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No. 10

REVIEW OF THE MONTH.

The contrast between the general conditions of credit now prevailing and the conditions in

Crop - financing problem of 1922.

the autumn of 1921 and of 1920 is made clear by the ease with which the banks are meeting the financial requirements of the current crop movement. From autumn to autumn the volume and distribution of the credit burden carried by the banks differ, and these differences largely determine the method of providing the additional funds necessary for the season. The position of the credit markets and the condition of member banks influence each year the extent to which the assistance of the Federal reserve banks is needed to meet the seasonal demands of agriculture. This season the method employed is interesting as indicating the crop-moving problem of 1922 and as presenting evidence of banking developments during recent months.

The important fact about the financing of the crop movement of this year is that although the yield of the principal crops is in excess of a year ago, yet the credit necessary to their marketing is being furnished chiefly by the local banks of the producing communities practically without assistance from outside. This is the chief point of difference between present conditions and those which existed either in 1921 or in 1920. In both of these years the local banks not only rediscounted with the Federal reserve banks, but the reserve banks in the districts that are largely agricultural rediscounted in turn with other Federal reserve banks.

In 1920, when the prices of agricultural products were near their peak, the amount of accommodation extended by the Federal reserve banks of the North and East to the Federal reserve banks in agricultural districts of the West and South reached record heights.

In the autumn of that year the lending power of the reserve system was mobilized to meet the demand for credit which mounted steadily until the close of the crop-moving period. By the autumn of 1921 the business situation and the level of prices had undergone great change, and, in general, credit conditions were easier. The local banks of the agricultural districts, however, were still in need of assistance. The difficulty then was that the prices of farm products had fallen so low that farmers could not realize enough from the sale of crops to meet their obligations at the banks. This was the period of "frozen loans." The banks, being unable to obtain full liquidation of old loans at home, were obliged to rely upon rediscounting as a means of providing their borrowers with new funds. The Federal reserve banks in the crop-producing districts again found it necessary in 1921 to rediscount with other Federal reserve banks. During the present crop-moving period, however, though the reserve banks have stood ready to extend accommodation at lower rates than in the preceding year, there has been little call for their aid. The extent of the change in credit conditions is sufficiently indicated by the fact that the larger crops of the present season are now in process of being financed with a hardly perceptible influence upon the lending operations of the Federal reserve banks.

The factors responsible for this ease of financing have their origin partly in the crop situation itself and partly in the current condition of the banks. While the crop yield

Crop yields and prices.

is in excess of a year ago, and on the whole well up to the five-year average, agricultural prices in general are substantially less than at the same time last year. The lower prices, of course, tend to reduce the volume of necessary bank credit and to offset at least in part the fact of the larger crops. The September crop

production forecast and the prices for that month indicate roughly the extent and character of the current financing required. The following figures prepared by the Crop Reporting Board of the Bureau of Agricultural Economics give the estimated total production and prices this year as compared with the previous year:

Crop.	Total production (000,000 omitted).			Price per unit on Sept. 1 (in cents).	
	1922, September forecast. ¹	1921, December estimate.	1916-1920, average.	1922	1921
Winter wheat..... bushels.	2 542	587	506		
Spring wheat..... do.	277	208	233		
All wheat..... do.	818	795	739	88.1	101.2
Corn..... do.	2,875	3,080	2,831	62.7	56.2
Oats..... do.	1,255	1,061	1,413	32.2	30.1
Barley..... do.	194	151	197	45.7	47.0
Rye..... do.	279.6	57.9	67.8	63.3	59.9
Buckwheat..... do.	13.5	14.1	14.4	86.3	114.4
White potatoes..... do.	438	347	373	88.0	163.6
Sweet potatoes..... do.	108	98.7	88.8	107.6	135.6
Tobacco..... pounds.	1,353	1,075	1,378		
Flaxseed..... bushels.	11.7	8.1	11.0	190.1	164.8
Rice..... do.	38.8	36.5	41.7		
Hay, tame..... tons.	2 02.9	81.6	85.1	\$11.13	\$12.44
Hay, wild..... do.	2 15.8	15.2	17.1	\$7.76	\$7.50
Cotton..... do.	7 10.6	8.0	11.9	21.1	12.6
Sugar beets..... tons.	5.3	7.8	6.6		
Apples, total..... bushels.	207	98.1	179	109.8	163.6
Apples, com'l..... barrels.	32.6	21.2	26.8		
Peaches, total..... bushels.	55.6	32.7	43.6	\$155.7	\$262.3
Kalfrs..... do.	96	115	91.3	\$7.7	\$53.0
Peanuts..... pounds.	691	816	1,043	\$4.4	\$3.9
Beans..... bushels.	12.6	9.1	13.3	\$396.8	\$270.2

¹ Interpreted from conditions reports.

² Preliminary estimate.

³ Total production in millions of bales, price in cents per pound.

⁴ Census.

⁵ Seven States.

⁶ Price Aug. 15.

⁷ Condition relates to 25th of preceding month.

The prices of corn and of cotton, it will be noted, are considerably higher than a year ago. The marketing of the corn crop, however, does not call for large extension of credit and the financing of the cotton crop was made easier by the relatively small carry-over from the previous season. The cotton crop of 1921 was short, so that accumulated supplies were largely drawn down, and thus the local banks in the cotton region which had previously advanced funds in order to enable cotton to be carried over were in a position to collect the amounts due them. Carry-over of grain on the farms was also less than last year. The rise in the prices of farm products which occurred early in the year encouraged marketing, and the funds secured were used by producers to settle their indebtedness to their local banks. This

liquidation, which has been general throughout the country except in certain restricted areas, has left the local banks in especially good position to finance the current needs of their borrowers. The following figures, showing stocks of grain, etc., on the farms in the spring of 1922, indicate that these stocks were at that time less than on the corresponding dates of last year. Local banks were thus relieved of the burden of the carry-over in time to assume the load of the new financing.

UNITED STATES CROP SUMMARY FOR MARCH.

	1921	1922	Average, 1914-1918.
Wheat:			
On farms Mar. 1—			
Bushels.....	217,037,000	131,136,000	151,508,000
Per cent of crop.....	26.1	16.5	18.7
Shipped out 1—			
Bushels.....	491,035,000	489,413,000	454,580,000
Per cent of crop.....	58.9	61.6	56.8
In country mills and elevators—			
Bushels.....	87,075,000	72,564,000	97,984,000
Per cent of crop.....	10.5	9.1	12.3
Price to producers Mar. 1 (cents per bushel).....	147.2	116.9	137.3
Corn:			
On farms Mar. 1—			
Bushels.....	1,564,832,000	1,313,120,000	985,880,000
Per cent of crop.....	48.8	42.6	35.6
Shipped out 1—			
Bushels.....	705,481,000	590,505,000	521,957,000
Per cent of crop.....	22.0	19.2	18.8
Amount of crop merchantable—			
Bushels.....	2,789,720,000	2,695,194,000	2,068,190,000
Per cent of crop.....	86.9	87.5	75.9
Price to producers Mar. 1 (cents per bushel).....	64.5	54.8	93.5
Oats:			
On farms Mar. 1—			
Bushels.....	683,759,000	404,461,000	478,083,000
Per cent of crop.....	45.7	38.1	35.7
Shipped out 1—			
Bushels.....	431,687,000	252,980,000	393,587,000
Per cent of crop.....	28.9	23.8	29.3
Price to producers Mar. 1 (cents per bushel).....	41.9	36.6	55.4
Barley:			
On farms Mar. 1—			
Bushels.....	65,220,000	40,950,000	44,596,000
Per cent of crop.....	34.5	27.1	22.3
Shipped out 1—			
Bushels.....	68,663,000	54,525,000	87,275,000
Per cent of crop.....	36.3	36.1	44.0
Price to producers Mar. 1 (cents per bushel).....	56.8	49.6	87.3

¹ Amount shipped out and to be shipped out of county where grown.

A further factor which strengthened the lending position of the banks in the agricultural sections before the present marketing season opened was that the demands upon them during the growing season were lighter than in recent years. The farmer made his crops at less expense this year, and

borrowed correspondingly less at the bank before the marketing process set in.

The earlier marketing which has taken place at many points throughout the South and West has tended to diminish the dependence of the producing communities upon credit from outside sources. The financing problem involved in agricultural marketing is naturally influenced by the rapidity with which the crops move to market. "Holding" of crops by producers, though it may throw an added burden upon those institutions in the growing regions which financed the making of the crops, diminishes the total volume of credit required for marketing purposes. Rapid movement concentrated within a relatively short period of time, on the other hand, throws a greater strain upon the banking system. To date this season the crops have moved to market somewhat more freely than in 1920, though less rapidly than in 1921. This is reflected in the fact that car loadings of grain and grain products reached a peak at the middle of July, as was the case last year also, instead of at the middle of September, as in 1920. The lack of facilities due to the shopmen's strike on the railroads may be responsible for this relatively slower movement in recent months, but as yet little complaint is heard concerning the retarding influence of transportation difficulties. Only in connection with the export trade has there been any apparent disposition to hold back, and there primarily because of difficulties in arranging for payment abroad due to exchange uncertainties.

The current method of crop financing, however, has been more largely influenced by the prevailing credit conditions than by the immediate facts about crops and prices. The peculiarity of the present year with reference to available bank credit is that the year has been on the whole a period of credit liquidation. The process of debt payment began in certain sections during 1921 and was completed in that year so far as inter-Federal reserve bank borrowing is concerned. During 1922 the process was continued, gradually spreading to all sections of the country and resulting in a fairly steady diminution of the indebtedness of the member banks to Federal reserve banks.

No Federal reserve bank has rediscounted paper with another Federal reserve bank since the middle of December, 1921,

Position of Federal reserve banks. when the banks in those districts, which are largely agricultural in character, repaid their borrowings. During the crop-moving season of 1921 a large volume of rediscounting operations between Federal reserve banks was necessary. The following table shows the extent and distribution of inter-reserve bank accommodation during five months of 1921.

VOLUME OF INTERDISTRICT ACCOMMODATIONS FROM JUNE TO OCTOBER, 1921.

[In thousands of dollars.]

Month.	Total.	Bills rediscounted by Federal reserve bank of—				Bills discounted for other Federal reserve banks by Federal reserve bank of—		
		Richmond.	Atlanta.	Minneapolis.	Dallas.	Boston.	New York.	Cleveland.
June.....	111,000	75,000	.....	18,000	18,000	18,000	93,000	.....
July.....	123,507	70,000	4,007	15,500	34,000	27,000	85,500	11,007
August.....	161,100	90,000	9,600	24,500	37,000	39,100	114,500	7,500
September....	158,588	100,000	17,588	11,500	29,500	33,500	111,500	13,588
October.....	108,500	70,000	6,000	12,000	20,500	25,500	82,000	1,000
Total..	662,695	405,000	37,195	81,500	139,000	143,100	486,500	33,095

The rapidity with which these interbank borrowings were repaid and the absence of necessity for such rediscounting operations this season indicates the manner and extent of change which has taken place in credit conditions within the present year. Apparently such aid as the member banks of the crop-growing regions will require this autumn can and will be supplied them by their local Federal reserve banks without the necessity of borrowing from other reserve banks.

Throughout the year liquidation has proceeded also as between member banks and Federal reserve banks and between customers and member banks. The significance of this

Credit liquidation and member banks. for the crop-moving problem is that these debt reductions created a "slack" which made crop financing easy. From January 4, 1922, to September 20, 1922, the bills held by Federal reserve banks decreased from a total of \$1,239,000,000 to \$644,000,000, a decline of \$595,000,000. The continuous char-

acter of this liquidation is also indicated by the decline from month to month of the "other loans and discounts" of reporting member banks. The following table shows the volume and rate of decrease in this item for the 800 reporting banks on selected dates:

Jan. 25, 1922.....	\$7, 393, 000, 000
Feb. 21.....	7, 323, 000, 000
Mar. 29.....	7, 340, 000, 000
Apr. 26.....	7, 242, 000, 000
May 24.....	7, 162, 000, 000
June 28.....	7, 032, 000, 000
July 26.....	7, 020, 000, 000
Aug. 30.....	7, 020, 000, 000
Sept. 20.....	7, 117, 000, 000

That liquidation during the first half of the year was not confined to any single section of the country nor limited to any one class of banks is made evident by a comparison of the condition statements of member banks on December 31, 1921, with those on June 30, 1922.

LOANS AND DISCOUNTS OF ALL MEMBER BANKS OF THE
FEDERAL RESERVE SYSTEM, BY CLASSES OF BANKS.

Class of banks.	Dec. 31, 1921.	June 30, 1922.	Reduction of loans during 6-month period.
All member banks.....	\$17, 468, 936, 000	\$17, 282, 290, 000	\$186, 646, 000
Central reserve city banks.....	4, 991, 010, 000	4, 884, 706, 000	106, 304, 000
Reserve city banks.....	5, 629, 504, 000	5, 565, 675, 000	63, 829, 000
Country banks.....	6, 848, 422, 000	6, 831, 909, 000	16, 513, 000

The decline in volume of borrowing since the first of the year, as indicated by the foregoing table, has been accompanied by other movements customary to a period of liquidation. Federal reserve notes have declined almost without interruption; reserve percentages of Federal reserve banks have increased; and discount rates of reserve banks and the rates charged customers by member banks have decreased. There is every evidence that the liquidation preceding the crop-moving period was sufficiently general and continuous to make the financing of the present crop a simple problem.

Since the middle of August, it is true, some slight indications of the seasonal demands of agriculture have been observable in Federal reserve banking and currency movements. The small increases in the volume of bills discounted

by Federal reserve banks probably were due in part to crop-moving requirements. The same cause may have been responsible for the increase in Federal reserve notes during August and for the recent increase in "other loans and discounts" of reporting member banks. The important fact is, however, that this year it requires close scrutiny to locate and measure the influence of crop financing in those very items which during recent crop-moving seasons have undergone major fluctuations. This year the effect of the forces tending to increase the demand for credit has been obscured by the general movement of liquidation. In fact, the seasonal demands of agriculture, coupled with the credit requirements incident to the marked recovery in industry, have not yet caused an increase in bank loans. Except for checking the decrease of loans, these demands have hardly registered themselves at all. Their real effect thus far has probably been to absorb credit set free by liquidation at other points in the system.

While the present season of financing is in marked contrast to those of 1921 and 1920, the

movements are somewhat similar to those of other autumns when liquidation has been in

process and easy money conditions have prevailed. Even prior to the inauguration of the Federal Reserve System the strain of crop financing was slight at those times when surplus reserves of the New York clearing house banks were unusually large and money conditions in that center easy. In 1908, for example, surplus funds arising from liquidation had accumulated in financial centers, and the crop of that year was financed without causing a seasonal stringency. During the first year or two after the system had been established, the funds available in the autumn were ample to provide the necessary financing without extensive assistance from the Federal reserve banks and without causing a marked strain upon the member banks in the money centers. The characteristic feature of these periods has been that the surplus funds resulting from the general liquidation flowed to the central money market, and in the autumn a return flow to the interior set in. If the demand for funds in the financial centers was

relatively limited, particularly the demand for call money, the funds were easily released.

This ebb and flow of funds has been repeated in the movements of 1922. The balances kept by interior banks with the member banks in the chief financial centers began to increase in the spring of 1921 and continued to increase steadily until the end of May, 1922. Since June, 1922, these balances have declined owing to the withdrawal of funds by interior bankers to be used in the local financing of crops. The use of this surplus, as in earlier and similar periods, has been the chief means of providing the additional funds needed to accomplish crop financing. During the third week in September the call-loan money market felt the effect of these withdrawals and the renewal rate for call loans rose to $5\frac{1}{2}$ per cent, the highest point reached since June of this year. This withdrawal of funds from the New York market by interior banks is also registered in the changes in the ownership of gold in the gold settlement fund of the Federal Reserve System. The following table shows the changes which took place in the ownership of this gold between June 28 and September 20, 1922.

CHANGES IN OWNERSHIP OF GOLD IN GOLD SETTLEMENT FUND.

[In millions of dollars.]

District.	June 28.	Sept. 20.	Increase (+); decrease (-).
Boston.....	31	50	+19
New York.....	156	66	-90
Philadelphia.....	43	50	+7
Cleveland.....	45	57	+12
Richmond.....	40	33	-7
Atlanta.....	22	26	+4
Chicago.....	80	124	+43
St. Louis.....	16	14	-2
Minneapolis.....	23	26	+3
Kansas City.....	28	27	-1
Dallas.....	8	25	+17
San Francisco.....	31	38	+7
Total.....	532	536	+4

The increases and decreases resulting from these interbank transactions reflect in general the flow of funds between the districts. Crop financing is, of course, only one of the influences affecting the operations of the gold settlement fund, yet the decrease in the gold held for the New York bank, which was fairly continuous throughout the period, and the increases for the Chicago and Dallas banks

are significant. These settlements are made so quietly and efficiently and with so little disturbance to the credit markets that they pass almost unnoticed by the business community. Yet it is the effectiveness of this arrangement for shifting funds and for making settlements that partly explains the ease of crop financing.

The relation between the decline in the volume of Federal reserve notes in circulation during 1921 and the first seven

months of 1922 and the absence of any marked reduction in the volume of deposits

of member banks constitutes a final factor of great importance in explaining the ability of member banks to finance the autumn demand for funds. Credit liquidation and the decline of the general price level during 1921 were accompanied by a reduction in the volume of Federal reserve notes in circulation, though the retirement of the notes lagged behind the fall of prices. The liquidation of Federal reserve bank loans, which characterizes the period since the late autumn of 1920, was effected to about the same extent through the deposit of imported gold and through the retirement from circulation of Federal reserve notes, whose elastic quality was evidenced by the promptness with which their outstanding volume declined in a period of falling prices. The reduction in the volume of these notes was by no means paralleled by a reduction of checking accounts in member banks—the volume of “deposit currency.” In fact, the avenue by which notes came in from circulation was through their deposit in member banks, thereby tending to maintain the level of individual deposits. The first use made by the banks of this accumulating credit was to retire their obligations to the Federal reserve banks. Later the surplus funds in member banks arising from this depositing by their customers of Federal reserve notes were redeposited with banks in financial centers. This was the origin of part of the surplus funds referred to earlier as having been used in current crop financing. The significance of the relations between deposits and Federal reserve notes in circulation, so far as the present period of liquidation and

crop financing is concerned, is that the retirement of the notes left surplus funds in the hands of member banks which they used in financing the crop requirements.

The following table presents the usual indexes of production and marketing conditions. Agricultural receipts showed large seasonal increases during August. Lumber shipments, coal production, and cotton consumption were also larger than in July. Iron and steel output was considerably curtailed. Comparisons with August, 1921, show some reduction in agricultural marketing, as contrasted with a general increase in manufacturing activity.

[000 omitted.]

	August, 1921.		August, 1922.		July, 1922.	
	Total.	Relative.	Total.	Relative.	Total.	Relative.
Receipts of live stock at 15 western markets (head).....	4,918	100	5,024	102.2	4,523	92.0
Receipts of grain at 17 interior centers (bushels).....	163,345	100	129,427	79.2	93,933	57.5
Sight receipts of cotton (bales).....	617	100	540	87.5	393	63.7
Shipments of lumber reported by National Lumber Mfg. Association (millions of feet).....	857	100	1,230	143.5	1,052	122.7
Bituminous coal production (short tons).....	34,538	100	22,261	64.5	17,003	49.2
Anthracite coal production (tons).....	7,190	100	161	2.2	116	1.6
Crude petroleum production (barrels).....	40,894	100	46,295	113.2	46,593	113.9
Pig iron production (long tons).....	954	100	1,813	190.0	2,405	252.0
Steel ingot production (long tons).....	1,138	100	2,215	194.6	2,487	218.5
Cotton consumption (bales).....	468	100	527	112.6	459	98.1

Net gold imports for the month of August, \$18,136,000, showed a large decline from the July total of \$42,342,000, and

Gold and silver movements. closely approximated the average monthly total for the first six months of the present year. Of the total of \$19,092,000 of gold brought to this country, \$13,270,000, or nearly 70 per cent, came from England, and \$2,588,000, or about 13.5 per cent, from Scandinavian and French ports. Substantial amounts are also shown to have been imported during the month from the Far East. Gold exports during the month, totaling \$956,000, were directed mainly to Hongkong, Mexico, and Canada. Net gold imports for the eight months ending August of the present year totaled \$173,348,000, compared with \$483,995,000 for the corresponding period in

1921. Net imports of gold since August 1, 1914, aggregated \$1,715,437,000, as shown in the following exhibit:

[In thousands of dollars.]

	Imports.	Exports.	Excess of imports.
Aug. 1, 1914, to Dec. 31, 1918.....	1,776,616	705,210	1,071,406
Jan. 1 to Dec. 31, 1919.....	76,534	368,185	¹ 291,651
Jan. 1 to Dec. 31, 1920.....	417,068	322,091	94,977
Jan. 1 to Dec. 31, 1921.....	691,248	23,891	667,357
Jan. 1 to Aug. 31, 1922.....	185,092	11,744	173,348
Total.....	3,146,558	1,431,121	1,715,437

¹ Excess exports.

Silver imports for August, \$4,944,000, were considerably below the July total of \$6,957,000. Silver exports during August, \$3,861,000, were also considerably below the July exports of \$6,269,000. Over two-thirds of the total silver imports for the month came from Mexico, and the remainder largely from Canada and South American countries. Of the total foreign silver shipments for the month, over 90 per cent was destined to British India and the China coast, and relatively small amounts to Canada and Mexico. Net exports of silver since August 1, 1914, totaled \$438,759,000, as may be seen from the following exhibit:

[In thousands of dollars.]

	Imports.	Exports.	Excess of exports.
Aug. 1, 1914, to Dec. 31, 1918.....	203,592	483,353	279,761
Jan. 1 to Dec. 31, 1919.....	89,410	239,021	149,611
Jan. 1 to Dec. 31, 1920.....	88,060	113,616	25,556
Jan. 1 to Dec. 31, 1921.....	63,242	51,575	¹ 11,667
Jan. 1 to Aug. 31, 1922.....	46,793	42,291	4,502
Total.....	491,097	929,856	438,759

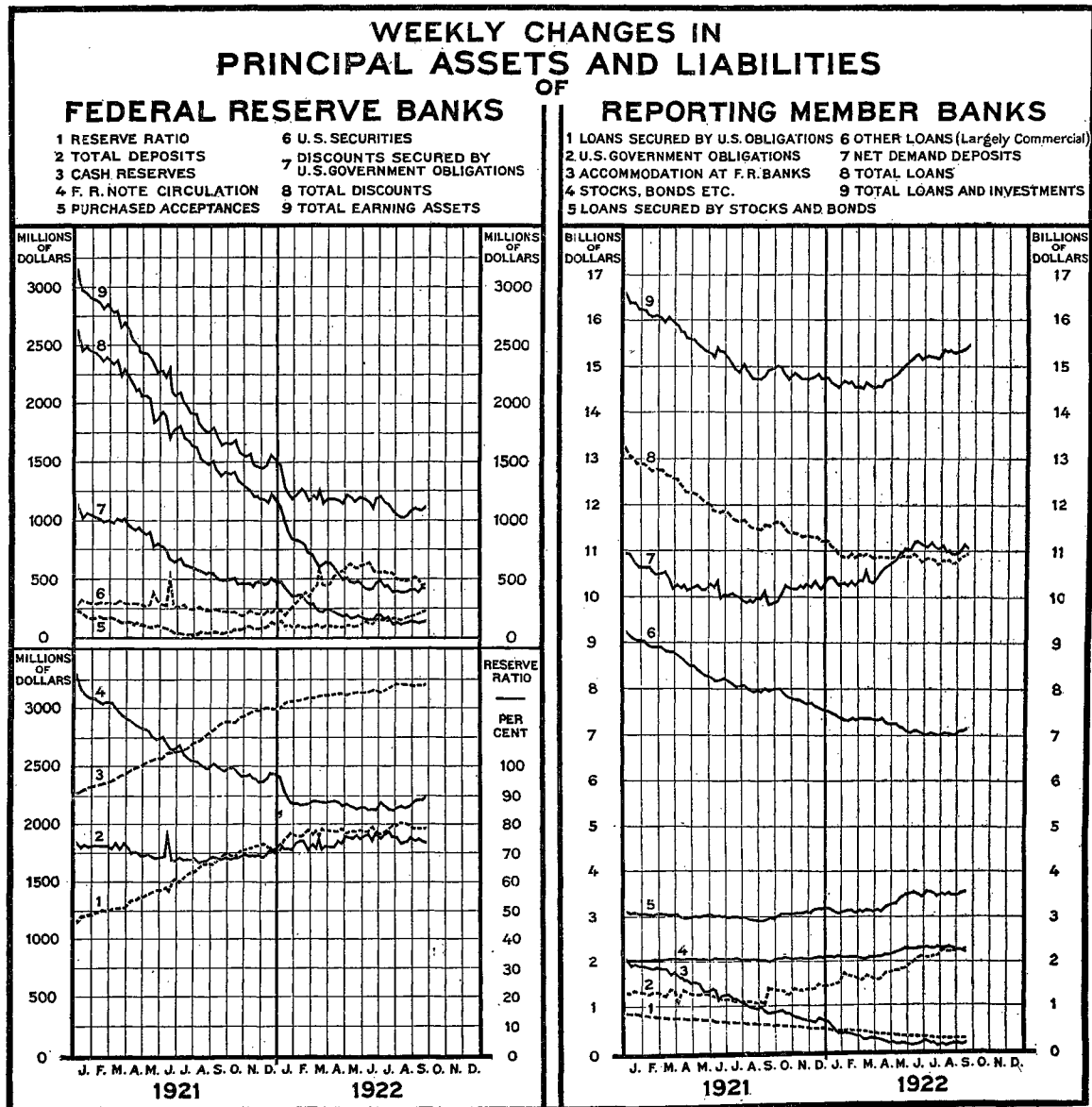
¹ Excess imports.

Continued liquidation of loans and discounts during the second half of August, followed by a substantial increase in the volume of loan operations during

The banking situation. the first three weeks in September, is indicated by the weekly statements of 790 member banks in leading cities. Loans and discounts on September 20 totaled \$10,939,000,000, or \$130,000,000 more than five weeks before. Of the total increase, \$42,000,000 represents an increase in loans against corporate securities and \$81,000,000 an increase in other, largely commercial, loans. The largest weekly loan increase, by about \$75,000,000,

shown on September 13, reflects in part the demand for funds in anticipation of income-tax payments due on September 15. Investments in Government securities, because of the larger purchases by the banks of United States bonds during the earlier weeks, show a greater increase during the latter part of August than during the subsequent weeks, while holdings

New York City. Total loans and investments of the reporting institutions declined by \$48,000,000 during the first two weeks, but increased by \$146,000,000 during the subsequent three weeks. Investments in Government securities constituted 14.7 per cent of total loans and investments on September 20, compared with 9.4 per cent about a year ago,



of corporate securities show a steady decline during the five weeks under review. Following the allotment on September 15 of \$227,000,000 of tax certificates, the reporting member banks show an increase of \$37,000,000 in their holdings of Treasury certificates, this increase being limited to banks outside of

while the corresponding share of "all other," largely commercial, loans and discounts shows a decline during the same period from 53.3 to 46.1 per cent.

Government and time deposits show small reductions, while the total of net demand deposits shows an increase of \$48,000,000, as

against the much larger increase in loans above shown. The ratio of these deposits to total loans on September 20 was 101.1 per cent, compared with 101.9 per cent five weeks before and 85.2 per cent about a year ago.

Borrowings of the reporting banks from the Federal reserve banks advanced from \$110,000,000 to \$164,000,000, largely during the last week under review. The proportion which these borrowings constitute of the total discounts held by the reserve banks was 38.6 per cent, compared with 28.8 per cent five weeks before.

The following exhibit presents the principal changes in the condition of the reporting member banks during the five weeks under review:

REPORTING MEMBER BANKS.

[In millions of dollars.]

Date.	Number of reporting banks.	Loans and discounts. ¹	Investments.	Rediscounts and bills payable with Federal reserve banks.	Ratio of accommodation (4÷2+3).	Net demand deposits.
	1	2	3	4	5	6
Aug. 23.....	790	10,766	4,550	117	0.8	10,940
Aug. 30.....	790	10,761	4,533	127	.8	10,942
Sept. 6.....	790	10,820	4,513	137	.9	10,993
Sept. 13.....	790	10,895	4,481	121	.8	11,145
Sept. 20.....	790	10,939	4,501	164	1.1	11,061

¹ Including rediscounts with Federal reserve banks.

In the Federal reserve field the principal developments during the five weeks ending September 27 included increases of \$30,300,000 in discounts and of \$71,600,000 in acceptances purchased in open market, as against a reduction of \$33,300,000 in Government securities. The increase in discounted bills is especially marked in the weekly statement following the September 15 tax date. Acceptance holdings show a steady increase for the period, while the reduction in United States securities is due largely to the redemption on September 15 of a considerable amount of tax certificates held among the investments of the reserve banks, and to a smaller extent to the redemption of Pittman certificates in connection with the gradual retirement of Federal reserve bank notes and their replacement by silver certificates.

Federal reserve note circulation followed an upward course, the September 27 total of \$2,243,400,000 being \$96,700,000 in excess of the August 23 total and approaching the maximum circulation figures for the current year.

While the larger part of the increase in note circulation occurred before Labor Day, it is notable that the customary return flow of notes to the banks during the following weeks failed

to materialize, but, on the contrary, note circulation continued to increase. Deposit liabilities of the reserve banks fluctuated between \$1,881,700,000 on August 30 and \$1,840,000,000 on September 27, the low figure reflecting the large reduction in Government deposits during the last week of the period under review.

Gold reserves, after but little change during the first four weeks, increased by \$15,000,000 during the last week and reached the high record total of \$3,076,900,000 at the end of the period. Other cash reserves, composed of silver and legal tender notes, show a decrease from \$130,900,000 to \$126,200,000. Since January 1 of the present year the Federal reserve banks have gained a total of \$201,900,000 of gold, compared with a gain of \$663,200,000 for the corresponding period in 1921. Chicago reports the largest increase in gold reserves for the present year, viz, by \$102,700,000; Atlanta, Richmond, and Dallas with increases of \$57,700,000, \$39,500,000, and \$26,900,000 following next in order. Smaller increases aggregating \$64,300,000 are shown for the Boston, Cleveland, Kansas City, and Minneapolis banks. The remaining four reserve banks show decreases in their gold reserves since January 1 aggregating \$89,200,000.

Owing largely to the increase in note liabilities the reserve ratio declined from 79.8 on August 23 to 78.3 per cent on September 6. The ratio continued unchanged in the following two weekly statements and rose to 78.4 per cent at the close of the period.

Principal weekly changes in the condition of the Federal reserve banks during the period under review are shown in the following exhibit:

FEDERAL RESERVE BANKS.

[In millions of dollars.]

Date.	Cash reserves.	Bills discounted, total.	Government securities.	Total deposits.	Federal reserve notes in actual circulation.	Reserve ratio.
Aug. 23.....	3,192.7	389.9	484.8	1,851.9	2,146.7	79.8
Aug. 30.....	3,195.9	404.4	498.0	1,881.7	2,153.2	79.2
Sept. 6.....	3,186.7	405.1	508.2	1,856.8	2,211.9	78.3
Sept. 13.....	3,197.4	387.2	496.9	1,872.1	2,213.6	78.3
Sept. 20.....	3,189.9	423.9	439.0	1,853.8	2,218.9	78.3
Sept. 27.....	3,203.1	420.2	451.4	1,840.1	2,243.4	78.

Mr. Walter Wyatt has been appointed general counsel of the Federal Reserve Board, effective October 1, succeeding Mr. W.S. Logan who resigned October 1 to engage in the general practice of law in New York City. Mr. Wyatt has been connected with the board's law division since May, 1917.

BUSINESS, INDUSTRY, AND FINANCE, SEPTEMBER, 1922.

The chief development of the current month has been the improvement in the labor situation. The amount of voluntary unemployment has been greatly reduced and wages have shown a distinct upward tendency. Mining output increased about 3 per cent during August and has shown a tremendous expansion during September, due to the reopening of most of the bituminous and anthracite coal mines. Manufacturing is also being maintained at relatively high levels, increased production being reported in most important industries. Crop prospects are somewhat less encouraging than a month ago, as there has been a rather general deterioration of the growing crops. Both wholesale and retail trade showed marked expansion during August. Financial conditions continue to be very sound, while domestic money rates show a slight upward tendency. The general level of prices has remained constant during the past month, the August index number of the Federal Reserve Board being the same as that for July.

Manufacturing was slightly curtailed in August, but has recovered during September. Iron furnaces and steel mills are increasing their rate of production to satisfy the continued large demand of railroads and automobile companies. The market for nonferrous metals continues reasonably strong and caused a further increase in mine output of copper and lead. Cotton mills and knit-goods factories have increased their output, and woolen machinery is slightly more active, while August silk consumption was the largest for any month since 1919. The continued building activity has resulted in an improved demand for lumber, cement, and other building materials. Petroleum consumption has increased, due to the shortage of other fuel, but stocks continue to accumulate.

The volume of employment has increased during September in consequence of the return to work of several hundred thousand coal miners, railroad shopmen, and textile workers. The period from August 15 to September 15, moreover, contained by far the largest number of wage increases reported in any month since the decline of business activity in 1920. The most important increases occurred at copper mines, steel mills, cotton mills, and in the building industry. Unskilled or semiskilled workers received most of these advances.

The average condition of farm crops declined somewhat during August. The cotton crop has suffered severe damage from boll weevils and from drought. Ginnings prior to September 1 were much larger than in either 1920 or 1921. The estimates of the corn crop have been much reduced, but the prospects for spring wheat have considerably improved. The grain crops are being marketed more slowly than last year except in the case of rye.

Wholesale trade improved substantially during August in all reporting lines. Every district reported increases in dry goods sales, which averaged almost 50 per cent higher than in July. Sales of furniture and shoes were also much larger. Comparisons with a year ago indicate improvement for all lines except groceries and shoes. Retail trade improved considerably during August, and the volume of business was larger in most sections than in August, 1921.

The banks are in a strong position and are meeting the seasonal demand for credit without strain. This seasonal demand has led to increases in both call and time money rates at New York. Federal reserve banks have somewhat increased their bill holdings. European exchange rates have generally declined during September, and there has also been a slight decline in Asiatic exchanges. The value of exports was practically the same in August as in July, but there was a moderate increase in the value of imports, bringing the monthly excess of exports down to the lowest point recorded since early in the war.

AGRICULTURE.

Threshing of small grain is making progress in the mountain regions of district No. 10 (Kansas City) and is practically completed in other sections. Yields of winter wheat equal and in some cases exceed the estimates of August 1. A number of States forecast that a smaller acreage of wheat is being sown this fall and attribute the decrease partly to the low price. Of all the crops, corn has everywhere suffered the most serious deterioration during the month. The September 1 estimate, showing a reduction of 142,000,000 bushels from that of August 1, places the yield somewhat under the final estimate for 1921, but above the average for the years 1916 to 1920. Forty per cent of the loss, which was due to the abnormally hot and dry weather, occurred in district No. 10 (Kansas City). In district No. 7 (Chicago) the weather which affected the crop adversely at the same time advanced the date of maturity and practically insured its safety from frosts. District No. 8 (St. Louis) affirms that although crop prospects have suffered somewhat since August 1, production as a whole will be well in excess of last season's. The protracted drought made difficult the preparation of the soil for planting, and there, as in district No. 10 (Kansas City), acreages of wheat and oats will probably be reduced somewhat. Reports of the early crops continue very favorable and marketing conditions and prices were generally satisfactory. Harvesting and threshing of wheat in district No. 12 (San Francisco) progressed rapidly during August, but movement of the crop to terminal concentration points has been unusually slow. Exports of wheat have been very small and prices, especially for the export trade, have been too low to be attractive to the farmer.

In district No. 9 (Minneapolis) a much larger crop of spring wheat, rye, oats, barley, flax, and white potatoes has been harvested this year than last. The bulk of the barley crop in California has been harvested and threshed and a much larger yield than that of last year is forecasted. The white potato crop in district No. 10 (Kansas City) is excellent both in yield and quality. This crop deteriorated materially in district No. 8 (St. Louis), as did late truck and garden crops on account of the drought. Both the rice and sugar crops declined two points during the month, but remain in good condition, with anticipated yields above those of last year. Farm prices are generally lower than they were a year ago.

COTTON.

The condition of the cotton crop has seriously declined during August, and the estimate on

August 25 was 57 per cent, compared with 70.8 per cent on July 25. Forecasted production for 1922 is 10,575,000 bales, compared with the final ginning in 1921 of 7,953,641 bales. Prior to September 1, 1922, 817,171 bales had been ginned, compared with 485,787 bales and 351,589 bales on the corresponding dates in 1921 and 1920. The price of middling upland cotton at New Orleans on September 20 was 20.75 cents, as compared with 21 cents on August 18.

Cotton stored at mills and public warehouses on August 31 amounted to 2,575,000 bales, compared with 4,470,000 bales on August 31, 1921. The deterioration in the cotton crop is due mainly to drought, but also to boll weevil, rust, and army worms. In district No. 11 (Dallas), where the weevils were held in check by exceedingly hot, dry weather, the leaf worms did the most serious damage. The decline in condition is also attributed to the fact that early rains delayed planting and prevented the formation of a good top root, thus rendering the plant more susceptible to adverse conditions. Picking and ginning have made excellent progress under favorable weather conditions. A marked feature of the present crop is the exceptionally high grade of fleece ginned, an unusually high percentage grading above middling. The crop has also declined in districts No. 8 (St. Louis) and No. 10 (Kansas City), owing to hot, dry weather, and in the former district the boll weevil did considerable damage. District No. 5 (Richmond) reports a lowered condition of the crop and states that further deterioration occurred in the early part of September.

TOBACCO.

The condition of the tobacco crop has declined somewhat during the month. In district No. 5 (Richmond) practically all the tobacco has been cut and housed. Virginia has had the best growing season for many years and has produced an excellent crop of fine-quality tobacco. The average price paid in South Carolina at the auction sales during August was \$21.05 per hundred pounds, compared with \$12.10 per hundred paid in August, 1921. In district No. 4 (Cleveland) the burley yield per acre is so poor that even with the large acreage the crop will not be much larger than last year's, which was one of the smallest in years. The drought forced the cutting of miniature plants, but that does not necessarily prevent its curing up well. Similarly, in district No. 8 (St. Louis) the condition of the tobacco crop suffered badly both in quantity and quality. Farmers are anticipating very satisfactory prices when the market opens.

District No. 3 (Philadelphia) reports a strengthening demand for all grades of cigars. Part of the increased production of cigars and cigarettes is undoubtedly due to seasonal demand, as the next three months are the best of the year for the cigar trade. Cigarette production, however, is increasing at a much faster rate than that of cigars. Cigarettes alone of all the standard tobacco products have shown an increase over the previous high point of 1920. There have been relatively few changes in the leaf-tobacco market, although some dealers report an increased demand in September, following the increasing demand for cigars.

FRUIT.

The fruit crops in district No. 3 (Philadelphia) have been unusually good. The peach yield was much larger than in 1921. In Virginia the peach crop is 56 per cent of a full crop and in Colorado it is reported as very good. Melon crops in districts No. 4 (Cleveland) and No. 8 (St. Louis) were abundant, but in the latter district heavy losses were sustained because of delays in transportation. Tree fruits in district No. 10 (Kansas City) are showing moderately heavy yields, although in some sections late varieties were injured by the dry weather. Kansas apples suffered from heat, but a very large crop will be harvested in Nebraska. Production estimates for citrus fruits in Florida are somewhat under those of last season. The strong demand for lemons caused by the hot weather increased the price from \$2.99 per box in July to \$3.69 per box in August. The outstanding features of the crop for the 1922-23 season are the fine quality and size of fruits from early bloom and the heavy selling of fruits from late bloom.

AGRICULTURAL MOVEMENTS.

Grain receipts at 17 interior centers were substantially larger in August than in July. Receipts of corn registered the only decline during the month, and the most marked increases were in receipts of wheat and rye. Wheat receipts at Chicago and Minneapolis were almost double those of last month. The unprecedented rye receipts were the result of tremendous increases at all centers, especially Duluth, the total receipts for district No. 9 (Minneapolis) being nine times the normal for August. Grain prices reached the lowest levels since 1913 about the middle of August, but later recovered somewhat.

Carload shipments of fruits and vegetables for the season up to September 2 have equaled and in most cases exceeded those of the corre-

sponding period last year. Shipments to date of apples from the barrel sections are almost double the corresponding figure last year. Shipments of cantaloupes, lettuce, tomatoes, and early white potatoes have already exceeded last season's total. August shipments of pears and peaches are well above those of August, 1921. Shipments of mixed vegetables during August and for the season to September 2 show large increases compared with corresponding figures for last year.

FLOUR.

Flour production during August was 12,271,000 barrels, compared with 10,321,000 barrels during July and 13,266,000 barrels in August, 1921. Output of the reporting mills in district No. 9 (Minneapolis) amounted to 2,323,617 barrels, an increase of 6.2 per cent compared with last month, but a decrease of 6.8 per cent compared with August, 1921. The mills in district No. 10 (Kansas City) manufactured 2,138,257 barrels, an increase of 33.3 per cent over last month and a decrease of 18.6 per cent compared with August a year ago. Thirty-six millers in district No. 7 (Chicago) produced 369,401 barrels, an increase of 39.3 per cent compared with July and a decrease of 7.4 per cent compared with August last year. In district No. 12 (San Francisco) 53 mills produced 671,653 barrels, compared with 411,924 barrels produced by 55 mills during July. Flour prices, following the course of wheat, have reached low levels, and the flour trade has been generally dull. All classes of buyers have been extremely cautious and the export demand has been very slight. The Pacific coast reports an increase in export demand, but this has not affected prices. Recent reports from district No. 9 (Minneapolis) show an improvement and mills in that district are now operating practically at capacity.

LIVE STOCK.

Seasonal movement of live stock to market was the heaviest recorded since 1919. Receipts of sheep alone show a decrease during August as compared with the corresponding period of 1921. Receipts of cattle and calves, sheep, horses, and mules at 15 western markets increased during August, but there was a decrease in receipts of hogs as compared with July. Receipts of cattle and calves totaled 1,638,418 head, an increase of 33 per cent as compared with July and of 15.5 per cent as compared with August, 1921. Receipts of hogs during August amounted to 2,183,390 head, a decrease of 1.8 per cent compared with

the corresponding period last year. Receipts of sheep were 1,185,150 head, an increase of 11.6 per cent compared with last month and a decrease of 24.4 per cent compared with August a year ago. Reports from the stock-raising districts indicate that the animals are generally in a healthy condition. In district No. 10 (Kansas City) the hot, dry weather has done serious damage to pastures and ranges over a very wide area. Consequently, in some regions live-stock men will be forced to reduce their flocks and herds below anticipations and also to provide feed for the coming winter. In district No. 12 (San Francisco), however, pastures and ranges which had previously suffered from drought were greatly improved by rains. Feed is now relatively plentiful in that district. In district No. 11 (Dallas) the condition is only fair and animals are suffering from insufficient feed and water. The movement of stockers and feeders to the country, which again reached remarkable totals, was the outstanding feature of the market during August.

Reports from the meat-packing companies in district No. 7 (Chicago) show that shipments for export in August were less than in July. The export demand was only fair, but increased slightly in early September. District No. 10 (Kansas City) reports a considerable improvement in exports of live cattle and in the meat trade, especially in pork and lard. Operations at the meat-packing centers in that district were materially larger than during last month, or August, 1921, and trade was generally good. Meat stocks at Kansas City on September 1 were larger than on the corresponding date last year.

COAL.

Operations at bituminous coal mines showed a substantial recovery during the last week of August, as a result of which the aggregate output for the month was 22,261,000 tons, as compared with 17,003,000 tons in July and 34,538,000 tons in August, 1921. The daily average production was maintained at about 1,600,000 tons during the first three weeks of September, which seems to be a temporary maximum due to a shortage of railroad facilities. District No. 3 (Philadelphia) reports that railroads and public utilities are placing large orders, whereas some industrial users are curtailing purchases in hope of obtaining lower prices. Reports from district No. 10 (Kansas City) state that miners have returned to work in all southwestern coal fields and that the rate of production is fully as large as in September, 1921. District No. 6 (Atlanta) reports that mine output is being decidedly

curtailed in both Alabama and Tennessee on account of a lack of freight cars.

The anthracite coal strike, which commenced on April 1, was settled by an agreement at Philadelphia on September 9. This agreement provided that the contracts in effect on March 31, 1922, be extended to August 31, 1923, that mining operations be resumed at once, that operators and miners should make a joint recommendation to Congress that a separate anthracite coal commission be created with authority to investigate and report promptly on every phase of the industry, and that terms of contracts to go into effect after the above extension date be based upon the commission's findings. Anthracite production during August amounted to 161,000 tons, as compared with 116,000 tons in July and 7,196,000 tons in August, 1921. In the second week after the reopening of the mines the output is reported to have exceeded 1,850,000 tons. A considerable proportion of the new production is being allotted to New England and other sections which have an early winter.

By-product coke production continued to decline during August and totaled only 1,794,000 tons, as compared with 2,486,000 tons in July. Beehive production, however, increased from 450,000 tons to 539,000 tons. The price of Connellsville foundry coke declined from \$15 per ton on August 16 to \$12 per ton on September 20, but is almost 200 per cent higher than on September 20, 1921.

PETROLEUM.

Production of crude petroleum amounted to 46,295,000 barrels in August, as compared with 46,593,000 barrels in July. Domestic consumption is expanding as a result of the rapid growth of the automotive industry and the shortage of coal. Stocks, nevertheless, increased 3,385,000 barrels in August. The number of new wells completed totaled 1,709, as compared with 1,798 in July, indicating a slight reduction in drilling operations.

Daily average production of crude petroleum in district No. 12 (San Francisco) increased 2.3 per cent during August, while average daily shipments declined 6.1 per cent. Seventy-six new wells, with an average daily production of 52,553 barrels, were completed in August, as compared with 100 wells having an average production of 66,195 barrels in July. Stored stocks of gasoline in California have been considerably reduced.

District No. 11 (Dallas) reports that average daily petroleum production increased 3 per cent during August. Well completions totaled 473, with an initial flow of 101,927 barrels, as compared with 597 having a flow of 119,126

barrels in July. New operations showed a still greater curtailment in district No. 10 (Kansas City), the amount of new production declining from 173,461 barrels to 105,517 barrels. Total average daily production in that district declined 29 per cent in August.

No important changes have been reported in crude oil prices during September. Prices of gasoline and fuel declined considerably after the settlement of the coal strike, but the price of kerosene has continued to advance.

IRON AND STEEL.

Manufacturing of iron and steel was considerably curtailed in August, due to a shortage of fuel and of railroad equipment, but there was a decided recovery in the first two weeks of September. Pig-iron production declined from 2,405,365 tons in July to 1,816,170 tons in August, while the ingot production of 30 leading steel companies was reduced from 2,487,104 tons to 2,214,582 tons. Demand has continued to be strong, as was shown by an increase of 3 per cent in the unfilled orders of the United States Steel Corporation during August and by a further rise in steel prices. Railroads, automobile companies, locomotive works, and builders are all making heavy purchases of steel.

District No. 3 (Philadelphia) reports a gradual easing of production difficulties. Coke supply is increasing, but prices continue high. Demand for pig iron is so great that some orders have been placed with British producers. Steel manufacturers are receiving many orders, but most of them are for delivery within 30 days. Reports from district No. 4 (Cleveland) indicate that large orders for steel rails have been placed during September, since the announcement of an increase of \$3 per ton in rail prices, effective October 1. Automobile demand has diminished, but is still strong for fine finished sheets.

AUTOMOBILES.

Automobile production increased slightly during August, but has been somewhat curtailed in September by the temporary closing of the plants of the Ford Motor Co. Manufacturers built 246,502 passenger cars and 23,782 trucks during August, as compared with 223,057 passenger cars and 20,973 trucks in July. Factory shipments were also larger in August than in July, particularly in the case of driveaways. Closed cars continue to be in great demand and many new models are being created to attract buyers. District No. 4 (Cleveland) reports that orders for motor trucks diminished somewhat during September.

NONFERROUS METALS.

Conditions in the zinc industry continue to show marked improvement. The price of zinc at St. Louis advanced to 6.70 cents per pound on September 20, as compared with 5.80 cents on July 19 and 6.15 cents on August 16. August production of slab zinc totaled 31,423 tons, which was only slightly smaller than the July output, but stocks were reduced 24.4 per cent. Shipments of zinc ores in district No. 10 (Kansas City) declined 37.6 per cent during August, due to a lack of fuel and to traffic congestion. The average price of ore increased from \$33.34 per ton in July to \$36.25 per ton in August.

Demand for lead also improved during September, and the price at New York rose from 5.75 cents on August 16 to 6.10 cents on September 20. Pig-lead production was 10.3 per cent larger in August than in July. District No. 10 (Kansas City) reports that shipments of lead ore were 35.2 per cent less in August than in July, but the average price per ton advanced from \$76.60 in July to \$79.27 in August. Mills have been hampered by shortages of labor, coal, electric power, and water power.

The price of refined electrolytic copper delivered at New York has been temporarily stabilized at 14 cents per pound, and very little shading is reported. Mine production aggregated 101,187,727 pounds in August, the largest monthly total since November, 1920. Refined stocks have now been reduced to about 300,000,000 pounds. A shortage of experienced miners is reported from district No. 12 (San Francisco) and certain Arizona copper mines have announced a 10 per cent increase in wages. Production of silver in August amounted to 5,561,523 troy ounces, an increase of 28.1 per cent as compared with July.

COTTON TEXTILES.

Recent improvement in cotton textiles is evidenced by the consumption of 527,404 bales of cotton during August, exceeding that of any previous month since June, 1920. Furthermore, the increase which began last April in the number of spindles active at the end of the month continued in August. This figure, however, is still smaller than for any of the seven months between August, 1921, and February of this year. Reports from the various Federal reserve districts also attest to this improvement, and district No. 1 (Boston) notes that the cotton-goods market has been active during September, with prices somewhat firmer. In that district the recent strike has been settled in most mills by the restoration of the pre-strike wage scale, and it is there that the greatest

relative increase in cotton consumption occurred.

Mills in district No. 3 (Philadelphia) are operating at about 75 per cent of capacity, and have made some satisfactory sales during the month, although the demand for goods is not generally considered to be active. Consumption of cotton by mills in district No. 5 (Richmond) also increased during August, and orders received by these firms are sufficient to cover their output.

Reports from 33 cotton-cloth mills in district No. 6 (Atlanta) indicate increases of 44 per cent in production and 19 per cent in shipments during August. Unfilled orders, on the other hand, were nearly 8 per cent less than at the end of the previous month. Stocks were 3.3 per cent and number of employees 5.8 per cent larger than the corresponding figures for July. As compared with August, 1921, all items had increased substantially except stocks of cloth on hand, which were one-third smaller. Production, in fact, was nearly 50 per cent greater than for the same month last year. Figures for 32 cotton-yarn mills in district No. 6 (Atlanta) were also favorable, showing a growth of about one-sixth in production, shipments, and orders over the July figures and a decline of 3 per cent in stocks. Increases in these items as compared with last August ranged from 39 per cent in the number of employees to 57.5 per cent in orders on hand. Furthermore, stocks fell off over 40 per cent within the same period.

COTTON FINISHING.

Reports from 34 members of the National Association of Cotton Fabrics show increased activity during August. The number of finished yards billed during the month increased in all districts, and amounted to 96,879,483, which was more than 14 per cent above the July total. Orders received were about 1 per cent larger than during July, in spite of declines in districts No. 1 (Boston), No. 2 (New York), and No. 5 (Richmond). Total shipments and finished goods in storage showed gains of 4.3 per cent and 3.1 per cent during the month. The average number of days' work ahead at the end of August was 8.7, as compared with 9.3 at the end of July. District No. 6 (Atlanta) showed substantial increases in orders and average number of days' work ahead.

WOOLEN TEXTILES.

Further slight improvement in the production of woollen goods is indicated by the comparative figures on active wool machinery. On September 1, of the total reporting looms

wider than 50-inch reed space, 64.7 per cent were active, compared with 64.1 per cent on August 1 and 63.6 per cent on July 1. This activity, however, is less than that prevailing during the 12 months preceding last May. A larger percentage of the narrower looms is idle than on August 1. The relative positions of woollen and worsted spindles changed further in August, when the activity of the former fell from 83.7 per cent to 82.9 per cent, while the latter were increasing from 68 per cent active to 74.8 per cent. The woollen spindles, however, are still more active than they were a year ago, whereas the worsted machines are considerably less so.

The demand for raw wool has improved throughout the country, although district No. 3 (Philadelphia) states that the market has not completely recovered from the summer slump, and in district No. 7 (Chicago) tariff uncertainty held back the August trade in finer-grade wools, although the medium grades were in good demand and firmer in price. District No. 1 (Boston) indicates that final settlement of the tariff question served to stabilize prices. The Boston district further states that stocks of foreign wool are large and total supplies are sufficient for the needs of the industry. Much raw wool of those grades on which the tariff rates were raised were removed from bond before the new act became effective.

In district No. 3 (Philadelphia) goods manufacturers are operating their plants at 75 to 80 per cent of capacity, and a few worsted mills are running full time. The demand for worsted goods and yarns has increased, whereas that for woollens is somewhat smaller. Prices of yarns have advanced during the past month, reflecting the continued strength of the raw-wool market. Sales of finished woollens in district No. 7 (Chicago) were reported to be about equal to those of July. Goods were being shown for the 1923 season and competition was close, with varying quotations.

The demand for carpets and rugs is reported by district No. 3 (Philadelphia) to be strong, and the increase in production which began late in 1921, after a slight recession during the summer months, has been resumed. This is further shown by the national activity of carpet and rug looms, which at 79.2 per cent on September 1 is at the highest point attained within the last four years. This is attributed to activity in home building.

CLOTHING.

Returns from clothing manufacturers in district No. 7 (Chicago) showed increased seasonal activity during August. Five firms reported increases of 23 per cent in the number of suits

made and of 178 per cent in shipments, as compared with the July figures. The situation, however, has not been as favorable as last year, for production during August was 16 per cent and shipments 5 per cent less than during August, 1921, and orders received since the opening of the fall season fell off 20 per cent as compared with the corresponding season last year. Seven tailors to the trade report recovery from their July slump with increases during August of from 50 per cent to 60 per cent in orders, production, and shipments. Improvement is also noted as compared with last August, and all items were from 20 per cent to 30 per cent larger than during that month.

District No. 2 (New York) reports increases in clothing sales of 102.7 per cent as compared with July and 8.6 per cent over last August. The demand for men's clothing is better than that for women's clothing, as August sales of the former by eight firms were 108 per cent larger than in July and 24 per cent above those of August, 1921, whereas 14 women's clothing firms report an increase of only 94.3 per cent above the July figure and a decline of 11.7 per cent from that for the corresponding month last year. District No. 4 (Cleveland) notes that the men's clothing industry is now in a dull period while fall goods are being delivered, and that the season in the women's garment industry has on the whole been somewhat disappointing.

SILK TEXTILES.

The demand for broad silks has improved during the past month, although mills in district No. 3 (Philadelphia) report that the betterment amounts to not more than 10 per cent. Approximate deliveries to American mills during August, however, totaled 34,772 bales. Not only is this an increase of approximately 40 per cent over the July figure, but it is the largest total of any month since the records began in January, 1921. This increase in consumption is partially attributed by district No. 3 (Philadelphia) to the large production of crêpes, which are heavy and require much raw material. Furthermore, the new styles are considered to be favorable for silk goods. The demand for thrown silk in district No. 3 (Philadelphia), which declined somewhat early in September, has recovered. The raw-silk market also became more active after the middle of September. Imports are larger and despite the greater volume of deliveries stocks in warehouses are growing.

Reports from Paterson and North Hudson showed only slight increases in activity during the bimonthly periods ending August 26 and

September 9. Most of the improvement in the market has taken place since the latter date. In the North Hudson section 1,816 looms out of a total of over 4,000 available, or 43.63 per cent, were producing, as compared with 42.67 per cent on August 28, 45.27 per cent on August 12 of this year, and 60.26 per cent on September 9, 1921. In Paterson, out of 15,000 looms, 3,746, or 24.97 per cent, were in operation on September 9, an increase as compared with 21.84 per cent on August 28, 17.02 per cent on August 12, and 22.87 per cent on September 10, 1921. The improvement in Paterson was attributed to recent settlement of labor disputes.

HOSIERY.

In the hosiery industry, according to district No. 3 (Philadelphia), the demand for cotton and mercerized goods has been increasing, accompanied by a sharp advance in prices. On the other hand, little or no improvement is noted in the demand for silk and heather hosiery. Production is curtailed and cancellations of orders for heather hosiery are numerous. Most of the firms in that district make the silk and heather grades, and their present condition is shown by reports from 35 reporting firms selling to the wholesale trade and 13 firms selling to the retail trade. Orders booked during the month by the former were 16.6 per cent less than in July and 50.9 per cent less than in August, 1921. Firms selling to retailers reported a decrease of 27.7 per cent in orders since last month, but an increase of 2.2 per cent over last year. Production during August for both classes of firms was slightly larger than in July, but less than in August, 1921. Cancellations by wholesalers increased 82.4 per cent and cancellations by retailers 18.8 per cent over the July figures. Shipments and unfilled orders on hand were less than for July and were also smaller than for the same month last year.

Reports from four cotton hosiery mills in district No. 6 (Atlanta), on the other hand, are considerably more favorable. Orders booked were 84 per cent above the July figure and about 35 per cent above that for August, 1921, and unfilled orders on hand on August 31 were, respectively, 80 per cent and 55 per cent larger than on July 31 and August 31 of last year. Production increased approximately 10 per cent over both the preceding month and the corresponding month a year ago. Finished stocks were also larger, whereas raw-material supplies were smaller than they were a month previous, but larger than on the same date last year. District No. 6 (Atlanta) also reported advancing prices.

UNDERWEAR.

Production of underwear, which fell off in July, recovered during August. The output of 49 mills totaled 519,511 dozens, or 68.8 per cent of normal, as compared with 422,872 dozens, or 60 per cent, for 50 mills during July, and 433,875 dozens, amounting to 66.6 per cent of normal, for 49 mills during August of last year. Forty-one mills report that during July new orders received were 71 per cent, shipments 92 per cent, cancellations 2 per cent, and output 80 per cent of normal production.

Comparative data furnished by 37 mills indicate a loss in new orders received of one-sixth, which, together with a 71 per cent gain in shipments and a similar increase in cancellations, resulted in a decline in unfilled orders on hand of 14 per cent. The output of winter underwear by 41 mills was 341,713 dozens, as compared with 269,223 dozens in July, and that of summer underwear by 24 mills was 177,798 dozens in August, as compared with 153,649 dozens by 23 mills in July. Production of the winter garments was 72.7 per cent of normal, as compared with 73.1 per cent last August. Summer underwear output aggregated 62.5 per cent of normal this year and 60.8 per cent last year.

In district No. 3 (Philadelphia) 14 firms making summer underwear reported increases over July figures of 116 per cent in production, 43 per cent in shipments, 45 per cent in unfilled orders, and 15 per cent in stocks on hand at the end of the month, with a decline of 22 per cent in orders booked. As compared with August, 1921, production fell off 24 per cent, orders 38 per cent, and shipments 37 per cent, and unfilled orders and stocks on hand were both substantially larger. Ten firms producing winter underwear in the Philadelphia district indicate a 13 per cent gain in production as compared with July, but losses in stocks, orders booked, shipments, and unfilled orders.

SHOES AND LEATHER.

The market for Chicago packer hides was moderately active during August and the first three weeks of September, and prices showed a further upward tendency. Shipments of hides and skins from Chicago were larger in August than in July or in August, 1921. There has been a considerable decline in the price of calfskins, but prices of goatskins are very strong.

The improvement in the leather industry noted in July and August continued during September. Reporting tanneries in district No. 7 (Chicago) had larger sales in August than in July, as well as a slightly larger production. The demand for heavy leather has broadened,

so that shoulders are selling more freely and there are some inquiries for heads. The volume of belting sales is still increasing steadily and prices have advanced. Sales of upper leather continue to be very large, and district No. 3 (Philadelphia) states that tanners of patent leather are behind on their deliveries on account of the volume of rush orders. Calf leathers in men's weights have found a ready market at advancing prices, while an encouraging number of foreign orders have been received for kid leather. The August improvement in demand for glove leather was not maintained during September. Sales of harness leather are larger in most reporting sections.

The shoe-manufacturing industry showed a marked recovery in activity during August, reflecting a large increase in sales of wholesale shoe dealers. Eight manufacturers in district No. 1 (Boston) report that production increased 25.2 per cent in August, and was 14 per cent larger than in August, 1921. Shipments for seven of these firms increased 49.7 per cent, while new orders decreased 7 per cent as compared with figures for July. Labor difficulties at Lynn have been settled and factories there are much more active. Reports of 43 firms in district No. 3 (Philadelphia) show that August production was 31 per cent larger than that of July, while shipments increased 71 per cent. The volume of orders received was 7.7 per cent less than in July, and the total orders on hand declined 18.5 per cent. Retail shoe business declined during August, but increased in the middle of September. District No. 7 (Chicago) reports that production of 24 companies increased 29 per cent during August, while shipments were 44 per cent larger than in July. Reports from 16 of the firms indicate that stocks were considerably reduced, whereas the volume of unfilled orders was only slightly diminished. Eleven manufacturing concerns in district No. 8 (St. Louis) report a decrease of 12.5 per cent in August sales. Factory operation in that district varies from 90 to 100 per cent of capacity. A small increase in factory prices for shoes is reported from most of the manufacturing centers.

LUMBER.

Lumber mills considerably increased their activity during August, and their operations continued at a high rate during the first two weeks of September. The August cut of 535 mills reporting to the National Lumber Manufacturers' Association amounted to 1,323,684,000 feet, as compared with 1,091,800,000 feet for 477 mills in July. Railroad shipments of forest products increased from 239,119 cars in July to 260,282 cars in August.

Production, shipments, and new orders increased 31 per cent, 13 per cent, and 33 per cent, respectively, during August, according to reports from four leading lumber associations in district No. 12 (San Francisco). Retail lumber yards, which were the largest domestic purchasers, bought chiefly woods suitable for small construction and repairs. From 70 per cent to 95 per cent of the freight cars required for lumber shipments during August were available, but deliveries to destination were unusually slow. Heavy rains in August ended the fire hazard which had curtailed logging operations for two months. The rate of log production consequently increased more than 80 per cent by September 1. Prices of northwestern lumber advanced quite generally during August.

Reports of 119 mills belonging to the Southern Pine Association in district No. 6 (Atlanta) showed that new orders, production, and unfilled orders increased during August, while shipments and stocks declined from the totals for July. The lumber business in that district has been seriously impeded by a shortage of transportation facilities. Reports from 40 southern pine mills in district No. 11 (Dallas) show pronounced increases in production and new orders, while the volume of shipments was practically unchanged. The upward trend of southern pine prices has continued without abatement.

The lumber cut and shipments of eight lumber companies in district No. 9 (Minneapolis) increased 11.1 per cent and 11.5 per cent, respectively, during August. Sales by retail lumber yards in that district also showed a substantial gain in August, and were 12.2 per cent larger than in August, 1921. Receipts of lumber at St. Louis increased during August, and were much larger during the first half of September than is customary at this season of the year. Price advances were quite general, especially in the case of soft woods.

BUILDING.

The building industry showed a further slight reduction in activity during August, but maintained an exceptionally high level of production for the sixth consecutive month. All kinds of building materials are still in great demand, and cement production was larger in August than in any previous month this year. It is still difficult to secure railroad cars for use in shipping bricks, sand, and gravel.

The value of contracts awarded in seven Federal reserve districts (compiled from statistics gathered by the F. W. Dodge Co.) totaled \$288,409,490 in August, as compared

with \$303,548,695 in July and \$201,527,465 in August, 1921. The three eastern districts showed increases in activity, but decreases occurred in the South and West. The total value of contracts let reached a new maximum in district No. 3 (Philadelphia), while the most noteworthy decline took place in district No. 7 (Chicago), and amounted to 31.5 per cent. The volume of residential building in these seven districts was smaller in August than in any month since February, totaling \$90,963,781. All of the districts covered, except No. 3 (Philadelphia) and No. 9 (Minneapolis), showed reductions. Statistics of number and value of building permits issued in 166 cities are published on page 1232.

District No. 1 (Boston) states that the volume of September building has been slightly less than in August. The general level of rents is reported to be temporarily stabilized. In district No. 2 (New York) there has been a marked gain in the volume of business building. District No. 5 (Richmond) reports that orders for all types of building supplies are plentiful. Brickyards and gravel dealers are finding difficulty in obtaining sufficient railroad cars for their shipments. A scarcity of skilled plasterers has developed in district No. 7 (Chicago) and there has also been a general rise in prices of building materials. District No. 10 (Kansas City) reports that building operations in August were larger than in any previous month this year.

EMPLOYMENT.

The volume of unemployment was much reduced during September by the settlement of the coal strike and the strike of shopmen on many railroads. A shortage of skilled building mechanics is still reported from many districts and there are numerous local shortages of unskilled labor. The National Industrial Conference Board states that of 123 wage changes reported from August 15 to September 15 the increases totaled 119. This is the largest number of wage increases reported in any month since the decline of business activity in 1920. The industries in which most of these advances occurred were steel, cotton manufacturing, and building.

Cotton mills, shoe factories, and paper mills in district No. 1 (Boston) are considerably increasing their forces. There is a decided increase in demand for machinists, and practically all members of the building crafts are fully employed. District No. 2 (New York) reports increased employment in most manufacturing lines. There is a shortage of experienced farm hands and of all types of skilled

building workers. In district No. 3 (Philadelphia) a scarcity of building mechanics, agricultural workers, and unskilled factory workers is noted. The settlement of the bituminous and anthracite coal strikes has greatly decreased the amount of unemployment. Reports from district No. 4 (Cleveland) mention a shortage of unskilled workers at steel mills.

District No. 5 (Richmond) states that unemployment has practically disappeared. The gathering of the cotton and tobacco crops is employing most of the agricultural population. A shortage of domestic servants is reported. Textile mills and vehicle factories in district No. 6 (Atlanta) increased their forces during August. The amount of industrial employment has increased in all the States of that district except Louisiana.

Employment reported by 142 firms in district No. 7 (Chicago) was 2.1 per cent larger in August than in July and 17.9 per cent larger than in August, 1921. The average pay per man was 0.1 per cent less than in July and 7.8 per cent less than in August, 1921. The largest gain in employment occurred in the brick industry, as several brickyards resumed operations during the month. Reports from district No. 8 (St. Louis) indicate that there was some decline in employment during August, due to lack of fuel and of railroad cars. District No. 9 (Minneapolis) reports a large demand for harvest hands and for lumber workers. There is still a shortage of skilled copper miners in Montana. Coal and metal mines in district No. 10 (Kansas City) are increasing the number of their employees. A shortage of bricklayers, plasterers, carpenters, and lumber workers is reported from many cities. The opening of sugar factories will require a considerable number of workers about October 1. Employment at industrial plants in district No. 11 (Dallas) was somewhat reduced during August, but this was balanced by an increased demand for agricultural workers. District No. 12 (San Francisco) reports that employment in California increased during August, due to harvesting and canning activities. A shortage of copper miners continues to exist in Arizona despite a general increase of wages at mines.

WHOLESALE TRADE.

Wholesale trade during August in all reporting lines and in every district recovered substantially from its midsummer decline. Of the four trades shown in the above table, it will be noted that the only decrease from July figures occurred in the case of grocery sales in district No. 12 (San Francisco). The greatest improve-

ment was experienced in dry goods, with increases ranging from 30 to 60 per cent. Business in this trade was also better than last year in most of the districts. In general, grocery sales appear to be smaller than they were last August, but reports from hardware firms continue to show the substantial betterment over 1921 which has been noted in previous months.

Wholesale lines not given in the table below show similar tendencies. August shoe sales were materially larger than those of July in all districts except No. 9 (Minneapolis), although smaller than during last year, and substantial advances were noted in furniture and stationery sales. Farm implements experienced seasonal declines in three out of five reporting districts, but were larger than during last August in all but district No. 12 (San Francisco).

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN AUGUST, 1922, AS COMPARED WITH THE PRECEDING MONTH (JULY, 1922).

[Minus sign (—) denotes decrease.]

District.	Groceries.		Dry goods.		Hardware.		Drugs.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.....	4.9	42	49.5	8	7.5	11	2.3	6
No. 3.....	8.1	65	41.5	19	10.8	32	5.1	16
No. 4.....	7.7	26	37.4	13	10.8	11	14.4	12
No. 5.....	6.8	43	44.9	16	9.6	17	4.7	14
No. 6.....	15.9	34	36.1	24	31.2	21	12.9	4
No. 7.....	13.5	38	29.7	10	8.8	17	5.0	11
No. 8.....	12.7	41	54.7	4	13.9	11	5.6	6
No. 9.....	7.6	9	59.1	4	3.8	11	16.4	7
No. 10.....	9.0	10	48.0	11	10.7	10	26.7	9
No. 12.....	-5.2	31	34.6	16	5.7	21		

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN AUGUST, 1922, AS COMPARED WITH THE SAME MONTH LAST YEAR (AUGUST, 1921).

[Minus sign (—) denotes decrease.]

District.	Groceries.		Dry goods.		Hardware.		Drugs.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.....	-7.1	42	0.3	8	22.8	11	2.9	6
No. 3.....	-9.4	65	-12.6	19	13.2	32	3.4	16
No. 4.....	-5.1	26	5.2	13	26.7	11	14.7	12
No. 5.....	5.5	43	3.4	16	6.4	17	0.9	14
No. 6.....	4.7	34	8.9	24	15.6	21	13.7	4
No. 7.....	-4.5	37	2.1	10	18.6	16	5.8	11
No. 8.....	-2.6	41	-1.9	4	18.2	11		
No. 9.....	-3.9	9	-4.4	4	13.6	11	-0.1	6
No. 10.....	3.0	10	19.4	11	5.5	10	1.4	7
No. 12.....	7.1	31	24.1	16	20.4	21	-0.3	9

RETAIL TRADE.

There has been considerable irregularity in retail trade throughout the country during the month of August, due probably to local labor

conditions and crop developments. Most districts report continued inactivity in buying on account of the hot weather during August and the unsettled industrial condition, but there is, nevertheless, a general spirit of optimism as to fall trade. The most important reason for this attitude is the settlement of the strikes. The 470 reporting department stores in the United States averaged the most substantial gain over the preceding year since November, 1920, trade being 3.2 per cent better than in August, 1921. District No. 4 (Cleveland) reported the largest increase, which amounted to 10.8 per cent, while district No. 10 (Kansas City) suffered a decline of 9.5 per cent, as may be noted from the table on page 1234. All districts report larger stocks on hand than at the end of July, due to the reduction of summer stocks and the replacement with fall merchandise, but in district No. 1 (Boston) only are the stocks as large as at the end of August, 1921. These increased stocks and smaller sales have decreased the rate of turnover for the month of August. The large ratio of outstanding orders to purchases for 1921 indicates that fall orders are still being filled.

PRICES.

Many important changes occurred in wholesale prices during August. The majority of the movements for individual commodities were downward, but the continued advance in the prices of coal and coke, pig iron, and, to a lesser extent, of other metals, was sufficient to offset the declines in other groups of commodities. The result has been that both the all-commodities index of the Federal Reserve Board and that of the Bureau of Labor Statistics remained unchanged in August as compared with July.

The raw materials group in the Federal Reserve Board's index moved up 7 points as a result of the sharp rise in coal and metals prices, which far outweighed the marked decline in the prices of all agricultural products. Consumers' goods fell 7 points, foods and staples showing decided reductions. Price variations in semi-manufactured goods, on the other hand, were comparatively slight, the only articles of this class to show an appreciable change being steel products.

In the Bureau of Labor Statistics index the groups of farm products and foods each declined 4 points, while metal products rose 5 points and fuel and lighting advanced 17 points. The changes in other groups of commodities were much smaller, building materials rising 2 points, with chemicals and cloths and clothing each showing an increase of 1 point.

FOREIGN TRADE.

Exports in August were valued at approximately the same figures as in July, while imports increased by nearly \$20,000,000. This brings the value of imports up to \$271,000,000 for August, which is the highest level reached by our inbound trade since late in 1920. Inasmuch as exports remained about constant at \$302,000,000, the August excess of exports over imports was only \$31,000,000, the lowest balance recorded since the early months of the war. The extent of the change whereby American foreign trade is approaching a more even balance between imports and exports is evident from a comparison of the small excess of exports in August with the balance in 1921, which averaged \$165,000,000 monthly. Imports of gold were considerably reduced during August, but amounted nevertheless to \$19,000,000. Exports of the metal, as in previous months, continued to be small.

State Banks and Trust Companies.

ADMISSIONS.

The following list shows the State banks and trust companies which were admitted to membership in the Federal Reserve System during the month ending September 30, 1922, on which date 1,653 State institutions were members of the system.

	Capital.	Surplus.	Total resources.
<i>District No. 2.</i>			
Perth Amboy Trust Co., Perth Amboy, N. J.....	\$200,000	\$200,000	\$4,515,767
New York Life Insurance & Trust Co., New York, N. Y.....	1,000,000	2,000,000	31,757,906
<i>District No. 5.</i>			
The Peoples Bank, Bishopville, S. C.....	25,000	75,000	332,377
Bank of Harpers Ferry, Harpers Ferry, W. Va.....	25,000	6,000	165,163
<i>District No. 6.</i>			
Dacula Banking Co., Dacula, Ga.....	25,000	5,000	85,383
Liberty Bank & Trust Co., Savannah, Ga.....	300,000	350,000	3,513,735
<i>District No. 9.</i>			
Minnetonka State Bank, Excelsior, Minn.....	25,000	10,000	507,721
<i>District No. 12.</i>			
Bank of Prineville, Prineville, Oreg...	50,000	5,000	184,126

Voluntary liquidation.—Merchants Bank, Port Townsend, Wash.
Conversion.—The State Bank of Kenbridge, Kenbridge, Va., converted into First National Bank of Kenbridge.
Mergers.—The Market Trust Co., Brighton, Mass., with the International Trust Co. of Boston, both members, under name of latter. The Bank of New York of the city of New York with New York Life Insurance & Trust Co., under name of Bank of New York & Trust Co.
Withdrawals.—Bank of Tennessee, Nashville, Tenn.; Farmers State Bank, Waconia, Minn.; Stratford State Bank, Stratford, Wis.; Spencer State Bank, Spencer, Ohio.
Insolvent.—Myton State Bank, Myton, Utah.
Change of name.—The Los Angeles Trust & Savings Bank, Los Angeles, Calif., to Pacific Southwest Trust & Savings Bank.

Fiduciary Powers Granted to National Banks.

During the month of September 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 bank is located.

The numerals opposite the name of each bank indicate the power or powers it is authorized to exercise, as given below:

Place,	District No.	Name of bank.	Powers granted.
Plattsburg, N. Y....	2	Merchants National Bank.....	1 to 9.
Syracuse, N. Y.....	2	Liberty National Bank.....	1 to 9.
Savanna, Ill.....	7	First National Bank.....	1 to 8.
Fairmont, Minn.....	9	Martin County National Bank.....	1 to 9.
Truman, Minn.....	9	Truman National Bank.....	1 to 9.
Atchison, Kans.....	10	City National Bank.....	1 to 9.

Commercial Failures Reported.

Numbering 1,072 during three weeks of September, as against 979 for a similar period of 1921, failures reported to R. G. Dun & Co. make a closer comparison with the figures of the previous year than has been the case for a long time past. The returns for August, the latest month for which complete statistics are available, disclose 1,714 commercial defaults for \$40,279,718 of liabilities. These totals compare with 1,562 insolvencies for \$42,904,409 in August, 1921, and an increased number of failures occurred last month in 8 of the 12 Federal reserve districts. The exceptions are the first district, where no change at all developed, and the sixth, ninth, and eleventh districts, which reported reductions of 46, 3, and 52 defaults, respectively. As regards the August indebtedness, the amounts are smaller in most instances, decreases being noted in the first, second, fourth, fifth, sixth, ninth, and twelfth districts. These reductions, however, are largely offset by an increase of fully \$3,000,000 in the eleventh district, due to one failure of exceptional size.

FAILURES DURING AUGUST.

District.	Number.		Liabilities.	
	1922	1921	1922	1921
First.....	118	118	\$1,556,039	\$2,821,841
Second.....	269	216	7,364,329	9,685,653
Third.....	76	68	2,735,637	2,090,756
Fourth.....	156	137	3,574,148	5,183,707
Fifth.....	134	98	2,253,748	2,658,017
Sixth.....	152	198	2,890,891	4,489,443
Seventh.....	243	204	6,776,867	4,123,520
Eighth.....	135	67	2,347,687	2,200,012
Ninth.....	69	72	888,750	1,458,576
Tenth.....	95	75	1,963,119	966,896
Eleventh.....	85	137	5,198,294	1,991,284
Twelfth.....	182	172	2,730,209	5,234,704
Total.....	1,714	1,562	40,279,718	42,904,409

New National Bank Charters.

The Comptroller of the Currency reports the following increases and reductions in the number and capital of national banks during the period from August 26 to September 22, 1922, inclusive:

	Number of banks.	Amount of capital.
New charters issued.....	7	\$930,800
Restored to solvency.....	1	25,000
Increases of capital approved.....	12	1,005,000
Aggregate of new charters, banks restored to solvency, and banks increasing capital.....	20	1,960,800
Liquidations.....	6	1,785,000
Reducing capital.....	3	325,000
Total liquidations and reductions of capital.....	9	2,110,000
Consolidations of national banks under act of Nov. 7, 1918.....	0	0
Aggregate increased capital for period.....		1,960,800
Reduction of capital owing to liquidations, etc.....		2,110,000
Net decrease.....		149,200

Acceptances to 100 Per Cent.

Since the issuance of the September BULLETIN the following bank has been authorized by the Federal Reserve Board to accept drafts and bills of exchange up to 100 per cent of its capital and surplus:

New York Life Insurance & Trust Co., New York, N. Y.

CATTLE LOAN COMPANIES.

The cattle industry has certain financial problems peculiar to itself and particular agencies have developed for dealing with those problems. Among these agencies are the cattle loan companies. The methods of financing used by the cattle loan company furnish an interesting illustration of how particular credit devices are developed to meet the special needs of an industry.

Financing problems in the cattle industry arose with the opening and rapid development of the territory west of the Mississippi. Both the industry itself and the financing methods employed were chaotic. The cattle were "longhorns," wild and inferior; the ranches were unfenced and "rustling" was frequent; heavy losses occurred due to insufficient water in summer and lack of feed in winter. Little discrimination was exercised in making loans. Finally the ranges became overstocked, and for several years after 1895 cattle raisers' losses were such as to render them unable to repay their loans. Many commission houses which had advanced funds failed and cattle paper became very unpopular. Since about 1900 conditions have changed. As one writer has said:

While pasture lands have decreased to a pitiful fraction of their former size, the transition has brought system and stability to the cattle industry. The ranches are now practically all fenced, the cattle are an improved type, disease is well controlled, and "rustling" is over. Water is supplied by engines or artesian wells, and adequate feed is stored for the winter. Skilled executives trained in approved business methods administer the affairs of the modern ranch. Cattle raising has become a specialized industry.

With this change in the character of the industry has come a change in financing methods and agencies.

The live-stock industry is now financed by three groups of organizations: Cattle loan companies, live-stock commission companies, and banks which lend money on live stock. The commission companies limit their loans for the most part to feeder loans [which are defined on p. 1172], and then only with the object of increasing their commission business. Banks make all classes of loans, but the legal restrictions on the amount which they may loan to one individual greatly curtails their advances. The banks, whose capital and surplus is such that a 10 per cent maximum to one borrower would not prove a handicap, are located in distant larger centers, and so are not in a position to make the necessary investigation to protect themselves against loss. They therefore buy cattle paper rather than lend in the first instance on cattle. An organization possessing facilities for local

supervision of loans is necessary. Moreover, such an organization must possess sufficient resources to enable it to finance a considerable volume of business. The cattle loan company, not subject to legal loan restrictions and obtaining its funds through resale of the loan it makes, fills this place. Some companies are organized independently, but, as a general rule, especially in the case of the larger ones, they are affiliated with some large national bank in a live-stock center. Stockholders, directors, officers, and headquarters are usually the same. In such cases the cattle loan company carries on those portions of the business which it would be extremely difficult, if not impossible, for a bank to handle.

In 1918-19, when cattle loan companies were carrying the largest amount of loans on record, the volume handled by the individual company ranged from \$500,000, in the case of the smaller companies situated at packing house centers, to approximately \$15,000,000 in the case of one or two companies. Since that time all companies have greatly reduced their loans—some of them as much as 50 per cent or more. This decrease has been due to the difficulty in placing paper as a result of general financial conditions; the realization by certain companies that their loans had been too large in comparison to their capital investment; and to the smaller amounts involved because of the decline in live-stock prices. In this connection it is interesting to note that some authorities believe a well-managed, conservative, cattle loan company can lend 10 to 20 times its capital and surplus. The larger companies, nevertheless, have felt that their loans should not greatly exceed 10 times their net worth, but in some cases, especially of the smaller companies, a much larger ratio has been lent. The average company, it has been said, places \$4,000,000 to \$5,000,000 of loans a year.

The capital and surplus of the individual company ranges from \$25,000 to \$1,000,000. The independent companies, it is generally stated, are smaller than the affiliated companies, although there are a few independent companies throughout the country that are as large as are the affiliated companies. The best companies are incorporated.

By far the greater part of the companies are located in the principal packing centers where the live-stock business is concentrated. Stockmen naturally seek funds at such points, while companies located there can inspect purchased cattle as well as watch the marketing of stock.

NOTE.—This article is based in large part upon a study of Mr. Victor A. Newman, prepared in satisfaction of the senior research requirements of the Wharton School of Finance and Commerce, of the University of Pennsylvania. This material the Division of Analysis and Research supplemented by data kindly supplied by leading bankers and others associated with the industry in the principal live-stock centers.

Some other large companies are located on the Pacific coast and in New Mexico. Very few have branches.

The territory covered by the individual company depends upon the size of the company and the policy it pursues. Certain companies are willing to make loans at a greater distance from the head office than are others. In general, the territory naturally tributary to the most important centers is as follows:

Chicago.—The Corn Belt and the Northwest as far as western Idaho.

Kansas City.—Kansas, Oklahoma, Texas, and parts of New Mexico and Colorado.

East St. Louis.—Southern Illinois, Missouri, Oklahoma, and Texas.

St. Paul.—The Northwest as far as Montana.

Omaha.—Nebraska, South Dakota, Wyoming, Montana, and part of Iowa.

St. Joseph.—Kansas, Texas, and eastern Colorado.

Sioux City.—South Dakota and parts of Iowa, Nebraska, Minnesota, and Wyoming.

Oklahoma City.—Oklahoma, Texas, and New Mexico.

Denver.—Colorado and part of Wyoming.

El Paso.—Parts of Texas, New Mexico, and Arizona.

Salt Lake City.—Utah and Idaho.

Los Angeles.—California and part of Arizona.

Portland.—Washington, Oregon, Idaho, and parts of California, Utah, Nevada, to as far east as Nebraska and South Dakota.

Types of loans.—Loans are made on cattle and to a lesser extent on sheep. The present discussion will consider chiefly cattle loans. These may be divided into feeder loans, stocker loans, and dairy loans. Feeder loans have been defined as "loans made on beef steers which are ready to go into the last stage of feeding prior to their sale as finished beef." That is to say, funds are advanced for the purchase of stock to be fattened on the feed which the borrower already has or which he will buy out of his own funds. Stocker loans may be defined as loans on all cattle other than those going into the last stages of feeding or those used for dairy purposes. These loans are further subdivided into those on breeding cattle, those on young steers or heifers which will not be ready for the market for a year or more, and so-called "summer loans." Advances are not made ordinarily on registered breeding herds, because of their high value and the attendant great risk. Summer loans are made only in the West to enable the borrower to buy cattle for grazing during the summer. The rancher is able to graze more stock than he can feed in the winter, and it is expected that in the fall he will sell all those which he can not feed. The cattle increase in weight, and therefore in

value, almost as rapidly on grass as in the feed lot. Dairy loans form a negligible part of the business of cattle loan companies, as they are dissimilar in many ways from the ordinary types of cattle loans. They run for relatively long periods, are usually payable in monthly installments from the proceeds of sale of butter fat, and are usually cared for by local banks.

Feeder loans are usually considered as furnishing the most desirable type of paper. They are ordinarily for a shorter period, and the cattle are at all times more marketable and are not subject to the same vicissitudes of weather, disease, and accident as are stockers. Some authorities feel that such loans should not be made by cattle loan companies, but should be taken care of by commercial banks. Certain companies, however, do take a large amount of this paper, and, at the same time, exclude a great many stocker loans by avoiding summer and open-range loans, because of the danger arising from the difficulty of making the careful and continuous check-ups which are necessary in order to keep losses at a minimum. On the whole, however, the types of loans handled by any one company depend upon the territory which it covers. The majority of feeder loans are made by companies located in or near the Corn Belt—at Chicago, East St. Louis, Omaha, and Kansas City—as well as in the extreme western cattle country tributary to Los Angeles and Portland. Many of these companies, however, have more stocker than feeder loans; while stocker loans are easily in the majority among the cattle loan companies as a whole.

Placing of loans.—The companies make their loans in one of three ways—through country banks, through commission companies, or direct to the cattlemen. Many large loans come direct, but probably as many of the smaller loans are made with a local bank as intermediary. The percentage of the total loans that is made through commission companies ranges up to 15 per cent, but the latter figure may be exceeded in the case of companies actively associated with commission firms. Difference of opinion, however, exists as to the merit of such loans. Some observers hold that commission firms are at times not so careful in lending as they should be, because such loans are granted in order to increase the volume of their commission business. They are, however, in close personal touch with their borrowers, and it is said this is a strong element of safety in loans originating through them. Their loan procedure is very similar to that of the cattle loan companies, although the margin required is smaller in some cases. The commission firm assumes liability for payment by indorsing the

paper. The cattle loan companies also indorse the paper.

Several methods are followed in placing loans through country banks. Loans too large for the country bank are made direct to the cattleman, and the company merely pays the country bank a commission for negotiating the loan. In practically all other cases the paper is indorsed either by the country bank or by its officers or directors. The latter type of indorsement is often the most valuable, and at the same time keeps down the amount of borrowings which the bank must show on its books. Practically all companies check the credit standing of the borrower, irrespective of whether the loan is made through a correspondent or direct. Some companies feel that "the country banker will not make the borrower come to time," but other companies desire some one on the ground to look after their interests, and hence prefer to make loans through correspondents.

Credit work.—As is the case with other classes of loans, the importance of doing business with the right sort of men is to be emphasized. It has been said, "The brand on the man is worth more than the brand on the cattle." Information is obtained through four forms—application, financial statement, inquiry, and inspector's report. The application and financial statement are often consolidated. When the application is separate, it furnishes personal data as to the applicant, purpose of loan, security, and sometimes other information as to his business practices. This results in considerable duplication of data, particularly in the case of the security, real estate, feed, and range. Such questions, however, are often omitted from the application when a consolidated form is used. A special "brand sheet" accompanies either the application or the financial statement if the data are not included elsewhere. This gives in both illustrative and descriptive form the holding brand on the cattle, as well as any other brands which may be on them.

In accordance with general credit practice, all the larger and most of the smaller companies verify the information given by the applicant through inquiries. These are addressed to bankers, merchants, and cattlemen, as well as to the county recorder or similar official, who, for a small fee, gives an abstract of the mortgages upon the applicant's property filed or recorded in his office. Efforts are made by the companies to establish relations with banks in the territory they cover, upon whom they can depend for information.

The cattle loan company, however, attaches the greatest importance to inspections. Every company has at least one regular inspector, although some depend upon local men to make a part of their inspections. The local inspector is either a cattleman or a country banker. The latter is usually employed only to inspect loans which have not been taken through his bank. Considerable difference of opinion exists as to the value of the local inspector's work. Some companies state that they are not always as reliable as they might be. In most cases inspections are made before a loan is accepted, and at intervals of from three months to one year thereafter, varying with the company. Practically every company, however, makes it a practice to inspect each loan at least once a year (it will not run that length of time unless renewed at least once), and inspection may be made at any time in case question arises as to the safety of the loan.

The inspection includes several matters. First, a count is made of the cattle covered by the company's mortgage. Most companies require a tally by class, number, value, weight, and brands. The latter is especially important, for the brand is the only means the company has of identifying its security. Further detailed information is required as to feed, range, and water, the general condition and appearance of the ranch or farm, and other data designed to verify that furnished by the applicant. Suggestions are also requested as to changes in the handling of the security. If cattle are purchased by the borrower in the center at which the company is located, the final inspection is easily made, and takes place at the same time as the purchase. If they are purchased elsewhere, an inspector is sent to the borrower's farm, and when they are delivered he inspects them to be sure they are the same cattle as he inspected previously.

Conditions of the loan.—One of the most important and most common conditions which must be met before a cattle loan company will make a loan is that the applicant shall be borrowing only from it. Confusion would be endless if one company held a mortgage on 200 steers and another a mortgage on 100 steers belonging to the same owner. Each company could only identify its security if the brands were different, and this is, in fact, required before any company will loan to an applicant who has already borrowed with cattle as security. Furthermore, if an occasion arises which compels one company to furnish expense money, a dispute is bound to arise as to which company should furnish the money.

Large buyers of cattle paper in many instances will not take paper where the borrower is indebted to more than one company.

The company also often specifies that the borrower shall own his ranch. The reasons for this are that the rental of pasture may prove a burden for the cattleman, and that when the company lends to the landowner it may look to a first or second mortgage on the ranch as something to fall back on in case the loan becomes doubtful. Nevertheless, most companies will loan to renters under certain conditions, such as a long lease at a rental believed reasonable. In most cases, however, the deciding factor is the financial statement of the borrower and the size of his net worth, especially in connection with feeder loans. His proven honesty and ability as a "cowman" are also large factors.

Collateral.—In addition to the signature of a second party to the note, the loan is secured by a chattel mortgage upon the cattle, and often upon "all the right, title, and interest of the mortgagor in and to the pasturage, feed pens, feed troughs, and water privileges used in feeding said live stock." Two features of the mortgage may be mentioned. First, it covers "all of said property and all accretions and additions and increase thereof." The inclusion of any increase is vital in the case of loans on breeding cattle, for in such cases the increase is relied upon to provide an additional margin of safety, as well as to provide funds to repay the loan when it is sold. Second, "the first party [the borrower] shall have no right to encumber said property in any manner whatsoever without the written permission of the holder of the note or notes hereinafter mentioned." In addition to giving the lender a preferred claim upon the property, it protects him against removal or sale of the security by the borrower and pocketing of the proceeds by the latter without paying off the loan. This is accomplished through a provision that any attempt to dispose of the cattle without the permission of the lender renders the note or notes immediately due and payable.

Further, if the cattle loan company "shall deem itself insecure at any time" it may take possession of the cattle given as security, and occupy the premises "where said live stock, cattle, or chattels may be, . . . and may use and occupy said premises and pasturage, feed pens, feed troughs, and water privileges of said first party for the purpose of feeding or caring for said live stock, cattle, and chattels." This provision is necessary since unwise handling of cattle may result in a heavy loss in a short time. Finally, the mortgage gives the holder the right to call for more security, to move the cattle with or without the consent of the mortgagor into another location which is more favorable, or

even to take possession of the cattle and ship them to market if necessary to protect the mortgagee's interests. In case of sale each owner is in turn responsible to the holder of the properly recorded mortgage for the amount of the note thus secured.

Cooperation with cattle raisers' associations.—In order to guard against disposal of the cattle without their knowledge, practically all companies, except those operating in the northern ranges, are members of a cattle raisers' association. Many companies also urge their borrowers to become members. These associations follow the movement of certain brands to market and notify the company which has loaned on cattle bearing that brand. They also employ brand inspectors outside of the markets. In this way they serve to stop theft and fraud, as well as to assist in picking up "strays." One large cattle loan company obtains similar results by furnishing large commission companies, operating outside the immediate territory of the former, with a description of the brands on cattle which may possibly be sold through the markets of the commission companies.

Use of bill-of-sale drafts.—A further check upon the borrower is obtained by using a draft with bill of sale attached, in order to place the proceeds of the loan at the disposal of the borrower. The borrower buying cattle pays the seller with a draft on the cattle loan company. The reverse side of the draft contains a bill of sale, by means of which the seller certifies to the sale of the cattle to the borrower, and a blank assignment whereby the borrower assigns his interest in the cattle to the cattle loan company.

While the use of a bill-of-sale draft is customary, other methods are sometimes employed. The borrower may simply be credited with the amount of the loan in the bank with which the company is affiliated. On the other hand, when the local bank has handled the loan directly, it may advance the money for the purchase of cattle, and be repaid by the company after the note and mortgage have been drawn up. In case the cattle have been bought at one of the larger markets, the company may also make payment directly to the commission company which has made the purchase for the borrower.

Margins.—Margins required vary greatly, both between companies and between loans made by the same company. In general, the advance per head is determined by the financial responsibility of the borrower, the amount of feed he has on hand, the kind and grade of cattle, and the method of handling them. In the case of feeder loans, the company at times may require no margin whatsoever if the borrower

has plenty of feed and is financially responsible. In the case of these loans, moreover, the cattle which are taken as security increase in weight from 1½ to 2 pounds per day. Further, the value of meat is higher in the case of fat stock. Accordingly, as the loan continues there is gradually built up a margin, which at the end of the loan may well amount to 20 per cent. In some cases a margin ranging from 10 to 50 per cent, according to the particular case in question, is required at the time the advance is made. Minimum margins required on feeder loans by different companies range up to 30 per cent.

The margin on stocker loans has always been higher than that on feeder loans. In many cases it has also been higher on stocker loans, with breeding stock as security, than on loans made on young steers. This is due to the fact that the feeder loan has always been considered more liquid, because the stock is in better condition for market at all times and because the increase in the value of steers on full feed is more rapid than the increase in the value of young steers not yet ready for feeding or of breeding stock which must depend upon an increase in number for enlargement in value. Margins required on stocker loans, therefore, vary from 10 per cent to 60 per cent, the minimum requirements of the several companies being from 10 per cent to 40 per cent. As a result of the abrupt decrease in the value of cattle and the consequent necessity of carrying cattlemen, new loans are, in many instances, bearing a higher margin than before.

Maturities.—The period for which a cattle loan runs varies with the type of the loan. Feeder loans usually run from two to four months, with occasional loans up to six months, depending upon how nearly ready for market the cattle are. Stocker loans, however, from their very nature, run usually for six months. This is the maximum time for which cattle loan companies will make advances, but they may, at times, make loans with the understanding that they will be renewed, provided all conditions remain satisfactory. Renewals may occur from one to three or four times. The length of "steer loans" depends upon the period necessary to prepare the stock for market or for the feeder, but is usually less than for loans on breeding stock, which are paid off by the sale of the increase. The latter requires some time, ordinarily 18 months. The cattlemen may be carried from year to year, although the security may change, when the loan is renewed, through the sale of some cattle and the purchase of others.

Feeder loans are usually not renewed, for they are supposed to be made upon cattle al-

most ready for slaughter. During recent years, however, a considerable number of loans were renewed in the hope that prices of live stock might advance and thus enable the loan to be liquidated. Stocker loans, except where the stock is ready to be fed or marketed, usually require renewal. Many, however, will gradually be reduced, especially in the case of breeding loans. Renewals on stocker loans have also increased greatly since the fall in prices. The normal percentages of renewals of such companies, ranging from 50 per cent to 75 per cent, have increased to 75 per cent to 90 per cent.

Losses.—Under normal conditions, losses of cattle loan companies have been negligible. Only one company on which data were obtained had a loss of as much as 1 per cent per annum, and this was a comparatively new organization operating in a territory stricken by drought shortly after its entrance into the cattle-loan field. Other companies show annual losses of one-twenty-fifth to one-tenth of 1 per cent.

For about five years conditions have not been normal. In 1917-18 there was a severe drought in a large part of the cattle-raising region of the Southwest. The following winter (1918-19) was unusually severe in that locality. The Northwest experienced a bad drought during the summer of 1919, which was followed by a very cold and snowy winter. During 1920 and 1921 cattle prices fell to the level of 1913 and below.

The loss due to drought during this period was not so heavy, partly because the cattlemen themselves were in good financial condition and partly because measures could be taken to care for stock in drought-stricken regions. The blizzards increased the loss suffered by the cattlemen, although the loan companies did not suffer heavily. The loss occasioned by the break in prices, however, was too heavy to be borne by the stockmen. Many were ruined, and the cattle loan companies are now experiencing the heaviest losses in their history. In many cases they have had to carry borrowers in the hope of ultimate repayment, where collections could not be made under the prevailing conditions.

Companies operating in regions afflicted with droughts and blizzards put these first among normal causes of loss. Companies operating in regions where these phenomena are not frequent place incompetency first or else neglect by the owner of his stock. In no case does disease cause serious loss, as companies do not operate in tick-infested areas and have experienced no loss from the hoof-and-mouth disease. In general few losses can be

assigned to fraud on the part of the borrower. Some of the companies which sprang up during the period of prosperity encouraged speculation by slackening their requirements during the period when money was easy. In addition to failing to demand proper margins, they took less than the usual amount of care in selecting borrowers.

Handling of doubtful loans.—There are two methods of procedure in handling doubtful loans. In case of fraud the security is disposed of without consideration of the debtor. If the loan becomes doubtful, however, because of drought or a drop in prices, the company usually endeavors to protect its customers. This is done by directing to some extent the handling of the cattle and by frequent inspection of them. The frequency of inspection will depend upon the particular conditions in each case; it being stated they are made more often in the instance of drought than in the case of a drop in prices. In any event, the loan company attempts to secure additional protection through a mortgage on real estate, other stock, indorsements, or any form which may present itself. The period for which the debtor will be carried depends upon the conditions of each individual case.

Sale of paper.—Whether the buyers of the paper are chiefly country banks or other financial institutions depends largely upon the location of the cattle loan company. Thus, companies located in cities such as El Paso, Oklahoma City, or St. Joseph, sell from 90 per cent to 100 per cent of their paper to eastern banks, whereas a large portion of the paper of companies in cities such as Chicago, St. Louis, Sioux City, St. Paul, or Kansas City is sold locally. Except in the last-named city, nevertheless, the majority goes to country banks, as distinct from private investors, although the latter do take a small percentage, in one case estimated as high as 15 per cent. Recently some savings banks in Chicago have been buying cattle paper, and there are also a few instances of paper being placed with commercial paper houses, but it is not believed this practice has been followed to an appreciable extent.

Cattle loan companies often arrange for lines of credit from banks which gives them a potential outlet, at least, for their paper. The line will not under ordinary circumstances ever be in excess of five times the average balance

maintained by the cattle loan company. Among the advantages claimed for the affiliated as against the independent company is the fact that the bank can absorb its surplus of paper at times when the smaller banks, which purchase seasonally, are not in the market. The company usually makes it a practice to keep an amount of paper on hand equal to its combined capital and surplus.

Any given loan on cattle may be evidenced by one note, or by several, in denominations such as \$1,000, \$5,000, and \$10,000, which are placed with different purchasers. The loan company holds the mortgage as trustee in either event, and the buyer of the paper looks to it for payment, the majority of the companies indorsing all the paper they sell. The investor who takes a complete loan may receive a duplicate copy of the mortgage, while the purchaser of a small note receives a "certified trust receipt of chattel mortgage."

Rarely does the interest charge of cattle loan companies go below 6 per cent and in few instances below 7 per cent, while 8 per cent is not uncommon. Accordingly, the profits of the company are decided to a great extent by the money rate in the chief financial centers where the larger proportion of the paper is sold. That is to say, as the rates in these centers advance, the margin of profit for the cattle loan company decreases. Under normal conditions the margin averages about 2 per cent gross and the expenses range from 1 per cent to 1½ per cent.

Conclusion.—It may be worth while here to indicate the place of the cattle loan company in the present financial organization of the country. As an agency for testing credit and for supplying funds, the cattle loan company performs a function that may be distinguished from other organizations engaged in live-stock financing. Through its facilities for local supervision of loans it keeps a close acquaintance with the condition of the borrower and of the security. Its loans are less specialized in character than those of the live-stock commission houses, and because of freedom from legal restrictions may be made in larger amounts to a single borrower than may the loans of a country bank. Finally, the cattle loan company by resale of the paper it buys distributes the loans among many lenders and draws additional funds into the live-stock industry.

BUSINESS AND FINANCIAL CONDITIONS ABROAD.

UNITED KINGDOM.

BANKING AND FINANCE.

Government finance.—The past few months have witnessed a continuance of the reduction of the Government floating debt which began in the middle of 1919. That part which consisted of advances from the Bank of England has been practically eliminated, while, since early in 1921, the outstanding amount of treasury bills has been drastically curtailed. This has been effected in two ways. Firstly, there has been an absolute reduction in the Government's requirements. Secondly, treasury bonds of comparatively short maturity have been issued to fill the gap which otherwise would have necessitated an enlargement of the floating debt. The net result has been a shrinkage in treasury bills outstanding, between December 31, 1921, and August 26, 1922, from £1,060,000,000 to £715,000,000, while outstanding treasury bonds of varying maturity totaled on August 26, 1922, £504,000,000, compared with £297,000,000 on December 31, 1921.

The result of this curtailment of treasury bill issues, aided by the trade depression, has been a very marked reduction of the rates at which the bills have been discounted. The average on September 2, 1921, was £4 7s. 1.53d. per cent. The rate fell continuously, with only short interruptions, to £1 13s. 6.41d.—the lowest point reached—on July 28, since when the trend has been upward, the rate on September 1 being £2 11s. 8.33d. per cent. The saving which this cheapness of money represents to the Government is very considerable. The Statist estimates that the expenditure on war-debt charges provided for during the current fiscal year will be undercut, at present rates, by some £47,000,000. Allowing, however, for the replacement of bills by bonds carrying higher interest charges, the net saving would total approximately £37,000,000, or a cut of 11.6 per cent on the total war-debt charges.

Money rates.—Corresponding with this decline in the rate on treasury bills, the present year has witnessed four successive reductions in the bank rate, each of $\frac{1}{2}$ per cent. These were as follows: February 16, lowered to $4\frac{1}{2}$ per cent; April 13, lowered to 4 per cent; June 15, lowered to $3\frac{1}{2}$ per cent; July 13, lowered to 3 per cent. The reductions from the 7 per cent rate ruling until April 27, 1921, represent a return to the level of the six months immediately preceding the outbreak of war. The last three of these reductions were made independently of any movements in the New York Federal Reserve Bank rediscount rate, which at the present moment stands 1 per cent

higher than the Bank of England's official rate of 3 per cent.

The low rate on treasury bills made the margin between it and deposit rates, which move in general agreement with the bank rate, much too narrow prior to the July reduction. Deposit rates being fixed, since the war, at 2 per cent below the bank rate, the present 1 per cent deposit rate allows a profitable margin to the banks. A similar improvement has resulted from the reduction of the rates of the discount houses on deposits at call and at notice from $1\frac{1}{2}$ per cent and $1\frac{3}{4}$ per cent, respectively, by one-half per cent in each case. The margin of profit allowed thereby to the discount houses is indicated in the following table of discount rates ruling on September 1, 1922:

	60 days.	3 months.	6 months.
Bank bills.....	2½-2½½	2½-2½½	2½-2½
Trade bills.....	3-3½	3-3½	3½-3½

There has been some criticism of the joint stock banks on the ground of their retention of the 2 per cent margin between bank and deposit rates. There was some hope that, with the reduction of the former to 3 per cent, they would refrain from a corresponding reduction of their deposit rate, thus reverting to the pre-war difference of $1\frac{1}{2}$ per cent. The banks, however, point out that since that time expenses have risen enormously in all directions, so that the old margin is not sufficient to maintain their former rates of net earnings.

Condition of joint-stock banks.—The half-yearly balance sheets of the joint-stock banks served to emphasize those tendencies which had been apparent in the monthly statements of condition, and which have continued to manifest themselves to date. Following are the composite items of the five leading banks (excluding the Bank of England) compared with their amounts six months and a year ago:

[Millions of pounds sterling.]

	June 30, 1922.	Change from Dec. 31, 1921.	Change from June 30, 1921.
Paid-up capital.....	59.2	.....	.....
Reserves.....	47.1	.....	+0.2
Acceptances and indorsements.....	45.5	-8.3	-1.9
Deposits (including undivided profits).....	1,600.2	-49.1	-19.9
Total liabilities.....	1,752.0	-57.4	-21.6
Cash, notes, balances at bank, and checks in course of collection.....	242.5	-28.5	-11.1
Money at call and short notice.....	100.3	+20.6	+20.4
Investments.....	377.0	+67.3	+73.8
Discounts.....	308.1	-86.8	-23.8
Loans and advances.....	655.9	-22.4	-79.8
Premises and sundries (including cover for acceptances).....	68.2	-7.6	-1.1
Total assets.....	1,752.0	-57.4	-21.6
Ratio of cash, etc., to deposits (per cent).....	15.1	-1.3	-0.5

The declines in acceptances, deposits, and loans and advances are, of course, the statistical expression of the trade slump, revealing the fact that the bottom was far from reached at the middle of last year, as was hoped at the time. The fall in discounts is not wholly attributable to this same factor. While it is true that trade bills have been scarcer, it is also true that treasury bills have not been so plentiful during the past few months. The issue of treasury bonds has served to accentuate that reapportionment of assets from discounts to investments which the trade depression itself would normally have brought about. The decline in cash, etc., is in the main offset by the increase in money at call and short notice. This, of course, results in a reduction of the banks' ratio, which, however, remains at its customary pre-war level of 15 per cent.

Bank profits for the half year.—In view of these circumstances of smaller turnover and lower rates, it is on the surface surprising that the banks in general have maintained their post-war level of dividends.¹ This is due in part to the conservative policy followed during the war of sternly refusing to raise dividends to what might be taken by shareholders as a permanently higher level under circumstances which might—and did—prove to be only temporary. But, in addition, the fall in interest rates has, as usual, brought with it an appreciation in the values of fixed interest-bearing securities. During the six months January to June, 1922, for instance, consols rose from 57–57½ by 6½, 4 per cent funding loan by 11½ from 87½–87¾, and 5 per cent national war bonds (1927) from 105¼–106 to 110¼–110½. It is true, of course, that these are mere paper gains until the security holdings are realized. It is true also that trade revival will tend to obliterate these increments. Nevertheless, the unlikelihood of gilt-edged securities ever falling again to such low levels as were arrived at during the recent trade boom make it certain that the banks, through their determined policy of writing down their investments during that time, are in a stronger position with respect to this item than would appear from the published statements of condition.

The capital market.—As might be expected, the rise in security values has been accompanied by a continuance of the heavy issues of new capital which became particularly marked in the last quarter of 1921. The total of new issues for the first six months of the present year, excluding treasury bills and pure conversion operations, reached £448,774,200, a figure surpassed only in the heavy war-loan years of 1917 and 1918. Some of the more important classes of investments, as defined by

the London Economist, are shown below, with the amounts of new capital allocated to each, in the corresponding periods of 1921 and 1922:

[Millions of pounds sterling.]

	January–June, 1921.	January–June, 1922.
Total.....	128.6	448.
British Government loans.....	20.1	304.3
Colonial Government loans.....	27.6	41.6
Foreign Government loans.....	5.5	13.1
British municipal and county loans.....	16.6	5.6
British railways.....		2.9
Foreign railways.....		14.7
Exploration, financial, and investment trusts.....	1.8	3.9
Manufacturing.....	19.2	5.7
Stores and trading.....	3.5	0.2
Oil.....	14.6	16.5
Iron, coal, steel, and engineering.....	3.3	5.4
Electric light and power.....	2.0	1.7
Docks, harbors, and shipping.....	2.2	12.1
Banks and insurance.....	2.1	2.9

It will be seen that the British Government has taken most advantage of the cheapness of money by seizing the opportunity to replace a large part of the floating debt by longer dated securities. Railways have come into the field again, making up for the diminution in new industrial issues.

The direction in which these investments have been flowing shows a gradual return to pre-war conditions. Apart from the British Government loans, foreign countries and British possessions in the past half-year each absorbed about £50,000,000, while about £44,000,000 were destined for home use. This shows a progressive return since the war to the distribution of the first half years of 1911, 1912, and 1913, when foreign and colonial issues were respectively six, three and a half, and five times the home issues.

Foreign exchange.—During the first six months of the present year sterling remained practically stationary in foreign exchange value, judged by the Statist index, which is weighted according to the volume of trade with the countries concerned. July and August, however, witnessed an appreciable rise. This, together with the continuous rise throughout the latter half of 1921, marks the past year with a notable approach to parity. In the 12 months, August, 1921, to August, 1922, sterling rose in terms of the dollar from 75.1 per cent to 91.7 per cent of parity. On the other hand, a development indicating the lack of a similar improvement in the French financial situation was the continued appreciation of the pound in terms of French francs, from 186.7 to 222.3 per cent of par. The course of the lira, too, paralleled that of the franc, the pound rising from 336.9 per cent to 392.1 per cent of par. There follow some of the changes in the value of the pound in terms of neutral currencies, which, taking all the circumstances

¹ See April BULLETIN, p. 416.

into consideration, are more indicative of the approach of the pound to parity:

[Per cent of par.]

Currency of—	August, 1921.	August, 1922.
Netherlands.....	97.4	94.9
Sweden.....	94.9	93.3
Spain.....	112.0	113.9
Switzerland.....	86.0	92.9

FRANCE.

THE FINANCIAL SITUATION.

During recent weeks the franc as measured in dollars has remained below the levels of last spring, but somewhat higher than the figures of a year ago. Measured in terms of internal purchasing power, the franc is notably lower than earlier in the year, and at almost the exact figure of one year ago. The course of dollar exchange and of the Federal Reserve Board's index of French wholesale prices is shown in the following table:

Month.	1921		1922	
	Exchange rate.	Price index.	Exchange rate.	Price index.
January.....	\$0.0643	386	\$0.0816	286
February.....	.0717	363	.0873	282
March.....	.0703	345	.0900	287
April.....	.0724	333	.0922	298
May.....	.0836	322	.09119	302
June.....	.0807	311	.0876	303
July.....	.0781	311	.082372	306
August.....	.0775	302	.079567	297
September.....	.0728	300	.076592	.....
October.....	.0725	294	.....	.....
November.....	.0719	292	.....	.....
December.....	.0784	286	.....	.....

The rise in the price level and the decline in exchange rates has been accompanied by an increase in the volume of circulation and the amount of advances by the Bank of France to the Government. It was planned to repay these advances at the rate of 2,000,000,000 francs a year. They were actually reduced by about that figure in the first three months, standing at 24,150,000,000 francs on January 5, 1922, and at 22,100,000,000 francs on April 27, in which month the exchange on New York reached its high point of the year. Circulation was lowest somewhat earlier, touching its lowest point since August 28, 1919, on March 23, when it was 35,281,790,430 francs. The circulation, volume of advances to the State, and the index number have climbed irregularly, while the rate of exchange has moved in the opposite direction. This condition, while doubtless affected by the unfavorable balance of foreign trade, was not primarily caused by it, as France is not a country heavily dependent on foreign commerce. It is rather in the internal financial situation that

these causes must be sought. By the third week in September advances to the State were virtually where they had been at the beginning of the year. Both circulation and advances are slightly lower than a year ago, but on October 5 the circulation had reached the highest point in nearly a year.

As was stated above, the August level of wholesale commodity prices was almost at last year's figure, while the franc exchange in New York averaged slightly higher. This serves to illustrate the close relationship between the movement of commodity prices and foreign exchange, and to show that interpretations of exchange movements in terms merely of current political news are likely to be misleading.

However much the decline in the exchange value of the franc may have been caused by the rise in commodity prices, the decline of this exchange from the high figure of last spring seems to be having more or less influence on French business sentiment. The end of the summer saw a strengthening of securities not bearing a fixed rate of return. Some observers credit the advance in security and commodity markets to the great volume of capital seeking investment. According to others this was due to the expectation that, in case further inflation should cause a real decline of the franc, accompanied by a rise in the price levels, such securities would adjust themselves to the new conditions. The index numbers on page 1215 show important advances in some groups of commodities.

ANALYSIS OF FRENCH FOREIGN TRADE.

The foreign commerce of France, according to the official French figures, shows that the volume of trade for the first six months of 1922 is considerably larger than for the corresponding period of 1921, with the value slightly less. The following table shows the volume of trade:

SPECIAL COMMERCE OF FRANCE.¹

[In metric tons.]

Groups of merchandise.	First six months of—		
	1922	1921	1913
IMPORTS.			
Food products.....	2,255,025	1,633,093	2,620,648
Materials necessary for industry..	21,361,159	15,027,538	18,405,642
Manufactures.....	828,492	839,771	819,240
Total.....	24,444,676	17,500,402	21,845,530
EXPORTS.			
Food products.....	415,130	703,161	590,551
Materials necessary for industry..	8,307,091	6,170,554	8,345,375
Manufactures.....	1,042,253	1,030,774	1,096,566
Parcels post.....	12,789	11,938	17,994
Total.....	9,777,263	7,916,427	10,050,486

¹ The "special commerce" does not include reexport figures.

The exports are practically at the pre-war level, the chief decline being in food products. In comparison with 1921, the improvement is large enough to give striking evidence of the recovery from the depression following the war. The increase in imports is largely accounted for by the item of coal, imports of which were 3,178,842 metric tons greater than in the first six months of 1921. A very large part of the coal comes from Germany and the Saar on reparations account.

The German deliveries of coal and coal products, however, were insufficient during the first half of 1922 to meet the needs of French industry, for the imports from Belgium exceed those from the Saar and the importations of coal from England exceed those from Germany by about 50 per cent. Coal imported from Germany proper amounted to 4,283,366 metric tons, and from England to 6,071,327 metric tons, about equal to the deliveries from Germany and the Saar together. The total of coal imported into France for these six months was 14,523,042 metric tons, or about one-half of the total imports by weight. This is slightly greater than the proportion in 1913. The question of coal, as was brought out in the article in the September BULLETIN, is of vital importance to French industry and is one of the most important factors in the reparations problem.

France is also an exporter of coal, though not on a very great scale. During the first half of the current year, total exports of domestic coal, coke, and briquettes were 880,977 metric tons, the exports of coal showing a decline from the corresponding period of 1921. Out of a total of 1,541,035 metric tons of coal exported, 621,136 metric tons were of domestic origin. It may be noted also that coal for ships' bunkers accounts for 913,679 metric tons of the total. Coke was exported to the amount of 229,891 metric tons, of which 211,542 metric tons were of domestic origin. There were also small exports of briquettes. The documents do not show that any appreciable amount of the German deliveries was reexported, the figure being 425 metric tons of coal from the Saar and 3,866 metric tons of briquettes from Germany, no German coke being reexported. Of English coal, 956,241 metric tons were brought in for reexport. The largest single item of export is "ore of all sorts," which shows an increase of 1,688,764 metric tons over last year. Total exports of ore, however, did not quite reach the 1913 level.

A study of the value of France's foreign trade is less satisfactory, since exports are computed from a table of arbitrary values and imports on declared values. The schedule of

export values was changed in June, 1922, when they were adjusted to 1921 prices, instead of to 1919 prices which had hitherto been used. On account of this method of valuation, exports in the months preceding June of this year, as given currently, appeared greater than they actually were; whereas the totals given below for six months of 1922 come much closer to being an accurate picture.

SPECIAL COMMERCE OF FRANCE.

[In thousands of francs.]

Groups of merchandise.	First six months of --		
	1922	1921	1913
IMPORTS.			
Food products.....	2,623,661	2,438,531	842,851
Materials necessary for industry.....	6,091,884	5,401,131	2,571,179
Manufactures.....	1,956,047	2,855,355	826,337
Total.....	10,671,592	10,695,017	4,240,367
EXPORTS.			
Food products.....	846,635	1,134,847	399,324
Materials necessary for industry.....	1,966,734	2,097,005	903,276
Manufactures.....	5,913,459	6,240,191	1,782,836
Parcels post.....	64,832	596,543	286,810
Total.....	9,368,660	10,068,586	3,372,246

The great discrepancy between the figures of 1922 and those of 1913 is, of course, due to the change in the value of the franc. An approximate comparison may be reached by multiplying the figures of 1913 by 345, the Statistique Générale average index number of prices for the year 1921. Another method of comparison is to reduce the francs to dollars and allow for the decline in the purchasing power of the dollar. The results can not be termed precise, but they seem to show that the French foreign commerce has not yet reached its pre-war level.

The visible balance of trade ran against France in 1913. The excess of imports was paid for partly by the expenditures of tourists and partly by the income from foreign investments. The exact amounts of these two items at present is conjectural; the latter, however, is considerably smaller than in 1913, as the Russian investments, which have been discussed in this BULLETIN, are at present paying nothing, while many of the others are still unproductive or have only recently resumed payments. A part, possibly a large fraction, of the foreign securities was disposed of after the outbreak of the war. The income from these two sources, nevertheless, should go far toward meeting the current unfavorable balance, which for the first six months of 1922 amounted to 1,302,932,000 francs. Allowing for the different scale of valuations, this is not

very far from the balance for the corresponding period of last year.

The four largest customers of France are the United States, England, Belgium, and Germany, as shown in the following table giving French imports and exports during the first six months of 1922:

[In thousands of francs.]

Country.	Imports.	Exports.
United States.....	1,692,142	1,067,795
England.....	1,608,009	1,739,145
Belgium.....	750,516	1,700,113
Germany (including the Saar).....	940,041	940,058

The excess of imports from the United States for this period is 624,347,000 francs for the first semester of the current year, compared with 1,348,140,000 francs for the same period last year. It is significant that this remarkable change has been effected almost entirely by a reduction of purchases in the United States by 611,135,000 francs, the value of the exports to this country showing only a slight increase. The largest single item of French imports from America in the first six months of 1921 was cereals, the total being 4,472,294 metric quintals, valued at 456,128,000 francs. This had dropped in 1922 to only 815,002 metric quintals, valued at 38,950,000 francs. In the first half of 1921 the United States supplied about three-fifths of the cereals brought into France, while this year the proportion has dropped to about one-seventh.

At the average rate of exchange for the semester (\$0.0883) the unfavorable trade balance amounted to about \$55,000,000. But for the purpose of obtaining a more complete picture of the financial relations between the two countries, there must be added to this figure interest payments on French loans held in the United States. The most important issues are given below:¹

Designation.	Amount outstanding.
French Republic 8's.....	\$93,660,500
French Republic 7's.....	93,789,300
Three Cities 6's.....	40,586,000
Remainder of Anglo-French loan.....	13,850
Soissons 6's.....	6,000,000
Paris-Lyon-Mediterranée R. R. 6's.....	40,000,000

Besides those given above there are bonds of the Midi Railroad, issued to an amount of 50,000,000 francs, and the internal French 5½'s of 1917, of which \$2,110,000 were disposed of in New York in April, 1919, and small amounts of other issues. As the interest on these bonds is payable in paper francs, such

¹ The figures for the two French Republic loans and for the loans of Marseilles, Bordeaux, and Lyons are from the Bulletin de Statistique et Législation Comparée of May, the figures being as of March 31, 1922.

payments are more easily met than those of dollar denominations. The \$10,000,000 issue of Framerican Industrial Development Corporation bonds are not included, because, although they are guaranteed by a French company, the corporation itself is American, and its interest payments would not necessarily involve remittances from France.

The total annual interest due on these outstanding securities amounts to over \$20,000,000, payable in gold or its equivalent in American currency or exchange. As the Seine, Soissons, and Paris-Lyon-Mediterranée issues were floated after the first of the year, six months' interest had not accrued on them during the semester.

There are several ways by which France may meet these interest charges and the trade balance. They include the return from American securities held in France, the expenditures of tourists, the shipment of gold, and the floating of loans.

There are no exact figures of the amount of American securities still in France. The pre-war estimates, however credible they may be, place the amount at about \$500,000,000. Probably a part of these have been sold abroad. Some may have been mobilized and sold during the war by the French Government, but not many, since the plan, which succeeded well in England, produced indifferent results in France. M. Descamps, head of the securities department of the Bank of France, estimated the total sales of foreign securities under this mobilization scheme at about 600,000,000 francs up to November, 1920; of course not all these were American securities.

The item of tourist expenditures can only be guessed at. In any conjectures, it must be remembered that the more important purchases of travelers must be declared on arrival in the United States, and so may figure in the American statistics of imports from France, though not in French figures of exports from that country.

A large part of this balance has been settled in the third way, namely, the shipment of gold. The following table shows the movement of gold from France to the United States in recent months:

Month.	1921	1922
January.....	\$4,695,491	\$1,874,799
February.....	13,583,374	1,425,881
March.....	26,956,333	6,649,971
April.....	10,895,170	1,161,039
May.....	9,725,929	543,754
June.....	7,482,146	667,019
July.....	27,973,327	
August.....	34,999,294	
September.....	17,784,302	
October.....	18,596,507	
November.....	15,051,331	
December.....	3,730,062	
Total.....	191,473,266	

The total for the first six months of 1922 is \$12,322,463, compared with \$73,338,443 for the similar period of last year. The sources of this gold have not been made public, as the monthly "Documents Statistiques sur le Commerce de la France" do not include shipments for the account of the French Government nor of the Bank of France. During recent months the gold reserves of the Bank of France have increased slightly, at the end of June being 5,528,858,000 francs, as compared with 5,524,316,000 francs at the first of the year and 5,500,647,000 francs in the early part of 1921. The gold shipped to America has not come from the gold reserves of the Bank of France, which are now larger than the reserve of 4,104,000,000 francs at the outbreak of the war.

The fourth method of meeting the adverse trade balance—the floating of loans—does not lend itself to analysis, but it is evident that the French loans¹ floated in New York during the first semester of 1922 offered facilities for financing the current excess of exports to France.

The problem of meeting this excess has not been easy for France since the war. The American figures show the adverse balance to have been \$769,540,000 in 1919, \$510,539,000 in 1920, and \$83,056,000 in 1921; while in only one month out of these 36 was the balance in favor of France. For the first six months of this year the figure was \$50,311,000.² Since the volume of French securities that can be absorbed in the American market is limited, and the supplies of gold available for export from France are greatly reduced, it appears that future unfavorable balances must be met largely out of tourists' expenditures and from the return on the American securities still held by France, both of which items are conjectural. The conclusion seems warranted that the volume of French trade with America may be expected to be more closely balanced than in the past.

FRENCH INVESTMENTS IN TURKEY.

In the course of the analysis of the French trade situation given above, reference was made to the importance of French investments abroad in settling pre-war trade balances. In the June and July issues of the BULLETIN there were discussions of the French investments in Russia. More French capital had gone to Russia than to any other country, but the exports of capital to Austria-Hungary and Turkey were also enormous.

In considering the amount of French investments in Turkey it is necessary to use pre-war

estimates in most instances, the figures representing, nominally, gold francs. In some cases, of course, property of a high pre-war value may have been damaged, or even ruined, by warfare or neglect. One general reservation, furthermore, must apply to all investments represented by listed securities internationally distributed. It is impossible to tell at any given time exactly where the controlling interest may be held, as it may be passed readily from the nationals of one country to those of another. This will apply, notably, to such securities as bank stocks, like the Imperial Ottoman Bank and the Banque de Salonique. There is no doubt that French interests enormously exceed those of any other power in Turkey, probably totaling above 3,500,000,000 francs.³

The most important financial interests of France in Turkey consisted of credit advanced to the Government and of capital invested in private enterprises, usually operating under French names.

Ottoman public debt.—The French people hold about 2,500,000,000 francs, or 60 per cent, England 14 per cent, and Germany 21 per cent of the Turkish public debt, the holdings of the remainder being scattered. The administration of the public debt is in the hands of a board, presided over by a Frenchman or an Englishman in alternate years. The Director General of the Debt has usually been French, as are a large number of officials, and French is the language of official reports. The administration of this debt involves the collection and administration of those revenues which have been pledged to secure the debt. These include the revenues on salt, alcohol, and fisheries, the stamp tax, and the tithes on silk. The sources of these revenues are widely scattered. To sum up, a large part of the Turkish revenues are mortgaged to the debt, and these are largely under French control.

Turkish Government loans.—The development of this situation is a long and involved story, and only the outlines can be sketched here. During the period between the Crimean War and the Russian War (1854-75), out of 14 major financial operations, 10 were carried on through French interests, the others being through English or Austrian financiers. The disorders, political and economic, between 1876 and 1881 led to the well-known Decree of Mouharrem (December 20, 1881), which created the Ottoman public debt, as described above.

Between 1881 and 1903 Turkish financiers were occupied in funding the floating debt.

¹ Described on p. 420 of the April BULLETIN.

² It is impossible to reconcile this figure exactly with the French statistics.

³ As pre-war figures have been used in most instances, it is important to remember that some of these investments lie in territory no longer under Turkish rule, notably in Syria.

Six loans were required for this operation, secured by pledging revenues. These loans were almost entirely absorbed by France, as English financial interest in the Near East was largely diverted to Egypt. Between 1903 and 1914 the competition of German capital became more apparent, especially in connection with the Bagdad Railway. During this period twelve loans were floated, of which six were taken in France, four in Germany, one in England, and the other divided among these three countries. Payments on these loans were suspended during the war, but the Ottoman Government is liquidating in installments the accumulated interest.

Investments in private enterprises.—The close cooperation between French capital and the Turkish Government before the war facilitated investments in private enterprises; and it is estimated that these amounted to over 1,000,000,000 gold francs. The proportion of French to other foreign investments has been stated to be about as follows: 53 per cent French, 33 per cent German, and 14 per cent British, or roughly one-half has been French capital. These estimates are based on pre-war figures. Since the war, Italian capital has become a very important factor in Turkey. The investments have gone into banks, lighthouses, railways, power plants, telephones, mines, tramways, and port developments. One of the most important is the tobacco monopoly. These activities for the most part enjoy concessionary privileges.

French banking interests.—French banking interests are very important, and among these institutions the greatest is the Imperial Ottoman Bank. It was founded in 1863 by French and British capital, originally about equally divided. Of the directors, 10 must be residents of Great Britain and 10 of France. The present director general is French, but, as in the public debt, the office is alternately held by French and English representatives. The importance of this bank in the financial life of Turkey is shown by the fact that it has the exclusive right to issue Government bank notes, to act as paymaster general of the Empire, and as internal and external financial agent of the Government. The bank has about 80 agencies in Turkey and other parts of the Near East, and one each in Paris, Marseilles, London, and Manchester. The branches in Syria have lately been turned over to the recently formed Banque de Syrie.

The following statement of the Imperial Ottoman Bank as of December 31, 1921, was

presented at the time of the annual meeting in London, July 26, 1922:

Assets.	Pounds sterling.	Liabilities.	Pounds sterling.
Cash.....	6,167,517	Capital paid in.....	5,000,000
Loans, including loans on bourse transactions.....	2,169,418	Bank notes in circulation.....	1,398,092
Accounts receivable (of which £8,155,181 7s. 4 d. are in British and French treasury bills)	9,652,013	Accounts payable.....	612,680
Securities owned (of which £1,203,950 11s. 3d. are in British and French Government securities).....	2,612,297	Open accounts.....	17,345,397
Open accounts.....	3,359,695	Time deposits.....	771,557
Secured loans.....	2,211,815	Legal reserve.....	1,250,000
Bank property.....	476,524	Profit and loss.....	208,553
Total.....	26,646,280	Total.....	26,646,280

Another large bank, nominally Turkish, is the Banque de Salonique. This was founded in 1888 with French, Austrian, Hungarian, and other capital. The Crédit Lyonnais has numerous branches in Turkey; and French capital is placed to a greater or less extent in many other banking institutions. Before the war there were a number of powerful German and Austrian banks, among them the Deutsche Bank, the Deutsche Orient Bank, and the Wiener-Bank-Verein. In the present absence of competition from these sources, the relative position of the French banks has been greatly strengthened.

Other interests.—Among the other French interests in Turkey the most important are the railroads. Before the war French interests were operating 2,077 kilometers of railway, Germany 2,565, and England 610. French capital was also heavily interested in the Bagdad line through individual investments. Other French railroads had been projected in Turkey, and concessions had been obtained for about 2,000 kilometers during 1913-14. In a summary of this kind, it is of course impossible to catalogue all of the enterprises to which French capital has been contributed. But they include such diverse interests as the coal mines of Heraclea, harbor developments in Constantinople and Smyrna, and public utilities in Constantinople. There is a great but uncomputed investment in schools and hospitals. The annual enrollment of the French schools in Turkey has been placed as high as 100,000. Trade between Turkey and France is fairly active, as French exports to Turkey in 1920 were approximately 20,000,000 francs.

ITALY.

BUDGET DEFICIT FOR THE FISCAL YEAR 1921-22.

The budget deficit for the fiscal year closed June 30 was officially announced at 6,581,000,000 lire, as compared with a deficit of nearly 11,000,000,000 lire the year before and 14,000,000,000 lire two years ago. The expenditures for the year were 26,306,000,000 lire and the receipts 19,725,000,000 lire. In this latter figure are included about 900,000,000 lire due from taxation on personal property and wealth, payment of which was deferred until August of this year by special legislation.

No one cause is responsible for this deficit. In fact, revenue from taxation was higher than in 1920-21, and rather higher than in 1913-14, after allowing for the difference in the level of prices.

[In millions of lire.]

Fiscal year—	Tax revenue.	Relative.
1913-14.....	2,070	100
1920-21.....	11,192	541
1921-22.....	12,857	621

This table shows an increase in tax revenue of 1,665,000,000 lire over last year. In comparison with the 1913-14 figures, however, the conclusion is not warranted that taxes are some six times as heavy as in the pre-war year. The average of wholesale commodity prices for the 12 months of that fiscal year was 558, using 1913 prices as 100, so that taxes would appear to have increased but slightly, measured by internal purchasing power. When it is recalled, however, that this increase in revenue has been obtained from a country weakened by war and laboring through a very serious industrial and financial depression, it becomes far more considerable.

The largest single items of public expenditure are the charge of the debt; and until the budget can be balanced it is evident that the annual charge for the debt is likely to increase rather than to diminish, as current deficits give rise to new debts. The principal items of expense during the fiscal year 1921-22 may be summarized as follows:

	Lire.
Interest charges.....	5,300,000,000
Pensions and assistance to war invalids....	1,900,000,000
War claims and expenses of new Provinces.	2,441,000,000
Railway deficit.....	960,000,000
Deficit of food administration.....	600,000,000
Military expenses:	
War.....	2,293,000,000
Marine (including 1,500,000,000 lire for merchant marine).....	2,121,000,000

The other items of expense are individually relatively small and are widely scattered. A very large part of them arise from appropriations for Government personnel, such as the "high cost of living compensation" of 176,000,000 lire to Government employees.

While the estimated deficit of 6,581,000,000 lire seems very unfavorable, there are a number of encouraging aspects to the situation. Large as the deficit is, it is only about half of that for 1919-1920. Further, some of the items of expense are not likely to be permanent. Expenses resulting directly from the war, such as war claims and the food administration deficit, are temporary charges on the budget. There is an expressed determination to end the heavy deficit incurred by the State railways. Military expenses are still large, but the budget of 1922-23 proposes a reduction to 2,600,000,000 lire on this account, compared with 669,000,000 lire, the cost of the military establishment in the fiscal year 1913-14. If military expenditures can be held down to that figure, it will represent a very marked reduction from pre-war costs, taking into consideration the reduced purchasing power of the lira. There are, therefore, good reasons to hope that the budget of the current year will come closer to a balance than that of the past year.

THE PUBLIC DEBT.

A complete statement of the public debt at the end of the 1921-22 fiscal year follows:

SUMMARY OF ITALIAN DEBT.

[In millions of lire.]

	Fiscal year ending June 30—	
	1920-21	1921-22
Funded and foreign debt ¹	75,816	² 78,216
Floating debt:		
Ordinary treasury bills.....	18,836	23,862
Government notes and warrants.....	2,544	2,545
Bank-note circulation for the account of State.	8,722	8,094
Other obligations.....	622	³ 487
	106,541	113,204

¹ Of which 13,358,000,000 lire is pre-war debt.

² The foreign debt is carried at 21,614,000,000 lire for June 30, 1922.

³ As of May 31, 1922.

It should be borne in mind that the foreign debt is carried at par of exchange, so that actually the present total debt in terms of paper lire is far in excess of that shown above. The summary shows an increase of 6,663,000,000 lire in the fiscal year 1921-22 over the figure at the close of the preceding fiscal year. The principal change came in the volume of the ordinary (short-term) treasury bills, which increased

5,025,000,000 lire. These instruments reached their maximum on April 15, 1922, with a circulation of 26,837,000,000 lire. This figure has been reduced partly by economies and partly by encouraging the sale of seven-year treasury bills. The totals of the five and seven year treasury bills rose from 5,604,000,000 lire to 7,232,000,000 lire in the year. Other items show only small changes.

BANKING AND INVESTMENT.

According to recent reports, the plan of liquidation of the Banca di Sconto, which was described in detail on page 686 of the June BULLETIN, has not met with the expected success. As was evident from the terms of the plan, its success depended upon the willingness of the creditors of the Banca di Sconto to deposit the proceeds of the liquidation of their claims in the successor institution, the Banca Nazionale di Credito. It now transpires that practically all of these depositors preferred to withdraw any credits to which they were entitled. It is reported that the Government is lending assistance to the Banca Nazionale and that other liquidation projects are under consideration.

The general investment situation in Italy showed the same unfavorable features in July as in June, although less sharply. Net reductions in capital on account of liquidation or other causes again exceeded net investments, the figures being 299,533,363 lire and 207,520,700 lire, respectively, as compared with 656,131,700 lire and 477,173,200 lire in June.

GERMANY.

THE DEPRECIATION OF THE MARK.

The recent drop in the value of the mark, which started toward the end of July, continued throughout August. During this period the dollar rose from an average of 400 marks in July to an average of 1,500 marks in August, at which point the rate was more or less maintained during September. The breakdown of the mark came so rapidly that it is difficult to find its actual causes. German sources are inclined to ascribe the present collapse of the mark to reparations, while officials of the Reparations Commission point out that reparations payments "are only one, and not the most essential, cause of the present depreciation of the mark."

The general explanation that the steady increase in the amount of bank notes outstanding is the main cause of the depreciation of the mark holds only to a limited extent. For, from April 30, 1921, to April 30, 1922, the amount of bank notes outstanding increased

by about 70 billion paper marks, or about 98 per cent, while during the same time the value of the mark as expressed in dollars was depreciating very much more rapidly.

The principal immediate causes of the present decline of the value of the mark are chiefly political—the outcome of the recent London and Berlin conferences and the murder of Dr. Rathenau, Minister of Foreign Affairs. The murder of the Minister of Foreign Affairs indicated the unrest prevailing in Germany and the instability of the present political order. It weakened Germany's credit standing abroad and exercised a depressing influence on mark exchange. The unsatisfactory results of the London conference, which tried to settle the reparations question, were also not without effect on the mark. Finally, the Berlin conference between representatives of the Reparations Commission and the German Government and the uncertainty of its outcome tended further to depress the value of the mark.

The above-named events are mainly of a political character and serve only to explain the immediate actions of holders of German currency. Of more fundamental importance are the economic factors which underlie the internal as well as the external value of the mark. Prominent among these factors are the budget, reparations, the balance of trade, and the flight of capital from Germany.

(a) *The budget.*—The unbalanced budget of the German Empire shows for the fiscal year 1922-23 a deficit of 208 billion paper marks. This deficit will actually be much larger, due to the recent depreciation of the mark, thus increasing continuously the amount of treasury notes outstanding and consequently the floating debt of the country. Since the German public is unable to absorb the treasury bills, they must be absorbed by the Reichsbank, which ultimately results in an increase in the amount of paper notes outstanding. The close relation between floating debt and the currency notes outstanding can be seen from the following table:

FLOATING DEBT AND AMOUNT OF MARKS OUTSTANDING.

[In millions of marks.]

Month.	Floating debt.	Notes outstanding.
1921.		
End of—		
January.....	155,459	66,621
April.....	172,730	70,840
July.....	190,770	77,391
October.....	218,000	91,528
1922.		
January.....	255,678	115,376
April.....	280,935	140,420
July.....	307,810	189,795
August (1).....	305,122	233,147
September.....	528,000	316,870

¹ Figures as of 20th of month.

(b) *Reparations.*—The deficit of the German budget is to a considerable extent due to expenditures arising directly or indirectly from the execution of the peace treaty (see *FEDERAL RESERVE BULLETIN*, September, 1922, pp. 1067-1070). Payments in cash are effected to a large extent by the sale of marks abroad, since no revenue sources have been provided for such payments. Deliveries in kind, such as coal, also tend to depress the value of the mark, since the shortage of coal prevailing in Germany forces her industries to import coal from abroad. Imports of coal, especially from England, further increase Germany's unfavorable balance of trade. Such imports from Great Britain to Germany during the last few months were:

	Metric tons.
May.....	274, 940
June.....	669, 217
July.....	1, 135, 409

(c) *The adverse balance of trade.*—The steady excess of imports over exports is another factor which depresses the mark abroad. The only consecutive foreign trade figures available since the armistice are for the 16 months from May, 1921, to August, 1922, the balance of which may be seen in the following table:

GERMANY'S BALANCE OF TRADE.

[Excess of imports (—); excess of exports (+).]

	Marks.
1921, May.....	—928, 253, 000
June.....	—976, 827, 000
July.....	—1, 368, 245, 000
August.....	—2, 734, 610, 000
September.....	—3, 149, 159, 000
October.....	—4, 163, 544, 000
November.....	—347, 175, 000
December.....	+847, 498, 000
1922, January.....	+1, 754, 620, 000
February.....	+2, 492, 282, 000
March.....	—1, 634, 392, 000
April.....	—5, 266, 482, 000
May.....	—5, 291, 315, 000
June.....	—4, 040, 712, 000
July.....	—10, 031, 000, 000
August.....	+3, 800, 000, 000

Total excess of imports..... —31, 037, 314, 000

The total excess of the value of imports over that of exports thus amounts to 31,037,314,000 marks in the 16-month period. Inasmuch as the exchange value of the mark fluctuated greatly during these months, it is not practicable to state the balance in terms of gold. A part of the balance, at least, has been offset by the expenditures of foreign travelers who visited Germany in large numbers during the last two years. The rest, however, was settled mainly through the sale of marks and securities. The sale of securities, improved property, real estate, and other tangible assets served, however, not so much to balance the foreign

trade as to shift capital from Germany to other countries.

(d) *The flight of capital.*—The tendency prevailing in Germany since the conclusion of the war to export capital to foreign countries has also served to depress the German mark. It is impossible to estimate the total amount of gold values shifted from Germany abroad, but it is a well-known fact that funds valued at many millions of gold marks have been transferred to other countries in order to escape the effects of depreciated currency, heavy taxation, and forced loans. The German Government has taken many measures to prevent the flight of capital, but it is difficult to state with what results.

Depreciation of the mark has been further accelerated by the attitude of foreign exchange dealers and the German public. Any considerable decline in the value of the mark often causes foreign dealers and firms to withhold from purchases, while at such times many Germans are willing to sell marks at almost any price. Acquired foreign exchange holdings are held partly for speculation and are partly hoarded. The disposition to hoard foreign currencies is widespread in Germany and has a very bad effect on the country's economic situation. Thus, while German Government officials state that the stabilization of Germany's currency and finance is impossible without a foreign loan, German nationals by buying bank notes of these countries practically extend huge noninterest-bearing loans to foreign countries, such as Switzerland and the United States.

THE PRICE SITUATION.

The results of the drastic depreciation of the mark are manifold and affect the entire economic structure of the country. Prices of all commodities, especially of imports, rose immediately and doubled in many instances during one day. The index number of the *Frankfurter Zeitung*, comprising 98 commodities in several groups, well reflects the situation. For purposes of comparison, the relative value of the dollar in terms of marks is also given in the table below.

* [July, 1914=100.]

Month.	Value of dollar.	Food-stuffs and luxuries.	Textiles and leather.	Minerals.
1922.				
March.....	5, 988	5, 211	8, 492	6, 810
April.....	7, 054	6, 330	10, 585	8, 585
May.....	6, 393	6, 649	11, 379	9, 305
June.....	6, 494	6, 967	11, 891	10, 141
July.....	9, 500	6, 323	13, 938	12, 168
August.....	18, 833	13, 691	21, 910	18, 355
September.....	32, 142	29, 175	36, 398	42, 648

Month.	Miscellaneous.	Industrial finished products.	All commodities.	Percentage increase over preceding month.
1921.				
March.....	4,201	3,617	5,427	
April.....	5,288	4,644	6,722	23.86
May.....	5,961	5,546	7,379	9.77
June.....	6,413	5,859	7,841	6.26
July.....	6,881	6,750	9,140	16.57
August.....	10,993	8,549	13,935	52.46
September.....	21,605	19,352	28,919	107.52

These figures show that during July prices increased by 52 per cent and during August by 107 per cent. They also indicate that during the last month the rise in prices was greater than the upward movement of the dollar. The greatest increase took place in the price of foodstuffs and minerals, groups of commodities which are to a large extent imported. The continuous rise in prices has served as a great artificial stimulus to German trade. The usual demand for goods of all sorts has been greatly accentuated by the desire of the German buying public to purchase in large quantities at the prevailing prices in order to cover their future needs. As a result the "flight from the mark," which follows after each drop in the value of the mark, has again been in evidence. The steady decline of the mark, the rise in prices, and the abnormal demand for goods have induced sellers to change their price policy. In many cases manufacturers and dealers sold their goods with large paper profits, but at the time of delivery prices were higher than the original sale price. To safeguard themselves against heavy losses, sellers at first established "scaling prices." Prices were fixed not at the time when an order was placed or a sale executed, but at the time of delivery. This method, however, was not satisfactory, since it failed to maintain the working capital of the various business houses. These concerns then based their prices upon the "cost of replacement," or on the price which a seller might have to pay in the future for the same quantity of goods. This price policy is in itself justified, but involves many elements of speculation. To avoid these, certain industries, especially those which depend largely upon imports, made it a practice to fix their prices in foreign currencies, mainly in dollars and guilders. It is reported, however, that stating prices in foreign currencies is unpopular among German buyers. In many instances prices are not based upon any calculation, and merely reflect a strong sellers' market, while exorbitant rates and usury are stated to be common. The fixing of prices of daily necessities is at present under active discussion in Germany and has caused

the issue by the Minister of Interior of several regulations respecting prices.

COST OF LIVING AND WAGES.

The cost of living in Germany, as may be seen from the following figures, has increased rapidly.

COST OF LIVING IN 46 GERMAN CITIES.

[July, 1914=100.]

1922—March.....	2,303
April.....	3,175
May.....	3,452
June.....	3,779
July.....	4,990
August.....	7,029
September.....	11,376

This rise in the cost of living created great dissatisfaction among German wage earners, whose representatives in the Reichstag urged the German Government again to introduce the rationing of food and clothing as it was managed during the war. The increases in prices which most affected the cost of living were for meat, fats, eggs, milk, gas, and electricity. The only important commodity which showed a downward movement was potatoes.

The rise in the cost of living was immediately followed by an increase in wages. Advances were made even where the "wage tariff" provided that no change should take place for a certain definite period of time. In most cases the rise in prices and wages surpassed the depreciation of the mark. Thus, for instance, according to official figures of the Government of Saxony (one of the most important industrial regions of Germany), wages increased there from November, 1921, to July, 1922, on an average by 270 per cent, while the value of the mark as expressed in dollars declined during the same time only by about 48 per cent.

THE MONEY STRINGENCY.

The rise in prices, coupled with the great increase in the cost of production, created a great demand for new funds. During the war German trade and commerce was carried on mainly on a cash basis. This practice was continued after the armistice and was further encouraged by the continued concentration of Germany's most important industries which deal largely on a cash basis. The feverish industrial activity and increase in the prices of raw material and labor, however, called for additional funds which industry and trade could not provide from their own resources. Business houses were thus forced to apply to banks for additional working capital. Since

most transactions were done on a cash basis, the demand for money grew from day to day and created a severe money stringency. This was not offset by the huge flood of new paper notes, which increased rapidly from month to month. The amount of paper notes outstanding increased during July by 20,583 million marks; during August by 48,352 million marks; and during September 86,000 million marks. It is not without interest to note that the large volume of sales which usually follows each decline in the value of the mark, and which increases the deposits of the banks, did not in the present instance change to any extent the deposits of commercial banks or of the Reichsbank. In many cases the banks were, in fact, unable to cash the checks drawn upon them. To meet this situation, banks and business houses again introduced the use of documentary bills of exchange, a practice which, although useful to industry and trade, seems likely to become a new burden upon the Reichsbank.

The gravity of the money stringency is reflected in the discount policy of the Reichsbank, which during one month raised its discount rate from 5 to 7 per cent. During August the various banking associations decided to raise the rate of interest and commissions charged to customers by 2 and 3 per cent, respectively. At the present time the lowest rate of interest prevailing in the open market is between 12 and 15 per cent, and is thus several points above the bank rate. This is one of the main reasons for the rapid increase in the holdings of commercial paper of the Reichsbank, as reflected by the following figures:

REICHSBANK'S HOLDINGS OF COMMERCIAL PAPER, 1922.

[Millions of marks at 7th of each month.]

January.....	1,746
February.....	1,940
March.....	1,975
April.....	2,110
May.....	2,584
June.....	3,320
July.....	4,947
August.....	9,980
September 30.....	50,234

The Reichsbank thus is forced not only to meet the huge demands of the State, but also the ever-increasing needs of industry and commerce. It was therefore generally believed that a further increase in the discount rate would shortly follow, and in fact on September 21, 1922, the rate was increased to 8 per cent. The discount policy of the Reichsbank indicates to what extent business conditions in Germany differ from those prevailing in other countries where the discount rate is being steadily decreased.

THE CAPITAL MARKET.

The money stringency and the scarcity of credit have exercised an influence also on the capital market. The latter reacted, however, during the last drop in the value of the mark quite differently from before. Previously a decline in the value of the mark was closely followed by a huge increase in the capital of most corporations. The new issues placed in the market during the last six months, however, not only do not show an increase, but indicate a downward movement.

VALUE OF NEW STOCKS AND BOND ISSUES PLACED UPON THE GERMAN MARKET.

[In millions of marks.]

March.....	6,416	June.....	2,762
April.....	3,992	July.....	2,330
May.....	4,151	August.....	2,468

Large banks, as well as security dealers generally, report that it is very difficult to dispose of even small lots of securities, and that the large commissions and interest rates charged for stock-exchange transactions have considerably increased the cost of speculative activity.

The reason Germans would rather invest their marks in foreign currencies and securities than in domestic stocks is that the value of shares in domestic enterprises does not increase to the same extent as the mark depreciates. While the prices of commodities and of foreign currencies rise from day to day, prices of securities have risen but little, as is evident from the following table:

INDEX NUMBER OF SECURITY PRICES BASED ON 25 STOCKS

[January, 1921=100.]

End of—	
January, 1922.....	217
February.....	258
March.....	263
April.....	255
May.....	231
June.....	234
July.....	271
August 20, 1922.....	397
September 20, 1922.....	428

A typical instance of the peculiar situation of German securities is that of a certain German concern whose shares had a par value of 1,000 marks and were quoted before the war at 1,500 marks. These shares are at present quoted at about 18,000 marks, or 12 times the pre-war value. The value of the mark meanwhile has shrunk between 90 to 100 per cent. Since this corporation did not increase its capital stock, as did many other German corporations, the present quotation of its stock should range between 60,000 and 90,000 marks.

This disparity between the rise in security values and the depreciation of the mark applies

not only to those corporations which did not water their stock, but also to a more limited extent to corporations with watered stock. The lower valuation of German securities reflects partly the financial policy of corporations and partly the severe money stringency prevailing at the present time in Germany. The fact that German securities do not increase to the same extent as the mark depreciates makes them less attractive to German buyers, who prefer to invest their marks in foreign currencies or securities. As a result German industries find it difficult to procure additional capital in order to keep up their present activity.

The depreciation of the mark has already begun to disturb the latest budget of the Government. Salaries of Government employees have lately been increased to a considerable extent, and a further increase is expected. The impoverishment of large classes of the population has been further accelerated, especially of those which are unable to adjust their incomes to the rapidly increasing prices. Imports are almost sure to be further restricted, thus affecting the standard of living of the population and the productive capacity of many industries, since the bulk of Germany's imports consists of foodstuffs and raw materials. In many instances the depreciation of the mark can hardly fail to result in wiping out the working capital of many business houses.

ARGENTINA.

FINANCIAL CONDITIONS.

The rejection by the Government of the several bids made by American and British banks for the loan of 500,000,000 paper pesos to consolidate the floating debt of Argentina has been the subject of a great deal of comment, both in the press and in financial and business circles of the Argentine Republic. The manner in which the negotiations were conducted and the final rejection of bids have been unfavorably commented on by the opposition press, but the official organs have taken the attitude that the terms offered were unacceptable and the Government was obliged to refuse them. It is certain, however, that some means will have to be found within a short time to provide funds to meet the most urgent demands of the floating debt. Shortly after the first bids were rejected, the Minister of Finance of Argentina issued telegraphic instructions to Argentine legations abroad indicating that the Executive would not be prepared to consider further bids which provided for an interest rate in excess of 6 per cent. According to the most reliable information available, the various tenders were for 6 per cent bonds, maturing in 20 years, the price of issue ranging between 88 and

92, thus making a net interest rate of about 7 per cent. Statements have been issued to the effect that the Executive will again request Congress to grant legal authorization for the floating of the consolidation loan. Similar requests for authorization have been previously requested from Congress by the present administration. In the President's message to Congress in December, 1916, legal authorization was asked for a loan of 250,000,000 pesos gold for consolidating purposes and subsequently in June, August, and September, 1917, the attention of Congress was again called to the same subject, but no definite action was taken in any of these sessions. When submitting a tentative budget for the present year, the budget and finance committee of the Chamber of Deputies called special attention to the increasing floating indebtedness due to continuous deficits, and recommendations were made for a thorough revision of the taxation system at present in force. Government expenditures during the past months of 1922 have been authorized by Congress from month to month on a basis of the 1919 budget. The figures indicating the increase in the floating indebtedness of the Argentine Republic since the pre-war year, 1913, are presented in the following table:

December 31—	Argentine paper pesos.	December 31—	Argentine paper pesos.
1913.....	78,094,570	1918.....	706,375,720
1914.....	237,260,506	1919.....	724,785,832
1915.....	400,574,000	1920.....	687,931,819
1916.....	489,146,542	1921 ¹	644,417,478
1917.....	614,618,546		

¹ July 31, 1921.

The following table indicates the annual deficits incurred by the Government of Argentina from 1910 to 1918:

[In Argentine paper pesos.]

Year.	Revenue.	Expenditures.	Deficit.
1910.....	302,485,654	411,245,297	108,759,643
1911.....	310,528,679	416,621,067	106,092,388
1912.....	336,366,473	401,151,866	67,788,393
1913.....	349,299,429	403,438,978	54,139,549
1914.....	250,067,601	419,639,608	169,572,007
1915.....	230,251,286	399,928,985	169,677,699
1916.....	232,585,318	374,645,598	142,060,280
1917.....	228,243,855	389,571,152	161,327,297
1918.....	297,573,216	421,052,107	123,478,891

A large program of building and construction in the Province of Buenos Aires has been submitted by the governor to the provincial legislature. Under the terms of this project, the executive would be authorized to spend an amount not exceeding 25,000,000 paper pesos, part of which would be obtained from the issue of bonds, either internal or external, up to the

amount of 25,000,000 paper pesos or its equivalent in foreign currency. The bill provides for interest at 6 per cent with cumulative amortization of 1 per cent, and the service of the loan would be met from general revenues. At the same time, the municipal council of the city of Buenos Aires has under advisement a further loan of 70,000,000 paper pesos, to be spent in municipal improvements. The negotiation of this loan will require the authorization of the Federal Congress under the present municipal charter. Another financial operation of importance has been that of a loan of 2,000,000 pounds sterling floated with a firm of British bankers by the Argentine State Railways. Under the terms of this loan, the State Railways obligate themselves to employ about 25 per cent of the principal in the purchase of equipment and supplies. This loan, issued at par, runs for a term of 20 years, interest being at the rate of 6 per cent per annum.

Liabilities of commercial failures during the month of July are placed at 7,710,234 pesos against assets of 6,708,573 pesos. These figures compare most favorably with those for previous months, statements of which have been published in recent issues of the BULLETIN.

THE TRADE SITUATION.

With regard to the general economic situation of Argentina, there are indications which point toward substantial improvement. There is no question that the results of the severe depression following the inflation of 1920 are still felt, and that recent labor troubles have also contributed to aggravate the situation. But the indications are that trade in general has materially recovered since the beginning of the current year. Shipments of wheat, the principal export product of Argentina, during the first seven months of 1922 have been nearly a million tons in excess of the entire total of exports of that commodity during 1921. It is probable that by the end of 1922 the amount above reported will be doubled. It must be borne in mind, however, that the decrease in the value of wheat will tend to offset the increase in quantity, but an approach to normal conditions in regard to both prices and shipments is to be expected. Exports of corn and linseed have likewise increased. Thus, with the grain situation materially improving

and the live-stock industry showing considerable betterment, due to the gradual elimination of speculative elements, the economic position of the Argentine Republic is in a more favorable position. On the other hand, cattle offerings continue to be greater than the demand, although some improvement has been noticed, due to a general increase in prices of meat. The Banco de la Nación is still carrying some 100,000,000 pesos in loans on live stock, many of which it has been necessary to renew as they have fallen due. According to statements of the Minister of Agriculture of Argentina, a tentative arrangement has been under consideration for the exchange of Argentine live stock for German manufactured products, but nothing like a concrete and definite understanding has been reported. A considerable increase in the exports of hides and skins from Argentina during the first six months of 1922 has also been instrumental in improving trade conditions in that country. Exports of wool during the first nine months of the "wool year," which begins in September, showed remarkable improvement over those of any previous year in the history of the wool industry in Argentina. The following is a comparative table showing the volume of wool exports in metric tons by countries of destination during the first nine months of the "wool years" 1919-20, 1920-21, and 1921-22:

[In metric tons.]

Country of destination.	1919-20	1920-21	1921-22
Germany.....	8,180	19,970	56,000
France.....	31,680	6,830	38,300
Great Britain.....	14,070	11,870	31,700
United States.....	25,370	33,430	13,700
Italy.....	6,150	1,010	8,900
Belgium.....	15,050	5,550	17,200
Other countries.....	7,500	2,390	3,250
Total.....	108,000	81,050	169,050

According to recent reports there is every indication that the 1922-23 wool clip, which has just started, will be the smallest in 30 years and only about two-thirds as large as the 1919-20 clip.

BANKING CONDITIONS.

The following table presents the condition of the leading Buenos Aires banks, including branches in Argentina, at the close of business on June 30, 1922:

CONDITION OF LEADING BUENOS AIRES BANKS JUNE 30, 1922.

(In Argentine pesos.)

Bank.	Deposits.		Loans and discounts.		Cash on hand.		Capital.	
	Gold.	Paper.	Gold.	Paper.	Gold.	Paper.	Gold.	Paper.
Alemán Transatlántico.....	279,372	59,894,754	555,842	42,521,142	706,450	24,198,652	3,650,000	.....
American Foreign Banking Corpora- tion.....		5,206,329		7,782,006		1,722,101		2,355,454
Americano del Río de la Plata.....		3,835,936		4,501,111		1,328,910		1,613,740
Anglo Sudamericano.....	1,186,419	118,513,674	1,180,962	69,254,253	332,934	59,873,500		11,338,636
Argentino Uruguayo.....		14,931,286		19,340,718		5,183,534		2,700,000
British Bank of South America.....	381,507	79,535,077	186,345	52,225,172	582,900	27,817,804	4,536,000	.....
Comercial del Azul.....		34,857,599		39,314,761		6,126,638		2,474,600
Comisionista Argentino.....		1,112,757		2,000,148		106,538		1,000,000
Chile y Argentina.....		1,833,368		5,586,525		238,597		3,000,000
Escandinavo Argentino.....	407,771	2,724,674	2,018	3,911,371		1,303,180		3,500,000
España y América.....		742,514		1,163,256		44,081		1,712,870
Español del Río de la Plata.....	342,836	368,271,157	14,165	270,570,407	873,477	102,038,891		98,991,320
Francés del Río de la Plata.....	47,445	58,717,946	118,851	53,885,123	369,289	14,387,616	14,000,000	.....
Francés e Italiano.....	7,463	68,263,660	52,915	52,189,596	14,420	15,004,837	2,500,000	.....
Galicía y Buenos Aires.....	446	48,905,227		43,735,605	1,205	11,969,617		17,162,100
Germanico de la América del Sud.....	10,772	28,468,540	203,459	18,560,259	188,112	9,270,175	1,733,389	.....
Holandés de la América del Sud.....	8,255	37,689,284		32,176,581	40,469	12,490,300	3,895,833	.....
Italia y Río de la Plata.....	1,033,596	186,017,059	331,683	167,688,796	1,114,068	47,273,411	10,000,000	.....
Italo Bérga.....	5,115	38,166,820		28,112,525	17,954	14,491,759	2,000,000	.....
Italo Sudamericano.....	310,379	47,337,844	131,928	30,444,623	272,490	18,081,819		7,341,000
Londres y Brazil.....	349,751	28,010,698	528,347	18,456,268	349,976	10,414,707	1,268,190	1,950,000
Londres y Río de la Plata.....	744,245	190,927,699	138,530	104,703,232	818,533	80,307,035	4,250,000	.....
Nación Argentina.....	3,198,511	1,328,606,698	12,359	932,760,663	23,257,020	394,780,888		150,038,942
Nuevo Italiano.....	44,042	115,581,260	108	90,011,345	75,841	30,158,082		5,455,780
Popular Argentino.....	4,396	37,087,763	58,960	43,828,832	31,236	9,843,036		10,514,880
Provincia de Buenos Aires.....	1,102,656	313,137,383	2,205,075	234,667,256	6,069,980	120,489,153		62,500,000
First National Bank of Boston.....	18,227	44,652,031		37,599,415	19,458	14,475,259		4,710,909
National City Bank of New York.....		46,216,965		42,843,738	6,503	19,986,609		2,944,318
Royal Bank of Canada.....		14,376,755		9,673,476		6,200,580		2,355,454
Banks with capital of less than 1,000,000 paper pesos.....		2,389,457		1,919,242		286,952		1,383,472
Total.....	9,483,804	3,326,012,214	5,721,547	2,461,427,445	35,142,315	1,059,885,261	47,883,412	395,063,475

Deposits and advances of privately owned banks decreased considerably as compared with June, 1921, while the Banco de la Nación reported an increase in deposits of 29,822,000 pesos and 88,423,000 pesos in loans. In June, 1921, the ratio between loans and deposits was placed at 73 per cent, whereas on June 30, 1922, the Banco de la Nación was using 79 per cent of its deposits, or an increase of 6 per cent over the previous year. The ratio of total cash to deposits has been as follows:

Banco de la Nación:	Per cent.
June, 1921.....	20
June, 1922.....	24
Increase.....	4
Privately owned banks:	
June, 1921.....	37
June, 1922.....	34
Decrease.....	3

The rate of interest on deposits has not suffered material change since the beginning of the year. The average has been from 4 to 5½ per cent, according to the terms. Discount rates on commercial paper range from 6½ to 8 per cent and on advances in current account from 7 to 8½ per cent.

BRAZIL.

TRADE CONDITIONS.

Notwithstanding the general activity in commercial operations prevailing at present in Brazil as a result of the centennial festivities, there have been no signs of substantial improvement manifested in the general economic outlook of the country. The continued weakness in exchange is to be accounted for by the present depressed condition of the export trade, as well as by an acute shortage of coffee bills. Imports have had a tendency to rise in response to the demand for goods on the part of buyers attending the celebration. Serious concern has been manifested in financial circles of Rio de Janeiro in connection with the possible future trend of foreign trade, and pertinent recommendations have been advanced to the effect that new foreign purchases should be restricted in an endeavor to keep the value of imports below that of exports. Judging by the supply of export bills during July and August, very little change has taken place in the volume of trade. The following table, giving the volume and value of Brazil's foreign trade during May and June, 1922, will serve to

supplement the table showing the foreign trade of Brazil during previous months, published in the August issue of the BULLETIN (p. 956):

Month.	Metric tons (gross weight).			Value in pounds sterling (000 omitted).		
	Imports.	Exports.	Excess of imports.	Imports.	Exports.	Excess of exports.
May.....	315,264	166,256	149,008	3,962	4,447	485
June.....	311,391	166,647	144,744	4,050	4,689	639
Total, January to June, 1922..	1,598,387	974,662	623,725	22,230	31,752	9,522

It will be noted that during May and June the value of Brazil's foreign trade showed a favorable balance of 485,000 and 639,000 pounds sterling, respectively. These figures compare unfavorably with the balance which resulted during the month of April, 1922, amounting to 879,000 pounds sterling. Brazil is still feeling the effects of the adverse balance for 1920-21, and the limited favorable balance resulting during the last months has done but little to help the exchange situation.

BANCO DO BRASIL.

The following are the latest statements of condition of the Banco do Brasil, dated May 31 and June 30, 1922. Statements showing the condition of the institution as of March 31 and April 29 were published in the July issue of the BULLETIN (p. 823).

[In milreis.]

	May 31, 1922.	June 30, 1922.
ASSETS.		
Capital unpaid.....	4,410,320	1,738,780
Premium on shares.....	1,102,580	434,695
Bills discounted.....	440,427,516	440,956,762
Loans in current account.....	501,764,610	393,824,608
Bills receivable:		
Foreign.....	17,199,471	19,165,156
Domestic.....	154,316,875	151,874,191
Securities in liquidation.....	555,342	664,374
Collateral deposited as security.....	253,088,922	251,249,794
Securities deposited.....	205,863,260	193,379,886
Branches and agencies in Brazil.....	188,934,747	214,622,803
Correspondents abroad.....	29,038,556	208,455,382
Correspondents in Brazil.....	2,894,880	2,912,353
Securities owned by banks.....	76,311,061	75,735,676
Real estate.....	5,675,932	5,669,003
Liquidation of Banco da Republica do Brasil.....	140,102	140,742
Furniture and fixtures.....	1,437,518	1,324,652
Collections in Brazil.....	102,062,588	103,694,012
Rediscount department.....	322,026,534	319,472,318
Sundry accounts.....	14,766,506	6,541,278
Cash:		
In currency.....	102,091,929	135,413,567
In other form.....	8,253	8,171
Total assets.....	2,424,177,502	2,527,278,203
LIABILITIES.		
Capital.....	100,000,000	100,000,000
Reserve fund.....	27,093,279	35,000,000
Premium on shares.....	1,102,580	434,695
Fund for liquidation of old accounts.....	2,682,578	2,622,693
Profit and loss account.....	2,263,964	4,307,888
Deposits in current account with interest.....	288,165,129	299,047,627

	May 31, 1922.	June 30, 1922.
LIABILITIES—continued.		
Deposits in limited account.....	39,641,303	41,234,838
Deposits without interest.....	339,919,229	447,069,946
Deposits at fixed dates.....	278,366,669	283,435,592
Securities deposited and in guarantee.....	458,952,181	444,629,680
Branches and agencies in Brazil.....	245,662,806	255,029,653
Correspondents abroad.....	17,536,611	
Correspondents in Brazil.....	6,265,339	1,377,547
National treasury, exchange account.....	8,888,889	8,888,889
Bills receivable.....	248,328,473	248,991,842
Compensation for checks (cleared).....	7,757,510	13,745,841
Bonus and dividends.....	997,492	10,736,438
Rediscount department.....	322,026,534	317,144,461
Sundry accounts.....	28,526,936	11,252,717
Total liabilities.....	2,424,177,502	2,527,278,203

The finance committee of the Brazilian Senate has reported favorably on the proposal for the establishment of a branch of the Banco do Brasil in Montevideo. According to the terms of the agreement, the Banco de la Republica O. del Uruguay shall have the right to open a branch in Rio de Janeiro. It has also been reported that the Banco do Brasil is contemplating the extension of its activities in the United States and that the establishment of a branch in New York is being given considerable attention. The Associaçao Commercial of the State of Pernambuco has requested the Banco do Brasil to investigate financial conditions in that section, urging the creation of branches of this bank in the interior of the State of Pernambuco.

GOVERNMENT AND STATE FINANCES.

The budget of expenditures during 1922 was signed by the President of the Republic on August 10. The final budget as passed provides for expenditures of 85,931,212 gold milreis and 831,154,763 paper milreis. The total receipts as estimated in a budget passed earlier and reported in the September BULLETIN (p. 1074) were placed at 92,276,320 gold milreis and 727,673,000 paper milreis. Comparing receipts and expenditures as budgeted, there is a surplus balance of 6,345,108 gold milreis and a deficit of 103,481,763 paper milreis. Converting the surplus gold balance into paper at the rate of 9d., gives 19,035,325 paper milreis, which sum will reduce the paper deficit to 94,446,438 milreis. Certain expenditures of an exceptional nature, provided for in the estimates, are not included in this deficit. It seems certain, therefore, that the total deficit at the end of the current year will be larger than the figures indicate.

The following table shows the amounts allotted to the different ministries in the approved budget:

[In milreis.]		
Ministry.	Gold.	Paper.
Justice.....	3,201,020	94,795,043
Exterior.....	5,363,054	2,496,220
Marine.....	4,100,000	84,073,708
War.....	1,700,000	128,175,730
Transportation.....	10,473,713	275,069,998
Agriculture.....	882,680	49,148,704
Finance.....	60,710,745	197,395,361

The President of the State of Rio de Janeiro, Dr. Paul de Moraes Veiga, delivered his annual message to the legislative assembly of the State on August 1, 1922, in which he described the economic situation of that State. According to his report, a remarkable advance has been made, both economically and financially. Considerable attention has been given to the development of the industry and agriculture of the State, with the result that the Government revenues have been substantially increased. Coffee, the most important agricultural product of the State of Rio de Janeiro, produced a revenue of 7,231,239 milreis during 1921, as compared with 4,294,370 milreis in 1920. A considerable reduction of revenue from this source is noted, however, for the first six months of 1922, as compared with the same period in 1921. These figures have been placed at 1,836,004 milreis and 2,138,622 milreis, respectively. An additional surtax of 3 francs per sack of coffee was also collected, which produced an additional revenue to the Government in 1921 of 2,463,821 milreis. In connection with sugar, the year's result was not very satisfactory, due to the past crisis, the results of which are still being felt in Brazil. Total actual receipts collected by the State of Rio de Janeiro amounted to 27,295,805 milreis, against expenditures of 26,041,711 milreis, thus leaving a surplus of 1,254,094 milreis. This sum, however, was considerably reduced, due to expenditures made on pending accounts from previous years. The service of the loan of 3,000,000 pounds sterling, floated in London by this State, amounted to 4,813,333 milreis. High exchange prevailing at the time payments were made accounts for the relatively high figure of this interest payment.

In the annual message delivered by the President of the State of São Paulo, before the legislative assembly of that State, the statement was made that during 1921 the revenue collected by the State of São Paulo amounted to 160,580,333 milreis. Estimated revenue had only amounted to 137,484,000 milreis. This excess of actual over expected revenue has been accounted for as the result of the natural growth of the State's activities,

since there were no new taxes created and the old dues were not augmented. Of the 37 revenue-producing items of the State, 28 yielded considerably larger returns than expected, 7 items, including coffee, the principal product, produced smaller revenue, and two were not collected. Expenditures, on the other hand, showed also a substantial increase. These were fixed by the budget at 137,484,000 milreis, but actual expenditures reached the high figure of 177,976,663 milreis, thus producing a deficit of 17,396,329 milreis.

With regard to the external debt, the following amounts are still outstanding:

Year issued.	Issued through—	Amount.
1888	Louis Cohen & Sons, to mature 1925.....	£157,100 0s. 0d.
1904	London & Brazilian Bank, maturity 1935..	£616,840 0s. 0d.
1905	Dresdner Bank, to mature 1943.....	£3,054,600 12s. 6d.
1907	Société Générale and Banque de Paris & Pays Bas, to mature 1957.....	£1,844,740 0s. 9d.
1921	Henry Schroeder & Co., Baring Bros. & Co., N. M. Rothschild, to mature 1951...	£2,000,000 0s. 0d.
1921	Speyer & Co., New York, maturity 1936...	£7,673,280 19s. 3d.
1921	Lippmann, Rosenthal & Co., Rotterdamsche Bankvereeniging, maturity 1951...	89,961,000
		Fls. 18,000,000

The above figures of foreign currencies converted into Brazilian currency total 201,008,585 milreis. The Government of São Paulo paid as service for this debt, during 1921, the sum of 34,024,681 milreis. The internal debt of the State amounted to 266,583,000 milreis at the close of 1921 and the floating debt was placed at 30,970,219 milreis.

The economic and financial condition of the State of Minas Geraes was discussed in the annual message of its President, Dr. Arthur Bernardes, now President-elect of the Republic. Revenues of that State during 1921 were placed at 63,449,997 milreis, against expenditures of 65,381,859 milreis, thus leaving a deficit of 1,640,934 milreis. The funded internal debt of this State was placed at 60,141,200 milreis.

RAILROADS.

According to a report made public by the Minister of Transportation of Brazil, railroad activities showed remarkable development during 1921. The total value of the different railway and port properties owned by the Federal Government of Brazil is placed at 1,291,980,000 milreis. The most important items making up this total are the Central do Brazil Railway, valued at 633,692,000 milreis, and properties at the port of Rio de Janeiro, valued at over 232,683,000 milreis. The following table shows the principal railways of Brazil and present mileage:

Railway.	Ownership.	Kilo- meters.	Miles.
Central do Brasil.....	Government.....	2,437	.....
Leopoldina.....	Private (British).....	2,946	.....
Mogyana.....	Private.....	1,689	.....
Paulista.....	do.....	1,245	.....
Oeste de Minas.....	Federal Government.....	1,564	.....
São Paulo.....	British.....	.....	153.5
The Southern São Paulo Ry. Co.....	do.....	.....	100.4
Victoria to Minas.....	Rented out by Federal Government.....	590	.....
Sorocabana.....	State of São Paulo.....	1,709	.....
São Paulo-Rio Grande.....	Concession from Federal Government.....	1,971	.....
Great Western of Brazil.....	Federal Government.....	.....	1,005
Sul Mineira.....	Federal Government, leased to private com- pany.....	.....	1,373
São Paulo-Goyaz.....	Leased out by State of São Paulo.....	146	.....
São Paulo & Minas Noroeste do Brazil.....	Federal Government.....	137	.....
Goyaz.....	.....	1,273	.....
Santa Catharina.....	.....	257	.....
Nazareth.....	.....	89	.....
Caxias to Cajazeiras.....	.....	222	.....
The State of Bahia South- western Ry. Co. (Ltd.).....	.....	78	.....
Recende to Bocaina.....	.....	84	.....
Araraquava.....	.....	38	.....
Don Thereza Christina.....	.....	279	.....
Rio Grande do Sul Ry. System.....	Largely State control.....	118	.....
São Luiz Thorezina.....	(See Caxias to Cajazeiras Ry.).....	2,252	.....
Campos do Jordão.....	.....	46	.....
Funilense.....	.....	94	.....
Fouradense.....	Private under concession from State of São Paulo and Federal Govern- ment.....	273	.....
Estrada de Ferro There- zopolita.....	.....	37	.....

CHILE.

THE NITRATE SITUATION.

Only a slight improvement has been apparent in the nitrate industry of Chile since the beginning of the current year. At the same time, lower selling prices have drawn considerable attention to the Chilean fertilizer. The actual visible nitrate supply in the world is still relatively high, and it is quite obvious that for some time there will be no need to reopen any of the oficinas at present closed. The output of nitrate of soda has established a new low record, while only 33 out of some 152 oficinas remain at work at present, with an average production of about 850,000 tons per annum, as against a normal productive capacity of about 4,000,000 tons. It has been estimated that during the present year the world's consumption is likely to amount to about 1,800,000 tons, but the actual visible supply is at present in the neighborhood of 2,000,000 tons.

The following comparative table shows production, shipments, and stocks of nitrate available during the first semester of 1922, as compared with the same period in 1921 and 1914:

[In metric tons.]			
	First 6 months of—		
	1922	1921	1914
Production.....	418,000	835,000	1,455,000
Shipments:			
To Europe, including Egypt.....	102,000	413,000	830,000
To United States.....	140,000	232,000	310,000
To other countries.....	37,000	28,000	41,000
Total shipments.....	279,000	673,000	1,181,000
Port deliveries:			
In Europe, including Egypt.....	750,000	495,000	1,494,000
In United States.....	403,000	82,000	295,000
In other countries.....	49,000	43,000	47,000
Total deliveries.....	1,202,000	620,000	1,836,000
Stocks in Europe on June 30.....	217,000	753,000	137,000
Stocks in Chile on June 30.....	1,610,000	1,349,000	757,000

While the stocks held in Chile on June 30, 1922, amounting to 1,610,000 tons, largely exceed those held on the same date in 1921 and the normal year 1914, the European stocks show a substantial reduction, which has been taken as a significant sign that European demand will materially increase during the balance of the year. Another hopeful feature pointing toward an early improvement in the nitrate situation is the fact that prices of this commodity compare quite favorably with those of competing fertilizers, and it is expected that the Producers' Association will be able to sell nitrate of soda to the European consumer on more favorable terms next season than for some years past.

ECONOMIC CONDITIONS.

The authorization granted to the Federal Government by the Chilean Congress to float an internal loan of 135,000,000 paper pesos to meet current obligations has resulted in a slight improvement in the trade conditions of the country. According to recent reports, a substantial increase in employment has been registered lately in the copper, nitrate, and agricultural industries of Chile. Imports and exports have also shown signs of improvement, although imports are still generally below the 1921 level. The Chilean Congress, in giving its authorization for the floating of the loan above referred to, provided for a complete revision of public expenses and the introduction without delay of considerable economies. These reforms will be studied by the legislative budget commission in charge of adjusting public expenses during 1923. According to statements of the Minister of Finance, the external

and internal debts of the country amount to about 600,000,000 pesos. The service of this combined indebtedness is alone sufficient to burden in a considerable degree the ordinary resources of Chile in difficult times like the present. It is reported that about 30,000,000 paper pesos of the 135,000,000 paper pesos loan will be placed with local Chilean banks, and the balance will be floated abroad. The budget for 1922, just passed by Congress, provides for disbursements of 74,000,000 gold pesos and 349,000,000 paper pesos. It is estimated that the proceeds of the newly authorized loan will cover the expected deficit for the current year. The amount of paper currency outstanding on July 31, 1922, has been placed at 265,858,000 pesos, as against 290,000,000 pesos, approximately, on June 30 and 324,600,000 on December 31, 1921.

The following table gives a clear indication of the extent to which the customs revenues of the Government of Chile have been reduced during the first quarter of 1922, as compared with the same period of 1920 and 1921.

[Amounts in paper pesos.]

Items.	First quarter of—		
	1920	1921	1922
Exports.....	40,112,963	25,076,699	8,030,537
Imports.....	12,282,520	17,771,271	10,762,021
Storage.....	356,770	640,693	487,093
Lighthouses.....	344,583	291,066	134,981
Consular fines.....	18,714	21,041	19,089
Total.....	53,115,550	43,800,770	19,433,721
Gold surtax (converted).....	23,984,107	13,880,060	1,423,234
Other shipping taxes.....	596,221	1,054,200	709,276

ECONOMIC AND FINANCIAL CONDITIONS IN MEXICO.

In the September issue of the BULLETIN (p. 1080), the commercial position, agricultural conditions, condition of the live-stock industry, mining conditions, and the petroleum industry of Mexico were discussed. The following article continues the discussion of the Mexican petroleum industry and analyzes the country's foreign trade.

OUTPUT AND EXPORTS OF PETROLEUM.

The enormous production of the Mexican wells can be properly illustrated by a comparison with the output of the wells of the United States. The oldest wells in the United States are in the Appalachian region, in which part of the country they number about 127,540, with an average yield per well of about one and two-fifths barrels daily. The newest region is in the Rocky Mountains, with about 1,070

wells, having an average daily production of 30 barrels per well. The Mid-Continent region comprises about 78,350 wells, with an average daily production of about 17 barrels per well. According to the 1920 report of the United States Geological Survey, the average daily production of each of the 258,600 American wells was placed at four and nine-tenths barrels. Taking into consideration all the wells of Mexico, the average actual daily production per well has been estimated in June of this year at 1,061 barrels. According to estimates of the Mexican Government, the 25 most productive wells in Mexico in 1919, if permitted to flow without restraint, would have yielded about 600,000 barrels daily, or an average of 24,000 barrels per well. Eight wells were drilled during the first half of 1919 in the Tampico region with a possible total daily output of 584,798 barrels. According to a report of the Secretary of Foreign Affairs in Mexico, during 1921 the Mexican oil wells yielded 194,755,712 barrels of petroleum, having a total value of 516,816,094 pesos. This represented an increase in production of more than 40,000,000 barrels over the previous year. The invasion of salt water in several of the most important fields has been the source of serious concern to well owners. It appears, however, that the menace from salt water has not reached great proportions and the output of new wells has served to offset the losses from salt water. The appearance of salt water in several of the oldest and largest wells has been a factor in stimulating the exploration and development of new fields.

The value of oil exported during 1921 has been estimated by the Mexican Bureau of Special Assessments of the Treasury Department at 577,719,891 pesos. Exports of petroleum during the first half of 1922 amounted to 106,129,457 barrels, which is the largest amount ever exported in a period of six months. This figure exceeds the total for the first semester of 1921 by 7,260,508 barrels, and that for the second semester by 13,579,986 barrels. The following table gives the monthly exports of oil from Mexico during the first seven months of 1922:

	Barrels.
1922—January.....	18,363,995
February.....	16,852,470
March.....	17,274,061
April.....	18,063,383
May.....	18,598,759
June.....	16,976,789
July.....	17,067,815
Total.....	123,197,272

The National Treasury of Mexico in 1920 received on account of oil production taxes the amount of 45,479,168 pesos, and in 1921

this sum increased to 50,604,040 pesos, thus showing a gain of more than 5,000,000 pesos. In the latter year the duties on exports of oil amounted to about 30,000,000 pesos. In consequence of the agreements of September 3, 1921, between the Mexican Government and the oil producers, receipts from petroleum duties declined by about 60 per cent.

OIL LEGISLATION.

The oil industry in Mexico has continued to develop, notwithstanding new legislation, which has been considered to contain retroactive and confiscatory provisions. Acknowledgment of the principle that the ownership of petroleum deposits was vested exclusively in the owner of the land was provided for in the mining laws of 1884, 1892, and 1909, which were based on the Mexican constitution of 1857. Provision was also made in these laws for the ownership of oil rights by foreigners. It was in accordance with these laws that foreign capital was invested in Mexico in the production and exportation of oil. The new Mexican constitution, promulgated on February 5, 1917, brought about a radical change in the mining and petroleum laws of the country. A translation of pertinent excerpts from articles 27 and 33, which directly affect the petroleum situation, follows:

ARTICLE 27. The ownership of lands and waters within the limits of the national territory is vested originally in the nation, which has had and has the right to transmit title thereof to private persons, thereby constituting private property.

Private property shall not be expropriated except for cause of public utility and by means of indemnification.

The nation shall have at all time the right to impose on private property such limitations as the public interest may demand, as well as the right to regulate the development of natural resources, which are susceptible of appropriation, in order to conserve them and equitably to distribute the public wealth. In the nation is vested direct ownership of all minerals, petroleum, and hydrocarbons—solid, liquid, or gaseous.

Legal capacity to acquire ownership of lands and waters of the nation shall be governed by the following provisions:

Only Mexicans by birth or naturalization and Mexican companies have the right to acquire ownership in lands, waters, and their appurtenances, or to obtain concessions to develop mines, waters, or mineral fuels in the Republic of Mexico. The nation may grant the same right to foreigners, provided they agree before the department of foreign affairs to be considered Mexicans in respect to such property, and accordingly not to invoke the protection of their Governments in respect to the same, under penalty, in case of breach, of forfeiture to the nation of property so acquired. Within a zone of 100 kilometers (62.14 miles) from the frontiers and of 50 kilometers (31.07 miles) from the seacoast no foreigner shall under any conditions acquire direct ownership of lands and waters.

ARTICLE 33. Foreigners are those who do not possess the qualifications prescribed by article 30 [i. e., citizenship by birth or naturalization]. They shall be entitled to the rights granted by Chapter I, Title I, of the present constitution; but the executive shall have the exclusive right to expel from the Republic forthwith and without judicial process any foreigner whose presence he may deem inexpedient.

On February 19, 1918, the President of Mexico issued the first of a series of decrees providing for measures to enforce article 27. This decree dealt with the payment of rentals and royalties to the Mexican treasury by the owners of oil lands, the registration of petroleum lands under penalty of confiscation, and the opening of lands not registered to the filing of claims by third parties. The United States, Great Britain, Holland, and France made a diplomatic protest against this decree. In July and August, 1918, new decrees were issued providing for means to terminate the existing titles to oil lands under certain stipulations, and for the official issuance of licenses to drill on the same lands. The decree of February 19, 1918, was reissued on July 31, 1918, fixing the date of August 15, 1918, as the time limit for filing a statement of title. Further edicts were issued later which suspended the drilling of new wells in an attempt to enforce the provisions of the decrees above referred to and the payment of taxes exacted by the other decrees. Several companies brought their claims before the Supreme Court of Mexico, and the recent decisions of this court have been taken as very significant in so far as the question of retroactive force of article 27 is concerned. An order signed by the president, dated January 17, 1920, provided for provisional permits to drill new wells on the following basis:

(1) Permits will be valid only until Congress enacts an organic law to carry out the provisions of article 27 of the Mexican constitution.

(2) Permits may include wells begun since May 1, 1917, whether finished or not.

(3) With the grant of a permit the Mexican Government abandons no right or judicial principle which it desires to sustain and companies acquire no new rights.

(4) If companies do not comply with the organic law when enacted, their benefits under permits will cease.

(5) Permits will not affect questions now before the courts concerning the application of article 27 of the constitution, and of executive decrees and orders relating to petroleum, nor will they affect the discussion of pending petroleum legislation.

The result of the above order was that during the period of three months after this edict was issued about 400 new applications for drilling were received by the Department of Industry, Commerce, and Labor of Mexico.

It is difficult to harmonize the confiscatory effects of article 27 of the constitution of 1917 with article 14 of the same document, which reads as follows: "No law shall be given retroactive effect to the prejudice of any person whatsoever." Practically all foreign com-

panies engaged in the production of oil in Mexico are working on privately owned property, legally acquired under the constitution of 1857, having made their contracts of lease or purchase with private owners of the land.

It has been reported that a new presidential decree has lately been issued authorizing the majority owners of a tract of oil land to proceed with its exploitation without consent of the minority holders, provided that they furnish bonds to the Government to protect the interests of the latter. There is reason to believe that this new ruling may give strong impetus to oil development in all sections of Mexico.

TAXATION OF PETROLEUM.

The subject of taxation has been a constant source of difficulty between oil producers and the Government of Mexico. It has been the custom to collect taxes on petroleum destined for export through payments at the end of every two months on the amount of oil exported during that period. Such taxes are levied according to a sliding scale of prices based on the density of oil and the market price in New York. The valuation of oil and its by-products, fixed for purposes of taxation by the finance secretary during the May-June period of 1917 to 1920, follows:

Kinds of petroleum.	1917	1918	1919	1920
	<i>Pesos per ton.</i>	<i>Pesos per ton.</i>	<i>Pesos per ton.</i>	<i>Pesos per ton.</i>
Fuel oil of 91° gravity.....	8.50	10.50	13.00	16.62
Crude oil of 91° gravity.....	11.00	13.50	15.50	21.67
Crude oil of over 97° gravity..	5.00	5.50	6.00	13.00
Gas oil.....	8.50	10.50	13.00	16.62
	<i>Centavos per liter.</i>	<i>Centavos per liter.</i>	<i>Centavos per liter.</i>	<i>Centavos per liter.</i>
Refined gasoline.....	0.11	0.1250	0.1250	0.16
Crude gasoline.....	.11	.1175	.1175	.1525
Crude or refined kerosene....	.03	.03	.0650	.0950

The rate of tax on oil is 10 per cent of the values above indicated, varying, however, according to increases or decreases in the density of the oil. On refined gasoline or kerosene the rate is 3 per cent and on crude gasoline and kerosene it is 6 per cent of the value.

An additional monthly tax of 150 pesos is assessed against each company as an inspection tax and a charge per ton of gross register is made on all ships entering or leaving the harbor of Tampico. On June 7, 1921, a new presidential decree was issued providing for an average increase of 25 per cent in export taxes on petroleum and its by-products, effective July 1, through the imposition of an additional tax based upon volume.

Recent official reports from Mexico state that the Government decreed on August 17, 1922, that export taxes on oil be reduced to 40

per cent of the former rate which was established in June, 1921. It is understood that this reduction is to be retroactive to February 1, and to be part of the agreement recently arrived at between oil producers and the Mexican Secretary of Finances. On the basis of the above reduction, the following table shows the old and new rates:

Kinds of petroleum.	Old rate.	New rate.
Crude oil, specific gravity 0.96 or less.....	\$1.25	\$0.50
Crude oil, specific gravity 0.96 plus.....	.72	.28
Fuel oil.....	1.00	.40
Gas oil.....	2.32	.92
Crude gasoline.....	4.70	1.88
Refined gasoline.....	2.35	.94
Crude kerosene.....	1.50	.60
Refined kerosene.....	.75	.30
Lubricants.....	1.40	.56

According to the new tariff the tax on a barrel of heavy crude oil amounts to 8 cents; on crude 0.96 plus, 5 cents; fuel oil, 6 cents; gas oil, 14.6 cents; crude gasoline, 29.8 cents; refined gasoline, 14.9 cents; crude kerosene, 9.5 cents; refined kerosene, 4.7 cents; and lubricants, 8.9 cents. The production tax on crude oil remains unchanged at 14 cents per barrel. The total export and production tax on a barrel of crude oil is 22 cents, compared with a former rate of 34 cents.

Several other decrees of minor importance have been issued since 1920. The Department of Industry, Commerce, and Labor of Mexico issued on April 21, 1920, supplementary regulations dealing with concessions for the use of creeks and rivers in connection with the exploitation of petroleum. After the Carranza Government was overthrown in May, 1920, the acting President issued a decree on July 16, 1920, providing for the establishment of a petroleum consultation committee having the following functions:

- I. To study the laws and regulations relating to petroleum.
- II. To study controversies brought about by the petroleum problem.
- III. To conduct a general investigation of the petroleum industry.
- IV. The development and encouragement of the petroleum industry.
- V. To study the problem of fuel as a basis for industrial development.
- VI. To study the Mexican petroleum industry in relation to the petroleum industry in other countries.
- VII. To render technical decisions on petroleum problems submitted by the Secretary of Industry, Commerce, and Labor, by the various Secretaries of State, or by others. These decisions or opinions to be submitted to the decision of the Secretary of Industry, Commerce, and Labor, or through him to the President.
- VIII. The compilation of general statistics on the petroleum industry.
- IX. To study the legislative measures necessary for the founding of an Institute of petroleum.

No recent official estimates of the present value of the oil industry in Mexico are available. The most recent estimate, made in 1920, follows:

	U. S. dollars.
Value of wells in production.....	100,000,000
Value of oil lands under production.....	50,000,000
Pipe lines, railroads, and welling stock.....	50,000,000
Refineries, machinery, buildings, and ships.....	100,000,000
Miscellaneous producing properties.....	50,000,000
Total.....	350,000,000

It is estimated that American capital represents about 70 per cent of the total investments in the petroleum industry in Mexico, British and Dutch capital 27 per cent, the remaining 3 per cent belonging to native and other interests.

FOREIGN TRADE.

Trade between Mexico and foreign countries has reflected political and economic developments in the country since the revolutionary period began in 1911. The following table, which presents the value of the Mexican foreign trade since 1909, gives a clear indication of the changes effected by current developments from time to time:

Years.	Imports.	Exports.	Excess of exports.
1908-09.....	\$156,533,027	\$231,100,619	\$74,567,592
1909-10.....	194,865,781	260,016,270	65,180,480
1910-11.....	205,874,273	293,753,640	87,879,367
1911-12.....	182,662,311	297,989,129	115,326,818
1912-13.....	192,292,462	300,405,552	108,113,090
1918.....	276,217,464	375,868,385	99,650,921
1919.....	237,038,347	393,790,000	156,751,653
1920.....	357,550,441	406,516,899	48,990,458
1921.....	334,412,303	284,426,070	49,986,233

During the fiscal year 1910-11, just before the first revolutionary outbreak, Mexico imported 205,874,273 pesos' worth of goods and exported domestic products in the sum of 293,753,640 pesos. The political developments during the following fiscal year resulted in a reduction of over 23,000,000 pesos in imports, although an increase in exports was registered, due to the already increasing petroleum shipments from a zone not affected politically at the time. During the fiscal year 1912-13 the political disturbances had subsided somewhat, and merchants started to replenish their stocks, with the result that a considerable gain was registered in imports. From that period up to the present time the productive capacity of the country has been gradually diminishing, due to further disturbances. Lack of transportation facilities, resulting from disintegration of the railroad system and the uncertainty of the farming situation, have also contributed to a reduced production of native staples essential to the support of the laboring classes. The importation of practically all sorts of merchandise from foreign countries became necessary to such an extent that the

country has been virtually supported by foreign products. This fact is indicated by the figures for the calendar year 1918, when Mexican imports exceeded in value those for the fiscal year 1912-13 by over 84,000,000 pesos. It is worth noticing, however, that a considerable increase in machinery imports for use in the oil industry contributed also to this increase. From 1913 to 1918, the period when Mexico suffered most from continued political troubles, no accurate foreign trade figures were kept. It is certain, however, that imports increased as a result of the lessening of productive activity in Mexico, and at the same time exports also increased on account of the oil development. In point of fact, oil constituted 62.1 per cent of the total exports from Mexico to the United States in the first quarter of 1921. Oil exports increased by 13,111,680 pesos in the same period as compared with the first quarter of 1920, whereas all other commodities decreased in the same period by 6,610,566 pesos. About 40 per cent of the manufactures of iron and steel imported into Mexico were destined for the petroleum industry. Machinery of this class imported into Mexico during the first quarter of 1921 was valued at 915,847 pesos against 217,543 pesos for the whole year of 1917.

Notwithstanding the considerable increase in imports during the revolutionary period, Mexico has always had a favorable trade balance. Mexico's preeminence as a silver producer and her enormous oil output are the two principal factors which account for the continued favorable balance.

The following table gives the figures of Mexico's foreign trade by countries during 1918, 1919, and 1920, in United States dollars, conversion having been made at the arbitrary rate of exchange of \$0.50 United States gold to the Mexican peso, the exact par of exchange of the peso being \$0.498.

IMPORTS INTO MEXICO, BY COUNTRIES.

Countries.	1918	1919	1920
United States.....	\$123,768,908	\$100,279,692	\$133,435,162
United Kingdom.....	4,811,410	6,165,185	16,345,949
France.....	1,656,982	3,350,611	10,916,266
Spain.....	957,841	4,054,548	4,516,072
Germany.....	9,681	283,676	3,481,400
Switzerland.....	227,783	300,944	1,657,062
India.....	651,737	610,823	1,572,989
Italy.....	332,955	399,464	1,153,190
Austria.....	.....	1,182	1,123,828
Japan.....	238,308	621,033	846,834
Belgium.....	100	33,518	643,441
Argentina.....	93,665	306,624	534,326
Netherlands.....	14,753	54,727	281,024
Russia.....	4,777	686	252,049
Sweden.....	4,344	112,506	227,832
Canada.....	2,609	30,859	214,644
China.....	224,337	358,291	199,912
Guatemala.....	733,497	211,930	137,776
Cuba.....	1,805,875	312,668	75,541
Chile.....	277,381	79,041	33,027
Peru.....	480,478	2,529	15,720
Other countries.....	1,811,311	948,536	1,111,183
Total imports.....	138,108,732	118,519,173	178,775,221

EXPORTS FROM MEXICO, BY COUNTRIES.

Countries.	1918	1919	1920
United States.....	\$179,525,497	\$176,565,334	\$179,405,995
United Kingdom.....	1,969,907	10,990,073	7,294,378
Cuba.....	1,404,901	1,689,901	4,842,020
France.....	10,007	1,667,996	2,402,178
Chile.....	2,701,510	1,190,502	1,287,875
Argentina.....	148,806	1,275,784	1,277,953
Netherlands.....		55,089	875,413
Brazil.....	242,381	544,605	820,086
Canada.....		378,017	677,000
Germany.....			659,581
British Honduras.....	96,433	420,288	621,439
Spain.....	827,370	746,070	467,232
Guatemala.....	323,121	419,104	404,987
Panama.....	362,413	234,960	282,514
Other countries.....	171,646	708,277	1,894,799
Total exports.....	187,784,192	196,895,000	203,273,450

The following table will give an idea of Mexico's reduced productive power during the same years, especially in the case of exports of food staples, which gave place to a considerable increase in imports of practically all commodities. The increase in total imports, on the other hand, has been more than offset by the production and exportation of oil and its by-products. Under exports the striking decrease in practically all metals is worth noticing. Copper alone suffered a reduction of over 50 per cent in 1920 as compared with the exports for 1918.

IMPORTS INTO MEXICO, BY MAJOR CLASSIFICATIONS.

Articles.	1918	1919	1920
ANIMAL PRODUCTS:			
Live animals.....	\$214,632	\$443,217	\$1,126,485
Meats.....	129,304	221,027	237,723
Wool.....	139,107	940,302	3,762,775
Butter, cheese, lard, and condensed milk.....	7,347,879	6,026,709	9,702,388
Stearine and animal oils.....	395,558	521,160	851,845
Footwear.....	2,253,951	1,855,309	2,063,802
Other leather articles.....	369,599	853,054	1,278,440
Manufactured articles not classified.....	119,874	179,832	377,374
VEGETABLE PRODUCTS:			
Cotton and other fibers.....	1,193,737	655,354	2,939,037
Wheat, corn, rice, vegetables, and fruits.....	9,844,496	4,835,860	7,604,051
Tobacco, plants, and seeds.....	585,855	878,989	1,438,036
Sugar, flour, and edible oils.....	6,223,412	9,559,289	5,272,056
Industrial oils.....	617,950	900,196	1,604,675
Lumber.....	2,294,528	2,574,097	5,128,442
Furniture.....	313,146	508,631	689,278
Other manufactures of wood.....	744,151	1,251,445	2,891,872
All other articles of vegetable material.....	328,689	461,110	885,980
METALS AND MANUFACTURES:			
Gold and silver, including coin.....	49,226,569	3,647,483	6,449,185
Copper.....	880,926	1,659,374	2,740,573
Tin, lead, and zinc.....	683,989	621,446	959,884
Iron and steel.....	6,954,753	14,750,620	22,179,624
Aluminum and other metals.....	86,810	46,720	132,085
MINERAL PRODUCTS:			
Coal, stones, and earthenware.....	1,958,179	1,631,161	3,335,621
Industrial oils.....	1,306,019	1,437,195	2,850,874
Manufactures.....	255,423	693,066	838,862
Glass, crockery, and porcelain.....	749,103	1,212,658	2,702,709

IMPORTS INTO MEXICO, BY MAJOR CLASSIFICATIONS—CON.

Articles.	1918	1919	1920
TEXTILES AND MANUFACTURES:			
Cotton.....	\$12,850,098	\$11,452,428	\$16,343,249
Linen, hemp, and the like.....	513,820	513,826	1,150,847
Wool.....	856,676	2,033,007	3,749,927
Silk and part silk.....	920,736	1,729,256	3,784,486
Artificial silk.....	124,568	243,610	487,251
OTHER PRODUCTS:			
Chemical and pharmaceutical products.....	6,169,475	9,335,173	12,020,862
Wines and spirits.....	661,389	1,989,731	4,031,272
Paper and manufactures.....	1,667,587	4,212,845	3,576,536
Machinery.....	6,409,278	12,058,211	22,307,328
Vehicles.....	3,908,499	5,809,337	7,313,789
Arms and explosives.....	1,491,237	1,542,916	1,734,656
Miscellaneous.....	7,257,729	8,943,529	12,441,342
Total imports.....	138,108,732	118,519,173	178,775,221

EXPORTS FROM MEXICO, BY MAJOR CLASSIFICATIONS.

Articles.	1918	1919	1920
ANIMAL PRODUCTS:			
Live animals.....	\$1,342,964	\$925,522	\$764,799
Hides, green or salted—			
Goat and deer.....	965,629	2,029,379	868,464
Cattle hides, green.....	1,924,501	2,984,976	664,528
Cattle hides, dry.....	1,363,899	1,028,950	314,126
Kidskins.....	63,909	114,017	90,170
All other.....	555,295	583,067	589,691
VEGETABLE PRODUCTS:			
Cotton, raw.....	2,837,599	8,227,607	5,449,919
Hemp, ixtle, etc.....	1,625,168	1,428,487	1,702,083
Heenequen.....	13,804,434	29,945,328	21,883,502
Coffee.....	3,363,687	7,172,933	9,169,689
Beans.....	159,225	143,464	158,552
Chick peas.....	1,321,270	63,220	3,034,564
Vegetables and tubers.....	147,355	1,086	360,278
Zacaton root.....	300,712	2,051,873	1,610,268
Cotton seed.....	331,666	705,232	884,996
Leaf tobacco.....	162,954	315,038	118,945
Vanilla.....	252,510	1,166,634	855,594
Chicle.....	1,527,632	4,398,813	3,609,269
Rubber and guayule.....	829,304	809,718	609,630
Cabinet woods.....	725,148	477,017	690,801
Lumber.....	217,204	170,218	41,014
Cottonseed cake.....	76,141	351,037	203,156
All other.....	106,307	100,780	212,411
MINERALS AND MINERAL PRODUCTS:			
Precious metals—			
Uncoined gold.....	6,586,278	2,871,820	3,289,506
Gold ore in concentrates.....	341,022	2,275,903	801,059
Coined silver.....	82,982	149,537	1,705,022
Uncoined silver.....	47,798,441	56,311,082	42,864,072
Silver ore in concentrates.....	6,167,278	2,788,061	3,541,810
Industrial metals—			
Antimony.....	1,065,764	89,678	127,522
Arsenic.....	274,479	213,044	25,155
Mercury.....	908,301	363,299	182,988
Copper.....	30,244,471	19,990,857	14,758,323
Manganese.....	213,008	254,046	37,384
Lead.....	21,866,832	8,398,358	16,201,784
Zinc.....	4,703,065	2,111,905	2,665,874
All other.....	449,894	103,988	1,318,607
Petroleum—			
Crude.....	17,863,829	21,813,314	37,028,539
Fuel oil.....	9,236,940	5,980,644	11,104,957
Asphalt.....	554,722	387,223	1,196,166
Lubricating.....	587,035	762,576	374,516
Illuminating.....	203,002	372,232	304,854
Gas oil.....	139,577	45,162	142,714
Gasoline.....	695,122	1,234,498	1,439,031
All other.....	240,096	1,072,136	644,255
MANUFACTURES:			
Tobacco.....	101,519	159,584	57,184
Cordage and manufactures of heenequen, jute, etc.....	79,111	276,787	132,160
Hats, baskets, etc.....	339,051	423,739	468,911
Total exports.....	187,784,192	196,895,000	203,273,450

RUSSIAN BANKING AND CURRENCY.

A survey of Russia's banking and currency conditions during the past few years shows the financial havoc wrought by the economic policy of the present Russian Government. Certain aspects of Russian finance have already been commented on in a previous article (August *FEDERAL RESERVE BULLETIN*, pp. 936-942). The purpose of the present article is to measure, so far as the available information permits, the extent of increase in paper money, the loss of the gold reserve of the country, and to describe changes in the banking system.

I. CURRENCY.

The process of currency inflation and depletion of the gold stock started soon after the outbreak of the European war. The Czar régime, however, increased the outstanding notes only moderately, and did not differ in this respect from the inflation policy prevailing in almost all belligerent countries. The Kerensky régime started to issue paper notes on a much larger scale, and a similar policy was then followed by the Soviet.

Shortly after the outbreak of the war the limitations imposed by statute on the issue of paper money by the Imperial Russian Bank were set aside. The statute had provided that paper money issued should not exceed the gold reserve of the bank by more than 300,000,000 rubles. This restriction on note issue was abolished and the right to convert them freely into gold was abrogated.

On July 14, 1914, the outstanding notes amounted to 1,633,000,000 rubles and were covered by 1,744,000,000 gold rubles, a reserve of 107.4 per cent. During the three years and four months between the opening of the war and the inauguration of the Soviet régime, the paper notes in circulation increased over eleven fold. This expansion is indicated in the following table:

	Rubles.
July 16, 1914.....	1, 633, 000, 000
Jan. 1, 1915.....	2, 947, 000, 000
Jan. 1, 1916.....	5, 617, 000, 000
Jan. 1, 1917.....	9, 103, 000, 000
Nov. 17, 1917.....	18, 916, 000, 000

Out of this sum of 18,916,000,000 rubles, 9,950,000,000 rubles were issued by the Czar Government up to March 1, 1917, while 8,966,000,000 rubles were issued by the provisional or Kerensky Government during the nine months of its existence.

The notes issued by the Czar régime, known as "Czar" or "Romanov" rubles, were of a denomination of 500, 100, 50, 25, 10, 5, 3, and 1 rubles. Each note bore an inscription stating that it could be converted into gold, one ruble

being equal to one-fifteenth of one "imperial." The Kerensky régime continued the printing of Czar rubles, but, in order to increase the output of paper money, started to issue new currency notes, which were divided into two classes, namely, "Duma" and "Kerensky" rubles. The Duma rubles, issued in denominations of 2,000, 1,000, and 250 rubles, were Government obligations and nominally convertible into gold. The Kerensky notes, however, issued in denominations of 40 and 20 rubles, were not convertible into gold. Soon after the appearance of the Duma and Kerensky rubles, the Czar rubles disappeared from circulation and maintained an agio (premium) of between 30 to 60 points over the notes issued by the Kerensky régime.

For more than a year and a half the Soviet Government did not print its own notes but continued to issue "Czar," "Duma," and "Kerensky" rubles. From November 7, 1917, to January 1, 1918, they printed 6,544,000,000 rubles. Thus, at the beginning of January, 1918, the total amount of paper notes outstanding amounted to 25,462,000,000 rubles, of which 10,400,000,000 rubles or 40.8 per cent, were Czar rubles, 6,340,000,000 rubles, or 24.9 per cent, Duma rubles, and 8,722,000,000 rubles, or 34.3 per cent, Kerensky rubles. During the year 1918, 29,000,000,000 rubles were added to the amount already outstanding, and thus on January 1, 1919, the total amount of notes outstanding was 55,000,000,000 rubles, of which 15,000,000,000 rubles, or 27.3 per cent, were Czar rubles, 22,000,000,000 rubles, or 39.6 per cent, were Duma rubles, and 18,000,000,000 rubles, or 33.1 per cent, were Kerensky rubles.

In April, 1919, the first Bolshevik rubles appeared. They were of 1, 2, and 3 ruble denominations, and were commonly called "notes of account." Later in the year, however, notes of a much larger denomination were issued, known as "Pensenki" or "Lenenki." The notes were a direct obligation of the Government and were nominally redeemable in gold. Soon after their appearance the Duma and Kerensky notes disappeared from circulation.

During the year 1919 the paper note circulation increased by approximately 170,000,000,000 rubles, so that at the beginning of 1920 the total amount of notes outstanding amounted to 225,000,000,000 rubles of the following classes:

Class.	Rubles.	Per cent of total.
Czar notes.....	22, 000, 000, 000	9
Duma notes.....	39, 000, 000, 000	18
Kerensky notes.....	47, 000, 000, 000	21
Soviet notes.....	117, 000, 000, 000	52

As the printing press was almost the only source of income of the Government, the number of outstanding notes during 1920 increased rapidly. It was estimated that during 1920 about 65,000,000,000 rubles of notes per month were issued. The denominations of the notes were raised, and 1, 10, and 100 ruble notes disappeared entirely from circulation. The paper of which the notes were made was of very poor quality and, due to the lack of paper, the issuing of Czar, Duma, and Kerensky notes was largely discontinued. The total amount of notes issued during 1920 was about 800,000,000,000 rubles, thus making the total amount of all notes outstanding on January 1, 1921, about 1,100,000,000,000 rubles.

The output of paper notes during 1921 and 1922 was accelerated, as may be seen from the following table showing the amount of notes outstanding on certain dates:

Date.	Rubles.
Jan. 1, 1921.....	1,169,000,000,000
Oct. 1, 1921.....	4,534,000,000,000
Dec. 1, 1921.....	9,849,000,000,000
Jan. 1, 1922.....	17,554,000,000,000
Feb. 1, 1922.....	29,778,000,000,000
Mar. 1, 1922.....	48,535,000,000,000

It is evident that the notes outstanding nearly doubled from month to month.

The huge increase in prices and salaries necessitated the issuing of notes of 100,000, 1,000,000, and 10,000,000 ruble denominations. The amount of notes issued during April, May, and June has been estimated to range between 50 and 85 trillion rubles per month. To bring down the fabulous sums of notes outstanding and their denominations, and to decrease the huge prices paid for daily necessities, the Soviet régime carried through a "currency reform." A set of new notes, so-called "notes of 1922," was issued, of which 1 ruble was made equal to 10,000 rubles of all previous Soviet issues. The Government stopped printing notes of previous issues and is about to redeem the old notes. The devaluation of the currency is in accordance with the new economic policy which tends to stabilize the ruble exchange and to introduce a new currency system.

It may also be mentioned that up to the beginning of 1922 all business transactions in Russia were carried on exclusively by the aid of paper notes. Payment for commodities and services by check or draft ceased soon after the nationalization of banks and credit institutions early in 1918. The lack of banking institutions and credit instruments necessitated an increase in the amount of paper notes and

further aggravated the currency situation of the country. The newly established State bank and other banking institutions were intended to improve this situation.

The attitude of the Soviet Government toward the Russian currency was a part of their economic policy. According to the theory of the Soviet leaders there was no need for money in a communistic State with an interchange of goods and services regulated and administered by the highly centralized Government. Interchange of services and goods in such a State is merely a matter of accounting or of debiting and crediting the various Government institutions and those employed by the Government. To reach this final stage the Soviet Government followed this policy. It abolished payments for many exchanges of goods and services. Thus, according to a Russian newspaper of October, 1921, the Council of People's Commissaries introduced the following bill abolishing money for certain transactions:

By order of the Small Council, the People's Commissary of Finance is instructed, in agreement with other departments, to present within a definite period detailed bills for carrying out the following measures:

(1) To abolish payment for all telegraph and postal services where these are of an official character.

(2) To abolish payment for the use of telephones, water, gas, and electricity in State institutions and enterprises, and also for services of workmen and employees.

(3) To abolish payment for fuel furnished to State institutions and also to their workmen and employees.

(4) To abolish payment for products issued by the Commissary of Food Supplies to consumers who receive the same through governmental institutions on the basis of food cards.

(5) To abolish payment for living quarters with respect to Government workmen and employees who live in nationalized or municipalized dwellings.

(6) Governmental institutions, within the meaning of this order, are considered to be the Communist International, the All-Russian Central Soviet of Trade Unions, and the Central Union of Cooperatives, with all their central and local organizations.

(7) The abolition of payment under this decree includes not only payment in tokens of exchange, but also all budget transfers for settlement according to paragraphs 1-6.

In conclusion it may also be of interest to survey the various issues of paper notes issued by municipalities, States, or leaders of anti-Soviet troops. Almost every large city in Soviet Russia printed its own money. The Kolchak Government in Siberia issued, during the time of its existence, 25,000,000,000 so-called Siberian rubles. The larger part of them was canceled by the Bolsheviks and only a small part was converted into notes issued by the Far Eastern Republic. In the Ukraine, notes amounting to several billion rubles were issued by the various temporary Governments. The greater part of these notes the Bolsheviks recognized and converted into soviet notes. The notes, however, issued by Denikin and Wrangel were entirely canceled. Large

amounts of paper notes were also issued by the Germans in the territories occupied by them and by the various federated Soviet Republics. In most cases these notes were recognized by the Soviet Government and exchanged for Soviet rubles.

SOVIET ATTITUDE TOWARD GOLD.

The tremendous increase in the amount of paper notes outstanding was followed by a rapid decrease of the gold stock of the country. Perhaps in no State in modern times has the gold reserve of a country been depleted in such a short time as in Russia. Shortly before the outbreak of the war the Russian gold reserve amounted to 1,744,000,000 rubles, or \$897,298,000. It was at that time the largest gold reserve accumulated in any one country of the world, and surpassed the total of paper notes in circulation, amounting to 1,633,000,000 rubles, by 111,000,000 rubles. The gold reserve was kept mainly at home and only 140,000,000 rubles were held abroad, largely in Great Britain and France.

Soon after the outbreak of the war Russia started to export gold to the various allied countries, mainly to Great Britain, in order to establish credits for the purchase of ammunition and other war supplies. The total amount of gold shipped from Russia to Great Britain up to the outbreak of the February revolution was estimated to be about 600,000,000 gold rubles. Dr. Magnus Feitelberg, in his booklet "Paper money in Soviet Russia," estimated the decline of the Russian gold reserve as follows:

GOLD HELD BY THE RUSSIAN STATE BANK.

	Rubles.
July 16, 1914.....	1,604,000,000
Jan. 1, 1915.....	1,560,000,000
Jan. 1, 1916.....	1,614,000,000
Jan. 1, 1917.....	1,478,000,000

The decrease in the gold reserve kept in Russia was followed by an increase of the Russian gold reserve kept abroad, since, with the consent of Great Britain, Russia continued to consider the gold shipped to England as part of her gold reserve.

At the outbreak of the first revolution the Russian gold reserve was estimated to be 1,166,180,000 rubles. Between the first revolution in March, 1917, and the inauguration of the Soviet régime in November, 1917, the reserve was increased by 31,758,000 gold rubles obtained from the Siberian and Ural gold mines. The Kerensky régime shipped 5,000,000 gold rubles to Sweden, so that the Russian gold reserve at the time of the accession of the Soviet Government to power amounted to about 1,192,938,000 rubles. Doctor Feitelberg

places this sum at 1,292,000,000 rubles, but it seems more probable that the Bolsheviki did not find in the Central Bank more than 1,200,000,000 gold rubles, or \$600,000,000.

Taking into consideration the known facts regarding gold movements in Russia during the first three years of the new régime, the total amount of gold under the control of the Soviet Government at the end of 1920, not including gold withdrawn from circulation or gold confiscated, may be estimated at about 900,000,000 rubles, or \$450,000,000. This estimate is composed of the following items:

	Rubles.
Original gold stock.....	725,000,000
Rumanian gold.....	125,000,000
Gold mined in Siberia (1918-1920).....	50,000,000

Some sources estimate this sum at 950,000,000 gold rubles, while others place it as low as 650,000,000 gold rubles.

If the gold withdrawn from circulation and confiscated gold valuables are added to the above sum, the total gold of the Soviet Government at the end of 1920 may be placed at between 950,000,000 and 1,000,000,000 gold rubles. Taking the first figure as a basis and deducting the shipments of gold from Russia during the last two years it is possible roughly to estimate the total amount of gold at present under Soviet control.

Soon after the inauguration of the Bolsheviki régime, gold was demonetized and all dealings in gold coin and bullion were prohibited. Gold was declared a commodity in which only the Soviet authorities might deal for the purpose of buying commodities abroad. Since Russia produced only few commodities for export in return for its imports, she was forced to ship gold continuously to other countries, and such gold shipments increased after the lifting of the blockade. In addition to shipments of gold as payments for imports, the Soviet Government paid about 32,000,000 gold rubles to the border States according to the various peace treaties concluded with these new States. For payment of imported goods about 540,000,000 gold rubles were shipped during 1920, 1921, and January, 1922, to other countries. If these two sums are deducted from the sum arrived at before (950,000,000 rubles), the gold available in Russia at the beginning of February, 1922, may be estimated to be between 350,000,000 and 400,000,000 rubles. This figure, however, is without doubt too large, since the 540,000,000 gold rubles shipped abroad include only shipments through Reval, it being impossible to trace shipments through other ports. In the June, 1922, FEDERAL RESERVE BULLETIN the amount of gold available in Russia was estimated at 100,000,000 rubles.

It is difficult to estimate the total amount of gold at present in Soviet Russia. While gold shipments to foreign countries still continue, the gold reserves are steadily replenished by gold confiscated from the church. Gold shipments to other countries are likely to continue for some time, since Russia can hardly avoid having an excess of imports for many years. The creation of a new gold reserve will be one of the most difficult tasks in the reorganization of the Russian currency.

II. BANKING.

Immediately after the inauguration of the Bolshevik régime the Council of People's Commissaries issued a decree whereby banking was declared a government monopoly. All private and semipublic banking institutions were nationalized. The assets and liabilities of the nationalized banking institutions, commercial as well as savings, were combined with those of the State bank. Out of these institutions the soviets founded a new bank, the so-called "People's Bank." This institution, however, exercised banking functions only to a very limited extent, and became in a short time a mere bookkeeping department, whose duty it was to debit and credit the various Government institutions.

The decree liquidating domestic banks was issued on December 14, 1917, or one month after the accession of the Soviets to power. Foreign banks or branches of foreign banking institutions continued to operate for some time, but at the end of 1918, the Council of People's Commissaries decided also to liquidate these. The principal regulations for the liquidation of foreign banks operating within the boundaries of the Russian Socialist Federal Soviet Republic, approved April 22, 1919, were as follows:

(1) According to the decree of the Council of People's Commissaries of December 2, 1918, all foreign banks are subject to liquidation.

(2) For such liquidation there is granted a month from the day of the publication of these regulations.

(3) Liquidation is executed by a liquidating commission, composed of the management of the bank, namely, the manager or his substitute, head bookkeeper, and one representative of the employees under the supervision of a special commissary.

(4) The liquidating commission makes a balance, closes out all operations and accounts, and undertakes all operations necessary to the prompt liquidation of the affairs of the bank.

(5) The credits thus realized are to be used in cancelling the indebtedness of the banks to the State and People's Bank, in the first place, then to the Russian depositors and other creditors, and, finally, to foreign creditors of the bank, under the following conditions:

(a) The credits resulting to Russian depositors and creditors are entered on their current accounts in the People's Bank, and are subject to the existing regulations governing payments on current accounts.

(b) The remainder, after satisfying the Russian depositors and creditors, are deposited to the credit of the foreign bank. From this amount payments are made to the foreign depositors and creditors, beginning with the most needy ones.

The nationalization and the liquidation of the banks in the country deprived Russia of all credit institutions, with the result that Russia became a country in which no exchanges of services or commodities were carried on by means of credit instruments. The Narodny Bank, the financial institution of the powerful cooperative societies, and the Mutual Credit Association continued their operations for a short time, but they also were finally liquidated.

Thus the only banking institution left in the country was the so-called People's Bank. Its functions were limited and defined by various decrees issued by the Soviet officials. The operation of the bank was described by the Commissary for Finance in a speech made before the All-Russian Financial Congress in 1919. The following is a translation of a part of this speech:

(1) The People's Bank of the Russian Soviet Republic has the exclusive right of granting and disbursing credit.

(2) As such—

(a) It serves the Supreme Council for National Economy, the People's Commissariat for Supplies, and the People's Commissariat for Commerce and Industry, financing the nationalized production, the operations of the Commissariat for Supplies, and the operations of the Commissariat for Foreign Trade.

(b) Finances railway building and railway operations.

(c) Finances the agricultural economy.

(d) Finances the payments of the People's Commissariats for Labor and Social Protection for promoting the social security of citizens.

(e) Makes all the payments of the commissariats and handles all receipts.

(f) Makes all the payments of the Soviet institutions mutually and with all private persons and enterprises.

(g) Makes all the payments of the State and, with the consent of the Commissariat for Commerce, also settles all the accounts of the public and private organizations with foreign Governments and citizens.

(10) As to settlement of accounts with other countries where the capitalistic social order exists, the People's Bank follows the former bank regulations and usages which have international application.

(11) During the present transition period the People's Bank also retains some credit functions:

(a) Finances the cooperatives.

(b) Grants credit to the not yet nationalized enterprises.

(c) Receives from private citizens deposits of limited amounts.

(d) Continues the activity of the savings banks in life insurance and meets the obligations of the former insurance companies.

THE STATE BANK.

In accordance with the new economic policy inaugurated during 1921 (see *FEDERAL RESERVE BULLETIN*, August, 1922, pp. 936-942), a number of more or less independent business organi-

zations were created, the operations of the Central Soyúz were enlarged, and free trading was permitted to a very large extent. In order to finance the decentralized industries and to provide them with working capital, a new banking institution, the so-called "State Bank," was founded. This bank in its operations resembles a central reserve bank, but it also performs the functions of an ordinary commercial bank. It is organized and controlled by the State, but has no right of note issue. Its capital consists of 2,000 billion Soviet paper rubles, old issue, which were handed over to the bank from the resources of the treasury after a certain appropriation had been made in a budgetary way. The surplus is to be formed out of the profits of the bank. The amount of surplus which may be accumulated is unlimited, but if the loss in any one year exceeds the total accumulated surplus, the difference between loss and surplus will be met by the State. The net profits of the bank are divided as follows: 50 per cent goes to surplus, not more than 20 per cent may be used for the improvement of the living conditions of the employees of the bank, while the rest is handed over to the treasury of the Government.

ADMINISTRATION OF THE STATE BANK.

The statutes and by-laws regulating the activities and administration of the bank have been prepared by experts of the People's Commissariat for Finance and sanctioned by the All-Russian Executive Committee. The following are the principal regulations with regard to the operation and administration of the bank:

The supervision of the bank is exercised by the People's Commissary for Finance. He approves all the fundamental regulations concerning the operations of the bank, approves the rate of interest and commissions to be charged and the annual expenses of the bank. The administration of the State Bank is entrusted to a board of directors, whose residence is Moscow. The president of the board of directors is named by the Commissary for Finance and is appointed by the Supreme Council of the People's Commissaries. The other members of the board of directors are appointed by the Commissary for Finance.

The functions of the board of directors are:

- (a) To give instructions regarding the operation of the bank.
 - (b) To fix the rate of interest and commissions.
 - (c) To organize the interior service of the bank and its accounting system.
 - (d) To appoint and to discharge employees.
 - (e) To represent the interests of the bank in dealing with judicial and other State institutions at home and abroad.
 - (f) To open branches in all parts of the Russian Republic. The opening of a branch, however, must be approved by the Commissary for Finance.
- The board of directors meets whenever necessary, upon call of the president. The affairs of the bank are

decided by vote. In case there is a disagreement between the president and the majority of directors, the question is submitted to the People's Commissary for Finance. The various agencies of the bank are divided into 3 classes:

- (a) Central district branches.
- (b) Branches.
- (c) Agencies.

The central district branches are opened in important places of the Republic in the discretion of the board of directors, who also supervise the operations of all the branches and agencies.

The directors of the central district branches are appointed by the Commissary for Finance with the advice of the board of directors and competent local authorities.

Branches of the bank are opened in important cities of governments (administrative divisions) and districts. At the head of each branch is a director appointed by the Commissary for Finance with the advice of the board of directors of the bank. The district branches are under direct supervision of the central district branch.

The board of directors is assisted in its work by a committee on loans and discounts, which determines the lines of credit to be granted to concerns, State-controlled enterprises, and private organizations. All branches and agencies have committees for loans and discounts. The decisions of these committees must be confirmed by the board of directors of each branch or agency.

OPERATIONS OF THE BANK.

The State Bank of the Russian Socialistic Federated Soviet Government endeavors to facilitate the development of industry and commerce. For this purpose it opens credits to industrial enterprises of the State corporations, to affiliated institutions, and to private enterprises, agricultural as well as industrial. The bank may engage in the following operations:

- (1) The granting of call loans guaranteed by current accounts, documents representing goods, bills of exchange, and other obligations.
- (2) The opening of credits on call against foreign securities, currency, precious metal, and drafts.
- (3) The granting of time loans on each of the securities mentioned in paragraphs 1 and 2.
- (4) The discounting of bills of exchange and other obligations.
- (5) The purchase and sale on commission of goods admitted to free trading.
- (6) The purchase and sale for the bank's own account of foreign securities, drafts, and precious metals, within the limits of existing regulations.
- (7) The issuance of letters of credit on documents for goods exported or imported.
- (8) The issuance of drafts and letters of credit on places within the Russian Socialist Federal Soviet Republic and in foreign countries wherever the bank has branches or correspondents.
- (9) Commission operations—collection of money under bills of exchange, obligations, foreign drafts, documents for goods and all other kinds of documents and securities.
- (10) Receipt and payment of money deposits which are made as follows: (a) On current account; (b) payable at a fixed period of time; (c) on fixed terms for unlimited amounts. Certificates of deposit of the bank may be accepted as securities for loans. The deposits are not subject to detention or sequestration otherwise than in accordance with the soviet laws.
- (11) Acceptance of different articles for safe-keeping for not more than five years.

After the bank has begun its activities it shall take over from the central and local institutions of the People's Commissariat of Finance all deposits and temporary accounts, unpaid drafts, and letters of credit, as well as the accounts pertaining to the financing of the cooperative unions. All operations on account of the Government

shall be conducted exclusively through the State Bank. Besides, the bank will take over from the Commissariat of Finance all work connected with the receipt of State revenues and the payment of State expenditures.

The operating year of the bank will be counted from January 1 to December 31.

The new bank has no connection with the old Imperial Russian bank, and is not liable for the operation of that institution. The bank started its activities on November 16, 1921, and opened immediately a central district branch in Kharkoff, with a capital of 500 billion soviet rubles, to serve the interests of the affiliated Ukrainian Soviet Republic. Branches were also established in the most important cities, including Petrograd, Odessa, and Perm. The bank has established correspondent relations with banks in Germany, such as the Deutsche Bank and the Dresdner Bank, and has a number of correspondents in many other countries, including the United States, Italy, Sweden, and England.

The rate of interest charged by the bank at the beginning varied from 8 per cent to 12 per cent per month. Institutions operated by the Government or State institutions were charged a lower rate of interest than private organizations. For transfer of funds from one place to another, a commission of 2 per cent was charged if the sum did not surpass 100,000 rubles. For larger sums the commission was scaled down, the lowest charge being one-half of 1 per cent for transfers of sums exceeding 80,000,000 rubles. The bank paid 3 per cent per month on demand deposits and 5 per cent on time deposits. More recently, however, the interest rates charged to customers were reduced considerably, and range at present from 2 to 3 per cent per month. At the same time the interest rate paid by the bank to customers was reduced.

The Soviet Government also issued laws and regulations with regard to remittances of money from foreign countries and with respect to bills of exchange. The following are the principal regulations concerning remittances of money from abroad:

(1) Money remittances by post or telegraph from foreign countries to Russia are effected through the treasuries of the Commissariat of Finance attached to the missions of the Commissariat of Foreign Trade in foreign countries.

(2) The above-mentioned treasuries of the Commissariat of Finance may accept money for remittance from private persons or public organizations without limitation of amount.

(3) Said treasuries execute such remittances only on receipt of the sum to be transferred in the respective foreign currency (a) in cash, or (b) in cheques.

(5) The payment of such foreign money orders in Russia shall be made in soviet money, in the full amount, at the rate of exchange which shall be periodically fixed by the Commissariat of Finance, with the concurrence of the Commissariat of Foreign Trade and the Labor-Peasant Inspection.

(8) The amount of the dues to be levied on such transactions shall be fixed by the Commissariat of Finance.

(9) The forms of remittance documents, the procedure in attending to correspondence and in keeping accounts, shall be established by a special order to be issued by the Commissariat of Finance, with the concurrence of the Commissariat of Foreign Trade and the Commissariat of the Labor-Peasant Inspection.

The most important regulation is No. 5, which states that funds remitted from abroad shall be paid in Russian Soviet rubles at the official rate of exchange. It is to be noted, however, that the official rate as quoted by the State Bank is usually between 100 and 200 per cent lower than the rate in the open market.

The new economic policy of the Soviet Government necessitated also the passing of certain laws with regard to bills of exchange. To meet these requirements the Soviet Government issued a series of laws regulating all contracts of bills of exchange. The most important clauses affecting bills of exchange are the following:

(1) The amount of a bill of exchange can be fixed either in pre-war gold rubles, or in any currency which has circulation in the Russian Federation. In the event of the bill of exchange being made out in pre-war gold rubles, it shall be payable in the currency which has circulation in the Russian Federation, calculated at a rate of exchange which has been fixed by the Commissariat of Finance for the day of the payment. In the case of bills of exchange drawn abroad, in foreign currency, but payable in Russia, or drawn in Russia and payable abroad, but presented for payment in Russia, the amount is to be calculated in the currency which has circulation in Russia, at a rate of exchange to be fixed by the Commissariat of Finance.

(2) A bill can be protested before a notary public, or, where there is no such functionary, before a justice of the people's court.

(3) In the event of a bill payable in gold rubles being protested, interest at 6 per cent and a fine of 3 per cent from the day the bill has become due to the day of actual payment can be claimed. In the case of a bill payable in soviet currency, the rate of interest is to be fixed in accordance with the rates established by the State Bank for active operations.

(4) With regard to transferable bills of exchange, the place of payment, the place of residence of the respondent, and all other usual particulars must be given, as required for bills of exchange.

(5) As regards suing for the payment of a bill, three years' limitation is established, counting from the day the bill has been protested.

It should be noted that these regulations are only temporary, and will be changed or replaced by others as soon as new economic conditions require it.

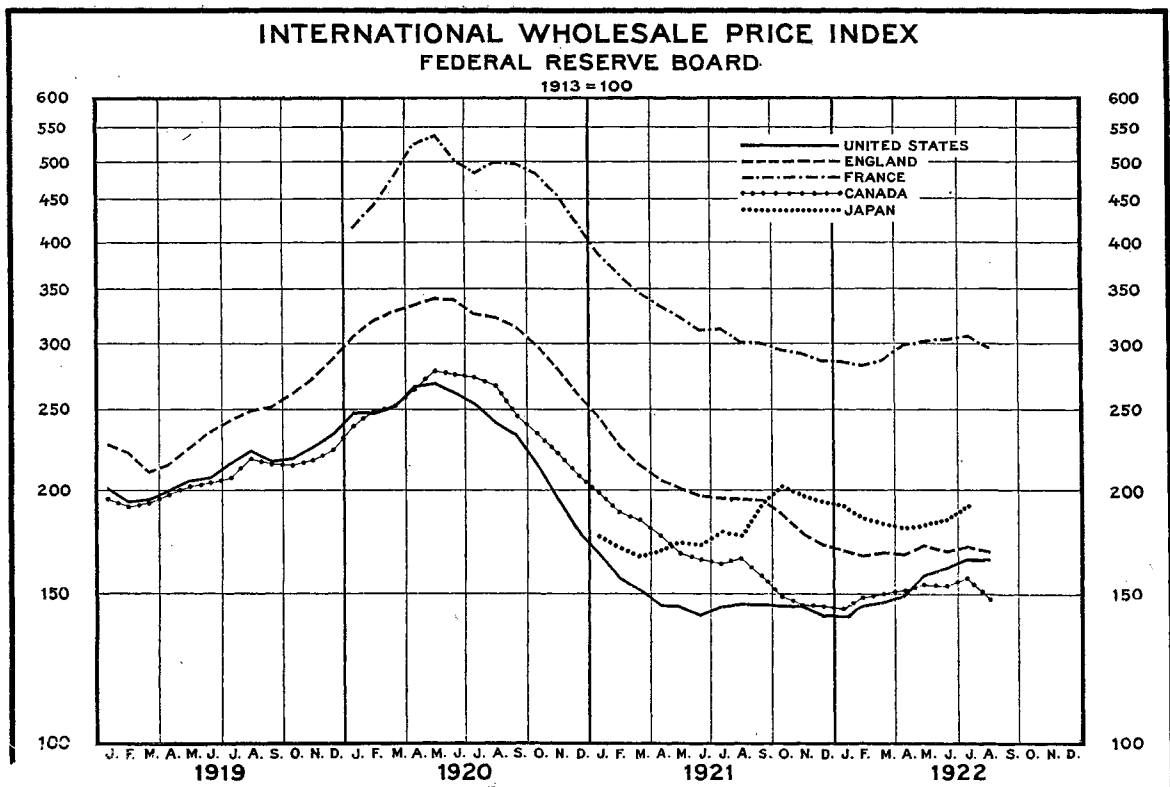
As already mentioned in a previous study, the Soviet Government contemplates the opening of banks for foreign trade to facilitate Russia's international commerce. Foreign banks also have applied to the Soviet Government for permission to establish either branches or independent banking institutions in Russia.

INTERNATIONAL WHOLESALE PRICE INDEX.

A comparison of group index numbers shows that the greatest decrease took place in consumers' goods, which fell in every country. The cause of this fall was the very general break in agricultural prices in all countries. This evidenced itself also in the raw materials groups, except in the United States and England, where it was offset by increases in the prices of minerals and metals.

INTERNATIONAL WHOLESALE PRICE INDEX—FEDERAL RESERVE BOARD.

Year and month.	Based on prices in respective currencies.					Converted to gold basis.				
	United States.	England.	France.	Canada.	Japan.	United States.	England.	France.	Canada.	Japan.
1913, average.....	100	100	100	100	100	100	100	100	100	100
1919, average.....	211	241	207	207	211	211	221	199	199	211
1920, average.....	239	314	478	250	239	239	242	185	223	239
1921, average.....	148	201	321	167	148	148	159	124	150	175
1921.....										
August.....	146	195	302	166	146	146	121	150	172	146
September.....	146	194	301	158	146	148	113	141	186	146
October.....	145	187	295	149	145	149	111	136	193	145
November.....	145	177	292	145	145	144	109	133	189	145
December.....	142	172	287	145	142	147	117	135	186	142
1922.....										
January.....	142	170	286	144	142	148	121	137	181	142
February.....	146	167	283	149	146	150	128	145	176	146
March.....	147	168	287	150	147	151	134	145	173	147
April.....	149	167	299	152	149	151	143	148	171	149
May.....	158	171	302	154	180	158	143	152	171	158
June.....	161	169	303	153	184	161	154	151	176	161
July.....	165	171	306	154	192	165	156	152	184	165
August.....	165	168	297	148	184	165	154	148	176	165

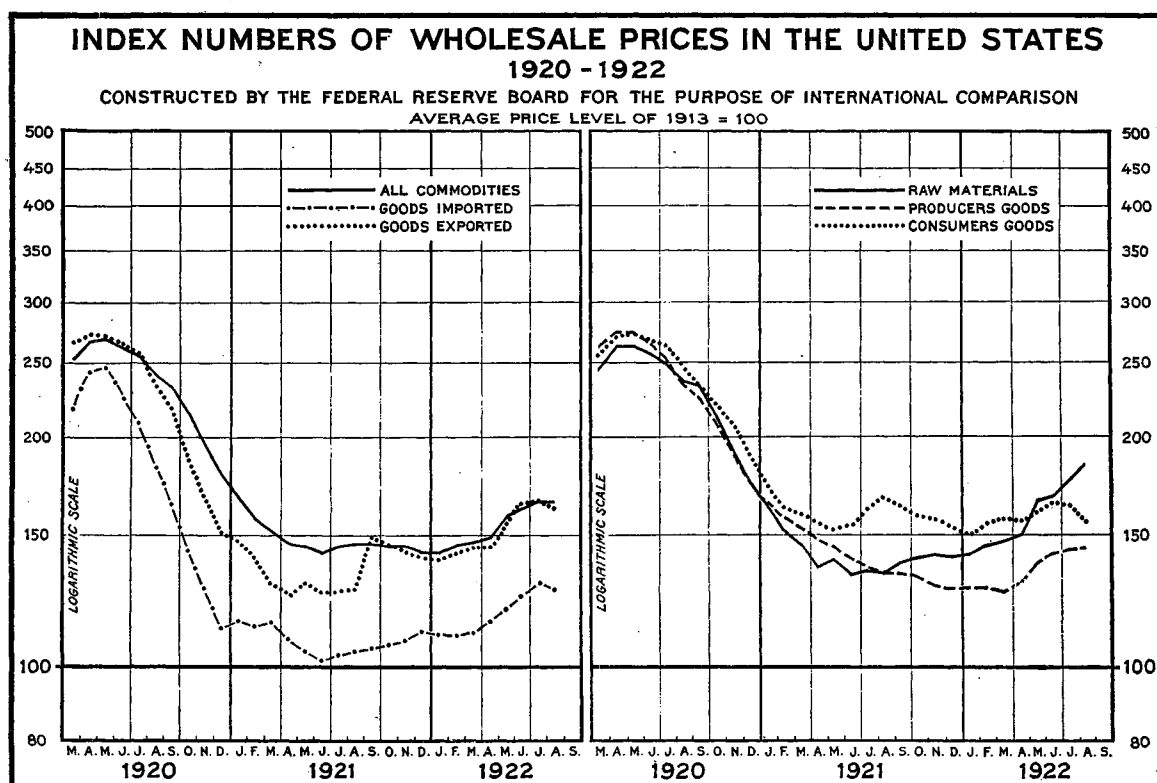


INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES.¹

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.
1919, average.....	214	174	221	209	198	221	211
1920, average.....	242	191	235	235	237	244	239
1921, average.....	148	108	136	141	142	160	148
1921.							
August.....	144	104	127	133	133	167	146
September.....	144	106	149	138	133	162	146
October.....	143	107	146	140	132	158	145
November.....	142	108	143	141	128	157	145
December.....	140	111	141	140	127	153	142
1922.							
January.....	139	110	139	141	127	150	142
February.....	143	110	142	145	127	155	146
March.....	144	111	144	147	126	157	147
April.....	146	115	144	150	129	156	149
May.....	155	119	155	164	137	160	158
June.....	158	124	163	167	141	164	161
July.....	162	128	165	177	143	163	165
August.....	162	127	162	184	144	156	165

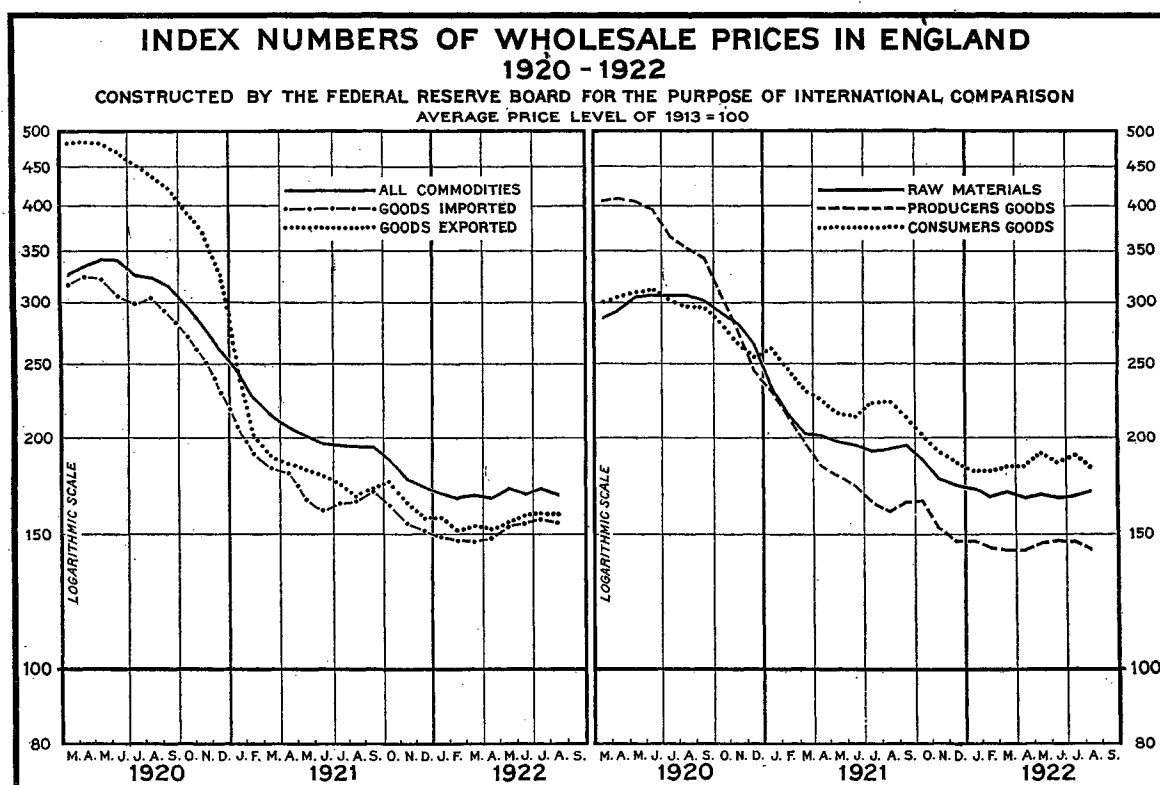
¹ A complete description of the United States index number, as originally published, may be found in the May, 1920, BULLETIN, pages 499-503. Revisions in prices or weights appear in the BULLETINS for June, 1920, June, 1921, and May, 1922.



INDEX NUMBERS OF WHOLESALE PRICES IN ENGLAND.¹

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1919, average.....	238	247	275	226	261	241	241	221
1920, average.....	315	294	438	291	355	292	314	242
1921, average.....	207	171	183	197	178	219	201	159
1921.								
August.....	202	165	168	193	161	223	195	146
September.....	199	170	171	195	165	212	194	148
October.....	192	163	175	187	166	200	187	149
November.....	182	154	164	177	153	191	177	144
December.....	176	152	158	173	147	186	172	147
1922.								
January.....	174	149	158	171	147	181	170	148
February.....	171	148	151	168	144	181	167	150
March.....	172	147	153	170	142	183	168	151
April.....	171	148	152	167	143	183	167	151
May.....	175	153	155	169	146	191	171	156
June.....	172	154	158	167	148	186	169	154
July.....	172	158	158	168	147	190	171	156
August.....	170	155	159	170	143	183	168	154
September.....	165	157	154	166	143	177 _{1/2}	165	150

¹ A complete description of the British index may be found in the February, 1922, issue of the BULLETIN, pages 147-153.

INDEX NUMBERS OF WHOLESALE PRICES IN FRANCE.¹

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1920, average.....	466	536	512	506	433	474	478	185
1921, average.....	322	313	288	341	248	348	321	124
1921.								
August.....	304	290	261	322	229	330	302	121
September.....	298	314	276	328	240	309	301	113
October.....	291	314	291	319	238	304	295	111
November.....	290	304	294	315	233	305	292	109
December.....	284	303	283	313	230	294	287	117
1922.								
January.....	284	295	277	308	229	299	286	121
February.....	282	286	275	300	227	300	283	128
March.....	288	282	272	305	229	306	287	134
April.....	302	282	274	318	228	327	299	143
May.....	305	288	279	322	226	333	302	143
June.....	305	295	292	327	230	327	303	138
July.....	306	308	297	332	236	325	306	131
August.....	295	309	296	329	233	303	297	122

¹ A complete description of the French index may be found in the August, 1922, issue of the BULLETIN, pp. 922-929.INDEX NUMBERS OF WHOLESALE PRICES IN CANADA.¹

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1919, average.....	207	204	220	197	188	227	207	199
1920, average.....	249	253	268	235	255	270	250	223
1921, average.....	168	164	181	155	174	183	167	150
1921.								
August.....	167	158	188	155	162	182	166	150
September.....	158	155	175	147	159	174	158	141
October.....	148	153	149	136	153	166	149	136
November.....	144	151	138	131	152	164	145	133
December.....	144	151	137	131	149	164	145	135
1922.								
January.....	143	151	139	132	147	161	144	137
February.....	148	150	152	138	147	164	149	145
March.....	150	150	151	140	146	166	150	145
April.....	152	151	153	142	146	169	152	148
May.....	153	157	154	145	147	168	154	152
June.....	151	162	149	143	150	168	153	151
July.....	153	165	154	143	152	171	154	152
August.....	145	167	144	135	154	164	148	148

¹ A complete description of the Canadian index may be found in the July, 1922, issue of the BULLETIN, pp. 801-806.INDEX NUMBERS OF WHOLESALE PRICES IN JAPAN.¹

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1921, average.....	186	154	173	154	188	193	181	175
1921.								
August.....	184	144	166	142	187	193	177	172
September.....	197	167	175	159	199	207	192	186
October.....	208	172	185	171	209	217	202	193
November.....	204	162	183	167	193	215	197	189
December.....	201	154	192	167	192	209	193	186
1922.								
January.....	198	153	197	168	191	203	191	181
February.....	192	151	186	163	183	198	185	176
March.....	187	153	175	157	183	195	182	173
April.....	186	151	176	157	183	192	180	171
May.....	185	157	183	164	182	189	180	171
June.....	188	166	192	168	191	191	184	176
July.....	197	167	196	170	195	203	192	184
August.....	189	160	189	161	187	196	184	176

¹ A complete description of the Japanese index may be found in the September, 1922, issue of the BULLETIN, pp. 1052-59.

WHOLESALE PRICES OF INDIVIDUAL COMMODITIES IN THE UNITED STATES.

In order to give a more concrete illustration of actual price movements in the United States, there are presented in the following table monthly actual and relative figures for certain commodities of a basic character. The prices have in most cases been obtained from the records of the United States Bureau of Labor Statistics. To save space this table is published in the BULLETIN only once in three months.

[Average price for 1913=100.]

Year and month.	Corn, No. 3, Chicago.		Cotton, middling, New Orleans.		Wheat, No. 1, northern spring, Minneapolis.		Wheat, No. 2, red winter, Chicago.		Cattle, steers, good to choice, Chicago.		Hides, packers, heavy native steers, Chicago.		Hogs, light, Chicago.	
	Average price per bushel.	Relative price.	Average price per pound.	Relative price.	Average price per bushel.	Relative price.	Average price per bushel.	Relative price.	Average price per 100 pounds.	Relative price.	Average price per pound.	Relative price.	Average price per 100 pounds.	Relative price.
1913.....	\$0.6155	100	\$0.1270	100	\$0.8735	100	\$0.9863	100	\$8.5072	100	\$0.1839	100	\$8.4541	100
1914.....	.6826	111	.1126	89	1.0031	115	1.0051	102	9.0387	106	.1963	107	8.3816	99
1915.....	.7217	117	.0961	76	1.3061	150	1.3067	132	8.7015	102	.2420	132	7.1870	85
1916.....	.8118	132	.1410	111	1.4108	162	1.3505	137	9.5730	113	.2618	142	9.4000	111
1917.....	1.6200	263	.2259	178	2.3248	266	2.2779	231	12.8085	151	.3273	178	15.4394	183
1918.....	1.5223	247	.3123	246	2.1905	251	2.2097	224	16.3682	192	.3000	163	17.6626	209
1919.....	1.5800	257	.3185	251	2.5660	294	2.5370	239	17.4957	206	.3931	214	18.3260	217
1920.....	1.3968	227	.3301	260	2.5581	293	2.5225	256	14.4856	170	.3122	170	14.7106	174
1921.....	.5648	92	.1411	111	1.4660	168	1.4353	146	8.7803	103	.1390	76	8.8913	105
1921.														
July.....	.6019	98	.1147	90	1.4384	165	1.2291	125	8.4063	99	.1388	75	10.2000	121
August.....	.5578	91	.1290	102	1.3953	160	1.2373	125	8.7750	103	.1405	76	10.3950	123
September.....	.5344	87	.1963	155	1.4825	170	1.2769	129	8.3750	98	.1406	76	8.5000	101
October.....	.4647	76	.1913	151	1.3191	151	1.1938	121	8.8750	104	.1481	81	8.1800	97
November.....	.4728	77	.1750	138	1.2535	144	1.1758	119	8.5625	101	.1580	86	6.8688	81
December.....	.4669	76	.1713	135	1.2594	144	1.1767	119	8.2188	97	.1650	90	7.0250	83
1922.														
January.....	.4738	77	.1650	130	1.2995	149	1.1960	121	8.1500	96	.1650	90	8.1600	97
February.....	.5572	91	.1656	130	1.5219	174	1.3816	140	8.6375	102	.1600	87	10.2625	121
March.....	.5606	91	.1669	131	1.5003	172	1.3567	138	8.7313	103	.1388	75	10.5875	125
April.....	.5759	94	.1681	132	1.5628	179	1.3914	141	8.4063	99	.1338	73	10.5000	124
May.....	.6093	99	.1937	153	1.5893	182	1.3558	137	8.6150	101	.1460	79	10.6000	126
June.....	.6010	98	.2170	171	1.4191	143	1.1600	118	8.8630	104	.1680	91	10.6000	125
July.....	.6370	103	.2210	174	1.4225	148	1.1520	117	9.7000	114	.1820	99	10.6950	127
August.....	.6173	100	.2163	170	1.1860	135	1.0565	107	10.3750	122	.2005	109	9.6363	114
September.....	.6269	102	.2088	164	1.0847	124	1.0706	109	10.7125	126	.2125	116	9.6938	115

Year and month.	Wool, Ohio, 1-3 grades, scoured, eastern markets.		Hemlock, New York.		Yellow pine, flooring, New York.		Coal, bituminous, Pocahontas, f.o.b. spot at mines, Columbus.		Coke, Connells-ville, at furnace.		Copper, ingot, electrolytic, New York.		Lead, pig, desilverized, New York.	
	Average price per pound.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet manufactured.	Relative price.	Average price per short ton.	Relative price.	Average price per short ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
1913.....	\$0.4710	100	\$24.2273	100	\$44.5909	100	\$1.5710	100	\$2.4396	100	\$0.1573	100	\$0.0440	100
1914.....	.4398	93	24.3958	100	42.7500	96	.....	.....	1.8083	74	.1338	85	.0389	88
1915.....	.5714	121	21.5909	89	39.5909	89	.....	.....	1.7854	73	.1726	110	.0459	104
1916.....	.6798	144	23.5417	97	39.3750	88	.....	.....	3.2458	133	.2754	175	.0680	155
1917.....	1.1452	243	27.7083	114	50.9091	114	.....	.....	8.2500	338	.2940	187	.0912	207
1918.....	1.4384	306	33.9286	140	60.7500	136	.....	.....	6.0000	246	.2465	157	.0743	169
1919.....	1.1894	248	39.7500	164	78.8333	177	.....	.....	4.7375	194	.1911	122	.0578	131
1920.....	.9712	203	56.6667	234	145.4167	326	5.8891	375	10.8163	443	.1797	114	.0808	184
1921.....	.5076	108	40.8960	169	93.7083	210	3.1804	202	3.6361	149	.1262	80	.0457	104
1921.														
July.....	.4909	104	37.5000	155	91.0000	204	3.2000	204	2.9063	119	.1253	80	.0440	100
August.....	.4727	100	37.2500	154	92.0000	206	3.0600	195	2.8000	115	.1173	75	.0440	100
September.....	.4727	100	37.2500	154	92.0000	206	2.9190	186	3.1875	131	.1200	76	.0461	105
October.....	.4727	100	37.2500	154	90.0000	202	2.6800	171	3.2750	134	.1268	81	.0470	107
November.....	.5091	108	37.2500	154	91.0000	204	2.4500	156	2.9700	122	.1303	83	.0470	107
December.....	.5273	112	37.2500	154	95.5000	214	2.1950	140	2.7500	113	.1356	86	.0470	107
1922.														
January.....	.5818	124	37.2500	154	95.5000	214	2.1500	137	2.7500	113	.1355	86	.0470	107
February.....	.6727	143	37.2500	154	95.5000	214	2.0750	132	3.0375	125	.1288	82	.0470	107
March.....	.7273	154	37.2500	154	95.5000	214	1.8250	116	3.2500	133	.1272	81	.0470	107
April.....	.7273	154	37.2500	154	95.5000	214	1.9750	126	4.4750	183	.1263	80	.0511	116
May.....	.7273	154	37.2500	154	90.0000	202	2.7500	175	6.0000	246	.1315	84	.0552	125
June.....	.7460	158	37.2500	154	90.0000	202	3.3060	210	6.7500	277	.1360	86	.0580	132
July.....	.8180	174	37.2500	154	92.5000	207	4.9550	315	10.7500	441	.1370	87	.0580	132
August.....	.8180	174	37.2500	154	92.5000	207	5.6880	362	12.8000	525	.1375	87	.0587	133
September.....	.8364	178	37.2500	154	92.5000	207	5.7500	366	11.1250	456	.1375	87	.0615	140

1 On Toledo market, average for last 6 months of 1913.

WHOLESALE PRICES OF INDIVIDUAL COMMODITIES IN THE UNITED STATES—Continued.

Year and month.	Petroleum, crude, Pennsylvania, at wells.		Pig iron, basic, Mahoning and Shenango Valley, at furnace.		Cotton yarns, northern cones, 10/1 Boston.		Leather, sole, hemlock, No. 1, Chicago.		Steel billets, Bessemer, Pittsburgh.		Steel plates, tank, Pittsburgh.		Steel rails, open-hearth, Pittsburgh.	
	Average price per barrel.	Relative price.	Average price per long ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per long ton.	Relative price.	Average price per pound.	Relative price.	Average price per long ton.	Relative price.
1913.....	\$2.4500	100	\$14.7058	100	\$0.2213	100	\$0.2821	100	\$25.7892	100	\$0.0148	100	\$30.0000	100
1914.....	1.9167	78	12.8733	88	.1967	89	.3019	107	20.0775	78	.0116	78	30.0000	100
1915.....	1.5292	62	13.7408	93	.1727	78	.3094	110	22.4408	87	.0127	86	30.0000	100
1916.....	2.4833	101	19.7680	134	.2646	120	.3883	138	43.9458	170	.0324	219	33.3333	111
1917.....	3.2000	131	38.9038	265	.3971	179	.5354	190	69.8558	271	.0557	376	40.0000	133
1918.....	3.9739	162	32.5094	221	.6001	271	.4841	172	47.3000	183	.0324	219	56.1500	187
1919.....	4.1346	169	27.6971	188	.5340	241	.5283	187	40.5385	157	.0271	183	49.2642	164
1920.....	5.9750	244	42.2692	287	.6245	282	.5342	189	56.2596	218	.0328	222	53.8269	179
1921.....	3.3144	135	21.6683	147	.2904	131	.3583	127	34.3846	133	.0193	130	45.6538	152
1921.														
July.....	2.2500	92	19.3750	132	.2411	109	.3500	124	32.2500	125	.0185	125	47.0000	157
August.....	2.2500	92	18.2000	124	.2586	117	.3400	121	29.6000	115	.0178	120	47.0000	157
September.....	2.3125	94	19.1250	130	.3446	156	.3400	121	29.0000	112	.0164	111	47.0000	157
October.....	3.1250	128	19.1875	130	.3832	173	.3400	121	29.0000	112	.0160	108	45.2500	151
November.....	3.9000	159	19.0000	129	.3653	165	.3400	121	29.0000	112	.0152	103	40.0000	133
December.....	4.0000	163	18.6250	127	.3391	153	.3400	121	29.0000	112	.0150	101	40.0000	133
1922.														
January.....	3.3000	135	18.1500	123	.3259	147	.3400	121	28.0000	109	.0150	101	40.0000	133
February.....	3.2500	133	17.7500	121	.3127	141	.3500	124	28.0000	109	.0139	94	40.0000	133
March.....	3.2500	133	17.9875	122	.3136	142	.3500	124	28.0000	109	.0139	94	40.0000	133
April.....	3.2500	133	20.0000	136	.3136	142	.3500	124	29.5000	114	.0148	100	40.0000	133
May.....	3.2500	133	24.6000	167	.3313	150	.3500	124	31.0000	132	.0156	105	40.0000	133
June.....	3.5000	143	25.0000	170	.3600	163	.3600	128	35.0000	136	.0160	108	40.0000	133
July.....	3.3130	135	24.2500	165	.3780	171	.3500	124	35.0000	136	.0170	115	40.0000	133
August.....	3.0000	122	26.6000	181	.3868	175	.3500	124	36.1000	140	.0188	127	40.0000	133
September.....	3.0000	122	32.6250	222	.3726	168	.3500	124	39.5000	153	.0213	144	40.0000	133
1913.....	\$0.7767	100	\$0.1295	100	\$0.1113	100	\$4.5837	100	\$0.1662	100	\$0.1233	100	\$0.0427	100
1914.....	.6400	82	.1364	105	.0816	73	5.0962	111	.1670	100	.1200	97	.0471	110
1915.....	.7875	101	.1289	100	.0745	67	6.6630	145	.1531	92	.1208	98	.0556	130
1916.....	1.0500	135	.1382	107	.0924	83	7.2639	158	.1850	111	.1217	99	.0688	161
1917.....	1.5558	200	.1672	129	.0927	83	11.3909	249	.2520	152	.1242	101	.0771	181
1918.....	2.1089	272	.2209	171	.0974	88	10.1305	221	.3180	191	.1695	137	.0780	183
1919.....	1.6274	210	.2333	180	.1785	160	11.9982	262	.3433	207	.2004	163	.0894	209
1920.....	1.8250	235	.2304	178	.1198	108	12.6750	277	.3340	201	.2629	213	.1267	297
1921.....	1.1792	152	.1627	126	.0719	65	8.3264	182	.2678	161	.2432	197	.0616	144
1921.														
July.....	1.1500	148	.1490	115	.0647	58	8.9000	194	.3200	193	.2200	178	.0546	128
August.....	1.1500	148	.1600	124	.0703	63	8.1200	177	.3248	195	.2200	178	.0583	137
September.....	1.1500	148	.1595	123	.0789	71	8.3188	181	.2756	166	.2200	178	.0559	131
October.....	1.1500	148	.1644	127	.0813	73	7.4250	162	.2372	143	.2320	188	.0519	122
November.....	1.1500	148	.1725	133	.0883	79	7.1700	156	.2238	135	.2400	195	.0517	121
December.....	1.2500	161	.1640	127	.0981	84	6.8813	150	.2150	120	.2400	195	.0500	117
1922.														
January.....	1.2774	164	.1538	119	.0963	87	7.0000	153	.2210	133	.2175	176	.0480	112
February.....	1.3000	167	.1450	112	.0902	81	7.9750	174	.2672	161	.2100	170	.0492	115
March.....	1.2500	161	.1450	112	.0959	86	7.8125	170	.3063	184	.2100	170	.0516	121
April.....	1.3000	167	.1450	112	.1083	97	8.1438	178	.3088	186	.2020	164	.0519	122
May.....	1.3500	174	.1450	112	.1098	99	8.0600	176	.3130	188	.1988	161	.0527	123
June.....	1.4270	184	.1450	112	.1100	99	7.5000	164	.3130	188	.2000	162	.0586	138
July.....	1.4000	180	.1480	114	.1040	93	7.7880	170	.3010	181	.2000	162	.0657	155
August.....	1.4000	180	.1550	120	.1000	90	6.9950	153	.2640	159	.2000	162	.0673	157
September.....	1.4500	187	.1550	120	.1020	92	6.3438	138	.2350	141	.2020	164	.0625	146

COMPARATIVE WHOLESALE PRICE LEVELS IN PRINCIPAL COUNTRIES.

ALL-COMMODITIES INDEX NUMBERS.¹

Year and month.	EUROPE.												
	Belgium; Ministry of Labor. ²	Bulgaria; General Statistical Bureau.	Denmark; Finans-tidende. ³	France; General Statistical Bureau. ⁴	Germany; Frankfurter Zeitung. ⁵	Germany; Federal Statistical Bureau. ⁶	Holland; Central Bureau of Statistics. ⁷	Italy; Riccardo Bachi. ⁸	Norway (Christiania); Oekonomisk Revue. ⁹	Poland; Central Statistical Office.	Spain; Institute of Geography and Statistics. ¹⁰	Sweden; Göteborgs Handels och Sjöfartstidning. ¹¹	Switzerland; Dr. J. Lorenz. ¹²
	(128)		(33)	(45)	(98)	(38)	(53)	(100)	(93)	(58)	(74)	(47)	(71)
1913.....		100		100		100	100	100			100	¹³ 100	
1914.....	¹⁴ 100	103	¹⁴ 100	101	¹⁵ 100	106	105	95	¹⁶ 115	¹⁷ 100	101	116	100
1915.....		137		138		142	145	133	159		119	145	
1916.....		¹⁸ 268		164		153	222	202	233		141	185	
1917.....		667		228		179	286	299	341		166	244	
1918.....		830		293		217	392	409	345		207	339	
1919.....		1,166		294		416	297	364	322		204	330	
1920.....		1,940		382	²⁶ 1,997	1,486	282	624	377		221	347	
1921.....		2,006		250	²⁶ 2,127	1,911	181	578	269		190	211	195
1921.													
August.....	347	1,730	254	331		1,917	180	542	297		183	198	177
September.....	364	1,758	224	344		2,067	180	580	287		183	182	181
October.....	372	2,052	202	331		2,460	169	599	286		185	175	184
1922.													
January.....	366	2,172	178	314	4,238	3,665	161	577	260	59,231	179	170	176
February.....	356	2,272	177	306	4,612	4,103	162	562	253	63,445	177	166	171
March.....	350	2,287	182	307	5,427	5,433	161	533	240	73,729	176	164	171
April.....	344	2,514	178	314	6,722	6,355	161	527	236	75,106	185	165	163
May.....	348	2,695	177	317	7,379	6,458	165	524	231	78,634	176	164	161
June.....	356	2,436	179	325	7,841	7,030	166	537	230	87,820	177	164	160
July.....	360	2,489	180	325	9,140	9,957	159	558	232	103,342		165	161
August.....	360	2,526	180	331	13,935	17,990	147	571	227			163	163
September.....			178	329	28,919			582	225			163	163
October.....					44,089								

Year and month.	EUROPE—continued.		NORTH AND SOUTH AMERICA.			ASIA AND OCEANIA.						AFRICA.	
	United Kingdom; Board of Trade.	United Kingdom; Statist. ⁴	United States; Bureau of Labor Statistics.	Canada; Department of Labor. ¹¹	Peru; Department of Statistics. ¹⁰	Australia; Bureau of Census and Statistics. ⁴	China (Shanghai); Ministry of Finance. ²⁰	Dutch East Indies; Statistical Bureau. ⁸	India (Calcutta); Department of Statistics. ⁵	Japan (Tokyo); Bank of Japan. ⁶	New Zealand; Department of Statistics.	Egypt (Cairo); Department of Statistics.	South Africa; Office of Census and Statistics.
	(150)	(45)	(404)	(271)	(58)	(92)	(147)		(75)	(56)	(106)	(23)	(187)
1913.....	100	100	100	100	100	²¹ 100				100	100	²⁵ 100	100
1914.....		101	98	101	104	²² 100		²³ 100	²⁴ 100	96	104	102	117
1915.....		126	101	110	120	141			112	97	123	124	135
1916.....		159	127	135	146	132			128	117	134	124	135
1917.....		206	177	177	176	155			147	147	151	168	154
1918.....		226	194	206	212	170			232	180	192	207	168
1919.....		242	206	217	220	180	133	281	198	236	178	225	181
1920.....	314	295	226	246	238	218	140	226	204	259	212	299	245
1921.....	201	182	147	182	205	167	145	186	181	200	201	180	192
1921.													
August.....	194	181	142	174	205	160	149	184	184	199	197	166	
September.....	191	175	141	172	205	160	148	188	187	207	197	176	
October.....	185	163	142	169	203	156	146	175	184	219	195	186	155
1922.													
January.....	168	156	138	168	190	147	149	164	178	206	186	169	
February.....	165	155	141	169	191	147	148	163	179	204	181	152	
March.....	163	157	142	167	190	146	152	164	182	201	179	153	
April.....	163	158	143	166	187	148	150	164	182	197	180	148	144
May.....	164	159	148	167	186	155	146	166	187	194	177	141	
June.....	163	159	150	165		156	144	167	183	197	175	139	
July.....	163	157	155	166		157	145		181	201		138	142
August.....	159	152	155	164		155	142		178	195		139	
September.....							139						

¹ The number of commodities or quotations used in the computation of each index is indicated by figures in parenthesis at head of each column.

² Average of last half of month.

³ First of month.

⁴ End of month.

⁵ Beginning of month—not always the 1st.

⁶ Average for the month.

⁷ Based upon price of 52 commodities during 1920; 53 during 1921.

⁸ 38 commodities prior to 1920; 76 commodities during 1921. Average for the month.

⁹ End of year and end of month.

¹⁰ 15th of month.

¹¹ Middle of month.

¹² July 1, 1913, to June 30, 1914=100.

¹³ April, 1914=100.

¹⁴ July 1, 1912, to June 30, 1914=100.

¹⁵ July, 1914=100.

¹⁶ Dec. 31, 1913, to June 30, 1914=100.

¹⁷ January, 1914=100.

¹⁸ December figure.

¹⁹ Average for month until September, 1921; thereafter prices as of 15th of month.

²⁰ As of last Wednesday in month.

²¹ February, 1913=100.

²² July, 1914=100.

²³ As of Jan. 1.

²⁴ End of July, 1914=100.

²⁵ Jan. 1, 1913, to July 31, 1914=100.

²⁶ January figure.

THE REVISED BELGIAN INDEX.

The statistical section of the Belgian Ministry of Labor has constructed a new monthly index of wholesale prices in Belgium. The index numbers are calculated, not according to the "chain system" as formerly, but on the permanent basis of prices in April, 1914. The index consists of 128 commodities, which are divided into 17 groups. Both the group index numbers and the general index are geometric averages. The prices are furnished by well-known industrial and commercial organizations and apply to the last half of each month only. A table giving the index numbers for all the groups of commodities as newly revised will be found on page 1214 of this issue. The index has not been computed for months prior to August, 1921.

OTHER INDEX NUMBERS.

The foreign index numbers published on the preceding page are constructed by various foreign statistical offices, and are sent to the Federal Reserve Board by cable. The BULLETIN for January, 1920, contains a description of the French, Australian, Japanese, and Canadian indexes. A description of the method used in the construction of the Swedish index number appeared in the BULLETIN for February, 1921; the British index number, compiled by the Board of Trade, was described in the March, 1921, BULLETIN; and the new Italian index number was discussed in the April, 1921, issue. The December, 1921, BULLETIN contains a description of the index published by the Federal Statistical Bureau for Germany, and the indexes for Switzerland, Holland, Norway, Bulgaria, Egypt, the Union of South Africa, the Dominion of New Zealand, and Peru. The index number for the Dutch East Indies was described in the BULLETIN for March, 1922, while a description of the Polish index may be found in the July, 1922, issue. The revised index of the United States Bureau of Labor Statistics was first published in the July, 1922, BULLETIN; and a description of the Frankfurter Zeitung's revised index was given in the issue

for September, 1922. Lack of space prevents the publication of group index numbers for many of these countries except occasionally, but they can be obtained at any time upon request. Reference may be made to the September, 1922, BULLETIN, pp. 1092-1100, for a more complete series of group index numbers than appears in this issue.

In the case of only a few of the index numbers is 1913 used as the basis in the original computations. In most cases in which 1913 appears as the basis for the computation the index numbers have been shifted from their original bases. The computations in such cases are, therefore, only approximately correct. In certain of the index numbers July, 1914, or the 12 months' period immediately preceding is used as the base. Since the figures are for the most part received by cable, the latest are subject to revision.

FEDERAL RESERVE BOARD SERIES.

A description of the international price index numbers of the Federal Reserve Board for the United States, England, Canada, France, and Japan may be found in the BULLETINS for May, 1920; February, 1922; July, 1922; August, 1922; and September, 1922, respectively. A comparative summary table showing the Board's international index for these five countries appears on page 1206.

Index numbers showing the price levels of separate groups of commodities in the United States and a few foreign countries are presented on the following pages. Group index numbers computed by the Federal Reserve Board as part of its international series of price indexes will be found on pages 1207-1209 of this issue.

The revised series of group index numbers for the United States, showing the Federal Reserve Board's regrouping of the new index of the Bureau of Labor Statistics, based upon 404 quotations, was published for the first time in the September, 1922, BULLETIN. A similar regrouping by the Federal Reserve Board of the old index of the Bureau of Labor Statistics first appeared in the October, 1918, issue.

**GROUP INDEX NUMBERS—UNITED STATES—COMMODITIES IN BUREAU OF LABOR STATISTICS INDEX REGROUPED BY
FEDERAL RESERVE BOARD.**

Year and month.	Raw materials.					Pro- ducers' goods.	Con- sumers' goods.	All commodi- ties.
	Agricul- tural products. (21)	Animal products. (21)	Forest products. (11)	Mineral products. (35)	Total raw ma- terials. (88)			
1913.....	100	100	100	100	100	100	100	100
1920.....	255	186	312	236	229	214	231	226
1921.....	134	110	166	185	142	135	159	147
August.....	123	114	152	169	135	125	157	142
September.....	141	105	154	168	137	126	155	141
October.....	135	107	162	174	138	126	154	142
November.....	130	103	175	178	137	125	153	141
December.....	130	103	169	179	137	125	151	140
1922.								
January.....	130	109	167	178	139	123	146	138
February.....	140	121	166	177	146	118	148	141
March.....	141	122	165	178	147	120	150	142
April.....	145	120	167	180	148	122	149	143
May.....	152	122	174	202	157	125	150	148
June.....	146	123	186	211	159	127	151	150
July.....	147	130	188	241	171	129	152	155
August.....	138	127	191	261	173	129	149	155

GROUP INDEX NUMBERS—UNITED STATES—BUREAU OF LABOR STATISTICS.

Year and month.	Farm prod- ucts. (56)	Foods. (110)	Cloths and clothing. (65)	Fuel and lighting. (20)	Metals and metal products. (37)	Building mate- rials. (41)	Chem- icals and drugs. (43)	House furnish- ing goods. (31)	Miscel- laneous. (25)	All commodi- ties. (404)
1913.....	100	100	100	100	100	100	100	100	100	100
1920.....	218	220	295	241	192	264	200	254	196	226
1921.....	124	144	180	199	129	165	136	195	128	147
1921.										
August.....	123	146	171	184	117	156	129	179	119	142
September.....	124	142	178	181	116	156	131	179	118	141
October.....	124	140	180	189	116	159	131	180	118	142
November.....	121	139	180	197	114	163	129	178	119	141
December.....	120	136	180	199	113	158	127	178	121	140
1922.										
January.....	122	131	176	195	112	157	124	178	117	138
February.....	131	135	174	191	110	156	123	177	117	141
March.....	130	137	172	191	109	155	125	175	117	142
April.....	129	137	171	194	113	156	124	175	116	143
May.....	132	138	175	216	119	160	122	176	116	148
June.....	131	140	179	225	120	167	122	176	114	150
July.....	135	142	180	234	121	170	121	173	114	155
August.....	131	138	181	271	126	172	122	173	115	155

GROUP INDEX NUMBERS—BELGIUM—MINISTRY OF LABOR.

[April, 1914=100.]

Year and month.	Foods. (16)	Fuel. (4)	Tar prod- ucts. (3)	Met- als. (15)	Petro- leum prod- ucts. (7)	Pot- tery. (10)	Glass- wares. (2)	Chem- icals. (12)	Ferti- lizers. (4)	Fats. (7)	Tex- tiles. (21)	Build- ing mate- rials. (13)	Rosin. (2)	Hides and leath- er. (9)	To- bacco. (1)	Paper. (1)	India rub- ber. (1)	All com- modi- ties. (128)
1921.																		
August.....	387	458		292	377	526	427	335	318	289	342	362	333	267	295	401	53	347
September.....	389	445	476	318	380	538	429	340	346	337	394	357	394	291	295	402	62	368
October.....	381	445	523	326	403	520	394	341	346	321	421	360	372	305	295	402	72	372
November.....	382	446	420	343	447	528	416	351	355	316	400	361	407	293	295	417	81	374
December.....	369	439	405	340	445	528	416	345	362	306	416	360	366	295	295	433	82	369
1922.																		
January.....	359	447	416	330	436	528	415	345	339	303	394	361	372	301	295	433	68	366
February.....	346	443	403	311	422	520	386	341	342	302	380	357	356	295	295	433	54	356
March.....	342	430	416	306	384	526	360	334	369	292	370	355	350	286	295	433	55	350
April.....	347	407	409	313	359	518	325	326	358	279	360	351	369	282	295	418	54	344
May.....	337	392	399	318	357	533	325	321	348	283	399	346	369	282	295	418	52	348
June.....	344	392	429	319	360	525	337	321	333	293	432	358	401	282	295	413	52	356
July.....	336	391	452	329	366	530	337	321	328	307	440	331	452	286	295	413	60	360

GROUP INDEX NUMBERS—FRANCE—GENERAL STATISTICAL BUREAU.

Year and month.	Animal foods. (8)	Vegetable foods. (8)	Sugar, coffee, and cocoa. (4)	All foods. (20)	Minerals. (7)	Textiles. (6)	Sundries. (12)	All industrial materials. (25)	All commodities. (45)
1913 average.....	100	100	100	100	100	100	100	100	100
1920 average.....	503	427	422	459	449	737	524	550	510
1921 average.....	380	330	343	355	275	355	374	338	345
1921.									
September.....	373	311	389	352	253	388	370	338	344
October.....	345	305	305	323	262	391	365	338	331
November.....	331	306	324	321	277	388	362	341	332
December.....	324	303	300	313	269	375	364	337	326
1922.									
January.....	309	289	306	302	258	363	350	324	314
February.....	303	288	318	301	242	345	341	311	306
March.....	341	285	326	317	242	326	328	300	307
April.....	362	310	320	335	245	319	324	297	314
May.....	362	310	319	334	249	338	323	303	317
June.....	363	318	334	341	255	372	322	313	325
July.....	359	293	339	330	265	392	326	322	325
August.....	354	292	336	327	275	421	330	334	331
September.....	346	279	333	318	279	418	341	339	329

GROUP INDEX NUMBERS—GERMANY—FRANKFURTER ZEITUNG.

[July, 1914=100.]

Year and month.	Foodstuffs and luxuries. (26)	Textiles and leather. (16)	Minerals. (18)	Miscellaneous. (17)	Industrial finished products. (21)	All commodities. (98)
July, 1914.....	100	100	100	100	100	100
January, 1920.....	1,972	3,407	2,749	1,101	1,343	1,997
January, 1921.....	2,019	3,840	2,780	1,776	1,594	2,129
1922.						
Beginning of—						
January.....	3,840	7,168	5,178	3,149	3,159	4,238
February.....	4,300	7,722	5,525	3,492	3,367	4,612
March.....	5,211	8,492	6,810	4,201	3,817	5,427
April.....	6,330	10,585	8,585	5,288	4,644	6,722
May.....	6,649	11,379	9,305	5,961	5,546	7,379
June.....	6,967	11,891	10,141	6,413	5,859	7,841
July.....	6,323	13,938	12,168	6,881	6,750	9,140
August.....	13,691	21,910	18,355	10,993	8,549	13,935
September.....	29,175	36,398	42,648	21,605	19,352	28,919
October.....	38,595	72,688	54,905	32,134	35,025	44,089

GROUP INDEX NUMBERS—GERMANY—FEDERAL STATISTICAL BUREAU.

[1913=100.]

Year and month.	Goods produced. (16)	Goods imported. (22)	All commodities. (38)	Year and month.	Goods produced. (16)	Goods imported. (22)	All commodities. (38)
1913 average.....	100	100	100	1922.			
1920 average.....	1,253	2,652	1,486	January.....	3,383	5,075	3,665
1921 average.....	1,786	2,533	1,911	February.....	3,763	5,800	4,103
1921.				March.....	5,027	7,463	5,433
August.....	1,913	1,935	1,917	April.....	5,985	8,203	6,355
September.....	1,952	2,643	2,067	May.....	6,026	8,617	6,458
October.....	2,235	3,585	2,460	June.....	6,540	9,479	7,030
November.....	2,967	5,662	3,416	July.....	9,168	13,854	9,957
December.....	3,170	5,071	3,487	August.....	15,080	32,490	17,990

GROUP INDEX NUMBERS—SWEDEN—GÖTEBORGS HANDELS OCH SJÖFARTSTIDNING.¹

[July 1, 1913-June 30, 1914=100.]

Date.	Vegetable foods.	Animal foods.	Raw materials for agriculture.	Coal.	Metals.	Building materials.	Wood pulp.	Hides and leather.	Textiles.	Oils.	All commodities.
1913-14.....	100	100	100	100	100	100	100	100	100	100	100
1920.....	262	296	312	1,007	273	371	675	215	324	294	347
1921.....	210	220	227	285	159	243	310	107	144	228	211
1921.											
August.....	217	230	214	250	130	198	183	107	132	191	198
September.....	183	208	207	223	130	191	178	108	166	191	182
October.....	167	198	200	202	130	211	169	119	161	187	175
November.....	161	196	197	194	133	239	181	108	149	179	174
December.....	156	186	202	197	134	243	189	110	146	179	172
1922.											
January.....	168	173	202	179	131	228	189	104	144	179	170
February.....	170	159	170	188	130	226	178	97	138	179	166
March.....	173	153	168	170	129	225	167	91	140	179	164
April.....	174	156	169	177	128	229	159	90	140	162	165
May.....	176	154	170	179	124	212	147	86	156	154	164
June.....	174	165	170	155	121	209	144	87	172	154	164
July.....	174	164	167	160	121	215	149	88	179	154	165
August.....	168	168	162	167	123	213	149	90	170	154	163

¹ Formerly published in Svensk Handelstidning.

GROUP INDEX NUMBERS—UNITED KINGDOM—BOARD OF TRADE.

Year and month.	Cereals.	Meat and fish.	Other foods.	Total food.	Iron and steel.	Other metals and minerals.	Cotton.	Other textiles.	Other articles.	Total not food.	All commodities.
	(17)	(17)	(19)	(53)	(24)	(20)	(16)	(15)	(22)	(97)	(150)
1913 average.....	100	100	100	100	100	100	100	100	100	100	100
1920 average.....	273	263	278	272	406	252	480	362	274	340	314
1921 average.....	194	219	214	209	237	179	192	173	196	197	201
1921.											
August.....	205	216	210	210	222	172	176	159	189	186	194
September.....	195	200	201	199	207	161	213	163	190	187	191
October.....	170	184	193	183	194	158	225	170	190	186	185
November.....	157	178	195	177	181	153	199	169	183	176	176
December.....	153	181	186	173	172	152	188	167	178	171	171
1922.											
January.....	149	176	182	169	166	149	180	160	174	167	168
February.....	155	178	187	174	162	145	168	164	169	161	165
March.....	159	166	186	171	159	143	172	159	167	159	163
April.....	156	171	186	172	158	143	173	160	164	159	163
May.....	159	174	181	172	157	142	179	166	163	160	164
June.....	154	173	179	169	157	139	187	167	163	160	163
July.....	156	170	181	169	155	138	191	168	162	160	163
August.....	151	169	161	160	151	142	186	167	160	159	159

GROUP INDEX NUMBERS—CANADA—DEPARTMENT OF LABOR.¹

Year and month.	Grains and fodder.	Animals and meats.	Dairy products.	Fruits and vegetables.	Other foods.	Textiles.	Hides, leather, etc.	Metals.	Implements.	Building materials, lumber.	Fuel and lighting.	Drugs and chemicals.	All commodities.
	(15)	(17)	(9)	(20)	(25)	(20)	(11)	(23)	(10)	(14)	(10)	(16)	(264)
1913.....	100	100	100	100	100	100	100	100	100	100	100	100	100
1920.....	263	198	204	261	258	303	192	203	245	268	255	204	246
1921.....	150	149	157	172	181	189	110	150	240	211	218	177	182
1921.													
August.....	152	143	142	182	173	181	101	145	237	192	206	176	174
September.....	144	133	141	170	170	183	100	143	235	189	206	171	172
October.....	127	134	149	171	162	185	100	143	234	190	210	169	169
November.....	125	113	158	176	158	179	100	140	232	180	211	165	168
December.....	131	122	170	188	159	176	100	141	232	180	211	166	170
1922.													
January.....	133	129	149	186	155	176	99	142	231	180	206	163	168
February.....	145	140	141	204	155	174	97	141	216	179	204	164	169
March.....	149	138	122	204	158	174	96	137	213	174	206	166	166
April.....	152	143	127	203	157	174	95	135	213	174	206	165	166
May.....	153	144	116	202	154	175	95	136	213	173	221	166	167
June.....	143	144	117	180	153	180	99	137	213	173	221	162	165
July.....	143	143	120	178	154	184	100	138	216	178	234	160	166
August.....	130	138	120	156	180	181	105	142	216	179	257	161	164

¹ Unimportant groups omitted.

COMPARATIVE RETAIL PRICES IN PRINCIPAL COUNTRIES.

In the following table are presented statistics showing the trend of retail prices and the cost of living in the United States and certain European countries:

INDEX NUMBERS OF RETAIL PRICES AND COST OF LIVING.

Year and month.	Retail prices.				Cost of living.				
	United States.	France (Paris) ¹	Italy.	Sweden.	United Kingdom.	Germany (46 cities).	Germany (Berlin).	Belgium.	Switzerland.
1913.....			³ 100						
1914.....	² 100	² 100		² 100	² 100	⁴ 100	⁵ 100	⁶ 100	⁷ 100
1920.....	199	371	454	298	249	813	1,080		
1921.....	150	337	548	237	226	1,047	1,236	434	210
1921.									
August.....	152	317	534	234	222	1,045	1,177	424	205
September.....	150	329	542	228	220	1,062	1,212	422	203
October.....	150	331	581	218	210	1,146	1,340	439	199
November.....	149	326	583	211	203	1,397	1,767	451	192
December.....	147	323	585	202	199	1,550	1,934	447	189
1922.									
January.....	139	319	576	190	192	1,640	1,903	418	186
February.....	139	307	559	189	188	1,989	2,177	394	175
March.....	136	294	546	185	186	2,302	2,740	372	170
April.....	136	304	524	182	182	3,175	3,177	368	162
May.....	136	317	530	178	181	3,462	3,455	365	156
June.....	138	307		179	180	3,779	4,149	373	155
July.....	139	297		179	184	4,990	6,122	372	
August.....	136	279		181	181	7,029	10,271		
September.....		291			179	11,376	16,368		

¹ Average for the month.⁴ 1913-1914=100.⁶ April 15, 1914.² July.⁵ August, 1913-July, 1914=100.⁷ June.³ Average for the year.

The American index number, constructed by the Bureau of Labor Statistics, was based upon the retail prices of 22 articles of food, weighted according to family consumption, until January, 1921, when it was increased to 43 articles reported by dealers in 51 important cities. The method of weighting continues the same, although the actual "weight" applied has been changed. The original basis, that of the year 1913, has been shifted to July, 1914.

The retail price index for Paris, compiled by the French General Statistical Office, consists of retail prices of 13 different commodities, weighted according to the average annual consumption of a workingman's family of four persons. Eleven of the commodities included in this index are foods, and the other two are kerosene and alcohol.

The Italian retail price index for the most important cities, computed by the Italian Ministry of Labor, consists of retail prices of 21 commodities. Of the commodities included, 20 are foods and the other commodity is charcoal.

The Swedish index number consists of the retail prices of foodstuffs, fuel, and lighting and is based upon the prices of 51 articles in 44 towns (in 1920, 50 articles in 49 towns), weighted according to the budget of a workingman's family which before the war had a yearly income of 2,000 kronor.

The British index number of the cost of living constructed by the Ministry of Labor consists of the retail prices not only of foodstuffs but of other articles as well. Retail clothing prices, rents, and the cost of fuel, lighting, and miscellaneous household items are also taken into consideration. The index number is weighted according to the importance of the items in the budgets of working-class families.

The German cost of living index for 46 cities is furnished by the Federal Statistical Bureau and includes food, fuel, light, and rent.

The Berlin index, computed by Dr. R. Kuczynski, is based on the minimum cost of subsistence for a working-class family of four persons in Berlin. The groups included in the budget are food, clothing, heating, lighting, and rent.

The Belgian index number of cost of living, constructed by the Ministry of Labor, consists of the retail prices of 30 commodities, weighted according to a standard budget based on an inquiry into the expenditures of 848 families of the laboring and small middle classes.

The Swiss index number, computed by the Social Statistics Service of the Bureau of Labor, is based on an investigation into household budgets made in 1920, and refers to about one-third of the entire cost of living of the family of a skilled worker.

INDEXES OF INDUSTRIAL ACTIVITY IN FOREIGN COUNTRIES.

ENGLAND.

Year and month.	Production (long tons, 000 omitted).				Raw cotton visible supply (thousands of bales). ⁴	Ship tonnage under construction (gross tons).	Railways net ton miles (000,000 omitted).	Exports.			Per cent of unemployed among approximately 12,000,000 insured persons.
	Coal.	Pig iron.	Steel ingots and castings.	Finished steel.				Iron and steel manufactures (long tons, 000 omitted).	Cotton manufactures (sq. yds., 000,000 omitted).	Coal (long tons, 000 omitted).	
Monthly average:											
1913.....	23,953	855	639			1,202,699		414	596	6,117	.....
1920.....	19,108	670	756	646	1,397	3,603,131	1,546	271	374	2,078	.....
1921.....	13,696	218	302	238	1,234	3,312,983	1,108	142	244	2,055	.....
1921.											
August.....	16,589	94	434	321	1,194		1,311	77	214	3,103	13.2
September.....	16,517	158	429	322	1,060	3,282,972	1,297	133	268	3,407	12.2
October.....	21,090	236	405	304	1,123		1,325	156	345	3,406	12.8
November.....	17,875	272	444	330	1,216		1,368	194	366	3,594	15.7
December.....	22,594	275	381	292	1,271	2,640,319	1,306	205	333	4,309	16.2
1922.											
January.....	17,693	288	328	271	1,298			253	342	4,021	16.2
February.....	19,764	300	415	321	1,240			224	254	4,014	15.2
March.....	19,921	390	549	369	1,112	2,235,998		296	307	5,201	14.6
April.....	22,875	354	404	294	1,181			258	305	4,097	14.4
May.....	19,146	408	462	334	1,143			272	345	5,057	13.5
June.....	15,827	369	400	316	1,111	1,919,504		236	315	4,794	12.7
July.....	23,135	399	473		890			252	447	5,064	12.3
August.....	19,150							270	381	6,146	12.0

¹ Average of 4 quarterly estimates.² Five weeks.³ Work suspended on all but 2,094,000 tons.⁴ End of month.⁵ Work suspended on all but 1,918,319 tons.⁶ Yards.⁷ Work suspended on all but 1,619,000 tons.FRANCE.¹

Year and month.	Pig iron production.	Crude steel production.	Coal imported for consumption.	Raw cotton imported for consumption.	Cotton stocks at Havre. ²	Raw silk imported for consumption.	Total imports.	Total exports.	Receipts of the principal French railways. ³	Number of unemployed receiving municipal aid in Paris. ¹
	Thousands of metric tons.	Thousands of metric tons.	Thousands of metric tons.	Metric tons.	Thousands of bales of 50 kilograms.	Metric tons.	Thousands of metric tons.	Thousands of metric tons.	Thousands of francs.	
Monthly average:										
1913.....	434	391	1,558	27,428	274	629	3,685	1,840	165,892	.....
1920.....	286	254	2,005	19,577	225	390	4,211	1,071	479,894	3,022
1921.....	280	255	1,472	16,666	169	206	3,165	1,333	516,397	20,671
1921.										
July.....	267	223	660	6,539	131	51	2,164	1,194		10,616
August.....	255	232	1,065	10,700	132	202	2,593	1,035		9,706
September.....	244	236	1,874	11,769	131	261	3,993	1,172		7,486
October.....	256	260	1,301	25,757	181	385	2,809	1,252		5,348
November.....	295	277	3,291	29,059	192	277	5,161	1,515	483,216	3,730
December.....	301	302	2,895	30,835	208	382	5,197	2,507	641,887	4,175
1922.										
January.....	312	315	1,676	14,870	188	502	3,396	1,554	454,323	4,658
February.....	323	317	2,153	14,714	163	467	4,126	1,520	468,175	4,385
March.....	386	367	2,081	20,978	127	408	4,434	1,570	472,779	3,546
April.....	383	324	1,538	17,391	138	207	3,787	1,794	608,764	2,447
May.....	442	364	2,058	18,090	169	404	4,396	1,538	472,607	1,636
June.....	416	358	1,829	32,380	145	391	4,307	1,799	504,431	958
July.....	428	368	1,631	26,325	153	566	4,223	1,936	651,720	602
August.....					135		4,512	1,788	546,310	606

¹ Latest figures subject to revision.² End of month.³ Railways included are: State railways, Paris-Lyon-Mediterranée, Nord, Orleans, Est, Midi, Alsace-Lorraine, and Guillaume-Luxembourg Railways.⁴ Does not include Lorraine.⁵ Excludes the Alsace-Lorraine and Guillaume-Luxembourg Railways.

GERMANY.

Year and month.	Production (000's of metric tons).		Imports (metric tons). ¹				Exports (metric tons). ¹				Ship arrivals in Hamburg.		Unemployment.	
	Coal and coke.	Lignite.	Raw wool.	Half manu- factured silk.	Iron ore. ²	Cotton. ³	Iron and iron manu- factures.	Machin- ery and electrical supplies.	Dyes and dye stuffs.	Coal. ⁴	Number of ships.	Ton- nage (net regis- tered tons; 000 omit- ted).	Number of applicants for every 100 avail- able posi- tions.	Number of unem- ployed persons receiving State aid (000 omit- ted).
Monthly average:														
1913.....	17,003	7,266	16,608	920	1,224,951	43,424	541,439	60,919	21,812	2,881,126	1,256	1,182	.....	.....
1920.....	13,043	9,303	14,025	232	537,535	12,490	145,883	46,772	8,462	608,749	401	374	169	366
1921.....	13,664	10,241	11,860	393	619,194	30,894	203,681	39,037	8,530	518,937	700	794	165	310
1921.														
July.....	12,949	10,065	10,815	354	493,434	35,176	177,773	51,416	7,353	453,173	809	888	151	314
August.....	13,974	10,606	14,725	328	356,397	52,433	240,071	37,456	9,618	613,739	942	955	142	267
September.....	13,885	10,359	17,688	447	564,827	28,766	225,331	34,615	10,156	649,158	957	1,018	132	232
October.....	14,373	10,567	12,506	774	919,822	29,739	246,115	33,067	10,255	576,048	915	1,047	128	186
November.....	14,052	10,479	12,628	346	937,268	27,242	233,204	35,697	9,953	569,657	838	881	136	150
December.....	14,343	11,029	10,984	388	790,811	28,313	214,812	46,397	9,212	640,877	503	873	148	149
1922.														
January.....	14,640	10,978	10,400	347	941,972	23,426	221,743	39,470	9,552	752,340	745	875	150	165
February.....	13,655	10,091	26,202	383	492,705	17,915	172,709	45,689	9,332	669,433	461	716	145	203
March.....	15,931	12,260	26,988	440	809,722	26,130	211,979	48,813	12,299	795,200	894	969	113	213
April.....	13,800	10,634	24,091	462	865,778	24,070	200,677	46,112	11,095	795,940	972	1,112	113	116
May.....	14,666	11,437	25,619	486	1,519,365	26,112	209,432	47,354	12,629	701,941	1,143	1,244	107	69
June.....	11,416	10,487	15,723	436	1,159,329	22,037	213,220	49,347	16,335	528,766	1,092	1,287	103	.....
July.....	9,580	.....	14,119	435	961,768	26,085	212,394	44,162	12,671	199,961	793	1,065	105	.....
August.....	10,206	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,005	1,171	.....	.....

¹ Import and export figures for first 4 months of 1921 not available; 1921 averages based on 8 months.² Includes manganese ore.³ Includes linters.⁴ Not including coal for reparations account.⁵ Average base on 6 months.⁶ Coal, excluding coke.

SWEDEN.

Year and month.	Exports.		Imports, coal (000's of metric tons).	Shipping.		Railway traffic, volume of freight carried on State railways (000's metric tons).	Production (000's of metric tons).		Blast furnaces in operation (per cent of total).	Unem- ploy- ment, number of workmen per 100 vacan- cies.
	Unplaned boards (000's of cubic meters).	Paper pulp (000's of metric tons).		Net tonnage of loaded vessels in foreign trade (000 omitted).			Pig iron.	Iron and steel ingots.		
				Entered.	Cleared.					
Monthly average:										
1913.....	328	71	408	1,147	1,147	830	61	49	.....	112
1920.....	306	73	234	677	692	991	39	37	.....	107
1921.....	162	40	122	519	482	589	26	17	.....	276
1921.										
July.....	119	41	20	455	487	503	19	16	14.9	261
August.....	205	66	148	592	536	575	17	15	15.7	235
September.....	325	49	279	609	536	566	16	16	16.4	227
October.....	370	54	219	670	595	691	16	16	15.7	263
November.....	361	99	192	601	578	721	18	22	.....	384
December.....	356	104	246	575	582	558	19	17	16.5	473
1922.										
January.....	87	28	114	442	409	485	18	13	21	482
February.....	25	11	62	285	255	630	17	17	21	479
March.....	63	36	197	617	509	730	22	22	22	381
April.....	66	21	206	524	485	622	19	21	.....	368
May.....	99	76	230	600	633	578	24	31	.....	257
June.....	500	80	172	596	738	645	21	24	.....	215
July.....	608	89	214	625	787	715	19	27	.....	203
August.....	539	104	294	.....	.....	.....	.....	.....	.....	172

JAPAN.

Year and month.	Exports.				Imports.			Ton- nage of vessels cleared in foreign trade.	Imperial Gov- ernment rail- ways.		Produc- tion cotton yarns.	Raw silk stocks, Yoko- hama market.
	Raw silk.	Silk fabrics (habu- taye).	Cotton yarns.	Sheet- ings and shirt- ings, gray.	Raw cotton, ginned.	Wool.	Iron plates and sheets.		Ton- nage of freight carried.	Total receipts.		
Monthly average:	<i>Piculs.</i>	<i>Piculs.</i>	<i>Piculs.</i>	<i>Yards</i> <i>(000).</i>	<i>Piculs.</i>	<i>Piculs.</i>	<i>Piculs.</i>	<i>Tons</i> <i>(000).</i>	<i>Tons</i> <i>(000).</i>	<i>Yen</i> <i>(000).</i>	<i>Bales.</i>	<i>Bales.</i>
1913.....	16,857	2,302	113,374	7,921	536,844	13,162	132,013	2,075	2,923	11,723	126,498	.....
1920.....	14,557	2,264	74,839	28,465	648,281	46,918	528,415	2,216	4,548	27,589	151,414	53,111
1921.....	21,836	1,702	73,064	23,210	717,993	22,277	312,432	2,324	4,342	31,182	151,007	58,477
1921.												
January.....	6,785	1,332	95,370	31,288	431,659	5,170	175,045	1,969	4,133	26,869	142,041	54,375
February.....	10,362	1,643	50,241	24,944	464,525	7,617	211,930	1,719	3,719	25,661	140,005	50,249
March.....	13,910	1,850	94,986	28,435	737,210	14,019	269,945	2,089	4,471	32,346	144,762	55,897
April.....	21,743	1,766	158,617	36,565	736,966	42,435	339,608	2,178	4,383	35,944	149,662	82,814
May.....	19,832	1,787	108,419	29,843	842,606	18,263	315,390	2,321	4,471	33,389	152,466	87,111
June.....	24,916	2,102	58,495	20,275	932,487	18,458	946,456	2,492	4,102	27,261	152,605	53,398
July.....	22,684	1,447	54,158	24,406	670,557	38,610	182,332	2,419	4,229	29,971	140,365	56,283
August.....	25,808	1,896	44,479	19,080	899,440	17,799	322,879	2,552	4,141	32,958	136,201	55,012
September.....	22,563	1,632	36,996	13,309	893,111	32,246	101,188	2,328	4,286	30,580	148,996	59,450
October.....	21,006	1,253	53,506	13,289	685,261	34,013	217,834	2,401	4,625	34,960	158,689	53,535
November.....	29,169	1,855	53,484	16,707	696,266	14,639	295,803	2,611	4,610	31,729	168,295	48,832
December.....	37,250	1,857	68,032	20,382	645,833	24,064	371,165	2,718	4,922	32,520	178,000	44,766
1922.												
January.....	16,924	1,080	61,414	19,124	1,161,410	41,724	461,991	2,749	4,102	28,576	167,853	40,561
February.....	18,102	1,551	63,719	24,990	1,168,355	93,411	593,563	2,817	4,261	28,037	174,389	32,213
March.....	16,647	2,003	123,605	24,194	1,083,960	64,865	637,079	3,094	5,066	36,337	184,421	44,701
April.....	27,380	1,669	138,226	24,725	707,041	76,416	582,232	2,971	4,968	42,074	190,513	40,777
May.....	35,147	1,977	146,354	25,821	580,165	24,753	751,640	3,287	5,225	38,487	194,057	18,293
June.....	29,569	2,176	139,057	29,713	489,955	68,415	889,819	3,024	.....	.....	190,265	18,547

FOREIGN TRADE OF PRINCIPAL COUNTRIES.

In the following tables are presented figures from official sources showing the monthly value of the foreign trade of a group of important European countries, Japan, and the United States. Currencies have not been converted to a common unit, nor are methods of valuation the same in all countries. In England imports are given current c. i. f. values;

exports and reexports, current f. o. b. values. The same method is followed in Japan and Sweden. In France and Italy the value of foreign trade is estimated not in terms of current prices but in terms of those of some earlier period, usually the preceding year. The figures do not include imports or exports of gold and silver unless so stated.

FOREIGN TRADE OF UNITED KINGDOM.

[In thousands of pounds sterling.]

Year and month.	IMPORTS.					EXPORTS.					Reex- ports.	Total exports and reex- ports.
	Food, drink, and tobacco.	Raw mate- rials and articles mainly unmanu- factured.	Articles wholly or mainly manu- factured.	Miscel- laneous, includ- ing parcel post.	Total.	Food, drink, and tobacco.	Raw mate- rials and articles mainly unmanu- factured.	Articles wholly or mainly manu- factured.	Miscel- laneous, includ- ing parcel post.	Total.		
Monthly average:												
1913.....	24,184	23,485	16,134	259	64,061	2,716	5,825	34,281	949	43,770	9,131	52,901
1920.....	63,817	59,196	37,787	254	161,387	4,245	12,126	93,312	1,523	111,206	18,563	129,769
1921.....	47,271	22,598	20,421	268	90,557	3,122	5,297	49,055	1,126	58,600	8,921	67,521
1921.												
August.....	50,584	19,589	18,194	214	88,581	3,124	7,058	39,936	1,228	51,346	9,998	61,344
September.....	48,410	20,465	17,905	338	87,119	3,300	6,997	44,009	942	55,248	8,595	63,843
October.....	44,475	21,256	18,691	320	84,742	3,466	7,359	50,328	1,113	62,265	10,386	72,651
November.....	41,246	29,946	17,913	154	89,259	3,586	7,046	51,094	1,169	62,895	9,823	72,718
December.....	39,063	27,792	18,291	165	85,312	3,187	7,446	47,364	1,378	59,375	9,204	68,579
1922.												
January.....	33,972	24,565	17,710	241	76,488	2,861	7,032	51,824	1,429	63,147	8,459	71,606
February.....	32,257	20,220	16,576	322	69,375	2,754	6,869	48,000	712	58,335	10,174	68,509
March.....	45,261	22,095	20,309	215	87,879	3,270	8,465	51,760	1,085	64,581	10,154	74,735
April.....	40,097	21,404	18,962	199	80,661	3,011	7,376	44,336	785	55,508	9,200	64,708
May.....	43,075	25,358	20,207	176	88,814	3,045	8,757	45,073	1,171	58,045	8,965	67,010
June.....	39,936	25,242	18,857	263	84,298	3,044	7,671	40,556	875	52,146	8,720	60,866
July.....	38,817	24,237	18,579	151	81,784	2,806	8,041	48,455	1,117	60,419	8,317	68,736
August.....	37,762	24,142	20,326	.....	82,661	3,105	8,900	47,149	.....	60,032	8,459	.....

FOREIGN TRADE OF ITALY, SWEDEN, NORWAY, AND JAPAN.¹

Year and month.	Italy. ² (In millions of lire.)		Sweden. (In millions of kronor.)		Norway. (In millions of kroner.) ³		Japan. (In millions of yen.)	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Monthly average:								
1913.....	304	210	71	68	46	33	61	53
1920.....	1,322	650	281	191	253	104	195	162
1921.....			106	91	128	63	135	104
1921.								
August.....	981	587	103	113	148	72	132	106
September.....	962	659	126	105	176	82	129	96
October.....	1,101	683	101	99	153	82	130	112
November.....	1,125	718	95	103	146	65	152	121
December.....	1,521	856	112	108	129	82	161	146
1922.								
January.....	1,300	620	77	61			179	87
February.....	1,056	716	49	38			198	101
March.....	1,169	719	109	71			208	115
April.....	1,313	691	102	60			185	129
May.....	1,248	678	97	90			169	154
June.....			93	104			157	146
July.....			83	113			142	144
August.....							137	145

¹ Subject to revision.² 1920 figures based on 1919 values; 1921 figures based on actual current prices; 1922 figures based on 1921 values. ³ Estimates of Farmand.FOREIGN TRADE OF FRANCE.¹

Year and month.	IMPORTS.					EXPORTS.					
	In thousands of francs.				In thousands of metric tons.	In thousands of francs.					In thousands of metric tons.
	Food.	Raw materials.	Manufactured articles.	Total.		Food.	Raw materials.	Manufactured articles.	Parcel post.	Total.	
Monthly average:											
1913.....	151,465	412,144	138,169	701,778	3,685	69,908	154,841	301,421	47,182	573,351	1,840
1920.....	989,576	2,096,379	1,072,787	4,158,741	4,211	217,733	509,485	1,413,548	100,479	2,241,245	1,071
1921.....	517,158	1,033,170	412,045	1,962,373	3,165	161,031	463,219	1,067,413	104,430	1,796,092	1,333
1921.											
August.....	555,545	855,697	320,052	1,731,294	2,593	112,654	445,312	1,084,193	82,933	1,725,092	1,035
September.....	691,972	1,204,213	329,494	2,225,679	3,993	146,467	444,891	1,087,443	95,852	1,774,653	1,172
October.....	717,091	1,191,860	318,000	2,226,951	2,809	132,424	482,376	1,041,594	103,078	1,759,472	1,252
November.....	564,012	1,446,125	323,593	2,333,730	5,161	157,180	478,875	992,256	120,343	1,748,654	1,515
December.....	754,671	1,856,148	543,445	3,154,264	5,197	259,605	549,495	1,193,161	180,059	2,182,320	2,507
1922. ⁵											
January.....	352,572	887,253	247,827	1,487,652	3,396	121,526	458,460	994,852	63,903	1,638,741	1,554
February.....	385,021	1,137,855	324,150	1,847,026	4,126	153,892	448,455	1,106,507	144,458	1,853,312	1,520
March.....	460,765	1,005,463	465,737	1,931,965	4,434	130,595	456,930	1,189,712	99,431	1,876,668	1,570
April.....	438,000	983,000	323,000	1,744,000	3,787	136,000	461,000	1,231,000	134,000	1,962,997	1,794
May.....	504,000	996,000	310,000	1,810,000	4,396	132,000	498,000	1,127,000	111,000	1,886,964	1,538
June.....	483,356	1,082,371	285,448	1,851,184	4,307						1,799
July.....	477,000	1,200,000	318,000	1,996,000	4,223	113,000	375,000	885,000	60,000	1,433,000	1,936
August.....	511,000	1,097,000	352,000	1,960,000	4,512	179,000	408,000	931,000	158,000	1,676,000	1,788

¹ Not including gold, silver, or the reexport trade. Latest figures subject to revision.² Calculated in 1913 value units.³ Calculated in 1919 value units. French foreign trade figures are originally recorded in quantity units, and the value of the trade is calculated by applying official value units to the quantities imported and exported. Normally the monthly statements of trade appear computed at the rates of the year previous, and only at the end of the year is the trade evaluated at the prices prevailing during that year. Because of the disturbed price conditions in France during the past two years, 1919 price units are being applied to the 1921 trade.⁴ Calculated in 1920 value units.⁵ Exports calculated in 1919 value units. Imports calculated on basis of actual declared values.⁶ Values of exports not available.⁷ Exports calculated on 1921 value units.

FOREIGN TRADE OF GERMANY.¹

Year and month.	IMPORTS. ²			EXPORTS. ³		
	Gold and silver (in thousands of marks).	Merchandise.		Gold and silver (in thousands of marks).	Merchandise.	
		In millions of marks.	In thousands of metric tons.		In millions of marks.	In thousands of metric tons.
Monthly average:						
1913.....	36,553	890	6,073	8,450	841	6,141
1920.....	17,756	9,910	1,570	17,773	5,776	1,651
1921 ⁴			2,194	34,901	8,295	1,715
1921.						
August.....	35,765	9,382	2,111	13,514	6,670	1,828
September.....	26,674	10,642	2,533	26,832	7,492	1,871
October.....	60,693	13,814	3,065	30,013	9,681	1,973
November.....	5,312	12,273	2,535	44,073	11,886	1,908
December.....	4,922	13,702	2,086	86,227	14,468	1,930
1922.						
January.....	132,336	12,641	2,309	134,054	14,394	2,027
February.....	46,409	12,001	1,475	57,425	14,482	1,747
March.....	7,566	22,919	2,645	46,898	21,285	2,153
April.....	12,315	28,266	2,889	51,451	22,948	2,176
May.....	31,910	32,417	3,810	75,844	27,080	2,093
June.....	18,018	34,364	4,029	109,298	39,232	1,880
July.....	37,215	45,738	4,798	124,178	35,707	1,636
August.....		64,720	6,765		60,295	1,407

¹ Latest figures subject to revision.² Not including deliveries on reparations account.³ Not including philanthropic gifts.⁴ Average for 8 months. Figures covering first 4 months of 1921 are not available.

FOREIGN TRADE OF UNITED STATES.

[In thousands of dollars.]

Year and month.	IMPORTS.								EXPORTS.								
	Gold.	Silver.	Merchandise.						Gold.	Silver.	Merchandise.						
			Crude materials for use in manufacturing.	Food-stuffs in crude condition and food animals.	Food-stuffs partly or wholly manufactured.	Manufactures for further use in manufacturing.	Manufactures ready for consumption.	Total merchandise. ¹			Crude materials for use in manufacturing.	Food-stuffs in crude condition and food animals.	Food-stuffs partly or wholly manufactured.	Manufactures for further use in manufacturing.	Manufactures ready for consumption.	Total merchandise. ²	
Monthly average:																	
1913.....	5,309	2,989	50,414	18,399	16,529	28,354	34,453	149,383	7,650	5,231	64,072	14,132	27,069	33,077	64,998	207,002	
1920.....	34,756	7,338	145,995	48,136	103,178	66,871	73,060	439,873	26,841	9,468	155,897	76,499	93,050	79,875	267,071	685,668	
1921.....	57,606	5,270	71,090	25,331	30,737	28,669	51,577	209,085	1,991	4,298	82,002	57,681	55,809	33,323	135,450	373,760	
1921.																	
August.....	86,211	7,853	71,525	18,922	27,095	25,171	49,879	194,768	672	3,743	69,483	105,871	66,607	25,064	98,042	371,935	
September.....	66,515	4,565	60,815	16,588	18,465	26,324	53,973	179,283	2,449	4,947	68,391	67,869	62,936	28,295	91,296	325,774	
October.....	47,110	7,510	59,460	23,326	23,883	27,707	51,665	188,028	7,576	4,782	121,322	40,205	48,018	28,129	98,323	343,597	
November.....	51,860	5,912	70,039	29,338	26,205	30,398	53,365	211,027	607	4,804	88,545	30,052	41,449	33,260	95,538	294,437	
December.....	31,685	5,516	94,016	32,707	25,473	32,083	51,171	237,373	2,162	7,145	89,950	28,737	38,282	35,145	98,370	296,306	
1922.																	
January.....	26,571	6,496	82,639	27,498	25,900	30,272	49,811	217,195	863	3,977	72,838	31,054	43,019	35,143	91,810	278,898	
February.....	28,701	4,771	80,971	22,370	27,762	34,041	49,375	215,743	1,732	7,092	55,895	27,799	45,164	32,193	84,684	250,748	
March.....	33,488	6,953	86,910	28,756	36,014	42,820	59,880	256,178	963	4,302	73,001	34,507	58,899	43,632	112,765	330,267	
April.....	12,244	4,800	69,804	25,711	32,482	37,252	50,820	217,073	1,579	5,109	79,511	31,174	47,372	37,969	113,876	318,100	
May.....	8,994	5,512	88,088	31,264	34,785	39,398	58,254	252,817	3,407	5,677	64,441	34,143	50,376	40,467	112,112	307,689	
June.....	12,969	6,346	91,146	26,170	37,346	46,471	58,439	260,391	1,601	6,004	70,219	41,000	55,485	39,086	121,284	334,684	
July.....	42,987	6,957	87,298	27,596	38,511	48,398	49,464	252,128	645	6,289	60,024	41,958	49,226	35,676	109,544	301,813	
August.....	19,092	4,944	110,285	22,489	42,404	48,430	55,858	281,412	956	3,861	47,872	61,339	46,071	35,708	104,871	301,804	

¹ Including miscellaneous merchandise imported.² Including miscellaneous and foreign merchandise exported.

FOREIGN TRADE INDEX.

There are presented below the usual indexes designed to reflect the movements in foreign trade of the United States, with the fluctuations due to price changes eliminated. The commodities chosen for these indexes are those for which prices are compiled by the Federal Reserve Board in the preparation of its international price index.¹

INDEX OF VALUE OF FOREIGN TRADE IN SELECTED COMMODITIES AT 1913 PRICES.

[Monthly average values, 1913=100.]

	Exports.				Imports.			
	Raw materials (12 commodities).	Producers' goods (10 commodities).	Consumers' goods (7 commodities).	Total (29 commodities).	Raw materials (10 commodities).	Producers' goods (12 commodities).	Consumers' goods (5 commodities).	Total (27 commodities).
1913, year.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1919, year.	88.9	155.1	133.6	115.3	157.5	192.9	147.5	168.4
1920, year.	92.2	158.7	133.6	107.5	135.8	227.5	138.8	168.8
1921, year.	103.1	116.9	124.1	108.9	113.6	162.8	141.4	135.6
1921.								
January.....	105.2	208.6	126.2	120.2	74.5	130.9	123.9	102.6
February.....	91.0	162.4	119.4	104.1	118.2	143.7	135.4	130.1
March.....	78.0	135.1	120.2	92.7	160.6	177.2	178.9	169.5
April.....	76.5	132.5	116.4	90.5	153.3	177.6	185.1	167.1
May.....	97.6	96.4	110.8	100.3	98.7	150.0	162.1	127.2
June.....	107.9	94.2	132.2	111.5	94.5	152.3	130.4	120.8
July.....	111.6	78.6	133.8	112.9	99.3	126.6	121.4	112.6
August.....	142.7	99.6	160.7	142.1	116.8	165.1	129.8	136.0
September.....	115.7	89.7	142.3	118.6	102.8	137.7	99.3	114.6
October.....	121.7	107.0	113.2	118.4	96.1	173.5	116.5	126.9
November.....	95.1	100.2	106.2	98.1	115.1	199.4	149.2	150.6
December.....	93.8	96.0	107.8	96.9	133.0	219.1	164.8	168.7
1922.								
January.....	82.6	104.3	129.7	94.5	118.4	228.7	135.2	160.1
February.....	68.5	86.0	127.6	82.6	123.3	281.3	133.5	183.4
March.....	89.8	121.7	156.5	106.9	148.1	306.3	161.1	206.5
April.....	90.5	120.9	150.5	106.0	125.5	236.1	152.0	169.1
May.....	78.3	128.8	155.4	99.4	144.6	227.9	168.0	177.9
June.....	86.3	124.3	169.2	107.4	148.7	273.3	137.3	191.0
July.....	79.1	124.0	133.5	95.0	146.9	266.3	137.5	187.7
August.....	88.8	90.5	126.3	96.7	174.2	255.5	120.3	164.2

¹ The list includes 27 of the most important imports the value of which in 1913 formed 49.3 per cent of the total import values, and 29 of the most important exports the value of which in 1913 formed 56.3 per cent of the total export values. The classification of the original list of commodities used was given in the July, 1920, BULLETIN. The classification of 11 additional commodities of imports was given in the April, 1921, BULLETIN, and 2 additional commodities in the November, 1921, BULLETIN. Exports of gasoline have been altered to include naphtha.

Volume of exports showed a slight recovery during August, but with the exception of last month are less than in any month since the low point in February. Decreases in exports of producers' and consumers' goods almost equaled the substantial gain in exports of raw materials, the group which has suffered most during the last year. This gain is entirely due to very heavy exports of wheat, as all other important items except lumber showed declines. Wheat exports were the largest since October, 1920. Substantially decreased exports of gasoline were responsible for the smaller exports of producers' goods. Other declines were registered in exports of sole and upper leather, steel rails and plates, and lime acetate, but exports of structural steel and of fuel and gas oil increased considerably. Loss in exports of consumers' goods is the result of decreased exports of sugar, ham and shoulders, and cotton cloths. Exports of illuminating oil were the largest since December, 1920, and exports of wheat flour and lard increased also.

As a result of greatly increased imports of raw materials, the total volume of imports showed a substantial increase during August, in spite of declines in imports of producers' and consumers' goods. Large increases in imports of hides and silk were the main factors in the increased imports of raw materials, although imports of tobacco, cotton, and copper also showed gains. Imports of hides and skins were the largest since June, 1921, and August silk imports were the second largest since September, 1919. Decreases in imports of producers' goods were very general throughout the group, being especially important in the cases of rubber, sugar, and burlap, while imports of chemicals, one of the smallest items in the group, registered the only important increase. In the group of consumers' goods there was a material reduction in imports of cocoa, coffee, and bananas, which was partially offset by increases in imports of olive oil and tea. Coffee imports were the smallest since September, 1921, whereas imports of olive oil reached the largest monthly total for a year.

INDEX OF OCEAN FREIGHT RATES.

The accompanying table shows the monthly fluctuations in ocean freight rates prevailing between United States Atlantic ports and the principal European trade regions. The figures are derived from the actual rates quoted on the following commodities: Grain, provisions, cotton, cottonseed oil, and sack flour. For the methods used in constructing the index see the August, 1921, BULLETIN, pages 931-934.

RELATIVE OCEAN FREIGHT RATES IN UNITED STATES AND EUROPE TRADE.

[January, 1920, rates=100.]

Month.	United States Atlantic ports to—					
	United Kingdom.	French Atlantic.	Netherlands and Belgium.	Scandinavia.	Mediterranean.	All Europe.
1921.						
January.....	60.7	30.2	34.1	42.9	43.2	43.3
February.....	54.7	27.7	29.2	30.9	43.8	38.5
March.....	49.3	24.6	28.3	30.8	42.2	35.9
April.....	50.1	32.6	36.6	29.4	35.7	39.0
May.....	50.6	35.0	38.2	31.3	34.6	40.1
June.....	42.7	34.7	38.3	31.3	34.0	37.6
July.....	42.5	33.2	37.0	29.0	34.7	36.8
August.....	42.9	33.4	36.7	28.4	34.3	36.7
September.....	41.8	32.7	35.8	28.2	33.6	36.0
October.....	37.0	28.5	30.7	26.7	33.3	32.3
November.....	33.5	25.0	25.2	24.0	32.9	28.8
December.....	32.4	22.7	22.9	23.3	32.3	27.2
1922.						
January.....	31.7	22.7	23.3	23.4	32.2	27.1
February.....	34.7	25.7	25.2	23.3	31.8	29.1
March.....	33.1	26.5	24.9	23.4	30.1	28.3
April.....	27.3	24.8	22.7	24.0	27.1	25.4
May.....	27.9	25.5	22.8	23.4	27.4	25.7
June.....	27.5	26.1	23.0	23.4	27.4	25.7
July.....	28.8	25.9	22.6	23.0	26.4	25.9
August.....	29.2	23.4	20.7	22.4	24.0	24.6
September.....	27.0	24.1	19.1	22.6	22.2	23.4

SAVINGS DEPOSITS.

Comparison of savings deposits on September 1, 1922, with deposits on August 1, 1922, and September 1, 1921, are shown for 886 banks distributed throughout all sections of the United States. The figures for districts No. 1 and No. 2 are those of large mutual savings banks, but in all other districts reports of other banks are included to make the figures thoroughly representative. In all districts where reporting commercial banks subdivide their time deposits, statistics of savings deposits subject to notice (excluding time certificates of deposit) are used. This is in accordance with the definition given in the Board's Regulation D, series of 1920.

During August the volume of savings deposits increased in eight Federal reserve districts. Declines were registered in districts No. 2 (New York), No. 3 (Philadelphia), No. 5 (Richmond), and No. 10 (Kansas City). The largest gain was shown by district No. 8 (St. Louis) and amounted to 1.7 per cent. Savings deposits increased during the year ending August 1 in all districts except district No. 4

(Cleveland). The most noteworthy increases during the year were 12.4 per cent in district No. 8 (St. Louis) and 13 per cent in district No. 11 (Dallas). Savings deposits in district No. 12 (San Francisco) are at the highest point since January 31, 1919, and are 42.7 per cent larger than on that date.

District.	Number of banks.	Sept. 1, 1922.	Aug. 1, 1922.	Sept. 1, 1921.
No. 1.....	64	\$1,104,435,000	\$1,102,250,000	\$1,061,725,000
No. 2.....	30	1,728,310,000	1,728,753,000	1,654,316,000
No. 3.....	80	422,128,000	423,963,000	412,117,000
No. 4.....	18	380,941,000	377,989,000	381,385,000
No. 5.....	93	269,220,000	269,238,000	245,075,000
No. 6.....	82	163,290,000	162,964,000	156,469,000
No. 7.....	219	778,906,000	776,081,000	768,092,000
No. 8.....	37	116,715,000	114,733,000	103,833,000
No. 9.....	15	79,245,000	79,165,000	79,230,000
No. 10.....	61	87,349,000	87,622,000	80,640,000
No. 11.....	112	72,935,000	71,480,000	64,585,000
No. 12.....	75	772,150,000	766,807,000	711,145,000
Total.....	886	5,975,624,000	5,961,045,000	5,718,612,000

REPORT OF KNIT GOODS MANUFACTURERS OF AMERICA.

The total production of winter and summer underwear for August is compared with previous months in the following table:

1922	Number of mills reporting.	Actual production (dozens).	Per cent of normal.
March.....	54	756,249	74.3
April.....	53	522,035	72.0
May.....	47	518,150	74.2
June.....	47	564,893	72.2
July.....	50	422,872	60.0
August.....	49	519,511	68.8
Winter underwear (August).....	41	341,713	72.7
Summer underwear (August).....	24	177,798	62.5

Order and production report for month ended August 31, 1922, follows. The number of mills producing was 41.

	Dozens.	Per cent of normal production.
Unfilled orders first of month.....	1,093,768	
New orders received during month.....	389,790	70.7
Total (A).....	1,483,558	
Shipments during month.....	504,839	91.5
Cancellations during month.....	11,782	2.1
Total (B).....	516,621	
Balance orders on hand Sept. 1 (A-B).....	966,937	
Production.....	441,587	80.1

Thirty-seven representative mills which reported for July and August, 1922, furnish the data for the following table:

[In dozens.]				
	July (37 mills).	August (37 mills).	Gain.	Loss.
Unfilled orders end of month.....	1,025,246	885,603		139,643
New orders.....	435,884	363,226		72,658
Shipments.....	286,785	491,087	204,302	
Cancellations.....	6,475	11,782	5,307	
Production.....	285,605	405,699	120,094	

PRODUCTION AND SHIPMENTS OF FINISHED COTTON FABRICS.¹

	July, 1922.				August, 1922.			
	White goods.	Dyed goods.	Printed goods.	Total.	White goods.	Dyed goods.	Printed goods.	Total.
Total finished yards billed during month:								
District 1.....	13,082,035	19,031,484	9,305,284	45,673,637	16,088,423	24,544,825	9,814,405	52,627,483
2.....	5,685,792	1,883,209	3,837,799	16,532,073	8,026,229	1,664,778	3,285,016	16,684,216
3.....	6,081,554	5,560,449		11,642,003	7,761,719	6,630,080		14,391,799
5.....	6,885,461	25,229		6,910,690	8,252,955	57,769		8,310,724
6.....	610,201	1,388,615		1,998,816	642,979	1,743,314		2,386,293
8.....				2,279,748				2,478,968
Total.....	32,345,043	27,888,986	13,143,083	85,036,967	40,772,305	34,640,766	13,099,421	96,879,483
Total average per cent of capacity operated:								
District 1.....	61	71	48	61	69	82	53	66
2.....	71	33	37	51	73	44	32	50
3.....	82	70		75	97	82		89
5.....	68			63	66			66
6.....	0			61	0			72
8.....				96				100
Average for all districts.....	65	65	46	62	72	77	49	66
Total grey yardage of finishing orders received:								
District 1.....	14,108,517	21,014,791	8,258,662	47,647,613	12,962,333	22,413,399	8,445,379	46,372,919
2.....	5,843,674	2,452,812	3,219,441	14,029,036	5,434,130	2,714,687	2,962,776	13,800,942
3.....	6,622,637	6,431,755		13,054,390	7,935,135	7,252,518		15,187,653
5.....	7,987,623	52,764		8,040,387	6,976,466	55,324		7,031,790
6.....	287,911	1,009,850		1,297,761	89,372	2,516,157		2,605,529
8.....				2,203,114				2,249,921
Total.....	34,850,362	30,961,972	11,478,103	86,272,301	33,397,436	34,952,085	11,408,155	87,248,754
Number of cases of finished goods shipped to customers (case equals approximately 3,000 yards):								
District 1.....	6,249	7,224	2,613	26,818	6,174	7,424	3,318	28,353
2.....	3,347	263		8,277	3,022	139		7,692
3.....	4,280	2,306		6,586	4,797	2,690		7,487
5.....	1,463			3,721	1,501			3,783
6.....	0			0	0			0
8.....				647				733
Total.....	15,339	9,793	2,613	46,049	15,494	10,253	3,318	48,048
Number of cases of finished goods held in storage at end of month:								
District 1.....	5,285	5,712	2,738	24,426	5,113	5,685	2,397	23,743
2.....	4,942	465		11,047	5,605	361		12,476
3.....	255	311		6,793	294	410		7,314
5.....	0			1,378	0			1,351
6.....	0			340	0			430
8.....				224				212
Total.....	10,482	6,488	2,738	44,208	11,012	6,456	2,397	45,526
Total average work ahead at end of month (expressed in days):								
District 1.....	4.7	11.0	12.0	9.3	2.4	11.0	10.7	8.4
2.....	14.0	9.7	6.6	8.0	9.3	4.3	4.7	5.4
3.....	13.0	13.0		13.0	14.0	12.0		13.0
5.....	9.6			9.6	14.0			14.0
6.....	0.0			5.0	0.0			18.0
8.....				9.2				7.6
Average for all districts.....	8.5	11.0	11.0	9.3	7.9	10.0	9.3	8.7

¹ The National Association of Finishers of Cotton Fabrics at the request of the Federal Reserve Board have arranged for a monthly survey within the industry. The results of the inquiries are herewith presented in tabular form. The secretary of the association makes the following statement concerning the tabulation:

The accompanying figures are compiled from statistics furnished by 34 out of 58 member firms of this association. It is probably fair to state that in the absence of having specific detail at hand, but according to our best estimate it is probably well within the fact that the figures given for the various classes of work would cover, approximately, the following percentages of the entire industry: White goods, 72 per cent; dyed goods, 62 per cent; printed goods, 30 per cent. The figures given represent reports from exactly the same finishers for the two months, both for the totals and for the subdivisions, and, therefore, are strictly comparable.

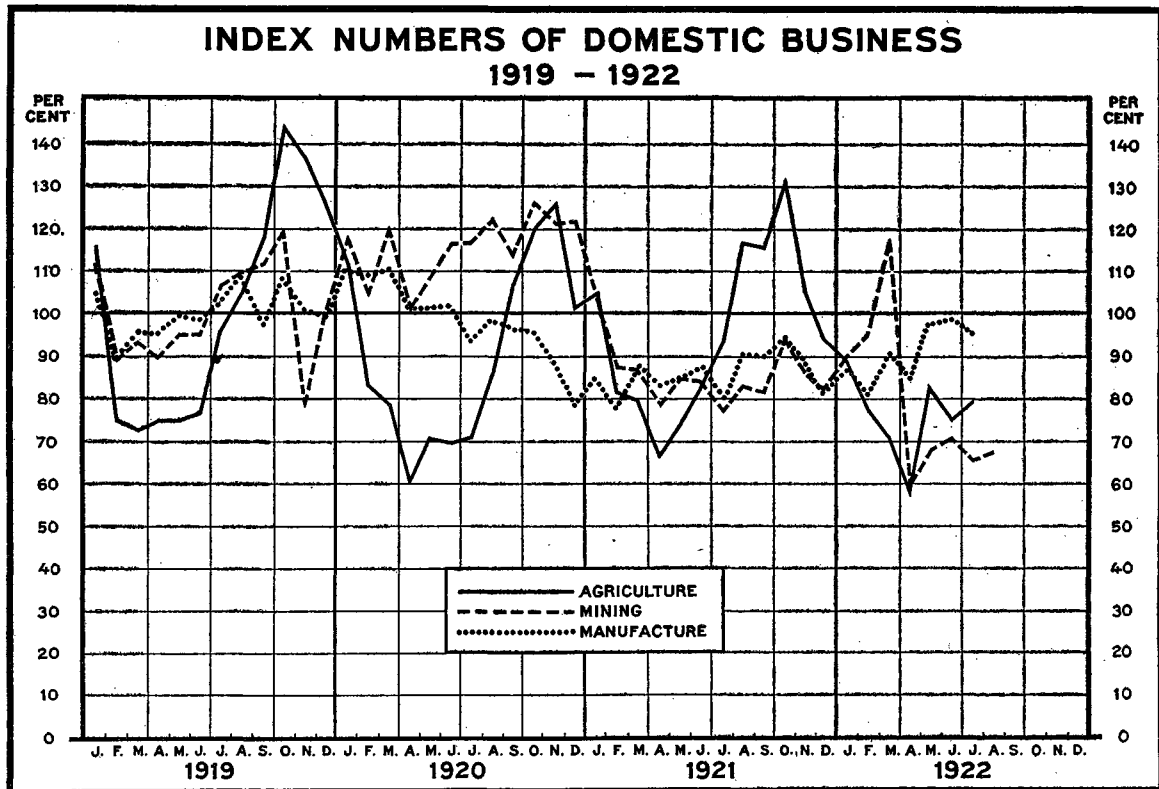
NOTE.—Many plants were unable to give details under the respective headings of white goods, dyed goods, and printed goods, and reported their totals only; therefore the column headed "Total" does not always represent the total of the subdivisions, but is a correct total for the district.

PHYSICAL VOLUME OF TRADE.

The indexes of domestic business moved upward during August. This increase was most pronounced in the case of agricultural movements, but was no larger than is customary at this time of the year. Receipts of wheat were considerably smaller than during last August, whereas rye receipts were exceedingly large. Both receipts and shipments of live stock at 15 western markets were larger during August than during July. The number of cattle slaughtered under Federal in-

Production of pig iron and steel ingots declined considerably during August, but there was a further slight increase in the sales of structural steel. At the end of August the United States Steel Corporation had a larger volume of unfilled orders on its books than on any date since March, 1921. The production of passenger automobiles and trucks were both greater than in any previous month except June, 1922.

Copper production reached a new peak for the current year in August, while lead production was also very large. The output of



spection was in excess of that of any month since November, 1920.

The textile industry showed a marked increase in activity. Consumption of raw cotton for August was the largest since June, 1920. Silk consumption also showed a pronounced increase and reached the highest total of any month since January, 1920, when the figures were first compiled. Stocks of raw silk, nevertheless, increased 5,041 bales in August.

Bituminous coal showed a moderate recovery during August, but anthracite output was negligible. Petroleum production showed a slight decline during August, but stocks are still accumulating. The July output of gasoline was the largest ever recorded.

zinc mines was slightly reduced, while the stocks of zinc continued to shrink and are now extremely small. Silver production reached a total of 5,561,523 ounces in August, which is larger than any month during the past two years.

The value of building contracts awarded during August was somewhat smaller than in July, but both the number and value of permits issued increased. The production of cement and of clay fire bricks were both larger than in July. Freight-car loadings increased 9 per cent and were much larger than in August, 1921. Loadings of grain, live stock, coal, and forest products all increased, while the number of cars loaded with ore was larger than in any month since October, 1920.

INDEXES OF DOMESTIC BUSINESS.

[Monthly average of 1919=100.]

AGRICULTURAL MOVEMENTS.

Date.	Total agricul- ture. ¹	Total ani- mals.	Total grains.	Cotton.	Fruit.	Leaf to- bacco.
1921.						
January.....	105.0	96.5	97.9	110.8	94.6	195.7
February.....	81.1	73.9	66.7	77.1	95.5	297.4
March.....	79.4	76.4	77.5	57.8	137.4	181.1
April.....	66.3	74.2	60.5	51.3	175.1	24.1
May.....	73.6	77.3	71.7	67.4	139.0	8.9
June.....	82.2	81.9	96.0	57.8	183.3	4.1
July.....	93.4	68.1	151.9	52.7	123.8	12.1
August.....	116.7	85.4	195.5	56.0	86.4	54.7
September.....	115.3	85.9	151.6	114.7	79.9	79.3
October.....	130.9	107.0	121.3	195.3	69.9	107.6
November.....	104.6	99.2	65.3	163.2	34.7	188.5
December.....	93.9	82.0	79.0	133.4	83.6	117.0
1922.						
January.....	88.9	91.8	83.8	76.8	96.1	113.2
February.....	77.7	76.5	92.3	43.3	55.5	101.2
March.....	70.7	79.2	73.0	42.8	130.4	27.5
April.....	57.4	71.8	49.6	37.0	103.0	5.5
May.....	82.6	90.2	92.5	50.1	105.7	3.9
June.....	75.1	88.7	77.1	43.0	93.8	1.5
July.....	79.8	81.2	106.4	33.4	59.3	12.3
August.....	106.7	96.5	153.8	48.3	43.1	55.2

¹ Combination of 14 independent series.² Partly estimated.

MINERAL PRODUCTS.

Date.	Total min- eral prod- ucts. ¹	Bi- tum- inous coal.	An- thra- cite coal.	Crude petro- leum.	Iron.	Cop- per.	Zinc.	Lead.
1921.								
January.....	102.8	105.5	100.8	120.3	94.8	80.0	65.9	109.1
February.....	87.5	80.8	104.8	111.2	76.0	71.2	45.2	94.3
March.....	86.8	79.6	100.8	130.2	62.6	83.0	40.0	86.1
April.....	78.7	72.2	104.8	127.3	46.8	47.6	42.1	77.8
May.....	84.7	87.3	102.0	133.6	47.9	22.6	45.9	78.0
June.....	83.9	88.7	105.9	128.4	41.8	18.1	49.5	74.6
July.....	76.7	79.6	95.9	128.1	33.9	16.6	39.4	72.4
August.....	82.8	90.5	97.9	130.2	37.4	19.9	37.2	87.8
September.....	81.6	91.9	96.9	116.3	38.7	19.5	36.6	79.7
October.....	93.9	114.6	103.1	113.2	48.9	22.9	37.0	100.4
November.....	86.0	94.2	93.3	120.0	55.5	20.8	53.8	103.3
December.....	82.0	81.1	81.4	133.3	64.7	17.3	56.0	103.2
1922.								
January.....	90.0	98.5	85.1	137.1	64.3	24.1	60.3	101.0
February.....	94.9	107.3	92.0	129.7	63.9	34.8	57.3	93.4
March.....	117.1	131.5	119.1	149.1	79.9	58.0	67.5	93.0
April.....	58.6	41.3	3	141.9	81.3	71.7	65.6	88.8
May.....	67.9	53.1	6	147.7	90.5	83.7	69.8	89.0
June.....	70.6	58.4	1.1	143.8	92.6	89.0	72.6	89.1
July.....	65.4	44.5	1.6	148.0	94.2	85.0	81.2	84.4
August.....	67.5	58.3	2.2	147.1	71.1	94.2	79.9	97.5

¹ Combination of 7 independent series.

PRODUCTION OF MANUFACTURED GOODS.

Date.	Total man- ufacture. ¹	Steel.	Lum- ber.	Pa- per.	Petro- leum.	Tex- tiles.	Leath- er.	Food.	To- bacco.
1921.									
January.....	84.5	87.6	67.7	87.8	127.7	72.0	63.5	88.2	87.8
February.....	77.4	69.6	75.7	79.5	106.8	73.1	62.8	77.4	94.1
March.....	87.8	62.5	89.3	84.4	113.0	90.8	72.0	88.1	106.1
April.....	83.1	48.3	87.5	81.7	113.8	91.5	75.8	84.0	95.5
May.....	84.4	50.3	100.4	72.4	114.7	95.0	83.2	82.2	99.3
June.....	87.1	39.9	89.6	70.2	110.1	101.9	81.1	85.1	106.8
July.....	80.1	31.9	85.3	65.6	108.3	94.5	76.3	85.5	100.6
August.....	90.7	45.3	99.7	75.6	110.6	103.4	85.7	98.5	117.2
September.....	90.2	46.7	92.9	78.6	110.2	105.5	80.3	92.8	111.6
October.....	94.6	64.3	103.1	90.8	119.7	104.8	86.2	99.8	115.8
November.....	89.5	66.0	100.6	95.8	117.1	100.4	90.9	89.4	102.9
December.....	81.3	56.8	92.2	94.7	119.6	99.7	93.0	85.2	76.8
1922.									
January.....	87.0	63.4	100.7	95.0	119.0	112.2	88.2	91.3	90.6
February.....	80.2	69.3	95.4	90.0	108.6	96.8	78.1	88.5	83.8
March.....	90.9	94.3	102.5	108.4	123.9	107.6	78.5	96.5	98.4
April.....	84.7	97.0	98.1	99.9	124.4	91.3	70.7	84.9	89.6
May.....	98.1	107.8	121.1	112.3	132.2	108.9	70.4	96.8	108.1
June.....	99.1	104.8	104.4	110.6	133.8	107.1	72.4	98.9	119.8
July.....	95.3	98.9	104.3	99.9	146.2	95.9	72.1	97.5	114.8
August.....	104.6	88.1	119.3	110.7	141.2	115.7	69.7	104.5	134.1

¹ Combination of 34 independent series.² Partly estimated.

COMMODITY MOVEMENTS.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of aver- age, correspond- ing month 1919- 1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
GRAIN AND FLOUR.						
Receipts at 17 interior centers (000 omitted):						
Wheat (bu.).....	62,644	45,408	77,027	93.6	90.4	115.1
Corn (bu.).....	22,058	26,396	30,983	134.2	149.0	188.4
Oats (bu.).....	26,519	18,843	42,740	77.1	79.6	124.2
Rye (bu.).....	14,085	1,443	6,208	319.5	49.1	140.8
Barley (bu.).....	4,121	2,283	6,387	77.1	40.6	119.5
Total grain (bu.).....	129,427	93,938	163,345	101.5	94.3	128.1
Flour (bbls.).....	2,990	2,612	3,130	121.8	123.8	127.5
Total grain and flour (bu.).....	142,880	105,687	177,430	103.1	96.8	128.0
Shipments at 14 interior centers (000 omitted):						
Wheat (bu.).....	51,883	28,552	58,902	128.8	136.4	146.3
Corn (bu.).....	19,964	23,905	22,658	175.9	192.0	199.6
Oats (bu.).....	17,846	14,445	15,422	116.0	117.0	100.2
Rye (bu.).....	11,903	11,161	4,548	402.8	47.0	153.9
Barley (bu.).....	2,152	1,995	4,060	57.0	44.2	107.6
Total grain (bu.).....	103,748	80,058	105,590	140.7	152.3	143.2
Flour (bbls.).....	4,846	3,998	5,040	116.7	117.6	121.4
Total grain and flour (bu.).....	125,553	98,047	128,272	135.9	144.5	138.8
Stocks at 11 interior centers at close of month (000 omitted):						
Wheat (bu.).....	11,852	10,365	21,928	58.4	68.7	108.0
Corn (bu.).....	4,390	11,804	6,907	143.1	147.7	225.1
Oats (bu.).....	32,048	30,329	50,835	132.7	135.4	210.5
Rye (bu.).....	2,213	634	2,571	50.2	15.2	58.3
Barley (bu.).....	980	398	2,206	58.8	20.2	132.4
Total grain (bu.).....	51,483	53,530	84,447	96.1	103.0	157.6
Total visible supply (000 omitted):						
Wheat (bu.).....	30,586	21,533	44,117	98.0	94.0	140.9
Corn (bu.).....	8,229	20,561	11,993	97.9	215.4	142.7
Oats (bu.).....	40,073	38,224	65,475	.....	.....	.....
Receipts at 9 seaboard centers (000 omitted):						
Wheat (bu.).....	32,480	17,501	29,365	115.5	89.5	104.4
Corn (bu.).....	6,261	6,478	1,936	433.9	184.2	134.2
Oats (bu.).....	3,847	4,018	2,625	105.2	69.0	71.8
Rye (bu.).....	3,808	2,454	1,966	210.2	76.1	108.5
Barley (bu.).....	2,827	3,073	6,089	63.4	56.0	136.6
Total grain (bu.).....	49,222	33,524	41,981	124.6	86.9	106.3
Flour (bbls.).....	1,705	1,376	2,173	103.4	39.7	131.7
Total grain and flour (bu.).....	56,895	39,715	51,759	121.3	73.3	110.3
Stocks at 8 seaboard centers at close of month (000 omitted):						
Wheat (bu.).....	11,208	7,235	12,934	75.8	79.0	87.5
Corn (bu.).....	782	936	956	106.2	132.2	129.8
Oats (bu.).....	2,814	2,027	1,592	158.0	100.2	89.4
Rye (bu.).....	340	258	1,389	37.1	30.5	151.8
Barley (bu.).....	3,415	2,901	3,998	75.0	69.9	87.8
Total grain (bu.).....	18,557	13,357	20,869	81.6	79.1	91.8
Wheat flour production (bbls.).....	12,271	10,321	13,266	120.3	115.5	113.0
LIVE STOCK.						
Receipts at 59 principal markets (head, 000 omitted):						
Cattle and calves.....	2,137	1,702	1,857	110.2	102.1	95.7
Hogs.....	3,016	2,964	2,649	126.8	104.4	100.2
Sheep.....	1,913	1,653	2,407	69.6	83.8	89.8
Horses and mules (43 markets).....	23	15	17	40.0	46.9	28.1
Total.....	7,089	6,334	6,990	99.5	97.3	98.1

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
LIVE STOCK—contd.						
Shipments at 54 principal markets (head, 000 omitted):						
Cattle and calves...	1,031	665	842	118.6	103.8	96.9
Hogs.....	1,052	1,018	929	122.7	102.6	108.3
Sheep.....	885	711	1,110	57.8	76.7	72.6
Horses and mules (43 markets)...	22	14	15	41.6	46.2	27.9
Total.....	2,990	2,408	2,896	90.3	93.0	87.5
Receipts at 15 western markets (head, 000 omitted):						
Cattle and calves...	1,639	1,231	1,418	111.4	101.2	96.4
Hogs.....	2,183	2,221	1,920	123.6	103.4	108.7
Sheep.....	1,185	1,061	1,569	64.9	81.7	85.9
Horses and mules...	17	10	11	40.5	44.0	27.0
Total.....	5,024	4,523	4,918	98.4	96.5	96.4
Shipments at 15 western markets (head, 000 omitted):						
Cattle and calves...	810	476	656	124.7	104.7	101.1
Hogs.....	646	651	610	114.4	95.3	108.0
Sheep.....	517	424	605	55.8	72.5	65.2
Horses and mules...	16	9	10	42.7	43.0	27.0
Total.....	1,989	1,560	1,881	91.3	89.4	86.3
Shipments of stockers and feeders from 34 markets (head, 000 omitted):						
Cattle and calves...	446	221	354	131.1	117.7	103.9
Hogs.....	30	29	22	85.4	104.1	62.3
Sheep.....	350	202	402	52.3	75.9	60.1
Total.....	826	452	778	79.1	93.8	74.5
Slaughter at principal centers under Federal inspection (head, 000 omitted):						
Cattle.....	761	697	680	102.6	99.9	91.7
Calves.....	345	330	304	108.4	92.6	95.4
Hogs.....	2,888	3,094	2,531	129.9	111.2	113.8
Sheep.....	1,024	964	1,237	87.4	88.5	105.7
Total.....	5,018	5,085	4,752	112.6	103.2	106.7
Meats, cold storage holdings at close of month (lbs., 000 omitted):						
Beef.....	48,225	47,030	85,638	38.4	35.5	68.2
Pork products.....	738,255	826,535	915,601	73.3	78.9	90.9
Lamb and mutton.....	3,371	3,308	6,750	62.0	48.9	124.1
Exports of certain meat products (lbs., 000 omitted):						
Beef—						
Canned.....	258	273	914	15.4	7.6	54.5
Fresh.....	300	192	293	10.3	3.8	10.1
Pickled and other cured.....	2,621	2,016	2,753	106.8	78.6	112.2
Hog products—						
Bacon.....	32,591	32,584	45,340	64.0	49.5	89.0
Hams and shoulders.....	18,761	26,668	32,234	68.9	95.7	118.3
Lard.....	68,907	66,058	87,411	123.4	91.5	156.6
Pork, pickled.....	3,384	3,244	3,212	133.8	112.0	127.0
DAIRY PRODUCTS.						
Receipts at 5 principal markets (000 omitted):						
Butter (lbs.).....	62,494	92,829	62,337	112.2	137.9	112.0
Cheese (lbs.).....	19,819	23,940	12,863	125.5	116.6	81.4
Eggs (cases).....	1,028	1,561	1,100	102.1	126.5	109.2

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
DAIRY PRODUCTS—con.						
Cold-storage holdings at close of month (000 omitted):						
Creamery butter (lbs.).....	112,062	103,151	92,396	99.1	100.5	81.7
American cheese (lbs.).....	53,626	46,580	46,706	87.6	88.9	76.3
Eggs (cases).....	9,606	10,161	7,207	135.5	136.5	101.7
OTHER AGRICULTURAL PRODUCTS.						
Cotton seed (tons):						
Received at mills.....	90,931	14,979	120,291	159.9	50.2	211.6
Crushed.....	48,816	20,530	99,308	105.0	74.2	213.6
On hand at mills at close of month.....	55,995	13,880	120,801	90.9	28.1	196.2
Cottonseed oil (lbs., 000 omitted):						
Production.....	13,354	5,825	29,630	99.3	38.4	220.2
Stocks.....	10,038	6,897	16,693	81.8	30.3	131.5
Oleomargarine consumption (lbs., 000 omitted).....	11,754	14,974	17,803	46.3	77.3	76.0
Tobacco sales at loose-leaf warehouses (lbs., 000 omitted):						
Bright belt—						
Virginia.....	18,160		11,840	158.1		103.1
North Carolina.....			37,950			83.3
South Carolina.....	1,162	1,547	2,662	66.0	170.3	151.3
Burley.....	178	406	487	33.3	41.5	91.0
Western dark.....						
Sale of revenue stamps for manufacture of tobacco, excluding Porto Rico and Philippine Islands (000 omitted):						
Cigars (large).....	641,164	585,874	622,039	105.3	96.9	102.1
Cigars (small).....	60,498	114,041	53,630	115.8	233.3	102.6
Cigarettes (small).....	6,373,890	5,210,962	5,130,577	151.5	144.8	122.0
Manufactured tobacco (lbs.).....	38,021	32,591	33,602	112.6	104.0	99.5
Fruit shipments from California (carloads):						
Oranges.....	1,274	1,715	3,126	57.8	58.1	141.7
Lemons.....	774	828	579	131.4	70.1	98.3
Apples:						
Shipments (carloads).....	3,684	2,181	3,220	114.7	155.2	100.3
White potatoes, shipments (carloads).....						
	17,396	18,376	16,115	120.8	118.5	111.3
Sugar, 7 ports (long tons):						
Receipts.....	501,203	507,623	416,170			
Meltings.....	540,024	530,334	423,677			
Raw stocks at close of month.....	262,959	309,413	136,421			
FOREST PRODUCTS.						
Lumber:						
Number of mills—						
National Lumber Mfg. Assn.....	535	477	437			
Southern pine.....		176	185			
Western pine.....	52	50	56			
Douglas fir.....	120	119	103			
Production (ft., 000,000 omitted)—						
National Lumber Mfg. Assn.....	1,327	1,092	878	119.6	110.4	79.1
Southern pine.....		407	389		105.8	98.0
Western pine.....	169	147	107	117.6	101.4	74.6
Douglas fir.....	426	303	291	119.1	129.6	81.3
Shipments (ft., 000,000 omitted)—						
National Lumber Mfg. Assn.....	1,230	1,052	857	118.4	114.7	82.5
Southern pine.....		405	406		106.2	104.4
Western pine.....	156	134	92	131.7	124.9	77.9
Douglas fir.....	385	324	322	110.9	136.3	92.6

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
FOREST PRODUCTS--continued.						
Lumber (M feet)—Continued.						
Stocks at end of month—Southern pine (ft., 000,000 omitted).....		1,011	1,225	89.3		107.4
Receipts at Chicago and St. Louis.....	332,417	468,604	356,730	137.5	120.6	96.7
Shipments at Chicago & St. Louis.....	548,378	321,041	235,736	130.5	142.3	97.8
Oak flooring—						
Production.....	27,669	24,082	15,717			
Shipments.....	27,037	24,261	15,670			
Stocks at end of month.....	25,971	20,712	35,352			
Unfilled orders.....	37,173	35,637	9,722			
Naval stores at 3 southeastern ports:						
Spirits of turpentine (casks)—						
Receipts.....	30,000	38,167	33,773	101.7	116.3	114.4
Stocks at close of month.....	26,041	16,726	52,861	74.0	46.1	150.2
Rosin (bbls.)—						
Receipts.....	93,737	117,822	92,580	103.0	125.9	101.6
Stocks at close of month.....	329,189	303,588	328,907	145.9	130.3	145.8
FUEL AND POWER.						
Coal and coke (short tons, 000 omitted):						
Bituminous coal production (est.)..	22,261	17,003	34,538	52.9	43.2	82.0
Anthracite coal—						
Production.....	161	116	5,375	2.1	1.5	93.3
Coke—						
Beehive production (est.)	539	459	248	43.4	40.2	20.0
By-product, production (est.).....	1,794	2,486	1,383			
Crude petroleum:						
Production (bbls.) (000 omitted)....	46,295	46,593	40,894	122.0	124.4	107.8
Stocks at close of month (bbls., 000 omitted).....	264,730	261,395	169,682	184.5	179.4	118.2
Producing oil wells (number).....	1,709	1,798	952	93.9	109.6	52.3
Oil refineries: ¹						
Total production (000 omitted)—						
Crude oil run (bbls.).....	44,378	41,805	36,041	127.7	124.5	103.7
Gasoline (gals.).....	569,711	525,941	419,642	144.2	133.3	106.2
Kerosene (gals.).....	192,924	173,650	138,724	112.0	105.4	80.6
Gas and fuel (gals.).....	959,029	903,057	807,428	131.0	126.1	110.3
Lubricating (gals.).....	91,715	80,138	65,893	122.1	108.0	87.7
Stocks at close of month (000 omitted)—						
Crude oil (bbls.).....	35,287	36,178	19,116	205.5	201.2	111.3
Gasoline (gals.).....	772,909	824,966	684,237	143.8	133.9	127.3
Kerosene (gals.).....	324,586	317,574	412,202	88.3	85.9	112.1
Gas and fuel (gals.).....	1,358,870	1,326,940	1,269,419	148.7	147.3	138.9
Lubricating (gals.).....	226,691	226,904	258,638	120.5	119.5	137.5
Electric power produced by public utility power plants (000 kw. hours):						
Produced by water power.....	1,524,243	1,546,994	1,199,195	100.0	102.3	78.7
Produced by fuels.....	2,538,822	2,314,300	2,210,706	133.4	126.6	116.1
Total.....	4,063,065	3,861,294	3,410,701	118.5	115.6	99.5

¹ Figures for July, 1922, June, 1922, July, 1921.

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
METALS.						
Iron and steel (long tons, 000 omitted): ²						
Pig iron production	2,034	1,816	986	92.4	79.6	44.8
Steel ingot production	2,374	2,215	1,175	106.5	96.5	52.7
Unfilled orders, U. S. Steel Corporation	6,692	5,950	4,561	94.6	83.2	64.4
Fabricated structural steel contracted for (tonnage)	135,843	129,160	59,300			
Silver production of United States (troy ozs., 000 omitted)	5,562	4,341	4,017			
Copper production (lbs., omitted)	101,188	90,999	21,414	123.5	119.8	26.1
Zinc (lbs., 000 omitted):						
Production	62,846	63,834	29,242			
Stocks at close of month	43,258	57,236	173,098			
Tin (lbs., 000 omitted):						
Imports	8,219	12,683	5,201	93.8	178.9	59.4
Deliveries to factories	9,462	10,282	7,437	111.1	191.6	87.3
Stocks at close of month	2,806	3,616	1,761			
TEXTILES.						
Cotton (bales, 000 omitted):						
Sight receipts	541	393	617	129.6	76.5	147.8
Port receipts	198	201	407	73.7		151.7
Overland movement	39	76	95	68.8		167.8
American spinners' takings	404	322	369	131.2		120.0
Stocks at ports and interior centers	695	762	2,168	42.1		131.6
Stocks at mills	1,025	1,215	1,006	94.1	96.5	92.1
Stocks at warehouses	1,550	1,488	3,464	61.0	55.9	143.7
Visible supply	1,597	2,840	3,724	51.6	81.8	120.3
Consumption by mills	527	459	468	109.2	95.2	96.8
Spindles active during month (number, 000 omitted)	32,499	31,975	32,931	95.9	94.8	97.2
Wool:						
Percentage of idle machinery on 1st of month to total reported— ³						
Looms wider than 50-inch reed space	35.3	35.9	22.0	113.1	116.9	70.5
Looms 50-inch reed space or less	32.5	28.5	28.4	113.2	105.2	99.0
Sets of cards	15.7	14.8	22.8	66.8	61.7	97.0
Combs	24.0	26.9	16.7	121.2	153.7	84.2
Spinning spindles, woolen	17.1	16.3	22.4	68.4	64.2	89.6
Spinning spindles, worsted	25.2	32.0	9.5	125.4	155.3	47.3
Percentage of idle hours on 1st of month to total reported—						
Looms wider than 50-inch reed space	36.4	37.2	23.3			
Looms 50-inch reed space or less	41.7	37.5	31.0			
Set of cards	11.2	11.8	21.1			
Combs	14.5	19.6	8.8			
Spinning spindles, woolen	13.8	14.0	21.2			
Spinning spindles, worsted	28.6	33.9	11.5			

² Figures for September, 1922, August, 1922, September, 1921.³ Figures for Sept. 1, 1922, Aug. 1, 1922, Sept. 1, 1921.

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
TEXTILES—continued.						
Raw silk:						
Imports (lbs., 000 omitted).....	5,547	3,593	5,115	143.4	85.2	132.2
Consumption (bales).....	34,772	24,996	32,790			
Stocks at close of month (bales).....	32,515	27,474	18,899			
HIDES AND LEATHER.						
Sales of raw hides and skins during month (number, 000 omitted):						
Cattle hides.....	1,211	841	792			
Calfskins.....	1,144	1,157	1,011			
Kip skins.....	215	207	218			
Goat and kid.....	1,114	1,535	1,440			
Cabretta.....	22	21	29			
Sheep and lamb.....	2,546	2,892	1,465			
Stocks of raw hides and skins at close of month (number, 000 omitted):						
Cattle hides.....	5,343	5,366	6,494			
Calfskins.....	3,583	3,625	3,459			
Kip skins.....	949	917	896			
Goat and kid.....	9,197	9,068	10,949			
Cabretta.....	663	877	1,029			
Sheep and lamb.....	11,294	9,662	13,904			
Production of leather:						
Sole leather (sides).....	1,308,417	1,352,789	1,607,302			
Skivers (dozens).....	35,008	25,238	21,430			
Oak and union harness (sides stuffed).....	128,763	105,196	50,857			
Boots and shoes, output (pairs, 000 omitted):						
Men's.....	7,949	6,318				
Women's.....	9,062	7,653				
Others.....	11,066	8,988				
Total.....	28,077	22,959				
MISCELLANEOUS MANUFACTURES.						
Wood pulp (short tons):						
Production.....	282,570	279,308	195,176	111.2	111.5	76.8
Consumption.....	258,871	238,173	186,362	116.3	112.6	83.7
Shipments.....	52,962	47,987	39,544	86.7	79.8	64.7
Stocks, end of month.....	209,957	239,220	220,043	111.6	109.3	117.0
Paper (short tons):						
Newsprint—						
Production.....	133,236	120,839	102,277	116.0	107.2	89.1
Shipments.....	134,490	123,050	100,668	117.7	106.7	88.1
Stocks, end of month.....	19,902	21,156	27,128	77.1	83.8	105.1
Book paper production.....	87,922	74,435	59,711	111.4	101.7	75.6
Paper-board production.....	195,115	165,551	138,530	107.6	99.2	76.4
Wrapping paper production.....	74,315	65,481	50,107	113.6	107.7	85.9
Fine paper production.....	33,081	27,767	18,833	116.7	103.6	66.4
Building materials (000 omitted):						
Clay fire brick—						
Production.....	51,828	47,266	26,189	110.7	105.7	55.9
Shipments.....	49,075	45,851	26,485	104.2	102.4	56.2
Stocks, close of month.....	162,876	158,236	142,308	116.7	113.1	101.9
New orders.....	52,300	55,681	24,190	107.4	154.7	49.7
Unfilled orders.....	74,399	67,557	27,334	69.1	63.7	25.4

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
MISCELLANEOUS MANUFACTURES—contd.						
Building materials (000 omitted)—Contd.						
Silica brick—						
Production.....	9,666	11,332	4,123			
Shipments.....	11,687	12,533	4,014			
Stocks, close of month.....	35,743	37,572	44,617			
Face brick—						
Production.....	46,849	52,408	53,410	79.5	106.9	90.7
Shipments.....	46,710	50,579	41,609			
Stocks in sheds and kilns.....	91,339	109,545	142,178	69.9	100.1	108.9
Unfilled orders, close of month.....	75,825	90,678	47,050	75.1	98.6	46.6
Cement (bbls.)—						
Production.....	11,664	11,557	10,244			
Shipments.....	14,361	13,850	12,340			
Stocks, close of month.....	5,737	8,433	8,280			
Rubber (lbs., 000 omitted):						
Imports of crude rubber.....	54,332	56,855	33,104	167.0	135.7	101.7
Consumption by tire manufacturers.....	33,739	28,181	30,634			
Pneumatic tires (000 omitted):						
Production.....	2,905	2,477	3,043			
Shipments, domestic.....	3,030	2,695	2,894			
Stocks.....	4,629	4,834	3,935			
Inner tubes (000 omitted):						
Production.....	3,808	3,068	4,430			
Shipments, domestic.....	4,220	3,631	3,804			
Stocks.....	5,207	5,676	3,649			
Solid tires (000 omitted):						
Production.....	84	72	56			
Shipments, domestic.....	69	60	67			
Stocks.....	190	176	216			
Automobiles:						
Production (number)—						
Passenger cars.....	246,502	223,057				
Trucks.....	23,782	20,973				
Shipments—						
Railroads (car loads).....	32,814	29,116	20,758			
Driveways (machines).....	36,754	28,100	15,218			
Boat (machines).....	10,096	7,030	3,595			
Locomotives (number):						
Domestic, shipped.....	130	122	43	122.6	135.1	40.6
Foreign, completed.....	21	6	51	12.7	9.0	44.0
Vessels built in the United States and officially numbered by the Bureau of Navigation:						
Number.....	95	108	75	57.9	61.7	45.7
Gross tonnage.....	11,511	19,356	90,205	4.3	8.2	33.6
TRANSPORTATION.						
Railroad operating statistics: ¹						
Net ton-miles, revenue and non-revenue (000,000 omitted).....	27,073	29,049	28,401	78.1	88.4	81.9
Net tons per train.....	645	655	660	88.4	91.6	90.4
Net tons per loaded car.....	25.0	25.4	27.5	88.0	90.4	96.8

¹ Figures for July, 1922, June, 1922, July, 1921.

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
TRANSPORTATION—con.						
Revenue-freight loaded and received from connections,classified according to nature of production (short tons):						
Grain and grain products.....	252,795	217,649	259,904	116.2	110.3	119.5
Live stock.....	133,492	115,797	116,955	110.0	100.3	96.4
Coal.....	443,244	327,763	667,956	56.3	42.1	84.8
Coke.....	37,639	41,558	19,499	88.5	146.7	45.9
Forest products.....	260,232	239,119	196,275	104.3	103.6	78.7
Ore.....	298,190	275,285	139,374	133.3	104.7	62.3
Merchandise, l. c. l.	1,037,350	1,004,797	949,432	116.5	148.7	118.0
Miscellaneous.....	1,467,169	1,366,156	1,173,696	103.7	93.7	83.0
Total.....	3,930,161	3,588,124	3,523,091	101.7	95.7	91.1
*Revenue freight loaded, classified according to geographical divisions:						
Eastern.....	921,633	826,084	856,993	96.8	90.1	90.0
Allegheny.....	811,662	713,608	694,944	99.8	93.0	85.4
Pocahontas.....	133,388	134,719	119,364	96.0	90.1	85.9
Southern.....	510,707	503,153	473,993	98.1	97.6	91.0
Northwestern.....	697,519	648,291	548,344	114.4	104.3	89.9
Central western.....	585,954	502,794	554,105	104.7	96.6	99.0
Southwestern.....	269,248	259,475	275,348	99.3	97.7	101.5
Total.....	3,930,161	3,588,124	3,523,091	101.7	95.7	91.1
Freight car surplus (number):						
Total.....	70,455	174,927	246,740	59.4	101.6	208.1
Box.....	3,850	21,367	69,238	9.5	.....	171.0
Coal.....	54,566	131,267	130,596	101.8	191.2	243.7
Freight car shortage (number):						
Total.....	58,670	24,973	739	105.1	55.8	1.3
Box.....	35,819	16,550	641	117.9	75.1	2.1
Coal.....	13,835	6,633	67	83.8	43.6	.4

¹ Figures for July, 1922, June, 1922, July, 1921.² Figures for September, 1922, August, 1922, September, 1921.

COMMODITY MOVEMENTS—Continued.

	Aug., 1922.	July, 1922.	Aug., 1921.	Per cent of average, corresponding month 1919-1921.		
				Aug., 1922.	July, 1922.	Aug., 1921.
TRANSPORTATION—con.						
Bad-order cars, total.	321,624	345,013	376,417	127.1	139.7	148.7
Vessels cleared in foreign trade (net tons):						
American.....	2,903,423	3,052,711	2,581,600	95.1	112.0	84.6
Foreign.....	3,274,088	3,285,941	3,222,908	98.7	99.6	97.2
Total.....	6,177,511	6,338,652	5,804,508	97.0	107.9	91.1
Percentage of American to total.....	47.0	48.4	44.5	104.3	107.4	92.8
Panama Canal traffic (tons, 000 omitted): ¹						
Total cargo traffic..	1,211	978	709	167.7	138.9	98.2
American vessels.....	582	367	316	.....	.....	.....
British vessels.....	480	268	240	.....	.....	.....
Commerce of canals at Sault Ste. Marie (000 omitted): ²						
Eastbound—						
Grain other than wheat (bushels)....	15,728	13,738	14,382	231.3	230.3	211.5
Wheat (bu.)....	37,520	9,217	28,120	225.5	144.5	169.0
Flour (bbls.)....	1,560	1,203	1,516	153.2	112.6	148.9
Iron ore (short tons).....	6,658	8,936	3,610	98.3	149.8	53.3
Total (short tons).....	8,451	9,890	5,018	111.0	151.0	65.9
West bound—						
Hard coal (short tons).....	11	.....	281	4.7	.....	122.4
Soft coal (short tons).....	2,354	185	994	168.5	10.2	71.1
Total (short tons).....	2,535	477	1,464	135.8	20.3	78.4
Total freight (short tons)...	10,986	10,286	6,482	115.9	116.3	68.4

BUILDING STATISTICS.

BUILDING PERMITS IN 166 SELECTED CITIES.

[Collected by the 12 Federal Reserve Banks.]

NUMBER OF PERMITS ISSUED.

	District No. 1 (14 cities).	District No. 2 (22 cities).	District No. 3 (14 cities).	District No. 4 (12 cities).	District No. 5 (15 cities).	District No. 6 (14 cities).	District No. 7 (19 cities).	District No. 8 (4 cities).	District No. 9 (9 cities).	District No. 10 (14 cities).	District No. 11 (9 cities).	District No. 12 (20 cities).	Total (166 cities).
1921, August.....	2,596	8,188	2,749	4,222	3,756	3,437	9,013	1,971	2,390	2,653	2,814	10,187	53,976
1922.													
January.....	878	4,176	1,623	1,724	2,188	2,155	3,498	1,141	523	1,336	1,653	8,298	28,884
February.....	1,024	4,210	2,081	2,619	2,305	2,506	4,815	1,434	517	1,758	2,114	7,600	33,043
March.....	2,367	13,284	3,557	4,986	4,101	3,211	8,806	2,218	1,493	2,711	2,623	11,196	60,453
April.....	3,011	9,056	4,386	6,149	4,397	3,215	11,546	2,650	3,342	3,103	2,586	10,966	64,407
May.....	2,018	10,136	3,991	6,666	5,321	3,443	13,799	2,955	3,391	3,554	2,794	11,266	69,334
June.....	2,945	9,572	3,621	5,839	4,509	3,085	11,898	2,507	2,122	2,888	2,545	10,156	61,990
July.....	2,597	7,761	3,029	4,680	3,756	2,978	10,385	2,291	2,125	2,467	2,238	9,415	53,722
August.....	2,873	7,828	3,044	5,093	4,018	3,130	11,112	2,354	2,244	2,778	2,534	11,596	58,604

VALUE OF PERMITS ISSUED.

	District No. 1 (14 cities).	District No. 2 (22 cities).	District No. 3 (14 cities).	District No. 4 (12 cities).	District No. 5 (15 cities).	District No. 6 (14 cities).	District No. 7 (19 cities).
1921, August.....	\$6,924,076	\$55,534,223	\$6,879,857	\$10,857,711	\$8,190,936	\$5,304,592	\$26,451,466
1922.							
January.....	7,380,701	50,145,296	6,878,523	5,713,209	8,352,615	3,734,262	18,905,561
February.....	9,280,827	50,372,553	8,275,338	7,829,585	7,513,542	4,630,052	20,419,417
March.....	10,995,500	119,964,783	14,116,292	13,814,868	11,329,049	6,021,211	33,747,135
April.....	13,812,829	54,704,292	17,020,500	15,693,183	11,971,471	4,951,558	35,089,303
May.....	9,109,108	57,843,585	13,844,813	22,614,084	13,348,592	7,262,167	53,806,499
June.....	10,657,535	73,352,564	18,177,759	22,428,251	15,736,766	6,498,677	49,934,583
July.....	9,174,687	47,144,023	15,898,696	26,558,680	15,514,625	7,516,036	38,151,182
August.....	16,633,819	49,210,637	15,352,655	22,036,882	11,605,153	7,985,212	40,452,973

	District No. 8 (4 cities).	District No. 9 (9 cities).	District No. 10 (14 cities).	District No. 11 (9 cities).	District No. 12 (20 cities).	Total (166 cities).
1921, August.....	\$3,325,791	\$5,423,460	\$7,529,619	\$6,401,268	\$17,226,365	\$159,549,364
1922.						
January.....	2,579,894	2,110,424	5,023,603	4,960,078	22,872,876	138,631,902
February.....	4,180,487	1,569,774	4,336,011	4,419,789	18,917,888	141,715,243
March.....	5,012,607	4,526,209	7,165,925	5,629,336	27,432,286	259,754,421
April.....	6,076,684	8,196,110	8,384,552	6,228,385	30,195,052	212,323,919
May.....	7,443,855	9,913,853	10,807,084	4,752,642	28,271,238	239,017,520
June.....	5,855,459	6,020,186	8,894,131	5,276,819	29,598,278	252,431,008
July.....	5,698,792	7,663,443	8,040,606	5,861,650	22,391,016	209,613,436
August.....	5,815,805	8,284,659	9,793,352	5,010,294	29,424,332	221,605,682

VALUE OF BUILDING CONTRACTS AWARDED, BY FEDERAL RESERVE DISTRICTS.

[F. W. Dodge Co.]

VALUE OF CONTRACTS FOR ALL CLASSES OF BUILDINGS.

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	District No. 5.	District No. 7.	District No. 9. ¹	Total (7 districts).
1921, September.....	\$15,282,766	\$90,730,134	\$16,197,500	\$36,041,601	\$19,597,191	\$41,461,283	\$8,162,640	\$227,473,115
1922.								
January.....	15,302,453	54,962,847	12,128,900	21,066,282	14,002,399	29,182,324	3,613,148	150,258,353
February.....	14,799,476	60,152,424	11,828,700	20,602,823	16,518,079	32,344,424	5,192,824	161,438,750
March.....	26,212,330	90,088,870	24,558,100	29,661,058	24,116,011	58,081,526	11,933,270	264,651,165
April.....	42,196,915	117,814,535	24,795,800	38,089,754	25,618,120	64,236,563	9,878,501	322,630,241
May.....	31,689,783	91,441,141	25,739,294	58,432,714	32,268,767	71,117,055	12,455,410	323,044,164
June.....	36,259,420	81,614,205	26,630,900	30,668,191	46,801,800	77,500,940	12,153,061	311,688,517
July.....	24,910,926	79,819,084	28,768,377	25,362,187	52,224,001	83,159,795	9,304,325	303,548,695
August.....	26,780,103	80,810,922	43,818,911	20,983,619	59,811,596	56,954,434	8,249,905	388,409,490
September.....	29,245,087	64,298,556	21,947,916	22,997,450	34,634,723	62,219,681	5,868,200	214,261,613

VALUE OF CONTRACTS FOR RESIDENTIAL BUILDINGS.

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	District No. 5.	District No. 7.	District No. 9. ¹	Total
1921, September.....	\$6,547,754	\$48,789,646	\$5,526,400	\$8,987,610	\$6,171,436	\$11,655,497	\$2,476,134	\$90,151,477
1922.								
January.....	4,767,597	35,652,203	6,280,200	6,279,459	6,597,861	10,601,761	1,049,594	71,228,675
February.....	4,179,944	38,637,156	5,647,700	5,545,073	7,299,608	9,388,615	962,757	71,680,853
March.....	11,597,086	51,116,514	9,552,500	10,641,177	9,796,405	17,225,204	2,348,511	112,577,397
April.....	13,524,827	53,677,473	10,408,700	16,127,627	10,297,280	17,661,586	4,175,963	125,873,466
May.....	14,018,303	39,943,547	11,168,898	19,121,798	13,009,760	24,574,835	4,240,047	126,077,158
June.....	12,518,840	40,483,063	11,275,517	16,030,790	17,434,095	28,206,838	2,677,184	128,632,327
July.....	12,644,574	33,384,787	7,826,581	8,074,163	15,400,301	20,633,345	2,415,438	100,365,189
August.....	11,945,451	29,091,738	8,828,667	6,320,030	13,409,258	18,833,050	2,535,590	90,963,784
September.....	11,509,627	34,535,710	8,142,367	8,595,717	12,736,605	15,011,634	2,453,723	92,986,413

¹ Montana not included.

RETAIL TRADE.

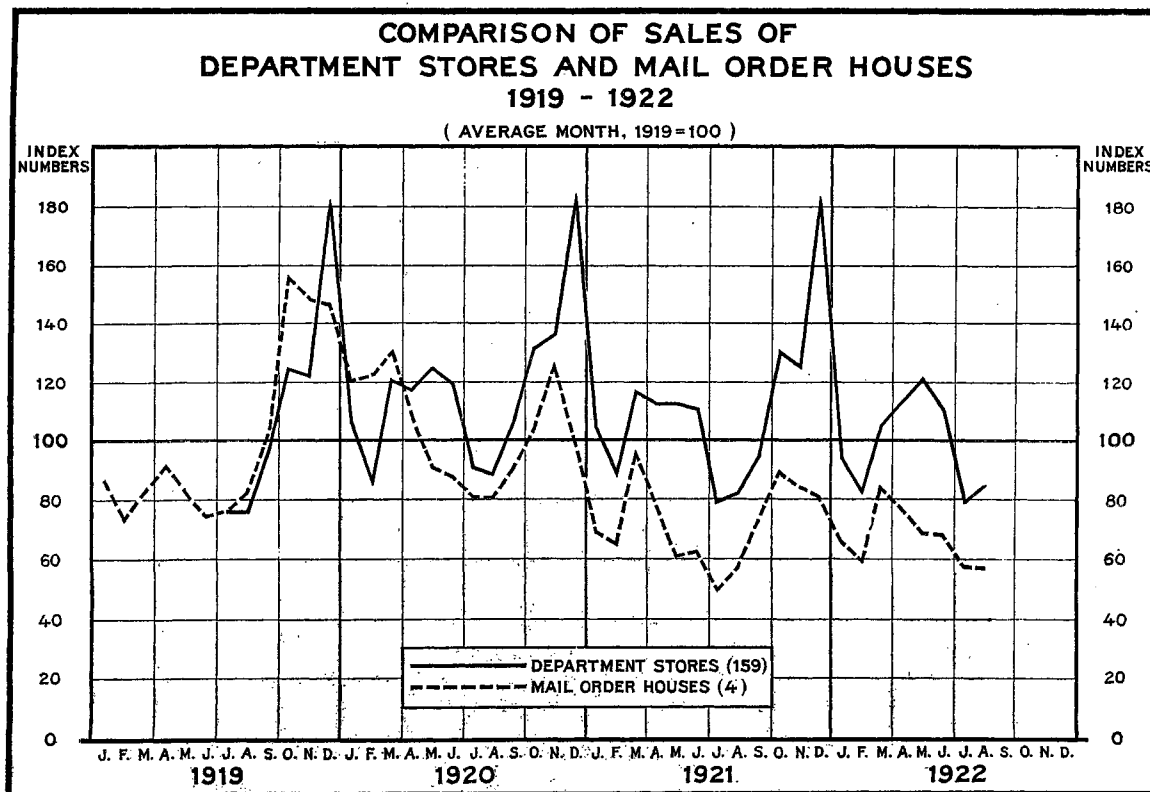
The following tables are a summary of the data obtained from 469 representative department stores in the 12 Federal reserve districts. In districts Nos. 1, 2, 5, 6, 7, 9, 11, and 12 the data were received in (and averages computed from) actual dollar amounts. In districts Nos. 3, 4, 8, and 10 most of the material was received in the form of percentages, and the averages for the cities and districts computed from such percentages were weighted according to volume of business done during the calendar year 1921. The tables for the month of August are based on reports from 25 stores in district No. 1 (Boston), 64 stores in district No. 2 (New York), 127 stores in district No. 3 (Philadelphia), 28 stores in district No. 4 (Cleveland), 25 stores in district No. 5 (Richmond), 36 stores in district No. 6 (Atlanta), 58 stores in district No. 7 (Chicago), 16 stores in district No. 8 (St. Louis), 22 stores in district No. 9 (Minneapolis), 16 stores in district No. 10 (Kansas City), 22 stores in district No. 11 (Dallas), and 31 stores in district No. 12 (San Francisco). Figures for Scranton and Wilkes-Barre, in district No. 3 (Philadelphia), and Chattanooga, in district No. 6 (Atlanta), are shown separately for the first time this month.

A comparison of monthly changes in activity of different types of retail business since January, 1921, is shown in the second of the fol-

lowing tables. The 158 department stores are located in districts Nos. 1, 2, 5, 6, 9, 11, and 12, while the mail-order houses do business in all parts of the United States. Chain-store figures are based upon the total sales of the same reporting chains for each month, but the actual number of stores in these chains varies slightly.

Mail-order business for the month of August is the lowest it has been since August, 1921. Cigar and shoe chain sales have decreased in comparison with last month and cigar sales were less than in August a year ago. All other types of reporting chains have increased their sales.

A comparison of the course of mail-order and department-store sales is shown in the chart below. The mail-order business is dependent for the most part upon farmers, while the department stores are situated in the cities and towns. The excellent condition of mail-order houses in 1919 was due probably to higher crop prices that year. In the years 1920 and 1921 sales of department stores and mail-order houses were generally moving in the same direction from month to month. Mail-order sales for the period showed a distinct downward trend, but there was little change in the total value of department-store trade. It is worthy of note that the peak of the mail-order business generally comes in October or November, while the largest sales of department stores occur in December.



CONDITION OF RETAIL TRADE IN THE FEDERAL RESERVE DISTRICTS.

[Minus sign (—) denotes decrease.]

District and city.	Percentage of increase in net sales as compared with corresponding period previous year.				Percentage of increase in stocks at close of month compared with—				Percentage of average stocks at close of each month to average monthly sales for same period.		Percentage of outstanding orders at close of month to total purchases during previous calendar year.	
	July, 1922.	August, 1922.	July 1, 1922, to close of—		July, 1922.	August, 1922.	Same month previous year.		July, 1922.	August, 1922.	July, 1922.	August, 1922.
			July, 1922.	August, 1922.			July, 1922.	August, 1922.				
District No. 1:												
Boston.....	7.9	5.9	7.9	6.8	5.5	4.7	-2.9	1.7	392.3	392.0	7.7	.....
Outside.....	-5	4.2	-5	.5	-6	-3	-2.2	1.2	431.4	450.0	5.5	.....
District.....	5.3	5.5	5.3	5.1	3.2	3.2	-2.7	1.6	404.2	407.0	7.4	.....
District No. 2:												
New York and Brooklyn.....	2.3	7.6	2.3	4.9	.7	.4	-4.9	3.6	453.1	453.5	6.0	6.6
Buffalo.....	-4.0	2.1	-4.0	-8	1.3	-2.8	2.7	.6	497.0	462.2	7.6	7.5
Newark.....	-4.3	-1.3	-4.3	-2.8	-8	-7.0	3.8	.3	468.2	453.0	6.9	7.3
Rochester.....	.1	6.9	.1	3.5	-7.4	-18.0	-8.1	-8	401.1	386.0	3.6	6.2
Syracuse.....	-4.7	-7.5	-4.7	-6.0	-17.4	-17.4	-10.0	4.8	407.0	438.0	6.0	5.8
Bridgeport.....	5.2	-4.4	5.2	1.3	-1.4	-1.6	-15.9	1.8	306.1	380.3	6.9	7.0
Outside.....	1.6	7.6	1.6	4.4	-11.2	-3.6	-12.2	8.8	537.2	573.9	9.0	9.3
District.....	-1	5.3	-1	2.6	-8	-1.4	-5.9	4.4	435.5	444.6	7.1	7.3
District No. 3:												
Philadelphia.....	-3.3	2.8	-3.3	.4	-5.3	-4.1	-2.6	3.2	448.0	402.8	8.9	8.5
Allentown.....	.3	4.5	.3	-1.1	.....	.....	.....	.....	.....	.....	.....	.....
Harrisburg.....	1.9	6.6	1.9	3.2	4.7	6.1	-6.8	10.4	498.9	522.0	.....	7.4
Johnstown.....	-25.0	-3.9	-25.0	-14.0	-6.7	-5.1	3.7	6.3	481.8	477.1	.....	.....
Reading.....	6.1	5.6	6.1	5.2	3.0	4.7	-7.6	3.1	654.0	651.6	10.2	10.6
Scranton.....	.....	-12.8	.....	-21.8	.....	15.1	.....	11.6	512.0	512.0	.....	33.0
Trenton.....	4.1	7.3	4.1	5.5	.5	-5	-1.5	3.8	483.8	406.1	.....	.....
Wilkes-Barre.....	.....	-11.0	.....	-14.1	.....	-4.2	.....	6.0	505.3	505.3	.....	.....
Wilmington.....	4.9	5.2	4.9	-1.1	-19.8	-12.6	-3.5	2.2	780.3	807.6	5.9	7.9
Outside.....	-7.8	1.7	-7.8	-2.0	1.7	1.7	-4.0	4.4	587.9	609.0	8.4	9.5
District.....	-3.7	1.5	-3.7	-1.5	-3.6	-1.9	-8.0	4.2	494.8	476.2	8.7	9.0
District No. 4:												
Cleveland.....	7.9	16.6	7.9	10.0	4.2	3.4	-8.7	5.7	431.0	382.7	10.3	10.3
Pittsburgh.....	.8	9.1	.8	4.8	-9.1	-11.0	-5.8	6.8	429.6	415.7	9.3	8.5
Cincinnati.....	-5.3	2.8	-5.3	-1.7	-5.8	-14.9	-5.1	3.4	624.7	535.0	11.0	10.8
Toledo.....	9.5	5.6	9.5	7.2	-2.7	-2.8	-7.7	3.2	427.1	432.1	6.0	6.9
Outside.....	8.5	19.4	8.5	14.8	-1.7	3.2	-8.2	7.3	436.4	488.5	14.5	14.2
District.....	3.2	10.8	3.2	6.3	-3.9	-5.7	-6.7	5.6	458.4	424.4	9.7	9.4
District No. 5:												
Baltimore.....	-4.7	1.1	-4.7	-1.8	.8	-7.8	-3.6	2.5	510.2	493.9	14.4	7.5
Richmond.....	-1.0	26.4	-1.0	12.2	-2.0	-4.5	-1.1	5.2	428.3	449.4	12.2	12.5
Washington.....	-7.0	-4.8	-7.0	-5.9	4.8	5.2	-4.8	10.1	485.9	509.2	9.3	7.4
Outside.....	-13.4	-4.7	-13.4	-9.3	-3.4	-4.3	-3.6	1.1	593.2	575.5	7.0	7.0
District.....	-6.3	.8	-6.3	-2.8	1.1	-2.9	-3.8	4.9	506.6	503.3	10.8	7.8
District No. 6:												
Atlanta.....	-2.6	11.1	-2.6	5.5	11.4	10.7	-1.2	5.6	636.0	632.4	4.2	9.6
Birmingham.....	3.7	21.3	3.7	14.6	-2.9	.8	-2.9	6.1	652.6	500.9	7.0	7.0
Chattanooga.....	.....	-15.3	.....	-4.9	.....	-14.1	.....	-17.1	.....	966.0	.....	.....
Nashville.....	-2.4	2.1	-2.4	.0	-2.5	-5.8	-2.9	5.7	680.2	599.3	9.8	9.0
New Orleans.....	-8.2	-8.2	-8.2	-8.5	-3.3	-2	2.7	5.2	568.3	573.3	10.5	11.0
Savannah.....	.....	-12.7	.....	-20.1	.....	-17.3	.....	2.6	708.2	708.2	.....	8.7
Outside.....	-11.3	-4.0	-11.3	-6.6	-13.2	-17.8	-6.6	6.9	675.5	656.6	7.1	9.7
District.....	-6.7	-1.6	-6.7	-3.7	-3.8	-3.9	-1.4	6.0	621.4	593.4	8.3	9.5
District No. 7:												
Chicago.....	2.4	5.3	2.4	.2	3.5	-9.5	-10.7	4.2	293.1	390.1	.....	6.7
Detroit.....	12.4	18.1	12.4	15.4	-1.2	1.1	2.1	13.4	395.8	394.3	13.6	11.1
Milwaukee.....	-9.0	.....	-9.0	.....	-7.2	.....	-1.1	.....	674.2	.....	.....	.....
Indianapolis.....	3.6	.....	3.6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Des Moines.....	-6.8	.....	-6.8	.....	.7	.....	-4.7	.....	356.8	.....	9.7	.....
Outside.....	-5.2	-3.4	-5.2	-3.5	-6.7	-4.1	-2.6	9.2	598.0	575.7	8.4	7.4
District.....	2.3	7.6	2.3	5.7	-3.0	-2.4	-1.7	10.6	465.6	473.4	10.1	9.3
District No. 8:												
St. Louis.....	-2.4	-5	-2.4	-1.4	-5.3	-4.4	.8	10.0	385.3	457.0	9.9	8.6
Louisville.....	11.9	-5.5	11.9	-6	-18.6	-18.9	-7.5	14.7	290.4	418.9	3.2	8.5
Memphis.....	1.9	11.8	1.9	6.2	-10.6	-11.9	.3	1.8	504.1	644.9	6.5	11.1
Little Rock.....	-7.0	-8.2	-7.0	-12.8	4.9	-8	-6.1	7.7	474.1	770.1	4.2	11.0
Outside.....	-13.2	9.0	-13.2	-11.5	-8.5	-2.7	-2.7	6.0	591.1	557.2	.8	11.3
District.....	-5	.9	-5	-8	-7.0	-7.0	-1.0	8.8	407.8	525.9	7.8	9.0
District No. 9:												
District No. 10:												
Kansas.....	-12.3	-13.4	-12.3	-12.9	-6.6	-6.2	9.2	12.3	550.9	594.8	9.3	7.3
Denver.....	-1	-5.7	-1	-4.9	2.2	-1	-1.3	6.2	575.5	599.2	13.3	12.2
Outside.....	-4.2	-9.1	-4.2	-7.9	6.9	-3.3	-5.2	19.2	577.3	615.9	10.9	10.5
District.....	-6.5	-9.5	-6.5	-8.7	.6	-3.3	1.3	12.7	564.5	601.8	10.7	9.9
District No. 11:												
Dallas.....	-6.8	2.5	-6.8	-6.6	-9.5	-10.7	-4.6	9.8	574.1	573.4	10.9	14.0
Fort Worth.....	-10.4	-5.1	-10.4	-7.8	-9.3	-10.4	-4.7	10.0	536.7	589.1	11.2	10.8
Houston.....	-3.3	.9	-3.3	-1.2	-2.2	-4.9	2.3	12.5	611.9	638.3	10.6	10.0
Outside.....	-14.0	-13.8	-14.0	-13.9	-8.4	-15.7	.0	13.9	521.7	547.2	10.2	8.9
District.....	-9.1	-4.2	-9.1	-8.2	-7.8	-11.0	-2.1	11.5	559.7	579.8	10.7	11.9
District No. 12:												
Los Angeles.....	6.6	7.2	6.6	6.7	-7.3	-20.4	5.2	-3.3	469.3	389.6	9.8	8.9
San Francisco.....	2.4	4.3	2.4	3.5	1.8	-1.2	-1.4	5.4	519.5	457.5	12.7	13.3
Oakland.....	-6.1	.4	-6.1	1.4	-8	-8	-1.8	6.6	617.7	577.4	.....	.....
Seattle.....	10.0	13.0	10.0	11.5	.3	-1	-1.8	13.1	384.2	397.8	11.4	10.4
Spokane.....	-5.5	-5.6	-5.5	-5.8	1.2	.3	.5	5.3	738.5	691.8	11.4	8.5
Salt Lake City.....	-5.6	.2	-5.6	2.8	8.7	-3.4	-5.3	6.8	533.1	306.7	7.3	.....
District.....	3.1	5.7	3.1	4.8	-1.4	-7.6	-5	4.1	497.5	451.4	10.7	10.6
United States.....	-1.1	3.2	-1.1	1.1	-1.6	-3.4	-2.8	6.5	481.6	486.2	9.0	9.0

AVERAGE MONTHLY VALUE OF RETAIL TRADE.

[Average month, 1919=100.]

	Department stores (158 stores).	Mail-order houses (4 houses).	Chain stores.					
			Grocery (16 chains).	Five and ten (4 chains).	Drug (7 chains).	Cigar (3 chains).	Shoe (5 chains).	Music (4 chains).
1921.								
January	103.7	69.1	124.6	86.1	117.3	119.9	85.8	79.0
February.....	88.4	64.8	118.4	92.9	110.7	116.5	82.5	78.3
March.....	117.0	95.1	128.7	121.1	123.6	131.8	141.0	81.9
April.....	112.6	77.5	121.7	111.9	121.8	134.7	139.7	75.1
May.....	112.5	60.2	118.8	112.2	119.2	129.5	136.5	65.1
June.....	110.9	62.1	116.0	109.7	120.6	127.8	127.6	59.9
July.....	79.2	49.3	115.1	108.0	122.1	128.5	100.9	55.6
August.....	82.0	56.4	121.4	116.0	119.8	127.6	86.6	71.6
September.....	94.5	72.7	118.3	113.4	119.4	128.0	103.1	82.3
October.....	130.4	88.6	135.2	141.9	124.2	138.0	135.4	99.2
November.....	123.3	83.3	133.5	134.1	115.2	124.8	119.1	107.0
December.....	182.4	80.3	144.5	241.6	146.1	172.7	149.6	172.6
1922.								
January	93.9	65.3	135.8	94.6	117.0	111.0	80.0	71.7
February.....	81.8	59.4	127.6	100.8	114.5	109.3	80.7	75.0
March.....	105.1	83.5	145.4	118.4	123.2	124.3	102.0	80.6
April.....	113.6	77.1	137.4	134.9	120.3	124.5	156.3	78.9
May.....	116.9	69.9	136.5	129.6	122.9	128.8	127.1	80.9
June.....	110.4	68.8	133.2	124.9	123.5	105.8	121.9	81.3
July.....	79.2	58.4	129.5	126.3	125.7	127.3	101.3	83.0
August.....	84.7	57.2	137.4	130.4	127.9	126.9	86.8	99.1

1 Partly estimated.

CONDITION OF WHOLESALE TRADE.

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN AUGUST, 1922, AS COMPARED WITH AUGUST, 1921.

District.	Groceries.		Dry goods.		Hardware.		Boots and shoes.		Furniture.		Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.....	-7.1	42	0.3	8	22.8	11	-18.4	10	.....	.....	2.9	6	.....	.....	3.6	6	.....	.....	.....	.....
No. 3.....	-9.4	65	-12.6	19	13.2	32	-3.8	11	.....	.....	3.4	16	.....	.....	.....	.....	.....	.....	.....	.....
No. 4.....	-5.1	26	5.2	13	26.7	11	.....	.....	.....	.....	14.7	12	.....	.....	.....	.....	.....	.....	.....	.....
No. 5.....	5.5	43	3.4	16	6.4	17	-6.4	19	45.6	9	.....	14	.....	.....	.....	.....	.....	.....	.....	.....
No. 6.....	4.7	34	8.9	24	15.6	21	63.3	12	23.4	19	13.7	4	.....	.....	27.3	5	56.2	6	.....	.....
No. 7.....	-4.5	37	2.1	10	18.6	16	-12.6	12	.....	.....	5.8	11	53.5	8	.....	.....	.....	.....	.....	.....
No. 9.....	-2.6	41	-1.9	4	18.2	11	20.1	6	.....	.....	.....	.....	.....	.....	.....	.....	44.3	6	.....	.....
No. 10.....	-3.9	9	-4.4	4	13.6	11	.....	.....	19.1	6	-1	6	-24.7	4	.....	.....	37.0	4	.....	.....
No. 11.....	3.0	10	19.4	11	5.5	10	.....	.....	63.7	2	1.4	7	.....	.....	.....	.....	35.5	5	.....	.....
No. 12.....	7.1	31	24.1	16	20.4	21	5.8	13	16.3	16	-3	9	5.9	18	10.7	27	-18.4	24	-9.4	21

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN AUGUST, 1922, AS COMPARED WITH THE PRECEDING MONTH (JULY, 1922).

District.	Groceries.		Dry goods.		Hardware.		Boots and shoes.		Furniture.		Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.....	4.9	42	49.5	8	7.5	11	51.2	10	.....	.....	2.3	6	.....	.....	6.5	6	.....	.....	.....	.....
No. 3.....	8.1	65	41.5	19	10.8	32	72.8	11	.....	.....	5.1	16	.....	.....	.....	.....	.....	.....	.....	.....
No. 4.....	7.7	26	37.4	13	10.8	11	.....	.....	.....	.....	14.4	12	.....	.....	.....	.....	.....	.....	.....	.....
No. 5.....	6.8	43	44.9	16	9.6	17	45.9	19	28.8	9	4.7	14	.....	.....	.....	.....	.....	.....	.....	.....
No. 6.....	15.9	34	36.1	24	31.2	21	9.1	12	37.8	19	12.9	4	.....	.....	26.5	5	-9.4	6	.....	.....
No. 7.....	13.5	38	29.7	10	8.8	17	41.1	12	.....	.....	5.0	11	14.0	9	.....	.....	.....	.....	.....	.....
No. 9.....	12.7	41	54.7	4	13.9	11	52.6	6	.....	.....	.....	.....	.....	.....	.....	.....	30.6	6	.....	.....
No. 10.....	7.6	9	59.1	4	3.8	11	.....	.....	54.3	6	5.6	6	13.4	4	.....	.....	-51.6	4	.....	.....
No. 11.....	9.0	10	48.0	11	16.7	10	.....	.....	47.9	2	16.4	7	.....	.....	.....	.....	60.2	5	.....	.....
No. 12.....	-5.2	31	34.6	16	5.7	21	36.2	13	29.3	16	26.7	9	-9	18	38.7	27	-27.3	24	13.2	21

OCTOBER CROP REPORT, BY FEDERAL RESERVE DISTRICTS.

Forecasts of crop production issued by the United States Department of Agriculture as of October 1, 1922, are shown in the table below, together with estimates of production in 1921.

A slight reduction in the corn forecast brings the expected total to 2,853,000,000 bushels, or about 227,000,000 bushels less than the estimated production last year. The forecast for wheat production is 810,000,000 bushels, or about 8,000,000 less than was expected a month earlier and about 15,000,000 more than the 1921 estimate. This increase is due entirely to spring wheat production, which is expected to be 60,000,000 bushels larger than in 1921, while

the winter wheat estimate is about 45,000,000 less than a year ago. The forecast of cotton production is 10,135,000 bales, or about 440,000 bales less than the September forecast, though still nearly 2,200,000 bales more than the crop of last year. The decrease in the estimated cotton production is due chiefly to a reduction in the Dallas district, which suffered from a severe drought and from damage caused by leaf worms. The forecast of oats production declined from 1,255,000 to 1,230,000 bushels, smaller totals being forecast for the Chicago, St. Louis, and Kansas City districts, in which the bulk of oats is produced.

PRODUCTION OF CORN, WHEAT, COTTON, AND OATS, BY FEDERAL RESERVE DISTRICTS—FORECASTS OF THE DEPARTMENT OF AGRICULTURE AS OF OCTOBER 1, 1922, COMPARED WITH ESTIMATED PRODUCTION FOR 1921.

(In thousands of units of measurement.)

Federal reserve district.	Corn (bushels).		Total wheat (bushels).		Spring wheat (bushels).		Cotton (bales). ¹		Oats (bushels).	
	1922, Oct. 1 forecast.	Estimate for 1921	1922, Oct. 1 forecast.	Estimate for 1921.	1922, Oct. 1 forecast.	Estimate for 1921	1922, Oct. 1 forecast.	Estimate for 1921.	1922, Oct. 1 forecast.	Estimate for 1921.
Boston.....	13,256	14,447	474	313	474	313			9,326	8,247
New York.....	36,260	42,872	9,996	9,778	391	362			34,339	26,500
Philadelphia.....	59,416	69,416	23,203	21,126	182	182			24,929	22,216
Cleveland.....	204,684	209,377	42,495	35,254	463	468			58,708	53,402
Richmond.....	177,638	173,687	28,922	24,863			1,372	1,547	21,596	19,830
Atlanta.....	204,128	250,255	5,716	5,677			2,177	1,693	19,210	21,987
Chicago.....	966,204	967,277	72,232	62,922	5,319	4,820			482,848	385,091
St. Louis.....	391,149	416,543	72,446	66,442	306	332	1,967	1,662	38,745	59,090
Minneapolis.....	265,326	302,344	224,105	153,483	214,925	146,275			341,176	229,772
Kansas City.....	383,448	442,158	225,345	271,130	12,863	12,844	656	469	129,343	163,401
Dallas.....	140,178	180,803	8,873	21,986	224	322	3,847	2,499	39,710	36,858
San Francisco.....	11,712	11,193	96,316	121,919	33,167	41,943	² 93	² 67	29,844	34,343
Total.....	2,853,399	3,080,372	810,123	794,893	268,314	207,861	³ 10,135	³ 7,946	1,229,774	1,060,737

¹ Condition on Sept. 25.

² In addition, the following amounts were estimated grown in Lower California (Mexico): 1921, 500,000 bales; 1922, 73,000 bales.

³ Cotton grown outside of cotton belt included as follows: 1921, 9,000 bales; 1922, 23,000 bales.

DISCOUNT AND OPEN-MARKET OPERATIONS OF FEDERAL RESERVE BANKS.

Following is a set of tables showing the volume of bills discounted and of acceptances, municipal warrants, and Government securities purchased by the Federal reserve banks during August, 1922:

VOLUME OF OPERATIONS DURING AUGUST, 1922.

Federal reserve bank.	Bills discounted for member banks.	Bills bought in open market.	United States securities purchased.		Municipal warrants purchased.	Total.	
			Bonds and notes.	Certificates of indebtedness.		August, 1922.	August, 1921.
Boston.....	\$143,428,690	823,601,942	\$8,938,000	\$8,161,000	.....	\$184,129,632	\$311,774,488
New York.....	344,202,169	78,070,600	44,908,200	53,180,000	.....	520,360,969	1,688,228,398
Philadelphia.....	164,512,699	12,998,792	2,395,000	4,370,000	.....	184,276,491	316,030,965
Cleveland.....	93,708,171	8,256,191	6,791,400	4,112,500	.....	112,868,262	196,940,429
Richmond.....	45,152,817	283,750	50,000	.....	.....	45,486,567	216,409,922
Atlanta.....	19,020,140	1,087,602	746,850	628,000	.....	21,482,592	124,661,063
Chicago.....	86,919,711	29,011,288	8,769,800	24,229,000	.....	148,929,799	312,804,557
St. Louis.....	43,898,895	987,224	7,352,550	1,632,000	.....	53,870,669	120,338,356
Minneapolis.....	11,862,647	.....	3,152,800	3,726,500	\$18,000	18,759,947	57,260,268
Kansas City.....	9,445,108	75,000	28,700	1,000	.....	9,549,808	60,347,239
Dallas.....	17,768,809	1,007,692	50,000	.....	.....	18,826,501	63,452,441
San Francisco.....	114,386,121	29,827,050	7,712,000	1,000,000	.....	152,925,171	194,915,109
Total: August, 1922.....	1,094,305,977	185,207,131	90,895,300	101,040,000	18,000	1,471,466,408	.....
August, 1921.....	3,513,063,190	107,303,045	1,182,000	41,615,000	.....	.....	3,663,163,235
8 months ending August 31, 1922.....	12,172,047,928	1,153,074,351	818,872,650	1,940,358,500	137,632	16,084,491,061	.....
8 months ending August 31, 1921.....	43,836,914,002	921,336,636	29,966,450	2,577,320,557	.....	.....	47,365,537,645

VOLUME OF BILLS DISCOUNTED DURING AUGUST, 1922, BY CLASSES OF PAPER; ALSO NUMBER OF MEMBER BANKS ACCOMMODATED.

Federal reserve bank.	Customers' paper secured by Government obligations.	Member banks' collateral notes.		Commercial papers, n. e. s.	Agricultural paper.	Live-stock paper.	Bankers' acceptances.		
		Secured by Government obligations.	Otherwise secured.				Foreign.	Domestic.	Dollar exchange.
Boston.....	\$139,239	\$43,356,500	.....	\$99,378,861	\$416,821	\$2,470	.....	.....	.....
New York.....	504,938	262,406,300	.....	80,116,684	615,136	3,251	.....	.....	.....
Philadelphia.....	55,000	128,537,750	.....	35,739,606	149,242	.....	.....	.....	.....
Cleveland.....	226,847	77,111,050	\$180,500	15,629,131	133,585	68,687	.....	.....	.....
Richmond.....	187,794	32,018,785	594,800	8,947,674	3,179,477	18,057	.....	.....	.....
Atlanta.....	105,445	5,210,650	227,000	9,918,827	3,080,330	261,837	.....	.....	.....
Chicago.....	104,348	57,166,465	435,500	22,497,086	6,635,110	92,060	.....	.....	.....
St. Louis.....	106,757	32,559,605	200,000	5,172,955	2,493,475	.....	.....	.....	.....
Minneapolis.....	6,355	5,455,580	600,559	3,547,524	1,468,369	779,302	.....	\$7,540	.....
Kansas City.....	33,755	4,445,165	.....	1,658,407	1,526,084	1,780,546	.....	.....	.....
Dallas.....	8,898	3,546,840	990,290	6,195,957	4,161,255	2,729,187	.....	.....	.....
San Francisco.....	113,165	76,079,295	22,838,317	12,104,706	2,135,424	699,173	.....	.....	.....
Total: August, 1922.....	1,592,541	727,893,985	26,072,966	303,907,508	25,994,308	6,434,590	.....	7,540	.....
July, 1922.....	2,856,274	929,180,480	22,933,412	323,266,424	28,613,670	7,800,944	\$44,987	16,240	.....
August, 1921.....	48,321,668	2,021,810,753	33,017,993	1,344,637,416	41,288,185	13,745,037	.....	1,417,632	.....
July, 1921.....	69,946,004	2,114,329,612	22,449,545	1,454,153,534	46,055,440	17,529,350	.....	1,941,628	.....

Federal reserve bank.	Trade acceptances.		Total, all classes.	Total reduced to a common maturity basis. ¹		Member banks.		
	Foreign.	Domestic.		Amount.	Per cent of total.	Number in district Aug. 31.	Accommodated.	
							Number.	Per cent.
Boston.....		\$134,799	\$143,428,690	\$67,634,083	6.2	432	171	39.6
New York.....		555,860	344,202,169	200,898,701	18.3	800	256	32.0
Philadelphia.....		31,011	164,512,699	96,044,322	8.8	714	304	42.6
Cleveland.....		358,371	93,708,171	70,895,101	6.5	883	283	32.0
Richmond.....		206,230	45,152,817	72,600,204	6.6	627	328	52.3
Atlanta.....		216,051	19,020,140	70,621,852	6.5	538	288	53.5
Chicago.....		81,202	86,919,711	193,881,625	17.7	1,445	712	49.3
St. Louis.....		266,483	43,898,895	64,157,746	5.9	606	252	41.6
Minneapolis.....		4,958	11,862,647	40,428,220	3.7	1,021	336	32.9
Kansas City.....		1,151	9,445,108	35,279,627	3.2	1,152	292	25.3
Dallas.....		130,382	17,768,809	77,531,994	7.1	863	485	56.2
San Francisco.....		416,041	114,386,121	104,332,552	9.5	836	335	40.1
Total: August, 1922.....		2,402,539	1,094,305,977	1,094,305,977	100.0	9,917	4,042	40.8
July, 1922.....		2,889,186	1,317,601,617			9,930	4,167	42.0
August, 1921.....	8,824,506		3,513,063,190			9,802	5,453	55.6
July, 1921.....	8,673,299		3,735,078,412			9,789	5,607	57.3

¹ Total discounts multiplied by ratio of average maturity of bills discounted by each bank to average maturity (13.48) for system.

VOLUME OF BILLS DISCOUNTED DURING AUGUST, 1922, BY RATES OF DISCOUNT CHARGED; ALSO AVERAGE RATES AND MATURITIES.

Federal reserve bank.	4 per cent.	4½ per cent.	5 per cent.	Total.	Average rate (365-day basis).	Average maturity.
					<i>Per cent.</i>	<i>Days.</i>
Boston.....	\$143,428,690			\$143,428,690	4.00	6.36
New York.....	344,202,169			344,202,169	4.00	7.87
Philadelphia.....		\$164,512,699		164,512,699	4.50	7.87
Cleveland.....		93,708,171		93,708,171	4.50	10.20
Richmond.....		45,152,817		45,152,817	4.50	21.67
Atlanta.....		19,020,140		19,020,140	4.50	50.04
Chicago.....		86,919,711		86,919,711	4.50	30.06
St. Louis.....		43,898,895		43,898,895	4.50	19.70
Minneapolis.....		6,138,704	\$5,723,943	11,862,647	4.75	45.93
Kansas City.....		6,295,279	3,149,829	9,445,108	4.68	50.34
Dallas.....		17,768,809		17,768,809	4.50	58.80
San Francisco.....	114,386,121			114,386,121	4.00	12.29
Total: August, 1922.....	602,016,980	483,415,225	8,873,772	1,094,305,977	4.34	13.48
July, 1922.....	810,474,889	474,290,016	32,836,712	1,317,601,617	4.39	11.97

VOLUME OF BANKERS' AND TRADE ACCEPTANCES PURCHASED DURING AUGUST, 1922, BY CLASSES.

Federal reserve bank.	Bankers' acceptances.				Trade acceptances.			Total bills purchased.	Total reduced to a common maturity basis. ¹	
	Foreign.	Domestic.	Dollar ex-change.	Total.	Foreign.	Domestic.	Total.		Amount.	Per cent of total.
Boston.....	\$16,541,265	\$5,925,489	\$1,135,188	\$23,601,942				\$23,601,942	\$10,132,117	5.5
New York.....	63,106,196	11,177,530	3,429,997	77,713,723	\$356,877		\$356,877	78,070,600	60,489,953	32.6
Philadelphia.....	10,237,863	2,188,772	550,000	12,976,635	22,157		22,157	12,998,792	21,970,196	11.9
Cleveland.....	6,597,905	1,540,109	118,177	8,256,191				8,256,191	12,321,154	6.7
Richmond.....	10,000	273,750		283,750				283,750	260,055	.1
Atlanta.....	794,952	292,650		1,087,602				1,087,602	899,378	.5
Chicago.....	22,425,822	6,395,466	190,000	29,011,288				29,011,288	46,758,300	25.2
St. Louis.....	787,224	100,000	100,000	987,224				987,224	1,802,747	1.0
Minneapolis.....										
Kansas City.....		75,000		75,000				75,000	158,252	.1
Dallas.....	874,343	133,349		1,007,692				1,007,692	492,796	.3
San Francisco.....	22,861,223	6,185,543	780,284	29,827,050				29,827,050	29,922,183	16.1
Total: August, 1922.....	144,236,793	34,287,658	6,303,646	184,828,097	379,034		379,034	185,207,131	185,207,131	100.0
July, 1922.....	125,333,111	30,243,235	2,653,505	158,229,851	529,293		529,293	158,759,144		
August, 1921.....	79,762,451	21,711,986	5,795,624	107,270,061	32,984		32,984	107,303,045		
July, 1921.....	29,136,700	16,140,995	1,345,000	46,622,695	46,844		46,844	46,669,539		

¹ Total purchases multiplied by ratio of average maturity of bills purchased by each bank to average maturity (42.18) for system.

VOLUME OF ACCEPTANCES PURCHASED DURING AUGUST, 1922, BY RATES OF DISCOUNT CHARGED, ALSO AVERAGE RATES AND MATURITIES.

Federal reserve bank.	3 per cent.	3½ per cent.	3¾ per cent.	4 per cent.	4½ per cent.	5 per cent.	Total.	Average rate (365 day basis).	Average maturity.
								<i>Per cent.</i>	<i>Days.</i>
Boston.....	\$19,480,503	\$3,783,729	\$288,122	\$19,922	\$29,666		\$23,601,942	3.06	18.11
New York.....	29,389,729	3,225,435	44,910,376	148,923	396,137		78,070,600	3.14	32.68
Philadelphia.....	10,721,662	2,003,574	251,399	22,157			12,998,792	3.08	71.28
Cleveland.....	8,083,939	56,820	18,091		90,000	\$5,841	8,256,191	3.04	62.94
Richmond.....							283,750	4.56	38.65
Atlanta.....	494,040	89,010					1,087,602	3.85	34.88
Chicago.....	19,921,951	7,514,421	1,574,916				29,011,288	3.11	67.98
St. Louis.....	987,224						987,224	3.04	77.02
Minneapolis.....									
Kansas City.....							75,000	5.07	88.99
Dallas.....	1,007,692						1,007,692	3.04	20.63
San Francisco.....	23,970,848	5,654,244	201,958				29,827,050	3.06	42.31
Total: August, 1922.....	114,057,588	22,327,233	47,244,862	191,002	515,803	5,841	185,207,131	3.10	42.18
July, 1922.....	88,142,558	14,756,833	48,304,494	934,461	5,739,122	60,324	158,759,144	3.13	36.63

¹ Includes \$57,765 of acceptances purchased at 3¾ per cent.

NOTE.—All Federal reserve banks use 360 days to the year in calculating interest on bills bought in open market.

HOLDINGS OF EARNING ASSETS, BY CLASSES.

Following is a set of tables giving a detailed analysis of the different classes of earning assets held by the Federal reserve banks during August, 1922:

AVERAGE DAILY HOLDINGS OF EACH CLASS OF EARNING ASSETS, EARNINGS THEREON, AND ANNUAL RATES OF EARNINGS DURING AUGUST, 1922.

Federal reserve bank.	Average daily holdings of—				Earnings on—				Annual rate of earnings on—			
	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.
									<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>
Boston.....	\$82,864,706	\$24,726,432	\$14,243,158	\$43,895,116	\$254,680	\$84,674	\$37,842	\$132,164	3.62	4.03	3.13	3.54
New York.....	239,947,488	48,068,963	34,247,753	157,630,772	733,581	164,335	91,591	477,605	3.60	4.03	3.15	3.57
Philadelphia.....	101,847,615	38,221,810	29,145,297	34,480,508	335,638	146,083	76,203	113,352	3.88	4.50	3.07	3.87
Cleveland.....	123,926,369	27,102,231	27,346,131	69,478,007	398,064	103,592	71,426	223,046	3.78	4.50	3.08	3.78
Richmond.....	40,698,413	35,531,371	369,368	4,797,674	145,920	136,162	1,456	8,302	4.22	4.51	4.64	2.04
Atlanta.....	38,879,147	29,918,396	902,076	8,058,675	134,837	114,516	3,101	17,220	4.08	4.51	4.05	2.52
Chicago.....	102,665,472	51,559,284	15,739,617	35,366,571	335,807	198,306	41,148	96,353	3.85	4.53	3.08	3.21
St. Louis.....	58,787,243	17,540,092	15,515,359	25,731,792	190,205	67,224	40,828	82,153	3.81	4.51	3.10	3.76
Minneapolis.....	37,451,900	26,959,000	.....	10,483,600	143,174	113,941	.....	29,195	4.50	4.98	.....	3.28
Kansas City.....	63,126,043	17,646,968	65,322	45,413,753	218,812	74,793	281	143,738	4.08	4.99	5.07	3.73
Dallas.....	44,164,132	35,419,348	2,699,768	6,045,016	165,922	145,634	7,293	12,995	4.42	4.84	3.18	2.53
San Francisco.....	118,739,684	43,549,289	18,747,002	56,443,393	338,704	153,467	48,950	186,287	3.85	4.15	3.07	3.89
Total: Aug., 1922.....	1,053,098,212	396,243,184	159,020,851	497,824,877	3,445,344	1,502,777	420,119	1,522,410	3.85	4.47	3.11	3.60
July, 1922.....	1,127,887,882	428,326,143	154,010,451	545,546,588	3,737,104	1,636,868	416,027	1,684,189	3.90	4.50	3.18	3.63
Aug., 1921.....	1,844,940,407	1,558,012,798	38,157,531	248,770,078	8,492,069	7,826,240	173,556	492,273	5.42	5.91	5.36	2.33
July, 1921.....	2,009,384,063	1,721,882,534	26,360,164	261,141,365	9,551,541	8,906,789	133,438	511,314	5.60	6.09	5.96	2.31

NOTE.—The figures for Minneapolis in the first, fifth, and ninth columns include average daily holdings of municipal warrants, earnings, and annual rate of earnings thereon as follows: \$9,300, \$38, and 4.77 per cent.

HOLDINGS OF DISCOUNTED BILLS, BY CLASSES.

[End of August figures. In thousands of dollars.]

Federal reserve bank.	Total.	Cus- tomers' paper secured by Gov- ernment obliga- tions.	Member banks' col- lateral notes.		Commer- cial paper, n. e. s.	Agricul- tural paper.	Live- stock paper.	Bankers' accept- ances.		Trade accept- ances.	
			Secured by Govern- ment obli- gations.	Other- wise secured.				For- eign.	Domes- tic.	For- eign.	Domes- tic.
Boston.....	22,721	541	9,580	.....	11,653	791	2	.....	.....	.....	154
New York.....	44,068	254	24,059	.....	18,571	753	.....	.....	.....	.....	431
Philadelphia.....	39,554	159	29,368	.....	9,505	432	.....	.....	.....	.....	90
Cleveland.....	24,021	415	12,980	31	9,043	672	269	.....	.....	.....	611
Richmond.....	35,461	345	9,043	439	15,652	9,463	67	.....	.....	.....	452
Atlanta.....	32,134	205	2,298	104	16,353	11,023	1,856	.....	.....	.....	295
Chicago.....	54,706	119	15,216	203	16,999	21,825	.....	.....	.....	.....	344
St. Louis.....	17,299	128	4,832	100	4,584	6,985	458	.....	43	.....	169
Minneapolis.....	27,209	25	2,276	329	3,522	13,035	7,841	.....	.....	.....	181
Kansas City.....	19,062	100	2,317	.....	2,624	4,615	9,402	.....	.....	.....	4
Dallas.....	37,537	21	1,567	367	6,907	16,977	11,499	.....	.....	116	83
San Francisco.....	43,676	213	10,052	10,801	7,903	10,833	3,509	.....	.....	.....	365
Total: Aug. 31, 1922.....	397,448	2,525	123,588	12,374	123,316	97,404	34,903	.....	43	116	3,179
July 31, 1922.....	406,178	2,700	129,690	11,790	126,030	96,813	35,466	.....	35	.....	3,654
Aug. 31, 1921.....	1,491,935	82,053	463,123	16,242	695,691	157,394	65,033	635	1,080	104	10,580
July 30, 1921.....	1,641,612	96,277	481,497	12,104	801,491	157,454	72,883	5,476	613	85	13,732

HOLDINGS OF BANKERS' AND TRADE ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTANCES.

[End of August figures. In thousands of dollars.]

Federal reserve bank.	All classes.			Bankers' acceptances.				Trade acceptances.		
	Total.	Purchased in open market.	Discounted for member banks.	Total.	Foreign.	Domestic.	Dollar exchange.	Total.	Foreign.	Domestic.
Boston.....	11,783	11,629	154	11,629	7,371	2,747	1,511	154		154
New York.....	53,569	53,138	431	52,383	41,617	8,224	2,542	1,186	755	431
Philadelphia.....	29,930	29,840	90	29,743	23,689	5,423	631	187	97	90
Cleveland.....	31,041	30,430	611	30,430	24,936	5,294	200	611		611
Richmond.....	721	269	452	269		269		452		452
Atlanta.....	1,269	974	295	974	611	363		295		295
Chicago.....	13,759	13,415	344	13,415	10,488	2,910	17	344		344
St. Louis.....	16,287	16,075	212	16,118	15,308	710	100	169		169
Minneapolis.....	181		181					181		181
Kansas City.....	79	75	4	75		75		4		4
Dallas.....	1,527	1,328	199	1,328	1,254	68	6	199	116	83
San Francisco.....	23,368	23,003	365	23,003	18,689	3,504	810	365		365
Total: Aug. 31, 1922.....	183,514			179,367	143,963	29,587	5,817	4,147	968	3,179
July 31, 1922.....	143,800			139,117	114,407	21,911	2,799	4,683	1,029	3,654
Aug. 31, 1921.....	47,721			36,995	27,005	9,103	887	10,726	146	10,580
Purchased in open market:										
Aug. 31, 1922.....		180,176		179,324	143,963	29,544	5,817	852	852	
July 31, 1922.....		140,111		139,082	114,407	21,876	2,799	1,029	1,029	
Aug. 31, 1921.....		35,322		35,280	26,370	8,023	887	42	42	
Discounted for member banks:										
Aug. 31, 1922.....			3,338	43		43		3,295	116	3,179
July 31, 1922.....			3,689	35		35		3,654		3,654
Aug. 31, 1921.....			12,399	1,715	635	1,080		10,684	104	10,580

HOLDINGS OF BANKERS' ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTING INSTITUTIONS.

[End of August figures. In thousands of dollars.]

Federal reserve bank.	Total.	Member banks.		Non-member banks and banking corporations.	Private banks.	Branches and agencies of foreign banks.
		National.	Non-national.			
Boston.....	11,629	5,892	3,905	1,528	204	100
New York.....	52,383	18,774	15,418	8,528	6,503	3,160
Philadelphia.....	29,743	12,862	7,458	4,401	3,259	1,783
Cleveland.....	30,430	13,048	12,829	3,208	598	657
Richmond.....	269	269				
Atlanta.....	974	413	472	89		
Chicago.....	13,415	5,879	6,509	893	32	102
St. Louis.....	16,118	7,497	7,487	736	396	2
Minneapolis.....						
Kansas City.....	75	75				
Dallas.....	1,328	191	685	200	95	157
San Francisco.....	23,003	9,282	7,045	3,573	1,395	1,708
Total: Aug. 31, 1922.....	179,367	74,182	61,808	23,246	12,482	7,649
July 31, 1922.....	139,117	60,968	47,034	14,879	9,371	6,865
Aug. 31, 1921.....	36,995	15,343	10,739	6,363	3,070	1,480
Purchased in open market:						
Aug. 31, 1922.....	179,324	74,147	61,800	23,246	12,482	7,649
July 31, 1922.....	139,082	60,933	47,034	14,879	9,371	6,865
Aug. 31, 1921.....	35,280	14,763	10,395	5,638	3,022	1,462
Discounted for member banks:						
Aug. 31, 1922.....	43	35	8			
July 31, 1922.....	35	35				
Aug. 31, 1921.....	1,715	580	344	725	48	18

BANKING CONDITIONS, BY FEDERAL RESERVE DISTRICTS.

For the five weeks ending September 20, 1922, reporting member banks in nearly all the Federal reserve districts show increases in their loan accounts, the only exceptions being reported for the Chicago and St. Louis districts. Holdings of United States Government obligations, which for all reporting banks increased by \$48,000,000 during the period, were larger in every Federal reserve district on September 20 than five weeks earlier. Corporate security holdings, on the other hand, show widespread reductions aggregating \$81,000,000, of which

\$68,000,000 were reported for the New York City banks. While the banks in most of the districts show increases in demand deposits, smaller figures are shown for the Richmond, Chicago, and St. Louis districts. The change in time deposits is relatively slight, a decrease of \$61,000,000 for the New York City banks being nearly offset by increases in other cities. The banks in all the reserve districts show increases in their accommodation at the Federal reserve banks

CHANGES IN PRINCIPAL RESOURCES AND LIABILITIES OF REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT BETWEEN AUG. 16 AND SEPT. 20, 1922.

[In millions of dollars.]

Federal reserve district.	Loans and discounts.		United States Government securities.		Other bonds, stocks, and securities.		Demand deposits.		Time deposits.		Accommodation at Federal reserve banks.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
Boston.....	26		2			3	16		6		6	
New York.....	34		7			73	9			51	5	
New York City.....	26			1		68	10			61	6	
Philadelphia.....	14					3	12				4	
Cleveland.....	14					2	12		2		3	
Richmond.....	5		2		1			11	3		7	
Atlanta.....	11		2			1	3		1		8	
Chicago.....		18	7		4			27	8		8	
City of Chicago.....		21	6			1		21		1	6	
St. Louis.....		3	6		1			3	2		7	
Minneapolis.....	19		4				10		7			
Kansas City.....	3		2		1				1		3	
Dallas.....	13		2				15				2	
San Francisco.....	12					6	12		8		1	
Total.....	130		48			81	48			12	54	

A table showing the distribution of earning assets of reporting member banks on January 7, 1921, soon after the peak of credit expansion was reached, on September 7, 1921, when

liquidation of bank credit had noticeably slackened, and on September 20, 1922, the latest available date, follows:

LOANS AND DISCOUNTS AND INVESTMENTS OF REPORTING MEMBER BANKS IN LEADING CITIES.

	Amounts (in millions of dollars).			Per cent of total loans and investments.		
	Jan. 7, 1921.	Sept. 7, 1921.	Sept. 20, 1922.	Jan. 7, 1921.	Sept. 7, 1921.	Sept. 20, 1922.
Loans and discounts, total.....	13,219	11,482	10,939	79.8	78.0	70.8
Secured by United States Government obligations.....	898	605	266	5.2	4.1	1.7
Secured by stocks and bonds (other than United States Government obligations).....	3,127	2,921	3,556	18.9	19.8	23.0
All other.....	9,224	7,956	7,117	55.7	54.1	46.1
Investments, total.....	3,341	3,244	4,501	20.2	22.0	29.2
United States Government securities, total.....	1,312	1,221	2,264	7.9	8.3	14.7
United States bonds.....	879	870	1,382	5.3	5.9	8.9
United States Victory notes.....	206	162	40	1.2	1.1	.3
United States Treasury notes.....		48	630		.3	4.1
United States certificates of indebtedness.....	227	141	212	1.4	1.0	1.4
Other investments.....	2,029	2,023	2,237	12.3	13.7	14.5
Total loans and investments.....	16,560	14,726	15,440	100.0	100.0	100.0
Accommodation at Federal reserve banks.....	2,049	979	164	12.4	6.7	1.1

Loans and discounts of reporting member banks, which stood at \$13,219,000,000 at the beginning of 1921, fell to \$11,482,000,000 by September 7 of the same year and further to \$10,939,000,000 on the latest date. Investments of the reporting banks, on the other hand, declined but slightly during the first period and increased by \$1,257,000,000 during the second. As a consequence, the percentage that loans constituted of total loans and investments declined from 79.8 per cent at the beginning of 1921 to 78 per cent in September of that year and to 70.8 per cent at the present time, while investments increased from 20.2 per cent at the beginning of 1921 to 29.2 per cent on September 20 of this year. This shift from loans to investments, particularly during the past year, indicates that as frozen loans were gradually being paid off and deposits increased, while the demand for new credit accommodation remained moderate, banks found themselves in the possession of considerable funds available for investment and used these funds to purchase Government and other securities.

A more detailed analysis of the figures shows that the volume of loans secured by Government obligations declined drastically from \$868,000,000 on January 7, 1921, to \$266,000,000 on September 20, 1922, and their proportion of total loans and investments dropped from 5.2 to 1.7 per cent, the larger part of the decline occurring during the last year. Loans secured by stocks and bonds, on the other hand, declined only by \$206,000,000 during the first period and increased by \$635,000,000 during the second period, their proportion of total loans and investments increasing constantly from 18.9 per cent to 23 per cent. All other loans, composed chiefly of commercial and industrial loans, showed continuous liquidation throughout the entire period, declining from \$9,224,000,000 in January, 1921, to \$7,117,000,000 on September 20, 1922, or from 55.7 to 46.1 per cent of the banks' total loans and investments. The increase in loans secured by corporate obligations in the face of a decline in the other two classes of loans is indicative of the fact that, while business was slow and commercial loans at a relatively low level, the increase in stock-exchange activity was reflected in an increase in loans secured by stocks and bonds, which is confined largely to the financial centers.

In the investment block, which shows an increase of \$1,160,000,000 for the entire period, the largest part of the increase is in Government securities, other investments increasing by only \$208,000,000. Holdings of United States bonds rose from \$879,000,000 to \$1,382,000,000, or from 5.3 to 8.9 per cent of

total loans and investments. Holdings of Victory notes, on the other hand, declined, largely as the result of redemption and exchange for Treasury notes, of which the banks now hold \$630,000,000, while at the beginning of 1921 this form of Government security was not yet known. Certificates of indebtedness are a fluctuating item but changes in them for the period are not notable. It is of interest to note that the holdings of Government securities and of paper supported by such securities combined, which declined between January, 1921, and September of that year, show an increase for the past 12 months and stand now at \$2,530,000,000, or at 16.4 per cent of the banks' total loans and investments, compared with \$2,180,000,000, or 13.1 per cent, at the beginning of 1921. These figures would seem to indicate that the banks are supporting the Government to a larger extent now than two years ago both in absolute figures and relative to total loans and investments, but the significance of the figures is entirely changed. At the present time the banks no longer assist the Government by helping purchasers of war obligations to carry them. Nor do Government security holdings represent chiefly assistance to the Government in meeting its current needs. The banks have invested large amounts aggregating for the period under review \$503,000,000 in United States bonds, and in addition have acquired \$630,000,000 of Treasury notes, though reducing their holdings of Victory notes by \$166,000,000 and those of Treasury certificates by \$15,000,000. Government securities, especially long-term obligations, in the hands of reporting member banks now reflect chiefly the investment policy of these banks rather than an effort to cooperate with the Government in its fiscal policies.

The last line in the table shows the great reduction in the amount of accommodation obtained by the reporting member banks from their reserve banks. From a total of \$2,049,000,000 constituting 12.4 per cent of total loans and investments shown on January 7, 1921, this item has shrunk to \$164,000,000, constituting about 1 per cent of total loans and investments at the present time. The figures indicate that the increase in the investment account of the member banks was in addition to the liquidation of the bulk of their own indebtedness to the reserve banks.

Increased discounts, especially in the corn and winter wheat belt, comprising the Cleveland, Chicago, and St. Louis districts, are indicated in the Federal reserve bank statements for the five weeks ending September 27. Increases in the Boston and Philadelphia districts are relatively slight, and the New York

bank reports a small decline. Smaller figures are shown also for the Minneapolis, Dallas, and San Francisco banks. Increased holdings of acceptances are reported for all the reserve banks which carry substantial amounts of these bills, with the exception of the Philadelphia bank. Acceptance holdings of the New York bank practically doubled during the period, increasing from 40.4 to 80.5 mil-

lions. Government security holdings, for reasons explained in the review of the month, show general declines, the only bank showing a material increase, amounting to \$9,300,000, being Minneapolis. Federal reserve note circulation increased in every reserve district, except New York, the heaviest increases being shown for the Cleveland, Boston, and Dallas banks.

CHANGES IN PRINCIPAL RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK BETWEEN AUGUST 23 AND SEPTEMBER 27, 1922.

[Amounts in millions of dollars.]

Federal reserve bank.	Total reserves.		Discounts.		Government securities.		Total deposits.		Federal reserve notes in circulation.		Reserve percentage.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Aug. 23.	Sept. 27.
Boston.....	29.5		2.9			17.0		1.1	17.1		77.0	81.9
New York.....		70.1		0.2		9.3	30.0			5.1	86.7	83.7
Philadelphia.....	6.6		2.7			1.1		.6	5.9		74.6	75.2
Cleveland.....	25.2		6.5			10.5		12.1	18.9		71.1	71.9
Richmond.....	4.3		4.6			.1		.5	6.8		77.6	76.7
Atlanta.....	5.6		4.4			2.4		4.0	8.3		82.6	79.9
Chicago.....		9.4	7.8		.6		9.9		11.3		89.3	87.7
St. Louis.....	3.3		7.6		.4		2.5		8.7		63.6	63.1
Minneapolis.....		1.0		1.0	9.3			2.9	3.8		71.7	65.9
Kansas City.....		1.5	5.5			.8	.4		3.1		66.1	63.8
Dallas.....	22.1			6.1		.4		5.2	13.3		54.6	67.5
San Francisco.....		4.1		4.4		2.0		4.7	4.6		70.4	67.4
Total.....	10.5		30.3			33.3	11.7		96.7		79.8	78.4

Cash reserves increased by \$10,500,000, the argost increases being shown for the Boston, Cleveland, and Dallas banks, while the New York bank reports a decline of \$70,100,000. Deposit liabilities of the reserve banks increased by \$11,700,000, the largest increase (by \$30,000,000) being reported for the New York bank. The reserve ratio of most of the reserve banks was somewhat lower on September 27 than on August 23, the decline for the New York bank being from 86.7 to 83.7 per cent. Higher reserve ratios, on the other hand are shown for the Boston, Philadelphia,

Cleveland, and Dallas banks, which report increased cash reserves and decreased deposit liabilities. The most pronounced increase in the reserve ratio is shown for the Dallas bank, whose cash reserves increased by \$22,100,000, while its deposits declined by \$5,200,000 and its note circulation increased by \$13,300,000. The Dallas bank's reserve ratio, which was 54.6 per cent, the lowest for the system, on August 23, rose to 67.5 per cent on September 27, which makes it rank eighth in reserve ratio among the 12 reserve banks.

CASH RESERVES, TOTAL DEPOSITS, FEDERAL RESERVE NOTE CIRCULATION, AND RESERVE PERCENTAGES FOR SEPTEMBER AND AUGUST, 1922.

[Daily averages. Amounts in thousands of dollars.]

Federal reserve bank.	Total cash reserves.		Total deposits.		Federal reserve notes in circulation.		Reserve percentages.	
	September.	August.	September.	August.	September.	August.	September.	August.
Boston.....	243,018	225,044	122,968	122,248	188,947	172,840	77.9	76.3
New York.....	1,106,352	1,159,094	722,548	724,971	611,313	617,664	82.9	86.3
Philadelphia.....	217,839	214,150	112,194	110,426	182,496	179,710	73.9	73.8
Cleveland.....	260,858	250,003	149,683	148,369	211,789	198,425	72.2	72.1
Richmond.....	109,932	108,689	59,764	59,635	84,303	79,608	76.3	78.1
Atlanta.....	135,449	133,378	50,327	49,426	116,550	110,597	81.2	83.3
Chicago.....	573,470	564,475	268,616	266,769	383,126	370,895	88.0	88.5
St. Louis.....	85,879	86,918	64,152	64,597	73,809	68,526	62.3	65.3
Minneapolis.....	69,523	68,252	46,516	45,885	51,820	48,976	70.7	71.9
Kansas City.....	92,926	94,141	83,095	83,506	62,649	60,304	63.8	65.5
Dallas.....	55,012	40,860	50,475	46,952	37,816	27,809	62.3	54.7
San Francisco.....	242,162	250,485	135,962	136,740	220,839	215,831	67.9	71.0
Total: 1922.....	3,192,420	3,195,489	1,866,300	1,859,524	2,225,457	2,151,185	78.0	79.7
1921.....	2,836,396	2,740,388	1,716,162	1,691,137	2,493,910	2,512,348	67.4	65.2
1920.....	2,139,280	2,127,305	1,912,070	1,885,062	3,275,535	3,165,222	43.3	43.7
1919.....	2,157,932	2,146,003	1,980,969	1,911,769	2,627,295	2,544,357	50.4	50.0

¹ Calculated on basis of net deposits and Federal reserve notes in circulation.

CONDITION OF FEDERAL RESERVE BANKS.

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, AUG. 30 TO SEPT. 27, 1922.

RESOURCES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Gold and gold cer- tificates:													
Aug. 30.....	293,751	14,348	182,289	5,782	13,497	3,610	5,404	25,244	4,073	7,424	2,708	9,105	20,267
Sept. 6.....	283,316	14,458	173,843	5,810	13,483	3,666	5,413	25,337	4,115	7,400	2,717	9,116	19,958
Sept. 13.....	281,408	15,649	168,458	5,813	13,531	3,586	5,439	25,385	4,175	7,406	2,736	9,220	20,010
Sept. 20.....	275,307	15,644	161,747	5,960	13,668	3,693	5,413	25,480	4,101	7,440	2,760	9,274	20,127
Sept. 27.....	272,000	15,874	157,404	6,049	13,719	3,805	5,433	25,698	4,133	7,464	2,774	9,475	20,172
Gold settlement fund, F. R. Board:													
Aug. 30.....	534,420	36,360	104,619	38,247	58,037	35,781	25,445	126,706	12,628	28,511	24,489	9,907	33,660
Sept. 6.....	530,125	26,904	70,656	44,570	62,924	34,346	29,755	139,202	16,691	30,043	30,045	16,508	28,481
Sept. 13.....	526,340	20,456	76,519	43,234	51,859	36,432	28,883	144,432	13,527	28,215	28,846	16,799	28,138
Sept. 20.....	536,176	50,121	66,572	49,860	56,681	32,533	25,822	124,467	14,321	25,608	27,139	25,375	37,677
Sept. 27.....	592,491	53,145	119,657	43,522	66,618	37,996	27,516	117,372	17,192	23,164	30,698	20,595	35,019
Gold with F. R. agents:													
Aug. 30.....	2,197,658	164,493	832,532	150,326	169,117	57,217	95,988	384,821	55,482	27,885	57,084	16,305	186,378
Sept. 6.....	2,206,468	172,771	832,392	149,408	169,479	56,610	95,860	383,453	53,947	32,885	54,471	18,990	186,202
Sept. 13.....	2,219,162	179,393	812,283	147,847	177,544	60,814	95,011	395,141	58,167	32,195	56,183	19,787	184,767
Sept. 20.....	2,202,258	176,987	811,993	148,090	175,585	59,841	94,752	393,040	54,893	32,659	56,694	19,524	178,200
Sept. 27.....	2,160,522	174,715	771,841	149,402	176,355	58,909	93,868	389,597	56,529	32,361	53,375	25,270	178,240
Gold redemption fund:													
Aug. 30.....	37,585	6,486	6,196	5,799	2,549	3,240	1,493	1,997	2,105	2,053	1,220	840	3,607
Sept. 6.....	38,914	7,565	5,622	5,931	1,427	3,342	1,185	2,880	1,888	1,898	1,526	1,230	4,411
Sept. 13.....	40,324	5,292	4,967	6,572	1,493	3,476	1,536	5,449	1,771	2,370	1,512	1,392	4,494
Sept. 20.....	48,136	6,968	9,089	7,113	2,339	3,605	1,257	6,861	1,714	1,689	1,699	1,671	4,101
Sept. 27.....	51,927	8,308	7,694	7,575	3,371	3,556	1,472	9,593	1,665	1,674	1,617	1,354	4,048
Total gold reserves:													
Aug. 30.....	3,033,414	221,687	1,125,666	200,154	243,200	99,878	128,330	538,768	74,288	65,873	85,501	36,157	243,912
Sept. 6.....	3,060,823	221,698	1,082,513	205,719	247,313	97,964	132,213	550,881	76,641	72,226	88,759	45,844	239,052
Sept. 13.....	3,067,234	229,790	1,062,227	203,466	244,427	104,308	130,899	570,407	77,640	70,186	89,277	47,198	237,409
Sept. 20.....	3,061,877	249,720	1,049,401	211,053	248,273	99,672	127,244	519,848	75,029	67,396	88,292	55,844	240,105
Sept. 27.....	3,076,943	252,042	1,056,596	206,518	260,003	104,326	128,289	542,260	79,519	64,663	88,464	56,694	237,479
Legal-tender notes, silver, etc.:													
Aug. 30.....	132,474	8,698	38,146	11,365	9,432	8,211	5,439	21,786	11,809	840	4,553	6,935	5,227
Sept. 6.....	125,864	7,735	39,215	11,147	8,695	7,761	4,651	19,923	9,972	705	4,550	6,845	4,665
Sept. 13.....	130,204	8,565	42,600	12,221	8,736	7,444	5,051	20,145	9,588	760	4,401	6,102	4,591
Sept. 20.....	127,993	8,043	41,941	12,837	8,623	7,311	5,735	20,128	8,101	862	3,997	6,348	4,067
Sept. 27.....	126,184	8,200	38,334	14,873	8,752	7,489	5,763	19,803	7,778	849	3,795	6,164	4,384
Total reserves:													
Aug. 30.....	3,195,888	230,385	1,163,812	211,519	252,632	108,122	133,760	560,554	86,097	66,713	90,054	43,092	249,139
Sept. 6.....	3,186,637	229,433	1,121,728	216,866	256,008	105,723	136,864	570,801	86,613	72,931	93,309	52,689	243,717
Sept. 13.....	3,197,478	238,353	1,104,827	215,687	253,163	111,752	135,950	590,552	87,225	70,946	93,678	53,300	242,000
Sept. 20.....	3,189,870	257,763	1,091,342	223,890	256,896	106,983	132,979	569,976	83,130	68,258	92,289	62,192	244,172
Sept. 27.....	3,203,127	260,242	1,094,930	221,421	268,815	111,815	134,052	562,063	87,297	65,512	92,259	62,858	241,863
Bills discounted: Secured by U. S. Government obligations—													
Aug. 30.....	133,631	9,882	24,694	28,115	15,135	9,969	1,655	23,078	4,369	2,172	2,034	1,578	10,970
Sept. 6.....	130,447	10,235	26,171	28,858	15,933	9,611	1,711	17,663	4,713	1,828	1,740	1,616	10,338
Sept. 13.....	123,960	9,173	21,438	28,871	19,105	9,951	1,723	14,265	4,819	1,631	1,183	1,839	9,662
Sept. 20.....	133,021	7,419	18,018	29,244	21,049	14,328	3,707	15,576	8,054	2,262	2,269	1,252	9,786
Sept. 27.....	139,102	8,526	24,750	28,928	20,333	12,403	2,753	17,629	7,142	2,049	3,151	1,661	9,774
Other bills dis- counted—													
Aug. 30.....	270,717	13,963	20,127	9,908	11,431	25,935	28,935	38,328	12,091	24,947	16,517	35,601	32,934
Sept. 6.....	274,636	19,007	22,105	8,863	11,914	24,974	29,508	34,779	13,489	24,489	16,217	34,267	35,024
Sept. 13.....	263,213	15,810	20,534	8,854	8,988	25,447	28,608	34,810	13,014	24,075	16,541	32,842	33,690
Sept. 20.....	290,886	19,519	26,622	10,530	11,745	26,606	33,890	40,738	16,860	23,954	17,801	30,724	31,888
Sept. 27.....	281,078	16,914	21,886	10,485	12,186	27,290	31,685	40,296	18,359	24,142	19,205	28,483	30,157
Bills bought in open market:													
Aug. 30.....	171,706	11,192	45,810	30,060	30,825	327	662	12,586	16,075	.....	75	2,103	21,991
Sept. 6.....	188,365	12,304	59,320	28,051	29,826	271	1,713	13,350	15,280	.....	75	805	27,351
Sept. 13.....	204,663	10,560	67,414	28,118	33,412	403	1,822	11,911	14,992	.....	75	2,125	33,831
Sept. 20.....	220,267	14,807	72,014	25,883	34,215	396	3,964	16,021	14,153	.....	75	4,039	34,700
Sept. 27.....	238,116	15,857	80,545	24,205	37,802	671	4,247	15,940	12,918	.....	75	4,868	40,928
U. S. bonds and notes:													
Aug. 30.....	193,750	11,177	32,303	23,589	27,643	1,241	208	6,202	18,563	4,445	27,881	2,816	37,682
Sept. 6.....	207,514	11,097	44,208	23,589	27,643	1,241	133	7,516	18,763	4,344	27,882	2,816	37,682
Sept. 13.....	198,835	11,117	37,230	23,589	27,627	1,241	201	6,750	18,761	4,489	27,332	2,816	37,682
Sept. 20.....	213,585	11,452	41,586	23,589	27,625	1,241	159	8,000	18,761	4,489	27,737	2,816	37,682
Sept. 27.....	229,158	11,982	56,519	23,626	27,639	1,241	140	8,300	18,761	12,885	27,537	2,816	37,682
U. S. certificates of indebtedness:													
One-year certifi- cates (Pittman Act)—													
Aug. 30.....	63,000	3,950	16,000	4,500	4,000	3,560	5,199	8,667	3,571	3,500	4,321	1,900	3,832
Sept. 6.....	56,500	3,250	13,500	4,500	3,500	3,460	4,999	7,667	3,571	3,000	4,321	1,900	2,832
Sept. 13.....	55,000	3,250	13,500	3,500	3,500	3,480	4,999	7,667	3,571	3,000	4,321	1,900	2,832
Sept. 20.....	52,000	3,250	12,500	3,500	3,500	3,460	3,999	6,667	3,571	3,000	3,821	1,900	2,832
Sept. 27.....	50,500	3,250	12,500	3,000	3,000	3,460	3,499	6,667	3,571	3,000	3,821	1,900	2,832

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, AUG. 30 TO SEPT. 27, 1922—Continued.

RESOURCES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.
U. S. certificates of indebtedness—Con.													
Other certificates—													
Aug. 30.....	241,220	33,647	102,718	6,525	40,072	.....	2,031	21,674	5,391	2,433	13,001	1,265	12,463
Sept. 6.....	244,178	34,107	103,421	6,525	40,155	.....	2,031	22,382	6,391	2,434	13,004	1,265	12,463
Sept. 13.....	243,045	35,212	100,761	6,954	40,175	.....	2,031	22,183	6,279	2,713	13,004	1,265	12,463
Sept. 20.....	173,399	10,485	73,999	5,629	29,029	.....	2,070	18,533	5,880	2,561	12,986	765	11,462
Sept. 27.....	171,788	12,681	71,759	5,809	29,059	.....	2,031	17,694	4,311	3,056	13,011	915	11,462
Municipal warrants:													
Aug. 30.....	21	.....	.....	.....	.....	.....	.....	.....	.....	21	.....	.....	.....
Sept. 6.....	21	.....	.....	.....	.....	.....	.....	.....	.....	21	.....	.....	.....
Sept. 13.....	18	.....	.....	.....	.....	.....	.....	.....	.....	18	.....	.....	.....
Sept. 20.....	16	.....	.....	.....	.....	.....	.....	.....	.....	16	.....	.....	.....
Sept. 27.....	15	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....
Total earning assets:													
Aug. 30.....	1,074,065	83,811	241,652	102,697	129,106	41,032	38,690	110,535	60,060	37,518	63,829	45,263	119,872
Sept. 6.....	1,101,661	90,600	268,725	100,399	128,971	39,587	40,095	103,357	62,213	36,116	63,239	42,669	125,690
Sept. 13.....	1,088,734	85,422	260,877	99,886	132,807	40,502	38,884	97,591	61,436	35,926	62,456	42,787	130,160
Sept. 20.....	1,083,174	66,962	244,769	98,372	127,164	46,031	47,798	105,535	67,279	44,729	64,689	41,496	128,350
Sept. 27.....	1,109,757	69,210	267,980	96,053	130,079	45,065	44,355	106,516	65,062	45,147	66,803	40,643	132,835
Bank premises:													
Aug. 30.....	43,456	5,251	9,295	603	6,025	2,571	1,637	7,678	952	936	5,025	2,094	1,389
Sept. 6.....	43,636	5,251	9,297	603	6,119	2,571	1,680	7,678	953	936	5,026	2,093	1,429
Sept. 13.....	43,808	5,251	9,297	603	6,201	2,571	1,604	7,703	952	959	5,038	2,094	1,445
Sept. 20.....	44,392	5,251	9,643	603	6,349	2,571	1,732	7,703	952	959	5,059	2,093	1,477
Sept. 27.....	44,473	5,251	9,644	603	6,409	2,571	1,741	7,703	952	959	5,060	2,094	1,486
5 per cent redemption fund against F. R. bank notes:													
Aug. 30.....	6,567	422	721	250	240	188	468	713	2,023	198	916	146	279
Sept. 6.....	4,698	422	674	250	239	188	468	695	223	198	916	146	279
Sept. 13.....	4,742	422	674	250	240	188	468	738	223	198	916	146	279
Sept. 20.....	4,483	422	674	250	239	188	468	665	223	198	916	146	94
Sept. 27.....	3,917	422	624	250	239	188	468	665	223	198	400	146	94
Uncollected items:													
Aug. 30.....	510,807	48,759	110,087	41,803	50,718	41,902	19,582	64,835	28,466	13,203	36,104	22,926	32,422
Sept. 6.....	576,078	48,904	127,397	46,249	52,958	46,781	21,426	78,387	34,964	15,272	41,793	26,435	35,512
Sept. 13.....	661,605	64,483	146,415	56,192	50,850	52,097	25,021	79,307	40,444	16,600	43,875	28,709	48,612
Sept. 20.....	669,563	62,134	149,671	52,690	63,250	57,917	28,028	85,195	39,666	15,940	43,473	30,059	41,540
Sept. 27.....	593,911	53,158	131,105	48,958	54,429	50,611	22,965	72,862	37,193	14,963	39,746	27,438	40,483
All other resources:													
Aug. 30.....	17,841	852	3,489	721	1,344	538	142	880	640	1,321	914	1,795	5,205
Sept. 6.....	18,193	901	3,378	757	1,446	653	154	825	668	1,334	969	1,796	5,312
Sept. 13.....	18,520	952	3,563	797	1,464	538	194	845	692	1,317	1,027	1,796	5,335
Sept. 20.....	14,194	473	2,009	460	1,064	583	149	435	487	1,339	614	1,854	4,727
Sept. 27.....	15,076	488	2,223	490	1,105	1,072	150	459	493	1,327	633	1,918	4,718
Total resources:													
Aug. 30.....	4,848,624	369,480	1,529,059	357,593	440,065	194,353	194,288	745,195	178,238	119,889	196,842	115,316	408,306
Sept. 6.....	4,930,953	375,511	1,531,199	365,124	445,741	195,505	200,687	761,746	185,634	126,787	205,252	125,828	411,939
Sept. 13.....	5,014,847	394,885	1,523,653	373,415	453,725	207,648	202,211	776,736	190,975	125,946	206,990	128,832	427,831
Sept. 20.....	5,005,676	393,005	1,498,108	376,265	454,962	214,154	211,154	769,509	191,737	131,423	207,040	137,040	415,540
Sept. 27.....	4,970,261	388,771	1,506,515	367,775	461,076	211,322	203,731	750,268	191,220	128,106	204,901	135,097	421,479

LIABILITIES.

Capital paid in:													
Aug. 30.....	106,086	8,107	27,664	9,194	11,690	5,618	4,328	14,734	4,785	3,577	4,573	4,199	7,617
Sept. 6.....	106,085	8,106	27,676	9,194	11,690	5,620	4,317	14,734	4,786	3,578	4,573	4,199	7,612
Sept. 13.....	106,070	8,106	27,677	9,194	11,690	5,618	4,321	14,732	4,786	3,562	4,573	4,199	7,612
Sept. 20.....	106,177	8,105	27,767	9,194	11,690	5,621	4,323	14,743	4,786	3,562	4,573	4,198	7,615
Sept. 27.....	106,172	8,090	27,772	9,194	11,689	5,622	4,324	14,744	4,787	3,562	4,571	4,199	7,618
Surplus:													
Aug. 30.....	215,398	16,483	60,197	17,945	22,509	11,030	9,114	29,025	9,388	7,468	9,646	7,394	15,199
Sept. 6.....	215,398	16,483	60,197	17,945	22,509	11,030	9,114	29,025	9,388	7,468	9,646	7,394	15,199
Sept. 13.....	215,398	16,483	60,197	17,945	22,509	11,030	9,114	29,025	9,388	7,468	9,646	7,394	15,199
Sept. 20.....	215,398	16,483	60,197	17,945	22,509	11,030	9,114	29,025	9,388	7,468	9,646	7,394	15,199
Sept. 27.....	215,398	16,483	60,197	17,945	22,509	11,030	9,114	29,025	9,388	7,468	9,646	7,394	15,199
Deposits:													
Government—													
Aug. 30.....	51,553	2,592	20,900	2,779	3,778	3,227	2,477	3,376	2,670	1,541	2,459	2,079	3,675
Sept. 6.....	37,730	875	14,428	845	3,247	1,529	3,126	5,416	1,581	1,343	1,725	2,244	1,371
Sept. 13.....	39,303	2,243	11,687	2,428	2,444	2,294	1,727	3,213	2,158	1,766	2,871	1,815	4,657
Sept. 20.....	37,019	2,708	21,154	3,108	3,561	4,196	3,830	7,255	2,167	1,783	1,037	3,076	3,144
Sept. 27.....	19,945	1,225	2,596	735	1,415	1,619	1,714	1,154	1,061	1,088	2,028	2,210	2,500
Member bank—re-serve account—													
Aug. 30.....	1,807,008	120,466	710,752	106,631	149,547	56,199	45,417	264,931	60,436	42,773	77,529	44,304	128,023
Sept. 6.....	1,796,081	120,668	698,254	106,826	149,325	55,922	49,437	256,267	61,676	45,652	80,637	47,940	123,477
Sept. 13.....	1,811,228	124,042	693,487	109,342	147,912	55,642	48,269	272,685	62,454	43,275	78,045	47,549	128,526
Sept. 20.....	1,774,997	122,524	655,269	114,131	147,460	55,604	50,776	262,639	60,502	47,867	79,231	50,359	128,638
Sept. 27.....	1,797,975	122,663	690,325	109,007	152,520	57,394	47,713	255,527	59,084	45,310	78,148	49,437	130,847
Other deposits—													
Aug. 30.....	23,125	514	9,669	1,656	951	228	229	1,284	571	297	458	188	7,080
Sept. 6.....	22,980	371	10,022	1,673	1,097	227	248	1,301	750	298	478	197	6,324
Sept. 13.....	21,572	441	9,518	1,352	1,106	239	355	1,153	680	250	628	167	5,683
Sept. 20.....	21,773	599	10,831	486	1,215	227	318	1,612	680	310	841	259	4,995
Sept. 27.....	22,213	421	11,172	616	1,136	234	206	1,256	616	262	548	213	5,533

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, AUG. 30 TO SEPT. 27, 1922—Continued.

LIABILITIES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Total deposits:													
Aug. 30.....	1,881,686	123,572	741,321	111,066	154,276	59,654	48,123	269,591	63,677	44,611	80,446	46,571	138,778
Sept. 6.....	1,856,797	121,914	722,704	109,344	153,669	57,678	52,811	262,984	64,007	47,293	82,840	50,381	131,172
Sept. 13.....	1,872,103	126,726	714,692	113,122	151,462	58,175	50,351	277,051	65,292	45,291	81,544	49,531	138,866
Sept. 20.....	1,853,789	125,831	687,251	117,725	152,236	60,027	54,924	271,506	63,349	49,960	81,109	53,694	136,177
Sept. 27.....	1,840,133	124,309	704,093	110,358	155,071	59,247	49,633	257,937	61,361	46,660	80,724	51,860	138,880
F. R. notes in actual circulation:													
Aug. 30.....	2,153,181	180,136	606,993	177,872	201,043	79,360	110,670	372,608	68,874	49,163	60,372	29,865	215,325
Sept. 6.....	2,211,889	186,609	615,358	182,528	205,256	82,060	114,301	382,801	70,653	51,328	62,024	35,076	223,745
Sept. 13.....	2,213,615	190,047	604,842	180,422	212,564	82,803	114,768	384,862	72,046	51,588	61,992	36,354	221,327
Sept. 20.....	2,218,764	190,351	605,186	180,159	209,383	84,996	116,590	382,330	74,260	52,415	63,076	39,334	220,684
Sept. 27.....	2,243,384	193,427	604,481	184,211	218,691	86,506	118,226	383,081	76,952	52,762	63,902	41,284	219,861
F. R. bank notes in circulation—net liability:													
Aug. 30.....	53,960	3,086	11,797	3,958	3,351	2,661	4,108	7,324	3,424	2,340	7,918	2,468	1,525
Sept. 6.....	52,793	2,577	10,842	3,758	3,414	2,662	4,301	7,916	3,390	2,351	7,607	2,423	1,552
Sept. 13.....	50,222	2,602	10,576	2,958	3,433	2,669	3,831	7,130	3,306	2,364	7,366	2,454	1,533
Sept. 20.....	46,834	2,572	9,214	2,968	3,435	2,627	3,449	5,943	3,411	2,362	6,898	2,404	1,551
Sept. 27.....	46,065	2,606	9,842	2,508	2,934	2,667	3,094	5,977	3,505	2,376	6,688	2,338	1,530
Deferred availability items:													
Aug. 30.....	415,762	36,704	76,215	36,019	44,385	34,902	16,778	48,560	27,208	11,328	32,783	23,093	27,787
Sept. 6.....	465,764	38,273	89,808	40,806	47,333	35,309	14,707	60,951	32,552	13,354	37,464	24,665	30,542
Sept. 13.....	534,674	49,455	102,804	48,178	50,118	46,217	18,676	60,675	35,268	14,260	40,754	27,189	41,080
Sept. 20.....	541,633	48,129	103,462	46,664	53,747	48,821	21,584	62,675	35,642	14,283	40,562	29,131	36,903
Sept. 27.....	495,471	42,331	94,987	41,905	48,117	45,097	18,147	56,135	34,284	13,896	38,196	26,330	36,046
All other liabilities:													
Aug. 30.....	22,551	1,392	4,872	1,539	1,911	1,128	1,167	3,353	882	1,402	1,104	1,726	2,075
Sept. 6.....	22,227	1,459	4,614	1,549	1,870	1,146	1,136	3,275	858	1,415	1,098	1,690	2,117
Sept. 13.....	22,765	1,466	4,865	1,596	1,949	1,136	1,150	3,261	889	1,413	1,115	1,711	2,214
Sept. 20.....	23,081	1,534	5,031	1,610	1,962	1,151	1,170	3,287	901	1,373	1,146	1,685	2,231
Sept. 27.....	23,638	1,525	5,143	1,654	2,065	1,153	1,193	3,369	943	1,382	1,174	1,692	2,345
Total liabilities:													
Aug. 30.....	4,848,624	369,480	1,529,059	357,593	440,065	194,353	194,288	745,195	178,238	119,889	196,842	115,316	408,306
Sept. 6.....	4,930,953	375,511	1,531,199	365,124	445,741	195,505	200,687	761,746	185,634	126,787	205,252	125,828	411,939
Sept. 13.....	5,014,847	391,885	1,525,653	373,415	453,725	207,648	202,211	776,736	190,975	125,946	206,990	128,832	427,831
Sept. 20.....	5,005,676	393,005	1,498,108	376,265	454,962	214,273	211,154	769,509	191,737	131,423	207,040	137,840	420,360
Sept. 27.....	4,970,261	388,771	1,506,515	367,775	461,076	211,322	203,781	750,268	191,220	128,106	204,901	135,097	421,479
MEMORANDA.													
Ratio of total reserves to deposit and F. R. note liabilities combined—per cent:													
Aug. 30.....	79.2	75.9	86.3	73.2	70.9	77.8	84.2	87.3	65.0	71.1	64.0	56.4	70.4
Sept. 6.....	78.3	74.3	83.8	74.3	71.3	75.7	81.9	88.4	64.3	74.0	64.4	61.7	68.7
Sept. 13.....	78.3	75.2	83.7	73.5	69.5	79.3	82.3	89.2	63.5	73.2	65.3	62.1	67.2
Sept. 20.....	78.3	81.5	84.4	75.2	71.0	73.8	77.5	87.2	60.4	66.7	64.0	66.9	68.4
Sept. 27.....	78.4	81.9	83.7	75.2	71.9	76.7	79.9	87.7	63.1	65.9	63.8	67.5	67.4
Contingent liability on bills purchased for foreign correspondents:													
Aug. 30.....	29,877	2,173	11,007	2,382	2,441	1,458	1,098	3,543	1,399	804	1,429	774	1,369
Sept. 6.....	29,859	2,173	10,989	2,382	2,441	1,458	1,098	3,543	1,399	804	1,429	774	1,369
Sept. 13.....	29,879	2,173	11,009	2,382	2,441	1,458	1,098	3,543	1,399	804	1,429	774	1,369
Sept. 20.....	29,888	2,173	11,018	2,382	2,441	1,458	1,098	3,543	1,399	804	1,429	774	1,369
Sept. 27.....	27,368	1,990	10,085	2,181	2,235	1,336	1,009	3,244	1,281	736	1,308	709	1,254

MATURITY DISTRIBUTION OF BILLS, CERTIFICATES OF INDEBTEDNESS, AND MUNICIPAL WARRANTS HELD BY THE 12 FEDERAL RESERVE BANKS COMBINED.

[In thousands of dollars.]

	Total.	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.
Bills discounted:						
Aug. 30.....	404,368	200,952	44,391	81,740	50,962	26,323
Sept. 6.....	405,083	206,038	55,179	78,259	42,579	23,028
Sept. 13.....	387,173	195,219	49,268	77,490	43,476	21,720
Sept. 20.....	423,907	230,408	47,642	81,042	45,372	19,443
Sept. 27.....	420,180	225,972	51,960	76,305	47,102	18,841
Bills bought in open market:						
Aug. 30.....	171,706	45,053	33,228	53,998	36,022	3,405
Sept. 6.....	188,365	55,118	34,463	61,105	34,756	2,923
Sept. 13.....	204,663	56,155	38,938	63,931	38,298	7,341
Sept. 20.....	220,267	53,112	42,809	64,992	49,439	9,915
Sept. 27.....	238,116	55,875	53,496	60,514	53,524	14,707
United States certificates of indebtedness:						
Aug. 30.....	304,220	11,069	32,599	34,287	10,420	215,845
Sept. 6.....	300,678	39,923	7,624	38,330	1,498	213,248
Sept. 13.....	298,045	38,721	8,336	35,604	3,398	211,936
Sept. 20.....	225,399	11,712	19,662	8,890	63,787	121,348
Sept. 27.....	222,288	9,034	22,552	2,631	68,922	119,139
Municipal warrants:						
Aug. 30.....	21	—	6	—	3	12
Sept. 6.....	21	—	9	—	—	12
Sept. 13.....	18	3	—	3	—	12
Sept. 20.....	16	1	—	—	—	12
Sept. 27.....	15	—	—	3	—	12

FEDERAL RESERVE NOTES.

FEDERAL RESERVE AGENTS' ACCOUNTS ON WEDNESDAYS, AUGUST 30 TO SEPTEMBER 27, 1922.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Net amount of F. R. notes received from Comptroller of Currency:													
Aug. 30.....	3,379,246	283,980	1,184,105	245,494	248,055	118,506	187,607	493,016	111,457	64,976	85,421	53,048	303,581
Sept. 6.....	3,388,980	282,258	1,188,949	250,575	250,317	118,369	189,279	491,648	113,462	64,976	85,008	52,733	301,406
Sept. 13.....	3,444,730	287,880	1,204,120	249,014	257,282	117,573	195,461	499,336	117,042	65,646	85,420	61,305	304,651
Sept. 20.....	3,472,244	294,474	1,200,867	247,258	257,003	126,060	194,672	505,891	118,368	65,790	84,931	62,043	314,884
Sept. 27.....	3,466,366	292,202	1,198,135	245,570	260,372	125,188	194,788	502,452	118,484	66,332	86,612	61,788	314,443
F. R. notes on hand:													
Aug. 30.....	775,327	91,250	293,050	45,020	32,220	31,760	72,409	77,980	28,130	13,715	14,100	20,263	55,430
Sept. 6.....	749,687	82,150	294,050	48,220	32,820	30,520	70,734	73,580	27,330	10,810	13,900	14,643	50,910
Sept. 13.....	792,417	83,400	323,410	40,220	32,040	29,640	74,434	79,460	27,730	11,075	12,900	21,198	50,910
Sept. 20.....	836,132	87,800	350,410	44,220	32,020	34,550	72,494	84,500	26,930	11,280	11,500	18,938	61,490
Sept. 27.....	812,822	84,800	347,410	42,220	28,020	32,590	70,774	80,840	26,930	10,840	13,450	15,838	59,110
F. R. notes outstanding:													
Aug. 30.....	2,603,919	192,730	891,055	200,474	215,835	86,746	115,198	415,036	83,327	51,261	71,321	32,785	248,151
Sept. 6.....	2,639,293	200,108	894,899	202,355	217,497	87,819	118,525	418,068	86,132	54,166	71,108	38,090	250,496
Sept. 13.....	2,652,313	204,480	880,710	202,794	225,242	87,933	121,027	419,876	89,312	54,571	72,520	40,107	253,741
Sept. 20.....	2,636,112	206,674	850,457	203,038	224,983	91,510	122,178	421,394	91,438	54,510	73,431	43,105	253,394
Sept. 27.....	2,633,544	207,402	850,725	203,350	232,352	92,598	124,014	421,612	91,554	55,492	73,162	45,950	255,333
Collateral security for F. R. notes outstanding:													
Gold and gold certificates—													
Aug. 30.....	416,522	5,300	363,184	-----	13,275	-----	2,400	-----	11,610	13,052	-----	7,701	-----
Sept. 6.....	416,522	5,300	363,184	-----	13,275	-----	2,400	-----	11,610	13,052	-----	7,701	-----
Sept. 13.....	416,508	5,300	363,184	-----	13,275	-----	2,400	-----	11,610	13,052	-----	7,687	-----
Sept. 20.....	416,507	5,300	363,184	-----	13,275	-----	2,400	-----	11,610	13,052	-----	7,686	-----
Sept. 27.....	416,508	5,300	363,184	-----	13,275	-----	2,400	-----	11,610	13,052	-----	7,687	-----
Gold redemption fund—													
Aug. 30.....	122,088	16,193	38,348	10,437	10,842	3,452	3,088	15,177	3,072	1,833	3,724	2,604	13,318
Sept. 6.....	124,654	14,471	38,208	14,519	11,204	2,815	4,960	15,808	3,537	1,833	3,111	2,289	11,899
Sept. 13.....	126,505	11,093	38,099	12,958	14,269	2,019	4,111	15,497	3,257	1,143	2,823	3,100	18,106
Sept. 20.....	132,617	18,687	37,809	11,201	12,310	4,016	3,352	16,395	2,983	1,607	4,334	2,838	17,055
Sept. 27.....	133,652	16,415	37,657	14,513	13,080	3,174	5,468	15,953	3,619	1,309	4,015	2,583	15,866
Gold fund—F. R. Board—													
Aug. 30.....	1,639,048	143,000	431,000	139,889	145,000	53,795	90,500	369,641	40,800	13,000	53,360	6,000	173,060
Sept. 6.....	1,665,292	153,000	431,000	134,889	145,000	53,795	88,500	367,645	38,800	18,000	51,360	9,000	174,303
Sept. 13.....	1,676,149	163,000	411,000	134,889	150,000	58,795	88,500	379,644	43,300	18,000	53,360	9,000	166,661
Sept. 20.....	1,653,134	153,000	411,000	136,889	150,000	55,795	89,000	376,645	40,300	18,000	52,360	9,000	161,145
Sept. 27.....	1,610,362	153,000	371,000	134,889	150,000	55,795	86,000	373,644	41,300	18,000	49,360	15,000	162,374
Eligible paper—Amount required—													
Aug. 30.....	406,261	28,237	58,523	50,148	46,718	29,499	19,210	30,215	27,845	23,376	14,237	16,480	61,773
Sept. 6.....	432,825	27,337	62,507	52,947	48,018	31,239	22,665	34,615	32,185	21,281	16,637	19,100	64,294
Sept. 13.....	433,151	25,087	68,427	54,947	47,698	27,119	25,986	24,735	31,145	22,376	16,337	20,320	68,974
Sept. 20.....	433,854	29,687	38,464	54,948	49,398	31,669	27,426	28,354	36,545	21,851	16,737	23,581	75,194
Sept. 27.....	493,022	32,687	78,884	53,948	55,997	33,629	30,146	32,015	35,025	23,131	19,787	20,680	77,093
Excess amount held—													
Aug. 30.....	156,965	6,800	27,194	13,670	7,762	6,480	11,880	43,774	4,690	3,429	4,387	22,774	4,116
Sept. 6.....	145,385	14,209	41,804	3,621	9,176	2,444	10,114	31,071	1,303	4,651	1,395	17,504	8,093
Sept. 13.....	147,060	10,756	38,273	6,181	11,704	7,396	6,012	36,182	1,680	2,803	1,458	16,452	8,163
Sept. 20.....	196,318	12,088	74,241	3,631	16,830	8,283	13,996	43,930	2,519	3,888	3,399	12,357	1,156
Sept. 27.....	150,671	8,610	42,769	3,303	13,332	6,158	8,378	41,817	3,369	2,598	2,647	14,324	3,366

CONDITION OF MEMBER BANKS IN LEADING CITIES.

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, FROM AUGUST 23 TO SEPTEMBER 20, 1922.

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Number of reporting banks:													
Aug. 23.....	790	48	105	56	84	79	42	109	37	33	78	51	68
Aug. 30.....	790	48	105	56	84	79	42	109	37	33	78	51	68
Sept. 6.....	790	48	105	56	84	79	41	109	37	33	79	51	68
Sept. 13.....	790	48	105	56	84	79	41	109	37	33	79	51	68
Sept. 20.....	790	48	105	56	84	79	40	109	37	33	79	52	68
Loans and discounts, including bills rediscounted with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	256,370	13,662	84,001	15,691	29,763	11,025	7,602	40,980	14,641	8,381	10,546	4,322	15,756
Aug. 30.....	259,330	13,261	84,148	15,888	29,498	11,023	8,797	43,633	14,615	8,191	9,973	4,263	16,040
Sept. 6.....	256,988	14,374	85,219	15,889	29,654	11,009	7,371	41,686	13,900	8,214	9,976	4,267	15,729
Sept. 13.....	263,642	14,732	87,842	16,073	29,361	11,177	7,434	42,857	15,562	8,267	10,078	4,105	16,154
Sept. 20.....	266,199	14,337	88,325	16,739	29,482	10,132	7,100	40,402	16,014	8,318	10,159	4,125	21,066
Secured by stocks and bonds (other than U. S. Government obligations)—													
Aug. 23.....	3,481,454	207,732	1,569,522	236,268	336,024	117,702	57,416	530,625	130,337	37,570	66,941	42,502	148,815
Aug. 30.....	3,482,013	209,638	1,572,318	234,324	337,407	118,017	57,558	528,071	132,244	38,203	67,760	42,788	143,685
Sept. 6.....	3,480,189	216,815	1,579,707	239,988	337,124	120,537	56,763	516,986	122,650	38,255	67,510	42,570	141,284
Sept. 13.....	3,528,112	222,148	1,616,415	247,382	338,777	116,348	52,590	516,076	124,493	38,294	67,538	42,729	144,422
Sept. 20.....	3,555,600	220,430	1,653,812	240,906	337,285	117,030	57,243	511,461	121,909	39,015	68,962	41,713	145,834
All other—													
Aug. 23.....	7,028,215	559,325	2,221,657	311,365	633,150	297,187	294,490	1,000,748	269,801	195,727	348,780	190,926	705,050
Aug. 30.....	7,019,852	559,658	2,212,165	313,309	636,520	298,948	291,380	1,004,619	260,965	193,653	348,501	192,018	708,716
Sept. 6.....	7,082,676	561,619	2,230,089	317,327	638,646	298,857	291,852	1,010,803	276,835	198,753	350,844	190,517	716,504
Sept. 13.....	7,103,626	569,867	2,230,354	317,708	643,333	307,312	301,348	1,002,681	279,851	200,160	348,020	197,603	715,389
Sept. 20.....	7,117,434	574,174	2,224,373	321,117	646,322	306,654	302,806	1,000,030	275,498	194,833	349,097	205,928	716,202
Total loans and discounts including bills rediscounted with F. R. banks:													
Aug. 23.....	10,766,089	780,719	3,875,180	563,324	998,946	425,914	350,508	1,372,353	414,779	211,678	426,267	237,750	869,621
Aug. 30.....	10,761,105	782,557	3,868,631	563,321	1,003,425	427,988	357,735	1,376,323	407,824	239,147	426,234	239,069	868,441
Sept. 6.....	10,819,853	792,808	3,895,015	572,904	1,005,424	430,403	353,986	1,369,475	413,383	245,222	428,330	237,381	873,517
Sept. 13.....	10,895,380	806,747	3,924,611	581,163	1,011,471	434,837	361,372	1,362,514	419,906	246,721	425,636	244,437	875,965
Sept. 20.....	10,939,233	808,941	3,966,710	578,762	1,013,289	433,816	367,149	1,351,893	413,121	242,166	428,218	251,766	883,102
U. S. bonds:													
Aug. 23.....	1,367,331	97,260	570,753	57,483	155,861	58,016	29,312	133,757	32,916	23,641	57,797	34,724	115,811
Aug. 30.....	1,366,800	97,886	568,596	57,190	155,562	58,202	29,452	135,106	33,343	23,701	57,636	33,787	116,199
Sept. 6.....	1,373,364	99,986	567,587	57,821	156,796	59,455	29,214	134,729	36,738	23,868	58,251	34,051	116,888
Sept. 13.....	1,382,968	98,382	566,121	58,282	161,049	59,449	29,242	137,186	36,045	24,083	58,539	34,294	120,296
Sept. 20.....	1,381,695	96,461	568,001	58,278	159,951	59,557	28,569	136,498	36,542	24,391	57,902	34,409	121,115
U. S. victory notes:													
Aug. 23.....	40,827	779	15,776	4,827	2,275	307	562	4,460	4,292	281	1,029	562	5,677
Aug. 30.....	47,863	810	21,576	5,197	2,534	306	541	4,972	4,141	283	1,364	558	5,581
Sept. 6.....	49,293	816	21,787	6,311	2,221	228	621	5,016	4,357	283	1,355	566	5,732
Sept. 13.....	45,524	1,784	20,939	3,151	2,237	294	638	4,711	4,433	283	1,424	516	4,984
Sept. 20.....	39,353	1,770	16,212	2,549	1,766	234	611	4,458	4,620	286	1,340	528	5,179
U. S. Treasury notes:													
Aug. 23.....	657,134	25,782	405,715	26,639	40,083	5,895	5,137	77,000	9,309	9,308	13,596	8,207	30,463
Aug. 30.....	647,325	26,982	402,074	26,695	39,839	6,037	3,896	75,604	8,251	9,308	13,837	8,242	26,560
Sept. 6.....	650,581	26,952	406,283	25,808	38,513	4,685	4,386	73,698	8,531	9,308	13,570	8,966	30,181
Sept. 13.....	635,380	24,699	398,208	26,830	37,748	4,703	4,386	71,546	8,102	9,141	11,478	9,174	29,365
Sept. 20.....	630,304	23,925	401,264	26,636	35,834	4,954	3,146	71,519	8,220	9,303	12,140	8,588	24,775
U. S. certificates of indebtedness:													
Aug. 23.....	181,022	5,613	72,654	6,846	7,871	3,095	6,699	30,122	6,874	5,975	9,560	6,582	19,131
Aug. 30.....	192,585	5,549	78,509	7,250	8,937	3,557	8,366	27,415	7,206	5,597	10,225	6,263	23,709
Sept. 6.....	173,272	5,724	65,313	7,195	9,180	3,757	8,866	25,084	7,299	5,390	10,405	5,632	19,027
Sept. 13.....	175,165	5,801	66,914	7,200	8,394	3,841	8,480	27,147	7,391	5,302	10,840	5,382	18,873
Sept. 20.....	211,902	7,830	66,784	12,343	11,403	5,703	9,382	37,871	9,268	7,474	13,192	8,155	22,497
Other bonds, stocks, and securities:													
Aug. 23.....	2,303,380	171,639	821,127	186,736	284,412	55,262	34,471	410,050	84,006	27,117	60,437	7,281	160,842
Aug. 30.....	2,277,718	171,171	796,436	187,445	283,683	55,683	34,711	408,320	84,359	26,573	60,866	7,899	160,572
Sept. 6.....	2,263,963	171,006	787,660	186,722	281,875	55,794	32,367	408,382	83,933	26,641	60,071	7,713	161,799
Sept. 13.....	2,241,889	169,936	770,693	185,784	280,711	55,946	32,951	405,728	84,176	26,126	60,582	7,851	161,405
Sept. 20.....	2,236,854	169,058	761,881	184,778	281,314	55,779	33,493	410,707	85,295	26,832	60,000	7,502	160,215
Total loans and discounts and investments, including bills rediscounted with F. R. banks:													
Aug. 23.....	15,315,733	1,081,792	5,761,205	845,855	1,489,448	548,489	435,639	2,227,742	552,176	308,000	568,686	295,106	1,201,545
Aug. 30.....	15,293,544	1,084,955	5,735,822	847,298	1,493,980	551,773	434,701	2,227,740	545,324	304,909	570,162	295,818	1,201,062
Sept. 6.....	15,332,626	1,097,292	5,743,645	856,761	1,494,009	554,322	431,440	2,216,384	554,243	310,712	572,362	294,312	1,207,144
Sept. 13.....	15,376,306	1,107,349	5,747,509	862,410	1,501,610	559,070	437,069	2,208,832	560,163	311,656	568,096	301,654	1,210,888
Sept. 20.....	15,439,541	1,107,985	5,780,852	863,346	1,503,557	560,043	442,341	2,212,946	557,366	310,452	572,792	310,948	1,216,883
Reserve with F. R. banks:													
Aug. 23.....	1,356,998	83,474	637,989	67,187	96,161	34,923	26,752	197,875	37,266	18,783	47,391	23,350	85,847
Aug. 30.....	1,377,582	83,849	646,984	67,758	104,592	34,102	28,145	199,873	37,095	19,178	46,407	22,480	89,119
Sept. 6.....	1,368,905	84,075	635,110	69,251	106,051	33,687	31,568	192,025	37,817	22,120	40,036	25,010	82,153
Sept. 13.....	1,363,966	85,681	628,470	68,637	96,194	34,708	29,834	204,899	38,591	22,640	47,011	23,418	86,013
Sept. 20.....	1,338,900	84,604	592,685	73,510	103,079	33,553	32,930	196,956	37,174	24,157	47,603	25,673	86,976

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, FROM AUGUST 23 TO SEPTEMBER 20, 1922—Continued.

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Cash in vault:													
Aug. 23.....	268,863	17,868	84,276	14,709	26,955	12,848	9,160	50,183	6,293	5,996	11,803	9,100	19,672
Aug. 30.....	274,189	18,389	84,718	15,209	27,069	13,127	9,452	50,986	6,881	6,138	12,149	9,308	20,823
Sept. 6.....	282,539	19,125	88,974	15,025	27,769	13,675	9,288	53,978	7,423	5,875	11,672	9,759	19,676
Sept. 13.....	291,404	19,593	89,264	15,161	29,792	13,721	9,400	57,274	7,246	6,852	12,153	10,293	20,649
Sept. 20.....	283,128	18,746	87,869	15,103	28,891	16,613	8,823	52,386	6,829	6,101	11,935	10,079	19,753
Net demand deposits:													
Aug. 23.....	10,939,671	780,621	4,795,137	679,516	861,582	330,041	249,785	1,447,668	319,218	191,779	448,779	207,525	627,993
Aug. 30.....	10,942,232	782,660	4,799,790	677,443	865,298	327,243	250,856	1,440,503	319,741	190,986	446,858	206,793	634,061
Sept. 6.....	10,992,939	791,135	4,794,570	689,493	874,958	331,996	249,695	1,446,489	322,358	198,153	451,038	209,926	633,128
Sept. 13.....	11,144,276	808,048	4,853,066	698,314	881,899	332,171	254,278	1,475,987	331,997	200,508	450,751	217,757	639,500
Sept. 20.....	11,060,765	805,244	4,841,689	696,911	874,927	321,031	251,144	1,437,300	319,479	194,741	449,124	221,778	644,337
Time deposits:													
Aug. 23.....	3,588,105	240,473	823,756	54,300	502,953	142,407	153,569	697,264	169,116	78,009	116,489	64,234	545,535
Aug. 30.....	3,598,688	240,308	828,129	54,371	504,625	141,567	154,211	701,687	170,386	77,716	116,844	64,013	544,831
Sept. 6.....	3,602,623	246,320	823,232	54,891	503,713	143,422	151,930	697,292	170,593	79,594	117,785	63,628	550,023
Sept. 13.....	3,561,145	245,975	781,538	54,832	502,044	143,612	152,891	701,125	170,415	79,537	117,833	64,084	550,539
Sept. 20.....	3,575,296	246,186	782,193	55,180	504,634	144,747	151,717	701,755	170,895	80,772	117,555	64,537	552,075
Government deposits:													
Aug. 23.....	178,591	13,004	69,133	11,583	15,072	5,470	5,150	24,969	4,211	5,935	5,973	4,460	13,631
Aug. 30.....	177,680	13,004	69,133	11,580	15,092	5,465	5,150	24,046	4,211	5,935	5,973	4,460	13,631
Sept. 6.....	178,300	13,004	69,133	11,622	15,072	5,425	5,150	24,949	4,211	6,053	5,973	4,066	13,642
Sept. 13.....	157,655	11,706	62,223	10,423	13,093	4,893	4,632	19,927	3,749	5,342	5,479	4,029	12,159
Sept. 20.....	148,449	11,909	51,074	10,755	11,098	4,529	4,621	18,030	6,476	6,598	5,503	3,668	11,128
Bills payable with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	53,412	2,000	21,218	8,431	5,150	3,211	95	5,057	1,350	302	68		6,500
Aug. 30.....	57,447	3,919	15,708	8,307	3,931	3,582		12,832	776	513	1,119		6,760
Sept. 6.....	56,923	3,165	18,620	9,438	5,321	3,585	95	8,432	1,255	138	719		6,155
Sept. 13.....	51,135	3,688	12,651	9,973	8,148	3,549	95	5,521	1,356	138	208	500	5,305
Sept. 20.....	62,012	2,089	11,169	9,731	10,788	7,516	2,044	6,529	4,307	889	1,330	65	5,585
All other—													
Aug. 23.....	191												191
Aug. 30.....	552				20	350							182
Sept. 6.....	447				20	250							177
Sept. 13.....	193				20								173
Sept. 20.....	315				115								170
Bills rediscounted with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	667	39	244	55	72	70	29	5	8	1	37	6	101
Aug. 30.....	1,212	39	244	55	105	98	507	5	8	1	38		112
Sept. 6.....	503	39		55	101	88	44	5	8	1	33	6	123
Sept. 13.....	983	39	486	55	100	78	21	41	7	1	50	6	99
Sept. 20.....	817	56	228	105	77	100	56	41	7		44	6	97
All other—													
Aug. 23.....	62,981	11,633	14,613	4,718	4,626	6,633	2,939	3,666	2,550	2,481	1,811	3,422	3,880
Aug. 30.....	68,229	10,405	15,684	5,565	6,370	6,415	3,041	6,828	1,156	2,365	2,384	4,222	3,794
Sept. 6.....	78,815	15,856	17,666	5,187	6,939	6,255	4,475	4,792	2,388	2,328	2,393	3,966	6,570
Sept. 13.....	69,027	12,606	15,800	5,419	4,048	6,771	3,643	4,266	1,712	2,350	2,675	3,798	5,939
Sept. 20.....	100,636	16,313	22,449	6,849	5,981	8,307	9,263	10,201	5,289	2,305	3,901	4,600	5,148

MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Number of reporting banks:													
Aug. 23.....	268	25	64	43	8	10	8	50	13	8	16	8	15
Aug. 30.....	268	25	64	43	8	10	8	50	13	8	16	8	15
Sept. 6.....	268	25	64	43	8	10	8	50	13	8	16	8	15
Sept. 13.....	268	25	64	43	8	10	8	50	13	8	16	8	15
Sept. 20.....	267	25	64	43	8	10	7	50	13	8	16	8	15
Loans and discounts, including bills rediscounted with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	167,163	10,959	74,310	13,920	6,861	2,178	1,642	32,304	11,170	5,505	2,144	1,297	4,873
Aug. 30.....	170,556	10,370	74,009	14,130	6,581	2,164	2,563	34,972	11,077	5,503	2,238	1,237	4,912
Sept. 6.....	168,982	11,692	73,593	13,861	6,591	2,150	1,541	33,109	10,550	5,530	2,209	1,226	4,930
Sept. 13.....	175,211	12,092	78,217	14,342	6,527	2,171	1,518	34,083	12,302	5,589	2,275	1,180	4,885
Sept. 20.....	177,627	11,684	77,728	14,806	6,486	2,099	1,358	31,285	12,725	5,540	2,238	1,224	10,454
Secured by stocks and bonds (other than U. S. Government obligations)—													
Aug. 23.....	2,516,173	159,105	1,397,769	215,416	135,796	15,464	10,771	402,955	101,216	16,679	17,364	8,520	65,118
Aug. 30.....	2,548,746	161,354	1,401,886	213,495	137,655	15,060	9,588	400,369	103,185	16,998	17,781	8,974	61,795
Sept. 6.....	2,516,797	167,003	1,406,674	219,346	138,410	15,770	10,801	389,857	93,539	17,271	16,850	8,966	61,710
Sept. 13.....	2,600,486	172,639	1,440,124	226,762	138,052	15,795	10,177	393,380	95,222	17,818	17,827	8,971	63,719
Sept. 20.....	2,619,038	170,991	1,479,008	220,007	135,053	15,751	9,670	386,874	92,160	18,275	17,905	9,309	64,052

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, FROM AUGUST 23 TO SEPTEMBER 20, 1922—Continued.

MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Loans and discounts, including bills rediscounted with F. R. banks—Continued.													
All other—													
Aug. 23.....	4,402,692	422,666	1,944,332	282,612	289,681	61,058	53,267	631,938	161,442	100,692	120,849	49,513	284,642
Aug. 30.....	4,385,823	422,735	1,932,983	281,269	290,376	61,469	53,830	630,672	155,925	97,220	119,361	49,836	287,147
Sept. 6.....	4,433,613	424,631	1,949,677	287,750	290,997	61,701	51,557	637,105	168,795	101,559	120,893	49,459	289,219
Sept. 13.....	4,431,624	432,973	1,940,018	288,629	293,709	65,539	53,529	627,425	170,501	101,265	117,911	51,250	288,875
Sept. 20.....	4,425,708	436,071	1,944,075	292,288	294,741	61,235	47,432	627,196	165,013	96,911	118,680	52,747	286,316
Total loans and discounts, including bills rediscounted with F. R. banks:													
Aug. 23.....	7,116,028	592,730	3,416,411	511,948	432,338	78,709	65,680	1,067,197	273,828	122,876	140,357	59,330	354,633
Aug. 30.....	7,105,125	594,659	3,409,478	511,894	434,612	79,299	65,981	1,066,013	270,187	119,721	139,380	60,047	353,851
Sept. 6.....	7,149,422	603,926	3,431,944	520,957	435,998	79,621	63,899	1,060,371	272,881	124,360	139,952	59,651	355,859
Sept. 13.....	7,207,321	617,704	3,458,359	529,733	438,288	83,505	65,254	1,051,888	278,025	124,672	138,013	61,401	357,479
Sept. 20.....	7,222,373	618,746	3,500,811	527,101	436,260	82,088	58,460	1,045,355	269,598	120,729	138,823	63,280	360,822
U. S. bonds:													
Aug. 23.....	795,737	41,122	501,756	43,971	25,774	4,671	5,343	61,653	16,815	5,676	23,304	9,267	56,382
Aug. 30.....	798,019	41,388	499,674	43,402	28,054	4,679	5,343	62,952	17,381	5,729	23,688	9,267	56,462
Sept. 6.....	800,241	43,582	498,751	43,862	28,122	4,682	5,343	61,134	19,067	5,828	23,486	9,267	57,117
Sept. 13.....	801,540	41,957	495,850	44,290	28,005	4,567	5,343	63,224	19,506	6,341	23,386	9,267	59,714
Sept. 20.....	800,803	39,695	497,231	44,203	28,423	4,544	4,862	62,412	20,095	6,343	23,397	9,264	60,334
U. S. Victory notes:													
Aug. 23.....	29,210	227	14,535	4,791	184	-----	1	3,873	2,969	29	277	53	2,271
Aug. 30.....	36,178	256	20,311	5,159	178	-----	1	4,496	2,988	29	298	54	2,408
Sept. 6.....	36,915	262	20,514	6,271	172	-----	1	4,550	2,392	29	254	54	2,416
Sept. 13.....	33,180	1,228	19,830	3,102	96	54	1	4,191	2,418	29	339	54	1,838
Sept. 20.....	27,471	1,214	15,070	2,497	97	-----	1	3,956	2,437	29	246	56	1,868
U. S. Treasury notes:													
Aug. 23.....	525,855	21,176	387,656	24,475	6,793	717	964	52,893	5,545	-----	7,976	3,740	13,920
Aug. 30.....	522,894	22,041	384,965	24,379	6,835	717	964	51,813	5,455	-----	8,122	3,740	13,863
Sept. 6.....	525,659	22,006	387,789	23,494	6,844	695	964	51,549	6,118	-----	8,123	4,363	13,714
Sept. 13.....	511,053	19,750	379,724	24,516	6,830	695	964	50,063	6,088	-----	5,902	4,363	12,158
Sept. 20.....	510,957	19,047	382,972	24,170	6,930	867	964	50,100	6,434	-----	5,684	3,701	10,988
U. S. certificates of indebtedness:													
Aug. 23.....	120,071	5,316	68,458	6,013	2,478	1,242	3,951	13,780	6,418	2,112	1,381	3,568	5,354
Aug. 30.....	126,539	5,252	74,768	6,643	2,341	1,242	3,951	14,069	6,512	1,732	1,336	3,252	5,441
Sept. 6.....	113,377	5,427	61,703	6,839	2,336	1,242	3,941	14,137	6,586	1,505	1,337	2,638	5,686
Sept. 13.....	113,742	5,504	63,165	6,769	2,340	1,267	3,670	13,641	6,656	1,270	1,543	2,638	5,279
Sept. 20.....	134,249	6,338	60,023	11,465	5,508	1,956	3,527	20,372	7,794	2,556	3,539	4,276	6,895
Other bonds, stocks, and securities:													
Aug. 23.....	1,264,037	81,183	622,599	151,139	63,907	6,284	3,571	179,234	53,568	11,819	12,691	810	77,232
Aug. 30.....	1,236,650	80,371	597,435	152,090	63,577	6,474	3,530	175,726	53,373	11,724	12,579	837	78,934
Sept. 6.....	1,227,494	79,712	591,338	151,225	62,487	6,467	3,529	176,570	53,361	11,677	12,498	825	77,805
Sept. 13.....	1,207,014	78,417	575,362	150,956	62,212	6,548	3,526	173,468	53,403	11,482	13,160	825	77,655
Sept. 20.....	1,199,526	78,172	567,433	149,888	61,626	6,567	2,906	177,477	54,257	11,515	12,525	770	76,390
Total loans and discounts and investments, including bills rediscounted with F. R. banks:													
Aug. 23.....	9,850,938	741,754	5,011,415	742,337	531,474	91,617	79,510	1,378,630	359,143	142,512	185,986	76,768	509,792
Aug. 30.....	9,825,405	743,967	4,986,631	743,567	535,597	92,411	79,770	1,375,069	355,896	138,935	185,403	77,197	510,962
Sept. 6.....	9,853,108	754,915	4,992,039	752,648	535,959	92,707	77,677	1,368,311	360,408	143,399	185,650	76,798	512,597
Sept. 13.....	9,873,850	764,560	4,992,290	759,369	537,771	96,636	78,758	1,359,475	366,186	143,704	182,343	78,548	514,123
Sept. 20.....	9,895,379	763,212	5,023,540	759,324	538,844	96,022	70,720	1,359,672	360,915	141,172	184,214	81,347	516,397
Reserve with F. R. banks:													
Aug. 23.....	987,986	67,435	592,911	62,003	29,831	5,714	4,892	138,189	25,014	8,497	15,781	5,989	31,727
Aug. 30.....	1,001,765	66,974	602,532	60,550	33,521	5,140	4,649	137,936	25,012	9,289	15,547	5,967	34,748
Sept. 6.....	988,808	67,227	589,367	64,203	33,596	5,409	4,861	136,232	24,989	11,716	17,364	6,050	27,794
Sept. 13.....	988,136	68,538	578,337	63,160	31,510	5,650	5,340	145,619	27,042	8,934	16,503	6,071	31,426
Sept. 20.....	956,645	66,886	544,822	67,926	29,200	5,269	5,838	141,220	25,059	14,471	14,030	7,599	34,325
Cash in vault:													
Aug. 23.....	144,333	8,240	71,622	12,063	7,259	955	1,790	27,905	2,988	2,075	2,297	1,497	5,642
Aug. 30.....	147,746	8,420	72,292	12,424	7,912	945	1,909	28,488	3,513	2,152	2,161	1,406	6,124
Sept. 6.....	151,566	9,085	75,290	12,105	7,617	1,065	1,766	29,648	3,347	1,998	2,288	1,474	5,883
Sept. 13.....	154,800	8,684	75,549	12,606	8,737	943	1,952	30,877	3,291	2,303	2,277	1,526	6,055
Sept. 20.....	149,906	8,376	73,838	12,360	8,173	970	1,658	28,791	3,184	2,165	2,248	1,394	5,849
Net demand deposits:													
Aug. 23.....	7,611,706	603,629	4,307,708	601,607	235,560	52,120	44,104	1,000,232	222,253	91,703	157,255	57,532	238,003
Aug. 30.....	7,623,462	606,686	4,316,409	600,761	234,773	52,630	44,435	997,632	222,024	91,440	156,383	57,031	243,238
Sept. 6.....	7,638,126	611,169	4,305,295	611,340	240,643	52,788	44,406	998,320	224,007	95,746	156,732	57,565	240,025
Sept. 13.....	7,731,511	624,000	4,352,754	620,169	244,497	54,222	44,992	1,004,507	232,900	94,264	155,803	60,632	242,615
Sept. 20.....	7,679,616	619,789	4,347,413	618,686	235,982	51,795	40,111	983,158	220,304	92,102	155,487	62,181	232,008
Time deposits:													
Aug. 23.....	1,808,737	107,716	605,396	37,919	297,383	24,218	23,050	333,707	96,862	32,891	11,381	9,022	229,192
Aug. 30.....	1,811,516	107,520	606,620	38,014	298,639	24,212	22,900	334,514	98,149	32,378	11,450	9,883	228,157
Sept. 6.....	1,808,174	113,136	601,031	38,525	296,850	24,216	23,012	328,414	98,259	33,882	11,429	9,022	230,368
Sept. 13.....	1,767,754	112,216	558,577	38,567	296,527	24,156	22,991	330,897	98,772	33,813	11,451	9,108	230,079
Sept. 20.....	1,766,442	112,263	557,658	38,875	298,455	24,193	19,512	330,693	98,699	34,422	11,271	9,219	231,182
Government deposits:													
Aug. 23.....	133,782	10,675	64,430	10,655	5,689	1,465	1,769	17,265	3,155	1,925	4,209	2,972	9,576
Aug. 30.....	133,388	10,675	64,430	10,655	5,688	1,465	1,769	16,871	3,155	1,925	4,209	2,972	9,576
Sept. 6.....	133,949	10,675	64,430	10,697	5,688	1,465	1,769	17,265	3,155	2,043	4,209	2,973	9,582
Sept. 13.....	119,815	9,609	57,988	9,590	5,088	1,319	1,590	14,881	2,840	1,731	3,889	2,675	8,617
Sept. 20.....	107,174	10,314	46,406	9,930	6,619	1,504	1,325	11,419	5,211	1,760	3,916	2,336	6,434

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, FROM AUGUST 23 TO SEPTEMBER 20, 1922—Continued.

MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

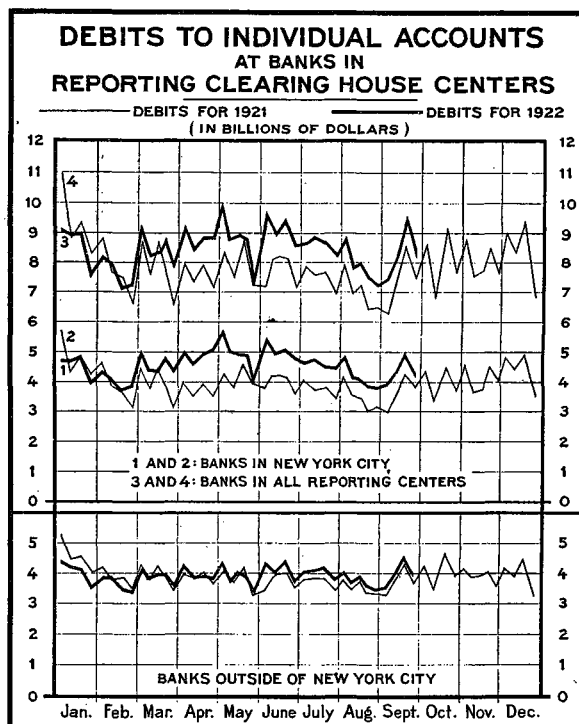
	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Bills payable with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	32,748	1,050	16,498	7,841		754		745			15		5,845
Aug. 30.....	27,123	2,894	9,468	7,507		165		935		38	16		6,100
Sept. 6.....	31,498	2,361	13,980	8,668		165		990	230	38	16		5,050
Sept. 13.....	24,315	2,644	6,480	9,373		859		905		38	16		4,000
Sept. 20.....	28,378	1,289	6,455	8,981	225	1,939	500	2,404	2,300	38	687		3,500
All other—													
Aug. 23.....													
Aug. 30.....													
Sept. 6.....													
Sept. 13.....													
Sept. 20.....													
Bills rediscounted with F. R. banks:													
Secured by U. S. Government obligations—													
Aug. 23.....	375	39	244	55							37		
Aug. 30.....	376	39	244	55							38		
Sept. 6.....	127	39		55							33		
Sept. 13.....	615	39	485	55							35		
Sept. 20.....	418	56	228	105							29		
All other—													
Aug. 23.....	35,593	11,200	11,079	4,709	948	862	504	1,677	1,500	282	1,053	725	1,057
Aug. 30.....	37,585	9,931	11,370	5,563	1,500	681	474	5,290		147	931	805	893
Sept. 6.....	47,107	15,387	14,015	5,187	2,858	665	499	2,667	1,127	222	919	465	3,096
Sept. 13.....	40,325	12,260	12,640	5,419	1,474	1,281	459	2,258		220	859	678	2,777
Sept. 20.....	60,845	16,118	19,281	6,824	3,041	2,059	930	7,114	1,041	254	890	1,668	1,625

BANK DEBITS.

Volume of business for the five weeks ending September 27 was on a weekly average level substantially similar to that maintained for the preceding four weeks, but the trend was upward instead of downward as before. After a slight decline during the first week, when a low record for the year was established (excepting only two five-day weeks in February), the volume of business rose continuously, and during the week ending September 20, with its heavy income-tax payments added to the normal mid-month swell, reached a total of \$9,413,000,000. During the last week of the period the volume of business shows a recession from the previous week's peak figure. In general, the figures indicate increasing business activity, in the financial centers and outside, which is closely parallel to the trend during corresponding periods in other years.

As compared with last year, the average volume of business for the five weeks under review was about 13 per cent larger, the spread between the two years being maintained at about the same level as during the preceding four weeks. Some of the larger centers show a greater relative increase compared with 1921. In New York, where the volume of stock-exchange transactions was much larger than a year ago, the volume of business is almost 20 per cent above last year's figure. In Pittsburgh the revival of the steel industry

is reflected in an 18 per cent rise in the business volume, and in Detroit, the center of the auto-



mobile industry, the volume is 14 per cent above last year's level.

The volume of business is measured by debits to individual accounts as reported to the Federal Reserve Board for banks in leading centers. Figures are shown for a total of 250 centers, of which 166 are included in the

summary by Federal reserve districts, because for these centers comparable figures for the five weeks and for the corresponding period in 1921 are available.

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN REPORTING CENTERS.

SUMMARY BY FEDERAL RESERVE DISTRICTS.

[In thousands of dollars.]

	Number of centers included.	1922 Week ending—					1921 Week ending—				
		Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Aug. 31.	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.
Boston.....	14	344,188	348,644	396,922	484,680	418,278	338,649	339,108	388,639	447,277	399,264
New York.....	7	3,926,126	4,026,040	4,455,895	5,102,945	4,361,645	3,258,885	3,094,476	3,687,786	4,388,704	3,941,354
Philadelphia.....	13	367,243	345,013	377,116	448,900	398,985	318,095	313,770	364,281	414,801	349,631
Cleveland.....	13	394,618	402,255	458,590	507,758	471,949	351,295	324,436	397,725	475,461	375,623
Richmond.....	11	164,928	173,967	178,026	210,653	184,726	172,435	186,207	197,941	223,032	185,373
Atlanta.....	15	154,549	159,816	176,586	201,494	183,886	151,091	159,821	192,830	198,078	175,504
Chicago.....	24	864,538	829,310	901,866	1,018,866	967,267	818,875	771,412	892,425	1,029,852	871,344
St. Louis.....	8	175,931	190,996	217,652	251,502	218,032	174,094	174,379	208,641	233,889	195,223
Minneapolis.....	12	125,192	129,427	151,619	164,447	151,798	123,868	135,460	153,368	163,085	135,093
Kansas City.....	16	216,066	212,874	264,287	267,409	238,323	213,126	221,576	252,177	252,245	226,086
Dallas.....	13	114,493	130,538	159,565	171,313	161,817	119,186	129,201	142,162	159,608	152,259
San Francisco.....	20	396,304	457,476	495,046	553,329	467,557	403,806	400,357	448,191	529,546	460,546
Total.....	166	7,244,176	7,406,356	8,233,170	9,413,296	8,224,263	6,443,405	6,253,203	7,328,166	8,515,578	7,467,300

DATA FOR EACH REPORTING CENTER.

[In thousands of dollars.]

	1922 Week ending—					1921 Week ending—				
	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Aug. 31.	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.
District No. 1—Boston:										
Bangor, Me.....	2,555	2,965	3,198	3,312	3,121	2,819	3,037	3,258	3,315	3,173
Boston, Mass.....	233,158	233,320	262,425	328,943	285,577	232,112	232,667	256,743	303,431	277,081
Brockton, Mass.....	3,298	3,773	4,848	5,543	3,768			4,690	7,511	6,800
Fall River, Mass.....	4,576	4,651	6,431	7,377	6,312	4,690	4,739	6,388	7,511	6,800
Hartford, Conn.....	17,124	16,299	21,907	23,362	17,678	16,569	15,856	22,048	21,578	18,720
Holyoke, Mass.....	2,673	2,481	3,396	3,479	3,550	2,315	2,289	2,754	3,034	2,608
Lowell, Mass.....	3,879	3,598	4,392	4,957	4,406	3,656	3,400	4,603	5,154	4,218
Lynn, Mass.....	4,251	4,798	5,698	6,439	4,900					
Manchester, N. H.....	3,056	3,320	4,011	3,992	3,498	3,377	3,514	4,214	5,117	3,611
New Bedford, Mass.....	4,764	5,838	5,851	6,283	5,931	4,191	4,894	6,571	7,235	5,225
New Haven, Conn.....	15,196	16,622	17,922	21,278	15,354	13,391	14,216	14,768	17,292	12,951
Portland, Me.....	7,389	7,708	8,184	8,213	7,617	6,698	6,610	7,881	7,198	6,684
Providence, R. I.....	21,858	22,674	26,416	34,609	31,699	24,229	22,990	27,859	32,830	28,934
Springfield, Mass.....	11,948	11,995	13,500	16,669	14,308	10,580	10,158	12,180	12,421	12,405
Waterbury, Conn.....	5,002	5,050	5,779	6,990	6,393	2,792	4,073	5,110	6,231	4,674
Worcester, Mass.....	11,010	12,123	13,510	15,216	12,834	11,200	10,665	14,232	14,900	12,180
District No. 2—New York:										
Albany, N. Y.....	17,840	17,375	19,748	20,011	17,632	21,004	17,277	15,418	23,545	17,687
Binghamton, N. Y.....	3,265	3,583	4,162	4,473	3,606	3,012	3,088	3,751	3,807	3,413
Buffalo, N. Y.....	50,802	54,108	56,779	67,963	56,034	47,169	44,775	53,134	58,233	48,309
Elmira, N. Y.....	2,763	2,534	3,212	3,770	3,182					
Jamestown, N. Y.....	3,003	3,953	3,612	4,076	3,404					
Montclair, N. J.....	1,840	2,268	2,333	2,979	2,660					
Newark, N. J.....	44,150	41,596	54,176	60,345	50,850					
New York, N. Y.....	3,813,641	3,908,327	4,326,992	4,953,518	4,239,732	3,147,199	2,989,780	3,572,652	4,253,046	3,829,245
Northern New Jersey Clearing House Association.....	28,722	26,778	33,825	38,590	39,980					
Passaic, N. J.....	4,884	5,242	6,260	6,822	5,334	4,195	4,762	5,081	5,783	4,776
Rochester, N. Y.....	24,019	26,455	28,147	33,395	26,051	23,101	24,066	26,292	30,361	27,177
Stamford, Conn.....	2,065	2,094	2,654	2,769	2,401					
Syracuse, N. Y.....	11,585	10,950	13,807	14,733	13,256	10,175	10,728	11,458	13,929	10,717
District No. 3—Philadelphia:										
Allentown, Pa.....	4,676	5,265	5,723	6,087	5,683					
Altoona, Pa.....	3,049	2,553	3,401	3,210	3,698	2,764	2,185	3,365	2,075	3,065
Camden, N. J.....	8,756	7,943	10,182	11,780	10,273					
Chester, Pa.....	3,802	3,479	3,839	4,683	4,463	3,127	3,509	3,304	4,461	3,838
Harrisburg, Pa.....	5,688	6,098	7,251	7,731	6,864	5,940	5,810	6,070	6,742	5,650
Hazleton, Pa.....	1,629	2,002	2,298	2,081	2,018					
Johnstown, Pa.....	4,580	4,523	5,221	5,425	4,788	4,332	4,076	4,697	4,562	4,497
Lancaster, Pa.....	4,094	4,327	4,951	5,152	5,254	3,453	3,410	4,491	4,890	4,650
Lebanon, Pa.....	1,079	1,063	1,247	1,254	1,264					
Norristown, Pa.....	626	658	842	713	795					
Philadelphia, Pa.....	302,166	277,441	298,156	363,366	321,532	252,081	249,832	281,363	334,655	272,592
Reading, Pa.....	6,151	6,314	8,092	8,511	7,918	5,108	5,228	7,689	6,484	6,681
Scranton, Pa.....	8,612	9,181	10,511	11,142	12,524	12,379	11,273	16,964	14,206	16,315
Trenton, N. J.....	10,926	11,118	12,773	15,493	11,012	9,357	9,452	13,298	12,388	9,961
Wilkes-Barre, Pa.....	6,037	6,630	7,824	8,143	7,041	7,935	7,106	9,284	8,770	8,159

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN REPORTING CENTERS—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922 Week ending—					1921 Week ending—				
	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Aug. 31.	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.
District No. 3—Philadelphia—Continued.										
Williamsport, Pa.	2,783	3,182	4,035	3,930	3,706	3,277	3,474	3,895	4,630	3,752
Wilmington, Del.	6,124	6,871	6,967	7,912	6,227	5,231	5,511	6,036	6,931	7,073
York, Pa.	3,231	3,293	4,095	4,202	3,958	3,111	2,904	3,825	4,007	3,889
District No. 4—Cleveland:										
Akron, Ohio.	11,561	13,657	14,549	14,079	13,870	10,751	15,183	11,773	12,785	13,035
Butler, Pa.	2,077	2,209	2,493	2,459	2,533					
Canton, Ohio.	8,320	7,640	8,921	9,983	8,956					
Cincinnati, Ohio.	52,858	53,721	64,756	78,891	66,782	48,490	46,455	59,019	67,719	55,990
Cleveland, Ohio.	107,111	114,671	132,666	149,165	128,598	101,204	92,804	115,741	125,034	105,897
Columbus, Ohio.	24,984	33,249	32,443	32,226	26,728	24,299	25,933	27,468	33,444	22,558
Cornellsville, Pa.	1,638	1,240	1,576	1,374	2,118					
Dayton, Ohio.	11,141	14,214	12,052	13,795	12,442	14,568	11,438	13,621	13,283	11,852
Erie, Pa.	5,698	5,002	5,916	7,074	6,676	4,946	5,457	6,375	6,106	5,683
Greensburg, Pa.	3,907	3,657	4,830	4,606	6,062	3,744	3,490	4,421	3,776	4,208
Homestead, Pa.	583	699	767	750	795					
Lexington, Ky.	3,333	3,011	4,225	3,907	3,851	2,815	3,112	3,473	3,386	2,999
Lima, Ohio.	3,282	2,766	3,288	3,086	3,187					
Lorain, Ohio.	1,053	1,303	1,149	1,407	1,442					
New Brighton, Pa.	2,033	1,960	2,402	2,389	2,177					
Oil City, Pa.	3,015	2,725	2,887	2,846	2,829	1,583	1,649	2,297	1,875	1,922
Pittsburgh, Pa.	147,687	130,527	155,861	173,451	179,119	120,543	100,802	131,848	183,931	133,244
Springfield, Ohio.	3,646	4,628	6,237	4,591	3,918	3,959	3,320	3,863	3,586	3,402
Toledo, Ohio.	28,682	29,958	33,473	36,480	33,102					
Warren, Ohio.	2,249	2,220	3,635	3,121	2,131					
Wheeling, W. Va.	8,164	7,108	8,016	9,419	9,163	6,330	4,951	5,800	8,053	6,575
Youngstown, Ohio.	11,513	10,085	14,153	13,805	11,911	8,063	9,842	12,026	10,483	8,858
Zanesville, Ohio.	2,121	2,701	2,859	2,489	2,470					
District No. 5—Richmond:										
Asheville, N. C.	3,761	3,989	4,373	4,722	4,337					
Baltimore, Md.	70,743	68,274	64,212	87,954	73,622	86,255	94,105	94,145	109,361	82,781
Charleston, S. C.	4,910	5,684	3,168	2,651	3,893	5,984	6,000	5,397	4,850	4,726
Charleston, W. Va.	6,078	5,966	7,483	7,719	7,543					
Charlotte, N. C.	5,404	7,183	7,621	8,891	7,138	4,510	4,941	5,993	6,965	5,756
Columbia, S. C.	3,000	4,114	4,117	4,977	5,098	3,523	3,614	4,690	5,168	5,058
Cumberland, Md.	1,666	1,690	1,679	2,153	1,809					
Danville, Va.	1,418	1,576	2,183	1,756	1,295					
Durham, N. C.	3,821	5,641	4,649	4,883	3,709					
Greensboro, N. C.	3,059	4,500	4,062	4,195	4,023					
Greenville, S. C.	2,919	3,455	3,838	3,400	3,600	2,248	2,695	3,384	4,379	3,908
Hagerstown, Md.	1,727	1,626	1,765	2,456	1,919					
Huntington, W. Va.	4,245	3,931	5,006	5,552	4,431	4,048	3,566	4,508	5,044	4,080
Lynchburg, Va.	3,043	3,347	4,200	4,210	4,008					
Newport News, Va.	2,111	1,447	1,636	1,689	1,321					
Norfolk, Va.	12,593	12,130	12,583	13,239	12,896	11,199	10,723	11,739	13,204	13,094
Raleigh, N. C.	3,189	4,000	4,000	5,000	3,900	3,600	3,700	3,650	4,050	4,120
Richmond, Va.	21,730	24,553	29,370	30,710	26,179	19,069	22,759	24,836	26,791	24,641
Roanoke, Va.	4,427	5,163	5,177	5,452	4,571					
Spartanburg, S. C.	1,283	1,506	1,570	2,198	2,185					
Washington, D. C.	32,253	35,996	39,337	43,113	39,155	27,879	29,998	34,409	38,097	32,409
Wilmington, N. C.	3,939	4,774	5,166	4,814	4,814	4,120	4,016	5,190	5,123	4,800
Winston-Salem, N. C.	4,719	5,046	6,094	7,905	6,117					
District No. 6—Atlanta:										
Albany, Ga.	870	1,020	1,072	1,131	1,110					
Atlanta, Ga.	22,115	23,776	25,907	27,811	24,430	19,876	19,762	23,822	26,200	23,089
Augusta, Ga.	5,161	5,341	5,962	7,357	6,005	4,192	5,413	6,596	7,764	6,770
Birmingham, Ala.	16,301	12,662	17,607	21,303	21,761	8,808	12,175	15,324	14,895	12,91
Brunswick, Ga.	491	655	655	626	703					
Chattanooga, Tenn.	5,424	6,482	8,343	8,284	6,866	5,906	6,710	8,015	8,815	6,519
Columbus, Ga.	1,783	2,605	2,844	3,281	2,751					
Cordele, Ga.	601	637	717	610	506					
Dorhan, Ala.	747	988	980	1,009	762					
Elberton, Ga.	120	142	144	174	203					
Jackson, Miss.	2,063	2,692	3,218	2,484	2,539					
Jacksonville, Fla.	11,188	8,784	9,607	10,874	9,059	8,517	8,468	9,308	8,001	8,000
Knoxville, Tenn.	5,121	5,643	5,836	7,779	5,657	5,065	5,242	6,176	6,535	5,110
Macon, Ga.	3,481	4,095	4,140	5,133	4,558	3,229	4,388	3,640	4,587	4,333
Meridian, Miss.	1,670	1,842	2,184	2,600	2,094					
Mobile, Ala.	4,787	5,614	5,850	6,375	6,307	4,618	5,530	5,834	6,522	7,058
Montgomery, Ala.	3,325	4,361	4,601	5,006	4,513	3,000	3,032	3,960	4,332	3,900
Nashville, Tenn.	13,218	13,676	16,803	15,182	11,885	22,223	21,842	28,184	27,419	26,337
Newnan, Ga.	238	225	360	293	466					
New Orleans, La.	49,597	51,989	54,169	67,620	62,005	50,373	50,825	62,665	61,777	52,158
Pensacola, Fla.	1,208	1,283	1,412	1,372	1,113	1,146	1,284	1,421	1,517	1,248
Savannah, Ga.	8,424	10,279	9,828	10,557	10,503	8,939	9,650	11,475	13,215	12,150
Tampa, Fla.	4,160	4,608	5,032	5,261	4,552	4,017	4,441	4,690	4,752	4,366
Valdosta, Ga.	926	917	1,080	1,055	970					
Vicksburg, Miss.	1,036	1,223	1,489	1,577	1,642	1,152	1,050	1,720	1,747	1,553
District No. 7—Chicago:										
Adrian, Mich.	656	588	729	813	574					
Aurora, Ill.	2,444	2,559	2,763	3,358	2,797					
Bay City, Mich.	2,151	2,257	2,234	2,287	2,278	2,370	2,902	2,391	2,676	2,548
Bloomington, Ill.	1,870	2,479	2,284	2,305	1,947	2,115	2,134	2,410	2,309	1,949
Cedar Rapids, Iowa.	5,173	4,808	5,237	5,310	4,478	8,329	8,069	10,978	8,657	8,432
Chicago, Ill.	544,281	531,506	570,569	672,722	617,675	536,840	494,768	571,735	649,923	590,633
Danville, Ill.	1,800	1,800	2,200	2,700	2,100					

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN REPORTING CENTERS—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922 Week ending—					1921 Week ending—				
	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Aug. 31.	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.
District No. 7—Chicago—Con.										
Davenport, Iowa	5,725	8,065	7,842	8,653	7,723	5,110	5,948	6,890	6,756	6,415
Decatur, Ill.	3,120	2,992	3,379	3,279	3,180	2,910	2,911	3,485	3,181	2,799
Des Moines, Iowa	12,820	13,218	17,489	16,500	15,641	13,064	13,326	17,385	14,763	13,268
Detroit, Mich.	130,825	110,961	110,019	139,940	141,783	100,756	95,631	108,811	153,517	96,337
Dubuque, Iowa	2,210	2,633	3,240	3,052	2,843	2,137	2,368	2,657	3,240	2,420
Flint, Mich.	5,565	4,878	5,295	6,768	5,952	4,711	5,718	5,810	6,077	4,812
Fort Wayne, Ind.	5,906	6,167	6,885	7,305	9,187	5,508	5,632	6,758	6,683	6,163
Gary, Ind.	2,840	2,292	2,963	2,661	2,523					
Grand Rapids, Mich.	13,275	12,161	13,941	11,717	13,130	10,059	19,337	19,677	20,470	18,468
Hammond, Ind.	2,890	2,100	2,670	3,000	3,037					
Indianapolis, Ind.	29,126	27,936	32,415	37,677	30,561	34,598	24,881	31,781	34,705	27,250
Jackson, Mich.	4,050	3,440	3,711	4,069	4,167	3,103	2,990	3,334	3,809	3,486
Kalamazoo, Mich.	3,815	3,910	3,504	5,367	4,627	3,308	3,269	3,756	5,333	3,456
Lansing, Mich.	5,009	5,600	5,100	7,067	5,900	4,595	4,141	4,712	5,603	4,741
Mason City, Iowa	1,561	1,898	2,267	2,193	1,883					
Milwaukee, Wis.	49,358	44,073	59,320	62,883	52,289	44,062	43,981	59,980	64,811	45,460
Moline, Ill.	1,303	2,129	1,963	1,793	1,569	1,276	1,559	1,832	2,034	1,568
Muscatine, Iowa	1,028	1,177	1,181	1,306	1,319					
Oshkosh, Wis.	4,200	2,500	3,000	2,800	2,100					
Peoria, Ill.	6,862	7,624	8,246	8,961	7,375	6,632	7,093	7,839	8,110	6,832
Rockford, Ill.	4,162	4,167	4,652	4,677	4,356	3,538	3,720	4,318	4,482	4,140
Saginaw, Mich.	4,246	3,494	4,261	5,504	4,407					
Sioux City, Iowa	14,116	13,824	16,361	16,177	11,981	5,879	7,209	7,704	7,500	7,552
South Bend, Ind.	6,495	6,398	9,439	8,418	7,210	4,881	6,355	6,153	6,109	5,287
Springfield, Ill.	4,257	4,723	5,292	4,598	4,598	4,872	4,882	5,122	5,996	4,736
Waterloo, Iowa	3,024	3,061	3,539	3,607	3,467	2,222	2,588	2,517	2,808	2,503
District No. 8—St. Louis:										
East St. Louis and National										
Stock Yards, Ill.	7,381	7,400	8,585	9,884	9,644	7,021	8,064	7,910	7,710	7,597
Evansville, Ind.	4,055	6,489	5,929	7,388	7,388	4,336	4,362	4,766	5,365	4,545
Fort Smith, Ark.	1,905	2,038	2,804	3,022	3,318					
Greenville, Miss.	559	533	823	1,002	677					
Helena, Ark.	735	897	1,513	1,436	1,587					
Little Rock, Ark.	7,609	10,725	10,868	13,594	12,667	8,424	8,233	11,342	11,958	12,511
Louisville, Ky.	25,837	24,269	32,137	32,991	28,957	23,512	23,423	27,374	29,651	27,105
Memphis, Tenn.	17,410	25,112	22,607	28,578	27,173	19,299	20,231	22,176	24,863	25,539
Owensboro, Ky.	973	912	1,124	1,218	992					
Quincy, Ill.	1,817	1,947	2,096	2,483	2,166	1,669	1,817	2,208	2,230	1,701
St. Louis, Mo.	109,223	112,367	132,563	153,370	127,480	107,656	105,599	129,847	149,207	113,751
Springfield, Mo.	2,599	2,687	2,867	3,214	2,557	2,177	2,650	2,818	2,905	2,474
District No. 9—Minneapolis:										
Aberdeen, S. Dak.	1,111	1,572	1,644	1,419	1,203	1,234	1,438	1,400	1,379	1,228
Billings, Mont.	1,338	1,514	1,677	1,700	1,586	1,232	1,629	1,548	1,718	1,593
Dickinson, N. Dak.	293	287	302	301	277					
Duluth, Minn.	18,263	18,175	26,264	26,036	24,892	18,077	25,047	29,490	28,310	21,491
Fargo, N. Dak.	2,557	3,120	3,131	3,284	2,840	2,459	2,574	2,781	3,046	2,444
Grand Forks, N. Dak.	1,211	1,612	1,904	1,666	1,873	1,071	1,258	1,523	1,466	1,206
Great Falls, Mont.	1,348	1,396	1,517	1,496	1,431	1,635	1,798	1,866	1,932	1,972
Helena, Mont.	2,041	1,975	2,288	2,530	1,920	2,358	2,331	2,285	2,887	2,506
Jamestown, N. Dak.	340	405	566	516	468					
Lewistown, Mont.	788	934	1,156	1,149	1,193					
Minneapolis, Minn.	63,479	66,825	77,622	82,553	80,980	67,014	69,424	82,120	81,900	70,739
Minot, N. Dak.	915	943	1,171	1,067	1,108					
Red Wing, Minn.	354	437	451	513	396					
St. Paul, Minn.	128,604	127,613	129,840	136,961	129,185	22,830	24,388	25,920	33,189	25,249
Do	33,318	32,231	36,131	43,657	33,654					
Stout Falls, S. Dak.	3,012	3,132	2,887	3,565	3,000	3,855	3,450	3,376	3,935	3,590
Superior, Wis.	1,530	1,593	1,835	2,210	1,726	1,829	1,208	2,158	2,202	2,237
Winona, Minn.	698	900	1,010	1,027	1,162	774	915	901	1,121	838
District No. 10—Kansas City:										
Atchison, Kans.	1,024	1,164	1,368	1,322	1,130	982	1,222	1,475	1,157	1,080
Bartlesville, Okla.	2,293	2,461	2,142	2,004	2,015	1,533	1,389	1,830	1,954	1,715
Casper, Wyo.	2,981	3,138	3,031	3,439	3,319					
Cheyenne, Wyo.	1,708	1,888	2,495	1,883	3,775	2,514	2,007	1,716	1,716	1,833
Colorado Springs, Colo.	2,275	2,854	2,995	3,354	2,671	2,266	2,678	2,842	2,898	2,305
Denver, Colo.	30,549	30,652	38,439	38,395	35,967	29,627	29,927	32,070	34,883	32,966
Enid, Okla.	2,820	2,789	3,038	2,901	2,640					
Fremont, Nebr.	557	741	805	722	711					
Grand Island, Nebr.	925	1,178	1,316	1,111	1,133					
Grand Junction, Colo.	486	598	818	731	579					
Guthrie, Okla.	490	590	546	547	557					
Hutchinson, Kans.	3,092	2,853	3,609	3,173	2,930					
Independence, Kans.	2,526	1,440	1,885	2,404	1,766					
Joplin, Mo.	2,118	2,217	2,929	2,568	2,339	1,571	1,771	2,251	2,025	1,776
Kansas City, Kans.	3,672	3,738	4,280	3,870	3,696	2,891	3,262	3,685	3,709	3,445
Kansas City, Mo.	62,024	63,659	83,483	85,959	71,272	67,805	76,619	82,427	85,041	70,105
Lawrence, Kans.	649	801	1,006	1,402	818					
McAlester, Okla.	649	636	891	1,083	995					
Muskogee, Okla.	6,279	3,429	5,985	7,153	6,848	2,765	2,582	3,323	3,504	3,416
Oklahoma City, Okla.	14,604	17,825	17,025	18,306	15,685	17,071	20,890	24,305	19,754	19,673
Okmulgee, Okla.		1,583	1,763	1,712	1,689					
Omaha, Nebr.	42,819	40,606	49,149	49,898	41,961	38,540	38,130	43,715	43,100	42,600
Parsons, Kans.	701	833	883	927	821					
Pittsburg, Kans.	1,909	1,018	1,360	1,149	1,482					
Pueblo, Colo.	2,853	2,993	3,038	3,224	2,900	4,273	3,183	4,322	3,836	3,532

1 Debits of banks which submitted reports in 1921.

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN REPORTING CENTERS—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922 Week ending—					1921 Week ending—				
	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Aug. 31.	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.
District No. 10—Kansas City—Continued.										
St. Joseph, Mo.....	11,750	11,409	12,389	15,240	13,614	14,341	15,449	16,537	16,965	15,067
Topoka, Kans.....	2,143	1,854	3,753	3,187	3,176	2,717	2,717	4,514	3,797	2,993
Tulsa, Okla.....	20,645	15,246	21,216	19,568	21,364	14,840	11,118	15,213	17,208	15,010
Wichita, Kans.....	9,310	10,879	10,601	11,476	9,910	9,390	11,632	11,952	10,698	8,570
District No. 11—Dallas:										
Albuquerque, N. Mex.....	1,731	2,010	1,832	1,816	1,649	1,329	1,715	1,605	1,690	1,401
Austin, Tex.....	2,830	3,580	4,908	4,688	4,469	2,293	3,130	3,191	3,554	3,128
Beaumont, Tex.....	2,377	2,727	3,611	3,781	3,057	4,424	2,945	2,907	3,382	2,361
Corisicana, Tex.....	785	1,180	1,533	1,440	1,270					
Dallas, Tex.....	26,247	35,388	37,571	49,702	41,483	25,542	30,279	32,309	39,550	39,206
El Paso, Tex.....	8,188	6,255	6,826	6,783	5,993	5,919	5,671	7,291	6,595	6,494
Fort Worth, Tex.....	18,147	18,131	19,106	20,987	20,847	20,250	23,180	24,220	23,920	23,210
Galveston, Tex.....	16,769	17,279	22,409	27,117	30,814	21,389	18,946	25,743	25,243	25,204
Houston, Tex.....	21,150	26,317	39,131	32,140	30,669	21,640	25,539	24,692	32,048	30,230
Roswell, N. Mex.....	538	494	427	494	525					
San Antonio, Tex.....	6,038	6,483	8,346	6,902	7,042	6,403	6,161	6,445	6,928	6,336
Shreveport, La.....	5,858	5,355	7,172	7,710	6,963	4,544	4,979	6,860	8,249	6,957
Texarkana, Tex.....	1,217	1,124	1,535	1,888	1,614	1,341	1,181	1,537	2,217	1,268
Tucson, Ariz.....	1,119	1,439	1,463	1,384	1,669	1,302	1,525	1,447	1,400	1,379
Waco, Tex.....	2,822	4,470	5,655	6,385	5,548	2,810	3,950	3,915	4,814	5,085
District No. 12—San Francisco:										
Bakersfield, Calif.....	2,201	1,958	2,245	2,355	2,032					
Bellingham, Wash.....	1,576	1,465	1,910	1,870	1,538					
Berkeley, Calif.....	2,510	4,231	3,489	5,516	3,508	2,606	3,545	2,168	3,213	3,687
Boise, Idaho.....	2,318	2,210	3,093	3,365	2,450	1,886	2,310	3,003	2,749	2,600
Eugene, Oreg.....	1,808	1,571	1,889	2,207	2,445					
Fresno, Calif.....	8,745	9,949	11,407	13,845	14,351	8,253	8,900	12,038	13,100	14,087
Long Beach, Calif.....	6,537	8,010	8,690	10,137	8,234	4,845	5,159	5,443	5,606	5,035
Los Angeles, Calif.....	87,990	107,133	123,094	132,155	112,364	87,553	79,723	93,590	108,349	106,405
Oakland, Calif.....	20,133	18,897	20,728	22,471	21,081	16,427	19,081	17,083	17,301	17,102
Ogden, Utah.....	4,272	4,342	4,898	5,123	4,394	2,686	2,863	1,644	3,431	3,076
Pasadena, Calif.....	3,842	5,251	5,490	5,691	5,028	3,810	3,802	4,832	5,242	4,204
Phoenix, Ariz.....	2,718	2,437	3,970	3,460	3,343					
Portland, Oreg.....	29,860	28,907	31,778	30,349	32,522	33,726	34,911	40,235	44,372	29,418
Reno, Nev.....	2,082	2,262	2,852	2,442	2,454	2,368	1,958	2,716	2,642	2,402
Ritzville, Wash.....	135	169	198	178	184					
Sacramento, Calif.....	14,278	14,653	17,818	16,174	15,665	6,699	13,120	13,107	15,317	15,919
Salt Lake City, Utah.....	10,724	11,890	13,260	13,399	12,300	11,833	14,135	13,108	15,233	12,642
San Bernardino, Calif.....	1,001	1,102	1,485	1,528	1,254					
San Diego, Calif.....	6,988	9,054	8,385	8,855	7,722	6,212	6,332	8,262	7,837	6,587
San Francisco, Calif.....	134,683	168,984	166,975	205,091	162,178	159,058	145,685	161,412	205,881	177,727
San Jose, Calif.....	5,252	4,788	4,786	5,074	5,258	4,559	4,543	4,851	4,978	4,959
Seattle, Wash.....	33,916	32,268	38,973	40,556	34,283	28,585	29,715	34,031	43,090	29,835
Spokane, Wash.....	8,971	8,937	9,732	9,327	9,221	9,311	10,150	12,866	12,449	10,204
Stockton, Calif.....	3,964	5,534	4,781	5,650	4,610	4,124	4,282	5,253	5,151	4,665
Tacoma, Wash.....	7,381	7,746	9,156	9,552	7,640	7,202	7,794	9,475	10,458	7,367
Yakima, Wash.....	1,858	2,400	2,751	2,557	2,294	2,061	2,349	3,074	3,147	2,626

GOLD SETTLEMENT FUND.

INTERBANK TRANSACTIONS FROM AUGUST 25, 1922, TO SEPTEMBER 21, 1922, INCLUSIVE.

[In thousands of dollars.]

Federal reserve bank.	Transfers.		Daily settlements.		Changes in ownership of gold through transfers and settlements.		Balance in fund at close of period.
	Debits.	Credits.	Debits.	Credits.	Decrease.	Increase.	
Boston.....	6,000	15,000	410,602	426,388		24,786	51,202
New York.....	21,500	86,000	1,721,058	1,599,008	57,550		60,005
Philadelphia.....	16,000	3,000	536,418	549,340	78		44,386
Cleveland.....	13,000		429,384	457,099		14,715	63,463
Richmond.....	10,000		351,767	364,772		3,005	36,040
Atlanta.....	6,500		170,457	181,630		4,673	28,109
Chicago.....	17,000	3,000	873,490	896,748		9,258	131,398
St. Louis.....	3,000	1,500	399,603	397,501	3,602		15,509
Minneapolis.....	7,000		124,570	130,370	1,200		23,944
Kansas City.....	6,000	1,000	312,255	313,056	4,199		24,723
Dallas.....	2,500	1,000	176,318	200,860		23,042	19,445
San Francisco.....	8,000	6,000	224,275	213,425	12,850		30,314
Total, 4 weeks ending—							
Sept. 21, 1922.....	116,500	116,500	5,730,197	5,730,197	79,479	79,479	528,538
Aug. 24, 1922.....	84,500	84,500	5,539,078	5,539,078			522,934
Sept. 22, 1921.....	462,341	462,341	4,693,123	4,693,123			415,517
Aug. 25, 1921.....	314,263	314,263	4,624,289	4,624,289			429,075

FEDERAL RESERVE CLEARING SYSTEM.

OPERATIONS DURING AUGUST, 1922.

[Numbers in thousands. Amounts in thousands of dollars.]

Federal reserve bank or branch.	Items drawn on banks located in own district.				Items drawn on Treasurer of United States.		Total items handled, exclusive of duplications.		Items forwarded to other Federal reserve banks and their branches.		Items forwarded to parent bank or to branch in same district.		Total items handled, including duplications.				Number of member banks.		Number of nonmember banks.			
	In Federal reserve bank or branch city.		Outside Federal reserve bank or branch city.		of United States.		exclusive of duplications.		other Federal reserve banks and their branches.		forwarded to parent bank or to branch in same district.		Number.		Amount.		Number of member banks.		On par list.		Not on par list. ¹	
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	1922	1921 ²	1922	1921 ²	Aug. 31, 1922.	Aug. 15, 1921.	Aug. 31, 1922.	Aug. 15, 1921.	Aug. 31, 1922.	Aug. 15, 1921.
Boston.....	585	492,366	3,572	389,831	110	15,710	4,267	897,907	205	43,786	.....	.....	4,472	4,151	941,693	928,285	432	437	259	255	.....	.....
New York.....	2,094	4,334,251	4,937	638,397	1,097	117,270	8,128	5,089,918	1,004	118,414	23	4,317	9,155	7,926	5,212,649	2,789,698	716	710	258	251	.....	.....
Buffalo.....	190	85,762	464	54,956	8	1,708	662	142,486	142	22,677	38	17,791	842	739	182,954	165,700	84	85	78	76	.....	.....
Philadelphia.....	1,843	751,474	2,228	253,360	149	28,215	4,220	1,033,049	414	91,113	.....	.....	4,634	4,498	1,124,162	1,048,100	714	700	479	462	.....	.....
Cleveland.....	707	241,805	1,381	154,977	42	5,084	2,130	401,866	36	5,413	26	6,301	2,192	1,602	413,580	332,172	315	316	513	522	.....	.....
Cincinnati.....	204	115,975	826	73,063	48	6,726	* 1,089	* 197,373	12	4,749	15	4,329	1,110	995	206,451	194,801	224	221	313	321	1	.....
Pittsburgh.....	509	232,074	879	98,456	31	4,944	1,419	335,474	84	37,991	27	7,084	1,530	1,262	380,549	331,160	344	342	251	237	.....	.....
Richmond.....	112	114,233	1,841	250,057	43	4,850	1,990	309,140	153	55,978	35	9,956	2,184	2,048	435,074	408,318	467	463	702	742	573	503
Baltimore.....	262	142,737	733	70,183	43	7,060	1,038	219,980	105	34,281	82	7,972	1,225	1,008	262,235	248,763	160	158	262	271	.....	.....
Atlanta.....	717	142,325	350	38,181	35	5,320	1,102	185,826	24	9,757	23	4,058	1,149	483	199,641	98,756	236	220	90	110	483	518
Birmingham.....	202	34,921	157	11,208	11	1,255	370	47,384	17	11,470	28	22,810	415	402	81,664	59,124	83	74	32	31	119	122
Jacksonville.....	61	18,116	154	14,270	7	1,487	222	33,873	25	3,664	5	1,070	252	213	38,007	33,786	76	68	61	64	146	145
Nashville.....	53	29,093	224	18,390	13	1,200	280	48,683	15	1,787	6	829	311	278	51,299	44,945	87	84	145	162	100	.....
New Orleans.....	57	40,800	107	12,514	38	9,721	202	63,035	35	10,386	6	761	243	250	74,182	68,361	56	54	51	50	223	227
Chicago.....	986	575,108	3,907	313,610	227	38,503	5,120	927,281	295	31,266	9	3,894	5,424	4,699	962,441	901,124	1,319	1,315	3,982	4,004	.....	.....
Detroit.....	326	171,814	594	50,384	25	3,264	945	225,462	21	5,492	4	1,597	970	727	232,551	190,729	126	121	256	258	.....	.....
St. Louis.....	299	228,171	1,413	78,807	114	12,541	1,826	319,519	40	4,607	11	1,120	1,877	1,049	325,245	280,058	382	365	1,705	1,748	.....	.....
Little Rock.....	99	18,650	274	14,626	8	752	381	34,028	5	921	27	2,036	413	318	36,985	36,740	71	69	230	228	.....	.....
Louisville.....	103	59,460	439	23,696	33	4,929	575	88,085	10	729	2	189	587	492	89,003	74,735	95	95	341	339	.....	.....
Memphis.....	76	25,700	176	9,196	11	1,427	263	36,323	2	384	1	216	266	216	36,923	29,573	58	55	188	183	156	167
Minneapolis.....	230	110,807	1,431	76,911	26	5,550	* 1,689	* 194,155	79	17,373	4	307	1,772	1,679	211,835	205,014	827	815	2,415	2,534	179	85
Helena.....	22	8,681	196	11,782	7	813	225	21,276	6	2,720	1	1,033	232	213	25,029	23,329	194	202	208	220	5	.....
Kansas City.....	284	214,145	1,363	95,130	64	8,389	1,711	317,664	215	32,457	62	10,727	1,988	2,267	360,848	407,623	330	331	1,435	1,461	.....	.....
Denver.....	137	43,862	361	21,374	27	5,005	525	70,241	96	18,319	55	12,210	676	600	100,770	80,489	161	161	266	283	.....	.....
Oklahoma City.....	71	45,720	933	63,568	10	1,339	1,014	110,627	45	7,335	18	6,729	1,077	1,031	124,691	142,751	411	336	430	548	7	.....
Omaha.....	94	49,862	549	34,684	17	2,268	* 661	* 87,234	39	4,490	19	4,780	719	687	96,504	94,404	252	261	917	1,016	158	91
Dallas.....	128	61,597	1,264	155,499	29	4,739	1,421	221,835	76	8,782	34	3,136	1,531	1,486	233,753	219,777	659	661	745	858	47	.....
El Paso.....	43	9,446	119	8,761	17	1,564	179	19,771	12	1,616	6	1,039	197	185	22,426	21,586	66	72	59	73	.....	.....
Houston.....	79	41,355	344	32,050	26	1,630	449	75,035	15	2,688	6	1,600	470	400	79,323	65,264	138	133	255	272	.....	.....
San Francisco.....	254	123,617	551	42,349	58	76,350	863	242,316	30	3,881	35	4,069	928	750	250,266	206,494	199	210	274	280	.....	.....
Los Angeles.....	484	128,666	1,417	96,453	34	9,322	1,935	234,641	115	17,096	71	8,290	2,121	1,322	260,027	191,775	163	174	177	161	.....	.....
Portland.....	56	34,735	213	12,489	17	3,964	286	51,188	5	2,300	37	4,655	328	300	58,143	46,939	133	132	141	170	22	.....
Salt Lake City.....	53	23,866	387	22,843	16	3,267	456	49,976	15	3,023	9	1,634	480	431	54,633	64,597	166	186	104	112	.....	.....
Seattle.....	123	35,997	239	16,513	25	7,999	387	60,509	25	5,941	46	4,880	458	393	71,330	50,430	66	64	92	100	.....	.....
Spokane.....	39	17,891	186	10,112	9	1,063	234	29,066	13	2,363	16	2,682	263	236	34,111	32,735	109	102	151	165	.....	.....
Total: August.....	11,582	8,805,142	34,209	3,268,680	2,475	405,488	* 48,280	* 12,482,226	3,430	625,249	787	164,101	52,497	45,936	13,271	10,136,135	9,919	9,792	17,865	18,550	2,281	2,078
July.....	11,568	8,319,841	33,815	3,247,425	2,260	349,360	* 47,657	* 11,919,769	3,419	611,948	775	155,843	51,851	47,946	12,687	10,725,891	9,930	9,779	17,884	18,599	2,285	2,040

¹ Incorporated banks other than mutual savings banks.² July 16 to Aug. 15, 1921.³ Includes items drawn on banks in other Federal reserve districts forwarded direct to drawee banks as follows: Cincinnati, 11,000 items, \$1,609,000; Minneapolis, 2,000 items, \$887,000; Omaha, 1,000 items, \$420,000. Total, 14,000 items, \$2,916,000.

NOTE.—Number of business days in period for Nashville, St. Louis, Memphis, Helena, Kansas City, Denver, Oklahoma City, Dallas, El Paso, Houston, San Francisco, and Los Angeles was 26, and for other Federal reserve bank and branch cities, 27 days.

GOLD AND SILVER IMPORTS AND EXPORTS.

IMPORTS INTO AND EXPORTS FROM THE UNITED STATES, DISTRIBUTED BY COUNTRIES.

Countries.	Gold.				Silver.			
	August—		Eight months ending August—		August—		Eight months ending August—	
	1921	1922	1921	1922	1921	1922	1921	1922
IMPORTS.								
Denmark.....		\$1,115,000	\$3,236,497	\$17,769,107			\$370	\$768
France.....	\$34,307,608	889,784	135,619,378	14,900,449	82,211	\$41,432	99,390	193,635
Germany.....	2,621,162		2,829,166	10,876	3,815,923	8,465	4,192,782	681,589
Netherlands.....	879,189	80	17,680,768	116,016			805	
Norway.....	2,885	274	1,534,985	7,880,576	4,111	2,944	4,111	2,944
Spain.....	26,442		3,243,238	34,943	46		16,328	71,512
Sweden.....	11,604,963	582,750	54,266,975	32,387,597	30	576	5,280	1,424
United Kingdom:								
England.....	19,202,625	13,270,482	143,108,454	75,998,765	344	13,569	1,143,236	149,210
Scotland.....				151,320				
Canada.....	2,653,997	392,842	27,936,534	8,713,513	206,945	569,167	2,779,929	3,684,598
Central America.....	704,599	225,112	4,291,261	3,204,174	42,940	126,439	1,453,659	991,171
Mexico.....	471,124	333,016	3,607,138	3,849,982	3,184,586	3,307,399	23,946,710	32,707,314
West Indies.....	450,383	13,505	5,557,877	1,485,929	52,319	21,656	244,103	461,057
Argentina.....	95,829		938,223	11,037	1,274		15,479	5,837
Chile.....	4,342	20,989	120,237	337,048	25,939	199,161	1,217,445	1,430,522
Colombia.....	690,074	641,629	8,216,727	5,004,187	21,443	15,075	116,575	167,219
Peru.....	139,273	104,211	864,426	960,379	425,768	468,328	3,512,787	4,958,170
Uruguay.....	1,469,821		4,871,084	273,689	5	1,782	2,556	2,167
Venezuela.....	33,243	10,158	952,030	652,071	25	69	2,556	2,243
China.....	1,351,637	869,500	16,542,740	4,820,430	509	125	7,441	1,744
British India.....	4,563,640		23,803,160		10,163		10,853	
Dutch East Indies.....	52,018	86,024	675,657	944,552	33,033	39,716	375,321	396,011
Hongkong.....	254,429		5,580,825	14,730	204		396	75
Philippine Islands.....	107,761		835,714	356,389	1,616		13,375	5,981
British Oceania.....	2,161,990	142,192	13,869,384	3,721,214	76	260	4,233	933
Egypt.....	306,714		506,290	355,173				58
All other.....	685,806	304,660	14,422,984	1,151,484	23,339	127,599	650,274	876,868
Total.....	84,901,554	19,092,208	495,091,752	185,091,630	7,852,849	4,943,762	39,816,491	46,793,050
EXPORTS.								
Spain.....				707,000				
Sweden.....			2,643,013	78,000				
United Kingdom—England.....					1,070,672	46,070	7,546,184	7,035,692
Canada.....	263,197	138,539	1,527,448	863,570	150,063	143,397	1,629,617	1,465,285
Central America.....			12,127	1,000			280,300	6,850
Mexico.....	301,905	368,530	5,163,750	2,972,769	104,894	125,327	1,553,687	1,634,429
West Indies.....	350		250,844	5,300	200	3,223	409,437	25,159
Colombia.....							239,500	795,703
China.....					1,074,324	1,473,965	5,900,307	14,469,141
British India.....		15,000		4,365,339		795,200	1,846,593	6,552,940
Dutch East Indies.....		50,000	60,000	435,010				
French East Indies.....							528,000	1,320,000
Hongkong.....	106,200	379,675	1,427,490	2,091,580	1,012,902	1,273,998	7,524,579	8,571,304
Japan.....					329,078		2,438,466	47,237
All other.....		4,109	24,600	213,341			900	367,266
Total.....	671,652	955,853	11,097,145	11,744,036	3,743,133	3,861,180	29,897,570	42,291,006

MONEY IN CIRCULATION SEPTEMBER 1, 1922.

[Source: United States Treasury Department circulation statement.]

Kind of money.	Stock of money in the United States.	Money held by the U. S. Treasury and the F. R. system.	Money in circulation.	
			Amount.	Per capita.
Gold coin and bullion.....	\$3,858,548,202	\$3,442,161,170	\$416,387,032	33.78
Gold certificates.....	¹ (689,404,019)	495,415,616	193,988,403	1.76
Standard silver dollars.....	394,444,404	335,409,954	59,034,450	.54
Silver certificates.....	² (317,743,165)	46,071,350	271,671,815	2.47
Treasury notes of 1890.....	² (1,502,023)	1,000	1,501,023	.01
Subsidiary silver.....	270,701,710	37,954,124	232,747,586	2.12
United States notes.....	346,681,016	61,680,279	285,000,737	2.59
Federal reserve notes.....	2,603,730,960	462,425,011	2,141,305,949	19.46
Federal reserve bank notes.....	69,737,400	9,578,588	60,158,812	.55
National bank notes.....	759,705,549	27,994,429	731,711,120	6.65
Total.....	8,303,549,241	³ 4,918,691,521	4,393,506,927	39.93
Comparative totals:				
Aug. 1, 1922.....	8,227,669,509	³ 4,894,381,009	4,337,418,158	39.47
Sept. 1, 1921.....	8,082,456,974	³ 4,469,487,072	4,658,877,498	42.99
April 1, 1917.....	5,312,109,272	³ 3,896,318,653	4,100,590,704	39.54
July 1, 1914.....	3,738,288,871	³ 1,843,452,323	3,402,019,427	34.35
Jan. 1, 1879.....	1,007,084,483	212,120,402	816,266,721	16.92

¹ Does not include gold bullion or foreign coin outside of vaults of the Treasury, Federal reserve banks, and Federal reserve agents.

² These amounts are not included in the total, since the money held in trust against gold and silver certificates and Treasury notes of 1890 is included under gold coin and bullion and standard silver dollars, respectively.

³ Includes gold held in trust against gold certificates and standard silver dollars held in trust against silver certificates and Treasury notes of 1890, the aggregate of which should be deducted from the sum of money held by the United States Treasury and the Federal reserve system and money in circulation to arrive at the stock of money in the United States. The amounts of such gold and silver held in trust as of the date of this statement are shown in parentheses in the first column.

DISCOUNT RATES OF FEDERAL RESERVE BANKS IN EFFECT OCTOBER 1, 1922.

Federal reserve bank.	Paper maturing within 90 days.				Bankers' acceptances maturing within 3 months.	Agricultural and live-stock paper maturing after 90 days, but within 6 months.
	Secured by—		Trade acceptances.	Commercial, agricultural, and live-stock paper, n. e. s.		
	Treasury notes and certificates of indebtedness.	Liberty bonds and Victory notes.				
Boston.....	4	4	4	4	.....	4
New York.....	4	4	4	4	4	4
Philadelphia.....	4½	4½	4½	4½	4½	4½
Cleveland.....	4½	4½	4½	4½	4½	4½
Richmond.....	4½	4½	4½	4½	4½	4½
Atlanta.....	4½	4½	4½	4½	4½	4½
Chicago.....	4½	4½	4½	4½	4½	4½
St. Louis.....	4½	4½	4½	4½	4½	4½
Minneapolis.....	4½	4½	4½	4½	4½	4½
Kansas City.....	4½	4½	4½	4½	4½	4½
Dallas.....	4½	4½	4½	4½	4½	4½
San Francisco.....	4	4	4	4	4	4

DISCOUNT AND INTEREST RATES.

In the following table are presented actual discount and interest rates prevailing during the 30-day period ending September 15, 1922, in the various cities in which the several Federal reserve banks and their branches are located. A complete description of the several types of paper for which quotations are given will be found in the September, 1918, and October, 1918, FEDERAL RESERVE BULLETIN.

A comparison between discount and interest rates prevailing during the 30-day period ending September 15 and the 30-day period ending August 15 shows very little change. The only declines of any importance are in prime commercial paper to customers, interbank loans, and indorsed bankers' acceptances. Compared with the corresponding period last year, all rates continue to be lower.

DISCOUNT AND INTEREST RATES PREVAILING IN VARIOUS CENTERS DURING 30-DAY PERIOD ENDING SEPTEMBER 15, 1922.

District.	City.	Prime commercial paper.				Interbank loans.	Bankers' acceptances, 60 to 90 days.		Collateral loans—stock exchange.			Cattle loans.	Secured by warehouse receipts.	Ordinary loans to customers secured by Liberty bonds.
		Customers ² .		Open market.			Indorsed.	Unindorsed.	Demand.	3 months.	3 to 6 months.			
		30 to 60 days.	4 to 6 months.	30 to 60 days.	4 to 6 months.									
No. 1.	Boston.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.	H. L. C.
No. 2.	New York ¹	5 4 4 1/2	5 4 4 1/2	4 1/2 4 1/2	4 1/2 4 1/2	5 4 4 1/2	3 3 3	3 1/2 3 3	4 1/2 4 1/2	5 1/2 5 1/2	5 1/2 5 1/2			5 4 4 1/2
	Buffalo.	7 4 4 1/2	6 4 4 1/2	4 1/2 4 1/2	4 1/2 4 1/2	6 4 4 1/2	3 1/2 3 1/2	4 1/2 3 3 1/2	4 1/2 4 1/2	5 1/2 5 1/2	5 1/2 5 1/2			5 4 4 1/2
No. 3.	Philadelphia.	7 5 6	6 5 6	5 4 1/2	5 4 1/2	6 5 6			7 5 6	6 5 6	6 5 6			6 5 6
No. 4.	Cleveland.	6 4	6 4	4 1/2 4 1/2	4 1/2 4 1/2	6 4		3 1/2 3 1/2	6 4 1/2	6 4 1/2	6 4 1/2			6 4 1/2
	Pittsburgh.	7 4 1/2	7 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	7 6 6	7 6 6	7 6 6			6 5 6
	Cincinnati.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
No. 5.	Richmond.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
	Baltimore.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
No. 6.	Atlanta.	7 4 1/2	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	7 5 6	7 5 6	7 5 6			6 5 6
	Birmingham.	8 6 6-7	8 6 6-7	8 2 2-6	8 2 2-6	8 5 6-8		6 6 6	8 5 6-8	8 5 6-8	8 5 6-8			8 5 6-8
	Jacksonville.	7 6 7	7 6 7	7 1/2 7 1/2	7 1/2 7 1/2	7 5 6		6 6 6	7 6 7	7 6 7	7 6 7			7 6 6
	New Orleans.	7 1/2 5 1/2	7 1/2 5 1/2	7 1/2 4 1/2	7 1/2 4 1/2	7 5 6		7 3 1/2 3 1/2	8 4 6	8 4 6	8 4 6			8 4 6
	Nashville.	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7		8 6 7	8 6 7	8 6 7	8 6 7			8 6 7
No. 7.	Chicago.	6 4 1/2	6 5 5 1/2	4 1/2 4 1/2	4 1/2 4 1/2	6 5 5 1/2		4 1/2 4 1/2	6 4 1/2	6 4 1/2	6 4 1/2			6 4 1/2
	Detroit.	6 5 5 1/2	6 5 5 1/2	4 1/2 4 1/2	4 1/2 4 1/2	6 5 5 1/2		3 1/2 3 1/2	6 5 5 1/2	6 5 5 1/2	6 5 5 1/2			6 5 5 1/2
No. 8.	St. Louis.	6 4 5	6 4 5	4 1/2 4 1/2	4 1/2 4 1/2	6 4 5		3 1/2 3 1/2	6 4 5	6 4 5	6 4 5			6 4 5
	Louisville.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
	Memphis.	6 6 6	6 6 6	4 1/2 4 1/2	4 1/2 4 1/2	6 6 6		3 1/2 3 1/2	6 6 6	6 6 6	6 6 6			6 6 6
	Little Rock.	8 6 6-7	8 6 6-7	8 6 6-7	8 6 6-7	8 6 6-7		8 6 6-7	8 6 6-7	8 6 6-7	8 6 6-7			8 6 6-7
No. 9.	Minneapolis.	5 1/2 4 1/2	5 1/2 4 1/2	4 1/2 4 1/2	4 1/2 4 1/2	5 1/2 4 1/2		3 1/2 3 1/2	5 1/2 4 1/2	5 1/2 4 1/2	5 1/2 4 1/2			5 1/2 4 1/2
	Helena.	8 7 8	8 7 8	8 7 8	8 7 8	8 7 8		8 7 8	8 7 8	8 7 8	8 7 8			8 7 8
No. 10.	Kansas City.	6 4 1/2	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 4 1/2	6 4 1/2	6 4 1/2			6 5 6
	Omaha.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
	Denver.	6 5 6	6 5 6	4 1/2 4 1/2	4 1/2 4 1/2	6 5 6		3 1/2 3 1/2	6 5 6	6 5 6	6 5 6			6 5 6
	Oklahoma City.	10 6 7	10 6 7	10 6 7	10 6 7	10 6 7		10 6 7	10 6 7	10 6 7	10 6 7			10 6 7
No. 11.	Dallas.	7 5 6	7 5 6	7 5 6	7 5 6	7 5 6		7 5 6	7 5 6	7 5 6	7 5 6			7 5 6
	El Paso.	10 6 8	10 6 8	10 6 8	10 6 8	10 6 8		10 6 8	10 6 8	10 6 8	10 6 8			10 6 8
	Houston.	7 5 6	7 5 6	7 5 6	7 5 6	7 5 6		7 5 6	7 5 6	7 5 6	7 5 6			7 5 6
No. 12.	San Francisco.	6 5 5 1/2	6 5 5 1/2	4 1/2 4 1/2	4 1/2 4 1/2	6 5 5 1/2		3 1/2 3 1/2	6 5 5 1/2	6 5 5 1/2	6 5 5 1/2			6 5 5 1/2
	Portland.	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7		8 6 7	8 6 7	8 6 7	8 6 7			8 6 7
	Seattle.	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7		8 6 7	8 6 7	8 6 7	8 6 7			8 6 7
	Spokane.	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7		8 6 7	8 6 7	8 6 7	8 6 7			8 6 7
	Salt Lake City.	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7		8 6 7	8 6 7	8 6 7	8 6 7			8 6 7
	Los Angeles.	10 4 1/2	10 4 1/2	7 4 5	7 4 5	7 5 6		4 3 3 1/2	8 4 1/2	8 4 1/2	8 4 1/2			8 4 1/2

¹ Rates for demand paper secured by prime bankers' acceptances, high 4 1/2, low 3, customary 3 1/2-4.

FOREIGN EXCHANGE.

In this number of the **FEDERAL RESERVE BULLETIN** there is introduced a change in the method of calculating the general index of foreign exchange. Since July, 1921, when the publication of the general index began, the method used has been a computation of a geometric average weighted on the basis of trade with each country during the preceding month. The revised index differs in three particulars: First, the German mark is omitted from the calculation; secondly, an aggregative average is used; and thirdly, it is weighted on the basis of trade with each country for the preceding 12 months instead of 1 month. The reason for the last-named change is that, with weights changing every month, it was difficult to determine at any given time whether a movement of the index was caused by a change in rates or by a change in the direction of trade. Sometimes nearly all the leading rates moved in one direction, while the general index, which is their average, moved in the opposite direction. It was, therefore, decided to use weights which will be fairly constant from month to month. But in a period like the present, when world trade conditions are rapidly shifting, it was not thought desirable to have absolutely rigid weights, because if such weights were used it might be necessary to revise them every year and the adjustment would appear abrupt. By having the weights changed about one-twelfth every month with eleven-twelfths remaining constant, it is believed that a gradual adjustment of weights to changing trade conditions is provided for, while, at the same time, changes in the index from month to month can be explained almost entirely by the influence of changes in individual exchange rates.

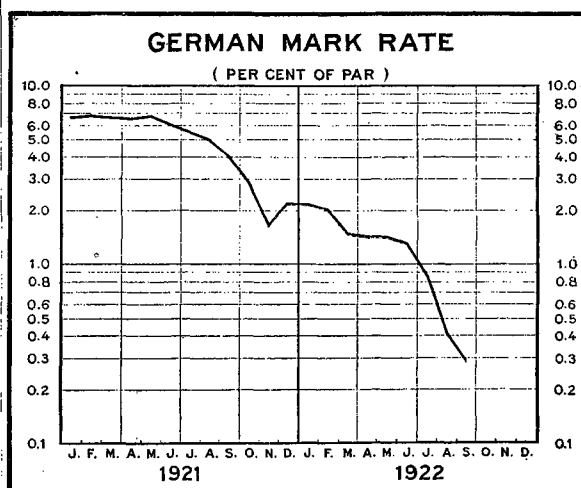
The change from the geometric to the aggregative average has been made for the following reasons: The foreign exchange index is supposed to represent the amount of money required to buy in the New York market a representative assortment of foreign exchange bills which at par would have cost \$100. The aggregative average actually represents such an amount, while the geometric average, being a mathematical abstraction, approximates it only so long as the extent of depreciation of the several currencies included does not differ too widely.¹

¹ The formula for calculating the aggregate average is:

$$\text{Index} = \frac{\sum(T) \times 100}{\sum\left(\frac{P \times T}{R}\right)} \quad \text{where 'T' represents the volume of trade with each}$$

country in dollars, P represents parity, and R represents the current rate of exchange. This formula was worked out with the cooperation of Prof. Irving Fisher, of Yale University.

In view of the great depreciation of the German mark it has been decided to exclude it from the calculation of the general index, for it is obvious that no method of computation can yield an average that will satisfactorily represent component items, ranging from a fraction of 1 per cent to more than 100 per cent. The little chart showing the movement of the German mark separately, which was published first in the **FEDERAL RESERVE BULLETIN** for August, will be continued.



The following table shows the new index for every month since November, 1918:

GENERAL INDEX OF FOREIGN EXCHANGE.

[Per cent.]

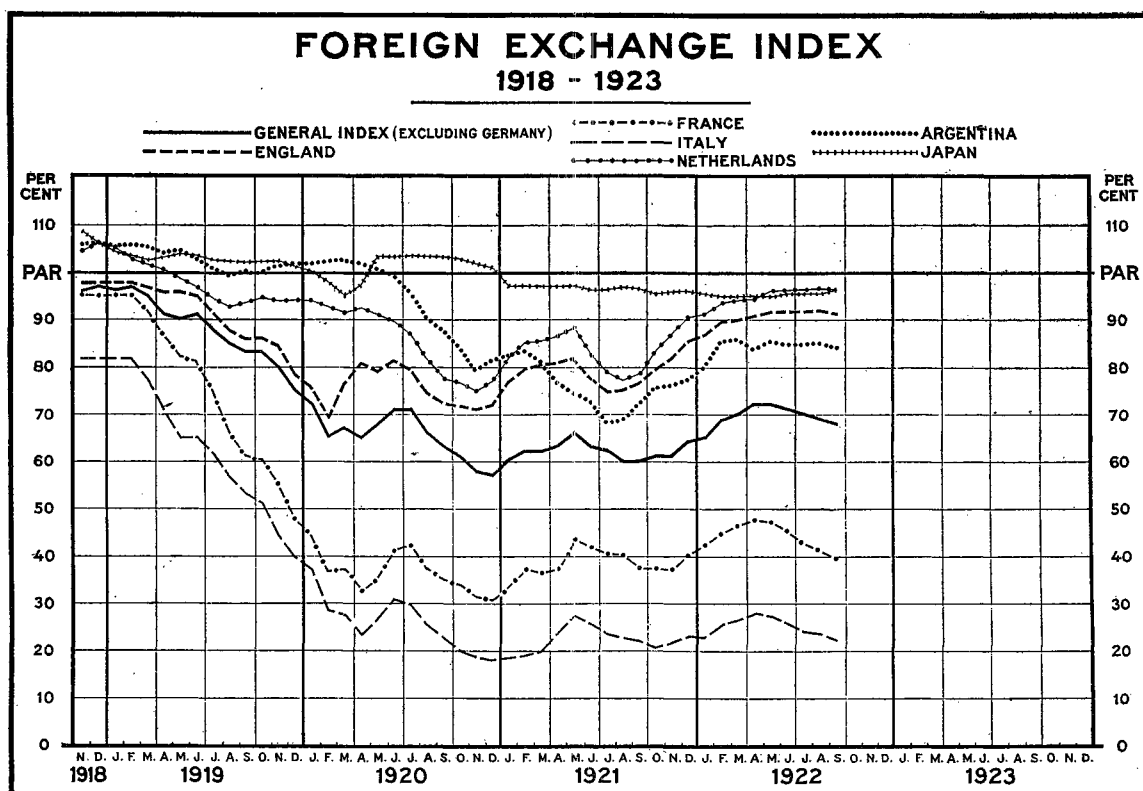
Year and month.	Index.	Year and month.	Index.	Year and month.	Index.
1918.		1920.		1921.	
November...	96	February...	65	July...	62
December...	97	March...	67	August...	60
		April...	65	September...	60
1919.		May...	68	October...	61
January...	96	June...	71	November...	61
February...	97	July...	71	December...	64
March...	95	August...	66		
April...	91	September...	63	1922.	
May...	90	October...	61	January...	65
June...	91	November...	58	February...	69
July...	88	December...	57	March...	70
August...	85			April...	72
September...	83	1921.		May...	72
October...	83	January...	60	June...	71
November...	80	February...	62	July...	70
December...	75	March...	62	August...	69
		April...	63	September...	68
1920.		May...	66		
January...	72	June...	63		

Throughout the month of September the foreign exchange market was characterized by a general downward tendency of leading rates, reflecting chiefly the apprehension caused by the military events in the Near East, besides

the seasonal offerings of foreign bills in payment for grain and cotton exports.

Sterling exchange, which had risen to \$4.48 in the middle of August, declined from that time to the end of September, when it stood at \$4.37. Other leading continental exchanges, with the sole exception of Norway, also show marked reductions for the month. The German mark, which had fallen to 0.0524 cent about the end of August, rallied to 0.0801 cent as the result of the action of the Repara-

tions Commission relieving Germany of further payments during this year. But this improvement was not maintained, and the mark was again quoted at around 6 cents per hundred at the end of September. South American exchanges also show declines, as do Chinese and Indian rates. The Japanese yen shows a slight advance for the month. Canadian exchange remained at about par throughout the month and on the last day rose a fraction above par for the first time since the war.



FOREIGN EXCHANGE RATES.

[General index for September, 1922, 68; for August, 1922, 69; for September, 1921, 60. Rates in cents per unit of foreign currency.]

COUNTRIES INCLUDED IN COMPUTATION OF INDEX.

	Monetary unit.	Par of exchange.	Low.		High.		Average.		Index (per cent of par). ¹		Weight.	
			Septem-ber.	August.	Septem-ber.	August.	Septem-ber.	August.	Septem-ber.	August.	Septem-ber.	August.
Belgium.....	Franc.....	19.30	7.1000	7.1300	7.4400	7.7770	7.2332	7.5451	37.48	39.09	32	31
Denmark.....	Krone.....	26.80	20.2700	21.4400	21.4700	21.6300	21.0552	21.5348	78.56	80.35	12	12
France.....	Franc.....	19.30	7.5400	7.5100	7.8700	8.2300	7.6592	7.9567	39.68	41.23	95	100
Great Britain.....	Pound.....	486.65	436.6000	444.2900	447.3400	448.3100	443.0696	446.4678	91.04	91.74	261	263
Italy.....	Lira.....	19.30	4.1700	4.3000	4.4100	4.6400	4.2676	4.5078	22.11	23.36	42	42
Netherlands.....	Florin.....	40.20	38.6300	38.6000	39.0100	39.0700	38.7932	38.8480	96.50	96.64	37	38
Norway.....	Krone.....	26.80	16.6100	16.7500	17.1300	17.4400	16.8272	17.1793	62.79	64.10	9	9
Spain.....	Peseta.....	19.30	15.1000	15.4900	15.5200	15.6500	15.2992	15.5489	79.27	80.56	20	20
Sweden.....	Krona.....	26.80	26.2400	26.0300	26.5800	26.7800	26.4568	26.3381	98.72	98.28	23	23
Switzerland.....	Franc.....	19.30	18.6000	19.0000	19.0200	19.0800	18.7908	19.0396	97.36	98.65	9	10
Canada.....	Dollar.....	100.00	99.8184	99.3472	100.0069	99.9124	99.9332	99.7481	99.93	99.75	187	184
Argentina.....	Peso (gold).....	96.48	79.6800	81.6100	82.7000	82.5700	81.0832	82.0852	84.04	85.08	31	30
Brazil.....	Milreis.....	32.44	11.4500	13.2200	13.6400	13.5800	12.5392	13.3752	38.65	41.23	31	30
Chile.....	Peso (paper).....	² 19.53	13.3800	13.4200	14.0400	14.3100	13.7276	13.7496	70.29	70.40	13	13
China.....	Shanghai tael.....	² 66.85	76.4800	76.1600	77.7700	77.5600	77.0140	76.9637	115.20	115.13	52	51
India.....	Rupee.....	48.66	28.3200	28.8800	29.0300	29.1200	28.7412	29.0144	59.07	59.63	29	29
Japan.....	Yen.....	49.85	47.7300	47.5700	48.4800	47.8100	48.0996	47.7019	96.49	95.69	117	115

OTHER COUNTRIES.

	Monetary unit.	Par of exchange.	Low.		High.		Average.		Index (per cent of par). ¹	
			Septem-ber.	August.	Septem-ber.	August.	Septem-ber.	August.	Septem-ber.	August.
Austria.....	Krone.....	20.26	0.0013	0.0012	0.0015	0.0022	0.0014	0.0017	0.01	0.01
Bulgaria.....	Lev.....	19.30	.6133	.6030	.6558	.7267	.6380	.6518	3.31	3.38
Czechoslovakia.....	Krone.....		3.0019	2.4361	3.5078	3.7567	3.2306	2.9023		
Finland.....	Markka.....	19.30	2.1488	2.0900	2.2063	2.1713	2.1741	2.1329	11.26	11.05
Germany.....	Reichsmark.....	23.82	.0594	.0524	.0801	.1493	.0684	.0989	.29	.42
Greece.....	Drachma.....	19.30	2.0400	2.9100	2.8900	3.2100	2.4724	3.0330	12.81	15.97
Hungary.....	Krone.....	20.26	.0390	.0353	.0515	.0744	.0423	.0595	.21	.29
Poland.....	Polish mark.....		.0112	.0112	.0146	.0155	.0127	.0135		
Portugal.....	Escudo.....	108.05	3.7700	5.2700	5.4300	7.3200	4.8256	6.5849	4.59	6.09
Rumania.....	Leu.....	19.30	.6009	.6600	.7350	1.0825	.6559	.8110	3.40	4.20
Yugoslavia.....	Krone.....		.2628	.2738	.3728	.3108	.3211	.2957		
	Dinar.....	19.30	1.0586	1.1029	1.4757	1.2471	1.2926	1.1863	6.70	6.15
Cuba.....	Peso.....	100.00	99.8188	99.8000	99.9375	99.9250	99.8700	99.8729	99.87	99.87
Mexico.....	do.....	49.85	48.2125	48.3075	48.3875	48.7750	48.3006	48.5314	96.89	97.35
Uruguay.....	do.....	103.42	76.6200	79.3400	79.5300	81.6500	78.0132	80.8474	75.43	78.17
China.....	Mexican dollar.....	² 48.11	55.6000	55.5500	57.2100	56.9000	56.1500	56.2559	116.71	116.93
Hongkong.....	Dollar.....	² 47.77	56.9200	57.1800	57.9200	57.8300	57.3080	57.5422	119.97	120.46
Straits Settlements.....	Singapore dollar.....	56.78	51.2500	50.7900	52.0000	52.0000	51.6440	51.3974	90.95	90.52

¹ Based on average.² 1913 average.

Average price of silver per fine ounce. In London (converted at average rate of exchange), \$0.70447; in New York, \$0.69888.

FINANCIAL STATISTICS FOR PRINCIPAL FOREIGN COUNTRIES.

A summary of banking and financial conditions abroad is presented statistically in the accompanying tables.

ENGLAND.

[Amounts in millions of pounds sterling.]

Year and month.	Deposit and note accounts, Bank of England and Treasury.				Government floating debt.		Nine London clearing banks. ²				London bankers' clearing house return.	Capital issues of United Kingdom. ⁴	Discount rates.			Statist index number of foreign exchange value of £. ⁵	Net profits industrial companies. ⁵
	Bank notes. ¹	Currency notes and certificates outstanding.	Deposits, public and other.	Coin and bullion. ³	Treasury bills.	Temporary advances.	Total floating debt.	Money at call and short notice.	Discounts and advances.	Investments.	Deposits.		Three months' Treasury bills.	Three months' bank bills.	Six months' trade bills.		
Average of end of month figures:											Total clearings.		Per cent.	Per cent.	Per cent.		Per cent.
1913.....	29	57	38	15	219	1,297					1,370		4 1/2	4 1/2	4 1/2	99.59	11.7
1920.....	103	348	147	146	1,078	1,321					3,252		4 1/2	4 1/2	4 1/2	15.2	
1921.....	108	327	136	157	1,139	1,322	97	1,176	309	1,768	2,911	32	4 1/2	4 1/2	4 1/2	10.3	
1921, end of—																	
August.....	107	319	137	157	1,166	1,347	100	1,179	302	1,764	2,787	3	4 1/2	4 1/2	4 1/2	105.5	
September.....	106	314	118	157	1,139	1,321	99	1,186	302	1,771	2,641	10	4 1/2	4 1/2	4 1/2	106.4	
October.....	104	312	175	157	1,124	1,338	102	1,196	306	1,802	2,938	33	4 1/2	4 1/2	4 1/2	108.4	6.5
November.....	106	313	144	157	1,108	1,300	96	1,205	311	1,793	2,921	19	4 1/2	4 1/2	4 1/2	112.4	
December.....	107	326	123	157	1,080	1,260	106	1,191	315	1,818	3,173	19	4 1/2	4 1/2	4 1/2	112.1	
1922, end of—																	
January.....	103	305	135	157	1,039	1,154	114	1,192	333	1,826	3,399	42	3 1/2	3 1/2	5 1/2	118.2	6.1
February.....	102	298	138	157	987	1,112	1,069	111	1,152	357	3,088	26	2 1/2	3 1/2	4 1/2	118.0	
March.....	103	300	151	157	882	1,147	1,030	103	1,097	369	1,747	25	2 1/2	3 1/2	4 1/2	118.3	
April.....	102	303	134	157	759	1,193	951	107	1,065	378	1,737	17	2 1/2	2 1/2	4 1/2	118.0	7.2
May.....	103	298	130	157	771	1,172	943	109	1,061	392	1,745	36	2 1/2	2 1/2	4 1/2	118.2	
June.....	103	295	131	157	761	1,205	965	113	1,070	388	1,755	22	1 1/2	2 1/2	3 1/2	118.2	
July.....	104	296	122	154	755	1,159	914	110	1,056	386	1,730	19	1 1/2	2 1/2	3 1/2	120.3	
August.....	103	293	124	154	715	1,153	868	105	1,020	390	1,688	1	1 1/2	2 1/2	3 1/2	121.3	
September.....	101	289	121	154									1 1/2	2 1/2	3 1/2		

¹ Less notes in currency notes account.² Held by the Bank of England and by the Treasury as note reserve.³ Average weekly figures.⁴ Compilation of London Joint City and Midland Bank, British Government loans for national purposes excluded.⁵ Compilation of London Economist. Ratio of net profits to ordinary and preferred capital of industrial companies, exclusive of railways, mines, insurance companies, and banks. Applies to earnings disclosed during the quarter and has therefore a probable lag of six months.⁶ Statist figure revised to exclude Germany.

FRANCE.

[Amounts in millions of francs.]

Year and month.	Bank of France. ¹					Situation of the Government.			Price of 3 per cent perpetual rentes. ⁶	Value of new stock and bond issues placed upon the French market. ⁷	Savings banks, excess of deposits (+) or withdrawals (-).	Average daily clearings of the Paris banks.
	Gold reserves.	Silver reserves.	Deposits. ²	Circulation.	Advances to the Government for purposes of the war. ³	Government revenue. ⁴	Internal debt.	External debt. ⁵				
1913, average.....	3,343	629	830	5,565		320	35,000		86.77		- 65	59
1920, average.....	3,536	253	3,527	38,066	26,000	1,005			57.34	4,654	+ 43	554
1921, average.....	3,568	274	2,927	37,404	25,300	1,103			56.56	1,100	+ 67	550
1921, end of—												
August.....	3,574	277	2,749	36,783	24,900	1,016			56.50	152	+ 72	467
September.....	3,575	277	2,509	37,129	24,900	1,011			56.20	234	+ 63	553
October.....	3,575	278	2,563	37,154	25,100	1,305		35,286	54.30	3,355	+ 33	463
November.....	3,576	279	2,563	36,336	24,500	1,051			54.90	434	- 0.5	505
December.....	3,576	280	2,743	36,487	24,600	1,228	242,758	34,779	54.75	853	+ 38	527
1922, end of—												
January.....	3,576	280	2,392	36,433	23,000	1,323			56.55	759	+ 41	489
February.....	3,577	281	2,429	36,151	22,500	1,014			59.55	5,062	+ 100	489
March.....	3,578	282	2,236	35,528	21,500	1,154	243,857	35,716	56.70	377	+ 49	455
April.....	3,579	283	2,412	35,787	22,100	1,381			57.60	459	+ 58	411
May.....	3,579	284	2,303	35,982	23,100	1,176			57.70	644	+ 55	464
June.....	3,580	285	2,448	36,039	23,300	1,225			57.95	947	+ 53	474
July.....	3,582	285	2,432	36,050	23,000	1,472			58.25		+ 62	562
August.....	3,583	286	2,170	36,385	23,900	1,168			60.10		+ 66	512

¹ End of month figures.² Includes Treasury and individual deposits.³ Under the laws of Aug. 5 and Dec. 26, 1914, July 10, 1915, and Feb. 16, 1917.⁴ Figures of the "Association Nationale des Porteurs Français de Valeurs Mobilières." Bonds issued by the Government and the railroad companies not included.⁵ Not including 1,078,000,000 francs held abroad from January through August and 1,948,000,000 francs from September through December.⁶ Not including about 1,948,000,000 francs held abroad.⁷ Average for 11 months.⁸ Estimate in the French Senate.⁴ From indirect taxation and Government monopolies.⁵ Foreign debt converted to francs at par.⁶ Last Wednesday in the month.⁷ Bonds issued by the Government and the railroad companies not included.

ITALY. ^a

[Amounts in millions of lire.]

Year and month.	Leading private banks. ¹			Banks of issue.						Government finances.					Index numbers of securities prices. ⁴
	Cash.	Loans, discounts, and due from correspondents.	Deposits and due to correspondents.	Loans and discounts.	Gold reserve.	Total reserve.	Deposits and demand liabilities.	Commercial circulation.	Circulation for account of the state.	State currency notes.	Treasury metallic reserve.	Short-term treasury bills.	Total public debt.	Principal revenues from taxation and monopolies during month. ³	
1913, end of Dec.	129	2,007	1,674	857	1,375	1,661	318	2,284		499	117				
1920, end of Dec.	1,308	16,539	15,810	7,074	1,068	2,077	2,563	8,988	10,743	2,268	161	13,200			
1921, average	1,200	16,242	16,001	7,509	1,074	2,020	2,352	9,304	9,064	2,267	170			1,019	
1921, end of—															
August	1,131	17,024	16,672	7,315	1,079	1,964	2,143	9,491	8,352	2,267	160	21,173	108,729	1,381	
September	1,052	17,223	16,825	7,327	1,073	1,966	2,124	9,785	8,395	2,267	159	21,612		564	
October	1,364	17,185	17,022	7,816	1,086	1,990	2,243	9,746	8,554	2,267	159	22,997	110,754	1,404	
November	1,174	12,844	12,778	7,810	1,089	1,948	2,151	9,435	8,485	2,267	159			648	
December	1,997	11,797	12,502	10,020	1,092	1,999	2,913	10,304	8,505	2,267	170	24,600	111,900	1,458	
1922, end of—															
January	1,426	11,334	11,616	10,156	1,109	1,996	2,848	10,183	8,570	2,267	170			909	
February	1,081	11,446	11,482	10,029	1,100	1,971	2,592	9,631	8,626	2,267	170			1,366	
March	965	11,407	11,403	9,833	1,118	1,956	2,687	9,589	8,523	2,267	170			759	
April	908	11,752	11,708	10,113	1,122	1,964	2,473	9,300	8,350	2,267	170			1,337	
May	841	11,732	11,698	9,323	1,104	1,963	2,572	9,259	8,061	2,267	169			667	
June	845	11,980	11,860	9,505	1,124	1,976	2,740	9,615	8,049	2,267	169	23,862	113,204	1,454	
July	861	12,118	11,896	9,051	1,125	1,991	2,524	9,947	8,050	2,267				783	
August				9,086	1,125	2,021	2,605	9,695	8,050						

^a Latest figures subject to revision.¹ Banca Commerciale Italiana, Banca Italiana di Sconto, Credito Italiano, Banco di Roma.² Revenues from state railways; from post, telegraph, and telephones; from state domain; from import duties on grain; and from Government sales of sugar are not included.³ Excluding Banca Italiana di Sconto.⁴ Figures for 1921 are based on quotations of Dec. 31, 1920=100. Those for 1922 are based on quotations of Dec., 1921=100.⁵ Revised.⁶ Includes paper circulation of the State and of banks on account of the State.GERMANY. ^a

[Amounts in millions of marks.]

Year and month.	Reichsbank statistics.					Situation of the Government.				Value of new stock and bond issues placed on German market.		Index numbers of securities prices. ¹	
	Gold reserve. ¹	Discounts. ¹		Note circulation. ¹	Deposits. ¹	Clearings.	Darlehens-kassen-scheine in circulation. ¹	Receipts from taxes.	Revenue of state railways.	Treasury bills outstanding. ¹		25 stocks.	15 bonds.
1913, average	1,068	-----		1,958	668	6,136	-----	207	13	220	-----	-----	-----
1920, average	1,092	47,980		53,964	17,702	57,898	13,145	-----	-----	-----	-----	-----	-----
1921, average	1,056	33,133		80,952	20,213	89,297	8,861	6,285	2,358	192,832	2,655	-----	-----
1921.													
August	1,024	84,044	1,002	80,073	13,650	79,172	7,837	5,145	2,416	202,872	1,228	-----	-----
September	1,024	98,422	1,142	86,384	19,980	98,004	7,610	4,908	2,599	210,504	1,534	-----	-----
October	994	98,705	881	91,528	18,303	119,496	7,316	6,185	2,825	218,000	2,889	-----	-----
November	994	114,023	1,446	100,944	25,313	140,493	7,330	7,044	3,397	226,676	7,135	289	181
December	995	132,331	1,062	113,639	32,906	120,835	8,325	8,016	4,329	246,921	5,965	206	147
1922.													
January	996	126,160	1,592	115,376	23,412	116,680	8,046	8,802	4,415	255,678	4,831	223	152
February	996	134,252	1,857	120,026	26,526	109,816	7,977	9,614	4,659	262,817	2,101	222	154
March	997	146,531	2,152	130,671	33,858	170,357	8,701	14,065	7,096	271,935	6,416	274	169
April	1,001	155,618	2,403	140,420	31,616	175,977	9,183	13,193	8,997	280,935	3,992	265	268
May	1,003	167,794	3,377	151,949	33,125	179,370	9,440	17,619	10,984	289,240	4,152	242	297
June	1,004	186,126	4,762	169,212	37,174	191,414	10,374	17,776	12,781	311,600	2,762	224	298
July	1,005	207,858	8,122	189,795	39,976	243,493	12,234	21,547	15,396	307,810	2,830	252	430
August	1,005	249,760	21,704	238,147	56,124	-----	13,383	31,466	18,053	-----	2,468	299	662
September	1,005	349,770	50,234	316,870	110,012	-----	13,995	-----	-----	-----	-----	445	1,933

^a Latest figures subject to revision.¹ End of month.² Calculated by the Frankfurter Zeitung with prices of 25 stocks, 10 domestic and 5 foreign bonds (prices as of Jan. 1, 1921=100). These figures, recently revised, now include subscription privileges which were heretofore omitted. Figures are as of beginning of month.³ End of March, 1913.⁴ As of Nov. 10, 1921.⁵ As of Dec. 30, 1921.

NORWAY.

[Amounts in millions of kroner.]

Year and month.	Norges Bank.					Private commercial banks (103).			Bankruptcies.
	Gold holdings.	Note circulation.	Deposits.	Loans and discounts.	Clearings at Christiania.	Loans and discounts.	Deposits.	Total aggregate resources.	
1914, end of July.....	184	123	14	88					Number.
1920, average.....	147	451	102	419	652	3,921	3,382		
1921, average.....	147	417	111	443	537	3,840	3,338	5,164	86
1921, end of—									
July.....	147	428	100	452	541	3,958	3,343	5,249	95
August.....	147	421	110	455	580	3,954	3,340	5,256	106
September.....	147	416	85	426	637	3,844	3,319	5,224	100
October.....	147	411	113	453	589	3,742	3,275	5,196	79
November.....	147	395	121	439	538	3,677	3,231	5,113	88
December.....	147	410	141	476	551	3,508	3,305	4,944	81
1922, end of—									
January.....	147	378	131	433	524	3,413	3,202	4,805	89
February.....	147	376	141	428	494	3,346	3,172	4,755	78
March.....	147	385	151	449	628	3,280	3,124	4,690	107
April.....	147	386	143	447	516	3,802	3,113	4,755	78
May.....	147	375	152	446	525	3,367	3,086	4,783	129
June.....	147	385	133	441	532	3,354	3,080	4,804	94
July.....	147	382	137	445	466	3,361	3,083	4,810	68
August.....	147	385	133	445	468	3,295	3,036	4,781	79

¹ Includes balances abroad.

SWEDEN.

[Amounts in millions of kroner.]

Year and month.	Riksbank.				Situation of the Government.		Joint-stock banks.		Protested bills during month. ¹		Business failures during month. ¹	Foreign exchange index. ¹	Index number of stock prices—A list. ¹	Value of stock issues registered during the month.
	Gold coin and bullion.	Note circulation.	Deposits.	Clearings.	Funded State debt.	Floating State debt.	Bills discounted with Riksbank.	Loans and discounts.	Number.	Value.	Number.	Value of the krona abroad (foreign currencies = 100).		
1913, end of December...	102	235	108	585	628	20	139	2,287	4,314	2	309		258	24
1920, average.....	269	733	226	3,596	1,281	248	476	6,008	3,586	6	196	112.9	176	61
1921, average.....	280	661	193	2,715			389	5,948	6,907	15	432	121.8	121	21
1921, end of—														
August.....	285	632	152	2,316	1,360	137	345	5,937	6,515	16	353	119.5	120	31
September.....	276	672	113	2,609	1,368	60	330	5,901	5,786	10	493	121.4	114	13
October.....	276	650	126	2,310	1,393	63	341	5,837	6,449	13	505	124.9	107	17
November.....	275	628	188	2,364	1,409	77	354	5,735	6,089	13	491	124.0	104	19
December.....	275	628	331	3,305	1,433	78	464	5,656	6,298	10	528	126.3	107	21
1922, end of—														
January.....	275	563	337	2,332	1,434	84	421	5,654	6,345	9	509	126.6	109	18
February.....	274	579	346	2,122	1,435	87	429	5,572	6,272	10	398	129.2	94	18
March.....	274	626	312	2,354	1,435	90	447	5,474	7,559	13	513	128.3	89	23
April.....	274	582	301	1,936	1,434	92	404	5,430	6,965	12	400	126.6	100	15
May.....	274	567	293				380	5,378	7,581	10	430	124.8	115	50
June.....	274	585	217				320	5,388	6,599	10	262	125.6	113	63
July.....	274	551	243				307	5,268	6,417	12	374	127.0	113	35
August.....	274	559	213				293	5,221	5,461	6	300	129.1	110	22

¹ Source: Kommersiella Meddelanden.

JAPAN.¹

[Amounts in millions of yen.]

Year and month.	Bank of Japan.						Tokyo banks.		
	Note circulation.	Specie reserve for notes. ²	Ordinary loans and discounts.	Advances on foreign bills.	Current Government deposits in Japan.	Private deposits in Japan.	Total loans Tokyo associated bank.	Tokyo bank clearings, total in the month.	Average discount rate (Tokyo market).
1913, average.....	363	216	47	33	(³)	7	333	364	8.38
1921, average.....	1,226	1,200	107	39	297	50	1,932	2,572	9.00
End of— 1921.									
August.....	1,192	1,192	107	31	345	35	1,951	2,816	8.43
September.....	1,232	1,232	101	32	293	30	1,955	2,627	8.28
October.....	1,255	1,255	157	30	309	34	1,993	2,679	8.50
November.....	1,283	1,264	197	30	325	37	1,989	2,783	8.79
December.....	1,546	1,246	298	26	203	35	2,000	3,340	9.20
End of— 1922.									
January.....	1,377	1,241	224	56	277	35	1,984	2,246	9.02
February.....	1,246	1,223	172	26	328	27	1,950	2,438	9.02
March.....	1,289	1,289	248	58	422	29	1,963	3,099	9.09
April.....	1,226	1,263	267	61	520	30	1,980	2,809	9.34
May.....	1,203	1,203	178	50	469	33	1,973	3,143	9.42
June.....	1,344	1,223	179	98	377	43	1,993	3,178	9.45
July.....	1,224	1,220	133	82	427	35	1,970	2,763	9.38
August.....	1,280	1,132	241	90	488	30	1,928	2,582	
September.....	1,237	1,069	134	115	382	29			

¹ Figures apply to last day of month in case of Bank of Japan, to last Saturday of the month in the case of the other items.² This includes the specie segregated against notes only. It includes gold credits abroad as well as bullion and coin at home.³ During January, February, April, October, November, and December, 1913, Government deposits averaged 4,193,000 yen. During the remainder of the year there was an average monthly overdraft of 8,942,000 yen.

ARGENTINA.

[Amounts in millions of pesos.]

Year and month.	Banks. ¹				Banco de la Nación.				Caja de Conversión.				Ex- change, average month- ly rate of New York on Buenos Aires. Par: \$96.48=100 gold pesos.	
	De- posits (paper).	Dis- counts and ad- vances (paper).	Cash.		De- posits (paper).	Dis- counts and ad- vances (paper).	Cash.		Clear- ings in Buenos Aires (paper).	Note cir- culation (paper).	Gold re- serve.	Gold bonds de- posited in lega- tions.		Liabil- ities of bank- rupt- cies during month (paper).
			Gold.	Paper.			Gold.	Paper.						
End of—														
1913.....	1,464	1,541	62	435	541	478	32	180	1,471	823	263		14	.....
1919.....	3,010	2,113	66	771	1,250	676	39	268	2,805	1,177	320	79	3	99.0180
1920.....	3,530	2,505	46	1,081	1,412	804	25	406	3,612	1,363	476	4	5	90.7040
1921.....	3,375	2,543	36	1,087	1,310	866	23	410	3,045	1,363	476	4	12	72.9909
1921.														
End of—														
July.....	3,454	2,544	38	1,072	1,350	846	23	387	3,065	1,363	466	4	12	65.799
August.....	3,444	2,519	38	1,093	1,349	828	24	403	3,093	1,363	466	4	12	68.555
September.....	3,447	2,492	36	1,152	1,350	816	23	431	3,076	1,363	466	4	8	69.63
October.....	3,391	2,467	36	1,172	1,311	803	23	448	2,909	1,363	466	4	16	73.078
November.....	3,359	2,501	36	1,150	1,293	840	23	463	2,133	1,363	466	4	13	73.4739
December.....	3,375	2,543	36	1,087	1,310	866	23	410	3,482	1,363	466	4	13	74.8042
1922.														
End of—														
January.....	3,362	2,529	36	1,064	1,310	887	23	419	3,014	1,363	466	4	10	77.1892
February.....	3,362	2,565	36	994	1,310	913	23	383	2,593	1,363	466	4	8	82.5704
March.....	3,313	2,512	36	981	1,272	884	23	383	3,298	1,363	466	4	16	82.7785
April.....	3,304	2,459	36	999	1,283	887	23	393		1,363	466	4	17	80.7480
May.....	3,278	2,461	35	1,016	1,294	906	23	386	3,016	1,363	466	4	13	82.4088
June.....	3,326	2,461	35	1,060	1,329	933	23	395	2,716	1,363	466	4	8	81.8554
July.....	3,308	2,473	35	1,013	1,322	920	23	399		1,363	466	4	8	81.8468
August.....										1,363	466	4	7	82.0852

¹ Including figures of Banco de la Nación.

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FEDERAL RESERVE DISTRICTS

