	5½-6	5-6	5-6	5½-6	5-6	4-6	5-6	5-6	4½-6
Cincinnati	5-6	5-6	5-6	5-6	5-6	5-6	6-7	6	5½-6½	5-5½	5-5½	5-6
Pittsburgh	5-5½	5-5½	5-6	5½-6	5-6	5½-6	6	6	6	5½-6	5-6	5-6
Richmond	4-5	4½-5	4½-5	5-5½	5½-6	5½-6				4½-5	4½-5	4½-5
Baltimore	4½-5½	4½-6	4½-6	4½-5½	4½-6	4½-6	6	5½-6	6	5-6	5-6	5-6
Charlotte	5-6	5½-6	5-6	6	6	5½-6	6	6	6	5-6	5½-6	6
Atlanta	5-5½	4-5½	4-6	5-6	5-6	5-5½	5-5½	4-4½	4½-5	5-5½	5-5½	5-5½
Birmingham	5½-7	5½-7	5½-7	5½-7	5½-7	5½-7	6-8	6-8	6-8	6	5-6	5-6
Jacksonville	4½-5	4½-5	4½-5	6½-7	6½-7	6-7	5½-7	5½-7	5½-7	6	6	6
Nashville	6	6	6	6	6	6	5½-6	5½-6	5½-6	5½-6	5½-6	5½-6
New Orleans	5-5½	5-5½	5-5½	6-6½	6-6½	6-6½	5½-6	5½-6	5½-6	5-6	5-6	5-6
Chicago	4-5	4-5	4-4½	4½-5½	4½-5	4½-5	4¾-5	4¾-5	4¾-5	4¾-5½	4¾-5½	4½-5½
Detroit	4½-6	4½-6	4½-6	5-6	5-6	5-6	6	6	6	5¾-6	5¾-6	5-6
St. Louis	4-4½	4-4½	4-4½	5-6	5-5½	5-6	5-6	5-6	5-6	4¾-5½	5-5½	5-5½
Little Rock	6	6	6	6-7	6-7	6-7	6-7	6-8	6-7	6	6	6
Louisville	6	6	6	6	6	5½-6	6	6	6	5½	5½	5-5½
Minneapolis	4-5	4-4½	4-4½	5-6	5-6	5-6	4-4½	4-4½	4-4½	5½-6	5½-6	5½-6
Helena	8	8	8	8	8	8	6-8	6-8	6-8	6-8	6-8	6-8
Kansas City	4½-5	4½-5	4½-5	5½-6	5½-6	5½-6	5-6	5-6	5-6	5½-6	5½-6	5½-6
Denver	5-6	5-6	5-6	5½-6	6	5½-6	6-8	6-8	6-8	6	6	6
Oklahoma City	5½-6	5½-6	5-5½	8	8	8	6-8	6-8	6-8	6	6	6
Omaha	5	4½-5	4½-5	6-7	6-6½	6-6½	6	6	6	6	6	5½-6
Dallas	4½-5½	5-5½	4-6	6-7	6-7	6-7	5-6	5-5½	5½-6	5-5½	5-5½	5-5½
El Paso	6-8	6-8	6-8	6-8	6-8	6-8	8	8	8	5-6	6	5-6
Houston	6	5½-6	5½-6	6	6	6	6	5-6	5-6	5-6	5-6	5-6
San Antonio	6	6	6-6½	6-8	6-7	6-7	6-8	6-8	6-8	6	6	6
San Francisco	5-6	5-5½	5-5½	5-5½	5½	5-6	5½-6	5½-6	5½-6	5	5	5
Los Angeles	6	6	6	5½-6½	6-6½	6-6½	6-7	6-7	6-7	6	6	5½-6
Portland	5½-6	6	6	5½-6½	5½-6½	5½-6½	6-7	6-7	6-7	6	6	6
Salt Lake City	6	6	6	6	6	6	7	7	7	6	6	5½-6
Seattle	6	6	6	6-6½	6-6½	6-6½	7	7	7	6	6	6
Spokane	6	6	6	6½-7	6-6½	6½-7	7	7	7	6	6-6½	6

* Revised.

NOTE.—Rates shown are those at which the bulk of the loans of each class were made by representative banks during week ending 15th of month. Rates from about 200 banks with loans exceeding \$8,000,000,000; reporting banks are usually the larger banks in their respective cities.

WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES

Principal Resources and Liabilities, by weeks

[In millions of dollars]

	Total	Federal Reserve District										City			
		Bos-ton	New York	Phila-delphia	Cleve-land	Rich-mond	At-lanta	Chi-cago	St. Louis	Min-neap-olis	Kan-sas City	Dal-las	San Fran-cisco	New York	Chi-cago
Loans and investments:															
Oct. 1.....	23,467	1,546	9,557	1,301	2,304	659	603	3,382	657	371	658	456	1,972	8,325	2,025
Oct. 8.....	23,297	1,521	9,473	1,298	2,280	654	600	3,353	654	371	659	455	1,979	8,236	1,995
Oct. 15.....	23,404	1,513	9,552	1,289	2,282	660	601	3,387	652	372	660	458	1,978	8,318	2,032
Oct. 22.....	23,383	1,516	9,518	1,293	2,284	660	599	3,380	657	374	659	459	1,984	8,273	2,026
Oct. 29.....	23,495	1,516	9,656	1,297	2,263	657	595	3,377	656	374	658	460	1,987	8,414	2,028
Loans:															
Oct. 1.....	17,013	1,171	7,090	908	1,498	468	453	2,588	498	242	419	340	1,339	6,241	1,556
Oct. 8.....	16,813	1,145	6,970	895	1,487	468	450	2,565	494	242	417	338	1,341	6,127	1,532
Oct. 15.....	16,861	1,133	7,018	882	1,492	468	451	2,591	492	242	414	340	1,342	6,175	1,560
Oct. 22.....	16,715	1,133	6,893	882	1,495	467	450	2,570	492	244	410	341	1,339	6,046	1,540
Oct. 29.....	16,704	1,133	6,959	888	1,486	467	446	2,564	490	244	408	342	1,336	6,116	1,537
On securities—															
Oct. 1.....	8,483	509	4,197	460	736	175	145	1,276	223	79	124	95	463	3,796	930
Oct. 8.....	8,268	494	4,060	456	725	175	143	1,250	219	79	122	95	451	3,660	901
Oct. 15.....	8,258	486	4,037	451	723	174	146	1,281	218	78	117	95	452	3,640	932
Oct. 22.....	8,142	474	3,954	447	727	174	143	1,273	219	78	111	93	448	3,550	923
Oct. 29.....	8,057	476	3,901	447	718	173	142	1,271	209	79	104	93	444	3,500	922
All other—															
Oct. 1.....	8,530	662	2,893	448	762	293	308	1,312	275	163	295	245	876	2,448	626
Oct. 8.....	8,545	651	2,911	439	762	293	307	1,316	275	163	295	244	890	2,466	631
Oct. 15.....	8,606	647	2,931	430	770	294	305	1,310	273	164	297	245	890	2,535	628
Oct. 22.....	8,573	659	2,939	434	769	293	307	1,297	273	166	299	247	891	2,496	616
Oct. 29.....	8,707	657	3,058	441	768	293	305	1,294	281	165	304	249	893	2,616	615
Investments:															
Oct. 1.....	6,454	375	2,468	393	806	191	150	794	160	130	239	116	633	2,081	469
Oct. 8.....	6,485	375	2,502	403	794	187	150	787	160	130	242	117	638	2,110	461
Oct. 15.....	6,541	380	2,534	408	790	191	150	797	161	130	246	118	636	2,143	472
Oct. 22.....	6,697	383	2,625	411	788	193	149	810	165	129	249	118	644	2,227	486
Oct. 29.....	6,731	384	2,697	408	777	190	149	812	165	130	250	118	651	2,299	491
U. S. Government securi-ties—															
Oct. 1.....	2,946	150	1,165	117	400	85	75	339	33	72	101	68	341	1,038	174
Oct. 8.....	2,970	148	1,183	127	394	84	74	340	34	72	104	69	341	1,049	178
Oct. 15.....	2,996	152	1,206	128	391	83	74	341	35	72	105	70	339	1,080	179
Oct. 22.....	3,060	153	1,257	130	386	84	71	356	37	71	106	72	338	1,130	191
Oct. 29.....	3,050	153	1,253	127	379	80	71	360	38	71	106	71	341	1,126	200
All other—															
Oct. 1.....	3,508	225	1,303	277	406	106	75	455	126	57	138	48	292	1,043	295
Oct. 8.....	3,515	227	1,319	277	399	103	76	447	126	58	139	48	296	1,061	286
Oct. 15.....	3,544	228	1,328	279	398	108	76	456	126	58	141	48	297	1,063	283
Oct. 22.....	3,607	230	1,368	282	402	110	77	454	128	58	144	47	306	1,097	291
Oct. 29.....	3,681	231	1,444	281	398	110	78	453	127	59	144	47	310	1,172	292
Reserve with Federal reserve bank:															
Oct. 1.....	1,787	99	863	85	138	42	38	255	44	25	56	33	108	802	176
Oct. 8.....	1,802	100	859	84	141	40	40	269	41	28	56	33	111	794	187
Oct. 15.....	1,827	102	860	83	147	41	38	279	45	27	59	37	110	794	191
Oct. 22.....	1,827	101	886	85	144	40	39	267	42	27	57	33	106	826	187
Oct. 29.....	1,879	98	942	84	146	40	36	266	43	29	56	34	105	874	187
Cash in vaults:															
Oct. 1.....	201	14	56	11	26	11	8	32	5	5	10	7	17	44	13
Oct. 8.....	212	15	59	12	27	12	9	32	6	5	10	7	18	46	13
Oct. 15.....	209	16	57	13	27	11	9	33	6	5	10	7	18	45	14
Oct. 22.....	212	15	59	13	28	12	9	32	6	5	10	7	17	46	13
Oct. 29.....	216	14	60	13	28	11	9	35	6	5	10	7	18	48	13
Net demand deposits:															
Oct. 1.....	13,812	917	6,366	759	1,133	352	313	1,873	360	227	489	280	743	5,778	1,260
Oct. 8.....	13,557	882	6,197	757	1,111	348	313	1,852	355	231	493	279	738	5,662	1,244
Oct. 15.....	13,767	909	6,251	744	1,125	352	317	1,920	361	232	510	289	757	5,665	1,302
Oct. 22.....	13,710	894	6,315	745	1,113	349	310	1,889	355	232	490	280	739	5,750	1,291
Oct. 29.....	13,830	886	6,468	738	1,089	342	306	1,880	359	234	484	277	737	5,937	1,285
Time deposits:															
Oct. 1.....	7,534	526	2,016	353	1,034	257	241	1,346	236	141	207	148	1,029	1,454	670
Oct. 8.....	7,541	534	2,045	350	1,023	257	241	1,343	235	140	197	149	1,026	1,479	661
Oct. 15.....	7,535	534	2,052	349	1,022	256	240	1,341	236	141	195	153	1,016	1,489	652
Oct. 22.....	7,560	532	2,035	350	1,021	257	239	1,325	236	141	195	153	1,016	1,530	634
Oct. 29.....	7,577	538	2,062	361	1,022	257	239	1,333	236	141	196	152	1,020	1,521	642
Government deposits:															
Oct. 1.....	181	16	52	13	22	17	20	10	2	1	3	18	10	46	6
Oct. 8.....	147	13	42	10	18	14	16	8	1	1	2	14	8	37	5
Oct. 15.....	142	13	40	10	17	13	16	8	1	1	2	14	8	36	5
Oct. 22.....	122	11	35	9	15	11	13	7	1	1	2	12	7	31	4
Oct. 29.....	113	10	32	8	14	10	12	6	1	1	2	11	6	29	4

WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES—Continued

Principal Resources and Liabilities, by weeks—Continued

[In millions of dollars]

	Total	Federal Reserve District												City	
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco	New York	Chicago
Due from banks:															
Oct. 1.....	1,657	74	207	103	137	94	87	284	70	76	194	112	220	122	194
Oct. 8.....	1,645	79	171	103	137	100	87	268	87	78	204	111	219	108	175
Oct. 15.....	1,696	95	181	98	126	93	87	289	89	83	213	115	228	106	188
Oct. 22.....	1,509	87	156	82	118	84	79	244	78	71	188	104	218	90	158
Oct. 29.....	1,568	93	153	90	154	83	80	270	79	78	174	100	213	90	175
Due to banks:															
Oct. 1.....	3,664	147	1,313	250	370	119	108	508	124	87	224	120	294	1,224	346
Oct. 8.....	3,604	143	1,228	249	368	125	112	515	131	87	229	121	298	1,147	356
Oct. 15.....	3,639	151	1,246	245	365	123	109	529	129	86	231	125	300	1,160	369
Oct. 22.....	3,389	140	1,175	215	338	113	106	473	120	81	219	117	291	1,099	333
Oct. 29.....	3,427	126	1,211	210	342	114	104	485	123	84	211	114	303	1,138	343
Borrowings from Federal reserve banks:															
Oct. 1.....	41	2	3	1	7	4	10	7	7	1		1	1		1
Oct. 8.....	39	2	4	1	8	4	8	4	5			2		2	
Oct. 15.....	76	1	36	1	11	5	9	3	5		1	3		29	
Oct. 22.....	58	1	11	2	13	6	9	2	7	1	2	2	2		1
Oct. 29.....	62	2	16	3	11	6	8	4	5		2	3	1		1

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BUILDING CONTRACTS AWARDED

[Value of contracts in thousands of dollars]

Federal reserve district	1930		1929
	Septem-ber	August	Septem-ber
Boston.....	34,053	26,886	32,411
New York.....	98,869	94,418	83,109
Philadelphia.....	20,027	19,859	35,047
Cleveland.....	34,268	33,784	64,140
Richmond.....	16,163	23,677	22,712
Atlanta.....	13,491	15,062	17,768
Chicago.....	60,119	58,599	102,562
St. Louis.....	18,167	23,320	39,465
Minneapolis.....	12,496	8,822	10,346
Kansas City.....	10,412	31,455	20,883
Dallas.....	13,799	11,438	16,960
Total (11 districts).....	331,864	347,318	445,402

Figures for building contracts awarded are for 37 States east of the Rocky Mountains, as reported by the F. W. Dodge Corporation.

COMMERCIAL FAILURES ¹

[Amounts in thousands of dollars]

Federal reserve district	Number		Liabilities			
	1930		1929		1930	
	Sept.	Aug.	Sept.	Sept.	Aug.	Sept.
Boston.....	188	198	137	4,956	3,472	2,628
New York.....	329	405	270	8,615	18,191	7,612
Philadelphia.....	96	103	60	1,939	2,343	1,234
Cleveland.....	148	145	150	2,738	3,176	3,471
Richmond.....	114	119	70	1,832	1,187	1,111
Atlanta.....	107	84	66	2,164	2,224	1,520
Chicago.....	335	297	272	7,606	8,050	6,159
St. Louis.....	153	112	98	4,428	1,909	1,762
Minneapolis.....	59	47	41	921	883	271
Kansas City.....	139	99	113	2,004	2,944	4,657
Dallas.....	60	48	38	1,321	890	316
San Francisco.....	235	256	253	8,424	3,910	3,383
Total.....	1,963	1,913	1,568	46,947	49,181	34,125

¹ Figures reported by R. G. Dun Co.

BUILDING PERMITS ISSUED

[Value of permits in thousands of dollars]

Federal reserve district	Num-ber of cities	1930		1929
		Septem-ber	August	Septem-ber
Boston.....	14	3,731	9,511	4,203
New York.....	22	46,330	35,876	53,694
Philadelphia.....	14	8,221	5,297	6,261
Cleveland.....	12	10,412	14,473	14,209
Richmond.....	15	5,293	6,740	8,804
Atlanta.....	15	2,687	2,994	5,456
Chicago.....	19	24,206	17,705	32,687
St. Louis.....	5	3,342	2,720	5,329
Minneapolis.....	9	3,128	2,391	3,686
Kansas City.....	14	4,785	4,486	9,701
Dallas.....	9	5,945	6,446	5,693
San Francisco.....	20	18,265	15,575	19,752
Total.....	168	136,344	124,213	169,474

BANK DEBITS

[Debits to individual accounts. In millions of dollars]

	Number of centers	Septem-ber, 1930	August, 1930	Septem-ber, 1929
New York City.....	1	27,383	25,052	50,342
Outside New York City.....	140	21,277	20,966	27,314
Federal reserve district:				
Boston.....	11	2,066	2,079	3,086
New York.....	7	28,161	25,864	51,503
Philadelphia.....	10	1,941	1,908	2,503
Cleveland.....	13	2,424	2,278	2,860
Richmond.....	7	708	665	729
Atlanta.....	15	928	848	1,090
Chicago.....	21	5,621	5,597	7,632
St. Louis.....	5	1,039	997	1,293
Minneapolis.....	9	772	730	974
Kansas City.....	15	1,281	1,290	1,437
Dallas.....	10	643	582	783
San Francisco.....	18	3,076	3,179	3,766
Total.....	141	48,660	46,018	77,656

BANK SUSPENSIONS

[1930; figures for the latest month are preliminary]

[Banks closed to the public either permanently or temporarily on account of financial difficulties by order of supervisory authorities or directors of the banks. Deposit figures are given in thousands of dollars, for the latest available date prior to suspension, and are subject to revision]

Federal reserve district	All banks						Member banks ¹				Nonmember banks ²			
	Number			Deposits			Number		Deposits		Number		Deposits	
	Oct.	Sept.	Jan.-Oct.	Oct.	Sept.	Jan.-Oct.	Oct.	Sept.	Oct.	Sept.	Oct.	Sept.	Oct.	Sept.
Boston.....	1		6	5,051		22,086					1		5,051	
New York.....		1	5		184	2,157						1		184
Philadelphia.....	1		4	771		2,881					1		771	
Cleveland.....	1	1	33	553	1,735	39,493					1	1	553	1,735
Richmond.....	2	3	58	450	2,571	23,767					1	3		2,571
Atlanta.....	1	2	85	551	401	51,766	1		450		1	2		401
Chicago.....	15	23	196	8,329	12,601	78,824	2	3	815	605	13	20	7,514	11,996
St. Louis.....	8	8	106	3,525	1,740	26,959			409		7	8	3,116	1,740
Minneapolis.....	17	6	96	2,698	533	14,806				114	17	5	2,698	419
Kansas City.....	14	15	108	2,877	3,203	26,633	3	2	556	520	11	13	2,321	2,683
Dallas.....	4	5	29	533	854	13,276	1	2	198	619	3	3	335	235
San Francisco.....	2	2	14	1,267	271	9,771	1	1	947	82	1	1	320	189
Total.....	66	66	740	26,605	24,053	312,419	10	9	3,926	1,940	56	57	22,679	22,153

¹ October figures represent national banks only; September figures include 7 national banks with deposits of \$1,769,000 and 2 State bank members with deposits of \$171,000; January to October figures include 86 national banks with deposits of \$66,365,000 and 12 State bank members with deposits of \$7,415,000.

² Includes private banks for which deposit figures are not available, as follows: October, 2 banks, January to October, 5 banks.

OCTOBER CROP REPORT, BY FEDERAL RESERVE DISTRICTS

(Based on estimates, by States, for Oct. 1 as made by the Department of Agriculture)

[In thousands of units]

Federal reserve district	Corn		Total wheat		Spring wheat		Oats	
	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
Boston.....	8,818	9,706	110	98	110	98	8,722	9,788
New York.....	24,625	24,657	5,373	6,545	136	176	25,937	47,542
Philadelphia.....	42,371	28,462	18,620	22,954	99	119	18,771	25,046
Cleveland.....	170,082	105,341	38,539	35,866	97	104	64,498	83,464
Richmond.....	148,109	103,292	26,147	29,278			26,875	26,060
Atlanta.....	174,605	126,296	4,144	3,717			15,814	15,313
Chicago.....	880,741	709,548	62,550	69,054	4,410	6,040	501,169	568,452
St. Louis.....	312,957	185,278	44,676	48,943	417	610	51,166	63,130
Minneapolis.....	294,781	247,242	184,665	189,929	172,350	178,876	283,837	310,654
Kansas City.....	445,415	397,447	267,493	290,807	12,187	11,530	152,447	168,185
Dallas.....	101,149	98,526	39,923	28,622	343	257	49,434	55,352
San Francisco.....	10,654	10,921	113,550	113,799	37,857	44,410	34,904	37,775
Total.....	2,614,307	2,046,716	805,790	839,612	228,006	242,220	1,233,574	1,410,761

Federal reserve district	Tame hay		Tobacco		White potatoes		Cotton	
	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930	Production, 1929	Estimate, Oct. 1, 1930
	<i>Tons</i>	<i>Tons</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bales</i>	<i>Bales</i>
Boston.....	4,981	4,912	38,406	40,853	58,593	54,364		
New York.....	6,958	6,370	1,078	1,104	28,010	33,798		
Philadelphia.....	3,061	2,632	47,691	40,898	23,623	21,134		
Cleveland.....	7,168	4,137	149,879	137,107	19,695	14,539		
Richmond.....	4,190	2,552	726,638	750,463	37,845	33,689	1,025	1,914
Atlanta.....	2,890	2,425	185,390	205,259	11,964	11,898	3,488	3,667
Chicago.....	23,333	16,722	46,360	46,376	44,914	38,661		
St. Louis.....	9,105	5,763	316,507	267,261	13,313	14,940	13,306	2,554
Minneapolis.....	12,190	10,360	4,508	4,410	47,707	40,817		
Kansas City.....	12,348	11,770	2,714	3,049	31,933	36,304	1,169	918
Dallas.....	1,284	1,257			3,122	4,391	4,862	5,060
San Francisco.....	14,278	15,171			39,077	47,671	398	373
Total.....	101,786	84,071	1,519,081	1,496,780	359,796	352,206	14,828	14,486

¹ Includes 9,000 bales grown in miscellaneous territory.² Includes 4,000 bales grown in miscellaneous territory.

FOREIGN BANKING AND BUSINESS CONDITIONS

REPORT OF THE AGENT GENERAL FOR REPARATION PAYMENTS ¹

The final report of the Agent General for Reparation Payments, submitted to the Reparations Commission under date of May 21, 1930, and covering the execution of the Dawes plan through the fifth annuity year and the transition period under The Hague agreements up to May 17, 1930, when the new plan entered into force, includes figures for reparation payments and transfers for these periods, and reviews the development of the experts' plan as a whole. It also contains discussion of the budget, the public debt, German credit and business conditions, foreign trade, and the German balance of payments—which are given (with some omissions) herewith, together with the introduction and conclusion of the report:

INTRODUCTION

The report of the Young committee was made on June 7, 1929, and the plan which the experts recommended was intended to take effect, according to its terms, as of September 1, 1929. But owing to the time expended by the conferences between the interested governments, by the work of the organization committees, and by the process of ratification in the principal countries concerned, it was not until May 17, 1930, that the Reparation Commission and the Kriegslastenkommission were able to make the joint report for which provision was made in the final clause of The Hague agreement of January 20, 1930. With this declaration the new plan came into force, and with the final transfers to the Bank for International Settlements the functions of the Agent General for Reparation Payments and of the several organizations established under the Dawes plan came to an end.

Owing to the length of time required for putting the new plan into effect, the entire first annuity under the Young plan, covering the seven months' period from September 1, 1929, to March 31, 1930, was paid and transferred under the system of administration provided by the Dawes plan. The same is true of that part

of the second annuity under the Young plan falling within the period from April 1 to May 17, 1930. In addition to the accounts of the fifth annuity year under the Dawes plan and the closing accounts of the Dawes plan itself, the present report, therefore, presents the record of receipts and payments for the first year of the Young plan and likewise for the first part of the second annuity year under the Young plan up to the date of the final transfer of the Agent General's balances to the Bank for International Settlements. This transfer was completed on May 17, 1930, and the accounts of the Agent General for Reparation Payments for both the Dawes plan and the Young plan, up to the close of business on that date, have been examined and approved by the auditors. The functions of the Agent General in respect of the Dawes plan and the transition period are thus completely discharged, and the present report presents the final statements of account.

During the whole period of the Dawes plan reparations have been fully paid and transferred, as provided in the plan, up to a total of nearly 8,000,000,000 of gold marks for the five annuity years and to as much as 2,500,000,000 for the fifth annuity year alone. The specific securities provided by the plan also developed satisfactorily, fully meeting or exceeding the original expectations of the experts of the Dawes committee and providing a substantial margin of safety for the payments required of Germany under the plan. The assigned revenues and the German Railway Co. continue to provide collateral guaranties for the payment of the annuities which Germany has agreed to pay under the new plan.

The Dawes plan has also realized its broader objects. The experts of the Dawes committee, it will be recalled, were originally appointed to "consider the means of balancing the budget and the measures to be taken to stabilize the currency" of Germany. The German currency, at all times since the beginning of the plan, has satisfied both internally and externally the practical requirements of the gold standard, and with the coming into force of the new plan it has been placed on a full gold basis. The German budget was brought into balance at the outset of the plan, and the means for keeping it in balance have been constantly at hand, with public revenues which have developed

¹ Previous reports of the Agent General for Reparation Payments, covering periods as indicated, have been published in part in Federal Reserve Bulletins as follows:

Period	Bulletin
September, 1924, through August, 1925.....	February, 1926.
September, 1925, through August, 1926.....	January, 1927.
September, 1926, through May, 1927.....	August, 1927.
September, 1926, through August, 1927.....	January, 1928.
September, 1927, through May, 1928.....	July, 1928.
September, 1927, through August, 1928.....	February, 1929.
September, 1928, through May, 1929.....	September, 1929.

during the period of the plan to an extent far exceeding the expectations of the experts and which are undoubtedly ample to meet all legitimate demands for public expenditure, including, of course, the discharge of Germany's obligations under the new plan. But though the means exist, and the public revenues provide the essential material for a well-balanced budget, the determination to control expenditures and to keep them safely within the limits of available income has been lacking, and the result has been a long series of budgetary deficits which within the past year have produced a state of great tension in the public finances and which are now adding very seriously to the burdens of the German economy at the very time when it most needs to be free to adjust itself to the new conditions created by the fall in world prices and the general recession in trade and business. As the new plan comes into operation, the reform of the public finances is the first problem of the German Government and the German people, and on its solution will depend in large measure the future progress of the German economy under the new conditions created by the Young plan.

This report brings to an end the record of the administration of the Dawes plan and presents the final figures for reparation payments and transfers under the plan up to the close of business on May 17, 1930. It also reviews the development of the German public finances and of German credit and business conditions during the whole period since the interim report of July 1, 1929, and in these fields it takes account of all official information becoming available up to and including the first 10 days of May, 1930.

* * * * *

V. THE GERMAN BUDGET

During the financial year ended March 31, 1930, the German budget saw the culmination of the tendencies toward overspending and overborrowing which have been described in previous reports and in the memorandum of October 20, 1927, to the German Government. The year as a whole was under the shadow of the financial difficulties of the public authorities, and at times, particularly toward the end of December, 1929, there were periods of acute tension in the finances of the Reich and of some of the communes. Under pressure of these difficulties the first steps have been taken to put the financial position in order, but the whole problem of financial reform still calls most urgently for effective consideration and action.

Fundamentally, the situation has not changed, but the stage has been reached when energetic measures of reform can no longer be delayed without endangering the public credit and the development of the national economy as a whole. The public revenues throughout the whole period of the Dawes plan have shown beyond a doubt that the necessary material for budgetary equilibrium exists, and that under prudent administration the resources available to the budget would be ample to meet all legitimate requirements. What has been lacking, however, is any determined effort to control public expenditures, and the result has been a constantly mounting level of expenditure, exceeding even the greatly increased revenues and culminating in the serious financial troubles of the past year. The immediate necessity, without doubt, is to put the public finances in order, and for this purpose increased taxes will undoubtedly have to be levied, at least for the time being. But attention needs to be directed primarily to the problem of controlling public expenditure, and until this problem is squarely faced and solved there can be no question of reductions in taxation. The problem, moreover, of controlling public expenditures is not confined to the immediate situation, or to the coming year alone. It is the fundamental budgetary problem, and it can only be solved by firm adherence to sound principles of public finance. What is needed, most of all, is the determination to keep the budget effectively in balance at all times and at all events, plus a recognition of the fact that public expenditures can not be permitted to rise year after year at their recent pace without running the danger of drying up the sources of taxation and prejudicing the future development of the German economy.

Now, as Germany enters upon the execution of the Young plan, which itself brings substantial relief through reductions in reparation payments, the problem presents itself with renewed force and in a form which calls more than ever for firm leadership on the part of the Reich and for sincere and comprehending support from the States and communes. The means are at hand, and the opportunity exists, to meet the problem on a basis that would enable the public finances to be brought into order, and that would also open the way to a resumption of the program of tax reductions, in accordance with the views expressed by the experts of the Young committee in their report of June 7, 1929. Tax reductions, however, can only be made on the basis of assured reductions in expenditure, and up to the present

time the level of expenditures appears to be rising rather than falling, and at a rate that gives no assurance even of effective budgetary balance, notwithstanding substantial increases in taxation. Under the new plan the answer to the problem rests entirely with the German Government and the German people, and their decision will go far to determine the future course of German economic life and the position of German credit, at home and abroad.

The present report deals first with the finances of the Reich and then with the finances of the States and communes, and traces their development through the past year against the background of the experience which has become available since the German budget was brought into balance in the first year of the Dawes plan.

The budget of the Reich.—The events of the past year have fully confirmed the conclusions about the budget of the Reich which have appeared in previous reports, not merely as to the existence of the essential basis for the sound development of the budget and the adequacy of the revenue resources of the Reich, but even more as to the urgent necessity of effective measures of reform in order to bring the budget into balance and restore order to the public finances as a whole. The budget of the Reich, it is clear, has not suffered from lack of revenues, though it has been shown in the past year that the great increases of previous years can not be counted on to recur indefinitely and that there are practical limits beyond which taxation can not well be pushed. But the actual returns for 1929–30 still show the same high revenues from taxation as in 1928–29, and with the sources of revenue which are released under the Young plan and the increased taxes recently imposed the Reich is budgeting in the current year for total revenues from all sources of about 11 milliards of reichsmarks. It remains to be seen to what extent these estimates may be affected by the world-wide fall in commodity prices and the recession in business and trade, but even with full allowance for these factors of uncertainty it is abundantly clear, from the experience of the past six years, that the essential material exists on the revenue side for the sound development of the budget of the Reich, and that under prudent administration the revenues would be ample to meet all legitimate requirements. The Young plan, which brings substantial reductions in Germany's payments to the creditor powers, has greatly improved the position in this regard, not merely by giving direct relief to the budget but also by emphasiz-

ing Germany's sole responsibility to make the needed financial reforms.

The difficulties from which the budget of the Reich has been suffering are on the side of expenditure, and the trouble, in the main, has come from making public expenditures year after year beyond the limits of the available resources. During the past year, in particular, expenditures at times have exceeded not merely the regular resources from taxation and other current revenues, but also what could be secured from loans and even from short-term borrowings. The result has been, twice during the year, in April and May, 1929, and again toward the end of December, to produce a state of acute tension in the cash position of the Reich and a situation of greater strain in the public finances than has existed at any other time since stabilization.

The causes which led to this situation have been described at length in previous reports, and particularly in the Agent General's memorandum of October 20, 1927, to the German Government. The difficulties have not been of sudden development, or of the past year alone. They have been gathering for three years or more, and their roots are to be found very largely in the series of new expenditure measures which were adopted in 1926 and 1927, and in the general lack of control over public pending and public borrowing to which the memorandum drew attention. These dangerous tendencies have been developing from year to year, with cumulative effect, and in the financial year just closed they came to a head, under pressure of the weight of accumulating deficits and of the high interest rates and difficult credit conditions which prevailed during most of the year.

The general course of the budget of the Reich during the five years from 1924–25, when stabilization first became effective, up to the end of 1928–29, is illustrated by the following diagram [omitted], which shows the actual revenues and expenditures of these years and the results of each year as expressed in current surplus or deficit.

In the first two years, it will be observed, total expenditures remained below 7,500,000,000 reichsmarks a year, and the small current deficit in 1925–26 was more than covered by the surplus of the previous year. But in the three succeeding years expenditures increased by leaps and bounds, and in 1926–27, 1927–28, and 1928–29, taken together, the aggregate current expenditures exceeded even the greatly increased current revenues by a total of 2,445,000,000 reichsmarks. Of this deficit 1,237,000,-

000 reichsmarks fell in the year 1928-29, notwithstanding the fact that current revenues in that year reached a total of 9,651,000,000 reichsmarks, or 1,961,000,000 reichsmarks more than the total current revenues in 1926-27, two years before. This series of deficits completely exhausted the surplus remaining over from the years 1924-25 and 1925-26, as well as the special working fund of 252,000,000 reichsmarks which had been established by the treasury outside the budget in 1924-25 out of seigniorage on the coinage. The remaining deficit was covered to some extent by recourse to long-term loans, from which a total of 553,000,000 reichsmarks was realized during the three years, but the final accounts for the year 1928-29 still showed an uncovered net deficit outstanding at the end of the year to the amount of 859,000,000 reichsmarks. The difficulty of carrying this accumulated deficit put a heavy burden from the outset on the financial year 1929-30, and the position became further aggravated during the year as expenditures again outran the revenues from all sources and led to a new current deficit. The final accounts for 1929-30 are not yet available, and the figures for this year are therefore not included in the diagram. But it appears from the results thus far announced that the current deficit is again a substantial one, and that it will amount to between 600,000,000 and 650,000,000 reichsmarks even after taking into account about 600,000,000 reichsmarks of savings realized by this budget from the adoption of the Young plan. Of this indicated deficit about 340,000,000 reichsmarks have been covered by loans issued during the course of the year, so that the net deficit carried forward will amount to between 260,000,000 and 310,000,000 reichsmarks, in addition to the accumulated deficit of 859,000,000 reichsmarks from previous years, or between 1,120,000,000 and 1,170,000,000 reichsmarks in all.

The development of the budget of the Reich during the financial year 1929-30 is presented in further detail in the following pages, with comparative figures for the previous five years and the latest official indications as to the prospects for the new financial year which opened April 1, 1930. [This section, including a detailed analysis of revenues and expenses, omitted.] It is unnecessary to anticipate the figures, which largely speak for themselves, but it is worth pointing out, for its bearing on the future, that the budgetary troubles of the Reich may be traced very clearly to the following causes:

First, and foremost, there has been no effective recognition of the principle that the Government must live within its income. Revenues have been ample, and, notwithstanding the important reductions in taxation that were made in the earlier years, have risen to an estimated total of 10,061,000,000 reichsmarks in 1929-30, as compared with 7,757,000,000 reichsmarks in 1924-25 and 8,961,000,000 reichsmarks in 1927-28. These revenues would have been adequate to meet all legitimate requirements of the Reich, and even to provide a reasonable margin of safety, if only a firm financial policy had been pursued. For the past four years, however, the Government has always spent more than it received and at times, especially during 1929-30, it has made commitments to spend even more than it could borrow. The Reich itself has been one of the worst offenders against the principle which was announced, in the strongest possible terms, in the survey prepared by the Finance Ministry which accompanied the draft budget for 1929-30, as follows:

Once the principle of covering all expenditures by revenues is abandoned, the dam against the rising tide of expenditure collapses. Neither the Government nor Parliament will then be able to stem the flood. The disorder once admitted will not be restricted to the year of the deficit but will extend to an increasing degree to future years. Nor will the deficit be confined to the public finances; it is like a running sore which infects all the members of the national economy.

The first condition of return to a sound position is an absolute determination to hold public expenditures within the limits of the available revenues, and, in addition, to leave a sufficient margin of safety to give the Government protection against emergency demands that may arise and the possibility of applying some surplus, year by year, to debt reduction. What is most needed is a firm resolve on the part of the Government to live within its income. This is a simple program which can be readily and effectively applied, but it requires a real exercise of will on the part of the Government itself and an abandonment of the easy theory of the "inevitability" of public expenditures.

Second, the Government has failed year after year to make the reforms which have been so frequently promised and which the Government itself recognizes as fundamental to the sound construction of the budget. The financial settlement between the Reich and the States and communes, the reform of which was expected in connection with the adoption of the Dawes plan, is still governed by pro-

visional financial arrangements which put an arbitrary drain on the finances of the Reich. Up to this time, notwithstanding repeated statements that the problem was to be taken in hand, nothing whatever has been accomplished in the direction of giving the necessary protection to the budget of the Reich. The general reform of administration, which was definitely promised as long ago as 1927, has not yet been undertaken, and the whole problem of reducing the costs of government by rationalizing the public administrations remains to be examined. The reform of the system of unemployment insurance, which had become a pressing problem as early as the winter of 1928-29, was completely neglected until the end of December, 1929, when measures were finally taken, under pressure of the prevailing cash necessities, to raise the contributions from employers and employed. But it was too late to put the system on a self-supporting basis over the winter of 1929-30, and the advances which have had to be made from the budget have put a heavy drain on the finances of the Reich, which threatens to be continued well into the future unless effective measures can be taken without further delay. The difficulties which confront the German Government in dealing with these various problems may well be recognized, and the problem of unemployment insurance, in particular, has been aggravated by the persistent high level of unemployment during the past year. But until now there has been no apparent disposition to face the issue squarely, and matters have already drifted to such a point that the Government seems to be finding itself in more difficulties from continued failure to meet these problems than it would be likely to find in resolutely endeavoring to solve them.

Third, there is the practice, much followed in the past five years, of adopting new measures by legislation or decree without adequate consideration or even knowledge of their financial consequences. Once adopted, moreover, these measures soon give rise to interests which the Government becomes reluctant or unwilling to attack, no matter how burdensome the consequences for the budget. One of the worst cases of this kind was the general increase in the salaries and pensions of officials, announced by the Finance Minister of the Reich on September 14, 1927, and applied as from October 1, 1927, not merely to the administration of the Reich but also to the States and communes, the post office and the German Railway Co. These increases, as pointed

out in the memorandum of October 20, 1927, were "made on the most sweeping basis, and in the way most likely to bring serious consequences for the general economy of the country." It would seem, the memorandum further remarked, that "the German Government could have served its own interests better by using such substantial increases as an instrument for securing the reform in administration of which so many announcements have been made in the past two or three years. It may not even be too late now to make the salary increases serve this purpose. But as matters stand at present, they seem likely to hinder rather than to help the cause of administrative reform, and to saddle new and lasting burdens on the already heavily burdened budgets of the Reich and the other public authorities." These views have been more than confirmed by events. The reform of administration has not yet been accomplished, and the costs of the general increases in salaries and pensions, which in practice far exceeded the original estimates, have proved to be one of the most stubborn factors behind the constantly rising level of public expenditure. Numerous other examples of the adoption of new measures of expenditure without regard to the financial consequences are to be found throughout the record of the past few years. These measures have contributed very greatly to the budgetary difficulties of the Reich, but, even when their financial effects have become apparent, the theory of the inevitability of expenditure is so strongly held that no steps have been taken to correct them.

Fourth, the budget as a whole is still wrapped in such obscurity, particularly at the time when it comes before the Reichstag, that it lacks the salutary checks which it would otherwise get from public opinion and from the Parliament itself. There is, for example, a growing tendency to provide for expenditures outside the budget by assigning special receipts to special purposes, and in the draft budget for 1930-31 this practice has been carried so far as to separate almost the whole body of transfers to the States and communes from the general budget of the Reich. The budget is further confused by the division between the ordinary and extraordinary budgets and the transfers between them, and perhaps more than anything else by the system of carrying forward revenue and expenditure estimates from previous years without making allowance for the expected results in the budget estimates for the current year. Under the prevailing system, which is discussed in greater detail in later sections, the

budget is never presented to the Reichstag on a real cash basis, and frequently it is not until the expenditures have already been made and the deficit already incurred that the Parliament gets a clear picture of the situation. The inevitable result has been to encourage the growth of unsound financial practices and to deprive the budget of the natural checks that would be provided by clear and straightforward budgetary practice and accounts.

These various sources of difficulty are, of course, more or less related to each other, and they have conspired together in the past few years to produce the constantly rising volume of public expenditure which is at the root of the budgetary troubles of the Reich. The problem of checking public expenditure has become more than ever the vital budgetary problem of the German Government, and the time has come when a solution has to be found for it, not merely from the standpoint of budgetary stability but in the general interests of the country's economic life and of its credit at home and abroad. The problem is one which can be solved if the will to solve it exists, and it remains true, as stated in previous reports, that there is nothing in the situation which will not yield to the application of sound principles of public finance. Most important of all, the essential material exists, in sources of revenue which have proved their vitality even in times of great stress, but which themselves must be treated with respect if their productivity is to be maintained and a flight from taxation avoided.

With the coming into force of the Young plan the German Government has not only the full responsibility but also the normal incentive to do the things and carry out the reforms which are clearly needed in the country's own interest. Germany now knows, for the first time, the full extent of her international obligations, and the German public authorities are now able to make their calculations with reference to known liabilities. In this regard the coming into force of the Young plan marks a fundamental change in the situation. It is itself an act of confidence in Germany's good faith and financial integrity, and it calls for a corresponding effort on the German side, now that her international obligations are finally fixed and all foreign controls removed, to put the public finances in order and to do the things which are necessary to maintain the capacity of Germany to discharge the obligations which she has assumed.

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The budgets of the States and communes.—The finances of the States and communes, like those of the Reich, have been in difficulties during most of the past year, and for much the same reasons. Their revenues have greatly increased during the period of the Dawes plan, both in the form of transfers from the Reich and in their own tax collections; but, generally speaking, the States and communes have been following the practice of making expenditures, year after year, in excess of their available resources, and in some cases the pressure of accumulated deficits has recently become severe enough to bring measures of financial reform into active consideration.

The budgetary difficulties of the States and communes have been gathering for the past three years and more, and it has long been recognized that they have their origin in the failure to keep State and municipal expenditures within proper limits. The Government of the Reich, as long ago as October 7, 1927, pointed out, in its announcement with regard to the foreign borrowings of the States and communes, that "in view of the entire present situation in Germany any expenditure that is not urgent or economic, whether made out of foreign loans or from other sources, must be avoided." The Agent General's memorandum of October 20, 1927, to the German Government called special attention to the same problem, and urged that the Reich should exert its full leadership in the direction of keeping expenditures of the States and communes within the limits of their available resources. The memorandum emphasized, in the following terms, that this was the only solution which would go to the root of the problem:

The question underlying State and communal borrowing is not whether individual loans should be placed in the domestic market or in the foreign market, or at short or long term, but whether they should be placed at all. To divert the borrowing of the States and communes from one market to the other, or to refuse it in one form and permit it in another, does not go to the root of the difficulty. Overborrowing at home or abroad proceeds from the same source, namely, rising public expenditures, and it is by reducing expenditures to the minimum that relief is to be found. On the other hand, balanced budgets and economical administration will give the best assurance that when credit is needed for essential public purposes it will be forthcoming.

It is recognized, of course, that the Reich does not control the States and communes in these matters. But, when the States and communes go into foreign markets to finance their budgetary expenditures and internal improvements, they raise fundamental questions of foreign policy which have the most direct interest for the Reich. And under the constitution itself the Reich has a unique opportunity and even

responsibility for leadership, not merely because of its large transfers of revenue to the States and communes, but also because of its powers to prescribe the fundamental principles and main outlines of their laws in many matters of taxation and public finance. The force of these considerations has been recognized to some extent in the efforts that have been made for the past two years and more to supervise the foreign borrowings of the States and communes through an advisory organization established for this special purpose. These efforts, for whatever reason, have not been successful, and the results appear in the swollen figures for State and communal borrowings that have already been given. A new and truly effective supervision, based primarily on the principle of controlling public expenditures, is urgently needed at this time, both in the interests of German credit and to safeguard Germany's economic recovery against the dangers of overstimulation and subsequent reaction as a result of overspending and overborrowing by the public authorities.

The Government of the Reich stated, in its answering memorandum, that it was "devoting its greatest attention to the development of the financial affairs of the States and communes." In practice, however, little has been done during the intervening period but to restrict, through the Beratungsstelle, the issue of long-term public loans abroad, and, instead of showing leadership, the Reich itself has set an unfortunate example to the States and communes by constantly permitting its own expenditures to run beyond the limits of the available resources. The States and communes themselves, instead of putting some check on their expenditures, have allowed them to rise far beyond the high levels already prevailing in 1927, and in many cases far beyond the resources available to them from taxation and long-term borrowing. Altogether, the result has been the growth of a great volume of short-term indebtedness which put an increasing strain on the capacity of the domestic credit market, culminating in the acute difficulties which developed in December, 1929, in connection with meeting the year-end requirements of the Reich and some of the communes.

The importance of the budgets of the States and communes in the public finances of Germany as a whole is indicated by the fact that these two groups of public authorities together dispose of considerably more than one-half of the total tax revenues of Germany. Moreover, as their finances are closely interwoven with those of the Reich, an analysis of the budgetary position of the Reich necessarily involves an examination of the budgets of the States and communes. The development of their budgets during the successive years of the Dawes plan has accordingly been traced in previous reports to the extent that the official information permitted, and it has been observed, as a

general proposition that, notwithstanding the large year-to-year increase in transfers from the Reich and in other available resources, the States in recent years have been steadily budgeting for deficits and that for some years past both the States and the communes have been spending more than their current resources permitted. In the financial year 1929-30 the budgets of most of the States again showed appreciable deficits, while the finances of some of the communes, including Berlin, reached such a state of tension that it became necessary to resort to emergency measures. The finances of the State of Prussia, on the other hand, present a relatively better picture, since on the whole Prussia appears to have succeeded in keeping its budgetary deficits within manageable limits and in avoiding too great a burden of short-term indebtedness.

The submission of the 1930-31 budgets of many of the States has been delayed, awaiting the terms of the financial settlement for 1930-31 between the Reich and the States and communes. The draft budgets of Prussia, Saxony, Wurtemberg, and some of the smaller States were first presented, moreover, on the basis of a continuance of the arrangements hitherto in force, and these drafts now have to be modified to take account of the changes in the financial settlement which have been introduced since their submission. In the case of Bavaria the Finance Minister stated in the Diet on February 19, 1930, that the budget estimates for 1930-31 could not be submitted without further information regarding the financial relations of the States with the Reich, and it was not until May 6, 1930, that the draft budget for the year was actually presented. Only in the case of Baden and three of the smaller States does the 1930-31 budget appear as yet to have been definitely voted.

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VI. THE GERMAN PUBLIC DEBT

The steady increase of the total public debt of Germany, which has been noted in previous reports, continued during the financial year 1929-30. The extent of the increase is shown not only in the public-debt statements of the Reich, but also in the latest statistics for the public debts of the States and communes, which now give the figures for the States and Hanseatic cities and for the larger communes down to the end of the third quarter of 1929-30. The principal factor, of course, in this continued growth of public indebtedness has been the

constant borrowing resulting from the budgetary deficits which have been reviewed in the preceding chapter on the German budget.

The reported public debt of the Reich rose during the year to a total of 10,353,000,000 reichsmarks, a net increase of about 1,403,000,000 reichsmarks. Of this increase, about 440,000,000 reichsmarks resulted from the further inscription of war damage liquidation debt certificates, but much the largest part was in treasury certificates, which alone showed an increase of 1,016,000,000 reichsmarks. Some of these appear to have been issued to fund various short credits which had not previously been reported in the public-debt statements, while 361,000,000 reichsmarks were held by the Agent General, representing the anticipation of budgetary savings under the Young plan rather than a further addition to the debt. For the most part, however, the tremendous increase in the volume of treasury certificates reflected the growing budgetary deficits of the Reich.

The public debts of the States and communes at the end of 1929-30 have not yet been reported, but the figures as of December 31, 1929, which are now available for the States and Hanseatic cities and the communes with 100,000 or more inhabitants, indicate that in the first nine months of the financial year the States increased their indebtedness by 116,000,000 reichsmarks, the Hanseatic cities by 98,000,000 reichsmarks, and the communes with 100,000 or more inhabitants by about 729,000,000 reichsmarks, part of which is reported to have been due to the absorption of smaller communes. The most recently published figures also show that the public debts of the communes with over 10,000 inhabitants (including those with 100,000 or more inhabitants) increased during the period of 18 months between March 31, 1928, and September 30, 1929, by as much as 2,371,000,000 reichsmarks, or about 50 per cent.

The published statistics show further that a large part of the total increase in indebtedness has taken the form of floating debt. In the case of the Reich the floating debt accounted for 64 per cent of the total increase for the year 1929-30, and in the case of the States for more than the entire net increase in their indebtedness during the first nine months of the year, since there was a decrease of 7,000,000 reichsmarks in the funded debt. In the case of the Hanseatic cities and the communes with 100,000 or more inhabitants, the floating debt accounted for 97 and 60 per cent, respectively, of their total debt increases in the first nine months of

the year. In the case of the communes with over 10,000 inhabitants, about 45 per cent of their increased indebtedness in the 18 months' period between March 31, 1928, and September 30, 1929, took the form of floating debt. Not only did the floating indebtedness of the public authorities rise materially during 1929-30, but the difficulty of carrying it increased and at times, particularly in April and May, and again in December, 1929, the tension became acute. Conditions in the domestic credit market during most of the last year were not favorable to the issuance of long-term loans, and the problem has now become so pressing that for some months past urgent attention has had to be given to the necessity of consolidating the floating indebtedness and the possibilities of making reductions in indebtedness out of taxes or budgetary savings. The measures which have thus far been taken to deal with the floating debts of the public authorities have been described in the preceding chapter.

The official figures of the indebtedness of the States and Hanseatic cities and of the communes which have been published since the last report make it possible for the first time since stabilization to give a comprehensive view of the German public debt as a whole. The assembled figures for March 31, 1928, the latest which are complete for all the public authorities, show that on that date the reported indebtedness was divided as follows: The Reich about 7,891,000,000 reichsmarks, the States about 1,298,000,000 reichsmarks, the Hanseatic cities about 398,000,000 reichsmarks, and the communes about 5,792,000,000 reichsmarks. The growth of the public debts of the various public authorities since March 31, 1928, to the extent to which official figures are now available, is also summarized in the following sections, and it is possible in this way to get a fairly comprehensive picture of the German public debt up to September 30, 1929. But no complete view can be obtained for any date later than March 31, 1928, owing to the fact that later information has not been published regarding the debts of the communes with 10,000 or less inhabitants. The official figures, in all cases, include short-term indebtedness but exclude post-stabilization guaranties, debts between the public authorities, and debts of undertakings belonging wholly to the public authorities but existing in the form of private companies. The public debt statements of the Reich, moreover, do not yet include the reparation indebtedness of Germany as finally determined under the Young plan.

a. Public debt of the Reich.—The reported public debt of the Reich increased by 1,403,000,000 reichsmarks in 1929–30 and aggregated 10,353,000,000 reichsmarks on March 31, 1930, according to the official statements furnished by the Finance Ministry of the Reich. These figures, however, include 361,000,000 reichsmarks of treasury certificates held by the Agent General which represent the anticipation of savings under the Young plan rather than a further addition to debt. The details of the public debt on March 31, 1930, are shown in the following table, with comparative figures for the end of the six preceding financial years.

PUBLIC DEBT OF THE REICH

[In millions of reichsmarks]

	Mar. 31, 1924	Mar. 31, 1925	Mar. 31, 1926	Mar. 31, 1927	Mar. 31, 1928	Mar. 31, 1929	Mar. 31, 1930
Bonds:							
Loan liquidation debt:							
with drawing rights							
without drawing rights							
Reich loan of 1927							
Reich loan of 1929							
War damage liquidation debt certificates ⁴							
Total ⁵							
Treasury certificates:							
Dollar certificates:							
6 per cent, repayable 1935							
6 per cent, repayable 1932							
K bonds							
E bonds							
Treasury bills							
7 per cent bonds 1929, issued to social insurance institutes							
7 per cent bonds 1929, issued to old age and disability insurance institute							
Treasury certificates issued in connection with the financial agreement with Rumania							
Other treasury certificates							
Total ⁵							
Bank debts:							
Rentenbank							
Reichsbank							
Total							
External loan 1924:							
Dollars							
Pounds sterling							
Swedish crowns							
Lire							
Swiss francs							
Total ⁵							

PUBLIC DEBT OF THE REICH—Continued

[In millions of reichsmarks]

	Mar. 31, 1924	Mar. 31, 1925	Mar. 31, 1926	Mar. 31, 1927	Mar. 31, 1928	Mar. 31, 1929	Mar. 31, 1930
Other Reich debts:							
Guaranties (pre-stabilization)							
Credit for reclaiming farm land							
Loan from the Reichspost							
Short-term loans							
Other obligations to pay ⁶							
Total ⁵							
Grand total ⁵							

¹ Provisional estimates.² Nominal value.³ Capital value including premium on redemption.⁴ The inscription of this debt is not yet complete; it is expected eventually to amount to about 1,100,000,000 reichsmarks.⁵ Differences due to rounding off.⁶ Excluding administrative credit at the reichsbank limited by the bank law to 100,000,000 reichsmarks and amounting on March 31, 1930, to 50,000,000 reichsmarks, and the advance of 135,000,000 reichsmarks made toward the end of March, 1930, by the Bank for Industrial Debentures.

The public-debt statements up to this time have not taken account of the indebtedness of Germany under the Young plan, as finally determined by The Hague agreement of January 20, 1930. This indebtedness is now represented by the debt certificate of the German Government which has been given to the Bank for International Settlements in accordance with Annex III to The Hague agreement, and it is stated in terms of annuities rather than in terms of capital debt. But on a 5½ per cent basis, the rate at which the calculations of the Young plan were made and at which the debt certificate gives Germany the "right to redeem all or any part of the not yet mobilized annuities," the total capital value of the annuities payable under the Young plan from April 1, 1930, to March 31, 1938, amounted as of April 1, 1930, to about 36,000,000,000 reichsmarks. This figure includes the annuities payable to the United States of America under the separate agreement concluded simultaneously with the adoption of the new plan. It does not include the amounts representing the first annuity under the Young plan, since these had already been paid during the transition period between September 1, 1929, and March 31, 1930; and it also excludes the amounts required for the service of the German external loan, 1924, since the outstanding principal amount of this loan already appears in the regular statements of the public debt. On the other hand, no allowance has been made in these calculations for the fact that the Reich receives

660,000,000 reichsmarks a year from the German Railway Co., from October 1, 1929, to April 1, 1930, as a contribution toward the annuities payable under the new plan. The total capital value of this railway contribution, also calculated on a 5½ per cent basis, amounted, as of April 1, 1930, to about 10,900,000,000 reichsmarks, which counts, of course, as an asset for the Reich against its total capital debt of about 36,000,000,000 reichsmarks under the new plan.

The reported increases and decreases in the various categories of the public debt of the Reich during 1929-30 were as follows, expressed in millions of reichsmarks:

New items:	
Reich loan, 1929.....	183
Bonds issued to old age and disability insurance institute.....	176
Increases in existing items:	
Loan liquidation debt without drawing rights.....	43
War damage liquidation debt certificates.....	438
Treasury bills.....	18
Other treasury certificates.....	1,016
Gross increase.....	1,874
Decreases in existing items:	
Loan liquidation debt with drawing rights.....	146
Treasury certificates issued in connection with financial agreement with Rumania.....	15
Bank debts to Rentenbank and Reichsbank.....	143
German external loan, 1924.....	35
Credit for reclaiming farm land.....	12
Loan from Reichspost.....	110
Short-term loans.....	10
Total decrease.....	471
Net increase.....	1,403

The new items appearing in the debt statement consist, first, of the 7 per cent tax-exempt internal loan issued in May and June, 1929, in the nominal amount of 183,000,000 reichsmarks, from which a total of 179,000,000 reichsmarks was realized; and, second, of the 7 per cent 5½ year bonds, issued at 93 per cent to the old age and disability insurance institute in the last half of the financial year, in the nominal amount of 176,000,000 reichsmarks, from which 163,000,000 reichsmarks were realized. Both of these issues were described in the last report.

The increases in existing items of the public debt during the year were as follows:

(a) The loan liquidation debt without drawing rights, the figures of which are not yet final, increased by 43,000,000 reichsmarks in consequence of the settlement of certain outstanding claims.

(b) The war damage liquidation debt increased by 438,000,000 reichsmarks, following

the further inscription of debt certificates. It is estimated that about 100,000,000 reichsmarks of certificates will still have to be issued before the inscription of this debt is complete.

(c) The treasury bills discountable at the Reichsbank again reached the maximum legal limit of 400,000,000 reichsmarks on March 31, 1930. About 82 per cent were reported as issued on the open market as against 91 per cent on March 31, 1929.

(d) Other treasury certificates increased by 1,016,000,000 reichsmarks and aggregated 1,216,000,000 reichsmarks on March 31, 1930. Full details of this amount have not been published but it appears to be made up of the following items:

Two hundred million reichsmarks taken by the German banks at a discount of 7½ per cent. About three-quarters of this issue were originally repayable on September 30, 1929, but were prolonged on the same terms until the maturity of the remainder, on January 31, 1930. Subsequently, on January 17, 1930, the whole of this issue was again prolonged at the same discount rate, under an arrangement according to which 100,000,000 reichsmarks will be repayable on July 31, 1930, a further sum of 50,000,000 reichsmarks on November 30, 1930, and 50,000,000 reichsmarks on December 31, 1930.

Three hundred and fifty million reichsmarks taken by the Reich loan syndicate under the direction of the Reichsbank in December, 1929. This loan bears interest at one-half of 1 per cent above the Reichsbank discount rate, which stood at 7 per cent at the date when the loan was first issued, and is repayable in seven monthly instalments of 50,000,000 reichsmarks from April 15 to October 15, 1930, inclusive, out of the amortization fund created in virtue of the law of December 24, 1929, as explained in the previous chapter in the section discussing the cash position.

One hundred and twenty-five million reichsmarks of 1-year treasury bonds issued in three tranches in January, February, and March, 1930, and maturing on January 15, February 15, and March 15, 1931, respectively.

One hundred and eighty million reichsmarks taken by the German Railway Co. originally in the form of short-term certificates, but recently renewed and extended to a longer term by arrangement between the German Government and the Railway Co.

Three hundred and sixty-one million reichsmarks taken by the Agent General for Reparation Payments, pursuant to the provisions of The Hague protocol of August 31, 1929, as

supplemented and extended by The Hague agreement of January 20, 1930. These treasury certificates represent, in effect, an anticipation of the savings which accrue to the German Government under the Young plan rather than a further addition to the public debt.

The decreases in existing items of the public debt during the year were as follows:

(a) The loan liquidation debt with drawing rights decreased by 146,000,000 reichsmarks, due to the annual drawing of bonds made in October, 1929, and paid in December, 1929.

(b) The treasury certificates issued in connection with the financial agreement with Rumania decreased by the retirement of 15,000,000 reichsmarks in April, 1929: another 15,000,000 reichsmarks have since matured on April 1, 1930, and the balance comes due April 1, 1931.

(c) The debt of the Rentenbank decreased by 134,000,000 reichsmarks, of which 60,000,000 reichsmarks came from the four quarterly payments by the Reich, due under paragraph 7b of the law on the liquidation of Rentenbank notes, and the balance from interest payments by the owners of the mortgaged land under paragraph 7a of the law. The debt to the Reichsbank decreased by 9,000,000 reichsmarks, the amount of the annual payment by the Reich provided for in the budget.

(d) The German external loan, 1924, decreased by 35,000,000 reichsmarks, primarily through the operation of the sinking fund.

(e) The credit for reclaiming farm land, which amounted to 12,000,000 reichsmarks on March 31, 1929, appears to have been liquidated. At any rate, it has not been reported in the published statements since June, 1929.

(f) The special loan from the Reichspost which amounted to 133,000,000 reichsmarks on March 31, 1929, decreased to 23,000,000 reichsmarks on March 31, 1930, thus reflecting the lessened volume of Reichspost funds available for this purpose, as indicated in the preceding chapter.

(g) Short-term loans decreased by 10,000,000 reichsmarks, leaving a balance of 210,000,000 reichsmarks outstanding on March 31, 1930.

The floating debt of the Reich, as shown in the public debt statement, amounted to 1,888,000,000 reichsmarks on March 31, 1930. This total, however, does not include the administrative credit granted to the Reich at the Reichsbank, amounting on that date to 50,000,000 reichsmarks, or the advance of 135,000,000 reichsmarks made toward the end of March by the Bank for Industrial Debentures,

in anticipation of the 150,000,000 reichsmarks payable to the Reich upon the coming into force of the new plan, representing the April 1 installment of the service of the industrial debentures.

The following table, expressed in millions of reichsmarks, shows the various categories of the floating debt as reported for March 31, 1930, with comparative figures for the end of the three previous financial years:

	Mar. 31, 1927	Mar. 31, 1928	Mar. 31, 1929	Mar. 31, 1930
Treasury bills.....		40	383	400
Treasury certificates under agree- ment with Rumania.....			45	30
Other treasury certificates.....			200	1,216
Guaranties (prestabilization).....	51	42		
Loan from Reichspost.....	110	60	133	23
Short-term loans.....		75	220	210
Other obligations to pay.....	10	9	9	9
Total.....	171	226	990	1,888

The growth of the floating debt during 1929-30 has been discussed at length in the previous chapter in connection with the cash position of the Reich. With the coming into force of the Young plan, important reductions may be expected to take place, partly through the redemption of the 361,000,000 reichsmarks of treasury certificates held by the Agent General, which were in fact retired on May 17, 1930, and also through the various special funds which revert to the Reich as the Dawes plan comes to an end, as outlined in the previous chapter.

In addition, it has been officially announced, in the Finance Minister's declaration of January 27, 1930, to the Reichstag, that the floating debt will be reduced by the proceeds of the loan which the Reich is to receive from Kreuger & Toll and the Swedish Match Co., to which reference has also been made in the preceding chapter. According to the terms of the Swedish match contract the proceeds of the first tranche of the loan, in the nominal amount of \$50,000,000, would not have become payable to the Reich until August 29, 1930, while the proceeds of the second tranche, in the nominal amount of \$75,000,000, were not payable until May 29, 1931. Under the leadership of the Reichsbank, however, a syndicate of German and foreign banks and bankers was formed in March, 1930, for the purpose of discounting both tranches of the loan so as to make the proceeds of the first tranche available to the Reich in April, 1930, and the second tranche in June, 1930. In the communiqué announcing the conclusion of these arrangements, the Fi-

nance Ministry emphasized that the proceeds of the Swedish match loan were intended to serve the reduction of the floating debt and added that "through the discounting of the proceeds of this loan the Finance Minister will bring about the reduction of this floating debt at once. The debt amortization which is contemplated in the law of December 24, 1929, and which, in the course of the budget year 1930-31, is to be effected in the amount of 450,000,000 reichsmarks, from new taxes and economies, is to be carried out in addition." The Finance Minister has thus undertaken that the funds derived by the Reich from the discounting of the proceeds of the match loan will be applied at once to the reduction of the floating debt, instead of finding their way into additional expenditure. The public debt statement for April 30, 1930, however, has not yet been published, and it is not known, therefore, to what extent the floating debt may have been reduced up to this time through the funds that were received in April, 1930, from the discounting of the first tranche.

The official statements of the public debt do not include the contingent liabilities outstanding under the various guaranties undertaken by the Reich since stabilization, principally in aid of industry, housing, foreign trade and agriculture. According to a statement of the Finance Ministry which appeared in the survey accompanying the draft budget of 1930-31, these guaranties aggregated 522,000,000 reichsmarks on January 1, 1930, as compared with 783,000,000 reichsmarks on October 1, 1928. The details are indicated in the following table:

POST-STABILIZATION GUARANTIES ASSUMED BY THE REICH

[In millions of reichsmarks]

	Oct. 1, 1928	Jan. 1, 1930
Agriculture:		
Agricultural machines.....	21	21
Fertilizers.....	34	1
Vinegrowers.....	30	
Live-stock marketing companies.....	22	17
Debt consolidation credits.....		60
Loans to peasants in East Prussia, etc.....		5
Miscellaneous.....	1	1
Total¹.....	108	104
Trade and commerce:		
Flax growing and spinning.....	8	6
Russian credits.....	139	36
Other support of German exports.....	132	134
Industrial undertakings (Mechanischer Werke, Niederschlesische Bergbau A.-G., Komnick A.- G., Ostpreussenwerk).....	30	10
Total¹.....	308	185

POST-STABILIZATION GUARANTIES ASSUMED BY THE REICH—Continued

[In millions of reichsmarks]

	Oct. 1, 1928	Jan. 1, 1930
Shipping:		
Loan to—		
Rhine-Main-Danube Canal A. G.....	37	35
Neckar Canal A. G.....	8	7
Tank steamers.....	17	16
Total¹.....	61	57
Housing and settlements:		
Small dwelling houses.....	200	146
Refugee settlements.....	70	17
Small dwellings for Reich employees and war victims.....	25	2
Total.....	295	165
Occupied territories:		
Communes with curative spas.....	3	3
Agriculture and commerce.....	6	5
Total¹.....	8	8
Miscellaneous:		
Deutsches Museum in Munich.....	4	4
Grand total¹.....	783	522

¹ Differences due to rounding off.

The foregoing table, it appears from the text of the survey, has been drawn on a different basis from the table of guaranties assumed by the Reich as of October 1, 1928, which was published with the survey accompanying the draft budget of 1929-30 and summarized in the last report. This table showed guaranties to a total of 1,189,000,000 reichsmarks as of October 1, 1928, including the guaranty of the dividend on 400,000,000 gold marks, nominal amount, of preference shares issued by the German Railway Co. The table now published, however, does not take this guaranty of railway preference shares into account, either on October 1, 1928, or on January 1, 1930. The survey indicates, furthermore, that even the figures now published for these two dates have not been prepared on the same basis, and that the figures for October 1, 1928, include certain guaranties authorized but not taken up, whereas the figures for January 1, 1930, comprise only guaranties actually assumed and do not include guaranties authorized but not yet taken up, amounting at that date to 550,000,000 reichsmarks, or guaranties which have expired in the meantime with or without being taken up. No conclusions therefore, can be drawn from the apparent decrease of 261,000,000 reichsmarks in outstanding guaranties between October 1, 1928, and January 1, 1930.

The total losses incurred under these guaranties up to January 1, 1930, are reported as amounting to 48,000,000 reichsmarks, of which

40,000,000 reichsmarks were met out of the reserve fund created in the years 1927-28 to 1929-30, while the balance of 8,000,000 reichsmarks remains to be covered in 1930-31 out of an appropriation of 13,000,000 reichsmarks included in the draft budget to replenish the reserve fund. On the general question of the risk of loss under outstanding guaranties, and the dangers of these guaranties from the standpoint of the budget of the Reich, the survey accompanying the 1929-30 budget contained a significant statement from the Finance Ministry of the Reich, in the following terms:

Since, as stated above, most of the guaranteed claims have not yet matured, these particulars do not give an exact picture of the degree of risk entailed by the individual guaranty categories. But it is already possible to say that the greatest risk is entailed by guaranties for credits accorded to individual industrial undertakings (the credits known as subsidy credits), and that in addition considerable losses are to be feared in all cases where assistance to branches of enterprise, instead of taking the form of nonrepayable grants or of Reich credits shown as expenditure in the budget, takes the form of a guaranty of the Reich. There is grave danger that the decision to take up a guaranty, which is no charge on the budget under discussion, will be all too lightly adopted, and that a subsequent budget year will be burdened with charges which the current year is possibly unable to bear.

A further statement in much the same sense appears in the survey accompanying the 1930-31 budget, as follows:

The inherent risk can be kept within tolerable limits if the guaranties are not misused in the sense of providing necessitous undertakings with a backing which enables them to take up short-term credits which then have to be made good by the Reich as they fall due, and if relief is not given to particular branches of industry or particular districts in this form in the place of grants in aid or direct credits by the Reich. Such attempts tend to conceal the real budgetary position inasmuch as expenditure which is bound to be incurred is not shown clearly at the moment of its being voted in the budget. It also tends readily to lead to a certain cheerful readiness to make grants, which revenges itself on later budgets not responsible for the grants.

Notwithstanding the views thus expressed by the Finance Ministry of the Reich, it appears from recent announcements that a further series of guaranties is now under consideration, primarily for agricultural credits and for relief in the agricultural districts toward the east.

A guaranty of the Reich operates, of course, as a pledge of the public credit, and apart from the risk of loss to the budget it puts an indirect burden on the credit of the Reich, which reacts adversely on all direct issues of Reich obligations. There are strong presumptions, therefore, against the assumption of additional guaranties, and it would greatly strengthen the Government's credit and facilitate the manage-

ment of the public debt as a whole if it were clearly understood for the future that no new drafts were to be made on the public credit in this form.

b. Public debts of the States and communes.—Considerable progress has been made by the Reich Statistical Office since the last report in bringing up to date the assembled statistics of the public debts of the States and communes, as reported to the Reich pursuant to the decree of June 23, 1928. Under this decree monthly statements must be furnished by the States and by communes with over 100,000 population, while communes with a population between 10,000 and 100,000 are required to furnish their debt statements quarterly. The figures for the public debts of the States and all the communes are now complete as of March 31, 1928, and are summarized in the table on page 707, to which, in order to give a comprehensive view, the figures for the public debt of the Reich on that date have been added. A similar table was published in the last report, without including the figures for the Reich, but the official information regarding the indebtedness of the communes as of March 31, 1928, had not then been fully published, particularly in respect of post-stabilization indebtedness contracted within Germany. In view of the importance of the missing information, an estimate was made of this indebtedness by the Economic Service of the Transfer Committee and was included in the table published in the last report. The official figures, which are now available, indicate that this estimate was too low by as much as 2,145,000,000 reichsmarks. The estimate, it will be recalled, was based on the reports of loans issued by the public authorities on the capital market, as published monthly in *Wirtschaft und Statistik*, but it now appears, from the survey accompanying the official figures as of March 31, 1928, that nearly 40 per cent of the total poststabilization domestic debts of the communes had taken the form of floating debt, consisting mainly of current advances from the savings banks and of other short credits taken up on the money market, which are not included in the figures published in *Wirtschaft und Statistik* and concerning which no official figures were available at the time the estimate which appeared in the last report was made. The underestimate on this account amounted to 1,525,000,000 reichsmarks, and in addition there was a further underestimate of about 620,000,000 reichsmarks in the funded domestic debt, due to the fact that

the loan figures published in *Wirtschaft und Statistik* failed to show the whole of the long-term debt contracted.

PUBLIC DEBTS OF REICH, STATES AND HANSEATIC CITIES, AND COMMUNES, MARCH 31, 1928

[In millions of reichsmarks]

	Reich	States	Hanseatic cities	Communes
Prestabilization:				
Revalorized paper mark debt—				
Bonds with redemption rights	4,548	28	95	1,049
Bonds without redemption rights	700	1	11	17
Fixed-value debt	1,054	32	40	90
Total¹	6,302	62	146	1,156
Poststabilization:				
Contracted abroad—				
Funded debt	902	379	143	512
Floating debt		133	76	30
Total	902	512	219	542
Contracted within Germany—				
Funded debt	512	287	1	2,570
Floating debt	175	438	33	1,525
	687	725	34	4,095
Total	1,589	1,237	253	4,637
Grand total¹	7,891	1,298	398	5,792

¹ Differences due to rounding off.

The official figures indicate that the total indebtedness of the communes as of March 31, 1928, amounted to 5,792,000,000 reichsmarks, or nearly two-fifths of the total indebtedness of all the German public authorities. Of the indebtedness of the communes on this date, 4,637,000,000 reichsmarks, or about four-fifths of the total, consisted of poststabilization debt, of which 4,095,000,000 reichsmarks were reported as having been contracted within Germany and 542,000,000 reichsmarks abroad. About one-third of this poststabilization debt was reported to be in the form of floating debt, consisting principally of interim credits obtained in Germany pending the issue of long-term loans.

In addition to the assembled statistics as of March 31, 1928, the published figures of the public debts of the States and Hanseatic cities and of the larger communes are now complete to December 31, 1929, while figures for the communes of more than 10,000 inhabitants are available as of September 30, 1929. These later statistics are summarized in the next two sections.

1. *Public debts of the States and Hanseatic cities.*—The public debts of the States and Hanseatic cities as of December 31, 1929, are summarized in the following table, with comparative figures for March 31, 1928, and March

31, 1929, as published by the statistical office of the Reich:

PUBLIC DEBTS OF THE STATES AND HANSEATIC CITIES
[In millions of reichsmarks]

	States			Hanseatic cities		
	Mar. 31, 1928	Mar. 31, 1929	Dec. 31, 1929	Mar. 31, 1928	Mar. 31, 1929	Dec. 31, 1929
Prestabilization:						
Revalorized paper mark debt ¹	28	32	28	95	89	87
Fixed-value debt	32	32	32	40	37	37
Total²	61	64	60	135	126	124
Poststabilization:						
Contracted abroad—						
Funded debt	379	378	373	143	151	150
Floating debt	133	115	174	76	23	100
	512	493	547	219	173	250
Contracted within Germany—						
Funded debt	287	435	438	1	26	30
Floating debt	438	735	799	33	155	173
	725	1,171	1,236	34	180	203
Total²	1,237	1,664	1,783	253	353	453
Grand total²	1,298	1,727	1,843	388	479	577

¹ Excluding bonds without drawing rights and unsettled claims.

² Difference due to rounding off.

The indebtedness of the States on December 31, 1929, stood at a total of 1,843,000,000 reichsmarks, an increase of 116,000,000 reichsmarks in the first 9 months of the financial year 1929–30 as compared with an increase of 429,000,000 reichsmarks in the preceding 12 months. The increase in the floating debt alone was 123,000,000 reichsmarks, contracted about one-half abroad and one-half within Germany, while funded debt decreased by about 7,000,000 reichsmarks.

The debts of the Hanseatic cities have continued to grow at a somewhat faster rate, and are reported as amounting on December 31, 1929, to a total of 577,000,000 reichsmarks, an increase of about 98,000,000 reichsmarks in the first 9 months of 1929–30 as compared with an increase of 91,000,000 reichsmarks in the preceding 12 months. As in the case of the States, the increase was almost entirely confined to the floating debt, other debt having remained practically stationary. About 81 per cent of the increase in the floating debt is reported to have been contracted abroad through the sale of treasury certificates.

The States and Hanseatic cities, in addition to their direct indebtedness summarized in the foregoing table, have also incurred debts to the Reich, mainly in the form of reimbursable

credits for housing, and have assumed guaranties for various purposes, principally in respect of bonds issued by their public credit institutions. The credits from the Reich to the States amounted to 139,000,000 reichsmarks on December 31, 1929, showing a decrease of 62,000,000 reichsmarks in the first nine months of 1929-30 in consequence of the reimbursement of credits for mortgages on small dwellings granted in 1926-27. Reich credits to the Hanseatic cities, on the other hand, remained practically unchanged at 19,000,000 reichsmarks on December 31, 1929. Information concerning the guaranties assumed by the States and Hanseatic cities is not available for any date later than March 31, 1928, when they are reported to have amounted to a total of 618,000,000 reichsmarks.

2. *Public debts of the communes.*—The official statistics of the indebtedness of the communes, though not so current or complete as those for the other public authorities, are still adequate for an appreciation of their present position. The latest figures covering all communes are for March 31, 1928, already summarized in the table on page 707; but for the communes with over 10,000 inhabitants and for the associations of communes, statistics of public debts are available as of September 30, 1929, while for the communes with 100,000 or more inhabitants the debt figures are available as of December 31, 1929.

The table opposite shows, as of March 31, 1928, and September 30, 1929, the public debts of the communes with more than 10,000 inhabitants and of the associations of communes. No figures are available for the public debts of the communes with 10,000 inhabitants or less on any date later than March 31, 1928; but even without these figures the table gives a comprehensive picture of communal indebtedness and of its growth during recent years. In the figures of March 31, 1928, the debts of the smaller communes amounted to only 18.5 per cent of the total, while the official commentary accompanying the figures of September 30, 1929, states that "the share of these smaller communes in the total communal debt has probably decreased since March 31, 1928."

The table shows that in the 18 months ended September 30, 1929, the public debts of the communes with more than 10,000 inhabitants and of the associations of communes increased by a total of 2,371,000,000 reichsmarks, or about 50 per cent. Of this increase about 10,000,000 reichsmarks are reported as having resulted from the absorption of smaller communes by the larger ones. During the same

period the debts of the States increased by 464,000,000 reichsmarks, or 36 per cent, and those of the Hanseatic cities 149,000,000 reichsmarks, or 39 per cent. The communes whose debts are included in the table have thus increased their indebtedness at an appreciably greater rate than the States and Hanseatic cities.

PUBLIC DEBTS OF THE COMMUNES WITH MORE THAN 10,000 INHABITANTS AND OF THE ASSOCIATIONS OF COMMUNES

[In millions of reichsmarks]

	Mar. 31, 1928	Sept. 30, 1929	Increase ²
Prestabilization:			
Revalorized paper mark debt ¹	924	945	21
Fixed-value debt.....	89	114	26
Total.....	1,013	1,059	47
Poststabilization:			
Contracted abroad—			
Funded debt.....	497	706	209
Floating debt.....	27	12	³ 15
Total.....	524	718	195
Contracted within Germany—			
Funded debt.....	1,921	2,979	1,058
Floating debt.....	1,267	2,338	1,071
Total.....	3,188	5,317	2,129
Total ².....	3,712	6,036	2,324
Grand total ².....	4,724	7,095	2,371

¹ Excluding bonds without drawing rights and unsettled claims.

² Differences due to rounding off.

³ Decrease.

The growth of the communal indebtedness during the 18 months' period occurred principally in the domestic poststabilization debt, which increased by 2,129,000,000 reichsmarks, of which 1,058,000,000 reichsmarks represented funded debt and 1,071,000,000 reichsmarks floating debt. The prestabilization debt showed an increase of 47,000,000 reichsmarks, due to the further settlement of disputed claims in the case of the revalorized debt and to a more complete assembling of the figures of the fixed-value debt.

The debt figures in the foregoing table do not include the credits granted to these communes by the Reich or the States for housing, productive unemployment relief, etc., or those obtained from rent tax funds. On September 30, 1929, the credits from the Reich and the States aggregated 435,000,000 reichsmarks, as compared with 404,000,000 reichsmarks on March 31, 1928, while credits from rent tax funds aggregated 353,000,000 reichsmarks on September 30, 1929, as compared with 204,000,000 reichsmarks on March 31, 1928.

The total floating debt of the communes included in the table amounted to about 2,350,000,000 reichsmarks on September 30, 1929, practically all of which is reported to have been contracted within Germany, though substantial amounts indicated as contracted within Germany are probably held abroad. This tremendous volume of floating debt, in conjunction with the greatly increased floating indebtedness of the Reich, has kept the domestic credit market under heavy pressure throughout the past year. The tendency of the floating debt to increase more largely than the funded debt is characteristic of the recent development of the indebtedness of all the German public authorities, including the Reich. In this connection the official survey accompanying the debt figures of the communes for March 31, 1928, states that before the war intermediate and short-term debt was created by the communes almost entirely for the purpose of meeting temporary cash requirements, while the postwar growth of communal floating debt has been due largely to the unwillingness of the communes to borrow at long term at the high rates prevailing in the domestic capital market. The true explanation, however, is to be found in the fact that for some years past the communes have lived largely beyond their incomes and have fallen back more on short-term and intermediate credits to finance capital expenditures and public works which should never have been undertaken unless first assured of proper financing at long term. The result has been to put a severe strain on the domestic market and on the cash position of the public authorities, and under pressure of this necessity emergency measures have had to be taken, as outlined in the previous chapter, to deal with the problem of debt consolidation.

The table below shows the public debts of the communes with 100,000 or more inhabitants on four different dates beginning March 31, 1928, and ending December 31, 1929. These are the latest figures of communal indebtedness, and they make it possible to follow the development of the public debts of the larger communes up to the end of 1929. The indebtedness of these communes on March 31, 1928, amounted to about two-fifths of the aggregate public debts of the communes on that date, and the subsequent figures up to September 30, 1929, are already reflected, of course, in the statistics given in the previous table for communes with more than 10,000 inhabitants.

PUBLIC DEBTS OF THE COMMUNES WITH 100,000 OR MORE INHABITANTS
[In millions of reichsmarks]

	Mar. 31, 1928	Mar. 31, 1929	Sept. 30, 1929	Dec. 31, 1929
Prestabilization:				
Revalorized paper mark debt ¹	559	541	556	567
Fixed-value debt	59	74	74	73
Total ²	618	615	629	640
Poststabilization:				
Contracted abroad—				
Funded debt	413	593	592	602
Floating debt		5	1	1
	413	598	593	603
Contracted within Ger- many—				
Funded debt	1,330	1,148	1,367	1,415
Floating debt		1,010	1,286	1,443
	1,330	2,158	2,653	2,858
Total ²	1,743	2,757	3,246	3,461
Grand total ²	2,361	3,372	3,875	4,100

¹ Excluding bonds without drawing rights and unsettled claims.

² Differences due to rounding off.

The indebtedness of the large communes, it will be observed, increased by 729,000,000 reichsmarks in the first nine months of 1929-30, as compared with an increase of 1,011,000,000 reichsmarks during the whole year 1928-29. An appreciable part of this increase appears to have resulted from the absorption of small communes, and during the first half of the year alone about 176,000,000 reichsmarks out of a total increase of 503,000,000 reichsmarks are reported to have been due to this cause. The floating debt of the large communes increased from 1,015,000,000 reichsmarks on March 31, 1929, to a total of 1,444,000,000 reichsmarks on December 31, 1929, practically all of which is reported to have been contracted within Germany.

In addition to the public debts included in the table, the communes with 100,000 or more inhabitants are reported to have taken up credits out of public funds to a total of 346,000,000 reichsmarks on December 31, 1929, as compared with 310,000,000 reichsmarks on March 31, 1929. About one-half of these credits was granted by the Reich and the States, and about one-half was obtained from rent tax funds.

VII. GERMAN CREDIT CONDITIONS AND THE CURRENCY

The German economy during the past year has had to contend with many disturbing forces, some of them purely internal, as, for

example, the state of the public finances; others mainly due to the suspense and uncertainty attending the long discussions over the complete and final settlement of the reparation problem; and still others, world-wide in their effects, including first the strong movement of funds away from Europe during most of 1929, and then the sharp decline of commodity prices and the general recessions in production and trade during recent months. In the face of these difficulties, the German economy as a whole has succeeded in maintaining its essential stability, and in some very important directions it has shown new strength and self-reliance. Some of the disturbing elements have now run their course, and with the coming into force of the Young plan there enters a new factor of stability and confidence. But other adverse factors, such as the state of the public finances and the general depression of trade, still remain, and their effects are to be seen in a somewhat diminished volume of business in Germany and in the high level of unemployment which prevails.

Before dealing in detail with the results of the period, it is interesting to review in broad outline the changes in business and credit conditions which have taken place since the end of 1928. At that time, it will be recalled, the available figures showed that normal forces had again asserted themselves in many departments of the German economy, giving evidence of underlying stability and of a broader and sounder basis of credit. There had already occurred, however, an event of considerable importance, namely, the November, 1928, lockout in the Rhenish-Westphalian steel and iron industry, which accelerated the seasonal rise in unemployment and affected indirectly the activity of other industries. In the early months of 1929 the effects of the lockout were aggravated by weather of unprecedented severity, which brought seasonal unemployment to the highest level reached up to that time and restricted both the output and distribution of goods. But with the coming of spring there was a prompt rebound, and by midsummer the shortages of the winter months had been largely made up. In some particulars, notably in heavy industry, the volume of production reached a higher level than at any previous time, and from April to November, 1929, the general index of production stood well above the average of the two previous years. During the late autumn a recession developed in many branches of industry and trade, which was carried somewhat further in the early months of 1930. But

taking the year 1929 as a whole, the figures show that the physical volume of production and trade was slightly larger than in 1927 and 1928, both years of large business activity.

The outstanding commercial development of the year 1929 was the further growth of the export trade, with the result that the value of goods exported finally overtook and slightly exceeded the value of imports, and this without any reduction from the previous year in the volume of raw materials imported for the use of German industry. The value of exports has been increasing since 1925 at an average rate of about 1,000,000,000 reichsmarks a year, but heretofore, except in 1926 when imports were seriously curtailed, exports had still remained below imports. This deficiency in the merchandise trade balance has been one of the major causes for Germany's dependence in previous years on foreign credit, and its disappearance in 1929 was of primary importance because it diminished the degree of that dependence. In the first quarter of 1930 the vitality of the export trade has been well maintained.

The continued growth of exports, which itself had much to do with maintaining the volume of production during 1929 at a high level, reflects among other things the results of the laborious process of rationalization and consolidation which has been under way ever since 1925. The efficiency now attained has reduced costs of operation, and reorganization generally has greatly increased the capacity of German industry to compete in foreign markets. In recent months consolidations or intimate working agreements have been effected in banking and shipping, which correspond in their practical consequences to the earlier combinations in the steel, potash, and chemical industries.

A factor only less important than the growth of exports in bringing German foreign trade into balance in 1929 was the greater productivity of agriculture, the effect of which, coupled with the lower prices paid for foreign grains, was to reduce the value of imported foodstuffs. But the same conditions added seriously to the difficulties of agriculture, which were already pressing, particularly in some sections, because of the heavy burden of interest on debts incurred in previous years. The situation in the district east of the Elbe has been acute for some time, but the further decline in the prices of agricultural products that occurred over the turn of the year 1929-30 intensified the difficulties of agriculture as a whole. The special measures for the relief of agriculture, including the increased duties

recently imposed on agricultural products and the other measures which the Government has under consideration, have been followed by an improvement in domestic grain prices, but they have raised at the same time questions of far-reaching importance for the business and commercial policy of Germany. On the other hand, it seems clear that the possibilities of rationalization are by no means exhausted, and that much can still be accomplished not merely in the development of intensified forms of agriculture but also through technical improvements in the methods of distribution and the organization of agricultural credits.

In the field of credit, the German money market in 1929 was confronted with unusual difficulties on both sides, the side of supply and the side of demand. In each previous year since stabilization, foreign credits at long or short term had flowed into Germany in great volume. But in 1929, owing to conditions at home and in the international money markets, the amount of fresh credit from abroad was much reduced. The total of long-term loans for the year fell to about one-fifth of the former amount, and the net growth of short-term credit of all sorts appears also to have been much reduced.

The special factors operating to restrain the flow of credit into Germany during 1929 centered on three principal developments—the great speculative activity prevailing on the New York Stock Exchange, which until the autumn drew funds from all over the world and restricted the market for fixed-term investments of all sorts; the restraints exercised by the Reichsbank on the use of foreign credit at both long and short term; and the negotiations for the complete and final settlement of the reparation problem, which extended over the entire year. The most acute phase of the reparation negotiations passed in May, 1929, when it became clear that the committee of experts was about to reach an agreement, but in the earlier period of suspense, as appeared from the last report, an immense amount of liquid funds had been withdrawn from the German market. Later in the year the return flow of funds somewhat more than made up for this loss, but the recurrent waves of uncertainty with respect to the final settlement and the controversies incidental to it discouraged both the long-term borrower and the long-term lender.

The demands made on the money market during 1929 were also exceptional. Until September, for example, the reparation charge was running at the rate of 2,500,000,000 gold marks

a year, the full amount fixed under the Dawes plan for the standard annuity, and reparation payments were thus being made at a level 750,000,000 reichsmarks higher than in any previous year of the Dawes plan, and higher, indeed, than will be required in any year under the Young plan. Beginning with the month of September, under The Hague protocol of August 31, 1929, reparation transfers were in effect placed on the reduced basis provided in the Young plan. Another demand, effective during the whole year 1929, was for interest and sinking fund payments on debts incurred abroad, which stood at the largest figure up to that time, reflecting, of course, the rise in German foreign indebtedness during previous years. At the same time the money market had to support a volume of housing construction somewhat larger than in previous years and to provide funds to carry a high average volume of production and trade. Finally, the public authorities, by reason of their urgent demands for credit, exerted greater pressure than ever before on the money markets. This pressure was most acute in the final months of the year, when for a time the uncertainty as to the position of the public finances overshadowed the entire business situation, and the Government of the Reich was obliged to take emergency measures for the purpose of meeting its year-end requirements.

The pressure thus exerted on the money markets from all sides had its natural consequence in high money rates, and except for the first quarter of the year interest rates ranged higher in 1929 than in any of the preceding three years. In April and May, during the period of suspense over the outcome of the Paris conference, money rates reflected a temporary crisis of confidence, and this was followed by a brief period in which the Reichsbank was obliged to return to the policy of credit rationing. But even after these special influences had passed, representative rates ranged from midsummer onwards to the end of the year from half a point to as much as two points above the rates prevailing in corresponding seasons of 1927 and 1928.

During the first few months of 1930, consistently with the ease of money which has developed in other important markets, rates for short-term loans have rapidly declined. At the end of April the Reichsbank rate stood at 5 per cent, a level touched only once before since stabilization and $2\frac{1}{2}$ points below the rate of last summer. Long-term rates, as expressed in the yield of standard bonds at current market prices, have also declined though

much more moderately. These lower rates for money are of unquestioned benefit to the German economy at large, but it should not be overlooked that the decline thus far has been mainly a reflection of lower rates in other markets. The margin by which representative rates in Germany exceed rates in other important centers is still about the same as during the whole second half of 1929, and it was only during April that any narrowing of the spread began to appear.

Largely by reason of the improvement in the balance of trade and the higher money rates prevailing in Germany as compared with those in other principal markets, the reichsmark has stood ever since June, 1929, as one of the strongest currencies in the world. Indeed, its strength in the foreign exchanges has been such that before the end of March, 1930, the gold and reported devisen reserves of the Reichsbank had somewhat more than recovered the losses incurred in the period which culminated in the crisis of May, 1929, while at the end of April the total reserves, reported and unreported, are understood to have been somewhat higher than at any previous time.

From the broad outlines drawn in the foregoing paragraphs it appears that the German economy during the larger part of the year 1929 had to deal with exceptionally difficult credit conditions. Nevertheless, the physical volume of production and trade, taking the year 1929 as a whole, was slightly larger than in the best preceding year, and the volume of goods exported considerably exceeded the exports of former years. The tendency of domestic business toward the end of 1929, however, was downward, and this period of slackness has in the main continued through the months covered by the latest available figures, coinciding with the depression in business elsewhere in the world. In short, German industry and trade have shown remarkable resistance during all this period to adverse and sometimes critical influences, and only late in the period have definite signs of recession appeared, in harmony with similar conditions in other countries.

Many of the difficulties which proved most disturbing in 1929 are already passed or have been somewhat mitigated. The high cost of credit the world over, for example, has given way, at least for the time being, to an unusually low international interest rate. This development is of special importance to Germany, which must still have recourse, though doubtless to a diminishing degree, to foreign markets for marginal amounts of capital. The advantage thus derived from low interest rates goes hand

in hand with the benefit Germany obtains from the decline that has taken place in the prices of the raw materials which she has to import for the use of her industries. As an importer of credit and of raw materials, a decline in prices works directly to reduce the cost of manufacture and of doing business generally.

The final agreement reached at The Hague on January 20, 1930, which took the form of German law on March 13, 1930, removed the uncertainty as to the amount of the reparation obligations and brought to an end the suspense that had attended the course of the reparation negotiations. This feeling of suspense, and particularly the agitation that continued up to the very end over various phases of the settlement, dampened business enterprise and introduced an element of hesitation and doubt into German credit and business conditions. The removal of the reparation question from the field of political controversy was one of the principal contributions of the Dawes plan to the reconstruction of Germany, and the final settlement of the whole problem under the Young plan, with the lifting of foreign controls and the substitution of a certain for an uncertain obligation, coupled with the large reduction in the annual financial burden, should prove a most constructive factor in the development of German economic life.

Other factors remain, which have a restraining influence. The recent decline in business activity in other important countries of the world and the general fall in commodity prices provide elements of uncertainty which serve to restrain business recovery in Germany, as well as abroad. In addition, within Germany itself, basic unemployment remains a stubborn problem, and agriculture in large sections of the country finds itself in a difficult position. At the same time, the disorder in the public finances continues to be one of the most serious factors of disturbance in the entire situation, and it remains the chief problem still to be settled. Its effects have been manifested in many directions, not the least of which is the influence it exerts on the cost of credit. A considerable part of the margin by which interest rates in the German market exceed those in the international markets is attributable to the public authorities, whose requirements in the shape of taxes and loans limit the accumulation of investment funds and raise the cost of money to private borrowers, and at the same time seriously interfere with the efforts of German business and industry to readjust themselves to the changed conditions

of world prices and world trade. This handicap can only be removed by internal measures of financial reform, and until these have been taken the position of the public finances will remain one of the principal obstacles to the economic progress of Germany.

a. Demand for credit and the supply.—Before proceeding with the detailed study of the numerous factors of supply and demand which have entered into the German credit situation during 1929 and the first few months of 1930, it is useful to point to two developments which distinguish the period from any preceding it. One is the growth of exports to the point of equilibrium in the trade balance, with imports at a high level, and the other is the decrease in the volume of foreign borrowing.

It is possible, of course, to establish a relationship between these two developments only indirectly, through the German money market as a whole. Converging on the German money market, regarded as a unit, are all the demands from whatever source, such as the innumerable and varied demands for funds at both long and short term for purely domestic purposes, as well as the demands for funds ultimately finding their way abroad. The latter include funds utilized to make reparation transfers, to pay for imported goods, to pay interest on foreign debt and so on. All of these several demands taken together exert pressure on the market for the funds available in it. On the other side, that is, the side of supply, funds accumulate from the export of goods abroad and from domestic sources, through savings or otherwise, and if these are not sufficient to balance the sum total of the demands, the latter are restricted, or funds are attracted from abroad, or both.

During 1929, as has already been indicated, the German money market was subjected to demands which in several directions were exceptionally large. Yet for reasons which will presently appear in detail, the supply of foreign funds available to the market in the shape of loans and credits was much reduced as compared with previous years. The market was thus faced with a shortage of funds, and in consequence encountered certain difficulties, which would have been much accentuated had not access to foreign sources of funds been found through larger shipments of goods. The increase in exports offset somewhat more than 1,000,000,000 reichsmarks of the decline in loans and credits, and relieved the market to that noteworthy extent. In its broader aspects this result represented a long step forward in

the direction of independence of foreign funds as a source of credit.

1. *Funds from abroad.*—The limitations on the inflow of foreign funds during the year 1929 were due in part to German banking policy and still more to conditions in the international money markets. The Reichsbank for some years past has exerted its influence against foreign borrowing, and whenever internal conditions permitted has reinforced its influence with its discount rate. For about four months in the spring of 1929, as appears in the next section of this chapter, the Reichsbank's rate stood lower than at any time in the preceding year or more, and other money rates in the German market were at levels consistent with it. Abroad, on the other hand, largely by reason of the great speculative activity on the New York Stock Exchange, which drew funds from all over the world, money conditions were more or less strained and the demand for foreign bonds in the principal markets was very narrow. The market for issues of bonds remained limited well up to the end of the year.

FOREIGN LOANS

[In millions of reichsmarks]

	1925	1926	1927	1928	1929	1930, January- April	Total
Loans of the States.....	138.6	270.6	267.3	-----	-----	-----	676.5
Provincial or communal loans.....	256.0	249.5	112.5	237.4	34.5	5.0	894.9
Loans of public and semipublic undertakings:							
(a) Of the Reich.....	161.7	25.2	336.0	152.3	-----	-----	675.2
(b) Of the States, Provinces, and communes.....	202.8	351.5	205.7	588.3	124.4	179.0	1,651.7
Loans of private enterprises.....	472.0	742.0	597.3	529.1	156.1	155.5	2,652.0
Loans of various church organizations.....	25.1	57.6	4.1	32.1	22.4	8.8	150.1
Total.....	1,256.2	1,696.4	1,522.9	1,539.2	337.4	348.3	6,700.4

The figures shown in the foregoing table for the year 1929 differ but slightly from those for the first six months of the year, as given in the interim report. Indeed, in the six months from June 30 to December 31, 1929, the new long-term issues placed abroad amounted to less than 50,000,000 reichsmarks, of which 15,000,000 reichsmarks were for a municipality, 21,000,000 reichsmarks to a steamship concern, and about 12,000,000 reichsmarks to church organizations. All told, the long-term loans issued abroad for German account in 1929 were hardly more than one-fifth the amount offered

in any one of the previous three years. The net increase in the gross foreign indebtedness on that account was probably negligible, after taking into account sinking-fund installments paid on the debt already outstanding. During the first four months of 1930 long-term issues abroad aggregated 348,000,000 reichsmarks, or more than during the whole of 1929. The main issues consisted of one for a private enterprise in February and two for semipublic electrical concerns in March and April. These transactions, however, can not be regarded as having constituted in any important sense a revival of the foreign market for long-term German loans.

The changes during 1929 in the short-dated debt owing abroad were far more pronounced than in the case of the long-term debt. In the first five months there was a rapid outflow of funds, due in the first instance to the differential in money rates prevailing during the early part of the year, and later to the uncertainty over the outcome of the Paris conference. During the summer and autumn the current turned the other way, and funds again flowed toward Germany. It is impossible, in the absence of published figures, to state in accurate terms the extent of the decline in short-dated debt during the spring or the extent of the rise during the remainder of 1929. From the evidences available it may be estimated that there was a net increase which may be very roughly placed at somewhere between 800,000,000 and 1,200,000,000 reichsmarks. In the early months of 1930 international money rates still favored a flow of funds into Germany, but the extent of the movement is a matter of conjecture. On the other hand, during the past year and more, there appears to have been a considerable flow of funds abroad for the purpose of evading taxation, and, what is tantamount to the same thing, a retention abroad of interest and profits accruing in foreign markets for German account. The amounts involved are, of course, impossible to appraise.

In order to remove some of the existing restrictions placed on capital invested in Germany, whether foreign or domestic, a bill was approved by the Reichsrat on May 2, 1930, and has since been presented to the Reichstag, the intent of which is to permit the Government of the Reich, with the assent of the Reichsrat and a committee of the Reichstag, to reduce or suppress taxes on income derived from capital and on capital transactions of various sorts. The purpose of any changes in taxes made under this law, according to the

official memorandum presented with it, will be to facilitate the investment of foreign funds in German enterprises and to encourage the retention of German capital in the country, as well as the return of domestic capital now invested abroad, and thereby to enlarge and cheapen the supply of credit available for the German economy.

The most recent estimate of the total short-dated debt which has been published with official authority remains that of the Institut für Konjunkturforschung, which was given in the last report. According to this estimate, the volume of foreign funds in Germany, other than long-term credits, amounted at the end of 1928 to about 8,500,000,000 reichsmarks. This figure was not presumed to be more than an estimate; it represented the accumulated balance of funds, other than the proceeds of long-term loans, moving into and out of Germany, as shown in the balance of payments estimates of the Reich Statistical Office. Out of the total it was estimated that 7,000,000,000 reichsmarks were in the form of short-term credits. The Institut, it should be added, estimated a decline of 500,000,000 reichsmarks from the total figure of 8,500,000,000 reichsmarks during the first four months of 1929, but did not indicate the nature of the reduction.

There has been another source of funds from abroad of considerable importance during the past year, though the amount necessarily remains a matter of conjecture. From time to time substantial purchases of shares for foreign account have been made in the German market, offset in part at least by purchases for German account in foreign markets. During 1929 there appear to have been relatively unimportant purchases of shares by foreigners in the open market, but there has been a considerable number of cases where foreign corporations have acquired direct participations in kindred German industries. In some cases these participations have been acquired by an exchange of shares; in others purchases have been made for cash. Sometimes these participations amounted merely to the reestablishment of relations broken by the war; sometimes also they were prompted by the desire of the foreigner to get a foothold in the German market or to utilize a German plant for producing goods for export to neighboring markets; and sometimes the initiative came from the German side as a means of enlarging working capital. A list of the principal new participations in German enterprises during 1929 has recently been published by the Institut für Konjunkturforschung. On the basis of partial data, the

Institut came to the conclusion that the total amount involved in such participations during 1929 must have equaled or exceeded the amount of German loans publicly issued abroad, that is, about 350,000,000 reichsmarks. In this estimate, it should be observed, no allowance has been made for German participations in foreign enterprises.

The consideration of the economic effects of foreign borrowing belongs to preceding years rather than to the present, and the discussions given in previous reports are not repeated here, except by way of referring to the general function which foreign funds have performed. Without reference to the specific purpose which any particular loan was intended to serve, it is clear that foreign credits as a whole have greatly accelerated the process of German reconstruction, by providing essential funds at a time when the German economy was not yet strong enough to provide them for itself. The proceeds of foreign loans, upon entering into the German economy, supplied the material out of which German labor and enterprise could create new and larger domestic values, and in the four years of active borrowing, considering conditions at the start and the funds then available, there took place a growth of trade and an extension and renovation of plant such as had not been equaled in any previous period of equal length. The sound character of that growth depended, of course, primarily on the magnitude of the supplemental values created, and, secondly, upon the capacity of those values to earn a return in excess of the cost of the borrowed funds. Taken as a whole, and without reference to any individual loan, there is no reason to doubt that the new values created in Germany during the period of the Dawes plan have aggregated several times the amount of the foreign debt incurred. This was manifest a year ago, and the experience of the past year, when the inflow of funds has been reduced to small proportions, amply confirms this conclusion.

2. *Foreign exchanges and interest rates.*—The first five months of 1929 formed a period when the reichsmark showed pronounced weakness in the foreign exchanges, but the remainder of the year, together with the early part of 1930, has been a period of pronounced strength. The two periods compare, of course, with those mentioned in the previous section, the first covering the months when short-time funds were flowing away from Germany and the second when the reverse current had set in.

Up to the close of the first quarter of 1929, under the influence of the relatively low Reichs-

bank rate and market rates corresponding with it, the foreign exchanges responded to ordinary economic forces and there was a substantial outflow of funds, reflecting the more profitable use to which money could be put in other markets. In April, 1929, however, forces of another nature intervened to depress the reichsmark still further and to cause very large withdrawals of gold and devisen from the Reichsbank. These forces had their origin in the suspense incident to the work of the experts' committee in Paris, and in the doubts which arose in the second half of April as to whether the conference would succeed in reaching a positive result. Foreign bankers showed more and more disinclination to buy German bills, and late in April there developed some disposition to withdraw deposits then subject to call and to give notice with respect to time deposits. Within Germany a tendency was manifested to convert domestic balances into foreign funds and to postpone the bringing home of balances accruing abroad. There was anxiety to cover open commitments in foreign currencies; and for the first time since stabilization became effective in 1924, some nervousness showed itself with respect to the stability of the currency, and a demand developed among people of small means for notes in foreign currencies. These were quoted for a time at a premium over the rates for telegraphic transfer.

The Reichsbank freely met the demands for foreign exchange as they were made, but it was not until April 25, 1929, that it raised its rate from 6½ per cent (where it had stood since January 12) to 7½ per cent. Subsequently, the Reichsbank took other measures to protect the exchange, which are described in the next section. By the middle of May the turning point had come at the Paris conference, and this gave strong support to the Reichsbank's protective measures. The exchange strengthened rapidly and on May 25, 1929, for the first time since the end of December, 1928, the dollar was quoted below par with the reichsmark, and sterling declined to the computed gold import point.

From the last week in May, 1929, up to the present, with very rare exceptions, the reichsmark, as measured by its position in the foreign exchanges, has been one of the two or three strongest currencies in the world. The preponderant reason, of course, has been the high level of interest rates in Germany as compared with those prevailing in other markets, but the improved balance of trade has also been a factor of great importance. The foregoing

diagram [omitted], showing interest and foreign exchange rates Berlin-New York, illustrates only one interest rate in each of the two countries, a rate which is nearly though not absolutely comparable between the two markets, and is perhaps the least subject to fluctuation of all open-market rates currently quoted. It will be seen that as a rule, whenever the margin has widened between the Berlin rate and the rate in New York, the value of the dollar in terms of reichsmarks has tended to fall; and, on the other hand, whenever the margin has narrowed, the value of the dollar has tended to rise. It should be understood, however, that during most of 1929, up to the time in October when the intense speculative activity on the New York Stock Exchange came to an end, the rate in New York which exerted the most potent influence was that for stock-exchange call loans. The fluctuations in this rate ranged in the spring between 6 and 20 per cent, and in the summer between 6 and 15 per cent; it was not until October that it fell below 6 per cent.

The high level of money rates abroad, for which the rates current in New York were the principal moving cause, made it necessary for the Reichsbank, if it was to recover the gold and devisen reserves lost in the spring, to maintain its discount rate at 7½ per cent until November 2, 1929, and other money rates in Germany also remained high.

The action which the Reichsbank took to reduce its rate on November 2, 1929, was a recognition of the change in the international level of interest rates, and also of the fact that the position of the Reichsbank in respect of both the amount of its reserves and the demand for its credits had become much easier. The reduction, which was by half a point, left the discount rate at 7 per cent. The Federal Reserve Bank of New York had reduced its rate at the end of October from 6 to 5 per cent, and in November made a further reduction to 4½ per cent. The Bank of England lowered its rate in successive half-point stages from 6½ to 5 per cent, and a number of other European central banks made one or two reductions from the high rates previously in effect. In consequence, the spread between rates for money in Germany and those prevailing in important foreign markets was broader in the final weeks of 1929 than at any time in nearly two years, contrasting with the narrowness of the spread at the close of 1928 and during the early months of 1929.

The very moderate reduction at the beginning of November brought the Reichsbank

rate to the same level as a year before, but rates in the open market averaged from half a point to one point higher than in the previous year. The special factor exerting pressure on the market was the immense volume of demands from the Reich, the States, and the communes, which reached something of a climax as the turn of the year approached.

In the first few weeks of 1930, consistently with the usual easing of money at that season, there came a decline in money rates which has been carried well beyond the period when a countermovement usually takes place. The Reichsbank, in recognition of this tendency and of the strong foreign exchange position of the reichsmark, has made four further reductions of one-half point each in its discount rate—on January 14, 1930, to 6½ per cent, on February 5 to 6 per cent, on March 7 to 5½ per cent, and on March 25 to 5 per cent, thereby establishing the rate at the lowest level since 1927. Other money rates have declined correspondingly and in February and March averaged less than in the corresponding months of both 1928 and 1929; in April they declined practically to the low level prevailing in 1926 and the early months of 1927. Central bank discount rates and money rates in other countries have also declined since the turn of the year, with the result that the spread between rates in Germany and those abroad is still almost as wide as during the summer and autumn of 1929.

In general, and in summary of the foregoing, it appears that interest rates in Germany from the first quarter of 1929 until the end of the year were higher on the whole than in corresponding seasons since the end of 1925, and that the decline since the beginning of 1930 has been largely a reflection of money-rate movements in other countries. The high level of interest rates in Germany has been due to a complex set of conditions, partly international and partly internal. The forces originating abroad appear now to have spent themselves, but the most disturbing of the internal forces, that arising from the demands of the public authorities, largely remains. It is manifest that high interest rates increase the cost of every business transaction involving the use of credit and thus operate as a direct burden on the development of the economy. There can be no doubt that in this way the disorder in the public finances has had a restraining effect on business, and that it would give great relief to the whole structure of credit and business if effective measures of reform were to be taken.

3. *Reichsbank reserves and credit.*—The forces already described have produced important

changes in the volume of the Reichsbank's reserves and in the amount of Reichsbank credit employed. The period when these forces had their most acute effect centered on the month of May, 1929, when the reserves fell to the lowest point since the middle of 1926, and the volume of Reichsbank credit in use rose to the highest point since stabilization.

In the first weeks of 1929 the Reichsbank's stock of gold and devisen eligible for reserve against notes showed a slight rise, thereby continuing the movement which had proceeded with great vigor during most of 1928. On January 23, 1929, the reserves stood at 2,893,000,000 reichsmarks, the largest total up to that time on any reporting date since stabilization and a figure not to be attained again for more than a year. From the end of January, 1929, onward to May 7, 1929, there was a progressive decline, which was greatly accelerated toward the end of the movement. Without counting supplementary amounts of devisen taken from its unreported stock (which includes among other items foreign bills of maturities longer than are legal for currency reserves), the decline in the Reichsbank's gold and devisen holdings amounted to 1,074,000,000 reichsmarks. Thereafter, in response to the measures which the Reichsbank took to protect its position, and reflecting also the prospect of agreement in the experts' committee at Paris, a contrary movement began which has continued fairly consistently up to the present, favored by the differential in interest rates which has prevailed between German and foreign markets. By the end of December, 1929, the reserves stood at 2,687,000,000 reichsmarks, a rise for the period of 868,000,000 reichsmarks, and by the middle of March, 1930, the loss incurred during the preceding year had been fully recovered. Since that time, gold reserves have continued to increase while reserves of reported devisen have been reduced, and as a consequence total reported reserves have shown little change. This leaves out of account any changes which may have occurred in the devisen not reported in the periodical condition statements of the Reichsbank. But according to its annual report, the Reichsbank's stock of such devisen on December 31, 1929, stood at 409,000,000 reichsmarks, somewhat higher than the year before, and there are indications that the unreported holdings have since been increased, in order to obtain the benefit of the higher yield that can be secured from bills of longer maturities.

During the period of decline in the spring of 1929 the Reichsbank sold devisen to the market freely upon demand. Its sales of gold, made for the purpose of replenishing its holdings of devisen, the Reichsbank carried out on its own account in the main European and overseas financial markets. These sales had the practical result of preventing the purchase and shipment of gold from Germany on private account. During the subsequent period of rise, the Reichsbank both bought devisen when offered at favorable rates and purchased gold when the latter was delivered to it at its main office in Berlin or at any of its branches. As a matter of financial practice, the Reichsbank reserved to itself full discretion as to the amount of devisen it was prepared to buy and the price it was prepared to pay. The gold received during the summer and early autumn was derived chiefly from the British market, representing in part gold newly shipped from South Africa. Later in the year, gold was received from Argentina, mostly in the shape of pre-war German gold coins, and at the very end of the year from the United States. During the first five months of 1930, further gold was purchased in London for German account, partly new gold from South Africa and partly gold offered in that market by Spain. Substantial shipments of gold have also been received from France, the first since the war.

The volume of Reichsbank short credit outstanding at the end of May, 1929, was larger than at any time since stabilization, as appears in the foregoing diagram and table [omitted]. The figures given are the sum of three items currently shown in the Reichsbank statement, namely, bills and checks, Reich treasury bills, and collateral loans. For the period up to the middle of 1926 the figures have been adjusted as explained in previous reports, on such a basis as to afford a fair comparison with the figures of later dates.

In addition to the pressure which its 7½ per cent discount rate exerted on the volume of credit, the Reichsbank for a brief period in May and early June, 1929, resorted to the emergency measure of rationing credit, a means which it had employed in the period of recovery from the inflation and had found to be effective. By the middle of June, when conditions had reassumed a more normal aspect, the Reichsbank was able to abandon this measure. From then on, with the inflow of gold and devisen from abroad, the volume of short credit declined month by month, until by the end of November

the total was some 700,000,000 reichsmarks less than in May, though still somewhat higher than at the end of November, 1928.

During the last weeks of 1929 there appeared to be some probability that the year-end settlements, complicated by the additional requirements of the Reich for funds in the amount of about 400,000,000 reichsmarks, would lead to a new expansion of credit. But the actual increase in the use of Reichsbank credit at the end of the year was about the same as in previous years, indicating that the rise was largely of a seasonal nature. The total in fact was less than at the end of 1927, and was smaller also than during the period of strain in the spring of 1929. In the first weeks of the new year there was a prompt liquidation of Reichsbank credit, at first corresponding in volume to that of a year before and later exceeding it, and this has been recognized in the successive reductions of the Reichsbank's discount rate. At the end of April, 1930, the volume of Reichsbank outstanding short credit was about 70,000,000 reichsmarks lower than at the end of January, which is usually the seasonal low point for the year.

The Reichsbank, as the Young plan comes into force, is in a remarkably strong position, and its discount rate, at 5 per cent, has been reduced to a point touched only once before since stabilization. Its reserves of gold and devisen stand at the highest levels ever reached, and the amount of its credit in use ranges well below the levels of recent years.

4. *Public credit.*—The change in the position of the public authorities from large lenders to large borrowers has been a fundamental element in German credit conditions. As will be recalled from the reports during the first three years of the Dawes plan, there existed up to the middle of 1927 a more or less acute problem centering on the administration of the large funds at the disposal of the public and quasi-public authorities. These funds were frequently so invested and managed as to counteract Reichsbank policy, and they were a fertile source of encouragement for programs of public spending. This phase passed as spending exhausted the free balances and the Reichsbank was able to extend its authority. In place of it came a new phase, that of severe pressure on the credit market by reason of the immense demands of the public authorities for loans.

As has been seen from the extended discussion in the chapters on the German budget and the public debt, the Reich, the States, and the communes with over 10,000 inhabitants have incurred since stabilization (up to September

30, 1929) nearly 7,100,000,000 reichsmarks of funded debt and about 4,800,000,000 reichsmarks of floating debt. Of these amounts, the figures show that about 2,400,000,000 reichsmarks of funded debt and about 2,700,000,000 reichsmarks of floating debt were incurred in the 18 months from March, 1928, to September, 1929. Figures for December 31, 1929, which are available only for the Reich, the States, and the communes of 100,000 or more inhabitants, show a further increase in the debts of these groups of authorities, in the three months since the end of September, of about 150,000,000 reichsmarks in the funded debt and about 850,000,000 reichsmarks in the floating debt. Taken by themselves and without further comment, the mere size of these figures goes far to explain the strain on the credit markets and the spread of interest rates in Germany above those prevailing in foreign financial centers.

It is, of course, the floating debt which has produced the greatest difficulties. Efforts to convert it into long-term debt have crowded the investment markets, and again and again have stifled them before they were able to acquire any reserve strength. Moreover, the rapidity of its growth, particularly during 1929, has put severe pressure on the entire credit system. Nominally this unfunded debt is short-dated, but much of it is short only in the sense that it is awaiting some future opportunity for conversion. In default of conversion, which its very size and growth have tended to prevent, it backs up as a burden on the banks and the other sources of short credit.

High interest rates operate to restrict commercial borrowing by making it more expensive and thus less profitable. But the same rule does not work with anything like the same efficiency in the case of public borrowing. Only in the long run, when high fixed charges become a burden on the tax budget, does the rate exert a direct pressure on the use of credit by the public authorities. Some communes during the autumn of 1929 appear to have paid from 11 to 14 per cent interest on loans of nominally short duration. Long-term bonds offered by representative German cities in the course of 1929 frequently carried an effective yield of $9\frac{1}{2}$ to 9 $\frac{3}{4}$ per cent. The effect of such rates, of course, was to establish a competition for funds which private borrowers, dependent upon profits for the means of paying the service of loans, could not meet.

There is no occasion, in view of what has been said in preceding chapters, to outline the measures which have been taken or which may be in prospect for dealing with the short-dated

debt of the public authorities. This overhanging volume of debt remains one of the most pressing problems not merely of public finance but of the credit markets; and just as the rapid growth in the floating debt has been the factor which strained credit most in the past year, so would an effective programme for its reduction relieve the German credit situation as a whole.

5. Banking and other short-term credit.—The pressure which the weight and immobility of the short-dated debts of the Reich, the States and the communes have exerted on the short-term credit market has been assuming cumulative importance since 1927. In addition, there have been periods of acute tension from other causes, as for instance in April and May, 1929, when funds were flowing away from Germany during the uncertainty as to the outcome of the meeting of the experts for the final settlement of the reparation problem.

In preceding years, the increase in the volume of credit reported by the leading German banks has been more or less directly associated with an inflow of funds from abroad. In 1929, as has already been observed, foreign funds were scarce; during the first five months of the year the flow of short-term funds was away from Germany, and taking the year as a whole, the net inflow of such funds was apparently much smaller than in previous years. Accordingly, more than at any time in the past three years, the German banks during 1929 had to rely upon domestic resources for their capacity to increase the volume of credit.

The following table gives the latest available data, with comparable figures for previous dates, as reported by certain large private banks which as a group represent about three-quarters of the total private banking strength of Germany. The number of banks whose figures are included in the table was reduced from six to five early in 1929 by the amalgamation of the Commerz-und Privatbank and the Mitteldeutsche Creditbank, and again to four in the autumn of 1929 by the amalgamation of the Deutsche Bank with the Disconto-Gesellschaft, with which were incorporated at the same time four smaller institutions formerly related to one or the other of them. The figures of the four smaller banks for earlier dates have been introduced into the above table and thus it is not precisely comparable with similar tables printed in previous reports. Figures are now currently reported by certain other large banks, but are not available for earlier years and therefore are not included in this compilation.

LARGE PRIVATE BANKS

[In millions of reichsmarks]

	Jan. 1, 1924	Dec. 31, 1927	Dec. 31, 1928	Dec. 31, 1929	Mar. 31, 1929	Mar. 31, 1930
ASSETS						
Cash, amounts due from clearing banks and banks of issue.....	118	358	410	382	231	219
Amounts due from banks and bankers.....	527	1,108	1,278	1,171	1,240	1,024
Bills and treasury notes.....	51	2,001	2,732	2,809	2,661	3,018
Advances on merchandise.....	76	853	1,527	1,728	1,567	1,664
Advances on stocks and bonds.....	21	577	709	495	655	505
Sundry loans, total.....	580	4,059	4,629	5,207	5,067	5,724
(a) On stock exchange securities.....			1,234	1,291	1,209	1,367
(b) Other.....			3,395	3,916	3,858	4,357
Bank buildings.....	181	181	183	183	176	183
LIABILITIES						
Capital stock.....	452	527	527	520	505	520
Reserves.....	189	267	278	295	288	295
Deposits.....	1,187	7,462	9,091	9,349	9,175	9,630
Customers' credits with other banks.....		692	1,328	1,625	1,317	1,596
Acceptance liabilities.....	2	433	458	473	475	470
Long-term liabilities.....		189	189	189	189	189

In the year 1929 deposits of the reporting banks covered by the table showed an increase of about 260,000,000 reichsmarks, as compared with increases in the years 1928 and 1927 of about 1,630,000,000 and 1,320,000,000 reichsmarks, respectively. The increase during 1929 was not spread evenly through the year. During April and May there was a rapid decline in deposits, reflecting the suspense over the outcome of the Paris conference. The subsequent upward movement did not fully compensate for this decline until nearly the end of the year.

Another item on the liability side of the account gives some measure of the reliance on foreign credit for the purpose of carrying goods in process of distribution. This item, listed as customers' credits with other banks, represents acceptance credits granted by foreign banks to German firms through the medium of German banks. It increased during 1929 by about 300,000,000 reichsmarks, as compared with an increase of about 630,000,000 reichsmarks in 1928.

Up to the end of 1928 the volume of treasury notes of the Reich and the States held by the banks had not been in large amounts. On December 31, 1928, the combined item representing bills and treasury notes amounted to about 2,730,000,000 reichsmarks, of which less than 150,000,000 reichsmarks consisted of treasury notes. On December 31, 1929, the combined item stood at about 2,810,000,000 reichsmarks, of which 380,000,000 reichsmarks consisted of treasury notes. It follows from

these figures that the banks' holdings of commercial bills declined slightly during the year, whereas their holdings of treasury notes, in consequence of the pressure for credit from the public authorities, increased by about 150 per cent.

The other changes among the assets of the banks are self-evident except in one or two particulars. The decline in the item representing amounts due from banks and bankers is largely due to the consolidation of the Deutsche Bank and the Disconto-Gesellschaft, which had the effect of eliminating interbank deposits between the several banks. The only other item which showed any marked decline during the year was the item representing advances on stocks and bonds, chiefly loans to brokers. This decline reflected the prevailing inactivity of the share markets.

In the first three months of 1930, the statements of the banks included in the table have reflected the easier conditions prevailing on the money market. Deposits showed an increase of 280,000,000 reichsmarks, or more than in the entire year 1929, and on March 31, 1930, reached a record figure of 9,630,000,000 reichsmarks. Customers' credits with other banks, together with its corresponding asset item, advances on merchandise, declined slightly, reflecting in part seasonal influences and in part the general recession in trade. Corresponding to the growth in deposits, the banks' loans and advances, including those on stock exchange securities, also increased. Their holdings of treasury notes continued to increase and at the end of March, 1930, amounted to over 610,000,000 reichsmarks, while holdings of commercial bills showed a further slight decline.

The following tables show combined statements for 21 State and provincial banks, the chief one of which is the Prussian State Bank or Seehandlung, and 17 Girozentralen, the central institutions through which the various savings offices and communal banks are inter-related. End-of-year statements for these banks are not published. The compilation for March 31, 1930, differs slightly from those for earlier dates, as one relatively small provincial bank has recently been amalgamated with one of the Girozentralen.

TWENTY-ONE STATE AND PROVINCIAL BANKS INCLUDING SEEHANDLUNG

[In millions of reichsmarks]

	Mar. 31, 1923	Mar. 31, 1929	June 29, 1929	Oct. 31, 1929	Nov. 30, 1929	Mar. 31, 1930
Cash and amounts due from banks and bankers.....	374	647	423	333	421	447
Bills and treasury notes.....	467	408	450	399	389	568
Loans and advances, total.....	1,631	1,844	1,922	1,884	1,876	1,741
(a) on stock exchange securities.....	256	274	246	243	240	245
(b) other.....	1,375	1,570	1,676	1,641	1,636	1,496
Long-term loans.....	903	1,447	1,514	1,596	1,008	1,683
Deposits.....	2,538	3,067	3,004	2,885	2,907	2,982
Long-term liabilities.....	941	1,378	1,406	1,456	1,468	1,542

SEVENTEEN GIROZENTRALEN

[In millions of reichsmarks]

	Mar. 31, 1923	Mar. 31, 1929	June 29, 1929	Oct. 31, 1929	Nov. 30, 1929	Mar. 31, 1930
Cash and amounts due from banks and bankers.....	469	630	313	339	383	449
Bills and treasury notes.....	168	244	154	129	129	221
Loans and advances, total.....	832	1,104	1,157	1,142	1,101	1,170
(a) on stock exchange securities.....	70	70	102	92	87	68
(b) other.....	762	1,034	1,055	1,050	1,014	1,102
Long-term loans.....	1,169	1,902	1,932	1,951	1,953	2,072
Deposits.....	1,630	2,157	1,832	1,805	1,820	2,038
Long-term liabilities.....	1,047	1,788	1,788	1,806	1,802	1,915

The principal change in the statements of the public banking institutions during the year ending March 31, 1930, relates to their long-term loans, which rose somewhat more than their long-term liabilities. Deposits of both groups of banks declined during the year, as did also their cash and amounts due from banks and bankers, while their short-term loans and investments taken as a whole showed little change.

It should be noted in connection with the foregoing table, as well as with that for the State and provincial banks, that the reporting system was changed in March, 1928, and that comparative figures before that date are not available.

The volume of bills drawn and circulating in Germany has latterly declined. In part this reduction represents a decline in the prices of commodities, but it may also reflect some falling off in the number of bills drawn. The

following table [omitted] reproduces figures published by the Institut für Konjunkturforschung.

During the spring months of 1929, in connection with the withdrawal of deposits from the banks, there was a large movement of bills away from the commercial banks and into the hands of the Reichsbank and the minor banks of issue. Subsequently, as conditions righted themselves, this movement was corrected and the portfolios of the banks increased; but the volume of bills circulating in the open market continued to decline. In the foregoing table [omitted], the figures showing bills held by the banks include bills held by numerous institutions in addition to those whose condensed statements have already been given. Figures are not yet available for the period after September, 1929.

The volume of rediscountable treasury bills of the Reich outstanding during 1929 and the first quarter of 1930 has remained at or near the legal maximum of 400,000,000 reichsmarks. Up to the spring of 1929, these bills were fairly consistently in the hands of the banks, other institutions and the public except over short periods at the month-end settlements, but during April and May, 1929, a substantial volume came into the hands of the Reichsbank under rediscount. From midsummer until December the volume of treasury bills under rediscount rarely exceeded 100,000,000 reichsmarks, but at the end of December the volume so held by the Reichsbank rose temporarily to 241,000,000 reichsmarks, the largest amount reported up to that date. After the turn of the year the Reichsbank's holdings of such bills promptly declined and during the first quarter of 1930 were practically negligible.

The large volume of Reich treasury bills in the market has had an important influence on the private discount market. The volume of prime bankers' acceptances dealt in at the private discount rate has been estimated at between 800,000,000 and 900,000,000 reichsmarks, about twice the amount of rediscountable Reich treasury bills outstanding. During 1929 the private discount rate, which applies to Reich treasury bills as well as to prime bankers' acceptances, remained generally close to the Reichsbank discount rate, and during the spring was identical with it. Later in the summer the private discount rate was reduced and at one time was as much as three-eighths of a point below the Reichsbank rate; but in the autumn, after the Reichsbank rate was lowered to 7 per cent, the margin between these rates was never over one-eighth and often the two rates were identical. In the first months of

1930, with the easing of money which then took place, the private discount rate declined until at times it was more than half a point below the Reichsbank rate, and early in May there was a spread of a full point.

6. *National income and the formation of capital.*—The German national income, according to figures recently published by the Institut für Konjunkturforschung, stood in 1929 at a level of about 70,000,000,000 reichsmarks, that is to say, about 16,000,000,000 reichsmarks, or 30 per cent, higher than in 1925. If allowances are made for the growth of the population in intervening years, and for changes in the general price level, the national income on a per capita basis has risen by about 15 per cent. This increase illustrates the progress made up to the present, notwithstanding the almost continual shortage of loanable funds and other difficulties, in rebuilding the German economy after the inflation. Considerable as this progress has been, the level of the per capita income of 1913 has not yet been reached. The Institut has calculated the index figure for that year, which takes account of changes in prices and population, at 120 as compared with 100 in 1925 and 115 in 1929.

GERMAN NATIONAL INCOME

[In billions of reichsmarks]

	1925	1923	1927	1928	1929
Agriculture.....	3.2	3.3	3.5	3.4-3.6	3.4-3.6
Trade and industry..	11.7	11.7	12.9	13.0-13.2	13.1-13.3
Rents.....	.5	.6	.7	.8	.8
Income from capital.....	1.4	1.5	2.2	2.8	3.3-3.4
Pensions.....	1.6	1.9	2.2	2.6	2.6-2.7
Wages and salaries...	34.9	37.5	38.8-39.4	43.6-44.1	44.5-45.5
Total of private income.....	53.3	54.5	60.3-60.9	66.2-67.1	67.7-69.3
Income earned by public undertakings.....	1.0	1.7	1.7-1.9	1.8-2.5	1.8-2.5
Total.....	54.3	56.2	62.0-63.0	68.0-70.0	69.0-72.0
Per capita income (in reichsmarks)...	870	895	980-1,000	1,070-1,100	1,080-1,125

The foregoing table, which reproduces the estimates prepared by the Institut für Konjunkturforschung, is the first detailed estimate of the national income which has issued from any official source since the Dawes plan went into effect.

The increase from the level of 54,300,000,000 reichsmarks in 1925 to a level around 70,000,000,000 reichsmarks in 1929 has been spread through each one of the seven categories given in the table. The preponderant item, both in total now reached and in the increase since 1925, is that covering wages and salaries, which

show a rise of about 11,000,000,000 reichsmarks in the five years. Income from these sources in 1929 comprised 64 per cent of the national income as compared with less than 50 per cent in 1913.

The second most important category, that of trade and industry, represents the income derived by proprietors, both individual and corporate, from their respective undertakings, but does not include dividends on shares of stock. Except for a moderate increase in 1927, a year of rising prices and large business activity, there have been comparatively slight changes in the annual figures, which in 1929 stood about 13 per cent higher than in 1925. A partial explanation is to be found in the expansion of an associated category, that covering income derived from the ownership of capital. This category includes income derived as dividends and interest on securities (except for amounts going abroad or payable to companies) and interest on mortgages, bank deposits and savings. This item has increased about 2,000,000,000 reichsmarks, and stood in 1929 at an amount somewhat more than double that of 1925. This growth is due in part to revalorization of prestabilization securities, but mainly it reflects the progress made in restoring the internal credit system destroyed by the inflation, and it provides some measure of the increase in the internal fund of investment money. In 1925 income derived from such sources amounted to only 2.6 per cent of the total national income, whereas now the proportion is about 5 per cent. In 1913, however, income from investments represented a little more than 11 per cent of the national income, a difference from the present which illustrates the effects of the inflation, and of the change in the direction taken since the war in the distribution of income.

The income of agriculturalists, like that of proprietors of industrial and trading enterprises, has increased only in small proportions since 1925. The Institut's estimates for 1928 and 1929 are still provisional, but it concludes that the changes since 1927 have not been considerable. The increase in income from rents derived by private persons, a relatively unimportant item in the total national income, has been retarded by the rent restrictions still in force, and since 1927 has been almost stationary. The gradual increase in income derived from pensions is due to the growth of social insurance payments. This item includes old age, accident, invalidity and employees' pensions, and a part of the unemployment insurance benefits. It does not include

the part of the unemployment insurance benefits representing the contributions of the employees themselves, which are included in the income of labor, nor does it include the Reich contributions to unemployment insurance, or annuities to indigent persons or war pensions, because the great bulk of these come out of public funds and are consequently shown in the income of taxpayers elsewhere.

The final item in the table, that for income earned by public undertakings, covers the income derived by the Reich, the States and communes from profit-earning enterprises owned by them, and from real estate or other capital assets. The total has about doubled since 1925, and indicates among other things the growth in the size and output of publicly owned electric light and power plants.

The foregoing estimates of the national income have a bearing, of course, on the annual formation of capital, but without supplementary information it is impossible to interpret one in terms of the other. It is true, as has already been indicated, that the growth in the income derived from capital implies an increase in the national fund available for investment. But this concerns only one side of the question, and leaves out of account other items of great importance. An estimate of current capital formation, if it had been made, would have been useful and timely in the present state of the German economy, and fully equal in importance to the estimates of income now published. It will be recalled in this connection that the estimates of capital formation prepared by the Reichs-Kredit-Gesellschaft, which were based upon a calculation of the excess of production over consumption, have been discontinued. They ceased with the estimates for the years through 1927, which were described in the interim and annual reports of the Agent General for 1928.

In default of any comprehensive official estimate of capital formation in Germany, it is possible to deal only with such individual evidences of it as are currently published in terms of figures. Heretofore only two such series have been regularly reported, the savings deposited with the savings offices or Sparkassen, and the amounts paid to life insurance companies in the shape of premiums on policies. Since the last report a third series of figures has become available, namely, the savings deposits of agricultural cooperatives, and in this report figures are also given for the first time showing deposits with tradesmen's cooperatives, which are published occasionally.

It appears from the figures reported by the Sparkassen that savings deposits with them increased during 1929 by an average of about 169,000,000 reichsmarks a month, a rate somewhat smaller than during 1928, when the Sparkassen reported the largest growth since stabilization. In May, 1929, the month-to-month increase fell to 40,000,000 reichsmarks, reflecting a temporary but widespread hesitation on the part of the public to put savings funds in bank during the uncertainty as to the outcome of the reparation negotiations in Paris and the pressure on the reichsmark in the foreign exchanges. But taking the year 1929 as a whole, the increase in savings deposits amounted to 2,026,000,000 reichsmarks, as against 2,292,000,000 reichsmarks in 1928, and 1,607,000,000 reichsmarks in 1927. It is noteworthy that whereas 561,000,000 reichsmarks of the increase reported for 1929 was derived from interest and the revalorization of pre-stabilization savings deposits, the total so derived in 1928 was about 300,000,000 reichsmarks. Thus the actual amount of new funds placed with the Sparkassen in 1929 was smaller than in the year before, a decline attributable in part to competition from other savings depositaries, which has been made all the stronger by the financial difficulties of some of the communal governments and of some of the enterprises owned and operated by them. The Sparkassen have reported for the first quarter of 1930 further increases in savings deposits, amounting to a total of 621,000,000 reichsmarks, including interest credited and revalorized deposits.

At the end of 1929 the total savings deposits in the Sparkassen amounted to about 9,000,000,000 reichsmarks, as compared with 19,700,000,000 reichsmarks of such deposits at the end of 1913. In this connection it is interesting to observe that the rate of increase in 1913 was about 84,000,000 reichsmarks a month, and that 61 per cent of that increase was derived from interest credited, leaving about 33,000,000 reichsmarks a month to represent fresh savings, as compared with 122,000,000 reichsmarks a month in 1929. After making all due allowance for the higher price level now prevailing, it appears that the saving capacity of the Sparkassen depositors has much increased as compared with the period before the war.

In addition to the Sparkassen, the large commercial banks now receive savings deposits from small depositors. Since November, 1927, the members of the Stempelvereinigung (the Berlin Bankers' Association) have been ac-

cepting savings deposits, on which the rate of interest was 6 per cent from April, 1929, to February, 1930, when it was reduced to 5 per cent. This rate is the same as the usual rate on savings deposited with the Berlin Sparkassen. Savings deposits are not separately shown in the published statements of the commercial banks, and their total accordingly can not be estimated.

A third class of savings deposits, those of the leading German agricultural cooperative associations, has recently been reported for the period up to June 30, 1929.

DEPOSITS WITH AGRICULTURAL COOPERATIVES

[In millions of marks or reichsmarks]

	Savings deposits	Current-account deposits	Total
1913—Dec. 31.....	2,019.7	231.9	2,251.6
1924—Dec. 31.....	81.5	75.0	156.5
1925—Dec. 31.....	227.3	180.0	407.3
1926—Dec. 31.....	450.4	276.4	726.8
1927—Dec. 31.....	690.8	276.0	966.8
1928—Dec. 31.....	1,055.8	316.0	1,371.8
1929—June 30.....	1,170.0	318.1	1,488.1

The figures shown in the foregoing table, published by the Institut für Konjunkturforschung, represent returns from some 18,000 individual cooperative groups belonging to the two most important associations, the National Association of German Agricultural Cooperatives and the General Association of Raiffeisen Cooperatives. About 60 per cent of the members are engaged in strictly agricultural occupations and the remainder are made up chiefly of other residents of rural districts. The latest published figures of deposits cover the first half of 1929 only, and so do not take account of deposits made during the marketing of the 1929 crop. The increase in savings deposits for the six months' period was 114,000,000 reichsmarks, as against 365,000,000 reichsmarks for the whole of 1928 and 240,000,000 reichsmarks for 1927. The total volume of savings deposits in the agricultural cooperatives on June 30, 1929, was about 58 per cent of the total at the end of 1913.

DEPOSITS WITH TRADESMEN'S COOPERATIVES

[In millions of reichsmarks]

	Savings deposits	Checking and current account deposits	Total
1926—Dec. 31.....	429.3	305.6	734.9
1927—Dec. 31.....	622.5	339.2	961.7
1928—June 30.....	780.4	330.6	1,111.0
Dec. 31.....	909.2	372.7	1,281.9
1929—Feb. 28.....	987.5	361.1	1,348.6
Apr. 30.....	1,017.2	358.1	1,375.3
June 30.....	1,038.5	365.8	1,404.3

The figures given above, showing the deposits in the tradesmen's cooperative banks, were compiled by the Reich Statistical Office from statements of about 1,300 individual institutions. In the first half of 1929, savings deposits with these banks increased by a somewhat smaller amount than in the same period of 1928—129,000,000 reichsmarks, as compared with 158,000,000 reichsmarks in the previous year. The total increase in 1928 amounted to 287,000,000 reichsmarks, as compared with less than 200,000,000 reichsmarks in 1927 and 1926 for closely similar groups of reporting cooperatives.

Some further indication of the volume of saving is to be found in the amounts paid to life-insurance companies in the shape of premiums on policies. While the premiums paid reflect the course of saving through life insurance, they are not in themselves a measure of capital formed; this can be ascertained only by the growth of insurance reserves, figures for which are not available.

LIFE INSURANCE IN PUBLIC AND PRIVATE INSTITUTIONS
(In millions of reichsmarks)

	Amount of insurance in force	Premiums paid during 2-month periods
1925 average.....		54
1926 average.....		69
1928 average.....	12, 076	101
1929 average.....	14, 683	120
1927—Dec. 31.....	10, 318	83
1928—Dec. 31.....	13, 147	103
1929—Feb. 28.....	13, 598	115
Apr. 30.....	14, 060	122
June 30.....	14, 556	114
Aug. 31.....	14, 928	124
Oct. 31.....	15, 323	127
Dec. 31.....	15, 635	118
1930—Feb. 28.....	15, 946	131

The amount of premiums paid, as reported by the larger public and private institutions, averaged 60,000,000 reichsmarks a month in 1929 as compared with a monthly average of 50,000,000 reichsmarks in the year 1928 and of about 35,000,000 reichsmarks in 1926. The amount of insurance in force increased by 2,488,000,000 reichsmarks in 1929 as compared with 2,829,000,000 reichsmarks in the preceding year. The increase in insurance is due principally to a growth in the number of smaller policies, as the average amount of each policy decreased from about 1,760 reichsmarks at the end of 1927 to about 1,370 reichsmarks on December 31, 1929. In the first two months of 1930 there was a further increase of insurance in force and of premium payments.

The various public social insurance institutions report periodically their receipts, disbursements, and net capital assets, and the increase in their assets may be taken to represent an increment in the supply of new capital. Details of these figures for the years 1924 to 1929 are given on pages [omitted]. Excluding the unemployment insurance institute, which is in debt to the Reich, the increase in net capital assets in 1929 amounted to about 690,000,000 reichsmarks as compared with an increase of about 780,000,000 reichsmarks in 1928 and about 650,000,000 reichsmarks in 1927.

7. *New capital issues and the security markets.*—Like the market for short credit, the German market for capital issues has been overloaded with a mass of loan applications far too large to be satisfied out of existing resources. This overloading of the market is not a new development. On the contrary, the volume of actual and potential offerings has exceeded the absorptive capacity of the market ever since stabilization. This was inherent in the situation which Germany faced after the wastage of the war and the inflation, for it was necessary when those periods closed to begin over again with the accumulation of investment funds. At the outset the accumulation was slow and additions to the supply were limited; but the demand, which was already active when accumulation began, has consistently kept ahead of the supply. And, whenever for seasonal reasons or otherwise the capital issues market has shown signs of vitality, it has been stifled under a mass of loan applications. One major factor in the demand, which of itself goes far to explain the pressure on the market, has been the extremely heavy and persistent solicitation of credit on the part of the public authorities. During 1929 this was particularly intense and inopportune.

The following table is made up from the most recent figures published by the Reich Statistical Office, and carries corrections in earlier statistics; accordingly it differs in minor particulars from tables printed in previous reports. It appears that during the three years after 1925, the domestic market was able to absorb about 4,300,000,000 reichsmarks of capital issues a year. While the annual totals were approximately identical, the market in each year was subject to periodic interruptions, frequently lasting for several months. In 1929, the interruption began with the month of February, and during the remainder of the year the market was narrow, with the result that in the year as

a whole the volume of domestic capital issues amounted to about 2,500,000,000 reichsmarks, or about 41 per cent below the total for 1928.

DOMESTIC CAPITAL ISSUES

[In millions of marks or reichsmarks]

	1907-1913 yearly aver- age	1925	1926	1927	1928	1929	1930, Jan.- Feb.
German bonds:							
Reich, States, com- munes, etc.	1,172	15	654	698	456	398	45
Associations under public law	4	22	364	16	207	-----	2
Real estate credit in- stitutions, Girover- bände and related institutions.							
(a) Communal bonds	116	38	465	349	489	248	52
(b) Mortgage bonds	788	840	1,628	1,597	1,459	890	281
Private concerns	400	79	322	181	294	7	19
Total bonds	2,480	994	3,433	2,841	2,905	1,543	399
German shares	740	656	988	1,438	1,339	964	197
Total German se- curities	3,220	1,650	4,421	4,279	4,244	2,507	596
Foreign securities	472	-----	-----	58	14	19	-----
Grand total	3,692	1,650	4,421	4,337	4,258	2,526	596

Several items in the table call for specific comment. The only category of capital issues which in 1929 approximated the volume of the previous year was that representing bonds issued by the Reich, the States, and the communes, to the total amount of about 400,000,000 reichsmarks. The principal issue included in the list was that of the Reich, offered in May, 1929, in the amount of 300,000,000 reichsmarks, of which, however, only about 180,000,000 reichsmarks were subscribed. The terms of this issue, which was described in the interim report, included numerous tax exemptions, a coupon rate of 7 per cent and an offering price of 99. The offering was made at a time of uncertainty as to the outcome of the Paris conference, and its failure is to be explained partly on that account. But its unusually attractive terms, and the high yields on other issues of the public authorities, particularly on communal bonds, set a standard which made private borrowing still more difficult and expensive.

In addition to long-term obligations publicly offered for sale on the market, the Reich issued during the past year to claimants under the war damage liquidation law of March 30, 1928, a large volume of war damage liquidation debt certificates. Most of these certificates have in turn been offered for sale on the open market by the recipients, and thus have absorbed some

of the funds available for investment. By March 31, 1930, a total of about 1,000,000,000 reichsmarks of these certificates had been issued by the Reich, and they have been selling on the market at an appreciable discount below their nominal value. Up to late in 1929 they were bringing a return to the purchaser of about 10 per cent or even higher, depending upon the date of maturity; but more recently, with the general easing of money, the rate of return at prevailing prices has diminished to between 8 and 9 per cent.

The pressure exerted on the market by the demands of the public authorities had the effect during 1929 of excluding practically all offerings of bonds by private concerns, and during the whole year private issues amounted to only 7,000,000 reichsmarks. Under the conditions prevailing in the bond market, private enterprises adopted the alternative of issuing shares, a certain portion of which passed into foreign hands, some in connection with financial and trade agreements made with foreign corporations, and others through the medium of German banks. Altogether, the new offerings of shares were relatively large, but still considerably below the offerings during 1928.

There was a marked falling off during 1929 in the volume of mortgage bonds issued by the real estate credit institutions. These obligations, known as Pfandbriefe, are secured by mortgages on real estate, including agricultural land, and are issued from time to time and at varying rates according to the market. Pfandbriefe, ordinarily popular with the German investor, provide a fair index of the condition of the market as a whole. During 1929 issues of Pfandbriefe were about 40 per cent smaller than in the preceding year.

The narrowing of the market for mortgage bonds obliged the real estate credit institutions to curtail materially their long-term loans to borrowers. According to figures assembled by the Institut für Konjunkturforschung, the net increase during 1929 in outstanding long-term loans made by these institutions amounted to about 810,000,000 reichsmarks on city and agricultural mortgages and 357,000,000 reichsmarks to the communes, as compared with 1,624,000,000 reichsmarks and 613,000,000 reichsmarks, respectively, in 1928. It is interesting to note that most of these long-term loans granted to the communes were made by credit institutions "of public-law standing"; that is to say, by institutions operated by or in close relation with the public authorities. The savings banks or Sparkassen made loans on

mortgages during the year in the amount of 952,000,000 reichsmarks as against 1,055,000,000 reichsmarks in 1928, and also lent 480,000,000 reichsmarks to the communes as compared with 346,000,000 reichsmarks a year ago.

Since the beginning of 1930 the general easing of money rates has brought some degree of relief to the long-term market as a whole, though not in the same proportion as for short-term funds. Issuing banks which at the end of 1929 had considerable amounts of unsold securities on their shelves have been able to effect a better distribution, and the output of new issues has also increased. In the first two months of 1930 new offerings of mortgage bonds were larger than for any two months since the beginning of 1928; and there were several offerings of communal obligations, mostly of three to five years' maturity. There were also a few small to moderate-sized industrial issues of both bonds and shares.

Consistently with the conditions prevailing during 1929 on the market for new capital issues, the prices of outstanding issues declined. Of the three principal classes of bonds, Pfandbriefe were the least affected, and at prices prevailing in December, 1929, standard issues yielded 8.17 per cent as against 7.88 per cent a year before. After the turn of the year there was a moderate rise in the market prices of fixed-term obligations, and at the beginning of May, 1930, standard issues of Pfandbriefe were selling on about a 7.8 per cent basis. The prices of other classes of bonds were also somewhat higher, including various State, city, and industrial issues. The Reich 6 per cent loan of 1927, the price of which had been officially supported at 87.50 for many months, declined slightly in February when the support was relaxed, but rose later and at the beginning of May was quoted at 87.80, while the Reich 7 per cent loan of 1929 was selling at the beginning of May about 2 points over par.

Though the stock markets were weak and inactive during 1929, there was no sharp drop of the nature observed in other markets. The decline, on the contrary, was gradual and speculation on the whole was absent. The average return on shares quoted on the Berlin Bourse at prices prevailing on December 31, 1929, was 6.58 per cent as compared with 4.99 per cent at the end of December, 1928. The difference was due practically in full to the fall in prices, inasmuch as dividends remained substantially unchanged. In the first half of January there was a marked rise in share prices on the Berlin Bourse, but since then there has been little change. At the end of March, the latest date

for which official figures are available, the average return of shares quoted on the Berlin Bourse was 6.29 per cent, reflecting principally a rise in share prices, as dividends remained practically unchanged.

8. *Agricultural credit.*—The size and urgency of the demand for agricultural credit in previous years has furnished one of the major causes, along with the credit demands of the public authorities, for the general credit pressure in Germany. During the second half of 1929, for the first time since stabilization, a decline took place in the volume of credit employed by agriculture. From the standpoint of the credit situation as a whole this was a favorable development, representing some progress in the consolidation and liquidation of debt. But for agriculture itself, the year 1929 and the first months of 1930 formed a period of singular difficulty. This arose in part from conditions confronting agriculture the world over, including the weak and falling prices at which the 1929 crop was sold. It was due in part also to conditions special to Germany.

It will be recalled that German agriculture was placed in a peculiarly difficult position with stabilization. While the inflation had relieved agricultural proprietors of a large part of their debts, it had also cost them many of their assets, other than the land itself and the existing buildings. In numerous cases, especially among the large landowners, the conditions introduced with stabilization—such as relatively low prices for agricultural products, extremely high costs for credit, high wages and taxes and high prices for materials and machinery—resulted in actual losses in operation from one year to the next. These losses were all the greater because of several poor to indifferent crops, followed by two good years the benefits of which were in a measure lost to them through low prices. As has been explained at length in previous reports, these and other causes, among them faulty marketing procedure and the inability of many proprietors to adjust themselves promptly to the changed conditions of agricultural production in the world at large, resulted in the rapid accumulation of debt. By the end of 1927 the volume of debt, though substantially smaller than the pre-war figures, was costing rather more in the aggregate amount of interest paid than it had before the war.

The accumulation of debt appears to have been most pronounced in those parts of Germany where large undertakings predominate. According to a recent calculation made by the Reich Finance Ministry, which relates to the

condition at the close of 1928, the amount of debt in proportion to the capital value of the undertakings, which in turn is based upon their taxable value, varied from about 9 per cent to about 57 per cent. The proportions ranging over 50 per cent related to districts in East Prussia, Pomerania, and Mecklenburg-Schwerin, where the large undertaking is typical, while the smaller percentages were mostly in other parts of Germany, where small farms predominate. The average for the Reich was given as 30 per cent.

AGRICULTURAL CREDITS OUTSTANDING

(In millions of reichsmarks)

	Mort- gage credits	Inter- mediate credits	Short- term credits	Total
1925—Dec. 31.....	1,011	26	2,186	3,223
1926—Dec. 31.....	2,048	102	2,127	4,277
1927—Dec. 31.....	2,814	304	2,566	5,684
1928—June 30.....	3,258	313	2,857	6,428
Sept. 30.....	3,441	322	2,944	6,707
Dec. 31.....	3,623	318	2,890	6,831
1929—Mar. 31.....	3,811	301	2,960	7,072
June 30.....	3,891	320	3,143	7,354
Sept. 30.....	3,997	323	2,957	7,267
Dec. 31.....	4,103	315	2,844	7,262

It should be noted that the foregoing table, giving figures compiled by the Institut für Konjunkturforschung, represents not the amount of new credit granted each year but the ascertainable amounts outstanding on the respective dates. In each of the three years prior to 1929 the amount outstanding rose by 1,000,000,000 reichsmarks or more. In the 12 months of 1929 the increase was less than half as much, and during the second half of the year there was a small decline.

Quite as important as the changes which took place in the total figures for the year were the changes in the individual classifications of indebtedness. The entire increase for the year was accounted for in the item representing mortgage debt. The amount of intermediate debt outstanding, on the other hand, was almost precisely the same at the end of 1929 as a year earlier, and the amount of short-term debt actually declined. Heretofore, except for seasonal fluctuations, the volume of short-term debt has shown a disturbing tendency to increase notwithstanding a general effort to convert as much as possible of it into mortgage form. Indeed, the two forms of debt tended up to the middle of 1929 to rise almost simultaneously. The change which has since taken place, however temporary it may prove to be, is in the direction of bringing the volume of agricultural credit into more manageable form.

Other evidence on the amount of short-term credit utilized by agriculture is to be found in figures published by the Preussische Zentralgenossenschaftskasse (known as the Preussenkasse), which is the central bank for cooperative credit. Whereas at the end of 1927 rural credit cooperatives had exceeded by 132,000,000 reichsmarks their assigned credit contingents with the Preussenkasse, the credits used at the end of 1928 were about 80,000,000 reichsmarks less than the credit contingents. At that time, however, credits used by the cooperatives situated east of the Elbe (where agricultural credit distress has been particularly acute) continued somewhat in excess of the assigned contingents. By the end of November, 1929, this excess not only had disappeared but the cooperatives both east and west of the Elbe were well within their contingents, and were in a position to call for some 114,000,000 reichsmarks more credit from the Preussenkasse than they were using. The amount of short-time credit furnished to agriculture by the Preussenkasse continued to decline up to the end of January, 1930; but since then there has been some seasonal increase.

These changes in tendency were beneficial to the credit market as a whole, but the figures necessarily leave out of account the conditions which were at least partly responsible for the results indicated. It seems safe to assume, for example, that certain agricultural borrowers had reached the limit of their power to incur debt and that other landowners had refrained from doing so because of the cost. Moreover, the decline in the market values of agricultural products reduced the amounts which farmers were able to borrow on the security of their crops, and intensified the difficulties, particularly of those burdened with debts carrying high rates of interest.

Various measures of relief have been undertaken and others have recently been proposed. Of those already put into effect one of the most constructive is the reorganization of the whole agricultural cooperative credit system. Without attempting to analyze an extremely complicated sequence of financial transactions, it may be said briefly that the Raiffeisenbank, the institution serving one of the principal groups of cooperatives, became seriously involved in the first years after stabilization through financing operations which had little or nothing to do with agriculture. Its difficulties were in a measure passed on to the Preussenkasse, and presently the capacity of both institutions to provide agricultural credit was much impaired. The Preussenkasse was reorganized in 1928, and

was provided with fresh resources by the State of Prussia; more recently arrangements have also been made to bring the Reich into participation as a stockholder to the extent of 50,000,000 reichsmarks. As for the Raiffeisenbank, the Raiffeisen group of cooperatives agreed to its liquidation, and the group itself has consented to a merger with five other important agricultural cooperative associations. This merger was effected on February 13, 1930, and consolidated 37,300 individual cooperatives out of a total in Germany of about 40,800. In addition, a broad program for rationalization and centralization of the various regional and functional agricultural cooperatives is in process. This program provides in general that in each State or province all cooperatives of the same functional category—for example, for buying or selling or for providing credit—shall be consolidated into a single regional association, and these regional associations in turn shall form an association for the Reich as a whole. It is contemplated that these associations shall assist in the rationalization of German agriculture in all of its varied aspects. The growth of savings deposits in the agricultural cooperatives, already mentioned in a previous section of this chapter, is an indication of the vitality of these organizations, and has an important bearing on agricultural credit as a whole, since these funds provide a natural and ready source of credit to the farming population.

Another measure designed for the relief of agriculture was forecast by the Chancellor of the Reich on December 12, 1929, in outlining to the Reichstag the financial proposals of the Government. According to this proposal, which has since been embodied in a draft law presented to the Reichsrat on April 7, 1930, agricultural landowners are exempted from the payment due April 1, 1930, and from subsequent interest payments on the Rentenbank general mortgage, subject to the proviso that the Government of the Reich may call for subsequent payments if ever required in order to enable the Rentenbank to fulfill its liabilities in respect of the liquidation of Rentenbank notes in circulation. Up to this time, as noted in previous reports, the bulk of the interest received on the Rentenbank mortgage has been used for the redemption of Rentenbank notes. The total of interest payments each year has usually exceeded 80,000,000 reichsmarks, of which 60,000,000 reichsmarks or more have been used for the redemption of notes and the remainder, up to 25,000,000 reichsmarks, has been placed at the disposal of the Rentenbank Credit Institution. The

suppression of the charge will postpone the date when the Rentenbank note retirement, now far advanced, is completed, but at the same time it carries manifest benefits for agriculture. The draft law also provides for changes in the relations between the Rentenbank and the Rentenbank Credit Institution, which already appear to be embodied to some extent in a new contract between them and the Reich and the Reichsbank.

A third group of measures, aimed at raising the prices in the domestic market for agricultural products, centers on a long series of changes in the customs tariff. Since the summer of 1929 the Government has been engaged in amending commercial treaties with other countries and in altering customs duties, all with a view to reducing or eliminating competition in the home market from foreign-grown agricultural products. These changes are discussed at length in the chapter on foreign trade, in the section dealing with tariffs and commercial treaties. Notwithstanding the changes first effected there was a continued fall in prices, and further increases in customs duties have since been made, with the result that internal prices for grains have risen somewhat since the end of March. The Government is also considering special measures for stimulating the consumption of rye, the present stock of which in the country is redundant.

The principal measures which thus far have been published with official authority are briefly described in the section on tariffs and commercial treaties, and in the chapter on German business conditions in the section on agriculture. The general course of agricultural prices is also discussed in the section on prices.

In connection with his signature of the liquidation agreement between Germany and Poland, the President of the Reich, in a letter addressed to the Chancellor on March 18, 1930, called special attention to the distress of agriculture in East Prussia, and asked that a new program of financial assistance for the eastern districts should be considered at the earliest possible moment. After extended negotiations between the various ministries concerned, it was announced on May 7 that an agreement in principle had been reached regarding such a program, but the details are not yet available. Generally speaking, however, it appears from the Finance Minister's budget speech to the Reichstag, on May 2, 1930, that the program contemplates measures for facilitating the transformation of short-term indebtedness into mortgage debts, for the

strengthening of existing agricultural enterprises, for encouraging settlement on the land, and for improving the means of transportation in the eastern districts. Apparently, it provides also for the reduction of certain tax charges.

It remains to state in summary form the cost of agricultural credit. In common with other money rates, interest on agricultural loans ranged during 1929 somewhat higher than in the previous year. The net cost to the borrower on long-term first-mortgage credits, including taxes and discount from the nominal value of the loan, rose from about 10.2 per cent in the autumn of 1928 to 10.5 per cent in the autumn of 1929. The rate charged on personal credits advanced by the Rentenbank Credit Institution from April 25 to November 2, 1929, stood at 9½ per cent; but thereafter, in connection with the successive reductions in the Reichsbank rate, it declined five times by half a point, and stood at the end of April at 7¼ per cent. Personal credits from other sources, however, have frequently cost the agricultural borrower as high as 12 per cent.

A reduction in the cost of credit would bring considerable relief to agriculture, but it is still true, as stated in the report of December, 1928, that "the difficulties which German agrarians face are by no means limited to questions of credit. To some extent they are the reflections of a change in agricultural conditions throughout the world, to which German agriculture has only begun to adapt itself. It is noteworthy that more and more attention is being paid to the means of effecting these readjustments. In particular, preliminary investigations have been made looking toward the improvement of marketing systems, livestock raising, dairying, and so on. If these result in greater farm efficiency and in cheaper and better production and distribution, they will bring measurable relief on the score of agricultural credit and will be advantageous also in diminishing imports of necessary food-stuffs."

9. *Business difficulties.*—The number of business failures in Germany during 1929 ran somewhat higher than in 1928, and in the early weeks of 1930 there was a considerable further increase. In some cases, distress has overtaken old-established concerns which have been unable to adjust their affairs to the new conditions prevailing since the war; in other cases, and this applies particularly to a number of small banking failures that occurred during the autumn, the trouble appears to have been largely due to situations which were

left over from the inflation and which came to a head during the year under the pressure of high interest rates. A few large business concerns also have been in difficulties, but these appear to have been individual cases of bad management, and not indicative of general weakness in the business situation. It should be understood that the figures given in the following table [omitted] are not fully comparable from one period to another, because of changes which have taken place in the official procedure for dealing with concerns in difficulties. These changes were described in the report of December 22, 1928.

The movement toward concentration in business which has been in progress in Germany since stabilization continued during 1929, but on average at a somewhat diminished rate. Since the beginning of 1925 the number of enterprises of all sorts dissolved, including partnerships and individual firms as well as joint-stock corporations, has exceeded the number of new enterprises formed by more than 70,000.

The nominal amount of protested bills was somewhat higher during 1929 than in 1928, when in turn the amount was somewhat higher than in 1927. The figures which are given in the following diagram and table [omitted] have been compiled and published by the Institut für Konjunkturforschung on the basis of private reports received from various parts of Germany. The amounts given have no absolute significance because they take into account only a minor part of the total protested bills in Germany; but the tendency illustrated may be assumed to represent a fair sampling.

The German currency.—From the time of stabilization up to the end of 1929 the volume of currency in circulation continuously increased, season for season, from one year to the next. But in recent years the year-to-year growth has slowed down, and in the first months of 1930 the volume of the circulation has been on the whole slightly smaller than in the corresponding months of 1929.

In the period immediately after stabilization, as a characteristic result of the inflation, the currency was barely sufficient to meet the minimum requirements of the country's business, and the year-to-year rise in volume was a reflection of the pressure which this shortage exerted, and only secondarily of the complex factors which ordinarily determine the growth or contraction of a gold standard currency. During 1929, when this phase was approaching its end, the year-to-year increase tended to restrict itself more and more closely to such addi-

tional amounts as were required to satisfy current changes in the demand—the latter the result of the complicated working of such factors as the volume of production and trade, the price level of commodities in world markets, Reichsbank credit policy and the availability of credit abroad.

The German currency has continued to satisfy all the practical requirements of the gold standard, as it has during the entire period since the Dawes plan went into effect. The position of the reichsmark in the foreign exchanges, as has been seen in a previous section of this chapter, has kept within the limits determined by the gold points both upward and downward, and on many occasions in recent months it has stood with respect to other leading currencies at or near the gold import point. Its internal value has risen to some extent, in accordance with the decline in the general index of commodity prices.

The reichsmark remained up to the end of the Dawes plan a gold currency in a de facto sense only, but with the coming into force of the new plan it has been placed on a full gold basis. Even before this final step was taken, the Reichsbank, as a matter of announced policy, held itself ready to redeem its notes in gold but it was not legally bound to do so. The Reichsbank's obligation to pay its notes in gold or devisa was provided for in section 31 of the bank law of August 30, 1924, but the coming into force of this section of the law depended, according to the provisions of section 52, upon "concurrent resolutions of the Reichsbank managing board and of the general council." As stated in the previous report, the president of the Reichsbank in a letter dated June 6, 1929, addressed to the chairman of the committee of experts then meeting in Paris, had said that he "was prepared to introduce the necessary resolution * * * at the latest in connection with the putting into force of the present plan by the Governments." On April 19, 1930, the Minister for Economic Affairs and the Finance Minister of the Reich issued a proclamation, dated April 17, 1930, conveying a communication from the Reichsbank managing board under date of April 15, 1930, to the effect that "in accordance with section 52 of the bank law of August 30, 1924, the Reichsbank managing board and the general council of the Reichsbank have unanimously resolved to put section 31 of the bank law in force. This resolution will come into force at the same time as the new plan."

*The diagram and table [omitted] show on the basis of month-end figures the growth of

the total amount of currency in circulation since the Reichsbank law went into effect on October 11, 1924. During 1929, while the circulation continued to rise, the rate of increase was slower than in any previous year. In 1926, for example, the average increase of the circulation over 1925 was about 450,000,000 reichsmarks; in 1927 the increase over the preceding year was about 550,000,000 reichsmarks, and in 1928 about 400,000,000 reichsmarks. In the first half of 1929 the year-to-year margin narrowed to 170,000,000 reichsmarks, and in the second half of the year to below 60,000,000 reichsmarks; while in the early part of 1930 the year-to-year increase practically disappeared and at the end of April there was even a small decline.

The notes of the Reichsbank have continued to furnish the principal element of increase in the currency. The increase in the Reichsbank circulation, indeed, has been somewhat larger than the increase in the circulation as a whole. Whereas in 1925 Reichsbank notes comprised on the average 52 per cent of the circulation, in 1929 they comprised about 75 per cent of it. The progressive retirement of Rentenbank notes has left a vacuum in the circulation which had to be filled. New coinage of the Reich has partly served this purpose, but the Reichsbank has been called upon to supply the difference as well as the year-to-year increase in the circulation as a whole.

Up to April 30, 1930, in carrying out the provisions of the Rentenbank liquidation law of August 30, 1924, Rentenbank notes have been retired in the following amounts (rentenmarks being equivalent to reichsmarks) and from the following sources:

	In millions of rentenmarks
Interest on the general mortgage on agricultural land.....	347
Payments by the Reich.....	315
Share of the Reich in Reichsbank earnings.....	88
Repayments of agricultural bills.....	880
Total.....	1,630

In addition, as noted in previous reports, about 70,000,000 rentenmarks have been withdrawn from circulation and are held under earmark at the Reichsbank. At the end of April, 1930, the amount of Rentenbank notes in the hands of the public was 363,000,000, or only about 6 per cent of the total German circulation.

As foreseen in the law, the retirements of Rentenbank notes were particularly heavy in the first years of the operation of the Dawes plan. In the period of about three years

ended December 31, 1927, about 1,340,000,000 of Rentenbank notes were retired. The principal source of funds during that period was the complete repayment of the so-called economic credits which had been granted in the early days of stabilization through the medium of the Reichsbank and the minor banks of issue, in rentenmarks and mainly for the benefit of agriculture. Since the beginning of 1928 the income of the redemption fund has been derived from the three remaining sources, namely, the interest on the rentenmark general mortgage to which agricultural land is subject (about 139,000,000 reichsmarks for the period), payments out of the budget of the Reich (135,000,000 reichsmarks), and the share of the Reich in the profits of the Reichsbank (16,000,000 reichsmarks). The suppression of the first of these items, in the interest of agricultural relief, forms part of the Government's plan for financial relief to agriculture, as already noted in a previous section. Under the draft law of April 7, 1930, which has been presented to the Reichsrat but not yet enacted into law, the annual contribution by the Reich to the redemption fund also disappears, so that in future the fund will normally receive only the annual share of the Reich in the profits of the Reichsbank. The time limit for the complete retirement of Rentenbank notes is accordingly to be extended from 1934 to December 31, 1942.

For reasons described at length in the last report and given in outline in preceding pages, the Reichsbank reserves of gold and devisaen were heavily drawn upon in the spring of 1929, with corresponding effects on the ratio of gold and eligible devisaen held against outstanding notes. On May 7, 1929, the reserve ratio stood at 41.0 per cent, the lowest since stabilization and only one point above the legal minimum. Since then, with the replenishment of reserves, the ratio has gradually risen and at the end of April, 1930, stood at 62 per cent, an end-of-month ratio rarely exceeded in recent years.

GERMANY'S FOREIGN TRADE

The equilibrium between exports and imports of goods, which had been tentatively reached in September and October, 1928, was maintained during the calendar year 1929, at an average level of about 1,120,000,000 reichsmarks a month. In the final months of the year the reported surpluses of exports, including deliveries in kind, more than overcame the deficits of the early part of the year, and thus brought German foreign trade for the full year

into balance. This result was not due to any sudden or sporadic reversal of former tendencies but to the gradual and cumulative effect of forces which have been in process since stabilization, reflected primarily in the growing vitality of the German export trade. In this sense, the maintenance of the foreign trade balance during 1929 may be regarded as the most promising commercial development of the year.

The main element in this result, as illustrated in the foregoing diagram [omitted], has been the growth of the German export trade. On the whole the value of exports has risen steadily ever since the reestablishment of orderly conditions after the inflation: In 1925 exports amounted, according to the published figures of the Reich Statistical Office, to an average of 774,000,000 reichsmarks a month, including deliveries in kind; in 1926 to an average of 868,000,000 reichsmarks; in 1927 to 900,000,000 reichsmarks; in 1928 to 1,023,000,000 reichsmarks; and in 1929 to 1,124,000,000 reichsmarks. Total exports for the year 1929 reached a level of 13,482,000,000 reichsmarks, or more than 4,000,000,000 reichsmarks higher than in 1925, making an average year-to-year increase of about 1,000,000,000 reichsmarks.

The development of the export trade has been one of the primary objects of German industry ever since stabilization, not only in the adaptation of plant and production at home but in the reestablishment of old trade relations abroad and the discovery of new trade outlets. In some parts also, the growth of exports has been due to the gradual removal of postwar discriminations against German goods in foreign markets. Much progress has been made in effecting commercial treaties and trade arrangements with foreign countries, which have had the result in most cases of reestablishing Germany on the same footing as other exporting nations. Deliveries in kind on reparation account, in addition to providing a useful method for transferring an important part of the sums paid as reparations, have also served the practical purpose of getting over customs barriers and prejudices against imports from Germany, and so of enlarging the German export market in general. Furthermore, the domestic demand for capital has exerted pressure more or less strongly throughout these years in the direction of larger sales of goods in foreign markets. During the year 1929 this pressure was all the more pronounced because of high interest rates and the difficulties, described at length in the chapter on

credit, of obtaining foreign loans; and business conditions abroad were at the same time favorable to the development of German exports.

On the import side of the trade balance the results of the year 1929 are also of great significance, but for different reasons. Since raw and other materials for industrial use make up the principal fluctuating element in German imports, the changes from time to time in the volume of imports furnish a fair indicator of changes in the activity of German industry as a whole. Regarded from this aspect, the import returns since the reform of the currency are of singular interest. In 1925, a year of stocking up after the inflation, the value of imports, according to the figures published by the Reich Statistical Office, amounted to an average of 1,030,000,000 reichsmarks a month; in 1926, the year of the rationalization crisis in industry, imports averaged 833,000,000 reichsmarks a month; in 1927, a year of broad business activity, the average was 1,186,000,000 reichsmarks; in 1928 it was 1,167,000,000 reichsmarks; and in 1929 it was 1,120,000,000 reichsmarks. Thus in the last three years the monthly average value of imports has been running fairly consistently at or about the level established in 1927, with only a slight tendency to decline in 1929, reflecting in part the fall in commodity prices. Practically all of the decline, moreover, was due not to smaller imports of industrial raw materials but to smaller imports of foodstuffs, made possible by the better harvests of the last two years.

GERMAN FOREIGN TRADE, BY MONTHS

[In millions of reichsmarks]

	Imports	Exports		-Excess of imports +Excess of exports	
		Without deliveries in kind	With deliveries in kind	Without deliveries in kind	With deliveries in kind
1925 average	1,030	733	774	-297	-256
1926 average	833	815	868	-18	+35
1927 average	1,186	852	900	-334	-286
1928 average	1,167	968	1,023	-199	-144
1929 average	1,120	1,055	1,124	-65	+4
1929-January	1,317	1,029	1,101	-288	-216
February	1,015	916	971	-99	-44
March	1,023	928	982	-95	-41
April	1,254	1,159	1,227	-95	-27
May	1,131	1,094	1,172	-37	+41
June	1,077	1,011	1,077	-66	0
July	1,226	1,028	1,099	-198	-127
August	1,073	1,119	1,189	+46	+116
September	1,038	1,130	1,200	+92	+162
October	1,107	1,154	1,247	+47	+140
November	1,161	1,091	1,154	-70	-7
December	1,020	1,003	1,063	-17	+43
1930-January	1,305	1,034	1,092	-271	-213
February	982	962	1,026	-20	+44
March	884	1,043	1,104	+159	+220

The satisfactory nature of the trade returns for 1929 is thus apparent. It is especially noteworthy that the equilibrium between exports and imports was reached, not by depressing the imports of materials essential to industrial activity, but by raising the value and volume of exports, with some collateral help from larger agricultural production. In this sense the re-establishment of balance in German foreign trade is less important in itself than the level at which equilibrium is restored. This level for the year 1929 stood on the average at about 1,120,000,000 reichsmarks a month, or some 300,000,000 reichsmarks a month higher than in 1926, the most recent previous date when exports balanced imports for any comparable period.

It will have been observed from the table [omitted] that the figures for the first quarter of 1930 show a continuation of exports at about the average level of 1929. Imports for the quarter as a whole were somewhat smaller than in the same period of the two previous years, owing in part to the decline in prices of many important raw materials and semifinished products. According to the figures as reported there was an export balance in the quarter of over 50,000,000 reichsmarks, as compared with an import balance of 300,000,000 reichsmarks in the first quarter of 1929. The reported import figures for the first quarter of the year, however, are always somewhat larger than actual imports in that period, as they include the values for certain goods physically imported in the previous months but not brought into the trade figures until the semiannual settlement in January for customs duties on those goods. It has been estimated by the Reich Statistical Office that this overstatement of imports in the first quarter of 1930, after making due allowance for the goods actually imported during the period but which will not be included in the statistics until the next semiannual settlement, amounted to about 180,000,000 reichsmarks. Thus the export balance for the first quarter of 1930 would amount to about 230,000,000 reichsmarks instead of only 50,000,000, reichsmarks, as shown by the reported figures. These adjustments, however, do not affect the conclusions reached with respect to the trade balance for the year 1929, because the statistical office has included in the imports for that year a similar excess applicable on the same grounds to the year 1928.

The most important developments of the first quarter of 1930, from the standpoint of German foreign trade, have been, first, the world-wide fall in prices, particularly for raw materials and

foodstuffs, and, second, the greatly increased customs duties which the German Government has recently imposed on many foreign products, particularly the agricultural products of neighboring countries. These countries are numbered among Germany's principal customers for finished products, and the question arises as to how far the new protective tariffs will, in turn, react upon German exports. Germany gains, of course, by the decline which has taken place in the prices of the raw materials needed for the use of its industries, and as indicated below, the fall in commodity prices during the past year has tended to reduce the value of imports without a corresponding reduction in the actual volume of goods received. The effects of the sharp price decline since the turn of the year are likely to be reflected even more in the import figures for coming months than in those so far reported, and the higher customs duties will also tend to curtail the import of agricultural commodities during the next few months. On the export side, it still remains to be seen how sales of German goods abroad may be affected by the decline in world prices and the general recession in production and trade.

The balance of payments.—It follows from the better position of Germany's foreign trade that the balance of payments should have improved also. The balance of payments, of which the balance of trade forms a part, takes account not only of the import and export of goods, but of all the other services and things of value exchanged between Germany and the rest of the world. In many respects these other services and things of value can be expressed only conjecturally in terms of figures. Nevertheless it is interesting to bring together such elements as can be stated in fairly exact terms, so as to give some picture of the balance of payments as a whole. During the fifth annuity year the rising volume of the export trade, bringing with it a much smaller deficiency in the merchandise trade balance, was associated on the other side of the account with a much reduced volume of borrowing, and this notwithstanding the increase in reparation payments to the level of the standard year.

Analyses by annuity years.—In preceding annual reports analyses of the balance of payments for the respective annuity years, beginning September 1 and ending August 31, have been made within such limits as the available figures permitted, and a similar statement for the fifth annuity year is given below, together with a brief statement of the main characteristics of the earlier years. Inasmuch as many of the so-called invisible items entering into a

balance of payments are necessarily matters of estimate and deduction, no effort has been made to make the statements fully comprehensive. The items selected for presentation are based upon the broader but still partly conjectural statements published by the Reich Statistical Office. Wherever the merchandise balance enters into the statement, imports and exports have been adjusted according to the coefficients of the Reich Statistical Office, in order to correct the overstatement of imports and the understatement of exports which were inherent in the official figures up to the time when the new foreign trade reporting procedure became effective. It should also be explained that wherever reparation payments enter into the calculations the figures used are those for transfers made in foreign currencies only. Deliveries in kind have been omitted for the sake of simplicity from both sides of the balance; their value has been given neither among the exports from Germany nor among the payments made by Germany.

In the first annuity year, a year of restocking and reconstruction, the large imports of goods, which far exceeded the relatively small amount of exports, placed a heavy burden upon foreign credit at both long and short term. In the second annuity year, a year which included practically the whole of the rationalization crisis in business, the much reduced imports of goods, which the moderately increased exports somewhat exceeded, placed no burden at all upon foreign credit, and the long-term loans then issued served in effect to refund a large part of the short debt incurred in the previous year. In the third annuity year, a year of large and rising business activity, stimulated in part by the borrowing and spending programs of the public authorities, very large imports, which far exceeded the rising values of exports, again placed a heavy burden upon foreign credit. In the fourth annuity year, a year when the business activity of the preceding period reached a maximum and then somewhat receded, imports of goods were again very large and together with imports of gold still far exceeded the increased values of merchandise exports, with the result that there was again a heavy dependence on foreign credit.

In the fifth annuity year, a year of large industrial production but of difficult credit conditions, imports of goods remained very large but a further rise in the value of exports much reduced the requirements for credit from abroad. The deficiency in the merchandise trade balance, after making allowances for errors in the figures up to the time when the

new reporting system became effective, amounted to about 1,080,000,000 reichsmarks. To this deficiency must be added the transfers in foreign currencies on reparation account, which amounted to 1,419,000,000 gold marks, and a further slight addition made to cover the year's increase in the Reichsbank's reserves of gold and devisen, amounting to 48,000,000 reichsmarks. In total, and disregarding items such as interest on foreign debt, travelers' expenditures, wages of foreign workmen, and so on, the deficiency may be estimated at about 2,550,000,000 reichsmarks.

Against this deficiency are to be placed only three items which can be stated even approximately. The first is the effective amount of capital issues placed abroad during the period, estimated at about 600,000,000 reichsmarks. The second item covers the net amount estimated to have been paid to Germans on shipping and transportation account, about 400,000,000 reichsmarks. The third is an item of about 300,000,000 reichsmarks, roughly stated, representing the return to German possession of property sequestered in the United States during the war. These items reduce the deficiency to about 1,250,000,000 reichsmarks, or considerably less than in either of the two preceding years. Conjecturally, this deficiency together with such supplements to it as may be represented in various undetermined items, was covered by short loans, acceptance credits granted by foreign banks to German firms through the medium of German banks, participation by foreigners in German business enterprises, and so on.

Estimate by calendar years.—The latest date covered by the preceding analyses is August 31, 1929, with the result that the important final months of 1929 are left out of account. There has recently become available, however, a condensed estimate of the balance of payments for the calendar year 1929, which is given below as a matter of information.

This estimate was published under date of December 31, 1929, by the Reichs-Kredit-Gesellschaft, a banking institution indirectly owned by the Reich, in its report on the German economic situation at the turn of the year 1929-30. The estimate for the calendar year 1929 is necessarily provisional because detailed figures for the final months of the year were not yet in hand; but it offers a useful basis for comparison with preceding years pending the publication of the estimate of the Reich Statistical Office which ordinarily appears sometime in May. The following table reproduces the items for the years 1927, 1928, and

1929 as they appear in the Reichs-Kredit-Gesellschaft's report. It should be added that the estimates for the years 1927 and 1928 resemble closely the statistical office's published estimates for those years, but are stated in simplified form.

REICHS-KREDIT-GESELLSCHAFT'S ESTIMATE OF
GERMAN BALANCE OF PAYMENTS

[In billions of reichsmarks, round amounts]

	1927	1928	1929
ASSETS			
I. Recurrent items:			
Exports (not including gold and silver)...	10.51	11.80	12.80
Reparation payments—			
(a) Deliveries in kind.....	.57	.70	.90
(b) In Germany.....	.08	.07	.07
Surplus from services rendered.....	.30	.29	.36
II. Nonrecurrent items:			
Gold surrendered by the Reichsbank.....			.47
Falling off in the foreign exchange holdings of the Reichsbank.....	.49	.07	
Influx of funds released by America.....		.04	.27
Imports of capital—			
(a) Loans.....	1.61	1.35	.35
(b) Short-term credits to the Reich.....			.21
(c) Other short-term credits.....	1.90	1.58	1.72
(d) Other imports of capital (balance).....	.73	1.33	
Total.....	16.19	17.23	17.15
LIABILITIES			
I. Recurrent items:			
Imports (not including gold and silver)...	14.00	13.60	13.60
Reparation payments (as from September, 1929, on the basis of the Young plan).....	1.58	2.00	2.37
Balance of interest.....	.45	.70	.86
Adverse balance of emigrants' and immigrants' capital transactions.....	.07	.07	.07
II. Nonrecurrent items:			
Increase in the visible foreign exchange holdings of the Reichsbank.....			.25
Influx of gold into the Reichsbank.....	.09	.86	
Total.....	16.19	17.23	17.15

GERMAN BUSINESS CONDITIONS

During the final months of 1929 and the first few months of 1930 the general volume of German production and trade, after a period in which previous figures had been surpassed in many lines of activity, has been distinctly below the average levels of the past two or three years. In some part, of course, this recession has been characteristic of the season, but it appears in the main to have been the result of a combination of forces, both internal and international, the nature of which has already been discussed in the chapter on credit. Recession in business activity in other countries and the world-wide decline in prices have been elements of uncertainty which have tended to restrain business progress in Germany, as well as abroad. Of the internal forces, the one which retains the greatest importance is the depressing influence exercised by the tension in the public finances. In the face of the disordered condi-

tions prevailing during most of the past year, producers and consumers have found it difficult to go ahead with their plans, and this hesitation has contributed materially to the decline of production and to the falling off in trade; while the capital which would otherwise have been available for productive business and industry has been largely absorbed by the ever-pressing demands of the public authorities. Indeed, the duration of the present recession is likely to depend in considerable measure upon the steps which are taken to reestablish order in the public finances, and the speed with which they are put into effect.

The slowing down in business over the turn of the year came at the close of a period which furnished a striking example of the vigor of the German economy under adverse conditions. During the calendar year 1929 the physical volume of production and distribution taken as a whole was even slightly larger than in 1928 and 1927, years which comprised a period commonly recognized as one of large business activity. In particular fields, notably in the heavy industry, the volume of production exceeded that of any previous year since stabilization. In other fields, particularly in the textile industry and in the industries making luxury articles and goods for home consumption, conditions were less favorable, and the year as a whole was characterized by moderate to small production. In general, it appears that the industries with the largest volume of production were those participating in the expansion of the export trade, or those benefiting indirectly from it. In response to the growing vitality of the export trade, and under pressure of difficult credit conditions, there were highly significant changes during the year in the direction of business. More goods than ever before passed into foreign trade, and exports and imports were brought into balance at an average level of about 1,120,000,000 reichsmarks per month. In domestic business there was a tendency for trade in articles of subsistence and in the less expensive articles of enjoyment to increase, and for trade in luxuries and fine goods to diminish. This latter development is consistent with a moderate further increase in the purchasing power of wage earners and a decline in the purchasing power of various other sections of the population, particularly those who before the inflation derived a substantial part of their income from fixed investments.

On the side of industrial organization, there have been further important developments. The movement toward concentration has resulted in a further reduction in the number of

enterprises and in the extension of the influence of cartels and trade associations. A noteworthy step in this direction was taken toward the close of 1929 when the Rohstahlgemeinschaft (the Raw Steel Association) was enlarged to include practically all German producers, with provision for the prolongation of its activities up to 10 years. Another development of primary importance is the community of interest established early in 1930 between the two leading German merchant-shipping concerns. In April, 1930, an agreement, which is still awaiting ratification, was also concluded for the prolongation of the German Coal Syndicate for a period of 10 years, to March 31, 1940. Other phases of rationalization have shown themselves in the shape of further improvements in business methods and factory organization.

The present position of German business as a whole is best to be understood in the light of what has occurred heretofore, in the period since the stabilization of the currency. In the autumn of 1925, German industry and trade started on a course of drastic readjustment and rationalization which involved radical reductions in staff, acute unemployment, a limited volume of production, and general depression in business. By the autumn of 1926 recovery was well under way, and the next 15 months covered a period of high and rising business activity. This expansion had a special stimulation from the very free use of credit, both domestic and foreign, particularly on the part of the public authorities, and toward the close of 1927 business was running on an exceptionally high level of activity. During the early part of 1928 there came the natural reaction from these conditions, and with it a considerable decline from the peak of production and a small decline in the volume of consumption; but for the year as a whole, in spite of the dislocation resulting from the November lockout in the Rhenish-Westphalian iron and steel industries, the average level of production stood on a high plane and showed only a slight reduction as compared with the previous year. During 1929, in spite of considerable fluctuations in business, and notwithstanding weather of unprecedented severity in the first quarter, the uncertainties of the reparation conferences, the constant financial difficulties of the public authorities, and the general reduction in the flow of fresh funds from abroad, the physical volume of production and trade reached equal or even slightly larger totals on the whole than in any previous year since stabilization.

From the standpoint of the German economy it is not sufficient, of course, that the general

volume of business should merely hold its own with previous years. It is necessary for it to increase, if for no other reason because of the year-to-year growth of the population. Recently the German population, according to the official figures, has been rising at the rate of about seven-tenths of 1 per cent a year, but by reason of the larger birth rate immediately before the war the population eligible for gainful employment has been rising at a rate about twice as fast, equivalent to about 1½ per cent a year. Simultaneously with this increase in the number of potential workers, German industry has been perfecting its processes and adding to its efficiency, with the result that it has enabled itself to produce more goods with less labor. Accordingly, the volume of business has to increase at a rate considerably faster than the growth of the working population if the problem of unemployment is to be kept on an even keel.

Since the early part of 1926, the physical volume of production and distribution has followed in the long term a generally upward curve, which is not to be obscured by the special expansion which came at the close of 1927, with its inevitable reaction, or by the temporary recession which occurred in the winter of 1928-29, or by the recession which is now in process. But the increase in business does not appear to have been sufficient as yet to take care of more than about half of the annual increase in the number of eligible workers. There is no doubt that on the whole actual employment has materially increased during the past few years, and stood in 1929 at a level much higher than in the years before the war. At the same time, owing to the increase in the eligible working population, basic unemployment has also risen to a considerable extent, and it still presents a serious problem not merely for the public finances but for the German economy as a whole.

Relief from this problem of a rising volume of basic unemployment, which is described more fully in a later section of this chapter [omitted], is to be looked for from three principal sources. The first centers on the fact that after 1932 the low birth rate during the war is due to be reflected in an actual decline in the number of eligible workers, and, other things being equal, should produce a reduction in the volume of basic unemployment. The second is a question of markets, both abroad and at home. Ever since stabilization the foreign market for German goods has responded to the energetic efforts of German exporters, and the volume exports has consistently and rapidly rise

The domestic market has shown greater variation, and has reflected more or less faithfully the prevailing credit conditions. Credit, the third source from which relief may be expected, passed in 1929 through an extremely difficult stage, as has been seen in the chapter on credit; and the relative ease of money in the early months of 1930 does not yet appear to have stimulated trade in the face of the uncertainties engendered by falling prices and the state of the public finances.

On the whole the 1929 harvest, according to the official estimates, produced a yield larger than in any recent year other than 1928, and the good harvests of 1928 and 1929 taken together have been of great assistance to the German economy as a whole by making it possible to do with smaller imports of foodstuffs. The prices, however, at which the new crop could be sold were even lower in most cases than a year ago, and this decline, though of benefit to consumers, seriously complicated the already difficult position of agriculture.

The question of the profits derived by industrial and trading concerns remains obscure. The Reich Statistical Office has attempted to arrive at general conclusions by analyzing the annual reports of numerous enterprises, but the results are suggestive rather than definite. For example, the net profits reported by about 1,200 concerns with business years ending in the last quarter of the calendar year amounted in 1927 to 637,000,000 reichsmarks and in 1928 to 621,000,000 reichsmarks, and the ratio of dividends to capital changed from 7.17 per cent to 7.12 per cent. For about 400 concerns with business years ending in the first half of 1929, the results were also practically identical from one period to the next. Reports from a few important concerns which have already issued statements for business years ending at later dates in 1929 also show almost no change from the preceding year. In a broad sense, the figures for profits support the conclusion drawn from the figures for production and distribution, namely, that taking each year as a whole there has not been any marked change from the level established on average in the year 1927; but, in a stricter sense, the figures often appear to reflect dividend and accounting policy rather than the absolute results of the years in question.

* * * * *

CONCLUSIONS

The present report brings to an end the administration of the Dawes plan, which has extended from September 1, 1924, to May 17,

1930, through the five full annuity years of the Dawes plan and through the transition period under The Hague agreements. During all this time reparations have been fully paid and transferred in accordance with the provisions of the plan.

To understand the place of the Dawes plan in the history of the reparation problem, it is necessary to look back to the preceding period and also to the future. When the experts of the Dawes committee were called together at the beginning of 1924, Germany was on the point of collapse, after an unprecedented period of inflation. Reparations were not being paid, and the prospects for future payments were uncertain. With the stabilization of the currency and the adoption of the Dawes plan there came the turning point in German reconstruction, and in the succeeding years the German economy has made remarkable progress. Germany's credit has been reestablished both at home and abroad, her industries have been reorganized and her productive capacity restored, and the general standard of living has greatly improved. This result has been achieved primarily through the industry and

energy of the German people, but the people of other countries have also assisted in large measure by making their savings available for the rebuilding of the German economy.

The Dawes plan, as was its object, also cleared the way for the complete and final settlement of the reparation problem which is embodied in the Young plan and The Hague agreements of January 20, 1930. The new plan is an act of confidence in the good faith and financial integrity of Germany, and Germany now has a definite task to perform on her own responsibility, without foreign supervision and without the transfer protection provided by the Dawes plan. Under the new conditions Germany has both the whole responsibility and the normal incentive to put her public finances in order and there is no doubt that this problem, which is now the most urgent one confronting the German people, can also be solved and solved on a sound basis if anything like the same efforts are now applied to the reform of the public finances as have been devoted during the period of the Dawes plan to the general reconstruction of the German economy.

FINANCIAL STATISTICS FOR FOREIGN COUNTRIES

GOLD HOLDINGS OF CENTRAL BANKS AND GOVERNMENTS

[In millions of dollars. Figures for end of month or latest available preceding date; see BULLETIN for June, 1929, p. 396, and for June, 1930, p. 372]

Month	Total (45 countries) *	United States	Ar- gen- tina	Aus- tra- lia	Bel- gium	Bra- zil	Can- ada	Eng- land	France	Ger- many	India	Italy	Ja- pan	Neth- er- lands	Rus- sia	Spain	Swit- zer- land	29 other countries *
1929—September.....	10,265	4,008	496	114	142	151	77	648	1,545	527	128	272	541	178	132	495	103	707
October.....	10,296	4,023	476	109	143	151	77	643	1,570	531	128	272	541	178	142	495	103	712
November.....	10,301	4,003	451	97	151	151	78	659	1,600	534	128	273	542	180	142	495	105	711
December.....	10,294	3,900	434	89	163	150	78	711	1,633	544	128	273	542	180	147	495	115	711
1930—January.....	10,360	3,921	445	88	164	139	78	732	1,683	547	128	273	520	177	147	495	108	714
February.....	10,432	3,988	448	124	164	127	78	740	1,680	582	128	273	477	176	150	476	108	714
March.....	10,503	4,061	445	126	164	127	79	759	1,668	595	128	274	453	174	156	476	108	711
April.....	10,566	4,131	442	109	164	90	79	795	1,659	611	128	274	443	174	167	477	112	711
May.....	10,612	4,159	441	91	167	90	80	765	1,717	617	128	274	434	174	177	477	112	709
June.....	10,671	4,178	440	97	167	89	81	768	1,727	624	128	274	434	174	203	477	112	699
July.....	10,708	4,180	436	97	167	80	94	746	1,775	624	128	274	440	157	233	477	118	700
August.....	10,790	4,148	434	97	168	69	100	759	1,852	624	128	275	433	157	249	477	123	697
September.....	10,826	4,159	434	98	173	65	110	766	1,899	590	128	278	431	157	249	478	123	686
October.....	10,813	4,183	434	98	173	65	110	782	1,192	519	128	278	431	171	249	478	123	686

* Preliminary, based on latest available figures. * Revised to include figures for Bolivia.

NOTE.—Table covers all countries for which satisfactory figures are available; see BULLETIN for April (p. 170), where separate figures for the 44 countries are given by years back to 1913. For the 16 countries here shown separately—all of which have held gold in recent years to the amount of \$90,000,000 or more—the figures are for central banks only except as follows: *United States*—Treasury and Federal reserve banks; *Argentina*—Government conversion fund and Bank of the Nation; *Brazil*—Bank of Brazil and Government stabilization fund; *Canada*—Government reserve against Dominion notes and savings-bank deposits, and gold deposits of chartered banks in the central reserve; *India*—currency and gold standard reserves of Government; *Japan*—domestic holdings of Bank of Japan and Government.

GOLD MOVEMENTS

[In thousands of dollars]

Month	United States			Germany			Great Britain			Netherlands			South Africa	India
	Im- ports	Ex- ports	Net	Im- ports	Ex- ports	Net	Im- ports	Ex- ports	Net	Im- ports	Ex- ports	Net	Net	Net
1929—September.....	18,781	1,205	17,576	9,939	851	9,088	18,301	41,283	-22,982	116	17	99	-15,375	3,390
October.....	21,321	3,805	17,516	4,624	1,002	3,622	28,591	26,794	1,796	177	12	166	-15,812	3,146
November.....	7,123	30,289	-23,166	5,093	919	4,174	36,249	27,844	8,405	107	15	92	-20,922	4,408
December.....	8,121	72,547	-64,426	11,096	806	10,290	65,343	16,439	48,903	297	17	280	-18,220	4,603
1930—January.....	12,908	8,948	3,960	5,052	629	4,423	41,702	16,102	25,600	248	3,224	-2,975	-17,808	5,370
February.....	60,198	207	59,991	38,252	687	37,565	38,961	34,074	4,886	80	1,026	-946	-20,786	3,844
March.....	55,768	290	55,478	15,119	769	14,350	38,258	12,826	25,432	89	10	79	-13,777	3,447
April.....	65,835	110	65,725	18,670	703	17,967	42,741	14,828	27,913	81	21	60	-18,134	5,953
May.....	23,552	82	23,470	7,318	722	6,596	45,388	61,134	-15,746	75	19	56	-22,798	6,452
June.....	13,938	26	13,912	7,561	1,815	5,746	13,747	20,659	-6,912	34	11	23	-18,190	9,204
July.....	21,889	41,529	-19,640	1,481	628	853	24,646	40,335	-15,709	48	16,587	-16,539	-22,415	3,404
August.....	19,714	39,331	-19,617	1,614	656	958	24,201	21,390	2,811	281	8	273	-18,708	13,461
September.....	13,680	11,133	2,547	2,030	25,859	-23,829	22,339	20,245	2,094	81	13	68	-17,149	-----

MOVEMENTS TO AND FROM GREAT BRITAIN

[In thousands of dollars]

From or to—	1930				1929	
	September		January-Sep- tember		Calendar year	
	Im- ports	Ex- ports	Im- ports	Ex- ports	Im- ports	Ex- ports
France.....	12	15,921	1,470	138,042	2,066	162,527
Germany.....	-----	1,470	7	65,257	3,203	92,991
Netherlands.....	-----	133	19	738	14,382	2,006
Spain and Canaries.....	3	2	19,496	150	4	359
Switzerland.....	-----	1,985	-----	17,640	-----	10,781
United States.....	-----	-----	283	-----	23,090	61,293
South America.....	5,182	-----	26,191	49	39,129	-----
British India.....	1	317	1	7,437	-----	10,320
Australia.....	1,815	-----	90,615	2	24,093	-----
New Zealand.....	12	-----	127	-----	2,433	-----
Egypt.....	-----	-----	-----	94	-----	3,786
Rhodesia.....	405	-----	3,960	-----	4,641	-----
Transvaal.....	14,439	-----	145,093	-----	184,954	-----
West Africa.....	356	-----	3,667	11	4,216	-----
All other countries.....	113	417	1,056	12,195	1,003	33,434
Total.....	22,339	20,245	291,985	241,615	303,725	377,505

MOVEMENTS TO AND FROM BRITISH INDIA

[In thousands of dollars]

From or to—	1930				1929	
	July		January-July		Calendar year	
	Im- ports	Ex- ports	Im- ports	Ex- ports	Im- ports	Ex- ports
England.....	407	-----	6,356	-----	10,461	-----
United States.....	-----	-----	-----	-----	22	-----
Aden and dependen- cies.....	60	-----	406	-----	1,045	-----
Arabia.....	34	-----	479	-----	1,287	-----
British Oceania.....	563	-----	5,551	-----	7,701	-----
Bahrein Islands.....	20	-----	100	-----	119	-----
Ceylon.....	419	-----	2,038	-----	4,151	1
China.....	652	-----	1,432	-----	188	-----
Mesopotamia.....	150	-----	1,478	-----	2,613	-----
Straits Settlements.....	146	-----	1,100	14	19	28
Egypt.....	88	-----	1,176	-----	6,867	-----
Natal.....	829	-----	17,470	-----	29,595	-----
All other countries.....	35	-----	4	-----	206	19
Total.....	3,404	-----	37,688	15	64,275	48

FOREIGN EXCHANGE RATES

[Monthly averages of daily quotations.¹ In cents per unit of foreign currency]

Country	Monetary unit	Par of exchange	1930			Country	Monetary unit	Par of exchange	1930		
			August	September	October				August	September	October
EUROPE						SOUTH AMERICA					
Austria.....	Schilling.....	14. 07	14. 1182	14. 1131	14. 1046	Argentina.....	Peso.....	96. 48	82. 4855	81. 7843	78. 0538
Belgium.....	Belga.....	13. 90	13. 9838	13. 9476	13. 9441	Bolivia ²	Boliviano.....	36. 50	36. 3750	36. 7500	36. 7500
Bulgaria.....	Lev.....	2. 72	2. 7219	2. 7224	2. 7209	Brazil.....	Milreis.....	11. 96	9. 9571	10. 0850	
Czechoslovakia.....	Crown.....	2. 96	2. 9661	2. 9672	2. 9664	Chile.....	Peso.....	12. 17	12. 1133	12. 1365	12. 0834
Denmark.....	Krone.....	26. 80	26. 8150	26. 7670	26. 7557	Colombia.....	do.....	97. 33	96. 5246	96. 5300	96. 5300
England.....	Pound.....	486. 65	487. 0709	486. 1101	485. 8969	Ecuador ³	Sucre.....	20. 00	20. 0000	20. 0000	20. 0000
Finland.....	Markka.....	2. 52	2. 5175	2. 5173	2. 5170	Peru ⁴	Sol.....	40. 00	35. 9808	34. 4100	31. 2596
France.....	Franc.....	3. 92	3. 9337	3. 9273	3. 9235	Uruguay.....	Peso.....	103. 42	82. 9367	82. 3747	79. 2496
Germany.....	Reichsmark.....	23. 82	23. 8893	23. 8229	23. 8050	Venezuela ⁵	Bolivar.....	19. 30	18. 8304	18. 5000	18. 5000
Greece.....	Drachma.....	1. 30	1. 2969	1. 2958	1. 2949	ASIA					
Hungary.....	Pengo.....	17. 49	17. 5294	17. 5160	17. 5050	China ⁶	Mexican dollar.....	28. 41	27. 8666	28. 7591	28. 2598
Italy.....	Lira.....	5. 26	5. 2384	5. 2371	5. 2360	China ⁶	Shanghai tael.....	39. 17	38. 5445	39. 6795	39. 0962
Netherlands.....	Florin.....	40. 20	40. 2908	40. 2880	40. 2982	China ⁶	Yuan dollar.....	27. 79	27. 7580	28. 5500	28. 0003
Norway.....	Krone.....	26. 80	26. 8101	26. 7604	26. 7544	Hong Kong ⁶	Dollar.....	28. 20	32. 2054	32. 2015	31. 9163
Poland.....	Zloty.....	11. 22	11. 2065	11. 2063	11. 2119	India.....	Rupee.....	36. 50	36. 0417	35. 9899	36. 0222
Portugal.....	Escudo.....	108. 05	4. 5046	4. 4925	4. 4872	Japan.....	Yen.....	49. 85	49. 3853	49. 4077	49. 5896
Rumania.....	Leu.....	. 60	. 5958	. 5959	. 5949	Java ⁷	Florin.....	40. 20	40. 3023	40. 3068	40. 3188
Russia ⁸	Chervonetz.....	514. 60	515. 0000	515. 0000	515. 0000	Straits Settlements.....	Singapore dollar.....	56. 78	55. 9482	56. 0320	56. 1687
Spain.....	Peseta.....	19. 30	10. 8762	10. 7255	10. 3448	Turkey.....	Turkish pound.....	439. 65	46. 9356	47. 0019	47. 1035
Sweden.....	Krona.....	26. 80	26. 8914	26. 8680	26. 8523	AFRICA					
Switzerland.....	Franc.....	19. 30	19. 4449	19. 4060	19. 4193	Egypt.....	Egyptian pound.....	494. 31	498. 2290	498. 9320	499. 4600
Yugoslavia.....	Dinar.....	19. 30	1. 7727	1. 7716	1. 7717	NORTH AMERICA					
Canada.....	Dollar.....	100. 00	100. 0943	100. 1206	100. 1033						
Cuba.....	Peso.....	100. 00	99. 9449	99. 9704	99. 9359						
Mexico.....	do.....	49. 85	47. 3364	47. 3740	47. 1678						

¹ Based on noon buying rates for cable transfers in New York.² Averages based on daily quotations of closing rates as published by New York Journal of Commerce.³ Chervonetz quotations nominal.⁴ Silver currency. The figure given for parity represents gold value of unit in October, 1930, computed by multiplying silver content of unit by New York average price of silver for October, 1930, which was \$0.36158 per fine ounce. On the same basis, parity in October, 1929, for the Chinese-Mexican dollar was 39.46 cents; for the Shanghai tael, 54.41 cents; for the Yuan dollar, 38.60 cents; and for the Hong Kong dollar, 39.18 cents.⁵ June, 1930.⁶ July, 1930.⁷ August, 1930.

Back figures.—See BULLETIN for January, 1930, 1929, and 1928.

CONDITION OF BANK FOR INTERNATIONAL SETTLEMENTS

[In thousands of dollars !]

	1930				1930		
	September	August	July		September	August	July
RESOURCES				LIABILITIES			
Cash on hand and on current account with banks.....	1, 073	641	1, 315	Short-term deposits:			
Demand funds at interest.....	13, 290	20, 765	15, 532	Central banks for own account—			
Rediscountable bills and acceptances (at cost):				Demand.....	14, 002	14, 381	18, 349
Commercial bills and bankers' acceptances.....	39, 316	29, 429	35, 539	Time: Not exceeding 3 months.....	51, 889	50, 646	39, 955
Treasury bills.....	19, 463	16, 308	34, 827	Time: Between 3 and 6 months.....	37, 289	24, 930	10, 963
Total.....	58, 779	45, 737	70, 366	Total.....	103, 179	89, 957	60, 267
Time funds at interest:				Central banks for account of others—			
Not exceeding 3 months.....	182, 733	104, 541	57, 506	Demand.....	24, 697	28, 257	42, 055
Between 3 and 6 months.....	29, 714	85, 110	68, 278	Time: Not exceeding 3 months.....	112, 441	27, 436	15, 045
Between 6 and 9 months.....	4, 866	14, 595	14, 594	Time: Between 3 and 6 months.....	7, 563	76, 018	52, 572
Total.....	217, 312	204, 246	140, 378	Total.....	144, 700	131, 711	109, 672
Sundry investments (at cost):				Other depositors:			
Maturing within 2 years.....	35, 853	29, 032	20, 830	Demand.....	23		
Over 2 years.....	202	282	2, 635	Time: Not exceeding 3 months.....		1, 218	1, 219
Total.....	36, 056	29, 314	23, 465	Long-term deposits:			
Other resources.....	1, 672	1, 080	549	Annuity trust account.....	29, 786	29, 824	29, 839
Total resources.....	328, 181	301, 782	251, 605	German Government deposit.....	15, 424	14, 748	16, 920
				French Government guarantee fund.....	13, 262	13, 190	13, 197
				Total.....	58, 472	57, 762	59, 946
				Capital paid in.....	19, 783	19, 783	19, 783
				Other liabilities.....	2, 024	1, 351	719
				Total liabilities.....	328, 181	301, 782	251, 605

¹ Converted into dollars from Swiss francs at par: 1 Swiss franc=\$0.1930.

CONDITION OF CENTRAL BANKS

[Figures are for the last report date of month]

	1930			1929		1930			1929
	Sep- tember	August	July	Sep- tember		Sep- tember	August	July	Sep- tember
Bank of England (millions of pounds sterling):					Central Bank of Bolivia (thousands of bolivianos):				
Issue department—					Gold.....	2,742	2,734	4,731	9,260
Gold coin and bullion.....	157.4	154.8	152.3	131.9	Foreign exchange.....	41,056	43,119	42,930	46,830
Notes issued.....	416.3	414.8	412.3	391.9	Loans and discounts.....	21,997	20,822	21,761	22,918
Banking department—					Notes in circulation.....	35,080	36,088	36,885	44,750
Gold and silver coin.....	1.1	1.0	1.0	1.3	Deposits.....	14,424	13,365	15,123	15,394
Bank notes.....	60.5	54.0	43.9	30.9	Bank of Brazil (millions of milreis):				
Government securities.....	41.1	49.1	51.7	68.9	Gold.....	—	407	407	407
Other securities.....	21.6	22.2	22.3	22.2	Currency.....	—	418	469	709
Discounts and advances.....	5.7	6.5	6.7	3.2	Correspondents abroad.....	—	299	268	264
Public deposits.....	13.3	18.2	9.1	14.7	Loans and discounts.....	—	1,682	1,547	1,282
Bankers' deposits.....	64.2	62.6	61.0	57.0	Securities.....	—	126	125	133
Other deposits.....	34.2	33.8	37.4	36.4	Note circulation.....	—	592	592	592
Reserve ratio ¹ (per cent).....	55.2	48.0	41.8	29.7	Deposits.....	—	1,549	1,486	1,514
Bank notes in circulation ²	355.8	360.9	368.4	361.1	National Bank of Bulgaria (millions of leva):				
Bank of France (millions of francs):					Gold.....	1,434	1,428	1,422	1,385
Gold.....	48,431	47,242	45,283	39,411	Net foreign exchange.....	234	223	187	1,200
Sight balances abroad.....	6,567	6,838	7,104	7,210	Total foreign exchange.....	1,164	1,155	910	1,640
Foreign bills.....	19,027	18,764	18,979	18,623	Loans and discounts.....	782	788	845	1,614
Loans and discounts.....	8,984	9,200	8,911	11,576	Government obligations.....	3,279	3,279	3,279	3,546
Negotiable bonds.....	5,304	5,304	5,395	5,612	Note circulation.....	3,660	3,683	3,435	4,222
Note circulation.....	73,053	73,677	72,110	66,639	Other sight liabilities.....	1,375	1,372	1,446	2,204
Public deposits.....	10,509	10,109	9,132	13,629	Central Bank of Chile (millions of pesos):				
Other deposits.....	8,780	7,734	8,363	5,958	Gold at home.....	62	63	63	63
German Reichsbank (millions of reichsmarks):					Deposits abroad.....	362	317	299	471
Gold reserve.....	2,329	2,469	2,469	2,062	Loans and discounts.....	32	77	97	77
Gold abroad.....	150	150	150	150	Note circulation.....	316	321	322	339
Reserves in foreign exchange.....	171	369	261	335	Deposits against which reserve is held.....	70	65	57	126
Loans and discounts.....	2,387	1,942	1,930	2,828	Bank of the Republic of Colombia (thousands of pesos):				
Deposits.....	472	416	398	501	Gold at home.....	20,549	20,130	20,827	24,957
Reichsmarks in circulation.....	4,744	4,707	4,638	4,914	Gold abroad.....	8,751	11,460	8,233	22,722
Rentenmarks in circulation.....	448	448	448	439	Loans and discounts.....	11,090	11,820	12,188	15,360
Bank of Italy (millions of lire):					Note circulation.....	26,363	27,075	28,398	41,862
Gold at home.....	5,291	5,232	5,210	5,176	Deposits.....	5,136	6,647	6,568	9,941
Credits and balances abroad.....	4,969	5,103	5,080	5,064	Czechoslovak National Bank (millions of Czechoslovak crowns):				
Loans and discounts.....	4,137	3,929	3,854	5,433	Gold.....	1,413	1,414	1,414	1,157
Total note circulation.....	16,172	16,074	16,182	16,916	Foreign balances and currency.....	2,423	2,309	2,063	1,838
Public deposits.....	300	300	300	300	Loans and advances.....	284	337	393	1,147
Other deposits.....	1,716	1,674	1,849	1,544	Assets of banking office in liquidation.....	331	334	342	392
Bank of Japan (millions of yen):					Note circulation.....	7,198	7,077	6,897	7,697
Gold.....	868	868	880	1,062	Deposits.....	575	555	482	475
Advances and discounts.....	710	776	735	770	Danish National Bank (millions of kroner):				
Government bonds.....	118	79	80	194	Gold.....	172	172	172	173
Notes issued.....	1,072	1,165	1,104	1,286	Foreign bills, etc.....	81	71	66	94
Total deposits.....	741	635	677	837	Loans and discounts.....	78	88	86	70
Commonwealth Bank of Australia (thousands of pounds sterling):					Note circulation.....	345	350	347	353
Issue department—					Deposits.....	29	27	28	30
Gold coin and bullion.....	20,177	19,976	20,006	23,441	Bank of Danzig (thousands of Danzig gulden):				
Securities.....	4,691	4,941	4,941	18,272	Balances with Bank of England.....	13,027	14,295	14,771	17,070
Banking department—					Foreign bills, etc.....	9,041	10,633	11,320	12,360
Coin, bullion, and cash.....	1,549	1,555	1,528	2,504	Loans and discounts.....	24,117	21,780	19,508	22,926
Money at short call in London.....	2,727	5,106	5,802	6,653	Note circulation.....	37,616	37,583	36,639	39,494
Loans and discounts.....	12,138	11,015	10,947	13,691	Deposits.....	1,720	1,904	1,893	2,007
Securities.....	22,708	22,458	21,458	14,922	Central Bank of Ecuador (thousands of sucres):				
Deposits.....	41,133	40,887	40,972	36,558	Gold.....	5,606	5,603	5,607	5,579
Bank notes in circulation.....	37,322	37,857	38,005	37,908	Foreign exchange.....	23,992	25,220	25,856	27,609
Austrian National Bank (millions of schillings):					Loans and discounts.....	14,142	14,359	14,349	15,488
Gold.....	215	169	169	169	Notes in circulation.....	24,107	24,414	26,538	31,262
Foreign exchange of the reserve.....	218	274	273	216	Deposits.....	14,091	14,860	15,116	14,725
Other foreign exchange.....	479	478	470	357	Bank of Estonia (thousands of kroones):				
Domestic bills.....	96	110	115	289	Gold.....	6,546	6,533	6,526	6,350
Government debt.....	101	101	101	110	Net foreign exchange.....	16,958	16,424	16,803	21,025
Note circulation.....	1,008	1,018	1,021	1,079	Loans and discounts.....	24,943	24,687	24,860	26,356
Deposits.....	103	117	115	65	Note circulation.....	33,638	33,241	31,897	35,791
National Bank of Belgium (millions of belgas):					Deposits—				
Gold.....	1,248	1,210	1,204	1,023	Government.....	7,033	7,586	9,401	9,121
Foreign bills and balances in gold.....	852	872	844	551	Bankers.....	4,789	4,442	4,959	4,420
Domestic and foreign bills.....	744	776	776	748	Other.....	1,793	1,393	1,808	1,958
Loans to State.....	311	311	311	343					
Note circulation.....	3,051	3,050	3,083	2,628					
Deposits.....	149	165	112	90					

¹ Ratio of gold and notes in banking department to deposit liabilities.² Notes issued, less amounts held in banking department and in currency note account.³ Revised.

CONDITION OF CENTRAL BANKS—Continued

[Figures are for the last report date of month]

	1930			1929
	Sep-tember	August	July	Sep-tember
Bank of Finland (millions of Finnish marks):				
Gold.....	301	302	301	302
Balances abroad and foreign credits.....	869	907	949	547
Foreign bills.....	197	191	185	19
Domestic bills.....	578	583	630	1,290
Note circulation.....	1,350	1,352	1,355	1,440
Demand liabilities.....	94	149	206	146
Bank of Greece (millions of drachmas):				
Gold.....	522	516	566	623
Net foreign exchange in reserve.....	2,957	2,853	2,712	2,822
Total foreign exchange.....	3,747	3,770	3,853	4,996
Loans and discounts.....	324	306	282	174
Government obligations.....	3,389	3,489	3,489	3,597
Note circulation.....	5,077	4,761	4,816	5,414
Other sight liabilities.....	1,680	1,876	1,576	1,496
National Bank of Hungary (millions of pengös):				
Gold.....	163	163	163	163
Foreign bills, etc.....	25	42	43	43
Loans and discounts.....	189	198	203	315
Advances to treasury.....	69	70	72	89
Other assets.....	89	101	91	62
Note circulation.....	430	440	466	478
Deposits.....	28	58	38	112
Miscellaneous liabilities.....	51	51	47	54
Bank of Java (millions of florins):				
Gold.....	139	139	139	147
Foreign bills.....	29	29	34	37
Loans and discounts.....	53	50	53	140
Note circulation.....	257	261	267	306
Deposits.....	43	38	53	66
Bank of Latvia (millions of lats):				
Gold.....	24	24	24	24
Foreign exchange reserve.....	47	46	44	49
Bills.....	87	88	88	92
Loans.....	57	54	56	57
Note circulation.....	48	47	45	46
Government deposits.....	91	92	93	91
Other deposits.....	75	77	77	76
Bank of Lithuania (millions of litas):				
Gold.....	35	35	35	34
Foreign currency.....	94	76	78	53
Loans and discounts.....	94	93	90	90
Note circulation.....	109	103	100	94
Deposits.....	106	95	96	78
Netherlands Bank (millions of florins):				
Gold.....	391	391	391	443
Foreign bills.....	243	234	241	186
Loans and discounts.....	140	132	136	187
Note circulation.....	831	800	809	852
Deposits.....	21	25	16	20
Bank of Norway (millions of kroner):				
Gold.....	147	147	147	147
Foreign balances and bills.....	23	24	22	55
Domestic credits.....	217	220	222	251
Note circulation.....	309	315	315	316
Foreign deposits.....	1	1	1	1
Total deposits.....	71	62	60	91
Reserve Bank of Peru (thousands of soles):¹				
Gold.....	39,910	39,584	40,811	45,976
Gold against demand deposits.....	3,601	3,572	2,251	7,750
Foreign exchange reserve.....	10,168	10,473	12,746	21,157
Bills.....	17,041	16,966	14,863	18,343
Note circulation.....	56,443	56,524	57,081	64,342
Deposits.....	7,202	7,145	4,501	12,734
Bank of Poland (millions of zlotys):				
Gold at home.....	484	484	484	432
Gold abroad.....	77	219	219	232
Foreign exchange of the reserve.....	322	228	222	422
Other foreign exchange.....	115	119	111	96
Loans and discounts.....	784	696	685	805
Note circulation.....	1,373	1,355	1,321	1,354
Current account of the treasury.....	67	98	89	282
Other current accounts.....	125	144	153	157
Bank of Portugal (millions of escudos):				
Gold.....			9	9
Balances abroad.....			169	380
Bills.....			317	321
Note circulation.....			1,951	1,936
Deposits.....			81	48
National Bank of Roumania (millions of lei):				
Gold at home.....	5,356	5,356	5,356	5,178
Gold abroad.....	3,919	3,919	3,919	3,592
Foreign exchange of the reserve.....	1,613	1,595	1,527	6,032
Other foreign exchange.....	159	82	40	79
Loans and discounts.....	8,378	8,696	8,748	10,000
State debt.....	5,349	5,599	5,699	7,472
Note circulation.....	19,355	19,154	18,534	21,393
Deposits.....	6,806	7,006	6,979	10,757
State Bank of Russia (thousands of chevrons):				
Loans and discounts.....			501,458	419,897
Deposits.....			244,403	214,757
Issue department—				25,595
Gold.....			45,424	
Other precious metals.....			2,549	3,848
Foreign exchange.....			5,959	7,762
Note circulation.....			210,860	146,628
South African Reserve Bank (thousands of pounds sterling):				
Gold.....	6,694	6,843	6,488	7,941
Foreign bills.....	7,250	7,511	7,736	7,185
Domestic bills.....	40	360	206	1,995
Note circulation.....	7,743	8,676	7,459	9,131
Deposits—				
Government.....	2,065	1,881	2,312	2,160
Bankers.....	4,444	4,704	4,730	4,625
Others.....	131	426	122	291
Bank of Spain (millions of pesetas):				
Gold.....	2,475	2,474	2,472	2,565
Silver.....	712	720	721	712
Balances abroad.....	38	26	32	89
Loans and discounts.....	2,103	2,000	1,923	2,241
Note circulation.....	4,508	4,456	4,396	4,359
Deposits.....	807	826	818	924
Bank of Sweden (millions of kronor):				
Gold.....	242	242	243	242
Foreign bills, etc.....	398	349	300	222
Loans and discounts.....	158	100	131	376
Note circulation.....	613	570	551	580
Deposits.....	109	106	110	163
Swiss National Bank (millions of francs):				
Gold.....	640	639	610	533
Foreign balances and bills.....	335	342	333	216
Loans and discounts.....	70	65	79	226
Note circulation.....	987	943	928	944
Demand deposits.....	157	176	171	71
National Bank of the Kingdom of Yugoslavia (millions of dinars):				
Gold.....	98	98	98	94
Foreign notes and credits.....	189	202	226	282
Loans and discounts.....	1,503	1,441	1,394	1,591
Advances to State.....	2,997	2,997	2,997	3,000
Note circulation.....	5,536	5,521	5,317	5,695
Deposits.....	998	1,072	1,153	1,025

¹ Figures for September, 1929, have been converted from libras (par \$4.8665) into soles (par \$0.4000). See Federal Reserve Bulletin for May, 1930.

CONDITION OF COMMERCIAL BANKS

Country	Millions of national currency			Millions of dollars								
	1930			1929			1930					
	July	August	September	July	August	September	April	May	June	July	August	September
Canada:	<i>Millions of dollars</i>											
Gold and subsidiary coin ¹	63	62	62	62	61	61	60	60	60	63	62	62
Money at call and short notice.....	422	445	413	577	584	594	415	417	435	422	445	413
Current loans and discounts.....	1,502	1,483	1,481	1,572	1,585	1,639	1,601	1,573	1,550	1,502	1,483	1,481
Public and railway securities.....	447	458	480	470	462	487	428	431	444	447	458	480
Note circulation.....	152	166	164	170	190	197	155	165	166	152	166	164
Individual deposits.....	2,391	2,387	2,460	2,578	2,551	2,654	2,472	2,401	2,449	2,391	2,387	2,460
Gold reserve against Dominion notes.....	77	83	83	59	60	60	64	65	66	77	83	83
Dominion note circulation.....	166	163	170	196	199	201	174	170	174	166	163	170
Argentina:	<i>Millions of pesos</i>											
Bank of the Nation—												
Gold.....	7	7	—	65	62	57	6	6	6	6	6	—
Other cash.....	126	121	—	125	122	122	108	110	104	104	100	—
Loans and discounts.....	593	603	—	542	552	554	533	492	495	486	497	—
Deposits.....	731	730	—	734	734	723	646	629	613	599	602	—
Other banks in Buenos Aires—												
Gold.....	10	10	—	12	12	12	10	10	10	10	10	—
Other cash.....	199	214	—	156	161	160	166	165	166	163	177	—
Loans and discounts.....	867	865	—	852	853	861	780	759	735	712	713	—
Deposits.....	1,007	1,026	—	972	975	979	890	875	857	826	847	—
England:	<i>Millions of pounds sterling</i>											
Cash in vault and at banks.....	191	188	186	924	915	929	911	897	921	931	915	907
Money at call and short notice.....	143	135	134	696	701	725	650	666	699	697	657	654
Advances and discounts.....	1,236	1,215	1,211	5,932	5,864	5,803	5,729	5,857	5,993	6,015	5,912	5,891
Investments.....	241	250	255	1,178	1,176	1,175	1,095	1,127	1,132	1,171	1,217	1,240
Deposits.....	1,794	1,767	1,764	8,654	8,558	8,534	8,331	8,478	8,701	8,730	8,600	8,484
France:	<i>Millions of francs</i>											
Bills and national-defense bonds.....	20,198	—	—	782	757	770	773	762	793	792	—	—
Loans and advances.....	11,415	—	—	415	418	422	440	420	425	448	—	—
Demand deposits.....	30,232	—	—	1,272	1,237	1,248	1,325	1,338	1,378	1,185	—	—
Time deposits.....	1,437	—	—	39	42	40	57	61	57	56	—	—
Germany:	<i>Millions of reichsmarks</i>											
Bills and treasury notes.....	2,964	2,918	2,654	—	644	669	755	755	776	706	695	632
Due from other banks.....	1,218	1,054	1,096	—	328	336	271	275	265	290	251	261
Miscellaneous loans.....	8,579	8,592	8,627	—	1,902	1,935	2,076	2,059	2,046	2,044	2,047	2,054
Deposits.....	12,067	11,804	11,672	—	2,687	2,760	2,921	2,916	2,929	2,874	2,812	2,780
Acceptances.....	507	522	546	—	121	121	117	116	115	121	124	130
Denmark:	<i>Millions of kroner</i>											
Loans and discounts.....	1,818	1,823	—	476	476	476	491	486	489	487	489	—
Due from foreign banks.....	123	128	—	37	39	43	30	29	33	33	34	—
Due to foreign banks.....	66	68	—	18	17	17	22	22	18	18	18	—
Deposits and current accounts.....	2,010	2,015	—	523	528	533	532	532	537	539	540	—
Norway:	<i>Millions of kroner</i>											
Loans and discounts.....	1,224	1,211	1,210	339	340	337	333	331	328	328	325	324
Due from foreign banks.....	120	124	105	33	35	36	30	30	28	32	33	28
Due to foreign banks.....	65	65	67	22	23	22	21	20	18	18	17	18
Rediscounts.....	76	76	76	26	27	27	24	22	21	21	20	20
Deposits.....	1,489	1,485	1,477	417	418	417	402	399	397	399	398	396
Sweden:	<i>Millions of kronor</i>											
Loans and discounts.....	4,437	4,487	—	1,120	1,125	1,128	1,167	1,173	1,181	1,189	1,193	—
Foreign bills and credits abroad.....	304	283	—	74	82	93	70	68	72	81	76	—
Due to foreign banks.....	237	220	—	31	31	34	42	42	69	64	59	—
Rediscounts.....	14	36	—	51	54	57	24	15	19	4	10	—
Deposits.....	3,722	3,709	—	946	946	955	989	981	978	997	994	—
Japan:	<i>Millions of yen</i>											
Cash on hand.....	197	181	281	118	141	140	140	128	115	98	90	140
Total loans.....	2,176	2,148	2,446	951	974	971	1,061	1,077	1,093	1,085	1,071	1,219
Total deposits.....	2,052	2,051	2,068	952	983	982	1,017	1,021	1,033	1,023	1,022	1,031

¹ Not including amounts held abroad.

* Revised.

NOTE.—Banks included are as follows: *Canada*—Chartered banks; *England*—nine London clearing banks; *France*—four commercial banks; *Germany*—six Berlin banks; *Denmark, Norway, and Sweden*—joint-stock banks; *Japan*—Tokyo banks.

DISCOUNT RATES OF CENTRAL BANKS

[Rate prevailing November 1, 1930, with date of latest change]

Country	Rate	In effect since—	Country	Rate	In effect since—	Country	Rate	In effect since—	Country	Rate	In effect since—
Austria.....	5	Sept. 10, 1930	Ecuador.....	9	Jan. 10, 1930	Italy.....	5½	May 19, 1930	Portugal.....	7½	June 2, 1930
Belgium.....	2½	Aug. 1, 1930	England.....	3	May 1, 1930	Japan.....	5.11	Oct. 7, 1930	Rumania.....	9	Nov. 26, 1929
Bolivia.....	7	Aug. 26, 1930	Estonia.....	7	Oct. 7, 1930	Java.....	4½	Mar. 1, 1930	Russia.....	8	Mar. 22, 1927
Bulgaria.....	10	July 2, 1929	Finland.....	6	Aug. 27, 1930	Latvia.....	6	Oct. 1, 1930	South Africa.....	5½	Sept. 29, 1930
Chile.....	7	Aug. 4, 1930	France.....	2½	May 2, 1930	Lithuania.....	6	Apr. 1, 1930	Spain.....	6	July 17, 1930
Colombia.....	7	Sept. 18, 1930	Germany.....	5	Oct. 9, 1930	Netherlands.....	3	Mar. 25, 1930	Sweden.....	3½	Apr. 3, 1930
Czechoslovakia.....	4	June 25, 1930	Greece.....	9	Nov. 30, 1928	Norway.....	4½	Mar. 21, 1930	Switzerland.....	2½	July 10, 1930
Danzig.....	5	Oct. 10, 1930	Hungary.....	5½	May 30, 1930	Peru.....	7	Sept. 1, 1930	Yugoslavia.....	5½	May 28, 1930
Denmark.....	4	May 3, 1930	India.....	5	July 10, 1930	Poland.....	7½	Oct. 3, 1930			

CHANGES: *Bolivia*—August 26, from 9 to 7 per cent; *Danzig*—October 10, from 4 to 5 per cent; *Estonia*—October 7, from 8 to 7 per cent; *Germany*—October 9, from 4 to 5 per cent; *Japan*—October 7, from 5.48 to 5.11 per cent; *Latvia*—October 1, from 6-7 to 6 per cent; *Poland*—October 3, from 6½ to 7½ per cent; *South Africa*—September 29, from 6 to 5½ per cent.

MONEY RATES IN FOREIGN COUNTRIES

Month	England (London)				Germany (Berlin)				Netherlands (Amsterdam)		Switzerland
	Bankers' acceptances, 3 months	Treasury bills, 3 months	Day-to-day money	Bankers' allowance on deposits	Private discount rate	Money for 1 month	Day-to-day money	Private discount rate	Money for 1 month	Private discount rate	
1929—April.....	5.21	5.18	4.43	3½	6.63	7.57	6.85	5.36	5.81	3.45	
May.....	5.21	5.21	4.67	3½	7.49	9.65	9.32	5.37	5.88	3.34	
June.....	5.32	5.35	4.23	3½	7.50	9.89	7.90	5.30	5.30	3.26	
July.....	5.38	5.39	4.54	3½	7.39	9.35	8.21	5.20	4.90	3.19	
August.....	5.47	5.48	4.35	3½	7.18	9.43	7.42	5.06	4.68	3.33	
September.....	5.59	5.63	4.39	3½-4½	7.18	9.48	7.86	5.36	5.32	3.38	
October.....	6.13	6.19	5.45	4½-4	7.28	9.06	8.06	5.15	4.52	3.38	
November.....	5.35	5.30	5.15	4-3½	6.89	8.29	7.79	4.26	4.17	3.32	
December.....	4.76	4.75	4.23	3½-3	6.98	8.78	8.14	3.52	3.87	3.15	
1930—January.....	4.07	4.04	3.62	3	6.33	7.71	6.03	2.99	2.85	2.97	
February.....	3.82	3.72	3.76	3-2½	5.53	6.72	6.01	2.80	2.94	2.71	
March.....	2.78	2.55	3.20	2½-1½	5.12	6.35	5.57	2.50	2.61	2.60	
April.....	2.48	2.49	2.28	1½	4.46	5.57	4.40	2.52	3.08	2.61	
May.....	2.16	2.11	1.93	1	3.89	5.00	3.62	2.29	2.53	2.44	
June.....	2.31	2.30	1.93	1	3.58	4.80	3.74	1.89	1.93	2.06	
July.....	2.37	2.38	1.78	1	3.40	4.57	4.30	1.85	1.85	1.92	
August.....	2.21	2.17	1.85	1	3.24	4.43	3.73	1.83	1.63	1.75	
September.....	2.07	2.05	1.68	1	3.30	4.54	3.78	1.96	1.84	1.50	

Month	Belgium (Brussels)	France (Paris)	Italy (Milan)	Austria (Vienna)		Hungary		Sweden (Stockholm)	Japan (Tokyo)	
	Private discount rate	Private discount rate	Private discount rate	Private discount rate	Money for 1 month	Prime commercial paper	Day-to-day money	Loans up to 3 months	Discounted bills	Call money overnight
1929—April.....	3.97	3.44	6.75	6½-7¼	7½-8¼	8½-9	7-9	4½-6½	5.48-5.66	3.65
May.....	3.96	3.49	6.83	7½-7¼	8-9	8½-9½	7-9	4½-6½	5.48-5.66	3.29
June.....	3.97	3.50	6.75	7½-7¼	8¼-9	8¼-9½	7-9	4½-6½	5.48-5.66	3.29
July.....	4.04	3.50	6.75	7¼-7¾	8¼-9	8¼-10	7-8¼	4½-6½	5.48-5.66	3.10
August.....	4.93	3.50	6.85	7¼-7¾	8¼-9	8¼-10¼	7-8	4½-6½	5.48	3.10
September.....	4.94	3.50	7.01	7¾	8¼-9¼	8¼-10¼	6¾-8	5½-7	5.48	2.92
October.....	4.94	3.50	7.18	8-8¼	9-10	9-10¼	7¼-8	5½-7	5.48	3.47
November.....	4.57	3.50	7.00	7¾-8¼	8¼-10	8¼-9¾	6¼-7¾	5½-7	5.48	3.47
December.....	4.40	3.50	7.00	7¼-7¾	8¼-9¼	8¼-9¾	7-7½	5½-7	5.48	3.10
1930—January.....	3.40	3.38	7.00	6½-7¼	7½-8¾	7½-10	6½-7½	4½-6	5.48	2.74
February.....	3.41	2.91	6.95	6½-6¼	7-8	7-9¼	5½-6¾	4½-6	5.48	3.83
March.....	3.31	2.70	6.57	5½-6	6¾-7¾	6¾-8½	5½-6½	4-6	5.48	3.83
April.....	3.33	2.57	6.43	5-5½	6½-7½	6½-8¼	5-6½	3½-5½	5.48	3.65
May.....	2.87	2.36	5.81	4½-5	6½-7	5½-8	4½-6	3½-5½	5.48	3.10
June.....	2.78	2.11	5.50	4½-4¼	6-6½	5½-8	4½-6¼	3½-5½	5.48	3.83
July.....	2.78	2.08	5.50	4½-4¼	6-6½	5½-7¾	4½-5½	3½-5½	5.48	3.65
August.....	2.44	2.10	5.50	4-4¼	6-6½	5½-7¼	4½-5	3½-5½	5.48	3.83
September.....	2.39	1.99	5.50	3¾-4¼	5¾-6½					

NOTE.—For sources used, methods of quotation, and back figures, see BULLETIN for November, 1926, April, 1927, July, 1929, November, 1929, and May, 1930.

PRICE MOVEMENTS IN PRINCIPAL COUNTRIES WHOLESALE PRICES—ALL COMMODITIES

Month	United States		Canada		England		France		Germany		Italy		Japan	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January.....	97	93	94	96	138	131	657	576	139	132	461	417	228	201
February.....	97	92	95	94	138	128	660	567	139	129	463	408	226	200
March.....	98	91	96	92	140	125	654	558	140	126	461	400	226	196
April.....	97	91	95	92	139	124	648	548	137	127	455	396	225	193
May.....	96	89	93	90	136	122	643	546	136	126	452	390	223	189
June.....	96	87	94	88	136	121	629	540	135	125	447	382	222	181
July.....	98	84	97	86	137	119	624	558	138	125	440	375	220	177
August.....	98	84	98	84	136	118	598	560	138	125	437	379	218	176
September.....	98	84	98	83	136	116	608	555	138	123	437	375	218	172
October.....	96	-----	97	-----	136	-----	607	-----	137	-----	436	-----	216	-----
November.....	94	-----	96	-----	134	-----	603	-----	136	-----	431	-----	211	-----
December.....	94	-----	96	-----	133	-----	596	-----	134	-----	425	-----	205	-----
	Australia		Austria		Belgium		China		Czechoslovakia		Denmark		Dutch East Indies	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January.....	157	151	128	125	867	808	160	170	139	126	151	143	149	143
February.....	156	147	130	123	865	791	162	175	139	124	159	140	149	141
March.....	157	144	133	121	869	774	164	174	141	122	154	136	150	139
April.....	158	146	134	119	862	777	161	174	141	121	150	135	148	138
May.....	156	148	135	118	851	774	162	173	137	120	148	132	150	136
June.....	158	145	134	121	848	750	163	186	134	119	146	130	149	134
July.....	159	144	132	119	858	739	163	190	135	120	149	129	149	132
August.....	160	-----	132	118	850	729	165	189	134	118	150	128	148	-----
September.....	163	-----	128	115	846	712	167	188	132	115	150	126	148	-----
October.....	161	-----	127	-----	838	-----	168	-----	131	113	149	-----	147	-----
November.....	158	-----	125	-----	834	-----	165	-----	130	-----	147	-----	146	-----
December.....	154	-----	123	-----	823	-----	165	-----	128	-----	146	-----	144	-----
	Egypt		Finland		Hungary		India		Netherlands		New Zealand		Norway	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January.....	125	109	100	94	132	106	145	131	146	131	155	155	149	144
February.....	122	106	100	93	136	104	144	126	146	126	155	155	150	143
March.....	123	101	100	92	136	100	143	125	147	122	155	154	150	142
April.....	120	101	99	92	135	96	140	123	144	122	155	154	148	141
May.....	114	101	98	90	123	96	139	121	142	118	155	154	146	140
June.....	108	100	98	90	122	94	138	116	141	118	155	153	147	139
July.....	109	102	97	90	119	99	142	115	141	115	156	152	149	138
August.....	112	104	97	89	114	93	143	114	142	114	156	-----	148	137
September.....	113	104	96	88	109	-----	143	-----	141	-----	157	-----	148	135
October.....	115	-----	96	-----	111	-----	140	-----	140	-----	156	-----	147	-----
November.....	112	-----	95	-----	107	-----	137	-----	137	-----	155	-----	146	-----
December.....	110	-----	95	-----	107	-----	134	-----	135	-----	154	-----	146	-----
	Peru		Poland		Russia		South Africa		Spain		Sweden		Switzerland	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January.....	186	181	98	88	177	182	135	121	171	172	144	131	143	136
February.....	185	181	99	85	177	185	-----	-----	173	173	145	128	143	133
March.....	189	180	99	85	178	187	-----	-----	174	173	144	125	142	131
April.....	185	179	98	85	179	187	131	117	174	172	141	124	140	129
May.....	186	179	95	83	180	188	-----	-----	171	168	140	123	139	128
June.....	186	178	95	83	181	187	-----	-----	170	166	139	123	139	126
July.....	187	177	96	84	180	189	129	112	169	170	140	121	143	126
August.....	187	175	95	82	180	188	-----	-----	170	-----	141	121	143	126
September.....	186	178	94	80	181	-----	-----	-----	171	-----	140	119	142	123
October.....	186	177	93	-----	182	-----	128	-----	172	-----	138	-----	142	-----
November.....	184	-----	95	-----	181	-----	-----	-----	171	-----	135	-----	140	-----
December.....	182	-----	92	-----	182	-----	-----	-----	172	-----	134	-----	139	-----

* Revised.

NOTE.—All of the indexes shown, with two or three exceptions, are compiled by official agencies in the countries to which they relate, as indicated specifically in the BULLETIN for March (p. 124), where references are also given to sources in which current figures of the index numbers may be found.

The base periods are as follows: *United States*—1926; *Australia*—July, 1914; *Austria*—January-July, 1914; *Belgium*—April, 1914; *Canada*—1926; *China*—February, 1913; *Czechoslovakia*—July, 1914; *Denmark*—1913; *Dutch East Indies*—1913; *Egypt*—January 1, 1913-July 31, 1914; *England*—1913; *Finland*—1926; *France*—1913; *Germany*—1913; *Hungary*—1913; *India*—July, 1914; *Italy*—1913; *Japan*—October, 1900; *Netherlands*—1913; *New Zealand*—1909-1913; *Norway*—December 31, 1913-June 30, 1914; *Peru*—1913; *Poland*—1927; *Russia*—1913; *South Africa*—1910; *Spain*—1913; *Sweden*—1913; *Switzerland*—July, 1914.

Annual indexes for the years 1925-1929 and in certain cases for 1913 and 1914 were given in the BULLETIN for April (p. 256).

WHOLESALE PRICES—GROUPS OF COMMODITIES

UNITED STATES (1926=100)	All commodities	Farm products	Foods	Other commodities									Non-agricultural commodities
				Total ¹	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	
1929—September.....	98	107	103	93	111	93	81	104	98	94	97	82	95
1930—March.....	91	95	94	89	103	87	77	101	95	91	97	78	90
April.....	91	96	95	88	103	86	78	99	95	91	96	79	89
May.....	89	93	92	88	103	85	78	97	93	90	96	78	88
June.....	87	89	91	86	102	82	76	95	90	89	96	75	86
July.....	84	83	86	84	101	80	75	94	89	88	96	72	84
August.....	84	85	87	83	99	78	75	93	87	87	96	71	84
September.....	84	85	89	83	99	76	76	92	86	87	95	70	84

ENGLAND (1913=100)	All commodities	Foods				Industrial products							
		Total	Cereals	Meat and fish	Other foods	Total	Iron and steel	Coal	Other minerals and metals	Cotton	Wool	Other textiles	Miscellaneous
1929—September.....	136	143	141	143	145	132	115	126	116	154	158	132	138
1930—March.....	125	129	114	145	131	122	115	127	107	131	129	116	127
April.....	124	129	117	141	130	121	114	122	104	131	127	115	127
May.....	122	127	114	136	132	119	114	119	95	130	129	110	128
June.....	121	127	111	135	137	117	114	117	93	126	127	104	126
July.....	119	127	108	136	138	115	113	116	92	123	124	98	124
August.....	118	126	109	138	134	113	112	116	91	119	122	97	122
September.....	116	124	105	138	130	111	112	120	90	113	119	89	121

FRANCE (1913=100)	All commodities	Farm and food products			Industrial products								
		Total	Animal products	Vegetable products	Total	Minerals and metals	Textiles	Hides and leather	Chemical products	Rubber	Paper	Lumber	Cement and brick, etc.
1929—September.....	608	551	639	499	656	561	725	452	603	117	677	969	636
1930—March.....	558	495	622	419	612	562	621	425	607	90	667	987	708
April.....	548	481	599	411	606	551	620	405	598	86	667	987	708
May.....	546	483	570	431	601	547	615	405	592	81	667	978	708
June.....	540	488	587	428	587	542	583	403	593	74	667	978	708
July.....	558	540	595	507	573	539	562	399	582	65	664	956	725
August.....	* 560	* 550	* 587	* 528	568	537	554	409	* 571	59	654	937	725
September.....	555	559	612	527	551	532	517	420	570	48	654	937	725

GERMANY (1913=100)	All commodities	Agricultural products					Provisions	Industrial raw and semifinished products			
		Total	Vegetable foods	Cattle	Animal products	Fodder		Total	Coal	Iron	Nonferrous metals
1929—September.....	138	133	125	134	149	120	131	132	137	131	118
1930—March.....	126	110	109	116	118	86	118	126	138	129	109
April.....	127	112	118	113	110	99	118	125	136	128	103
May.....	126	111	119	110	109	96	117	124	136	128	90
June.....	125	110	118	109	110	90	115	122	135	126	87
July.....	125	115	120	112	121	97	114	119	136	125	84
August.....	125	117	124	112	121	100	111	118	136	125	82
September.....	123	114	117	108	125	97	108	116	137	124	80

		Industrial raw and semifinished products—Continued							Industrial finished products			
		Textiles	Hides and leather	Chemicals	Artificial fertilizers	Technical oils and fats	Rubber	Paper materials and paper	Building material	Total	Producers' goods	Consumers' goods
1929—September.....	136	122	127	82	134	28	151	162	157	157	140	170
1930—March.....	114	111	127	86	126	22	150	157	153	153	139	163
April.....	116	110	127	86	127	21	149	157	152	152	139	162
May.....	116	111	126	83	135	20	147	156	152	152	139	161
June.....	111	112	126	84	134	18	145	153	151	151	138	161
July.....	105	108	125	78	131	17	143	149	151	151	138	160
August.....	101	108	125	79	133	15	139	145	149	149	138	158
September.....	96	111	125	80	129	13	139	142	148	148	138	157

¹ The index for other commodities, recently published by the Bureau of Labor Statistics, includes the prices of articles in the all-commodities index with the exception of those for farm products and foods; the nonagricultural index omits merely farm products.

² Revised.

NOTE.—Annual indexes for the groups shown in the table are given for the years 1913 and 1925-1929 in the BULLETIN for April (p. 257). Original sources for these indexes are: *United States*—Wholesale Prices of Commodities, Bureau of Labor Statistics, Department of Labor; *England*—Board of Trade Journal and Commercial Gazette, Board of Trade; *France*—Bulletin de la Statistique Générale de la France, Supplément Mensuel, Statistique Générale de la France; and *Germany*—Wirtschaft und Statistik, Statistisches Reichsamt.

LAW DEPARTMENT

Surrender of trust powers by national banks.

Section 11 (k) of the Federal reserve act with reference to trust powers of national banks was amended by act of Congress approved June 26, 1930, so as to provide that such banks might voluntarily surrender the right to act in trust capacities. The Federal Reserve Board on October 17, 1930, amended its Regulation F so as to provide a procedure for the surrender of trust powers by a national bank pursuant to the recent amendment to the statute. The only important change made in the regulation was the adoption of a new Section XIV, which is set forth below. The adoption of this section made it necessary to renumber subsequent sections of the regulation accordingly; and Section I of the regulation, which sets forth the provisions of section 11 (k) of the Federal reserve act, was amended so as to set forth these provisions of the statute in the form as amended by the act of June 26, 1930. The regulation in its amended form is designated Regulation F, series of 1930. The new section numbered XIV is as follows:

SECTION XIV. SURRENDER OF TRUST POWERS

(a) **Procedure.**—Any national bank which has been granted the right by the Federal Reserve Board, pursuant to section 11 (k) of the Federal reserve act, to act in any fiduciary capacity or capacities and which desires to surrender such right, shall signify such desire through a resolution adopted by its board of directors. A properly certified copy of such resolution of its board of directors should be filed with the Federal reserve agent of the district in which such national bank is located and should be accompanied by (1) a letter stating the reason why, or the purpose for which, such national bank wishes to surrender its right to exercise trust powers, unless such reason or purpose shall have been amply stated in the resolution itself; and (2) the permit or permits previously granted by the Federal Reserve Board to such national bank granting it the right to act in any fiduciary capacity, except that in case any such permit shall have been lost or destroyed an affidavit by any officer of such national bank as to such loss or destruction may be filed in lieu of such lost or destroyed permit. All such documents filed with the Federal reserve agent shall be promptly forwarded by him to the Federal Reserve Board with a recommendation as to the action to be taken by the Federal Reserve Board.

(b) **Examination.**—Upon receipt of such documents, the Federal Reserve Board will request the Comptroller of the Currency, upon the occasion of the next regular examination of such national bank, to have the examiner make a special investigation of the trust department of the bank in order to determine whether the bank has actually accepted or undertaken the exercise of any trust, whether under court, private, or other appointment, pursuant to authority granted under section 11 (k) of the Federal reserve act; and if

so, whether it appears from the records of the trust department in the case of each trust so accepted or undertaken:

(1) That the duties of the bank as fiduciary have been completely performed or that a substitute fiduciary has been appointed in accordance with the State law;

(2) That a final account has been filed by the bank, and that such account has been approved by the court or other proper authority where this is required by State law;

(3) That all assets and papers belonging to the trust estate have been delivered by the bank to the person or persons entitled to receive them; and

(4) That the bank has been discharged or otherwise properly relieved of its duties as fiduciary.

In exceptional cases, the Federal Reserve Board may make a special examination or may request the Comptroller of the Currency to make a special examination of such national bank in order to obtain the information above set forth.

(c) **Certificate of Federal Reserve Board.**—If upon receiving a copy of the report of such examination of such national bank the Federal Reserve Board shall be satisfied that such bank has been relieved in accordance with State law of all its duties as trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, committee of estates of lunatics, or other fiduciary, under court, private, or other appointments previously accepted by such bank under a permit granted by the Federal Reserve Board pursuant to the provisions of section 11 (k) of the Federal reserve act, the board may in its discretion issue to such national bank a certificate certifying that such bank is no longer authorized to exercise the powers conferred upon it by such permit of the Federal Reserve Board. Such bank thereupon (1) shall no longer be subject to the provisions of section 11 (k) of the Federal reserve act or the regulations of the Federal Reserve Board made pursuant thereto, (2) shall be entitled to have returned to it any securities which it may have deposited with the State authorities or with the Federal reserve agent for the protection of private or court trusts, and (3) shall not exercise thereafter any of the powers granted by section 11 (k) of the Federal reserve act without first applying for and obtaining a new permit from the Federal Reserve Board to exercise such powers.

Eligibility of a note of an insurance agency for rediscount by Federal Reserve Bank.

The Federal Reserve Board was recently requested to rule upon the eligibility for rediscount at a Federal reserve bank of a note of an insurance agency, the principal business of which is the writing of fire, surety, and casualty insurance, the purpose of the borrowing being the carrying of accounts covering premiums due on insurance sold.

After a careful consideration of this question, the board ruled that a note of the kind described is not eligible for rediscount at a Federal reserve bank. Such a note fails to comply with one of the requirements of the

board's regulations as to eligibility for rediscount in that it is not issued or drawn nor are its proceeds used in producing, purchasing, carrying, or marketing goods. Furthermore, in practical effect at least, it is a note the proceeds of which have been or are to be advanced or loaned to some other borrower.

Limitation on deposits of member banks with nonmember banks.

The attention of the Federal Reserve Board was recently called to the fact that a report of examination of a member bank disclosed that this member bank had on deposit with a nonmember bank an amount in excess of 10 per cent of its own capital and surplus, unless it was considered that the net amount of such deposit was reduced by a deposit of the nonmember bank with the member bank. The

board was asked for a ruling as to the proper construction of section 19 of the Federal reserve act on this point.

The pertinent portion of section 19 of the Federal reserve act is as follows:

No member bank shall keep on deposit with any State bank or trust company which is not a member bank a sum in excess of ten per centum of its own paid-up capital and surplus.

In the opinion of the Federal Reserve Board the amount of a deposit of a member bank with a nonmember bank under this provision of law is to be determined without regard to a deposit of the nonmember institution with the member bank. The board accordingly ruled that, under the circumstances described above, the deposit of the member bank with the nonmember bank was in excess of the limitation of 10 per cent of capital and surplus prescribed by section 19 of the Federal reserve act.

DETAILED FEDERAL RESERVE STATISTICS, ETC.

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES IN DETAIL AND FEDERAL RESERVE NOTE STATEMENT

[In thousands of dollars]

	1930		1929
	Oct. 31	Sept. 30	Oct. 31
RESOURCES			
Gold with Federal reserve agents.....	1,580,615	1,559,256	1,482,371
Gold redemption fund with United States Treasury.....	34,755	35,168	65,779
Gold held exclusively against Federal reserve notes.....	1,615,370	1,594,424	1,548,150
Gold settlement fund with Federal Reserve Board.....	514,463	549,362	814,343
Gold and gold certificates held by bank.....	874,093	823,568	641,461
Total gold reserves.....	3,003,926	2,967,354	3,003,954
Reserves other than gold.....	144,734	150,182	152,402
Total reserves.....	3,148,660	3,117,536	3,156,356
Nonreserve cash.....	60,633	63,480	77,454
Bills discounted ¹	207,101	272,361	999,704
Bills bought:.....			
Outright ²	159,631	193,112	320,485
Under resale agreement.....	3,228	15,630	34,502
Total bills bought.....	162,859	208,742	354,987
United States securities:.....			
Bought outright.....	601,559	596,538	271,032
Under resale agreement.....		320	50,050
Total United States securities.....	601,559	596,858	321,082
Other reserve bank credit:.....			
Other securities.....	6,322	6,772	25,131
Due from foreign banks.....	702	701	721
Reserve bank float ³	19,238	17,398	40,588
Total reserve bank credit outstanding.....	997,781	1,102,832	1,742,213
Uncollected items not included in float.....	496,899	557,657	713,359
Federal reserve notes of other reserve banks.....	16,418	18,266	28,711
Bank premises.....	59,632	59,644	59,037
All other resources.....	14,048	12,196	10,539
Total resources.....	4,794,071	4,931,611	5,787,669
LIABILITIES			
Federal reserve notes:.....			
Held by other Federal reserve banks.....	16,418	18,266	28,711
Outside Federal reserve banks.....	1,351,337	1,360,608	1,870,673
Total notes in circulation.....	1,367,755	1,378,874	1,899,384
Deposits:.....			
Member bank—reserve account.....	2,418,005	2,467,396	2,665,578
Government.....	18,181	38,795	15,227
Foreign bank.....	5,334	5,242	5,835
Other deposits.....	23,331	20,938	24,957
Total deposits.....	2,464,851	2,532,371	2,711,597
Deferred availability items.....	496,899	557,657	713,359
Capital paid in.....	170,426	170,648	167,026
Surplus.....	276,936	276,936	254,398
All other liabilities.....	17,204	15,125	41,905
Total liabilities.....	4,794,071	4,931,611	5,787,669
Contingent liability on bills purchased for foreign correspondents.....	433,137	431,634	502,538
FEDERAL RESERVE NOTE STATEMENT			
Federal reserve notes:.....			
Issued to Federal reserve banks by Federal reserve agents.....	1,783,356	1,779,582	2,363,159
Held by Federal reserve banks ⁴	415,601	400,708	463,775
In actual circulation.....	1,367,755	1,378,874	1,899,384
Collateral held by agents as security for notes issued to banks:.....			
Gold.....	1,580,615	1,559,256	1,482,371
Eligible paper.....	326,557	452,200	1,291,109
Total collateral.....	1,907,172	2,011,456	2,773,480

¹ Includes bills discounted for intermediate credit banks as follows: Latest month, \$116,000; month ago, \$365,000; year ago, \$3,160,000; and note secured by adjusted service certificates discounted for nonmember banks as follows: Latest month, \$44,000; month ago, \$45,000; year ago, \$75,000.

² Includes bills payable in foreign currencies as follows: Latest month, \$21,583,000; month ago, \$1,075,000; year ago, \$17,064,000.

³ Uncollected items in excess of deferred availability items.

⁴ Excludes "F. R. notes of other F. R. Banks," which are consequently included in "actual circulation".

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON OCTOBER, 31, 1930

[In thousands of dollars]

	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
RESOURCES													
Gold with Federal reserve agents.....	1,580,615	159,917	355,636	140,000	180,550	65,000	110,300	169,000	55,745	47,545	70,000	27,160	199,762
Gold redemption fund with U. S. Treasury.....	34,755	676	14,338	1,911	2,163	1,248	2,060	1,189	1,643	826	1,480	1,123	6,098
Gold held exclusively against Federal reserve notes.....	1,615,370	160,593	369,974	141,911	182,713	66,248	112,360	170,189	57,358	48,371	71,480	28,283	205,860
Gold settlement fund with Federal Reserve Board.....	514,463	24,900	161,084	40,531	56,007	15,659	10,087	85,421	27,919	12,844	19,973	9,666	50,282
Gold and gold certificates held by banks.....	874,093	36,002	531,859	28,754	60,169	9,442	7,922	133,178	7,360	5,543	7,164	9,094	37,606
Total gold reserves.....	3,003,926	221,585	1,062,917	211,196	298,889	91,349	130,369	388,788	92,667	66,758	98,617	47,043	293,748
Reserves other than gold.....	144,734	14,181	36,570	7,920	8,536	7,517	10,086	21,100	8,819	4,605	6,942	8,455	9,943
Total reserves.....	3,148,660	235,766	1,099,487	219,116	307,425	98,866	140,455	409,888	101,486	71,423	105,559	55,498	303,691
Nonreserve cash.....	60,633	8,944	13,384	2,953	4,232	3,402	4,093	9,627	3,647	1,537	1,578	2,898	4,338
Bills discounted:													
Secured by U. S. Government obligations.....	74,513	5,541	17,380	10,629	11,696	3,683	1,019	9,711	2,617	793	2,673	1,335	7,436
Other bills discounted.....	132,588	4,483	19,345	10,386	13,023	14,451	23,126	9,037	12,999	3,530	10,088	8,566	3,554
Total bills discounted.....	207,101	10,024	36,725	21,015	24,719	18,134	24,145	18,748	15,616	4,323	12,761	9,901	10,990
Bills bought.....	162,859	13,746	40,830	2,094	20,952	8,911	9,220	20,589	6,407	4,680	7,072	6,042	22,316
U. S. Government securities:													
Bonds.....	38,484	757	2,187	640	236	1,176	33	20,017	523	4,986	42	7,844	43
Treasury notes.....	280,702	22,219	77,331	25,590	33,292	7,732	7,480	29,890	15,584	11,991	14,036	11,572	23,985
Certificates and bills.....	282,373	23,197	107,796	26,022	24,327	8,075	5,181	31,221	7,792	9,308	14,658	9,815	14,981
Total U. S. Government securities.....	601,559	46,173	187,314	52,252	57,855	16,983	12,694	81,128	23,899	26,285	28,736	29,231	39,009
Other securities.....	6,322	1,000	4,250	1,000						72			
Total bills and securities.....	977,841	70,943	269,119	76,361	103,526	44,028	46,059	120,465	45,922	35,360	48,569	45,174	72,315
Due from foreign banks.....	702	52	231	68	70	30	25	94	25	16	21	21	49
Uncollected items.....	516,137	62,128	139,018	44,112	48,744	37,509	15,060	61,742	23,842	10,701	28,790	17,322	27,169
Federal reserve notes of other Federal reserve banks.....	16,418	223	4,591	426	1,627	1,746	970	2,054	659	1,124	1,294	332	1,372
Bank premises.....	59,632	3,580	15,664	2,614	7,062	3,271	2,658	8,295	3,811	2,018	3,972	1,877	4,810
All other resources.....	14,048	465	5,087	234	1,173	777	2,782	550	267	428	632	443	1,210
Total resources.....	4,794,071	382,101	1,546,581	345,884	473,859	189,629	212,102	612,715	179,659	122,607	190,415	123,565	414,954
LIABILITIES													
Federal reserve notes in actual circulation.....	1,367,755	131,894	240,559	120,324	181,769	68,152	118,329	146,333	61,694	49,042	64,625	32,926	152,108
Deposits:													
Member bank—reserve account.....	2,418,005	153,051	1,011,639	137,980	194,735	61,577	59,651	340,533	74,258	50,356	84,349	57,176	192,700
Government.....	18,181	1,263	1,284	1,417	1,617	4,336	785	1,795	1,519	1,047	1,176	993	949
Foreign bank.....	5,334	388	1,816	509	524	220	189	702	189	121	157	157	362
Other deposits.....	23,331	75	8,942	223	1,581	65	112	1,838	244	205	46	62	9,938
Total deposits.....	2,464,851	154,777	1,023,681	140,129	198,457	66,198	60,737	344,868	76,210	51,729	85,728	58,388	203,949
Deferred availability items.....	496,899	61,491	130,562	41,250	47,313	36,028	14,695	58,933	24,268	10,775	26,098	18,280	27,206
Capital paid in.....	170,426	11,881	66,228	16,765	15,913	5,772	5,356	20,158	5,257	3,061	4,328	4,357	11,350
Surplus.....	276,936	21,751	80,001	26,965	29,141	12,496	10,857	40,094	10,877	7,143	9,162	8,935	19,514
All other liabilities.....	17,204	307	5,550	451	1,266	983	2,128	2,329	1,353	857	474	679	827
Total liabilities.....	4,794,071	382,101	1,546,581	345,884	473,859	189,629	212,102	612,715	179,659	122,607	190,415	123,565	414,954
Reserve ratio (per cent).....	82.2	82.2	87.0	84.1	80.9	73.6	78.4	83.4	73.6	70.9	70.2	60.8	85.3
FEDERAL RESERVE NOTE STATEMENT													
Federal reserve notes:													
Issued to Federal reserve banks by Federal reserve agent.....	1,783,356	171,990	389,146	136,516	217,900	85,206	142,065	173,997	75,826	53,295	76,456	39,089	221,870
Held by Federal reserve banks ¹	415,601	40,096	148,587	16,192	36,131	17,054	23,736	27,664	14,132	4,253	11,831	6,163	69,762
In actual circulation.....	1,367,755	131,894	240,559	120,324	181,769	68,152	118,329	146,333	61,694	49,042	64,625	32,926	152,108
Collateral held by agents as security for notes issued to banks:													
Gold.....	1,580,615	159,917	355,636	140,000	180,550	65,000	110,300	169,000	55,745	47,545	70,000	27,160	199,762
Eligible paper.....	328,557	22,173	55,488	15,877	43,352	26,030	32,416	36,415	21,177	7,919	19,056	15,047	31,607

¹ Excludes "Federal reserve notes of other Federal reserve banks," which are consequently included in "actual circulation."

ALL BANKS IN THE UNITED STATES¹—TOTAL LOANS AND INVESTMENTS

[In millions of dollars]

Date ²	All banks			All member banks		
	Loans and investments	Loans	Investments	Loans and investments	Loans	Investments
1924—June 30.....	45,180	31,523	13,657	27,167	19,204	7,963
Dec. 31.....	47,182	32,440	14,742	28,746	19,933	8,813
1925—June 30.....	48,830	33,865	14,965	29,518	20,655	8,863
Dec. 31.....	50,603	35,640	14,963	30,884	21,996	8,888
1926—June 30.....	51,562	36,157	15,404	31,184	22,060	9,123
Dec. 31.....	52,018	36,759	15,260	31,642	22,652	8,990
1927—June 30.....	53,750	37,360	16,391	32,756	22,938	9,818
Dec. 31.....	55,450	38,407	17,043	34,247	23,886	10,361
1928—June 30.....	57,265	39,464	17,801	35,061	24,303	10,758
Oct. 3.....	57,187	39,650	17,537	34,929	24,325	10,604
Dec. 31.....	58,266	40,763	17,504	35,684	25,155	10,529
1929—Mar. 27.....	58,019	40,557	17,462	35,393	24,945	10,448
June 29.....	58,474	41,512	16,962	35,711	25,658	10,052
Oct. 4.....	58,835	42,201	16,634	35,914	26,165	9,749
Dec. 31.....	58,417	41,898	16,519	35,934	26,150	9,784
1930—Mar. 27.....	57,886	40,686	16,700	35,056	25,119	9,937
June 30.....	58,108	40,618	17,490	35,656	25,214	10,442
Sept. 24.....				35,472	24,738	10,734

¹ Includes national banks, State commercial banks and trust companies, mutual and stock savings banks, and all private banks under State supervision.

² Dates of reports of member banks; figures included for nonmember banks are as of nearest available date.

KINDS OF MONEY IN CIRCULATION

[End of month figures. In thousands of dollars]

	July 31	Aug. 31	Sept. 30	Oct. 31 ^a
Gold coin.....	356,079	353,358	351,765	350,919
Gold certificates.....	1,001,923	1,050,595	1,026,036	1,019,630
Standard silver dollars.....	38,108	38,234	37,512	37,315
Silver certificates.....	381,285	390,203	391,311	391,366
Treasury notes of 1890.....	1,259	1,254	1,252	1,250
Subsidiary silver.....	279,736	280,162	280,868	280,983
Minor coin.....	117,236	117,187	117,728	117,983
United States notes.....	287,878	297,603	297,307	300,032
Federal reserve notes.....	1,320,263	1,353,200	1,359,358	1,349,931
Federal reserve bank notes.....	3,155	3,126	3,104	3,082
National bank notes.....	639,593	648,274	635,237	640,818
Total.....	4,426,494	4,533,197	4,501,478	4,493,309

^a Preliminary.

MEMBERSHIP IN PAR-COLLECTION SYSTEM¹

[Number of banks at end of September]

Federal reserve district	Member banks		Nonmember banks			
	1930	1929	On par list		Not on par list	
			1930	1929	1930	1929
United States.....	8,252	8,629	11,338	12,221	3,625	3,777
Boston.....	398	408	266	271	-----	-----
New York.....	920	934	400	407	-----	-----
Philadelphia.....	755	771	461	479	-----	-----
Cleveland.....	779	805	945	999	9	9
Richmond.....	485	524	551	589	497	553
Atlanta.....	408	432	208	257	893	933
Chicago.....	1,116	1,209	3,269	3,515	237	228
St. Louis.....	548	573	1,537	1,692	481	475
Minneapolis.....	656	691	522	600	1,051	1,112
Kansas City.....	880	904	1,975	2,161	184	196
Dallas.....	716	762	583	608	214	210
San Francisco.....	591	616	621	643	59	61

¹ Incorporated banks other than mutual savings banks.

FEDERAL RESERVE BANKS—MATURITY DISTRIBUTION OF BILLS AND SHORT-TERM SECURITIES

[In thousands of dollars]

	Total	With- in 15 days	16 to 30 days	31 to 60 days	61 to 90 days	91 days to 6 months	Over 6 months
Bills discount- ed:							
Oct. 1.....	185,916	113,830	18,172	32,611	17,484	3,602	217
Oct. 8.....	173,166	101,788	22,880	27,566	16,730	3,943	259
Oct. 15.....	210,439	137,051	22,563	28,482	17,637	4,376	330
Oct. 22.....	191,984	122,054	19,523	28,522	16,589	4,876	420
Oct. 29.....	201,603	128,309	19,559	30,871	16,234	6,020	610
Bills bought in open market:							
Oct. 1.....	193,108	106,442	39,384	42,989	4,172	121	-----
Oct. 8.....	211,023	125,273	29,878	46,679	9,084	109	-----
Oct. 15.....	185,492	96,922	31,889	41,671	14,753	257	-----
Oct. 22.....	176,590	61,537	43,822	44,435	26,566	230	-----
Oct. 29.....	165,658	48,200	43,774	42,236	31,333	115	-----
Certificates and bills:							
Oct. 1.....	271,442	-----	-----	25,214	83,320	-----	162,908
Oct. 8.....	272,430	-----	-----	25,214	83,320	-----	163,896
Oct. 15.....	273,442	-----	-----	33,214	75,361	-----	164,867
Oct. 22.....	279,472	-----	28,214	85,370	-----	-----	165,888
Oct. 29.....	275,416	-----	25,714	82,322	66,076	-----	101,304
Municipal war- rants:							
Oct. 1.....	22	-----	-----	-----	-----	-----	22
Oct. 8.....	22	-----	-----	-----	-----	-----	22
Oct. 15.....	22	-----	-----	-----	22	-----	-----
Oct. 22.....	47	-----	-----	-----	47	-----	-----
Oct. 29.....	72	-----	-----	-----	72	-----	-----

CHANGES IN MEMBERSHIP

On October 25, 1930, there were 8,231 active member banks in the Federal reserve system, including 7,179 national banks and 1,052 State bank members. Below are given all changes, except suspensions and insolvencies, between September 26 and October 25, affecting the list of active member banks.

Date	CHANGES ("Consolidations" shown below include absorp- tions, mergers, etc.)	Capital
DISTRICT NO. 1—BOSTON		
1930 Sept. 30	Blue Hill National Bank, Milton, Mass. Succeeded by Blue Hill Bank & Trust Co., nonmember.	\$100,000
DISTRICT NO. 2—NEW YORK		
Sept. 29	Broadway National Bank & Trust Co., New York, N. Y. Park Row Trust Co., member Plaza Trust Co., member Consolidated under charter and title of Plaza Trust Co. and title of Broadway & Plaza Trust Co., member.	2,000,000 500,000 2,000,000
Sept. 30	Genesee National Bank, Buffalo, N. Y. Commercial Trust Co., nonmember. Consolidated under charter and title of Com- mercial Trust Co., nonmember.	2,500,000 250,000 1,000,000
Sept. 30	Peoples Banking & Trust Co., Elizabeth, N. J., member. Downtown Trust Co., nonmember. Consolidated under charter and title of Peo- ples Banking & Trust Co., member.	1,250,000 300,000 100,000 350,000
DISTRICT NO. 3—PHILADELPHIA		
Oct. 4	Chester National Bank, Chester, Pa. Cambridge Trust Co., member. Consolidated under charter of Cambridge Trust Co., and title of Chester-Cambridge Bank & Trust Co., member.	300,000 750,000 1,050,000
DISTRICT NO. 4—CLEVELAND		
Sept. 20 ¹	Uniontown National Bank & Trust Co., Union- town, Pa. Second National Bank Consolidated under charter and title of Second National Bank.	250,000 200,000
Sept. 23 ¹	Guaranty Trust Co., Butler, Pa., member Succeeded by Union Trust Co., nonmember.	200,000 500,000 150,000
Sept. 30	Second National Bank, Brownsville, Pa. Monongahela National Bank Consolidated under charter and title of Mon- ongahela National Bank.	125,000 100,000
Oct. 1	National Bank & Trust Co., Connellsville, Pa. Primary organization.	100,000 125,000
Oct. 4	First National Bank, Addison, Pa. First National Bank, Confluence, Pa. Consolidated under charter and title of First National Bank, Confluence, Pa.	25,000 25,000 25,000
DISTRICT NO. 5—RICHMOND		
Aug. 14 ¹	First National Bank, Kimball, W. Va. Restored to solvency and absorbed by Kim- ball National Bank, primary organization.	25,000 25,000
Oct. 16	Virginia National Bank, Norfolk, Va. Virginia Bank & Trust Co., nonmember. Consolidated under charter and title of Vir- ginia National Bank.	600,000 100,000 600,000
DISTRICT NO. 6—ATLANTA		
Sept. 26	City National Bank, Decatur, Ala. Title changed to First National Bank.	200,000
Oct. 14	Florida Bank & Trust Co., West Palm Beach, Fla. ¹ Admitted to membership.	100,000

CHANGES IN MEMBERSHIP—Continued

Date	CHANGES ("Consolidations" shown below include absorp- tions, mergers, etc.)	Capital
DISTRICT NO. 7—CHICAGO		
Sept. 16 ¹	Farmers National Bank, Edinburg, Ind. Thompson State Bank, nonmember. Consolidated under charter and title of Thompson State Bank, nonmember.	\$25,000 100,000
Sept. 26 ¹	First National Bank, Seymour, Iowa. Succeeded by National Bank of Seymour, Iowa.	100,000 50,000
Sept. 27	Guardian National Bank, Chicago, Ill. Union Bank of Chicago, nonmember. Consolidated under charter and title of Union Bank of Chicago, nonmember.	1,000,000 1,000,000
Oct. 7	First National Bank of Lyons, Clinton, Iowa. City National Bank. Consolidated under charter and title of City National Bank.	1,300,000 100,000 300,000
Oct. 15	First National Bank, Deerfield, Wis. Bank of Deerfield, nonmember. Consolidated under charter and title of Bank of Deerfield, nonmember.	300,000 30,000 50,000
Oct. 20	Farmers State Bank, Elberon, Iowa. Voluntary withdrawal.	50,000 50,000
Oct. 20.	Exchange National Bank, Polo, Ill. Succeeded by First National Bank.	50,000
Oct. 24	First National Bank, Doublin, Ind. First National Bank & Trust Co., Cambridge City, Ind. Consolidated under charter and title of First National Bank & Trust Co., Cambridge City, Ind.	25,000 50,000 50,000
DISTRICT NO. 8—ST. LOUIS		
July 1 ¹	First National Bank, Bentonville, Ark. Benton County National Bank. Consolidated under charter and title of Benton County National Bank.	50,000 60,000
Aug. 23 ¹	American National Bank, Gillespie, Ill. Gillespie National Bank. Consolidated under charter and title of Gilles- pie National Bank.	50,000 50,000
Oct. 18	Farmers National Bank, Clarksville, Ark. Reopened.	50,000 60,000
DISTRICT NO. 9—MINNEAPOLIS		
Sept. 24 ¹	First National Bank, Hobson, Mont. National Bank of Lewiston, Lewiston, Mont. Consolidated under charter and title of Na- tional Bank of Lewiston.	30,000 150,000
Sept. 29	Farmers & Merchants National Bank, Minneota, Minn. Farmers State Bank, Green Valley, Minn., non- member. Consolidated under charter and title of Farm- ers & Merchants National Bank, Minneota, Minn.	150,000 40,000 12,000 40,000
DISTRICT NO. 10—KANSAS CITY		
July 3 ¹	First National Bank, Mead, Colo. First National Bank, Longmont, Colo. Consolidated under charter and title of First National Bank, Longmont, Colo.	25,000 100,000
Sept. 11 ¹	First National Bank, Talihina, Okla. Succeeded by First State Bank in Talihina, nonmember.	25,000
Sept. 20	First National Bank, Westville, Okla. People's Bank, nonmember. Consolidated under charter and title of People's Bank, nonmember.	25,000 15,000 40,000
DISTRICT NO. 11—DALLAS		
Aug. 4 ¹	Odessa National Bank, Odessa, Tex. Citizens National Bank. Consolidated under charter and title of Citi- zens National Bank.	30,000 50,000
Aug. 22 ¹	First National Bank of Plainview, Tex. Succeeded by First National Bank in Plain- view, Tex.	50,000 100,000 100,000

¹ Not reported in the period in which the change took place.

CHANGES IN MEMBERSHIP—Continued

Date	CHANGES ("Consolidations" shown below include absorp- tions, mergers, etc.)	Capital
DISTRICT NO. 11—DALLAS—Continued		
Sept. 30	Merchants & Planters National Bank, Sherman, Tex.-----	\$800,000
	Dorchester State Bank, Dorchester, Tex., non-member-----	18,000
	Consolidated under charter and title of Merchants & Planters National Bank, Sherman, Tex.-----	800,000
Oct. 9	First National Bank, Arlington, Tex.-----	50,000
	First State Bank, nonmember-----	50,000
	Consolidated under charter and title of First State Bank, nonmember-----	50,000
Oct. 11	City National Bank, Bowie, Tex.-----	50,000
	Restored to solvency and assets sold to First National Bank-----	50,000
Oct. 24	First National Bank, Ireland, Tex.-----	25,000
	Gatesville National Bank, Gatesville, Tex.-----	100,000
	Consolidated under charter and title of Gatesville National Bank, Gatesville, Tex.-----	100,000
DISTRICT NO. 12—SAN FRANCISCO		
Oct. 1	Anaheim National Bank, Anaheim, Calif.-----	75,000
	Title changed to Anaheim First National Bank-----	
Oct. 20	Thatcher Brothers Banking Co., Logan, Utah-----	150,000
	Voluntary withdrawal-----	

Fiduciary Powers Granted to National Banks

During the month ended October 24, 1930, the Federal Reserve Board approved applications of the national banks listed below for permission to exercise one or more of the fiduciary powers named in section 11 (k) of the Federal reserve act as amended, as follows: (1) Trustee; (2) executor; (3) administrator; (4) registrar of stocks and bonds; (5) guardian of estates; (6) assignee; (7) receiver; (8) committee of estates of lunatics; (9) in any other fiduciary capacity in which State banks, trust companies, or other corporations which come into competition with national banks are permitted to act under the laws of the State in which the national bank is located.

Location	District No.	Name of bank	Powers granted
Baldwin, N. Y.-----	2	Sunrise National Bank-----	1 to 9.
Lexington, Ky.-----	4	Fayette National Bank-----	1 to 8.
Portsmouth, Ohio-----	4	Security Central National Bank-----	1 to 7 and 9.
Kingsley, Iowa-----	7	Farmers National Bank-----	1 to 9.
Clear Lake, S. Dak-----	9	Deuel County National Bank-----	1 to 9.
Independence, Kans.--	10	Security National Bank-----	1 to 9.
Salinas, Calif-----	12	Salinas National Bank-----	4.
Woodland, Calif-----	12	Bank of Woodland National Association-----	1 to 3, 5 to 7.

The Comptroller of the Currency presents the following summary of increases and reductions in the number and capital of national banks during the period from September 27 to October 24, 1930, inclusive:

	Number of banks	Amount of capital
New charters issued-----	3	\$350,000
Restored to solvency-----	0	0
Increase of capital approved-----	10	960,000
Aggregate of new charters, banks restored to solvency, and banks increasing capital-----	13	1,130,000
Liquidations-----	25	3,960,000
Reducing capital-----	1	25,000
Total liquidations and reductions of capital-----	26	3,985,000
Consolidation of national banks under act of Nov. 7, 1918-----	1	400,000
Consolidation of national banks and State banks under act of Feb. 25, 1927-----	1	600,000
Total consolidations-----	2	1,000,000
Aggregate increased capital for period-----		1,310,000
Reduction of capital owing to liquidations, etc-----		3,985,000
Net decrease-----		2,675,000

ALL MEMBER BANKS—CLASSIFICATION OF LOANS AND INVESTMENTS ON CALL DATES, OCTOBER 3, 1928— SEPTEMBER 24, 1930

[Amounts in millions of dollars]

Date	Total loans and invest- ments	Loans to banks			Loans to customers (exclusive of banks)					Open-market loans					Investments			
		Total	On securi- ties	All other	Total	Secured by stocks and bonds		Secured by real estate		Other- wise secured and un- secured	Total	Purchased paper			Street loans ¹	Total	U. S. Gov- ern- ment securi- ties	Other securi- ties
						To bro- kers outside New York City	To other cus- tomers	Farm land	Other real estate			Accept- ances payable in United States	Bills, accept- ances, etc., pay- able in foreign countries	Com- mercial paper				
Total—All member banks:																		
1928—Oct. 3.	34,929	548	(2)	(2)	21,242	850	5,796	421	2,668	11,507	2,537	80	101	457	1,899	10,604	4,386	6,218
Dec. 31.	35,684	538	(2)	(2)	21,462	975	6,373	412	2,711	10,991	3,158	109	103	390	2,556	10,529	4,312	6,217
1929—Mar. 27.	35,393	548	(2)	(2)	21,903	1,014	6,526	403	2,720	11,240	2,494	146	93	376	1,879	10,448	4,454	5,994
June 29.	35,711	670	(2)	(2)	22,516	921	6,813	414	2,750	11,618	2,472	108	90	249	2,025	10,052	4,155	5,898
Oct. 4.	35,944	640	(2)	(2)	23,249	939	7,170	392	2,760	11,988	2,276	93	70	228	1,885	9,749	4,022	5,727
Dec. 31.	35,934	714	(2)	(2)	23,194	803	7,685	388	2,803	11,515	2,243	212	80	291	1,660	9,784	3,863	5,921
1930—Mar. 27.	35,056	527	260	267	21,495	706	7,024	394	2,776	10,595	3,097	175	79	499	2,344	9,937	4,085	5,852
June 30.	35,656	535	230	305	21,565	819	7,242	386	2,769	10,349	3,113	170	71	507	2,365	10,442	4,061	6,380
Sept. 24.	35,472	466	175	291	21,010	774	7,090	387	2,776	9,982	3,262	205	62	523	2,472	10,734	4,095	6,639
New York City: ⁴																		
1928—Oct. 3.	7,197	287	(2)	(2)	3,919	45	1,491	-----	130	2,253	1,048	50	55	63	880	1,942	1,130	813
Dec. 31.	7,951	288	(2)	(2)	3,940	50	1,658	-----	132	2,100	1,790	61	61	29	1,639	1,933	1,094	839
1929—Mar. 27.	7,726	251	(2)	(2)	4,253	52	1,692	-----	148	2,361	1,250	59	52	37	1,102	1,972	1,135	838
June 29.	8,160	314	(2)	(2)	4,532	63	1,814	2	173	2,480	1,496	58	58	21	1,359	1,819	1,006	813
Oct. 4.	8,150	302	(2)	(2)	4,846	46	1,898	1	175	2,726	1,196	59	33	8	1,096	1,807	989	817
Dec. 31.	8,774	322	(2)	(2)	4,964	55	2,145	-----	169	2,595	1,397	128	46	21	1,202	2,091	1,112	979
1930—Mar. 27.	8,238	199	92	107	4,338	60	1,876	-----	150	2,252	1,655	89	40	49	1,477	2,046	1,150	897
June 30.	8,798	196	78	118	4,308	68	1,954	-----	157	2,129	2,091	144	29	35	1,883	2,203	1,147	1,056
Sept. 24.	8,557	169	53	116	4,276	86	1,945	-----	157	2,087	1,912	148	28	22	1,714	2,198	1,091	1,107
Chicago: ⁴																		
1928—Oct. 3.	1,910	35	(2)	(2)	1,326	252	543	3	41	487	144	1	3	21	119	405	191	214
Dec. 31.	1,910	40	(2)	(2)	1,389	369	598	3	39	440	91	1	1	14	75	391	174	217
1929—Mar. 27.	1,793	62	(2)	(2)	1,353	311	477	2	19	544	41	8	5	10	13	337	164	172
June 29.	1,767	67	(2)	(2)	1,309	242	484	2	22	559	58	1	3	6	48	334	159	176
Oct. 4.	1,823	68	(2)	(2)	1,374	257	504	2	19	592	68	1	4	4	59	312	153	160
Dec. 31.	1,757	88	(2)	(2)	1,329	240	533	2	19	535	30	9	5	5	11	309	116	193
1930—Mar. 27.	1,717	58	50	8	1,160	194	474	2	18	472	187	3	11	33	140	310	146	164
June 30.	1,849	50	43	7	1,257	229	487	2	18	521	176	2	19	56	99	366	160	205
Sept. 24.	1,934	41	35	6	1,187	239	448	2	16	482	296	7	13	42	233	407	157	250
Reserve city banks:																		
1928—Oct. 3.	12,211	179	(2)	(2)	7,770	435	2,152	124	1,368	3,691	732	5	27	178	522	3,530	1,703	1,827
Dec. 31.	12,156	173	(2)	(2)	7,878	509	2,318	118	1,387	3,546	650	16	33	136	465	3,454	1,662	1,791
1929—Mar. 27.	12,132	196	(2)	(2)	7,933	538	2,415	112	1,376	3,492	603	35	27	136	405	3,400	1,732	1,668
June 29.	12,065	241	(2)	(2)	8,124	511	2,480	119	1,360	3,654	423	16	22	83	302	3,276	1,607	1,670
Oct. 4.	12,161	225	(2)	(2)	8,401	510	2,598	110	1,360	3,823	458	6	27	71	354	3,075	1,519	1,567
Dec. 31.	12,029	258	(2)	(2)	8,417	425	2,775	110	1,428	3,679	408	43	24	102	239	3,944	1,368	1,576
1930—Mar. 27.	11,858	205	104	101	7,790	360	2,576	113	1,411	3,330	757	55	24	209	469	3,105	1,516	1,580
June 30.	11,852	227	99	128	7,770	431	2,663	110	1,394	3,172	534	17	19	245	253	3,319	1,525	1,794
Sept. 24.	12,037	193	77	117	7,534	360	2,586	111	1,398	3,080	768	47	17	295	409	3,537	1,628	1,909
Country banks:																		
1928—Oct. 3.	13,612	46	(2)	(2)	8,225	117	1,610	294	1,129	5,075	614	24	17	195	378	4,727	1,362	3,365
Dec. 31.	13,667	37	(2)	(2)	8,254	107	1,799	290	1,154	4,904	625	30	8	211	376	4,751	1,382	3,370
1929—Mar. 27.	13,741	39	(2)	(2)	8,364	114	1,942	289	1,176	4,843	598	44	8	192	354	4,740	1,424	3,316
June 29.	13,719	49	(2)	(2)	8,551	105	2,034	291	1,195	4,926	496	33	7	140	316	4,623	1,384	3,240
Oct. 4.	13,780	45	(2)	(2)	8,627	125	2,170	279	1,206	4,847	553	27	6	144	376	4,554	1,361	3,193
Dec. 31.	13,375	45	(2)	(2)	8,481	83	2,231	276	1,186	4,705	409	33	5	163	208	4,439	1,267	3,172
1930—Mar. 27.	13,243	65	14	51	8,206	93	2,097	279	1,196	4,541	496	27	4	207	258	4,475	1,273	3,202
June 30.	13,157	63	11	52	8,229	90	2,137	274	1,201	4,527	312	8	4	171	129	4,554	1,229	3,326
Sept. 24.	12,944	62	11	51	7,999	88	2,112	275	1,205	4,318	286	4	4	164	115	4,589	1,219	3,370

¹ Loans to brokers and dealers in securities at New York City.

² Figures not available.

³ Revised.

⁴ Central reserve city banks only.

NOVEMBER, 1930

FEDERAL RESERVE BULLETIN

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CONDITION OF ALL MEMBER BANKS

ALL MEMBER BANKS—CONDITION ON CALL DATES OCTOBER 10, 1927, TO SEPTEMBER 24, 1930

[Amounts in thousands of dollars]

	1927		1928				1929				1930		
	Oct. 10	Dec. 31	Feb. 2	June 30	Oct. 3	Dec. 31	Mar. 27	June 29	Oct. 4	Dec. 31	Mar. 27	June 30	Sept. 24
RESOURCES													
Loans (including overdrafts).....	23, 226, 513	23, 886, 393	23, 098, 936	24, 302, 787	24, 325, 010	25, 155, 255	24, 944, 641	25, 658, 491	26, 164, 829	26, 150, 061	25, 118, 783	25, 213, 770	24, 738, 011
United States Government securities.....	3, 856, 149	3, 977, 557	4, 215, 822	4, 224, 730	4, 385, 830	4, 311, 790	4, 453, 953	4, 154, 929	4, 021, 636	3, 862, 968	4, 085, 006	4, 061, 395	4, 085, 270
Other securities.....	6, 103, 119	6, 382, 962	6, 373, 690	6, 533, 656	6, 218, 145	6, 216, 890	5, 994, 432	5, 897, 541	5, 727, 308	5, 920, 921	5, 851, 908	6, 380, 494	6, 638, 969
Total loans and investments	33, 185, 781	34, 246, 912	33, 688, 358	35, 061, 173	34, 928, 985	35, 688, 935	35, 393, 026	35, 710, 961	35, 913, 771	35, 833, 950	35, 055, 697	35, 655, 658	35, 472, 250
Customers' liability on account of acceptances.....	576, 223	699, 701	695, 519	710, 207	727, 258	929, 540	830, 028	802, 188	988, 912	1, 252, 147	1, 111, 153	928, 807	912, 852
Banking house, furniture, and fixtures.....	1, 059, 930	1, 067, 200	1, 077, 529	1, 099, 210	1, 105, 558	1, 107, 287	1, 118, 418	1, 169, 752	1, 175, 393	1, 190, 806	1, 217, 963	1, 202, 486	1, 230, 754
Other real estate owned.....	180, 546	177, 229	180, 511	184, 109	178, 443	177, 716	184, 873	179, 878	182, 796	183, 989	188, 815	190, 995	197, 869
Cash in vault.....	539, 137	523, 370	525, 992	449, 198	519, 126	564, 384	516, 742	433, 491	497, 212	558, 450	496, 683	484, 262	470, 367
Reserve with Federal reserve banks.....	2, 319, 736	2, 514, 465	2, 366, 605	2, 342, 045	2, 348, 018	2, 409, 367	2, 338, 569	2, 359, 077	2, 321, 806	2, 373, 760	2, 352, 738	2, 407, 960	2, 414, 991
Items with Federal reserve banks in process of collection.....	739, 871	784, 391	686, 881	680, 492	856, 655	967, 836	841, 606	775, 822	923, 363	994, 373	719, 201	836, 471	698, 871
Due from banks in United States.....	2, 077, 441	2, 209, 831	1, 940, 619	1, 897, 231	2, 026, 259	2, 124, 252	1, 741, 478	1, 885, 167	2, 004, 938	2, 167, 756	1, 901, 517	2, 360, 377	2, 462, 827
Due from banks in foreign countries (including own branches).....	255, 821	258, 337	269, 373	291, 490	286, 686	305, 299	287, 248	272, 682	246, 996	263, 834	247, 612	220, 793	202, 447
Exchanges for clearing house and other checks on local banks.....	1, 564, 796	1, 508, 418	1, 311, 817	1, 447, 219	1, 634, 689	3, 493, 061	2, 486, 203	1, 446, 186	2, 132, 331	2, 762, 463	1, 616, 954	2, 645, 057	1, 146, 915
Outside checks and other cash items.....	157, 841	200, 159	134, 916	217, 291	163, 527	203, 884	142, 395	117, 298	102, 363	139, 056	65, 331	118, 552	51, 706
Redemption fund and due from United States Treasurer.....	33, 054	33, 281	32, 823	33, 025	33, 001	32, 995	32, 761	32, 715	32, 828	32, 889	32, 823	32, 658	32, 604
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	265, 007	431, 968	454, 958	436, 486	433, 668	677, 994	475, 155	453, 826	551, 587	735, 193	612, 198	557, 748	592, 732
Securities borrowed.....	29, 464	35, 212	29, 248	37, 753	36, 551	35, 947	48, 844	36, 337	32, 592	35, 533	25, 744	26, 324	23, 866
Other assets.....	171, 070	197, 666	186, 677	204, 940	205, 273	222, 149	229, 751	232, 621	198, 700	219, 379	231, 482	223, 114	242, 062
Total	43, 155, 718	44, 888, 140	43, 581, 656	45, 091, 849	45, 483, 697	48, 935, 646	46, 673, 097	45, 908, 001	47, 305, 588	48, 843, 078	45, 860, 379	47, 906, 740	46, 153, 113
LIABILITIES													
Capital stock paid in.....	2, 304, 708	2, 337, 780	2, 345, 519	2, 415, 376	2, 453, 859	2, 474, 223	2, 563, 278	2, 646, 928	2, 739, 645	2, 757, 113	2, 744, 975	2, 721, 997	2, 728, 268
Surplus.....	2, 049, 325	2, 124, 020	2, 144, 182	2, 285, 536	2, 382, 393	2, 440, 709	2, 548, 155	2, 650, 336	2, 811, 269	2, 864, 612	2, 881, 944	2, 870, 800	2, 903, 554
Undivided profits—net.....	940, 505	879, 480	914, 114	924, 012	886, 025	832, 564	918, 145	882, 806	980, 928	909, 548	950, 053	950, 072	1, 009, 435
Reserves for dividends, contingencies, etc.....	152, 531	128, 757	137, 345	145, 458	150, 438	120, 676	157, 144	148, 825	172, 193	137, 660	175, 896	148, 960	182, 397
Reserves for interest, taxes, and other expenses accrued and unpaid.....	54, 402	52, 073	45, 360	49, 823	65, 379	56, 510	51, 433	51, 883	55, 720	54, 458	51, 915	46, 206	47, 147
Due to Federal reserve banks.....	3, 567, 193	3, 808, 222	3, 495, 722	3, 263, 494	3, 462, 377	3, 649, 037	3, 070, 084	3, 091, 639	3, 153, 077	3, 517, 325	3, 204, 316	3, 831, 656	3, 817, 132
Due to other banks in United States.....	586, 869	745, 691	643, 372	613, 732	508, 571	543, 273	462, 649	464, 871	481, 696	576, 664	498, 075	571, 766	660, 612
Due to banks in foreign countries (including own branches).....	977, 944	839, 556	848, 064	787, 770	1, 041, 114	2, 184, 138	1, 739, 947	753, 620	1, 405, 446	1, 603, 562	1, 134, 283	1, 493, 437	771, 941
Certified and officers' checks outstanding.....	26, 391	21, 641	29, 015	43, 177	27, 338	23, 128	27, 385	43, 182	27, 613	23, 460	25, 038	41, 389	26, 638
Cash letters of credit and travelers' checks outstanding.....	17, 374, 426	18, 170, 140	17, 304, 646	17, 606, 564	17, 501, 430	18, 903, 658	17, 708, 269	17, 814, 603	17, 937, 478	18, 861, 582	17, 078, 905	18, 061, 977	16, 838, 351
Demand deposits.....	12, 459, 248	12, 764, 798	12, 922, 638	13, 438, 585	13, 409, 608	13, 453, 311	13, 328, 712	13, 325, 066	13, 317, 649	13, 233, 481	13, 518, 731	13, 811, 978	13, 944, 868
Time deposits.....	435, 475	266, 981	86, 032	256, 681	158, 761	261, 505	410, 867	347, 967	315, 479	143, 203	324, 893	280, 769	257, 185
United States deposits.....	17, 845	32, 785	21, 375	18, 103	95, 161	134, 084	102, 423	103, 758	149, 090	136, 957	66, 214	37, 164	38, 144
Agreements to repurchase U. S. Government or other securities sold.....	457, 758	583, 266	485, 874	1, 095, 997	1, 019, 789	1, 040, 608	981, 434	1, 029, 391	899, 311	646, 334	206, 124	273, 880	172, 578
Bills payable and rediscounts:	70, 457	80, 209	95, 018	113, 440	134, 127	121, 570	171, 601	168, 975	250, 587	232, 188	161, 090	143, 402	
With Federal reserve banks.....													
All other.....													
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	265, 007	431, 968	454, 958	436, 486	433, 665	677, 994	475, 155	453, 826	551, 586	735, 193	612, 193	557, 748	592, 732
Acceptances executed for customers.....	575, 636	721, 473	705, 001	716, 270	717, 931	928, 329	846, 370	800, 423	984, 670	1, 276, 159	1, 125, 907	925, 576	929, 337
Acceptances executed by other banks for account of reporting banks.....	26, 075	22, 318	26, 008	28, 235	41, 417	43, 636	45, 025	42, 075	40, 400	29, 647	24, 654	34, 998	18, 127
National bank notes outstanding.....	649, 390	649, 877	646, 162	648, 062	648, 046	649, 893	647, 534	648, 944	640, 610	645, 562	647, 081	649, 098	648, 999
Securities borrowed.....	29, 471	35, 936	29, 352	37, 782	36, 556	35, 947	48, 844	36, 337	32, 592	35, 533	25, 744	26, 324	23, 866
Other liabilities.....	135, 062	191, 169	201, 899	166, 726	189, 692	209, 109	224, 581	238, 116	214, 946	245, 585	239, 961	226, 915	212, 098
Total	43, 155, 718	44, 888, 140	43, 581, 656	45, 091, 849	45, 483, 697	48, 935, 646	46, 673, 097	45, 908, 001	47, 305, 588	48, 843, 078	45, 860, 379	47, 906, 740	46, 153, 113
Number of banks.....	9, 087	9, 034	8, 983	8, 929	8, 896	8, 837	8, 765	8, 707	8, 616	8, 522	8, 406	8, 315	8, 246

ALL MEMBER BANKS—LOANS, INVESTMENTS, DEPOSITS, AND BORROWINGS ON CALL DATES SINCE OCTOBER, 1928 ¹

[Amounts in thousands of dollars]

	Oct. 3, 1928	Dec. 31, 1928	Mar. 27, 1929	June 29, 1929	Oct. 4, 1929	Dec. 31, 1929	Mar. 27, 1930	June 30, 1930	Sept. 24, 1930
Loans—Total	24,325,010	25,155,255	24,944,641	25,658,491	26,164,829	26,150,061	25,118,783	25,213,770	24,738,011
Acceptances payable in United States	79,718	108,925	145,754	107,993	93,107	211,950	174,509	² 169,668	205,432
Bills, acceptances, etc., payable in foreign countries	101,259	103,245	92,701	90,001	69,561	79,577	79,219	² 71,438	61,934
Commercial paper bought in open market	456,635	389,560	375,501	248,609	227,574	290,822	499,286	² 507,392	523,129
Loans to banks—On securities	547,795	537,501	548,152	670,277	640,301	714,076	260,124	230,166	174,857
All other							266,957	305,141	290,936
Loans on securities, exclusive of loans to banks—Total	8,544,656	9,902,856	9,418,942	9,758,885	9,993,767	10,147,866	10,078,809	10,425,353	10,335,938
To brokers and dealers in New York	1,899,143	2,555,786	1,879,477	2,024,592	1,884,886	1,660,150	2,344,242	2,364,735	2,471,781
To brokers and dealers elsewhere	849,509	974,566	1,013,679	921,488	939,068	802,715	706,063	818,834	773,775
To others	5,796,004	6,372,504	6,525,786	6,812,805	7,169,813	7,685,001	7,023,514	7,241,784	7,090,382
Real estate loans—On farm land	420,687	411,567	403,475	413,988	392,076	387,714	394,117	386,036	387,366
On other real estate	2,667,502	2,710,866	2,710,657	2,750,438	2,760,422	2,803,281	2,775,673	2,769,262	2,776,344
All other loans (including overdrafts)	11,506,758	10,990,735	11,240,459	11,618,300	11,988,021	11,514,775	10,595,089	10,349,314	9,982,075
Loans eligible for rediscount with Federal reserve banks	4,368,094	4,160,436	4,343,404	4,389,853	4,598,240	4,396,904	4,204,395	3,904,968	3,812,169
United States Government securities—Total	4,353,530	4,311,790	4,453,953	4,154,929	4,021,636	3,862,968	4,085,006	4,061,395	4,095,270
Bonds	3,077,936	3,028,095	3,121,552	3,004,836	2,992,184	3,094,275	3,287,968	3,339,834	3,342,974
Treasury notes	778,646	729,427	804,739	703,641	664,821	519,983	524,452	462,924	418,495
Certificates of indebtedness	415,395	471,852	455,821	339,456	251,392	151,559	234,543	254,404	284,953
All other	113,853	82,416	71,841	106,996	113,239	97,051	38,043	4,233	48,848
Other securities—Total	6,218,145	6,216,890	5,994,432	5,897,541	5,727,306	5,920,921	5,851,908	6,380,494	6,638,969
Domestic securities—Total	5,522,470	5,533,129	5,341,637	5,262,502	5,114,902	5,292,123	5,242,297	5,691,850	5,938,307
State, county, and municipal bonds	1,224,894	1,221,910	1,168,501	1,144,362	1,116,276	1,224,030	1,168,257	1,232,040	1,379,471
Railroad bonds	878,559	895,759	863,345	831,913	787,134	785,867	781,471	914,037	938,869
Other public service corporation bonds	1,002,432	988,360	985,194	981,938	902,764	905,606	980,210	1,047,687	1,074,627
All other bonds	1,469,339	1,417,256	1,339,802	1,316,859	1,227,883	1,253,469	1,222,847	1,340,789	1,330,420
Stock of Federal reserve banks	145,146	146,113	153,834	158,290	166,686	170,517	173,384	169,505	170,260
Stock of other corporations	403,535	433,735	438,756	469,314	503,848	558,794	527,917	565,417	572,941
Collateral trust and other corporation notes	175,420	199,412	181,969	168,720	154,060	166,049	164,214	180,936	217,924
Municipal warrants	117,396	146,929	149,593	150,681	169,501	168,947	163,434	170,575	181,958
All other	105,749	84,655	87,643	90,425	86,750	58,844	60,545	70,864	71,837
Foreign securities—Total	695,675	683,761	652,795	635,039	612,404	628,798	609,611	688,644	700,662
Government bonds	349,896	343,200	319,239	308,773	303,407	304,123	280,835	346,219	344,439
Other foreign securities	345,779	340,561	333,556	326,266	308,997	324,675	328,776	342,425	356,223
Demand deposits—Total	17,501,430	18,903,658	17,708,269	17,814,603	17,937,478	18,861,582	17,078,905	18,061,977	16,838,351
Individual deposits subject to check	15,726,877	16,996,605	15,840,108	15,742,528	16,167,047	16,935,643	15,194,883	15,930,369	15,107,131
Certificates of deposit	230,445	234,763	207,050	200,986	188,152	201,671	182,828	198,041	196,673
State, county, and municipal deposits	1,243,108	1,299,835	1,384,876	1,511,706	1,224,375	1,335,485	1,446,366	1,568,470	1,276,471
All other	301,000	372,455	276,235	359,383	357,904	388,783	254,828	365,097	288,076
Net demand deposits	18,995,084	19,943,583	18,833,161	18,977,213	18,951,600	19,797,028	18,488,669	19,170,357	18,657,288
Time deposits—Total	13,409,608	13,453,311	13,328,712	13,325,066	13,317,649	13,233,481	13,518,731	13,811,978	13,944,868
States, counties, and municipalities	404,912	418,257	429,265	476,554	491,095	594,896	535,564	570,679	572,004
Banks in United States	134,166	124,262	113,443	79,894	111,148	95,170	102,793	111,829	101,313
Banks in foreign countries				77,508	112,405	154,009	175,529	224,114	233,873
Other time deposits—Evidenced by savings pass books	9,702,703	9,809,851	9,728,154	9,834,363	9,603,720	9,592,096	9,626,033	9,677,521	9,631,588
Certificates of deposit	1,882,008	1,895,223	1,831,666	1,745,134	1,743,212	1,740,944	1,811,315	1,861,504	1,959,775
Open accounts, Christmas savings accounts, etc.	1,169,220	1,071,463	1,110,132	996,976	1,136,043	933,902	1,139,518	1,232,679	1,302,785
Postal savings	116,599	124,255	116,052	114,637	120,026	122,464	127,979	133,652	143,530
Bills payable and rediscounts—Total	1,153,916	1,162,178	1,153,035	1,198,366	1,149,898	878,522	346,591	434,970	315,980
With Federal reserve banks—Bills payable	813,036	823,403	761,755	738,768	583,665	453,574	105,209	147,826	76,865
Rediscounts	206,753	217,205	219,679	290,623	315,646	192,760	100,915	126,054	95,713
All other—Bills payable	116,280	102,243	148,504	149,576	226,742	214,209	134,761	155,189	137,890
Rediscounts	17,867	19,327	23,097	19,399	28,845	17,979	5,706	5,901	5,512

¹ Corresponding classifications not available prior to October, 1928.

² Revised.

NATIONAL AND STATE MEMBERS—CONDITION ON SEPTEMBER 24, 1930, BY CLASSES OF BANKS

[Amounts in thousands of dollars]

	All member banks				National banks ¹				State bank members			
	Total	Central reserve city banks	Other reserve city banks	Country banks	Total	Central reserve city banks	Other reserve city banks	Country banks	Total	Central reserve city banks	Other reserve city banks	Country banks
RESOURCES												
Loans (including overdrafts).....	24,738,011	7,883,218	8,500,409	8,354,384	14,641,945	3,325,014	5,134,667	6,182,264	10,096,066	4,558,204	3,365,742	2,172,120
United States Government securities.....	4,095,270	1,248,167	1,627,722	1,219,381	2,811,562	671,390	1,124,964	1,015,208	1,283,708	576,777	502,758	204,173
Other securities.....	6,638,969	1,359,469	1,909,433	3,370,067	4,299,866	588,887	1,069,604	2,641,375	2,339,103	770,582	839,829	728,692
Total loans and investments.....	35,472,250	10,490,854	12,037,564	12,943,832	21,753,373	4,585,291	7,329,235	9,838,847	13,718,877	5,905,563	4,708,329	3,104,955
Customers' liability on account of acceptances.....	912,852	691,438	209,966	11,448	475,539	305,779	162,958	6,802	437,313	385,659	47,008	4,646
Banking house, furniture, and fixtures.....	1,230,754	254,878	437,617	538,259	793,312	109,915	267,556	415,841	437,442	144,963	170,061	122,418
Other real estate owned.....	197,869	11,288	72,388	114,193	129,457	5,151	34,844	89,462	68,412	6,137	37,544	24,731
Cash in vault.....	470,367	58,244	128,373	283,750	337,249	26,655	84,194	226,370	123,118	31,559	47,179	57,380
Reserve with Federal reserve banks.....	2,414,991	1,032,354	772,287	610,350	1,432,892	467,590	497,601	467,701	982,099	564,764	274,686	142,649
Items with Federal reserve banks in process of collection.....	698,871	268,809	327,816	102,246	460,315	168,644	220,480	71,191	238,556	100,165	107,336	31,055
Due from banks in United States.....	2,462,827	271,916	1,219,957	970,954	1,817,314	105,521	909,952	801,841	645,513	166,395	310,005	169,113
Due from banks in foreign countries (including own branches).....	202,447	140,170	59,628	2,649	163,726	109,663	52,476	1,587	38,721	30,507	7,152	1,062
Exchanges for clearing house and other checks on local banks.....	1,146,915	914,902	187,468	44,545	522,369	358,736	133,505	29,808	624,546	556,146	53,663	14,737
Outside checks and other cash items.....	51,706	7,087	27,929	16,690	36,584	2,405	20,270	13,909	15,122	4,682	7,659	2,781
Redemption fund and due from United States Treasurer.....	32,604	2,168	7,571	22,865	32,604	2,168	7,571	22,865	-----	-----	-----	-----
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	592,732	510,174	80,033	2,525	228,527	180,878	45,221	2,428	364,205	329,296	34,812	97
Securities borrowed.....	28,866	-----	12,972	10,894	16,505	-----	8,693	7,812	7,361	-----	4,279	3,082
Other assets.....	242,062	92,983	94,701	54,378	133,168	46,256	50,746	36,166	108,894	46,727	43,955	18,212
Total.....	46,153,113	14,747,265	15,676,270	15,729,578	28,332,934	6,474,702	9,825,602	12,032,630	17,820,179	8,272,563	5,850,668	3,696,948
LIABILITIES												
Capital stock paid in.....	2,728,664	873,092	856,745	998,827	1,741,700	411,582	555,433	774,685	986,964	461,510	301,312	224,142
Surplus.....	2,903,258	1,162,802	868,688	871,768	1,590,756	478,092	459,604	653,060	1,312,502	684,710	409,084	218,708
Undivided profits—net.....	1,009,435	368,835	259,746	380,854	585,527	132,525	152,590	300,412	423,908	236,310	107,154	80,442
Reserves for dividends, contingencies, etc.....	185,602	74,914	59,687	51,001	83,478	24,538	30,891	28,049	102,124	50,376	28,796	22,952
Reserves for interest, taxes, and other expenses accrued and unpaid.....	182,397	59,795	72,892	49,710	95,520	19,574	42,599	33,347	86,877	40,221	30,293	363
Due to Federal reserve banks.....	47,147	2	11,040	36,105	31,031	-----	5,484	25,547	16,116	2	5,556	10,558
Due to other banks in United States.....	3,817,132	1,461,547	1,953,980	401,605	2,462,404	682,289	1,467,487	312,628	1,354,728	779,258	486,493	88,977
Due to banks in foreign countries (including own branches).....	660,612	586,765	70,898	2,949	394,256	335,321	56,634	2,300	266,357	251,444	14,264	649
Certified and officers' checks outstanding.....	771,941	608,201	96,195	67,545	392,993	280,273	62,842	49,878	378,948	327,928	33,353	17,667
Cash letters of credit and travelers' checks outstanding.....	26,638	19,167	6,604	867	11,092	4,534	6,270	288	15,546	14,633	334	579
Demand deposits.....	16,838,351	5,953,535	5,522,734	5,362,082	10,320,020	2,636,976	3,604,064	4,078,389	6,518,322	3,316,559	1,918,070	1,283,693
Time deposits.....	13,944,868	2,090,105	5,159,875	6,694,888	8,781,362	850,500	2,849,495	5,081,367	6,163,506	1,239,605	2,310,380	1,613,521
United States deposits.....	257,185	61,484	135,927	59,774	160,458	18,830	95,434	46,194	96,727	42,654	40,493	13,580
Agreements to repurchase U. S. Government or other securities sold.....	38,144	22,362	10,887	4,895	11,954	21	7,453	4,480	26,190	22,341	3,434	415
Bills payable and rediscounts:												
With Federal reserve banks.....	172,578	6,800	27,493	138,375	132,330	2,385	17,891	112,054	40,248	4,415	9,512	26,321
All other.....	143,402	62,853	22,816	57,733	87,520	30,853	12,973	43,694	55,882	32,000	9,843	14,039
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	592,732	510,174	80,033	2,525	228,527	180,878	45,221	2,428	364,205	329,296	34,812	97
Acceptances executed for customers.....	929,337	704,372	215,406	9,559	487,092	315,284	166,200	5,068	442,245	389,088	49,200	3,951
Acceptances executed by other banks for account of reporting banks.....	18,127	12,167	4,152	1,808	9,830	4,700	3,731	1,399	8,297	7,467	421	409
National-bank notes outstanding.....	648,999	43,145	150,541	455,313	648,999	43,145	150,541	455,313	-----	-----	-----	-----
Securities borrowed.....	28,866	-----	12,972	10,894	16,505	-----	8,693	7,812	7,361	-----	4,279	3,082
Other liabilities.....	212,698	65,148	77,049	70,501	59,572	22,402	23,472	13,698	153,126	42,746	53,577	56,803
Total.....	46,153,113	14,747,265	15,676,270	15,729,578	28,332,934	6,474,702	9,825,602	12,032,630	17,820,179	8,272,563	5,850,668	3,696,948
Number of banks.....	8,246	68	421	7,757	7,192	32	299	6,861	1,054	86	122	896

¹ Member banks only, i. e., exclusive of national banks in Alaska and Hawaii.

NATIONAL AND STATE MEMBERS—LOANS, INVESTMENTS, DEPOSITS, AND BORROWINGS ON SEPTEMBER 24, 1930

[Amounts in thousands of dollars]

	All member banks				National banks ¹				State bank members			
	Total	Central reserve city banks	Other reserve city banks	Country banks	Total	Central reserve city banks	Other reserve city banks	Country banks	Total	Central reserve city banks	Other reserve city banks	Country banks
Loans—Total	24,738,011	7,883,218	8,500,409	8,354,384	14,641,945	3,325,014	5,134,067	6,182,264	10,096,066	4,558,204	3,365,742	2,172,120
Acceptances payable in United States	205,432	155,076	46,833	3,523	114,716	73,199	38,153	3,364	90,716	81,877	8,680	159
Bills, acceptances, etc., payable in foreign countries	61,934	40,966	17,311	3,657	39,874	24,872	11,423	3,579	22,060	16,094	5,888	78
Commercial paper bought in open market	523,129	64,459	294,794	163,876	398,134	33,402	228,289	136,443	124,995	31,597	66,505	27,433
Loans to banks—On securities	174,857	87,732	76,556	10,569	106,852	41,182	57,580	8,060	68,005	46,550	18,976	2,479
All other	260,936	122,720	116,791	51,425	189,418	67,689	77,482	44,247	101,518	55,031	39,309	7,178
Loans on securities, exclusive of loans to banks—Total	10,335,938	4,665,435	3,354,881	2,315,622	5,430,566	1,871,863	1,928,283	1,630,420	4,005,372	2,793,572	1,426,598	685,202
To brokers and dealers in New York	2,471,781	1,947,672	409,277	114,832	1,082,359	705,033	305,587	71,729	1,389,422	1,242,639	103,680	43,103
To brokers and dealers elsewhere	773,775	325,275	360,068	88,432	350,292	81,903	208,623	64,766	1,423,483	1,243,372	156,445	23,668
To others	7,030,382	2,392,488	2,585,536	2,112,358	3,997,915	1,084,927	1,419,063	1,493,925	3,092,467	1,307,661	1,166,473	618,433
Real estate loans—On farm land	387,366	1,568	110,804	274,994	300,083	258	84,219	215,606	87,283	1,310	28,585	59,388
On other real estate	2,776,344	173,481	1,397,770	1,205,093	1,181,264	16,652	531,044	633,568	1,595,080	156,829	866,726	571,525
All other loans (including overdrafts)	9,982,075	2,571,781	3,084,669	4,325,625	6,881,038	1,195,897	2,178,194	3,506,947	3,101,037	1,375,884	906,475	188,678
Loans eligible for rediscount with Federal reserve banks	3,812,169	1,000,044	1,271,257	1,540,868	2,677,188	438,658	943,386	1,295,144	1,134,981	561,386	327,871	245,724
United States Government securities—Total	4,095,270	1,248,167	1,627,722	1,219,381	2,811,562	671,390	1,124,964	1,015,208	1,283,708	576,777	502,758	204,173
Bonds	3,342,974	956,821	1,347,486	1,038,667	2,304,770	547,477	945,258	872,035	978,204	409,344	402,228	166,632
Treasury notes	418,495	163,602	121,207	133,626	270,964	76,089	89,378	105,497	147,531	87,513	31,889	28,129
Certificates of indebtedness	284,953	87,752	152,290	44,911	146,886	24,761	85,200	36,925	138,067	62,991	67,090	7,986
All other	48,848	39,992	6,679	2,177	28,942	23,063	5,128	751	19,906	16,929	1,551	1,426
Other securities—Total	6,638,969	1,359,469	1,909,433	3,370,067	4,299,866	588,887	1,069,604	2,641,375	2,339,103	770,582	839,829	728,692
Domestic securities—Total	5,938,307	1,234,146	1,743,413	2,960,748	3,767,070	518,320	960,263	2,290,487	2,171,237	737,756	783,150	670,261
State, county, and municipal bonds	1,379,471	321,508	401,551	566,412	881,974	125,885	308,995	447,094	497,497	195,623	182,556	119,318
Railroad bonds	938,869	197,414	226,124	515,331	674,282	121,736	140,819	411,727	264,587	75,678	85,305	103,604
Other public service corporation bonds	1,074,627	109,144	235,230	730,253	798,454	49,766	144,418	604,270	276,173	59,378	90,812	125,983
All other bonds	1,330,420	213,432	358,354	758,634	890,519	80,107	194,215	616,197	439,001	133,235	164,139	142,437
Stock of Federal reserve banks	170,260	61,144	52,511	56,605	100,738	26,753	30,634	43,351	69,622	34,391	21,877	13,254
Stock of other corporations	572,941	162,401	230,986	179,554	111,801	25,080	48,050	38,671	461,140	137,321	182,936	140,883
Collateral trust and other corporation notes	217,924	59,566	95,480	62,878	141,774	30,129	57,195	54,460	76,150	29,437	38,285	8,428
Municipal warrants	181,958	82,439	35,752	63,767	128,781	51,849	27,282	49,650	53,177	30,590	8,470	14,117
All other	71,837	27,098	17,425	27,314	38,747	5,015	8,655	25,077	33,090	22,083	8,770	2,237
Foreign securities—Total	700,662	175,323	166,020	409,319	532,796	72,567	109,341	350,888	167,866	52,756	56,679	58,431
Government bonds	344,439	63,924	80,939	199,576	264,226	34,285	57,930	172,011	80,213	29,639	23,009	27,565
Other foreign securities	356,223	61,399	85,081	209,743	268,570	38,282	51,411	178,877	87,653	23,117	33,670	30,866
Demand deposits—Total	16,838,351	5,953,535	5,522,734	5,362,082	10,320,029	2,636,976	3,604,664	4,078,389	6,518,322	3,316,559	1,918,070	1,283,693
Individual deposits subject to check	15,107,131	5,645,014	5,025,482	4,436,635	9,123,051	2,482,011	3,280,463	3,360,577	5,984,080	3,163,003	1,745,019	1,076,058
Certificates of deposit	196,673	40,490	42,015	114,168	148,232	28,535	26,996	92,703	48,441	11,957	15,019	21,465
State, county, and municipal deposits	1,276,471	112,576	404,131	759,764	905,961	46,723	265,068	594,170	370,510	65,853	139,063	165,594
All other	258,076	155,455	51,106	51,515	142,785	79,709	32,137	30,939	115,291	75,746	18,969	20,576
Net demand deposits	18,675,238	7,104,522	6,120,338	5,432,379	11,430,139	3,224,690	4,068,611	4,137,438	7,227,099	3,880,431	2,051,727	1,294,941
Time deposits—Total	13,944,888	2,090,105	5,159,875	6,694,888	8,781,362	850,500	2,849,495	5,081,367	5,163,506	1,239,005	2,310,380	1,613,521
States, counties, and municipalities	572,004	137,902	287,153	146,949	432,058	124,435	194,588	113,035	139,946	13,467	92,565	33,914
Banks in United States	101,313	55,236	34,940	11,137	74,252	40,469	25,803	7,980	27,061	14,767	9,137	3,157
Banks in foreign countries	233,873	202,174	31,686	13	121,452	89,758	31,681	13	112,421	112,416	5	-----
Other time deposits—												
Evidenced by savings pass books	9,631,588	814,328	3,770,970	5,046,290	6,038,544	267,826	2,022,745	3,747,973	3,593,044	546,502	1,748,225	1,298,317
Certificates of deposit	1,959,775	160,593	572,769	1,226,413	1,371,443	38,991	319,244	1,013,208	588,332	121,602	253,525	213,205
Open accounts, Christmas savings accounts, etc.	1,302,785	699,539	415,317	187,929	627,619	279,496	217,613	130,510	675,166	420,043	197,704	57,419
Postal savings	143,530	20,333	47,040	76,157	115,994	9,525	37,821	68,648	27,536	10,808	9,219	7,509
Bills payable and rediscounts—Total	315,950	69,653	50,219	196,108	219,850	33,238	30,864	155,748	96,130	36,415	19,355	40,360
With Federal reserve banks—Bills payable	76,865	5,085	20,542	51,238	54,516	1,400	13,476	39,640	22,349	3,685	7,066	11,598
Rediscounts	95,713	1,715	6,861	87,137	77,814	985	4,415	72,414	17,899	2,446	14,723	7,223
All other—Bills payable	137,890	62,800	22,696	52,394	83,051	30,800	12,973	39,278	54,839	32,000	9,723	13,116
Rediscounts	5,512	53	120	5,339	4,469	53	-----	4,416	1,043	-----	120	923

¹ Member banks only, i. e., exclusive of national banks in Alaska and Hawaii.

NOVEMBER, 1930

FEDERAL RESERVE BULLETIN

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ALL MEMBER BANKS—CONDITION ON SEPTEMBER 24, 1930, JUNE 30, 1930, AND OCTOBER 4, 1929, BY CLASSES OF BANKS

[Amounts in thousands of dollars]

	Central reserve city banks						Other reserve city banks			Country banks		
	New York			Chicago			Sept. 24, 1930	June 30, 1930	Oct. 4, 1929	Sept. 24, 1930	June 30, 1930	Oct. 4, 1929
	Sept. 2, 1930	June 30, 1930	Oct. 4, 1929	Sept. 24, 1930	June 30, 1930	Oct. 4, 1929						
RESOURCES												
Loans (including overdrafts).....	6,359,108	6,595,530	6,343,646	1,524,110	1,483,214	1,510,153	8,500,409	8,532,560	9,085,403	8,354,384	8,602,466	9,225,627
United States Government securities.....	1,090,788	1,146,913	989,220	157,379	160,454	152,664	1,627,722	1,525,296	1,518,708	1,219,381	1,228,732	1,361,044
Other securities.....	1,107,406	1,055,857	817,418	252,063	205,140	159,824	1,909,433	1,793,939	1,556,696	3,370,067	3,325,558	3,193,368
Total loans and investments.....	8,557,302	8,798,300	8,150,284	1,933,552	1,848,808	1,822,641	12,037,564	11,851,795	12,160,807	12,943,832	13,156,756	13,780,039
Customers' liability on account of acceptances.....	612,674	634,683	690,522	78,764	61,277	68,397	209,966	221,143	218,595	11,448	11,704	11,398
Banking house, furniture, and fixtures.....	213,330	204,607	178,504	41,548	41,397	39,316	437,617	436,227	426,520	538,259	535,732	531,053
Other real estate owned.....	10,778	10,347	8,088	510	517	508	72,388	68,053	61,258	114,193	112,078	112,942
Cash in vault.....	49,015	57,777	57,516	9,229	9,912	9,952	128,373	136,288	146,067	283,750	280,285	283,677
Reserve with Federal reserve banks.....	857,813	814,278	734,532	174,541	177,178	174,138	772,287	787,435	766,053	610,350	629,069	647,083
Items with Federal reserve banks in process of collection.....	235,040	336,270	331,978	33,769	33,437	41,256	327,816	334,835	420,277	102,246	131,929	129,852
Due from banks in United States.....	105,940	156,186	195,775	165,976	150,653	133,506	1,219,957	1,132,888	828,575	970,954	920,650	847,082
Due from banks in foreign countries (including own branches).....	133,184	157,108	166,560	6,986	5,566	28,709	59,628	54,687	46,993	2,649	3,432	4,734
Exchanges for clearing house and other checks on local banks.....	864,872	2,143,690	1,648,608	50,030	70,787	187,468	341,996	330,467	44,545	88,671	82,469	82,469
Outside checks and other cash items.....	4,836	23,477	17,426	2,251	4,501	3,520	27,929	60,699	53,046	16,090	29,875	28,371
Redemption fund and due from United States Treasurer.....	1,757	1,750	1,783	411	310	310	7,571	7,630	7,722	22,865	22,968	23,013
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	458,049	438,952	477,900	52,125	40,943	8,315	80,033	76,573	64,108	2,525	1,280	1,264
Securities borrowed.....						698	12,972	14,443	20,048	10,894	11,880	11,837
Other assets.....	83,069	77,672	67,155	9,914	8,969	7,718	94,701	83,889	80,628	54,378	53,084	43,199
Total.....	12,187,659	13,855,097	12,726,640	2,559,606	2,454,169	2,409,771	15,676,270	15,608,081	15,631,164	15,729,578	15,989,393	16,538,013
LIABILITIES												
Capital stock paid in.....	722,092	714,192	738,281	151,000	149,750	149,050	856,745	861,187	854,102	998,827	996,868	998,212
Surplus.....	1,038,532	1,007,435	989,512	124,270	122,170	121,350	868,688	867,061	840,342	871,768	874,134	860,065
Undivided profits—net.....	340,289	326,908	291,516	28,546	24,983	25,046	259,746	249,801	269,951	380,854	348,380	394,415
Reserves for dividends, contingencies, etc.....	52,925	47,020	45,290	21,989	21,096	20,908	59,687	59,528	42,190	51,001	55,296	35,215
Reserves for interest, taxes, and other expenses accrued and unpaid.....	39,426	40,388	40,187	20,369	20,061	18,302	72,892	48,994	64,953	49,710	39,517	48,751
Due to Federal reserve banks.....	2	104	19				11,040	7,605	11,175	36,105	38,497	44,526
Due to other banks in United States.....	1,105,753	1,310,904	940,134	355,794	370,343	311,576	1,953,980	1,774,397	1,510,851	401,605	376,012	390,516
Due to banks in foreign countries (including own branches).....	564,568	492,926	415,216	22,197	21,714	20,473	70,898	54,407	43,634	2,949	2,719	2,373
Certified and officers' checks outstanding.....	579,083	1,217,435	1,145,365	29,118	26,228	25,316	96,195	151,860	147,316	67,545	97,914	87,449
Cash letters of credit and travelers' checks outstanding.....	17,232	27,139	18,038	1,935	2,810	2,147	6,604	10,366	6,957	867	1,074	471
Demand deposits.....	4,908,589	5,725,714	5,129,611	1,044,946	1,048,664	1,086,382	5,522,734	5,696,889	5,793,988	5,362,082	5,590,710	5,927,497
Time deposits.....	1,513,238	1,564,324	1,373,642	576,867	498,686	464,395	5,159,875	5,047,894	4,711,720	6,694,888	6,701,074	6,767,892
United States deposits.....	56,410	79,165	70,770	5,074	8,955	16,327	135,927	142,102	165,805	59,774	50,547	62,577
Agreements to repurchase U. S. Government or other securities sold.....	22,362	10,453	83,379			500	10,887	19,993	53,615	4,895	6,718	11,596
Bills payable and rediscounts:												
With Federal reserve banks.....	6,700	43,348	68,483	100		45,119	27,403	41,887	512,422	138,375	188,645	273,287
All other.....	40,353	72,326	96,799	22,500		2,700	22,816	18,692	53,638	57,733	70,072	97,450
Acceptances of other banks and bills of exchange or drafts sold with indorsement.....	458,049	438,952	477,900	52,125	40,943	8,315	80,033	76,573	64,108	2,525	1,280	1,263
Acceptances executed for customers.....	624,582	626,989	683,669	79,790	63,130	68,351	215,406	225,125	221,987	9,559	10,332	10,663
Acceptances executed by other banks for account of reporting banks.....	12,034	25,589	26,795	133	263	979	4,152	7,713	11,171	1,808	1,433	1,455
National-bank notes outstanding.....	34,920	34,791	34,245	8,225	6,200	6,090	150,541	151,656	151,501	455,313	456,451	448,774
Securities borrowed.....						698	12,972	14,443	20,048	10,894	11,880	11,837
Other liabilities.....	50,520	48,995	57,780	14,628	28,172	15,747	77,049	79,908	79,690	70,501	69,840	61,729
Total.....	12,187,659	13,855,097	12,726,640	2,559,606	2,454,169	2,409,771	15,676,270	15,608,081	15,631,164	15,729,578	15,989,393	16,538,013
Number of banks.....	52	52	57	16	16	18	421	430	469	7,757	7,817	8,072

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FEDERAL RESERVE BULLETIN

NOVEMBER, 1930

ALL MEMBER BANKS—LOANS, INVESTMENTS, DEPOSITS, AND BORROWINGS BY CLASSES OF BANKS

[Amounts in thousands of dollars]

	Central reserve city banks						Other reserve city banks			Country banks		
	New York			Chicago			Sept. 24, 1930	June 30, 1930	Oct. 4, 1929	Sept. 24, 1930	June 30, 1930	Oct. 4, 1929
	Sept. 24, 1930	June 30, 1930	Oct. 4, 1929	Sept. 24, 1930	June 30, 1930	Oct. 4, 1929						
Loans—Total	6,359,108	6,595,530	6,343,646	1,524,110	1,483,214	1,510,153	8,500,409	8,532,560	9,085,403	8,354,384	8,602,466	9,225,627
Acceptances payable in United States.....	148,160	143,756	58,782	6,916	1,579	1,320	46,833	16,683	6,191	3,523	7,650	26,814
Bills, acceptances, etc., payable in foreign countries.....	27,632	29,127	32,964	13,334	19,149	3,682	17,311	18,781	27,360	3,657	4,381	5,555
Commercial paper bought in open market.....	22,055	35,455	8,374	42,404	55,866	3,684	294,794	245,079	71,303	163,876	170,992	144,213
Loans to banks—On securities.....	52,567	77,726		35,165	42,746		76,556	99,085		10,569	10,609	
All other.....	116,441	117,911	301,744	6,279	7,065	68,319	116,791	128,464	225,373	51,425	51,701	44,865
Loans on securities, exclusive of loans to banks—Total.....	3,745,304	3,905,525	3,040,326	920,131	815,920	819,879	3,354,881	3,347,918	3,462,110	2,315,622	2,355,990	2,671,452
To brokers and dealers in New York.....	1,714,404	1,882,787	1,095,662	233,268	99,499	58,764	409,277	253,098	354,085	114,832	129,351	376,375
To brokers and dealers elsewhere.....	86,332	68,407	46,280	238,943	228,948	257,080	360,068	431,364	510,314	88,432	90,115	125,394
To others.....	1,944,568	1,954,331	1,898,384	447,920	487,473	504,035	2,585,536	2,663,456	2,597,711	2,112,358	2,136,524	2,169,683
Real estate loans—On farm land.....	23	35	920	1,545	1,832	1,840	110,804	110,277	110,114	274,994	273,892	279,202
On other real estate.....	157,381	156,766	174,861	16,100	17,575	19,143	1,397,770	1,394,282	1,360,299	1,205,093	1,200,639	1,206,119
All other loans (including overdrafts).....	2,089,545	2,129,229	2,725,675	482,236	521,482	592,286	3,084,669	3,171,991	3,822,653	4,325,625	4,526,612	4,847,407
Loans eligible for rediscount with Federal reserve banks.....	797,555	784,564	1,168,317	202,489	225,686	251,120	1,271,257	1,274,966	1,445,653	1,540,868	1,619,733	1,733,150
United States Government securities—Total	1,090,788	1,146,913	989,220	157,379	160,454	152,664	1,627,722	1,525,296	1,518,708	1,219,381	1,228,732	1,361,044
Bonds.....	875,797	958,833	731,723	81,024	128,830	115,995	1,347,486	1,218,546	1,123,150	1,038,667	1,033,625	1,021,316
Treasury notes.....	139,774	77,448	226,055	23,828	26,327	33,913	121,267	201,707	203,744	133,626	157,442	201,109
Certificates of indebtedness.....	55,154	110,632	21,764	32,598	4,797	2,214	152,290	102,719	123,545	44,911	36,256	103,869
All other.....	20,063		9,678	19,929	500	542	6,679	2,324	68,269	2,177	1,459	34,750
Other securities—Total	1,107,406	1,055,857	817,418	252,063	205,140	159,824	1,909,433	1,793,939	1,556,696	3,370,067	3,325,558	3,193,368
Domestic securities—Total.....	1,004,217	955,658	745,619	229,929	186,377	148,694	1,743,413	1,629,496	1,426,114	2,990,748	2,920,319	2,794,475
State, county, and municipal bonds.....	269,141	183,639	130,311	52,367	30,188	32,227	491,551	449,358	398,681	566,412	568,855	555,057
Railroad bonds.....	185,410	187,550	139,833	12,004	10,533	10,290	226,124	206,438	161,238	515,331	509,516	475,773
Other public-service corporation bonds.....	89,087	87,994	61,638	20,057	18,596	10,113	235,230	230,503	177,459	730,253	710,594	653,554
All other bonds.....	187,084	214,105	137,335	26,348	20,129	17,928	358,354	342,309	320,222	758,364	755,246	752,398
Stock of Federal reserve banks.....	52,881	51,945	51,766	8,263	8,132	8,012	52,511	52,501	50,700	56,605	56,927	56,208
Stock of other corporations.....	156,438	163,834	155,320	5,963	5,114	5,091	230,986	227,380	203,337	179,554	169,089	140,100
Collateral trust and other corporation notes.....	50,626	43,594	25,148	8,940	1,653	627	95,480	74,742	62,914	62,878	60,947	65,371
Municipal warrants.....	1,628	8,379	18,495	80,811	70,390	53,395	35,752	30,308	31,958	63,767	61,498	65,653
All other.....	11,922	14,618	25,773	15,176	12,642	11,011	17,425	15,957	19,605	27,314	27,647	30,361
Foreign securities—Total.....	103,189	100,199	71,799	22,134	18,763	11,130	166,020	164,443	130,582	409,319	405,239	398,893
Government bonds.....	51,226	51,688	40,797	12,698	11,849	7,773	80,939	84,997	61,341	199,576	197,685	193,496
Other foreign securities.....	51,963	48,511	31,002	9,436	6,914	3,357	85,081	79,446	69,241	209,743	207,554	205,397
Demand deposits—Total	4,908,589	5,725,714	5,129,611	1,044,946	1,048,664	1,086,382	5,522,734	5,696,889	5,793,988	5,362,082	5,590,710	5,927,497
Individual deposits subject to check.....	4,650,402	5,330,604	4,800,540	994,612	989,372	1,038,821	5,025,482	5,114,600	5,286,897	4,436,635	4,495,793	5,040,789
Certificates of deposits.....	37,528	30,813	23,675	2,962	2,711	2,776	42,015	43,943	33,222	114,168	120,674	128,479
State, county, and municipal deposits.....	68,062	123,257	75,125	44,514	54,487	38,724	404,131	469,958	405,242	759,764	920,768	705,284
All other.....	152,597	241,040	230,271	2,858	2,094	6,061	51,106	68,388	68,627	51,515	53,675	52,945
Net demand deposits.....	5,873,175	6,146,508	5,587,184	1,231,346	1,232,542	1,217,021	6,120,338	6,140,653	6,150,537	5,432,937	5,650,654	5,996,858
Time deposits—Total	1,513,238	1,564,324	1,378,642	576,567	498,656	464,395	5,159,875	5,047,894	4,711,720	6,694,888	6,701,674	6,767,892
States, counties, and municipalities.....	17,198	16,174	20,250	120,704	89,835	72,400	287,153	319,579	258,123	146,949	145,091	140,322
Banks in United States.....	39,732	50,128	46,980	15,504	15,862	22,168	34,940	38,400	35,176	11,137	7,439	6,824
Banks in foreign countries.....	169,445	183,979	92,942	32,729	21,585	9,928	31,686	17,879	9,521	13	671	14
Other time deposits—												
Evidenced by savings pass books.....	642,881	641,737	633,232	171,447	166,953	184,070	3,770,970	3,773,169	3,653,139	5,046,290	5,095,662	5,133,279
Certificates of deposit.....	79,090	106,700	79,503	62,477	56,334	572,769	478,376	388,368	1,226,413	1,213,951	1,219,007	1,219,007
Open accounts, Christmas savings accounts, etc.....	548,272	548,009	482,634	151,267	139,028	117,893	415,317	378,469	325,970	187,929	167,173	209,546
Postal savings.....	16,820	17,597	18,101	3,713	2,946	1,602	47,040	42,022	41,423	76,157	71,087	68,900
Bills payable and rediscounts—Total	47,053	115,674	165,282	22,600		47,819	50,219	60,579	566,060	196,108	258,711	370,737
With Federal reserve banks—Bills payable.....	4,985	42,100	64,937	100		30,019	20,542	28,243	336,697	51,238	77,483	152,012
Rediscounts.....	1,715	1,248	3,546			15,100	6,861	175,725	87,137	111,162	121,275	
All other—Bills payable.....	40,300	72,300	85,624	22,500		2,700	22,696	17,905	49,117	52,394	64,984	89,301
Rediscounts.....	53	26	11,175				120	787	4,521	5,339	5,088	8,149

NOVEMBER, 1930

FEDERAL RESERVE BULLETIN

ALL MEMBER BANKS—CONDITION ON SEPTEMBER 24, 1930, BY FEDERAL RESERVE DISTRICTS

[Amounts in thousands of dollars]

	Total	Federal Reserve District											
		Boston	New York	Philadel- phia	Cleve- land	Rich- mond	Atlanta	Chicago	St. Louis	Minne- apolis	Kansas City	Dallas	San Fran- cisco
RESOURCES													
Loans (including overdrafts)	24,738,011	1,808,162	8,595,139	1,814,241	2,299,809	881,573	768,264	3,642,179	899,433	514,557	741,322	649,457	2,123,875
United States Government securities	4,095,270	237,405	1,367,087	195,564	514,973	126,703	133,542	486,689	106,049	130,712	173,047	129,200	494,299
Other securities	6,038,969	537,892	2,130,493	726,765	715,001	197,441	150,731	837,637	283,096	227,075	245,969	89,432	497,437
Total loans and investments	35,472,250	2,583,459	12,092,719	2,736,570	3,529,783	1,205,717	1,052,537	4,966,505	1,288,578	872,344	1,160,338	868,089	3,115,611
Customers' liability on account of acceptances	912,852	76,690	624,289	25,459	18,672	5,508	10,465	98,954	2,941	141	20	4,342	45,362
Banking house, furniture and fixtures	1,230,754	71,006	333,055	106,945	150,281	62,076	57,523	178,676	40,496	26,815	42,242	47,236	113,203
Other real estate owned	1,197,869	8,163	26,411	24,373	30,243	15,327	15,755	24,070	13,054	5,589	7,500	9,735	17,649
Cash in vault	470,367	34,372	99,643	37,515	54,699	24,161	24,903	60,146	20,410	16,648	25,341	22,091	41,438
Reserve with Federal reserve banks	2,414,991	146,499	1,022,510	142,720	198,747	65,079	60,519	335,532	74,418	49,433	87,649	62,504	169,291
Items with Federal reserve banks in process of collection	698,871	55,797	277,985	43,523	70,770	31,498	18,904	80,253	30,760	6,734	30,519	22,523	29,605
Due from banks in United States	2,462,827	117,148	254,417	161,814	223,062	110,915	132,270	409,499	124,674	141,755	285,269	190,488	311,516
Due from banks in foreign countries (including own branches)	202,447	28,039	135,376	4,164	2,592	5,443	1,239	10,211	1,421	990	721	380	11,871
Exchanges for clearing house and other checks on local banks	1,146,915	23,313	878,268	33,232	24,907	10,382	9,640	78,357	11,083	7,882	13,936	7,832	48,083
Outside checks and other cash items	51,706	2,201	7,779	1,584	3,495	1,863	2,296	12,666	1,686	2,738	3,479	2,291	9,628
Redemption fund and due from United States Treasurer	32,604	2,210	4,468	2,709	3,826	2,458	2,377	4,597	1,592	1,326	1,578	2,248	3,155
Acceptances of other banks and bills of exchange or drafts sold with indorsement	592,732	27,738	475,612	6,334	8,650	862	1,476	58,100	786	31	27	121	12,995
Securities borrowed	23,866	248	480	323	7,674	903	1,996	2,613	7,218	71	1,034	443	863
Other assets	242,062	13,387	103,055	22,868	25,003	7,101	3,951	25,341	5,514	9,161	2,769	1,907	21,405
Total	46,153,113	3,190,879	16,336,667	3,350,193	4,352,404	1,549,893	1,395,851	6,354,520	1,624,631	1,141,658	1,662,422	1,242,320	3,951,675
LIABILITIES													
Capital stock paid in	2,728,664	196,277	940,311	184,065	232,897	107,586	103,891	370,132	110,405	64,125	93,682	93,528	231,765
Surplus	2,903,258	181,405	1,267,192	374,816	203,353	82,382	71,502	295,887	63,279	35,889	44,704	47,911	144,938
Undivided profits—net	1,009,435	77,445	448,070	87,096	83,223	31,654	22,537	97,705	27,474	17,057	26,193	29,045	61,936
Reserves for dividends, contingencies, etc.	185,602	14,654	68,646	14,568	18,730	6,497	2,962	35,148	5,547	3,138	3,201	3,332	9,179
Reserves for interest, taxes, and other expenses accrued and unpaid	182,397	15,320	58,382	11,432	20,282	7,090	4,798	32,720	4,548	5,791	4,310	3,368	14,356
Due to Federal reserve banks	47,147	6,643	13,457	6,453	4,779	4,071	1,920	3,369	104	69	1,372	4,910	
Due to other banks in United States	3,817,132	166,878	1,212,270	248,466	392,612	120,734	120,685	568,887	151,720	105,421	254,410	140,022	335,027
Due to banks in foreign countries (including own branches)	660,612	23,725	566,926	5,515	5,049	1,253	4,367	26,817	409	1,089	299	1,411	23,752
Certified and officers' checks outstanding	771,941	13,787	592,822	10,446	17,758	8,563	6,066	49,685	10,165	9,034	13,087	12,219	28,309
Cash letters of credit and travelers' checks outstanding	26,638	569	17,756	83	3,949	92	68	2,319	63	23	84	12	1,620
Demand deposits	16,838,351	1,264,250	6,244,020	1,090,545	1,387,584	505,815	489,204	2,290,504	601,309	408,469	775,732	581,682	1,199,237
Time deposits	13,944,868	1,026,784	3,433,075	1,161,258	1,724,543	567,161	434,962	2,232,621	534,976	455,760	398,047	235,765	1,739,916
United States deposits	257,185	22,773	70,328	18,120	25,525	22,655	31,060	18,989	4,610	2,239	4,885	20,468	14,924
Agreements to repurchase U. S. Government or other securities sold	38,144	2,045	22,564	95	1,210	247	222	1,929	8,010	203	374	1,076	169
Bills payable and rediscounts: With Federal reserve banks	172,578	10,241	24,447	14,686	15,920	18,785	24,986	15,412	17,018	4,072	8,769	12,053	6,189
All other	143,402	6,501	44,998	12,170	6,922	6,818	8,850	34,350	11,741	713	576	5,826	3,937
Acceptances of other banks and bills of exchange or drafts sold with indorsement	592,732	27,738	475,612	6,334	8,650	862	1,476	58,100	786	31	27	121	12,995
Acceptances executed for customers	929,337	77,456	634,462	24,108	18,704	5,494	12,843	99,774	2,919	95	20	6,747	46,715
Acceptances executed by other banks for account of reporting banks	18,127	930	13,538	2,122	164	119	321	193	35	49			656
National bank notes outstanding	648,999	44,597	88,860	54,982	76,031	48,838	47,182	91,609	31,628	26,384	31,388	44,789	62,711
Securities borrowed	23,866	248	480	323	7,674	903	1,996	2,613	7,218	71	1,034	443	863
Other liabilities	212,698	10,613	98,451	22,501	6,845	2,274	3,353	25,757	30,667	2,005	1,531	1,130	7,571
Total	46,153,113	3,190,879	16,336,667	3,350,193	4,352,404	1,549,893	1,395,851	6,354,520	1,624,631	1,141,658	1,662,422	1,242,320	3,951,675
Number of banks	8,246	398	922	755	767	485	407	1,118	549	657	880	716	592

ALL MEMBER BANKS—LOANS, INVESTMENTS, DEPOSITS, AND BORROWINGS ON SEPTEMBER 24, 1930, BY DISTRICTS

[Amounts in thousands of dollars]

		Federal Reserve District											
	Total	Boston	New York	Phila- delphia	Cleve- land	Rich- mond	Atlanta	Chicago	St. Louis	Minne- apolis	Kansas City	Dallas	San Francisco
Loans—Total	24,738,011	1,808,162	8,595,139	1,814,241	2,299,809	881,573	768,264	3,642,179	899,433	514,557	741,322	649,457	2,123,875
Acceptances payable in United States	205,432	22,981	148,626	258	1,265	25	874	7,560	306	487	1,215	1,772	20,063
Bills, acceptances, etc., payable in foreign countries	61,934	1,952	28,424	3,427	1,050	175	2,026	13,741	565	364	34	790	9,386
Commercial paper bought in open market	523,129	89,264	58,695	63,271	29,725	22,355	9,962	94,254	47,571	23,263	32,666	9,937	42,166
Loans to banks—On securities	174,857	11,172	54,234	13,933	17,270	4,959	4,857	48,888	10,394	790	3,628	1,488	3,244
All other	290,936	15,400	118,451	12,778	11,208	18,582	28,450	19,537	28,128	6,459	18,308	9,421	4,214
Loans on securities, exclusive of loans to banks—Total	10,335,938	745,879	4,622,292	728,292	977,160	258,481	188,115	1,529,616	282,378	127,349	160,904	124,176	591,296
To brokers and dealers in New York	2,471,781	111,952	1,795,012	48,648	86,407	11,035	18,703	251,806	16,728	7,454	26,224	10,283	87,529
To brokers and dealers elsewhere	773,775	87,739	104,327	78,412	65,252	14,143	14,951	288,250	28,168	6,928	8,256	5,922	71,427
To others	7,090,382	546,188	2,722,953	601,232	825,501	233,303	154,461	989,560	237,482	112,967	126,424	107,971	432,340
Real estate loans—On farm land	387,366	8,634	13,799	13,849	31,102	18,108	24,825	79,479	25,699	25,270	21,031	17,656	107,914
On other real estate	2,776,344	272,517	542,887	226,702	467,062	50,903	52,594	472,295	101,727	20,479	22,304	22,584	524,290
All other loans (including overdrafts)	9,982,075	640,363	3,007,731	751,731	763,967	507,985	456,561	1,376,809	402,665	310,096	481,232	461,633	821,302
Loans eligible for rediscount with Federal reserve banks	3,812,169	233,478	1,090,265	238,888	232,509	186,485	183,440	529,919	198,197	158,223	241,214	205,849	293,702
United States Government securities—Total	4,095,270	237,405	1,367,087	195,564	514,973	126,703	133,542	486,689	106,049	130,712	173,047	129,200	494,299
Bonds	3,342,974	207,475	1,104,698	172,481	475,769	100,561	100,629	318,969	86,001	112,522	133,630	95,236	435,003
Treasury notes	418,495	15,085	173,548	14,889	26,194	6,858	8,875	67,081	11,315	14,707	30,145	13,569	36,229
Certificates of indebtedness	284,653	14,845	67,454	8,115	12,978	19,283	24,012	80,589	5,246	3,432	6,933	19,608	22,158
All other	48,848		21,387	79	32	1	26	20,050	3,487	51	2,339	487	909
Other securities—Total	6,638,969	537,892	2,130,493	726,765	715,001	197,441	150,731	837,637	283,096	227,075	245,969	89,432	497,437
Domestic securities—Total	5,938,307	471,905	1,900,158	645,796	634,210	178,931	139,282	755,639	257,150	195,464	225,787	83,734	450,251
State, county, and municipal bonds	1,379,471	37,872	391,559	66,700	97,053	29,810	43,680	195,989	69,069	50,857	100,959	28,094	267,820
Railroad bonds	938,869	74,337	402,126	143,130	113,405	20,543	12,461	62,813	26,789	27,821	20,748	3,537	31,159
Other public-service corporation bonds	1,074,627	153,456	313,279	169,397	100,903	28,822	13,135	143,911	40,171	36,766	19,076	5,184	50,527
All other bonds	1,330,420	100,520	372,194	145,108	198,556	52,998	39,989	173,321	58,862	56,579	44,126	23,032	65,135
Stock of Federal reserve banks	170,260	11,799	66,339	16,775	15,813	5,842	5,322	20,116	5,232	3,040	4,298	4,349	11,335
Stock of other corporations	572,941	61,808	265,490	58,631	60,594	19,223	17,733	18,508	41,012	1,663	13,170	6,633	8,476
Collateral trust and other corporation notes	217,924	15,168	64,370	36,494	37,512	18,610	1,740	25,679	7,017	4,488	2,823	1,839	2,184
Municipal warrants	181,958	12,936	10,843	3,158	5,408	771	2,388	91,032	5,437	11,849	16,921	9,318	11,897
All other	71,837	4,009	13,958	6,403	4,666	2,312	2,834	24,270	3,561	2,401	3,666	1,748	1,709
Foreign securities—Total	700,662	65,987	230,335	80,969	80,791	18,510	11,449	81,998	25,946	31,611	20,182	5,698	47,186
Government bonds	344,439	29,056	109,575	38,062	37,516	8,325	6,134	42,313	13,940	14,415	11,388	3,267	30,448
Other foreign securities	356,223	36,931	120,760	42,907	43,275	10,185	5,315	39,685	12,006	17,196	8,794	2,431	16,738
Demand deposits—Total	16,838,351	1,264,250	6,244,020	1,090,545	1,387,584	505,815	489,204	2,290,504	601,309	408,469	775,732	581,682	1,199,237
Individual deposits subject to check	15,107,131	1,173,352	5,754,350	992,776	1,171,447	457,044	413,319	2,066,547	529,254	330,503	636,421	503,990	1,078,128
Certificates of deposit	196,673	13,907	51,372	7,636	14,458	5,255	5,469	29,837	10,687	12,447	24,327	11,383	9,895
State, county, and municipal deposits	1,276,471	61,766	274,149	78,532	184,317	39,217	66,701	182,026	58,425	63,391	106,944	62,075	98,928
All other	288,076	15,225	164,149	11,601	17,362	4,299	3,715	12,094	2,943	2,128	8,040	4,234	12,286
Net demand deposits	18,657,238	1,321,040	7,231,340	1,182,753	1,593,096	530,281	508,334	2,520,233	644,669	425,680	809,735	599,023	1,291,084
Time deposits—Total	13,944,868	1,026,784	3,433,075	1,161,258	1,724,543	567,161	434,962	2,232,621	534,976	455,760	398,047	235,765	1,739,916
States, counties, and municipalities	572,004	7,632	64,693	18,581	80,087	15,071	18,951	146,179	18,348	6,167	25,191	18,031	153,073
Banks in United States	101,313	2,120	43,855	2,685	2,376	3,089	1,945	20,358	3,059	7,448	113	706	13,559
Banks in foreign countries	233,873	18,331	169,450					32,720				13	13,350
Other time deposits													
Evidenced by savings pass books	9,631,588	764,678	2,315,507	879,657	1,311,002	419,813	277,392	1,404,216	281,725	261,535	185,959	166,398	1,363,706
Certificates of deposit	1,959,775	159,266	203,054	168,701	215,373	96,573	92,727	407,596	202,042	151,196	116,743	34,170	112,334
Open accounts, Christmas savings accounts, etc.	1,302,785	68,860	617,083	88,277	107,998	28,088	26,469	204,364	22,811	9,335	49,540	11,017	68,943
Postal savings	143,530	5,897	19,433	3,357	7,707	4,527	17,478	17,179	6,991	20,079	20,501	5,430	14,951
Bills payable and rediscounts—Total	315,980	16,742	69,445	26,556	22,542	25,603	33,836	49,762	28,759	4,785	9,345	17,879	10,126
With Federal reserve banks—Bills payable	76,865	4,089	16,003	8,387	11,694	6,063	4,511	9,628	9,152	431	2,314	2,969	1,621
Rediscounts	95,713	6,152	8,444	6,299	4,226	12,722	20,475	5,784	7,866	3,638	6,455	9,084	4,568
All other—Bills payable	137,890	6,337	44,586	11,795	6,396	6,052	7,997	33,524	11,207	668	410	5,437	3,481
Rediscounts	5,512	164	412	375	526	766	853	826	534	45	166	389	456

NOVEMBER, 1930

FEDERAL RESERVE BULLETIN

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FEDERAL RESERVE DISTRICTS

