

FEDERAL RESERVE BULLETIN

ISSUED BY THE
FEDERAL RESERVE BOARD
AT WASHINGTON

JANUARY, 1920



WASHINGTON
GOVERNMENT PRINTING OFFICE
1920

FEDERAL RESERVE BOARD.

EX OFFICIO MEMBERS.

CARTER GLASS,
Secretary of the Treasury, Chairman.
JOHN SKELTON WILLIAMS,
Comptroller of the Currency.

W. P. G. HARDING, *Governor.*
ALBERT STRAUSS, *Vice Governor.*
ADOLPH C. MILLER,
CHARLES S. HAMLIN.
HENRY A. MOEHLENPAH.

GEORGE L. HARRISON, *General Counsel.*

W. T. CHAPMAN, *Secretary.*
R. G. EMERSON, *Assistant Secretary.*
W. M. IMLAY, *Fiscal Agent.*
W. W. PADDOCK, *Chief, Division of Operations and Examination.*

W. W. HOXTON, *Executive Secretary.*
H. PARKER WILLIS,
Director, Division of Analysis and Research.
M. JACOBSON, *Statistician.*
J. E. CRANE,
Acting Director, Division of Foreign Exchange.

TABLE OF CONTENTS.

	Page.
Review of the month.....	1
Business and financial conditions: Summary.....	13
Special reports by Federal Reserve agents.....	19
Federal Reserve banking in 1919.....	11
International price index.....	26
Gold policy and foreign commerce of the Scandinavian countries, 1914-1919.....	35
The French National Bank of Foreign Commerce.....	46
Movement of foreign exchange rates in New York.....	49
Official:	
State banks and trust companies admitted to the system.....	62
Charters issued to national banks.....	62
Banks granted authority to accept up to 100 per cent of capital and surplus.....	60
Foreign branches of American banks.....	63
Fiduciary powers granted to national banks.....	64
Rulings of the Federal Reserve Board.....	65
Law department:	
Renewal of drafts drawn by the purchaser of goods and secured at the time of original acceptance by warehouse receipts or bills of lading.....	66
Miscellaneous:	
Adjustment of salaries in the Federal Reserve Banks.....	54
Retail trade index.....	53
The Edge Act, providing for the incorporation of institutions to engage in foreign banking.....	56
Act making gold certificates legal tender.....	60
Change in boundaries of districts Nos. 6 and 8.....	59
Election of directors of Federal Reserve Banks.....	60
Los Angeles branch opened.....	60
Directors of branch banks.....	61
Branch at Oklahoma City approved.....	63
Commercial failures reported.....	63
Statistical:	
Wholesale prices in the United States.....	68
Discount and interest rates prevailing in various centers.....	72
Physical volume of trade.....	74
Debits to individual account, November-December.....	84
Discount and open-market operations of the Federal Reserve Banks.....	88
Operation of the Federal Reserve clearing system.....	94
Resources and liabilities of the Federal Reserve Banks.....	95
Federal Reserve note account.....	100
Condition of member banks in selected cities.....	102
Imports and exports of gold and silver.....	108
Estimated stock of money in the United States.....	109
Foreign exchange rates in New York during three months ending December, 1919.....	111
Discount rates approved by the Federal Reserve Board.....	110
Diagrams:	
Movement of foreign exchange rates at Stockholm.....	40
Movement of foreign exchange rates at Copenhagen.....	41
Exchange rates at New York on principal allied and neutral countries.....	51
Exchange rates at New York on principal silver-standard countries.....	52
Par point map.....	94

OFFICERS OF FEDERAL RESERVE BANKS.

Federal Reserve Bank of—	Chairman.	Governor.	Deputy governor.	Cashier.
Boston.....	Frederic H. Curtiss...	Chas. A. Morss.....	Chas. E. Spencer, jr.. C. C. Bullen.....	W. Willett.
New York.....	Pierre Jay.....	Benj. Strong, jr.....	J. H. Case..... L. F. Sailer.....	L. H. Hendricks. ¹ E. R. Kenzel. ¹ J. D. Higgins. ¹ Channing Rudd. ¹ A. W. Gilbert. ¹
Philadelphia.....	R. L. Austin.....	E. P. Passmore.....	Wm. H. Hutt, jr.....	W. A. Dyer.
Cleveland.....	D. C. Wills.....	E. R. Fancher.....	M. J. Fleming ² Frank J. Zurlinden ²	H. G. Davis.
Richmond.....	Caldwell Hardy.....	George J. Seay.....	C. A. Peple..... R. H. Broaddus.....	Geo. H. Keesee.
Atlanta.....	Joseph A. McCord.....	M. B. Wellborn.....	L. C. Adelson.....	M. W. Bell.
Chicago.....	Wm. A. Heath.....	J. B. McDougal.....	C. R. McKay..... B. G. McCloud ³ O. M. Attebery.....	S. B. Cramer.
St. Louis.....	Wm. Mc. Martin.....	D. C. Biggs.....	C. A. Worthington ² Lynn P. Talley.....	J. W. White. S. S. Cook.
Minneapolis.....	John H. Rich.....	R. A. Young.....	Wm. A. Day..... Ira Clerk. ⁴	J. W. Helm. ³ Lynn P. Talley.
Kansas City.....	Asa E. Ramsay.....	J. Z. Miller, jr.....		W. N. Ambrose.
Dallas.....	Wm. F. Ramsey.....	R. L. Van Zandt.....		
San Francisco.....	John Perrin.....	J. U. Calkins.....		

¹ Controller.

² Assistant to governor.

³ Acting cashier.

⁴ Assistant deputy governor.

MANAGERS OF BRANCHES OF FEDERAL RESERVE BANKS.

Federal Reserve Bank of—	Manager.	Federal Reserve Bank of—	Manager.
New York:		St. Louis:	
Buffalo branch.....	Ray M. Gidney.	Louisville branch.....	W. P. Kincheloe.
Cleveland:		Memphis branch.....	J. J. Heflin.
Cincinnati branch.....	L. W. Manning.	Little Rock branch.....	A. F. Bailey.
Pittsburgh branch.....	Geo. De Camp.	Kansas City:	
Richmond:		Omaha branch.....	O. T. Eastman.
Baltimore branch.....	Morton M. Prentis.	Denver branch.....	C. A. Burkhardt.
Atlanta:		Dallas:	
New Orleans branch.....	Marcus Walker.	El Paso branch.....	R. R. Gilbert.
Jacksonville branch.....	Geo. R. De Saussure.	Houston branch.....	Sam R. Lawder.
Birmingham branch.....	A. E. Walker.	San Francisco:	
Nashville branch.....	Bradley Curry.	Los Angeles branch.....	Ira Clerk.
Chicago:		Portland branch.....	C. L. Lamping.
Detroit branch.....	R. B. Locke.	Salt Lake City branch.....	C. H. Stewart.
		Seattle branch.....	C. J. Shepherd.
		Spokane branch.....	C. A. McLean.

SUBSCRIPTION PRICE OF BULLETIN.

The FEDERAL RESERVE BULLETIN is distributed without charge to member banks of the system and to the officers and directors of Federal Reserve Banks. In sending the BULLETIN to others the Board feels that a subscription should be required. It has accordingly fixed a subscription price of \$2 per annum. Single copies will be sold at 20 cents. Foreign postage should be added when it will be required. Remittances should be made to the Federal Reserve Board. Member banks desiring to have the BULLETIN supplied to their officers and directors may have it sent to not less than 10 names at a subscription price of \$1 per annum.

No complete sets of the BULLETIN for 1915, 1916, or 1917 are available.

FEDERAL RESERVE BULLETIN

VOL. 6

JANUARY, 1920.

No. 1

REVIEW OF THE MONTH.

Treasury operations during the month of December have continued to follow the same general course which had been reported during the autumn months. On the basis of the daily Treasury statements, the total receipts for December, exclusive of transactions in the public debt, aggregated \$1,092,691,597.63, of which amount \$905,307,590.08 represents receipts on account of income and profits taxes, while expenditures on the same basis aggregated \$492,410,665.02, leaving a net current surplus for the month of \$600,280,932.61. The total amount of income and profits taxes deposited with the Federal Reserve Bank of New York and its Buffalo branch for the period from December 1 to December 31 was \$270,133,737.42. Sales of certificates of indebtedness under the offering of December 15 aggregated \$728,130,000, of which amount \$281,882,500 were in the New York district. The total amount of Treasury certificates maturing December 15 was \$662,752,000, of which amount \$294,189,500 were outstanding in the New York district. The net disbursements by the Treasury for interest on the public debt, on the basis of the daily Treasury statements, for the month of December were \$140,566,811.57. Receipts in New York and at other points only partially offset the disbursements of the Treasury, and the result was a corresponding increase in funds momentarily available at the banks in those districts. Subsequent income-tax receipts and payments of loans by the banks out of the proceeds of redeemed certificates of indebtedness combined to reduce the earning investments of the Federal Reserve system, which fell to \$2,891,836,000 on December 19. At the New York Federal Reserve Bank the level of earning assets on December 19 was the lowest since October 23.

The relations between public finance operations and the condition of the banks have thus been especially noteworthy during December, producing as they have a somewhat complex situation in the earning investments of the system. On 14 business days during the month of December the total investments of the Federal Reserve Bank of New York were more than \$1,000,000,000. Since the middle of November Government deposits have been withdrawn with fair regularity. These deposits, created chiefly by the sale of certificates of indebtedness during August and September, resulted, when the Government called for the funds, in a momentary rise not only in rates on the stock exchange money market, but in the loans and discounts of the Federal Reserve Banks. This amounts to saying that the deposits resulting from the sale of certificates consist for the most part only of entries on the books of the banks showing credits to the account of the United States. It is not until the Government demands deposits that the bank has to find the funds with which to pay. Recourse, if necessary, is then had to the Federal Reserve Bank where the purchased certificates or other collateral were put up as security for loans, and these are normally liquidated when the withdrawn deposits return to the banks as Government checks.

The reserve percentages for the different banks of the Federal Reserve system have continued during the month to show more or less fluctuation as between the several banks, but comparatively little fluctuation for the system as a whole. In the following table are given for November and December the reserve percentages obtaining for all Federal Reserve Banks combined. From this it will be seen that the combined reserve percentage of the system has decreased during the month of December about 1.6 per cent.

	Per cent.
November 7.....	46.8
November 14.....	47.1
November 21.....	46.9
November 28.....	45.5
December 5.....	46.4
December 12.....	46.0
December 19.....	46.8
December 26.....	44.8

During the same period the total of loans in the system and at the different banks has substantially been unchanged, there being only a minor reduction. This maintenance of the outstanding loans of the banks has been due to the fact that while some banks in the commercial centers have reduced their commitments very materially, partly as a result of high rates for call money, banks elsewhere have almost correspondingly increased their loans. The following table shows the movement of loans, discounts, and investments during the month of November and December:

Loans, discounts, and investments of reporting member banks in leading cities.

[Amounts in millions of dollars.]

	New York City.		All Federal Reserve Bank cities.		Leading cities in all Federal Reserve districts.	
	Number of banks.	Amount.	Number of banks.	Amount.	Number of banks.	Amount.
Oct. 31	71	5,789	268	10,420	784	15,611
Nov. 7	71	5,688	268	10,361	783	15,570
14	71	5,570	274	10,334	790	15,582
21	71	5,487	275	10,233	794	15,463
28	71	5,467	276	10,216	795	15,451
Dec. 5	71	5,374	276	10,155	796	15,439
12	71	5,394	276	10,177	796	15,459
19	71	5,473	276	10,309	796	15,614
26	71	5,460	276	10,323	797	15,621

As a result of the continued maintenance of the volume of bank credit outstanding, interest rates have continued very high and have shown a marked rising tendency. The commercial rate of interest is now 6 per cent or higher, while call rates during the month ran as high as 18 per cent and were only temporarily reduced to moderate levels. These rates represent conservative tendencies in the loan policies of banks, but as the reports of the Board from the various Federal Reserve districts show, the higher trend in interest rates in the

cities has not as yet been fully paralleled by rates in the southern and western parts of the country.

Conditions not only at Federal Reserve Banks, but throughout the member banks of the system, as thus indicated, led the Board

on December 11 to authorize an advance in discount rates, while by a readjustment of rates the differential in favor of paper secured by Government obligations other than Treasury certificates of indebtedness was eliminated. The following table shows the new discount rates just referred to, and indicates a general level for 90-day commercial rediscounts amounting to $4\frac{1}{2}$ to 5 per cent. At the corresponding date last year the rates were generally $\frac{1}{2}$ to $\frac{3}{4}$ per cent lower for Government secured paper, commercial discounts being about as at present. Upon the present basis the rate is substantially the same throughout the system, varying in the case of most of the banks not more than about one-fourth of 1 per cent, irrespective of whether the paper is commercial in character or is secured by Government obligations.

Discount rates approved by Federal Reserve Board up to Dec. 31, 1919.

Federal Reserve Bank.	Discounted bills maturing within 90 days (including member banks' 15-day collateral notes) secured by—		Trade acceptances maturing within 90 days. ²	Agricultural and live-stock paper maturing within 91 to 180 days.
	Treasury certificates of indebtedness.	Otherwise secured and unsecured. ¹		
Boston.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	5
New York.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	5
Philadelphia.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	5
Cleveland.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
Richmond.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	5
Atlanta.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
Chicago.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
St. Louis.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
Minneapolis.....	$4\frac{1}{2}$	$5\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
Kansas City.....	$4\frac{1}{2}$	5	5	$5\frac{1}{2}$
Dallas.....	$4\frac{1}{2}$	5	5	$5\frac{1}{2}$
San Francisco.....	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$

¹ Rate on paper secured by War Finance Corporation bonds, 1 per cent higher.

² Rate also applies to bankers' acceptances discounted by the New York and Cleveland banks.

³ Rate of $4\frac{1}{2}$ per cent on paper secured by $4\frac{1}{2}$ per cent certificates.

⁴ Rate of $4\frac{1}{2}$ per cent on member banks' collateral notes secured by $4\frac{1}{2}$ per cent certificates.

⁵ Rate of 5 per cent for maturities 61 to 90 days.

NOTE.—Acceptances purchased in open market, minimum rate 4 per cent.

It is thus seen that, with the exception of Minneapolis, all the banks have adopted a uniform rate for all commercial paper maturing within 90 days, the rate in the Minneapolis district being 5 per cent for paper maturing within 61 to 90 days, as against $4\frac{1}{2}$ per cent for shorter maturities. The differential established during November between rates on paper secured by $4\frac{1}{2}$ per cent Treasury certificates and paper secured by $4\frac{1}{2}$ per cent certificates has also been eliminated by most of the banks through the adoption of a uniform $4\frac{1}{2}$ per cent rate for paper secured by all classes of Treasury certificates. These changes have brought about a great simplification in the Federal Reserve System's rate structure.

The effect of this advance in discount rates was decidedly less than was the influence of that which had been authorized on November 4, due to the fact that the influence of the second increase of December 11 was directly in line with the policy which had already been initiated on November 4. In New York the announcement of the new rates was followed by a day or two of high call interest charges and of active liquidation, while a similar effect, although in less pronounced degree, was observable at other points throughout the country.

In this connection reference may be made to a letter transmitted by the Board to Federal Reserve Banks under date of December 19 in which a new method of figuring deposits upon which reserve is to be computed was laid down. In accordance with an opinion of counsel the Board now rules that beginning with February 12, 1920, the reserve to be carried by Federal Reserve Banks against deposits will be computed against immediately available deposits only. Items on the liability side whose availability is deferred and uncollected items on the resource side of the bank statement of condition will be disregarded in determining the deposit liability upon which reserve is computed. This action will tend to apply a more severe standard of computation,

especially in the case of those banks which have been carrying a relatively large "float."

Early in 1918 the Federal Reserve Board was informed of a disposition **Increased rates on bank balances.** on the part of large banks throughout the country to indulge in sharp competition for bank balances and to offer inducements in the way of increased rates of interest. At that time the Board was consulted by representative bankers and an adjustment was arrived at. Upon the understanding then reached, the Clearing House banks of New York agreed to fix a rate of $2\frac{1}{2}$ per cent on bank balances payable on demand, with the proviso that the interest rate would be automatically advanced or reduced one-quarter of 1 per cent with each advance or decline of one-half of 1 per cent in the 90-day rate at the Federal Reserve Bank of New York. This rate is now $4\frac{1}{2}$ per cent, and should it be advanced at any time to 5 per cent the rate of interest paid by New York banks for out-of-town bank balances would advance automatically to $2\frac{1}{2}$ per cent, and a $5\frac{1}{2}$ per cent rate at the New York reserve bank would advance the interest rate on bank balances automatically to $2\frac{1}{2}$ per cent.

The Board wishes to be free to approve such discount rates as conditions may make necessary or desirable, but it is anxious at the same time to avoid a disturbance of the whole banking situation such as would most likely result from an advance in the interest rate allowed on out-of-town balances by the New York Clearing House banks, or banks in other large centers.

The Board has decided, therefore, to invite representatives of the clearing houses from all parts of the country to meet together in Washington on Tuesday, January 6, 1920, for the purpose of discussing this matter in the hope that some way will be found of abrogating the existing entangling alliance between Federal Reserve Bank discount rates and interest rates on deposits without endangering existing banking relationships.

The month of December has been a period of unusual uncertainty and disorganization in the foreign exchange market. A remarkable decline in the chief European quotations occurred between the beginning and the 14th of the month, directly ascribable to the excess of our exports to, over imports from, the countries which were primarily affected. Generally abnormal conditions now exist in the exchange market. Current items are not being settled continuously as before the war, while many exporters are "carrying" their foreign customers upon open account. In the following table are furnished figures designed to set forth some of the more interesting movements occurring during the month at selected dates. In each case the low quotation for the day mentioned has been cited.

	Nov. 29.	Dec. 6.	Dec. 13.	Dec. 20.
England.....	3.99½	3.84½	3.65½	3.71½
France.....	9.84	10.75	11.87	11.35
Italy.....	12.28	12.77	13.60	13.22
Spain.....	19.60	19.65	19.50	18.70
Argentina.....	43.125	43.25	43.15	43.125
Hongkong.....	100.00	101.75	100.50	99.00
China (Shanghai).....	150.00	150.00	159.00	164.00
Japan.....	50.31½	50.50	50.50	50.50

Canadian exchange has also been quoted as low as 11 per cent off, although during the latter part of the month there was recovery.

These conditions in the exchange market have been the subject of close scrutiny and continuous discussion on the part of both domestic and foreign authorities. Public statements made by various British economists and publicists have been based upon what was considered to be the necessity of obtaining from the United States definite action designed to alleviate what they thought to be a wholly abnormal and distressing condition. In several countries, notably in the Central Empires, the exceedingly low value of the currency has been such as to make importation from the United States very difficult. The abnormal exchange situation is in part due to the extreme depreciation of many foreign currencies as compared with gold in their home markets, and is not entirely assignable to the derangement of imports and exports between the United States and other countries.

According to the reports made public by the Bureau of Foreign and Domestic Commerce, November foreign trade figures (issued on Dec. 23), show a continuously increasing balance of trade in favor of the United States. This balance for the whole of the year 1919, it is now estimated, will run well up toward \$4,000,000,000. The November figures not only show no sign of slackening in the movement of goods but even indicate an increase, though it should be noted that there has also been a marked increase of importations. The net excess of exports over imports for the month is, however, \$311,710,086, a figure in excess of the balance for the preceding month. While, however, figures for the volume of United States exports are thus very large, it is to be recalled that they have attained this great size largely as a result of the high prices of commodities and that they do not represent a corresponding increase in the number of units of goods exported. Indeed, in some branches of business there has been a distinct falling off in the actual volume of goods shipped.

The following condensed table shows the export trade situation as indicated by the figures made public on December 23—an 11-month showing.

	November—	
	1919	1918
IMPORTS.		
Free of duty.....	\$302,136,620	\$204,274,453
Dutiable.....	127,074,457	46,733,584
Total.....	429,211,077	251,008,037
EXPORTS.		
Domestic.....	729,807,707	513,180,250
Foreign.....	11,113,456	9,056,344
Total.....	740,921,163	522,236,594
Excess of exports.....	311,710,086	271,228,557

	11 MONTHS ENDING NOVEMBER—		
	1919	1918	Increase.
IMPORTS.			
Free of duty.....	\$2,428,838,518	\$2,066,896,344	\$361,942,174
Dutiable.....	1,069,293,791	753,429,849	345,863,942
Total.....	3,528,132,309	2,820,326,193	707,806,116
EXPORTS.			
Domestic.....	7,084,005,090	5,492,495,336	1,591,509,754
Foreign.....	158,040,708	90,706,047	67,334,661
Total.....	7,242,045,798	5,583,201,433	1,658,844,365
Excess of exports.....	3,713,913,489	2,762,875,240	.....

The problem thus presented by our export trade situation is one of the utmost importance in connection with international trade and with the continuance of active business conditions in the United States.

For several months past it has been the belief of foreign trade authorities that the growingly unfavorable rates of exchange would form an impenetrable obstacle and that as a result of the lack of systematic foreign credits a considerable falling off in our shipments would take place. In considering this prediction and its apparent nonfulfillment, there is, however, to be borne in mind the fact that the growing volume of exports to which reference is made is in terms of money and not in volume of goods, foreign countries now being obliged to pay far higher values for raw materials than they did even a few months ago. On the other hand, it should be remembered that as yet time has not been afforded for establishing the results of the present credit situation in foreign trade. Whatever the amount of credit extended through the efforts of banks and commercial houses to European buyers may be, it is different in its character and effect as well as in its volume from the credit extended through the use of Government funds up to a period shortly after the conclusion of the armistice at the end of 1918. Some American export houses have been financing their foreign customers to a considerable extent either by carrying them on open account or by leaving credit balances due themselves on deposit with foreign banks. Such houses are of course obliged to resort to their own banks for larger accommodation than they would otherwise need, so that the indirect extension of credit from banking sources in support of foreign trade may be very considerable, although it does not result in an immediate and complete cancellation of indebtedness such as occurred when the Treasury advanced the proceeds of public loans for the use of buyers representing European nations.

In view of the continuance of very high exports to European countries, the action of Congress and the President in definitely placing the so-called "Edge Act" upon the statute books becomes a matter of moment. Action upon the conference committee's report regarding this measure having been taken by the Senate on December 15, the President on December 24 signed the measure, thus enacting it into law. The provisions of the bill have been fully set forth in general terms in past issues of the BULLETIN and do not need detailed review at this time. It is, however, important to note that the measure in the form in which it has been enacted calls for action by the Federal Reserve Board in order to carry its terms fully into effect. The Board has jurisdiction of the procedure relating to the organization of corporations under the act and is also required to regulate the conditions under which the corporations may operate in numerous important respects, including the terms and conditions upon which bills and drafts may be accepted and those upon which debentures, bonds, and promissory notes may be issued, while the Board is given general authority to determine what powers the concerns may exercise as incidental to the powers conferred by the act or as usually exercised by similar corporations. Whenever an Edge Act corporation receives deposits in the United States it is required to carry reserves in such amount as the Board may prescribe, but in no event less than 10 per cent of those deposits. To the Board also is assigned the duty of passing upon applications made by any such corporation to purchase and hold stock in other corporations organized under the terms of the Edge Act, under the terms of any State law, or under the laws of any foreign country. Other functions in connection with the eligibility of directors on the boards of the new corporations are intrusted to the Federal Reserve Board, to which the various corporations are

required to report and by whose examiners they are to be examined. These numerous details in connection with the organization and operation of the proposed corporations will require the issue of regulations or instructions designed fully to cover the points specified in the law. Such regulations are already under advisement and the Board expects to make them public without delay to the end that there may be no further postponement of action under the terms of the law by those who desire to take advantage of its provisions. The question how far the proposed organization will be able to furnish effective aid under existing conditions to European countries is one upon which no definite opinion can be expressed, but which will depend not only upon the number and scope of the new concerns, but also upon the extent to which investors all over the United States respond to the offer of debentures to be issued by them.

The fact already referred to that low quotations of foreign currencies are in no small degree merely a reflection of the fact that these currencies are depreciated at home is clearly realized by foreign banking authorities. This is shown by the action of the British Exchequer, announced on December 18, in fixing the volume of British secured circulating currency notes at a figure identical with the maximum which has existed during the past year. This circulation has increased during 1919 about £38,000,000. It will be remembered that the so-called "Cunliffe Committee," which reported in 1918 and whose report was then published in the FEDERAL RESERVE BULLETIN, pointed to a limitation of the volume of Government issues of all kinds as a cardinal principle in the restoration of sound financial conditions in England. The action now taken would seem to be an acceptance of this view then expressed. If adhered to, the policy would mean a distinct limit to further currency inflation in Great Britain, as any further demands for circulation would have to be met from bank reserves as they were when England was on a gold basis. In this connection it is

interesting to note an increase in the volume of Bank of France notes of 1,433,671,000 francs, while the increase of Federal Reserve notes during the past year amounts to nearly \$372,000,000. In all such cases the real question to be determined is whether the increase of notes issued represents a corresponding growth of business transactions which carry with them their own power of "liquidation," or whether they are in effect a conversion of Government bonds or other obligations into terms of money. The action taken by Great Britain parallels the policy adopted by Congress after the close of the Civil War in fixing the volume of greenbacks at a specified maximum which could not be exceeded. Contraction of currency or of credit in general may be effected through change in the backing or protection which supports the issues or in lieu of such far-reaching action, a first step may be taken through the policy of maximum limitation which the British Government is now reported to have adopted. In the United States the question to be considered in connection with the currency would naturally be how far the growth in its volume corresponds to a growth in the volume of current production and business. Indices of the physical volume of trade, which have been collected by the Board during the past year, point to a shrinkage in production. As has often been stated in the BULLETIN, these indices are as yet incomplete. The conclusion to be drawn from them as they stand is, however, supported by the comparison of ton-mile freight movements on American railroads. Such a comparison tends to show an even heavier falling off, although here it should be remembered that during the war the high movement of war freight to export points produced an artificial level of comparison. The indications at all events are clearly to the effect that there has been some decrease rather than an increase in the country's general output.

While the question of private action in the financing of European needs
Aid for Europe. has thus been practically referred to the bankers and investors of the

country, the question of governmental intervention is still under discussion in the press. The Secretary of the Treasury in his annual report to Congress, transmitted at the opening of the session, calls attention to the situation and expresses the opinion that—

“inequalities of exchange reflect not only the trade and financial balance between two countries, but, particularly after a great war such as that we have been through, the inequalities of domestic finance. The United States has met a greater proportion of the cost of the war from taxes and bond issues than any other country. Largely as a consequence of this policy, the buying power of the dollar at home has been better sustained than has the buying power at home of the currency of any European belligerent. For the United States to determine by governmental action to depress the dollar as measured in terms of foreign exchange and to improve the position of other currencies as measured in terms of dollars would be to shift to the American people the tax and loan burdens of foreign countries. This shifted burden would be measured by the taxes to be imposed and the further loans to be absorbed by our people as a consequence and by increased domestic prices. United States Government action at this time to prevent in respect to foreign exchange the ordinary operation of the law of supply and demand, which automatically sets in action corrective causes, and to prevent the dollar from going to a premium when its natural tendency is to do so, would artificially stimulate our exports, and through the competition of export demand with domestic demand, maintain or increase domestic prices.”

Although thus expressing in unmistakable language the general view of our financial relations to Europe which has been the consistent policy of the Treasury ever since the conclusion of the armistice and which is generally accepted as the sound one, the Secretary of the Treasury is disposed for humanitarian reasons to modify his attitude in so far as relates to the relief of immediate suffering. In a letter to Congress dated

December 18, Mr. Glass said that “in order to meet the urgent necessity of keeping the destitute populations of Europe alive through this winter, there must be taken at once measures for their relief. The resources and efficiency of the private charities of this country are not adequate to the necessities which can not in the nature of the case be financed through ordinary private channels.” Congress had already been advised that it was the desire of the department to fund the maturing interest obligations of allied Governments to which we had made loans during the war, in so far as such Governments might deem action of the kind necessary and in so far as it might be deemed wise by Treasury authorities to make this concession to them. The Treasury is considering with representatives of the Governments of the Allies the funding of the demand obligations which the United States holds into long-time obligations, and at the same time the funding during the reconstruction period, or, say, for a period of two or three years, of the interest on the obligations of foreign Governments acquired by the United States under the Liberty loan acts. The relief thus furnished by the action of the department should in an important degree alleviate the necessities of the European financial situation by relieving European Governments of the necessity of providing a volume of exchange which may be roughly estimated as \$500,000,000 per annum in order to meet their current indebtedness to the United States.

One of the important phenomena of the past month has been the rapid advance in the price of silver, both in the London and New York markets. This advance has carried the value of the metal as high as \$1.3575 in the United States. In the following table the course of silver prices during the past few years is briefly sketched, with more detailed figures covering the years 1918 and 1919.

Annual average price of a fine ounce of silver, 1910-1919, based upon London quotations at par rate of exchange for the years 1910 to 1917, inclusive, and on New York quotations thereafter; also bullion value of 371½ grains of pure silver (contents of silver dollar) at the average annual prices quoted.

[Data furnished by the Director of the Mint.]

Year.	Average annual price of ounce of silver	Value of pure silver in a silver dollar.
1910.....	\$0.54077	\$0.41825
1911.....	.53928	.41709
1912.....	.61470	.47543
1913.....	.60458	.46760
1914.....	.55312	.42780
1915.....	.51892	.40135
1916.....	.68647	.53094
1917.....	.89525	.69242
1918.....	.98446	.76142
1919.....	1.12085	.86691

Average monthly New York prices of fine bar silver per ounce.

Year and month.	Average New York price of fine bar silver per ounce.	Year and month.	Average New York price of fine bar silver per ounce.
1918.		1919.	
January.....	\$0.93927	January.....	\$1.01558
February.....	.89514	February.....	1.01500
March.....	.92728	March.....	1.01475
April.....	.98394	April.....	1.01500
May.....	1.00003	May.....	1.08020
June.....	1.00010	June.....	1.11402
July.....	1.00000	July.....	1.07332
August.....	1.00692	August.....	1.12386
September.....	1.01492	September.....	1.15636
October.....	1.01500	October.....	1.20692
November.....	1.01500	November.....	1.30446
December.....	1.01587	December.....	1.33072
Average for year....	.98446	Average for year....	1.12085

The situation has been such as to tend to stimulate the movement of our exports to oriental countries in precisely the same way that the unfavorable conditions of exchange in relation to Europe have tended to hamper the sale of our goods in those countries in which the dollar was at a premium. The brief table already furnished at an earlier point in this issue shows how the dollar in trade with oriental nations has tended to fall below par, just as exchanges upon the European belligerents have shown the dollar at a quotation very far above par. At the same time there has been heavy exportation of silver from the United States to oriental countries, the aggregate shipments of the metal between January 1 and

December 10, 1919, showing a net excess of exports of about \$145,000,000. In view of the conditions thus indicated by the movement of silver bullion out of the country to the Orient, announcement was made on December 6 that under arrangements made between the Treasury and the Federal Reserve Board standard silver dollars that are free in the Treasury will until further notice be delivered against other forms of money to the Division of Foreign Exchange of the Federal Reserve Board, which will through the Federal Reserve Bank of New York, cooperating with the branches of American banks in the Orient, employ such dollars in regulating our exchanges with silver standard countries. It was noted that the arrangement referred to can not of course affect the redemption of outstanding silver certificates in standard silver dollars.

Further changes in the price level have occurred during the month of December. The index number of the Bureau of Labor for the month of November showed an upward movement of 7 points, while Sauerbeck's index number for Great Britain shows a parallel movement of 8 points as compared with 1913 as a base, or 7 points compared with its original base. These changes continue to be of large importance, as has been noted by the BULLETIN in the past, in their bearing upon both economic and social conditions through their influence on wages and other forms of income. They are also exercising an influence upon investment conditions. As prices advance and money loses in its purchasing power, the market tendency is to increase the rate of interest to be required for the use of capital. There has been some indication of changes in this regard as evidenced in the lowered value of investment securities. Careful analysis of the situation, however, shows that the change in the cost of capital which has occurred during the past few months has been far less than that which has taken place in the value of goods. A survey of the situation recently made for the Federal Reserve Board would indicate the following results:

Security.	Yield 1913.	Yield now.	After taxes.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Municipals.....	4.28	4.62	4.62
Railroad bonds.....	4.92	5.96	5.24
Industrial bonds.....	5.71	6.63	5.84
Industrial notes.....	6.21	6.51	5.73
Industrial preferreds.....	6.88	7.25	6.81

These net yields after taxes were obtained by deducting 12 per cent from the bond and note yields, except municipals (which are not subject to Federal tax), and 6 per cent from the yield of preferred stocks.

It is worthy of note that upon the basis of these estimates the gross price of capital obtained through the issue of industrial bonds has gone up 0.92 per cent; and of this, the war taxes account for 0.79 per cent, while the rise in the price of capital, meaning net to the investor, accounts for only 0.13 per cent. So great has been the effect of the enlarged earning power of the industrial companies upon the credit of the companies that industrial notes and preferred stocks apparently yielded at the time of this estimate actually less in the net than they did in 1913.

During the month ending December 10 the net outward movement of gold was \$54,688,000, as compared with a net outward movement of \$44,950,000 for the month ending November 10. Net imports of gold since August 1, 1914, were \$792,073,000, as may be seen from the following exhibit:

[In thousands of dollars, i. e., 000 omitted.]

	Imports.	Exports.	Excess of imports over exports.
Aug. 1 to Dec. 31, 1914.....	23,253	104,972	¹ 81,719
Jan. 1 to Dec. 31, 1915.....	451,955	31,426	420,529
Jan. 1 to Dec. 31, 1916.....	685,745	155,793	529,952
Jan. 1 to Dec. 31, 1917.....	553,713	372,171	181,542
Jan. 1 to Dec. 31, 1918.....	61,950	40,848	21,102
Jan. 1 to Dec. 10, 1919.....	66,729	346,063	¹ 279,333
Total.....	1,843,345	1,051,273	792,073

¹ Excess of exports over imports.

Gold imports for the monthly period, amounting to \$4,554,198, were received principally from Canada, New Zealand, Belgium, and

Mexico. Of the gold exports, amounting to \$57,797,769, \$21,050,000 were consigned to Argentina, \$19,035,474 to Japan, \$4,494,415 to Hongkong, \$3,953,780 to British India, \$1,986,453 to China, and \$1,200,000 to Spain, the remainder going principally to Mexico, Straits Settlements, Panama, Canada, and Dutch East Indies. Since the removal of the gold embargo on June 7 total gold exports have amounted to approximately \$331,673,000. Of this total about \$92,635,000 were shipped to Japan, \$54,050,000 to Argentina, \$34,686,000 to China, \$36,094,000 to Hongkong, \$31,954,000 to British India, and \$29,200,000 to Spain, and the remainder largely to Uruguay, Venezuela, Dutch East Indies, Mexico, and Canada. The net outward movement of gold since the removal of the embargo was approximately \$308,946,000.

During the same monthly period the net outward movement of silver was \$29,168,000, as compared with a net outward movement of \$1,688,000 for the month ending November 10. Net exports of silver since August 1, 1914, were \$424,603,000, as may be seen from the following exhibit:

[In thousands of dollars, i. e., 000 omitted.]

	Imports.	Exports.	Excess of exports over imports.
Aug. 1 to Dec. 31, 1914.....	12,129	22,182	10,053
Jan. 1 to Dec. 31, 1915.....	34,484	53,599	19,115
Jan. 1 to Dec. 31, 1916.....	32,263	70,595	38,332
Jan. 1 to Dec. 31, 1917.....	53,340	84,131	30,791
Jan. 1 to Dec. 31, 1918.....	71,376	252,846	181,470
Jan. 1 to Dec. 10, 1919.....	82,271	227,113	144,842
Total.....	285,363	710,466	424,603

Almost three-fourths of the silver imports for the most recent monthly period, amounting to \$7,649,000, were received from Mexico; Salvador, Canada, Chile, and Peru furnishing most of the remainder. Of the silver exports, amounting to \$36,817,000 (as against \$9,577,000 the month before), \$27,271,000 were consigned to China, \$3,554,000 to Hongkong, \$3,221,563 to Canada, and the remainder principally to the Netherlands and Mexico.

During the four weeks between November 21 and December 19 member banks in the leading cities report net liquidation of 8 millions of United States bonds and of 33.6 millions of Victory notes, as against an increase of 23.3 millions Treasury certificates, following the latest issue of tax certificates on December 15. War paper holdings, exclusive of amounts rediscounted, show a decline of 37.6 millions, due largely to redemption by the Government at or before maturity of Treasury certificates. The net decrease for the 4 weeks in the aggregate holdings of United States war securities and war paper, 56 millions, is, however, more than fully offset by increases of 49.6 millions in the total of loans secured by stocks and bonds and of 157.6 millions in other loans and investments. On the other hand, these banks reduced their bills payable with the Federal Reserve Banks by 208.4 millions, so that, on the whole, their net loans and investments show but little change for the period under review. Payment of income and excess-profits taxes due on December 15 resulted in a considerable reduction of their net demand deposits, the amount carried by reporting banks on December 19 being 148 millions less than four weeks before. For the same period the banks report an increase of 416.2 millions in their Government deposits.

Data for the Federal Reserve Banks, available for the 5-week period ending December 26, indicate a gradual reduction in the holdings of war paper to 1,414.9 millions on December 19 (a decrease of 258.9 millions since November 21) and a gain of 95.4 millions for the following week. Other discounts show a continuous growth, the December 26 total being 233.8 millions in excess of the corresponding November 21 figure. Fifteen-day paper, which constituted about 83 per cent of the total discounts held by the Federal Reserve Banks on October 31, the Friday preceding the adoption of the new rate schedule, which did away with the differential between 15-day and 90-day war paper in nearly all districts, constituted 68 per cent of the total discounts held on the last Friday in 1919. Acceptances on hand in-

creased from 480 to 585.2 millions, a new high record, while total earning assets likewise reached a record total of 3,080.5 millions, an increase since November 21 of 163.6 millions. Net deposits reached the low level of 1,610.9 millions on December 19, following the heavy tax payments due on December 15, and on the following Friday stood at 1,704.5 millions, a decrease of 142.3 millions since November 21. Loss of 40.9 millions in gold reserves and 51.4 millions in total cash reserves were caused apparently to a large extent by export withdrawals of gold and silver. Federal Reserve note circulation shows an increase for the five weeks of 240.4 millions, or at an average weekly rate of about 48 millions, the increase being especially marked during the last two weeks of the year. As a result the reserve ratio of the banks shows a decline from 46.9 to 44.8 per cent.

Under date of December 27, 1915, the Resignation of Federal Reserve Board published the following resolution:

Whereas, it is the opinion of the Federal Reserve Board that persons holding political or public office in the service of the United States, or of any State, Territory, county, district, political subdivision, or municipality thereof, or acting as members of political party committees, can not consistently with the spirit and underlying principles of the Federal Reserve Act, serve as directors or officers of Federal Reserve Banks.

Resolved, That the Federal Reserve Board hereby expresses to the member banks its opinion that no such persons should henceforward be elected or act as directors or officers of Federal Reserve Banks; and prescribes as a condition of eligibility that candidates for election shall comply with the terms of this resolution.

Resolved further, That copies of this resolution be sent to every member bank and Federal Reserve Bank and to all directors of Federal Reserve Banks.

In accordance with the spirit and purpose of this resolution, two resignations from Federal Reserve Banks have occurred. Col. William B. Thompson has resigned as class B director of the Federal Reserve Bank of New York to become chairman of the Republican National Ways and Means Committee, and Mr. William C. Procter has resigned from the board of the Cincinnati branch of the Federal Reserve Bank of Cleveland.

Federal Reserve Banking in 1919.

During the calendar year 1919 activities of the Federal Reserve Banks continued in undiminished scope and volume. Cessation of actual hostilities did not end the war work of the banks, and loan operations for the Government in close harmony with the Treasury, involving the flotation of the last popular war loan and the placing of the several issues of loan and tax certificates, continued to be one of the leading if not the leading function of the Federal Reserve Banks. This task involved collection, concentration, and disbursement on Government account of 15,669 million dollars, of which 4,491.5 millions represents the total of the Victory loan allotted; 6,754.4 millions the combined amounts of eight series of certificates issued during the year in anticipation of the Victory loan and of four series of the so-called loan certificates; and 4,423 millions the total of eleven series of certificates issued in anticipation of income and excess profits taxes due in 1919 and 1920.

The success of these issues was due in part to the accommodation accorded to member banks through the discount at preferential rates of so-called war paper—i. e., member banks' own notes and customers' paper secured by United States war bonds and certificates. Reported holdings of war paper, which totaled slightly over 1,400 millions at the close of 1918 and reached a maximum of 1,863.5 on May 16, about the time of the consummation of the Victory loan, when war paper constituted 91.4 per cent of the total discounts held by the Federal Reserve Banks, gradually declined to 1,383.9 millions, or 84.1 per cent of the total discounts held by these banks on September 19. Between that date and the middle of November these totals followed an upward course. Since then, as the result of rate revision, the amount of war paper has gone down to 1,510.4 millions, or 68.8 per cent of the total discounts held on December 26. Of this total, 732.4 millions, or 48.5 per cent, were secured by Liberty bonds, 337.7 millions, or 22.3 per cent, by Victory notes, and 440.3 millions, or

29.2 per cent, by Treasury certificates. Other discounts, which aggregated 302.5 millions at the close of 1918, continued at a comparatively low level during the greater part of the year. It was only at about the close of September that the discounts of ordinary commercial paper began to show material increases. On December 26 holdings of this class of paper aggregated 684.5 millions, and constituted 31.2 per cent of the Federal Reserve Banks' total holdings of discounted bills, as against less than 18 per cent the year before. Acceptances on hand, which totaled 303.7 millions on December 27, 1918, moved within moderate limits during the first part of the present year. About the end of June the total for the first time in the year was in excess of 300 millions. During the last two months of the year, however, the accumulation of acceptances in the portfolios of the Federal Reserve Banks proceeded at a rapid pace, the total held on the last Friday of the present year, 585.2 millions, being over 21 per cent of the total bills held by the Federal Reserve Banks, compared with 15 per cent the year before.

During the year the banks' holdings of United States bonds show a reduction from 28.9 to 26.8 millions, the present holdings comprising largely circulation bonds and 3 per cent conversion bonds and, only to a very small extent, Liberty bonds. An increase since January 3 of 148.4 millions in Treasury certificate holdings represents largely additional investments of the banks in one-year 2 per cent certificates to secure Federal Reserve bank-note circulation. Total earning assets increased during the year from 2,318.2 to 3,080.5 millions, or nearly 33 per cent.

During the earlier part of the year, while the gold embargo was still in force, and between August and November, the banks' gold reserves were increased through net imports of gold and through the acquisition of German gold and its transfer to London. These gains were practically offset, however, by the amount of gold withdrawn for foreign shipments, largely to Spain, Argentina, and the Far East,

with the result that gold reserves at the close of the present year, 2,078.4 millions, are 11.9 millions less than a year ago. Total cash reserves show a similar decline from 2,146.2 to 2,135.5 millions.

As against moderate changes in the banks' reserve holdings, their net deposits, because of the increase in membership and in consequence of the general credit expansion, show an increase during the year from 1,552.9 to 1,704.5 millions. Federal Reserve note circulation on the last Friday in 1918 totaled 2,685.2 millions. During the early part of the present year there was considerable contraction of the note circulation, followed by moderate expansion up to the close of September, when the notes in circulation totaled 2,655.3 millions. Since then the volume of circulating notes has increased by over 400 millions, or at an average weekly rate of over 30 millions. In addition there has been an increase during the year of 143.9 millions of Federal Reserve bank notes in circulation, issued largely to take the place of silver dollars melted and silver certificates withdrawn from circulation under the Pittman Act.

The reserve position of the banks until the close of September shows but little change, the

ratio of cash reserves to aggregate deposit and note liabilities during the entire period, except on July 11, continuing above 50 per cent. Substantial growth of deposit liabilities during October and November and the large note issues during the last two months, coupled with a simultaneous loss of about 70 millions in reserves, account for the considerable decline in the reserve ratio during the latter part of the year. On the last Friday of 1919 the reserve ratio stood at 44.8 per cent, compared with 50.6 per cent on the corresponding date in 1918.

Some indication of the growth of the system is afforded by the comparative figures of paid-in capital, which show an increase during the year from 80.7 to about 87.3 millions, or 6.6 millions, corresponding to an increase in the aggregate capital and surplus of member banks of 221.9 millions, as the result of accession of new members and increase in the capitalization of existing member banks. The largest relative gains in paid-in capital are shown for the San Francisco, Chicago, and Kansas City banks, while the largest increases in the number of banks admitted to membership during the year are reported for the San Francisco, Chicago, and Cleveland districts.

BUSINESS AND FINANCIAL CONDITIONS DURING DECEMBER, 1919.

Great activity in retail trade, strong demand for goods and consequently large volume of buying orders at manufacturing plants, high and rising prices throughout the country, and full employment of labor at unprecedented wages, except in those cases where employment has been rendered unsteady or insecure as the result of strikes or labor disturbances, are the principal factors reported by Federal Reserve agents from their several districts. General anxiety concerning the continued advance in prices is exhibited, while unfavorable foreign-exchange rates are regarded as likely to bring about a reduction in exports which may necessitate some readjustment of domestic industry. Labor disturbances during the month of December have on the whole been less severe than in November, both the steel and coal strikes reaching a practical conclusion followed by resumption of work.

In practically all districts primary emphasis is placed on the general distribution of purchasing power and the freedom with which recipients of wages and salaries are expending their means in the purchase of goods. District No. 1 reports that "the year closes with New England industries stimulated by post-war conditions to a degree of peace-time activity unparalleled in the economic history of this section." In district No. 2 high prices and active trade exist, and both manufacturers and distributors of dry goods, textiles, hardware, footwear, and similar merchandise "are sold up ahead as far as they will take orders." Credits have been shortened and production is far short of demand, but cautious manufacturers are disinclined to commit themselves far in advance. Banking expansion has been somewhat stayed. In district No. 3 it is stated that "the enormous demand for commodities of all kinds has been far from satisfied. Unsatisfied demand is reflected in higher prices." District No. 4 takes the view that "with no thought of price, with little provision for the future, our people almost without exception are de-

manding goods, especially luxuries * * *. The signing of the armistice was apparently the signal for an outburst of the buying fever which has not yet reached its height." In District No. 5 high prices for crops have furnished a stimulant to trade from which no considerable reaction is yet apparent. Demand at manufacturing establishments is unabated. District No. 6 speaks of "remarkable commercial activity and expansion" and asserts that "the volume of holiday trade generally during the month appears to be greater than has ever been experienced." The Federal Reserve agent at Atlanta, however, remarks that in some cases business is about stable in the volume of goods, although "in money there has been quite an increase in the business done." From district No. 7 it is reported that "business is good," the demand for bank accommodation has continued heavy and business has rapidly "picked up the slack caused by the coal shortage and fuel conservation restrictions." In district No. 8 collections are good and business is large, labor difficulties are less than heretofore, but "high prices are exerting a restraining influence on buying," although even where the volume of merchandise is smaller, the value of the transactions is larger than last year. In district No. 9 "manufacturing enterprises are very active," demand is strong, there is a shortage of skilled labor in industrial centers, "but retail reports from outlying districts show some slowing up in merchandise sales and a tendency on the part of buyers to hesitate because of high prices." In district No. 10 there is "an extraordinary volume of trade running through the fall months and reaching its highest peak about Thanksgiving. Merchants' stocks are low and the holiday season has been attended by great buying activity and considerable extravagance." In district No. 11 "every line of trade and finance now reflects the year's peak position in trade balances and for the first time in many months the district finds itself not only with

ample funds for its own use but with a healthy surplus which it can lend." In district No. 12, except for seasonal unemployment, "labor is fully employed," no strikes of consequence are in progress, domestic commerce continues active, and real estate sales are very large.

From sundry of the districts it is noted that the growth of business is far more noticeable in terms of dollars than in units of production, while, as just indicated, there are some in which very high prices are already beginning to produce a curtailment of buying power. This appears to be more largely true in the country and outlying districts than in the cities. The banking situation is spoken of as reflecting the high prices of goods in the form of larger demand for accommodation. Increase in the cost of living is referred to as an unquestionable menace and in some districts it is reported that retailers themselves recognize this fact. The "work and save" program is reported by some to be considered hackneyed or obsolete. High wages are resulting chiefly in a reduction of labor time. According to one report "much of our skilled labor works only sufficient days during the month to keep going. The effect of excessive wages has been that of destroying regular standards of living and the recognized basis of prices."

In districts whose products are predominantly agricultural the usual midwinter intermission of activity has set in. In the grain-growing regions early snowfall and severe cold weather has done harm, particularly to the livestock prospects. On the Pacific coast unfavorable climatic conditions during the early planting season retarded the sowing of wheat so that in Washington the acreage of winter wheat will be only 60 to 70 per cent and that of Oregon 90 to 93 per cent of normal. However, in the dry-farming sections of Utah and southern Idaho there has been much larger sowing of fall grain than in 1918. In district No. 10 acreage of winter wheat is considerably less than last year. In the cotton States the crop has been relatively small and the yield per acre low, but prices have been at a record level. Wheat sowings in Tennessee are about 60 per cent of last year's and in other Southern

States early rains have prevented plowing for wheat from obtaining its full scope. In district No. 4 and especially in Ohio, winter wheat seeding is reported very late, while the very late seeding naturally went into the winter with practically no growth and a doubtful ultimate result. Fodder is reported to have been severely damaged. District No. 5 reports that the season now drawing to a close has been a fair one for the harvesting of crops. Cotton has been more closely picked than last year, and the demand for tools, horses, mules, and fertilizers indicates extensive preparation for next year's crops. Some cotton is still being held, but the crop generally appears to have been rapidly picked, ginned, and sold.

Receipts of cattle at 15 primary markets during November were 2,046,664 head, corresponding to an index number of 203, as compared with 2,317,487 head during October and 2,053,359 head during November, 1918, the respective index numbers being 230 and 204. The receipts of sheep are slightly in excess of those during November, 1918, being 1,743,189, as compared with 1,677,537 last year, and 2,405,511 during October, 1919, the respective index numbers being 128, 123, and 176. Receipts of hogs, however, are considerably less than at the same time last year, showing a decline from 3,431,782 head, corresponding to an index number of 156 during November, 1918, to 2,715,955 head, corresponding to an index number of 124 during November of this year, as compared with 2,160,079, corresponding to an index number of 98 during October. From Kansas City it is reported that November receipts of cattle and sheep at the six markets of that district were 15 and 36 per cent, respectively, below the October record, while receipts of hogs were 13 per cent larger than in October. Reports at the middle of December indicated more liberal supplies of cattle and sheep, but largely reduced supplies of hogs as compared with the marketings for the same period last year. Hogs marketed in November showed an increased weight as compared with November, 1918, while December has brought still further reduction in the prices of hogs. It is reported from Chicago that although the

average price of live hogs in November was only \$14.20, as compared with \$17.70 a year previous, the average price for December is considerably lower. Cattle prices have also declined since the October report. The sale of the War Department's entire surplus of frozen beef is not expected to affect the market very materially.

Grain shipments are reported unusually slow, partly owing to coal shortage and consequent reduction of warehouse accommodations. For the period from December 1 to December 18 it was reported from the Minneapolis district that a severe shortage of cars has existed and that there has been the utmost difficulty in securing cars for the shipment of stock and farm products. Country elevators are full of grain and all movements of loaded cars are slow. On the Pacific coast farmers are holding spring seed wheat in anticipation of having to reseed. Winter feeding of live stock on the Pacific coast has begun much earlier than was expected, but in spite of this there was a heavy demand for cattle for feeding and the stockyards report the quality offered superior to that of a year ago.

A large amount of paper is said to be offered by cattle loan companies in consequence of the heavy movement of cattle from the drought sections of Montana, Wyoming, and Kansas toward the Southwest for grazing grounds.

Coal production has felt the effect of the strike and has accordingly been low in the bituminous field. The production during November was 20,303,000 tons, corresponding to an index number of 55, as compared with 54,579,000 tons, corresponding to an index number of 147 during October and 43,895,000 tons, corresponding to an index number of 118 during November, 1918. The production of anthracite coal, however, has been well maintained, shipments during November being 5,971,671 tons, as compared with 6,560,150 tons during October and 5,276,659 tons during November, 1918, the respective index numbers being 106, 117, and 94. In the central Pennsylvania fields the bituminous strike seriously curtailed output. Mines served by the Pennsylvania Railroad produced at 46 per cent of capacity, those served by the New York Cen-

tral at 8 per cent, and those served by the Buffalo, Rochester & Pittsburgh at 21 per cent of capacity. The Federal Reserve agent at Philadelphia predicts that the total production of bituminous coal for 1919 may be 150,000,000 tons less than in 1918. Anthracite coal production has been fairly satisfactory, although not quite up to the level of last year. In the fourth Federal Reserve district resumption of work by the miners has relieved what might have been a serious situation, but the supply of cars still seems inadequate to move coal freely to the points where it is needed. The production of coke in the fourth district has also been curtailed by reason of the miners' strike. One phase of the coal strike which has received much attention has been its possible effect upon other industries. On this subject the Federal Reserve agent at Philadelphia remarks that "the effect on the industries of this district has not been very marked, although some mills and factories have been compelled to close down." In Cleveland it is stated that the restriction on fuel supplies necessitated a sharp cut in the production of steel, although a critical stage had only barely been reached when the coal strike was terminated.

Petroleum conditions, as reported from the Kansas City district, indicate the completion of 963 wells, a decline of 76 wells as compared with the October record. The total daily new production from the November completions was 69,131 barrels. Great activity in the effort to speed up production has occurred. An advance of 25 cents a barrel on crude oil has given a new impetus.

The iron and steel industry has been obliged to face severe operating problems and trade and market conditions have accordingly been subordinated for the time being. Toward the end of the coal strike fuel curtailments had been ordered which would have necessitated a very material reduction in steel output. In fact, during the early days of December many blast furnaces were obliged to bank and a number of steel works were also closed. Loss of output has accordingly been suffered by the industry during December, the situation being cumulative as a result of the coal strike and

the steel disturbance. It is estimated that the loss of production during the past three months as compared with the rate of activity prevailing October 1, has been from 2,000,000 to 2,500,000 tons in iron and steel. In the Atlanta district, however, although the industry was handicapped by the coal strike, there has been a very heavy demand for pig iron, and steel mills, while suffering from the coal strike, have been actively employed. They now have enough unfilled orders on hand to keep them operating at full capacity for many months to come. In Philadelphia pig iron is in strongest demand since the signing of the armistice, and steel products of all kinds are in heavy demand. Production during November was 2,392,350 tons as compared with 1,863,558 tons during October, the respective index numbers being 103 and 80. The unfilled orders of the United States Steel Corporation at the close of November were the highest for any month during the present year, being 7,128,330 tons, corresponding to an index number of 135, as compared with 6,472,668 tons at the close of October, corresponding to an index number of 123. The high costs of production now prevailing are proving a serious problem to steel producers, and one large manufacturer in the Philadelphia district has closed his order books until definite costs can be ascertained. Raw materials are advancing, while fuel and transportation charges show possibilities of following in the same direction. Meanwhile, the demand for steel is strong in all lines, various railroads placing tonnages for 1920 delivery. Such orders placed or under negotiations in district No. 4 run from 800,000 to 1,000,000 tons.

In the copper market producers are reported to confine their sales largely to consumers. Heavy snows in Colorado during the latter part of November resulted in cessation of operations of the smaller operators who work their properties only in the summer. The marked increase in the price of silver has caused many small operations to start, and increased production is anticipated in the course of a few months. Advancing prices of lead and a feeling of certainty that zinc ore prices will also advance is likewise expected

to result in increased activity in the Joplin lead and zinc districts, although operations have been curtailed due to the coal shortage and weather conditions.

In general, manufacturing activity is very great. Shoe manufacturers in the Philadelphia district are now operating with sufficient orders ahead to last until spring, but it is noted that high prices have to some extent tended to check purchasing. In St. Louis the manufacturing of boots and shoes is steady and larger orders are in hand for future delivery than ever before. Leather is reported to continue to decline in value, being particularly marked in lower grades. Tanners are reported to be cautious in the replenishment of stocks of hides which have likewise shown a decrease in price. In shoe manufacturing and leather, New England tanners are inclined to be cautious. Materials for women's fine shoes are still rising in price. No early reduction in the cost of footwear is foreseen, but the public is beginning to show a more conservative attitude as to purchasing. Clothing manufacturers report very large orders, future demand exceeding normal, while November business was about on a par with the corresponding month a year ago. Manufacturers of woollens in district No. 3 have not kept up with demand and values are extremely high. At the New England wool sales during the past month the demand for fine grades continued and far western wools are being purchased in advance of harvesting. Manufacturers are sold out for months ahead at high prices, chiefly for an output of fine fabrics, but there are hopeful indications for an increasing demand for wools of a lower grade. In silk goods demand is unprecedented and prices are the highest ever received. Raw materials can be obtained in fair volume and with reasonable ease, but only at very high prices.

In New England manufacturers of fine cotton fabrics have not yet developed a policy with respect to taking on business, but many have sold practically their entire anticipated output for the first quarter of 1920, and others have engaged their product as far as August and September. The demand for goods continues high and strong. In cottons the high price of

the raw material has had a bad effect while unsatisfactory shipping conditions have added to the difficulties of producers. There has been an active call for all kinds of cotton goods both for domestic and export trade, while prices have been steadily on the increase. There are practically no stocks on hand at the mills. Manufacturers are concerned over the future and merchants are urged not to carry more goods than are absolutely necessary. The attitude of the consumer toward higher prices on spring goods is considered likely to be an important factor. The wholesale and jobbing trade is considerably confused, some dealers reporting very large increases running as high as 200 per cent, as compared with last year, while others report decreases up to 33 per cent. It would seem that some retailers in anticipation of higher prices have been buying ahead.

The housing situation is reaching a critical stage which may result in largely stimulating building operations. In the Middle West, particularly in industrial centers, the shortage is said to be acute. Rents have advanced very greatly in view of the standstill of building operations and the increase of city populations which have called for much more extensive accommodation. In Chicago thus far building permits have been granted amounting to about \$90,000,000, but it is estimated that from 4 to 10 years will be required to overcome the deficiency in housing accommodation. In Detroit rentals have increased about 85 per cent since the beginning of the war and the shortage of houses is the more serious than a year ago. In South Bend, Ind., the shortage is exceptionally acute and the same is true at many important industrial points throughout the Middle West and in the Northwest. The same situation exists in many other parts of the country; in fact, so widely as to be all but universal, although in varying degrees. As a result of it an increase in building has already set in and in St. Louis the permits granted during the past month have been much larger than those of the preceding month or the corresponding month last year. The same is true of the fourth Federal Reserve district, while on the Pacific coast building construction is very active. In New

York building contracts fell off \$2,585,000 in November as compared with the preceding month. This was a decrease of about 5 per cent. Contract awards, however, normally show much larger decline at this season. The total volume of building in New York is very much above normal in cost and somewhat above normal in floor space. Residential building continues on a large scale. The continued rise in the prices of building materials has not yet reduced the extent of building operations below normal.

The Atlanta district reports that conditions during the past month have been favorable to the production of naval stores and that receipts have accordingly been well maintained. Prices have been stable and the prospects are that they will go no lower this season. Domestic demand is very large and labor conditions are not unsatisfactory.

The development of real estate speculation commented upon in many Federal Reserve districts in November appears to have reached another stage in some quarters at least. The Federal Reserve agent at Chicago notes that an encouraging feature of the situation is the fact that the rise in the price of land has received a decided check, while in some cities prices have declined 25 per cent as compared with a few months ago. On the Pacific coast, however, there is still a tendency to purchase farm lands at high prices for the purpose of reselling.

An active lumber market is reported for all parts of the country in spite of the steadily increasing prices. Production in many sections is stated to be well below normal, and mills are well supplied with orders. It is stated from the Atlanta district that "the year will close with the greatest demand for lumber and the highest prices ever known, and the outlook is said to be for still higher prices early next year."

As already noted, a serious view is taken of the advance in prices. The index number of the Bureau of Labor Statistics shows an advance from 223 during October to 230 during November, which is the highest level yet reached. The increase is found in the index

numbers for each of the principal groups, raw materials showing an increase from 220 during October to 226 during November, producers' goods from 211 to 216, and consumers' goods from 228 to 236. The increase in the index number for the group of raw materials is due largely to the increase in the prices of farm products, the index number for which group increased from 254 in October to 275 in November, while the index number for the forest products group likewise increased from 224 in October to 239 in November. That for the animal products group remains constant at 212 and that for the group of mineral products shows a decrease from 184 to 183. In Great Britain, Sauerbeck's index number shows an advance from 224.3 to 231.

The month of December shows some abatement of labor unrest and disturbances which had greatly reduced production during the preceding month. The termination of the coal strike and the cessation of activity in the steel strike, as well as the increase in the number of men employed in those industries, has greatly reduced the figures representing unemployment. From many districts it is reported that the chief difficulty does not lie in systematic strikes but in indisposition to increase production or to keep steadily at work. The reduced output as a result of very short hours or suspension of work a given number of days each week has proved to be a national problem. The disposition of labor to pursue such a policy is ascribed by many to high wages and the desire to employ the increased purchasing power thus obtained in the purchase of leisure rather than goods.

During the month of December there has been some reduction in the expansion of bank credit, and from district No. 2 it is reported that "the progressive expansion of October has been stayed, at least for the present." A falling off in the amount of new securities offered for sale is reported, while during the month the loans of the New York banks have continued to decline. From October 31 to December 21 the loans, discounts, and investments of the 112 reporting banks in the district fell off about \$403,000,000, this decline being

chiefly in New York City, but banks elsewhere increased their loans by about \$264,000,000 during the same period, making a net decrease of only \$139,000,000 for all the reporting banks in the country, about 794 in number. During the month discount rates at the Federal Reserve Banks were once more advanced, this advance being effective December 11. Commercial paper rates have continued to harden somewhat, and in New York are now on a 6 per cent basis as compared with about a 5½ per cent basis at the middle of November. Call money has been as high as 18 per cent during the month, but the prevailing rate has been around 8 to 10 per cent, although at one time as low as 5 per cent. Less activity, not only in the New York stock market but also on stock exchanges the country over, has been a feature of the month's operations. Practically throughout the country there has been some tendency to a hardening in money rates of all kinds. The investment yield of securities has increased materially and during the month of December there has been a considerable liquidation in bonds. The result has been to reduce bonds generally and in a marked way. The lowest price level since 1896 has been reached. Third Liberty bonds and Victory 4½ per cent notes have sold on a basis higher than 5 per cent. Dubious issues of stocks have made their appearance in great numbers throughout the country. The movement is stronger in the larger cities but is very widely prevalent. A vast growth of new enterprises, some doubtful, some sound, appears to be taking place throughout the country, and the total volume of securities issues has been far in excess of any within recent months. Wage earners are buying for cash or are transferring their Liberty bonds to promoters, who in many cases offer extraordinarily high rates of return. During the month foreign exchange has gone to record low levels, sterling at one time touching \$3.65. Francs and lire have paralleled this decline in sterling, and practically all exchanges have been unsettled. During the latter part of the month there was an upward movement, which restored many of the currencies to somewhat better figures.

SPECIAL REPORTS.

REPORTED BY DISTRICT NO. 1.

With no important curtailment of production on account of the coal strike, for the reason that reserve supplies had not been seriously invaded before the settlement of the difficulty, and through the installation of fuel-oil systems in many large plants, the year closes with New England industries stimulated by post-war conditions to a degree of peace-time activity unparalleled in the economic history of this section; wages advanced to rates hitherto undreamed of and commodity prices at corresponding levels; and labor at the moment quiescent. While there has been no doubt considerable saving from earnings as evidenced by large aggregate deposits in savings institutions and investments in Government obligations, nevertheless no one may observe without a feeling of apprehension the manner in which the enhanced purchasing power of the wage earners is being dissipated by irrational personal expenditures, especially when it is beginning to be coupled with requests for credit at retail stores by many who have never before known the meaning of a charge account. The readjustment of rediscount rates by the Federal Reserve Banks was undertaken with a view to modifying the situation of which these conditions are a reflex, but this will not furnish the complete remedy. Indeed, not until some powerful influence is brought to bear upon the machinery of production to establish a more normal relationship between the quantity of necessities and of luxuries, respectively, offered for consumption will it be possible to accumulate the wealth necessary to pay the cost of the war as represented by the enormous debts of the nations and to bring about a return to normally healthy social conditions. It is unlikely, however, that any reduction in the cost of living will be forced upon the consumer by the voluntary benevolence of the makers of goods; it is certain that it will not come about through legislation any more than it was vouchsafed the people of Rome in 301 A. D. by the Edict of Diocletian; and if it comes otherwise than by a collapse of the existing economic structure such as would bring, not reduced prices only, but reduced earnings and widespread distress, it can come only through individual sacrifices, foresight, and initiative manifested by restricted expenditure and conservation of savings beyond anything yet apparent.

REPORTED BY DISTRICT NO. 2.

Stock market.—The liquidation of stocks which followed the extraordinary money conditions early in November has been continued with a fair degree of consistency throughout the past 30 days. This liquidation proceeded without sharp breaks in the market and with lessened public participation, as is customary in a declining market. The former extravagant demands upon credit appear to have subsided considerably.

Daily sales fell off materially. In the third week of November the average was 1,145,000 shares a day; in the fourth week 980,000; in the first week of December 936,000; in the second week 938,800, and in the third week fell to 867,200 shares a day. A partial recovery of prices which took place early in December was most pronounced in the highly speculative issues, while shares which are commonly regarded as investment stocks remained comparatively dull.

The market has been fairly responsive to news developments. For instance, the termination of the bituminous miners' strike and the announcement of the Attorney General that he would not appeal the Southern Pacific oil land case caused a rise in particular stocks and lent a momentary strength to the rest of the list. The announcement of the fractional increases in rates by this bank on December 11 was followed by a day of high call money rates and active liquidation.

Bond market and new financing.—The liquidation which developed in stocks was far more pronounced in the bond market. It manifested itself tentatively in the third week of November and became heavy during the next two weeks; although three-quarters of the transactions were in United States bonds, the prices of which fell, the declines in the prices of corporation bonds were heavier. From the middle of November to the middle of December United States bonds fell off about three-quarters of a point; industrial bonds one and one-half points; public utilities two and one quarter points, and railroad bonds about three points. Bonds other than Government issues which were most heavily sold were those of railroad and street railway companies whose records of earnings are poor, and of other corporations whose bonds are regarded as high grade but because of their prices have the smallest yields. In spite of some exceptions the bond market as a whole fell to the lowest

price level reached since 1896. The effect of the decline on Liberty bonds was to place the third 4½ per cent and the Victory 4½ per cent issues on a better than 5 per cent basis.

The high price of money in November caused a marked reduction in the aggregate of new issues by domestic corporations. The total for that month was \$253,000,000, as compared with \$390,000,000 in October and \$90,000,000 in November a year ago. This falling off seems to register the passing for the time being at least of the high tide of offerings to bond houses by corporations which are anxious to enlarge their capital. Nevertheless, it is reported to us that the applications are still so numerous that the best bond houses are able to consider only a small proportion of them and in the aggregate they are much beyond the power of the market to absorb.

Dubious issues.—The creation of a great body of new capitalists through the sale of Liberty loans and because of the generally higher level of wages, has encouraged the sinister activity of promoters and salesmen who are trying to float stocks of the most dubious character. Based upon answers to inquiries made from 50 banks outside of New York City, and upon other evidence within the metropolitan district, it appears that this movement is general in the larger cities of the district, particularly New York, Buffalo, Rochester, Syracuse, Utica, and Binghamton, but with varying intensity. It appears that some of the promoters are men whose business records do not stand scrutiny either from the standpoint of success or personal integrity, and some of them have in times past been found guilty of crime.

A possible indication of the extent to which new capital is sought appears in the total of new incorporations. Doubtless only a fraction of the total is intended for immediate issue, depending primarily upon the capacity of the public to buy, and a number of them are, of course, of the highest character. Nevertheless, the total is noteworthy. In November new incorporations in the Eastern States amounted to \$1,341,000,000 and in October \$2,363,000,000, as compared with \$131,000,000 in November a year ago. The monthly average for 1919 up to this time is \$1,054,000,000, which is nearly seven times the monthly average shown by the five years prior to the war. Most of the new incorporations are of oil, shipping, and chemical companies and concerns engaged in the manufacture of articles the current prices of which are high and the margins of profit on the present basis exceptionally good. In many cases

the chances of return for the investor are limited to the maintenance of the present price level.

The operations of dealers in poor or worthless stocks are particularly serious at a time of great expansion such as the present, not only because of the waste of capital involved, but because fraudulent issues are lost sight of in the general outpouring. Reports from the banks in certain parts of the district indicate that a large amount of Liberty bonds have been secured in exchange by promoters, who promise an 8 per cent rate or better in place of the interest carried by the bonds. Many sales for cash are reported also, particularly to wage earners. An estimate of the amount of dubious issues on sale, secured from a source specializing in such matters, puts the total at "hundreds of millions."

As usual, the victims of such transactions are those who are in the worst position from knowledge or experience to measure the worth of securities. Methods of sale include not only newspaper advertisements and offers through the mails, but solicitation by a highly organized corps of canvassers. In a number of cases the name of the Federal Reserve Bank is reported to have been used for the purpose of convincing prospective purchasers of the value of the stock offered. Usually the argument has been that the bank whose stock the canvasser is selling will become a member of the Federal Reserve system, or that the paper to be handled by the newly organized "finance corporation" will be discounted by the Federal Reserve Bank. Such statements should be sifted with the greatest care, but usually the man approached by the canvasser is in no position to know the limitations set by law, both on Federal Reserve membership and discounts.

Certain cases of apparently fraudulent intent have already been brought to the attention of the Federal or local prosecutors, but in the past most prosecutions have succeeded only when the fraud has been completed and the investor has lost his money. It is therefore essential that individuals buy only after seeking advice from trusted bankers or others who are equipped with sound information and good sense on financial matters. In a number of progressive communities the newspapers not only refuse to take dubious financial advertising, but have undertaken to warn their readers against unscrupulous vendors of stocks. Officers of banks can carry this public service further by giving advice to all inquirers, whether they are customers or not. Many bankers are already doing work of that sort.

REPORTED BY DISTRICT NO. 3.

Coal.—The strike of the bituminous miners has seriously curtailed the output of that kind of coal in the central Pennsylvania fields. Figures of the United States Geological Survey for the end of November indicate that mines served by the Pennsylvania Railroad were producing at 46 per cent of capacity; mines served by the New York Central, at 8 per cent of capacity; and those served by the Buffalo, Rochester & Pittsburgh, at 21 per cent of capacity. The settlement of the strike very possibly may not be followed by immediate resumption of full-time operations, but it is hoped that by the first of the year production may be up to normal; meanwhile we are faced with a distinct shortage of bituminous coal. Thus far the effect on the industries of this district has not been very marked, though some mills and factories have been compelled to close down. The total production for the country up to November was 100,000,000 tons below the corresponding period in 1918. November is estimated to have added 30,000,000 tons to this shortage and December may add as much as 20,000,000 more. It appears not at all improbable, therefore, that production for the year 1919 would be 150,000,000 tons below 1918. During the months preceding the strike car shortage was evidently an important element in curtailing operations, and it is to be hoped that this difficulty will be eliminated in so far as is possible. A severe winter may cause serious consequences.

Anthracite-coal production has been fully satisfactory, though not quite up to the level of last year. The following table shows the shipments over the nine principal anthracite-coal carriers:

	1919	1918
	Tons.	Tons.
January.....	5,934,241	5,638,383
February.....	3,871,932	5,812,082
March.....	3,938,908	7,276,777
April.....	5,224,715	6,368,373
May.....	5,711,915	6,887,256
June.....	5,619,591	6,887,669
July.....	6,052,334	7,084,775
August.....	6,144,144	7,180,923
September.....	5,687,401	6,200,000
October.....	5,580,150	6,286,366
November.....	5,971,671	5,276,659
December.....		5,736,260

Sizes for domestic use are in adequate supply, though in some few cases it has been necessary for consumers to take pea in place of nut, and egg in place of the stove size. Steam sizes are

moving very comfortably, due somewhat to its use in place of bituminous coal, but there is nothing urgent about the situation. Prices have not changed during the past month. Labor conditions in the anthracite field show no apparent unsettlement.

REPORTED BY DISTRICT NO. 5.

The recent restrictions in the use of coal had a slightly demoralizing effect on business, and had it been continued beyond the brief period of its enforcement would have seriously handicapped all lines of business. The location in this district of some of the largest and finest coal properties, the settlement of the miners' strike, and the prompt removal of these restrictions relieved the uneasiness over the situation. Normal conditions are being promptly restored and the incident relegated to the past, with the hope that a final settlement with the miners will be reached without further trouble. This event has been the only disturbing feature of the past month, and although the irregularities as to labor and supplies of materials and delays in freight movements are matters of more or less comment, all reports indicate unusual activity. The prices realized for tobacco, cotton, and other crops have furnished a stimulant to trade, from which no considerable reaction is yet apparent. A conservative correspondent, while confirming these conditions, evidently considers a reaction inevitable and overdue, and remarks, "We are all aboard the 'Blue Sky Special,' indulging in the evanescent pleasures and diversions usually incident to an excursion to the fool's paradise of inflation. No one knows or seems to care where or when we will stop."

REPORTED BY DISTRICT NO. 6.

Coal.—While the coal miners' strike reduced the coal output to an alarming extent throughout the country, the situation in the Alabama coal fields has not, so far as the output is concerned, injured this territory, except for the fact that this section has been called upon to serve other parts of the country and to supply railroads with fuel to meet their requirements. This situation has been practically adjusted since the acceptance by the coal miners of the President's proposal, and conditions will no doubt be normal within a short time. The output for November in the Birmingham district was 1,080,810 tons, as compared with 1,459,385 for October.

Iron, steel, and miscellaneous industrials.—The iron and steel industry in this section was greatly handicapped by the coal miners' strike, and reduced production resulted. There is a very heavy demand for pig iron, and prices have advanced. Consumers are realizing the shortage and are eager to contract for a large supply. There are less than 100,000 tons of foundry iron in Alabama yards, and most of that belongs to consumers. The total output of pig iron in November was 196,209 tons, as compared to 208,793 tons in October.

Steel mills, while suffering from the coal strike, have been actively employed and have enough unfilled orders on hand to keep them operating to full capacity for many months. The miscellaneous industrial iron manufacturing plants are in full operation, with orders in large volume booked for future delivery.

REPORTED BY DISTRICT NO. 7.

Housing problem.—The housing situation is looming up as a serious problem in practically all of the industrial centers of the Middle West. In Detroit as well as in Chicago, where the growth of population in the last few years has been abnormal, the situation is acute. Interference with construction in Chicago through strikes retarded the building of homes sufficiently to add to an already acute shortage of homes. Conditions in Chicago a year ago were such as to bring into use for winter housing places built for summer use only.

Apartments in Chicago, which for many years had been idle and almost ready for condemnation, are again pressed into service, and several families in many instances are "doubling up." In the congested sections, such as the foreign districts and in parts of the West Side and in the belt circling Chicago's Loop or down-town district, the situation makes not only for the undermined health of the occupants but contributes to serious and growing dissatisfaction. The so-called middle class of salaried people, with incomes ranging from \$2,000 to \$5,000 a year, also have found the scarcity of dwelling space a serious factor in their living costs, with home seekers bidding up rentals against each other to extreme figures. Rentals have advanced from 20 to 75 per cent and even 100 per cent.

Obviously it is impossible to present exact figures to show the acute condition. Estimates from sources which ordinarily are regarded as reliable, place the shortage in Chicago alone at between 40,000 and 50,000 homes. The increase in population in Chicago during

the last two years is conservatively estimated at between 75,000 and 100,000 persons per year, which means that between 150,000 and 200,000 additional persons required housing in a period when building construction was either at a standstill or was greatly curtailed by war-time restrictions, expectations of lower prices for material and labor, and by strike interference.

Such large building construction as is now under way in Chicago involves, as a rule, the elimination of housing facilities for from 25 to 30 families, sometimes more. The new buildings supplanting those destroyed are mostly of the apartment hotel type. These, of course, will provide housing facilities for a larger number of families, but at a higher rental for less space. The kind of homes which appear to be chiefly in demand are the four, five, and six room apartments. The one and two room kitchenette apartments are more frequently constructed because of the income they return to the owner, renting from \$65 to \$100 and up per month. Thus far this year there have been granted permits for about \$90,000,000 of work, and it is said that this takes care of the normal increase and about 5,000 to 10,000 units of the shortage in homes. At the present rate authorities estimate from 4 to 10 years will be required to overcome the housing deficiency.

The shortage in homes in Detroit is estimated at 33,000, which is nearly 10,000 greater than a year ago, and notwithstanding the active campaign, next year will probably see an increased deficit. So far in 1919 there have been approximately 11,500 new apartments, while the requirements were for 20,000. The annual increase in population in Detroit is now estimated at 100,000, while the increase in the accommodations as the result of 1919 building will care for approximately 14,600 families. There has been and is in prospect considerable building of groups of cottages by contractors and manufacturers at \$1,000 to \$1,800. Rentals in Detroit have increased on the whole about 85 per cent.

In South Bend, Ind., the shortage in homes is acute, owing to the great industrial growth. Old factories are expanding and new ones coming to town. There were about 500 homes built last year and plans contemplate 1,500 to be built in 1920. Fort Wayne, Ind., reports a shortage of 1,000 homes, with rentals 20 to 25 per cent higher. East Chicago, Ind., building is hampered by high material and labor costs, with rentals from 20 to 25 per cent higher. Hammond, Ind., has a shortage of homes and reports a further increase in rentals of 15 per

cent, bringing the advance between 35 and 40 per cent from prewar figures.

Rentals.—Indianapolis has experienced an increase in rentals of from 35 to 50 per cent, with a prospect of further dwelling shortage. La Fayette, Ind., has an acute housing situation, with rentals 20 per cent higher and no available houses or apartments. The same condition prevails at Muncie, Ind., with rentals for business rooms 100 per cent higher and common residences 75 per cent higher than in prewar times, while furnished rooms are 50 per cent higher.

The building situation at Terre Haute, Ind., is about 75 per cent of normal, with rentals about 10 per cent above prewar times. Mishawaka, Ind., has experienced a shortage of homes for several years, but a building program is being worked out by manufacturers to finance the employees so that they may own their own homes. It is estimated that 500 additional homes could be used. Rentals are 25 to 40 per cent higher than in normal times.

In lower Michigan Saginaw reports 10 per cent increase in rentals compared with a year ago, and 30 to 40 per cent higher than in war times, with 100 houses under construction. Muskegon estimates 1,000 new homes built within a year but rentals have advanced 14 per cent. Battle Creek rentals have increased from 50 to 60 per cent since 1917 owing to the rapid industrial growth and a demand for homes far in excess of supply, with plans now under way for the building of 1,000 new homes in 1920.

Des Moines and other Iowa cities are also experiencing a shortage in homes, but correspondents attribute this shortage in the smaller cities chiefly to wealthy farmers moving into town and the abandonment of the poorer for the better buildings. There is a boom in several of these towns in the building of houses costing from \$3,000 to \$7,000. Rentals have advanced from 20 to 50 per cent in Iowa cities.

Decline in land speculation.—One encouraging feature in the advices from Iowa and Illinois is the assurance on the part of bankers that the rise in the price of land has undoubtedly received a decided check, and in some instances, according to those well posted, prices have declined 25 per cent compared with a few months ago. The consensus of opinion is that there will be little land change hands until after the settlements of March, when it will be known how many defaults have occurred in contracts already made.

REPORTED BY DISTRICT NO. 8.

Wholesale and jobbing.—The wholesale trade situation is considerably mixed. Some dealers report large increases in the value of their sales as compared with November last year, in some cases over 200 per cent; others engaged in the same line of business report decreases up to 33 per cent. Orders on hand for future delivery in most lines are reported to be larger than usual. The unfavorable weather conditions in in parts of the district, which have increased the stocks held by retailers, have naturally decreased the demand from wholesalers. Business generally, however, is good and was not seriously affected by the coal strike.

Some wholesale dry goods houses report very large increases in the value of their sales as compared with last year, which is due in great measure to the desire on the part of buyers to avoid advancing prices. One dealer in commenting on this situation says: "Our spring lines have been sold up and withdrawn from sale. We are offering certain lines of fall merchandise, such as blankets, underwear, hosiery, kint goods, and napped goods for delivery in the spring months and they are being taken freely. This shows the inclination of the merchant to buy his merchandise ahead of time, with a view to heading off any advance, rather than buying these goods when he actually needs them." Another concern states that the prices that have been made for fall are higher than those for spring.

Wholesale drug houses generally report increases in value of their sales as compared with 1918. One concern, however, reports a 10 per cent decrease, due to the shortage of a certain product which forms a large part of its business. No basic changes in raw materials or in patented compounds are reported. Orders on hand for future delivery are beyond normal in some cases.

Dealers in electrical supplies say their business is slightly less active than it has been. One concern says the coal strike cut down its sales 25 per cent.

Cotton factors complain of the exchange situation which is unfavorable to exports. The high price of cotton is a favorable factor affecting them.

Wholesale grocery companies for the most part report increases over October. During the coal strike, however, buying was somewhat checked in mining towns. Orders on

hand for future delivery are still below normal, one company reporting that it has none.

REPORTED BY DISTRICT NO. 9.

The spring season will bring some problems in connection with the live stock situation. It will be necessary to ship back into the west end of the district a considerable amount of stock to replace that removed before snow fall on account of the severe shortage of feed. The amount of snow so far received is very promising for a good year in the districts that were dry during the season recently closed. The 1919 crop of wheat is, however, of very poor quality. Most of it arriving at terminal markets is light in weight, shriveled, and shrunken, and of very low germination. Without the most active efforts there will undoubtedly be a serious shortage of seed for spring planting. The prospect is so unfavorable that an organization has already been formed to gather data in regard to available seed supplies, and to conduct such work during the winter as will locate and provide for the distribution of the seed that is available. The prospect is for a reduction in next year's wheat acreage, while in the western half of the district the acreage of winter wheat and winter rye is already reduced.

With these exceptions, the outlook is not unfavorable.

REPORTED BY DISTRICT NO. 10.

Agriculture.—The condition of growing winter wheat in the States of this district is reported generally good, although a considerable acreage of wheat that was planted late made slow progress, December conditions in the States ranging from 75 to 91 per cent. The snow in the central Great Plains area is generally considered as beneficial to growing wheat, although a large part of the farm work usually done at this season was suspended because of the severe cold weather.

The agricultural outlook for the coming year is reported good from most sections. The area of winter wheat sown this fall is considerably less than that planted to winter wheat in the fall of 1918, indicating that with the war period at an end farmers are desirous of returning to their former system of diversified crops. The estimated acreage of winter wheat now in the ground is: Colorado, 978,000 acres; Kansas, 9,196,000 acres; Nebraska, 3,093,000 acres; Oklahoma, 2,881,000 acres. These figures indicate a decrease from the previous year's

acreage of 23.4 per cent for Colorado, 20.7 per cent for Kansas, 29.4 per cent for Nebraska, and 7 per cent for Oklahoma. Slight decreases of the wheat acreage also are reported from the 19 counties of Missouri that are in this district, and also in Wyoming and the portion of New Mexico in this district.

Indications point to an increased acreage of cotton in Oklahoma for the coming year, while in many sections more attention will be devoted to corn and potatoes, the acreage of both of these staples having been reduced in the last year in order to speed up wheat production.

Growers of sugar beets in the Colorado-Wyoming-Nebraska-Kansas regions have not as yet indicated their acreage for 1920. From reports received the growers are apparently in no hurry to make new contracts based on the 1918-1919 prices, on account of the additional cost of production.

The car shortage and cold weather have been unfavorable for the movement of many of the products of the farms to the markets and a larger per cent of these products are said to be still in the growers' hands than usual at this season.

Grain and milling.—Arrivals of wheat at the principal markets of this district in November were greatly in excess of those of October and about two and one-half times the receipts in November of last year. The extraordinary increase in November was largely the result of improved transportation service resulting from the pressure brought to bear on the Railroad Administration. It had the effect of greatly relieving the congested situation at local elevators and opened up a freer movement of wheat from the farms into the market channels. At this time last year, it is remembered, all grain movements were under shipping permits, which accounts for the small receipts in November of last year.

On account of scarcity of choice milling grades from the spring wheat sections, heavy requisitions were made on the markets of this district for stocks of hard and red wheat, the tendency being to stiffen prices. The high price at which wheat sold in Kansas City in November was \$2.80 for No. 2 hard and \$2.48 for No. 2 red. Relinquishments to millers of about 60,000,000 bushels of wheat held by the United States Grain Corporation at 7 cents a bushel over the guaranteed level at which the grain was purchased had little influence on cash wheat prices.

Flour-milling operations in the month of November were: At Kansas City 78 to 89 per

cent of capacity; at Omaha 92 to 100 per cent capacity; at interior milling points 82 to 91 per cent capacity. In early December some of the mills, particularly at interior points, were either shut down or were working on short time on account of the coal shortage, with the result that the per cent of activity was somewhat reduced.

On account of the fluctuations of prices of wheat, the flour prices have also shown slight changes, but generally flour is 75 cents to \$1 higher than early November prices. Short patents sold December 6 at \$12.75 to \$13.65, standards at \$12.45 to \$13.45, and straights at \$11.85 to \$12.50.

Receipts of corn, although slightly above those in October, were about 30 per cent less than the receipts in November, 1918. Car shortage helped in the holding back of new corn. Prices were materially improved as compared with those of September and October. The high and low prices of corn at Kansas City in November were \$1.61 and \$1.40 for No. 2 mixed as against \$1.50 and \$1.39 in October.

Receipts of oats were about 10 per cent below the November, 1918, receipts and prices showed some improvement over October prices. No. 2 white oats sold from 70 to 77½ cents.

REPORTED BY DISTRICT NO. 11.

The closing months of the year 1919 have found this district in a peculiarly checkered situation, with some sections setting new high records in the volume and profits of their products, while others are suffering from the disastrous effects of crop failures.

The most striking and surprising feature of this anomalous situation, as disclosed by the developments of the past 30 days, are the reports that are coming in from the western part of the district, particularly from western Texas, where a year of copious and well distributed rainfall has resulted in an amazing record of productivity and development during the year just closed.

In one western county alone a \$9,000,000 cotton crop, a \$1,000,000 wheat crop, and more feedstuff than its farmers have been able to gather have yielded an average crop income of more than \$500 per capita, transformed many tenant farmers into farm owners, and demonstrated generally what this section is capable of doing under favorable weather and market conditions.

While the figures cited from this county can not be taken as a picture of conditions in

the district as a whole, nor even as representative of the situation in all parts of western Texas, the fact remains that that part of the district which for many years has been suffering the hardships of droughts and crop failures has this year taken on the novel rôle of leadership in productivity, resulting in a wave of prosperity that has carried itself to and beyond the boundaries of the eleventh district.

Late estimates show that Texas as a whole has received from its 1919 cotton crop the largest money return it has ever realized, despite the practical certainty that the number of bales already ginned is the smallest in recent years. It is the opinion of reliable authorities that this situation, combined with other influences affecting agriculture in this district, will tend to produce a much larger cotton acreage here in 1920 than was sown in 1919.

Agriculture.—The winter grain acreage has been greatly reduced this year by the excessive fall rains throughout the grain belt. Estimates place the reduction, as compared with last year's acreage, at from 35 to 50 per cent. The condition of the growing grain is generally unfavorable, due to lack of proper preparation of the soil and also damage in some sections by insects. From present indications the season's yield will not exceed 35 per cent of normal.

Notwithstanding the loss sustained by cotton farmers from the effects of the excessive rainfall on both the yield and grade of the staple, the higher prices realized this year on their marketable cotton, as well as on other farm products, have placed the farmer in a much easier financial condition than they were a year ago. The Texas cotton crop for 1919, of which approximately 85 per cent has been gathered, has been estimated by the Department of Agriculture at 2,700,000 bales, although some of the leading authorities in the State of Texas contend that this estimate is too high.

Although it is too early to form a reliable estimate of next year's cotton acreage in this district, many reports are being received to the effect that the small acreage available this fall for winter grain has caused farmers in many communities to announce their determination to plant a larger acreage in cotton next year.

REPORTED BY DISTRICT NO. 12.

Of the 10 leading wool-producing States, 5 are located in the twelfth Federal Reserve district, which produced approximately 30 per cent of the 1919 wool clip. Production by States has been as follows:

State.	Rank.	Production.
		<i>Pounds.</i>
Idaho.....	2	22,145,000
Utah.....	4	15,800,000
Oregon.....	7	14,040,000
California.....	8	13,298,000
Nevada.....	10	10,500,000
Total.....		75,783,000

The following table indicates the great decrease in hop production in this district during the last few years:

State.	1919	Normal prior to 1919.
	<i>Bales.¹</i>	<i>Bales.</i>
California.....	70,000	115,000
Oregon.....	35,000	135,000
Washington.....	20,000	45,000
Total.....	125,000	295,000

¹ 185 pounds net per bale.

Fully 97 per cent of the 1919 crop has been sold at prices ranging from 30 to 35 cents per pound, with the latter price now being freely offered to growers for unsold stock. Growers are now contracting for their 1920, 1921, and 1922 crops at a price of 36 cents per pound, which compares with a prewar price of 15 to 20 cents per pound. Heavy reductions in acreage throughout the world, because of the demand for foodstuffs during the war, are largely responsible for this important increase in price.

International Price Index.

Especially since the close of the war a keen interest has been shown in the course of foreign prices, not only for purposes of comparison with our own price level but also as a method of studying business conditions abroad. In view of this fact, the Federal Reserve Board has undertaken the study of this subject and expects to publish each month the general index numbers of leading foreign countries and in addition index numbers of certain groups of commodities which it considers valuable for special study.

It was decided to make use of the index numbers published in the various foreign countries for the purpose of studying the general wholesale price levels of those countries only after considerable effort had been made to discover a better method of price comparison

with the material available in this country. It is recognized that these indexes are for the most part made up of too few commodities to represent the general wholesale price levels of their respective countries with any degree of exactitude. On the other hand, foreign price material obtainable in this country is too scanty to make possible the construction of larger indexes which would be more representative than those now published. If the limitations of these indexes are understood, they may be used with considerable confidence in a study of wholesale price oscillations.

Following is a description and analysis of the indexes which will be published currently along with the actual monthly figures for the past three years computed with 1913 as a base.¹

DESCRIPTION AND ANALYSIS OF EXISTING INDEXES.

The wholesale price index of the United States Bureau of Labor Statistics commands greater confidence as a measure of the general wholesale price level in this country than any of the other indexes published here. It consists of market quotations for over 300 commodities of industrial importance, weighted according to the quantity of these articles which enters into the trade or exchange of this country, allowance not being made for the frequency of turnover. A critical analysis of this list shows that all of the leading industries of the country are represented by one or more quotations, that in most cases commodities are quoted as raw materials, and in one or more stages of manufacture, but that such representation is somewhat uneven. The types of quotations used are rather heterogeneous. This is in some cases due to differences in industrial organization, some goods being sold exclusively on a cash basis, others on contract, the meaning of the contract price differing from industry to industry. This diversity would seem to be desirable if in each case the type of quotation used represents the basis of sale of the largest quantity of the commodity being traded in. To determine this requires very specific trade information. Quotations are obtained from trade magazines and private firms. In most cases these sources appear to be reliable, but as in the case of the type of price used, doubtless considerable improvement could be made in this direction by further study of specific industries.

¹ More complete information can be obtained regarding most of the indexes described below from Bulletin 173, U. S. Bureau of Labor Statistics. This bulletin is in process of revision.

The method of weighting used is satisfactory for a study of the general price level, although theoretically it would appear that frequency of turnover should be considered. To take this into account involves a detailed knowledge of sales methods in different industries.

The reliability of the index of the Bureau of Labor Statistics has been tested by the study made by the price section of the War Industries Board of prices during the war.¹ The latter study involved the construction of an index number for 1913 to 1919, consisting of 1,366 commodities representing the leading industries of the country, weighted according to the quantity produced here plus that imported. In the preparation of this index, great emphasis was placed upon the study of marketing methods in connection with the choice of commodities quoted and the types of prices used. The results of this study show an average difference during the six-year period between this index and that of the Bureau of Labor Statistics of 1.5 points with prices in the 1914 fiscal year considered as 100. Judging from this fact and taking into consideration that this was a war period, it would seem unnecessary to attempt to improve upon the index of the Bureau of Labor Statistics for the purpose of studying the general wholesale price level in this country.

Three indexes are currently published to show the general level of wholesale prices in England, that of the Board of Trade (official), that of the Economist, and that of the Statist. The last one mentioned is usually accorded the greatest confidence in England and abroad. Its construction has served as a pattern for several other European indexes. Both the Economist and the Statist index were originally constructed for the purpose of throwing light upon the relation between the gold supply and prices. The Statist index consists of approximately 60 quotations and is not weighted except in a crude way by allowing two quotations to certain very important commodities such as wheat, iron, coal, and cotton, to mention a few. Analysis of the list of commodities included shows certain important omissions such as rubber, paper, gasoline, tobacco, and others of perhaps less importance. Quotations are largely for commodities in their raw state, although there are such exceptions as wheat, flour, meats, leather, and refined petroleum. It is impossible to discover from published sources the type of

quotations used except in a very general way. Official returns are used in such cases as wheat, barley, and oats, and imported articles are quoted in bond; otherwise private firms, the Economist, and other publications are used, but no statement is made as to the type of price.

The Economist index at present consists of 44 quotations unweighted except roughly by the number of quotations allowed to the different commodities. Although the omissions are not so striking as in the case of the Statist (corn and hides being perhaps the most important), the reduction in the number of quotations practically guarantees a less accurate measurement of the price movement of the separate commodities. Most of the commodities quoted are raw materials, although the following semi-manufactured and manufactured articles are included: Flour, meats, cotton yarn, possibly cotton cloth, steel rails, iron bars, leather, and petroleum. Nothing is published regarding the type of price quotations used other than that they represent market quotations in London and Manchester.

The Board of Trade index is computed from the prices of 47 commodities weighted in accordance with estimated consumption, consumption being "taken to mean any process by which the commodity is substantially changed in character. In other words, consumption in manufacture is recognized as well as consumption by an individual." All commodities except certain ones in the food group are raw materials. Instead of using market quotations of one sort or another, import and export values are used for the most part as the basis for the index. These values are supplemented by official quotations for wheat, barley, and oats and by prices paid by public institutions for certain food-stuffs which may be termed semi-wholesale prices.

From the above discussion it is apparent that none of the British indexes is as inclusive as that of the United States Bureau of Labor Statistics nor so scientifically weighted, assuming that the aim in all cases is the same, namely, to measure the general price level of the country considered. Although certain important industries are entirely unrepresented, the Statist index is superior to the other two in the number of quotations included. Manufactured articles are almost equally slightly represented in the Statist and Economist indexes and still more slightly in that of the Board of Trade. Import and export values are probably not so representative of the prices paid by the country

¹ See *History of Prices During the War, Summary*. By Wesley C. Mitchell, W. I. B. Price Bull. No. 1.

as a whole as reliable market quotations. In this respect again the Statist and the Economist would seem to be preferable to the Board of Trade index. On the other hand, the Board of Trade index is weighted according to consumption whereas the other two are weighted in only a very general sort of way. The weighting used, however, is influenced apparently by a desire to measure the cost of living rather than the general wholesale price level since the weight of 330 points is given to food, all other commodities receiving the weight of 176. It may be concluded, therefore, that the Statist index is probably the most suitable one for measuring the British wholesale price level. It is inadequate, especially in respect to quotations of manufactured goods and weighting.

Only one wholesale price index is published at present in France, namely, that of the Statistique Generale of the French Ministry of Labor and Social Welfare, the index of Jules Domergue published in the *Réforme Economique* having been allowed to lapse at the beginning of the war. The former index consists of 45 commodities unweighted. It resembles the Statist and Economist indexes in number and type of commodities, very few manufactured goods being quoted. The quotations are obtained from the Bourse de Commerce of Paris, official and trade journals, and the *Réforme Economique*.

The leading Italian wholesale price index published at the present time is that of Prof. Riccardo Bachi, the official Italian indexes consisting of small numbers of foods at semi-wholesale prices. The Bachi index consists of 40 commodities at wholesale and is constructed on a similar plan as the Economist index for England. As is the case with the British and French indexes, the commodities are quoted mostly as raw materials. The quotations are obtained for the most part from the official reports of the chambers of commerce of Genoa and Milan.

The Swedish Government has recently begun publishing a wholesale price index. So far, we have been unable to discover how this index is constructed, the commodities used, or the source of quotations. The index number is being published currently, however, by the Supreme Economic Council in the *Monthly Bulletin of Statistics*, and judging from the grouping of commodities it must be similar to the other best known European indexes.

The Bank of Japan publishes a wholesale price index for Tokyo currently. It consists of prices of 56 commodities, both raw materials

and manufactured goods, unweighted. Prices are obtained from reliable firms with whom the bank has connections.

Index numbers of wholesale prices (all commodities).

(1913=100.)

	United States: Bureau of Labor Statistics (328 quotations).	United Kingdom: Statist (45 commodities).	France: Bulletin de la Statistique Generale (45 commodities).	Italy: Prof. Bachi (40 commodities).	Sweden official.	Japan: Bank of Japan for Tokyo (56 commodities).	Australia: Commonwealth Bureau of Census and Statistics (92 commodities).	Canada: Department of Labor (272 quotations).
1913.....	100	100	100	100	100	100	100	100
1914.....	100	101	102	95	116	95	106	101
1915.....	101	126	140	133	145	97	147	110
1916.....	124	159	187	202	185	117	138	135
1917.								
January....	151	187	215	229	¹ 244	128	* 140	157
February...	156	193	226	241	.....	126	.....	163
March.....	161	198	229	260	.....	127	.....	167
April.....	173	203	248	265	.....	131	* 146	171
May.....	182	205	256	278	.....	139	.....	181
June.....	185	216	266	288	.....	145	.....	183
July.....	187	208	268	304	.....	158	* 158	184
August.....	186	206	270	311	.....	169	.....	183
September..	183	207	280	331	.....	169	.....	182
October....	181	212	284	350	.....	164	* 166	181
November..	183	215	293	364	.....	163	.....	187
December..	183	217	304	365	.....	166	.....	190
1918.								
January....	185	219	313	367	¹ 339	172	* 173	191
February...	187	220	319	384	.....	179	.....	195
March.....	187	221	327	399	.....	183	.....	199
April.....	190	223	333	407	.....	207	* 178	199
May.....	191	225	335	417	.....	186	.....	204
June.....	193	226	329	422	.....	188	.....	208
July.....	198	227	337	435	.....	194	* 180	210
August.....	203	230	350	435	.....	206	.....	211
September..	207	231	356	435	.....	206	.....	211
October....	205	232	360	443	¹ 370	216	* 181	214
November..	206	229	358	438	.....	214	.....	215
December..	207	230	353	372	.....	214	.....	213
1919.								
January....	203	224	348	328	369	214	* 177	212
February...	197	220	340	323	358	213	.....	207
March.....	201	217	337	326	354	206	.....	205
April.....	203	217	332	330	339	207	.....	206
May.....	207	229	325	337	.....	215	.....	210
June.....	207	235	330	356	.....	228	.....	210
July.....	219	243	.....	358	.....	247	.....	218
August.....	226	250	.....	365	.....	251	.....	223
September..	221	253	.....	.....	.....	257	.....	223
October....	223	264	.....	.....	.....	271	.....	222
November..	230	272	.....	.....	.....	.....	.....	227

¹ Year.

² Quarter.

There is at present a very excellent Australian index number published by the Commonwealth Bureau of Census and Statistics, consisting of 92 commodities weighted on the basis of the country's aggregate consumption. So far as can be judged, the list is a very inclusive one, covering Australia's leading raw materials, important producers' goods, and a long list of goods used in private consumption. Melbourne trade journals are used for the most part as a source for quotations, but in a few

cases, where Australian markets are not developed, prices are quoted on the London market. The weighting is apparently based on aggregate consumption as contrasted with private consumption. In other words, the idea of measuring the cost of living has not influenced the weighting, but consumption has been estimated by adding imports to production and subtracting exports. This index number is published quarterly in the Labour Bulletin, computed on the basis of average prices in 1911 equal to 100. Since 1915 an additional monthly index number has been computed on the basis of prices in July, 1914, equal to 100. Unfortunately, the Labour Bulletin is not received in this country very promptly after publication.

The official Canadian index is very similar to that of the United States Bureau of Labor Statistics in number and choice of commodities. It is not a weighted index, however. The 272 quotations used in the construction of the index cover the leading commodities of the country in both the raw and manufactured condition. Trade journals, boards of trade, and commercial houses are used for the collection and verification of the price quotations.

It is apparent from the table on page 28 that credit expansion has been least in Australia. The United States and Canada appear to be in approximately the same position and somewhat better off than the European countries. It would seem that values in Japan have shifted in about the same ratio as in England, whereas in France, Italy, and Sweden money has depreciated even more radically.

It should be noted also that whereas prices in all of these countries declined for a few months after the close of the war, they have consistently advanced during the last five or six months in every case where we have recent figures.

As stated at the beginning of this article, the index numbers published abroad are fairly satisfactory for the purpose of studying general price movements. By the use of the group indexes for foods, clothing, etc., published in every case except that of the Bank of Japan, it is possible to follow the movement of prices in related groups of industries. We thus have in addition to the average price fluctuation in a given country the variations of groups of industries from the average.

Group index numbers—United States Bureau of Labor Statistics.

[1913=100.]

Date.	Farm products.	Food, etc.	Cloths and clothings.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House furnishing goods.	Miscellaneous.
1913.....	100	100	100	100	100	100	100	100	100
1914.....	103	102	98	96	88	98	101	99	98
1915.....	106	105	99	92	94	94	109	99	99
1916.....	119	124	123	114	142	100	157	115	117
1917.									
January.....	148	151	161	176	183	106	159	132	138
February.....	151	160	162	185	190	108	160	132	141
March.....	163	161	164	188	199	110	165	132	143
April.....	181	188	169	184	208	114	170	139	149
May.....	197	192	173	194	217	117	179	139	150
June.....	197	188	179	201	239	127	180	144	152
July.....	199	182	187	192	257	132	198	152	158
August.....	205	181	193	165	249	133	209	152	156
September.....	204	180	193	160	226	134	223	152	155
October.....	208	184	193	146	182	134	252	152	163
November.....	212	185	198	155	174	134	240	155	166
December.....	205	186	202	158	174	135	238	155	170
1918.									
January.....	207	188	211	157	174	136	232	161	178
February.....	208	187	216	157	176	138	232	161	181
March.....	212	179	223	153	176	144	232	165	184
April.....	217	180	232	157	177	146	229	172	191
May.....	214	179	237	160	178	148	223	173	194
June.....	217	180	245	159	178	150	219	178	196
July.....	224	186	249	166	184	154	216	199	190
August.....	230	193	252	166	185	157	222	221	191
September.....	237	200	254	167	184	159	220	226	194
October.....	224	202	256	167	187	158	218	226	196
November.....	221	208	255	171	188	164	215	226	203
December.....	222	212	250	171	184	164	195	227	204
1919.									
January.....	222	209	234	170	172	161	191	218	212
February.....	218	197	223	169	168	163	185	218	208
March.....	223	205	216	168	162	165	183	218	217
April.....	235	212	217	167	152	162	178	217	216
May.....	240	216	227	167	152	164	179	217	213
June.....	231	206	258	170	154	175	174	233	212
July.....	246	218	282	171	158	186	171	245	221
August.....	243	228	303	175	161	209	172	259	225
September.....	226	212	306	181	160	229	173	262	217
October.....	230	211	313	181	161	231	174	264	220
November.....	240	219	325	179	164	236	176	299	220

Group index numbers—United Kingdom Statist.

[1913=100.]

Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Food-stuffs.	Minerals.	Textiles.	Sundries.	Materials.
1913.....	100	100	100	100	100	100	100	100
1914.....	110	100	107	105	90	97	105	98
1915.....	155	125	130	137	109	111	131	119
1916.....	193	152	161	169	140	152	163	153
1917.								
January.....	258	176	180	208	146	187	188	174
February.....	255	185	187	212	148	199	195	181
March.....	269	188	195	220	150	207	198	185
April.....	273	191	195	223	150	205	215	191
May.....	269	198	197	225	155	214	210	194
June.....	273	207	206	232	154	237	210	200
July.....	251	202	201	221	154	239	210	200
August.....	242	194	217	216	153	236	215	201
September.....	234	188	225	211	151	242	222	205
October.....	235	190	246	216	154	254	226	210
November.....	232	192	247	216	158	257	230	214
December.....	231	197	252	218	157	257	237	217
1918.								
January.....	243	200	250	224	160	262	227	216
February.....	245	200	254	225	162	263	229	217
March.....	239	200	258	224	162	268	232	219
April.....	241	203	231	222	167	264	243	224

Group index numbers—United Kingdom Statist—Continued.

Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Food-stuffs.	Minerals.	Textiles.	Sundries.	Materials.
1918.								
May.....	241	208	231	222	165	263	250	228
June.....	242	201	232	221	163	268	255	229
July.....	249	201	232	221	175	261	250	228
August.....	256	201	230	226	173	277	249	232
September.....	250	220	232	233	172	275	246	230
October.....	254	230	234	240	173	266	246	228
November.....	256	230	236	241	166	256	245	232
December.....	256	230	236	241	161	258	250	234
1919.								
January.....	249	226	221	234	159	246	246	218
February.....	250	226	221	235	156	242	235	212
March.....	249	205	238	224	154	235	246	215
April.....	243	206	223	224	154	239	243	213
May.....	244	208	236	226	177	253	253	230
June.....	246	208	243	229	182	258	271	239
July.....	244	208	275	231	202	256	294	250
August.....	254	208	320	242	206	272	283	254
September.....	253	208	327	244	206	286	279	257
October.....	260	226	322	253	222	305	284	270
November.....	266	226	332	.....	180	296	328	280

Group index numbers—France and Italy.

Date.	France, Bulletin de la Statistique Generale. [1913=100.]		Italy, ¹ Prof. Bachi. [1913=100.]				
	Foods (20).	Materials (25).	Cereals and meats.	Other food-stuffs.	Textiles.	Minerals and metals.	Other goods.
1913.....	100	100	100	100	100	100	100
1914.....	104	101	102	84	96	100	96
1915.....	131	145	132	93	113	207	133
1916.....	167	206	156	135	184	380	197
1917.							
January.....	183	242	175	150	240	419	210
February.....	189	256	184	155	243	449	218
March.....	191	260	188	158	274	518	230
April.....	228	264	189	158	266	535	243
May.....	230	277	189	167	281	562	230
June.....	238	289	191	171	303	597	252
July.....	237	293	207	173	330	610	266
August.....	238	296	212	174	341	630	268
September.....	244	309	236	176	364	688	287
October.....	236	322	267	183	413	685	305
November.....	239	337	268	198	426	711	322
December.....	249	349	269	189	428	720	326
1918.							
January.....	257	358	.....	.....	.....	.....	.....
February.....	260	367	.....	.....	.....	.....	.....
March.....	264	378	.....	.....	.....	.....	.....
April.....	275	380	.....	.....	.....	.....	.....
May.....	279	382	.....	.....	.....	.....	.....
June.....	269	377	.....	.....	.....	.....	.....
July.....	274	388	.....	.....	.....	.....	.....
August.....	292	398	.....	.....	.....	.....	.....
September.....	296	404	.....	.....	.....	.....	.....
October.....	298	410	348	279	484	775	427
November.....	301	404	348	285	484	746	432
December.....	304	392	304	286	484	430	432
1919.							
January.....	313	376	304	300	330	306	422
February.....	316	360	300	307	328	306	384
March.....	337	337	292	312	331	355	362
April.....	336	330	294	330	333	358	349
May.....	319	330	293	336	375	366	340
June.....	313	344	320	343	380	419	336
July.....	.....	.....	334	331	387	420	342
August.....	.....	.....	332	350	414	421	341

¹ Group index numbers January–September, 1918, not available in this country.

Group index numbers—Sweden, Official.

[1913=100.]

Date.	Vegetable food.	Animal food.	Raw materials for agriculture.	Coal.	Metals.	Building material.	Paper pulp.	Hides and leather.
1913-14.....	100	100	100	100	100	100	100	100
1914 ¹	136	101	114	123	109	104	116	113
1915.....	151	140	161	177	166	118	116	158
1916.....	152	182	180	266	272	165	233	229
1917.....	181	205	198	551	405	215	267	206
1918.....	221	419	304	856	398	275	300	195
1918.								
October.....	276	487	318	826	382	293	309	208
November.....	276	486	318	780	385	293	315	208
December.....	276	482	318	844	384	293	327	208
1919.								
January.....	276	483	356	810	373	293	323	208
February.....	276	448	356	784	341	293	323	208
March.....	276	438	356	814	317	288	323	174
April.....	276	423	367	769	287	288	323	172

¹ Average for the six months ending Dec. 31, 1914.Group index numbers—Canadian Department of Labor.¹

Date.	Grains and fodder.	Animals and meats.	Dairy products.	Fruits and vegetables.	Other foods.	Textiles.	Hides, leather, etc.	Metals.	Implements.	Building materials, etc.	Fuel and lighting.	Drugs and chemicals.
1913.....	100	100	100	100	100	100	100	100	100	100	100	100
1914.....	114	107	100	99	104	102	105	96	101	100	94	106
1915.....	136	104	105	93	121	114	110	128	106	97	92	160
1916.....	142	121	119	130	136	148	143	167	128	100	113	222
1917.												
January.....	174	138	157	196	154	165	174	177	153	105	153	228
February.....	178	146	156	224	155	171	168	197	157	107	150	231
March.....	185	149	145	241	156	177	161	202	157	109	161	238
April.....	201	157	140	246	168	182	161	210	157	113	143	241
May.....	222	171	143	269	195	189	173	222	159	115	151	243
June.....	214	165	134	289	192	199	174	228	178	116	162	229
July.....	216	163	136	258	187	205	169	230	184	123	194	232
August.....	216	160	147	214	192	210	171	233	189	124	184	231
September.....	207	163	149	250	189	212	170	233	188	124	190	239
October.....	205	166	159	170	189	222	163	226	188	125	154	236
November.....	222	169	160	220	192	233	163	220	187	128	158	243
December.....	228	173	165	220	194	247	166	221	187	130	158	247
1918.												
January.....	232	181	168	216	195	250	160	217	189	131	159	255
February.....	242	184	171	221	202	250	156	223	203	132	160	260
March.....	258	191	159	214	203	255	156	226	210	143	161	256
April.....	251	198	157	215	204	257	154	222	209	148	162	243
May.....	236	221	155	208	210	264	173	237	206	148	163	242
June.....	227	210	155	224	210	278	173	237	210	149	200	259
July.....	229	205	163	234	214	283	173	238	212	150	205	259
August.....	227	199	165	217	214	284	174	236	220	152	205	250
September.....	214	199	170	206	220	287	177	235	224	153	206	244
October.....	227	198	179	199	226	286	179	231	230	153	208	244
November.....	216	186	186	213	227	291	179	230	231	154	210	244
December.....	207	171	190	208	227	290	171	217	214	154	211	244
1919.												
January.....	198	191	191	206	223	293	171	204	229	154	209	240
February.....	192	191	178	188	218	281	162	189	229	155	202	233
March.....	199	196	171	189	219	282	162	172	229	156	199	212
April.....	217	209	184	198	213	284	166	162	223	153	206	210
May.....	231	213	181	209	213	277	202	162	223	153	192	208
June.....	238	213	179	221	215	274	211	161	226	158	194	197
July.....	240	216	186	200	218	278	235	166	226	168	194	195
August.....	243	215	189	210	224	277	260	171	228	170	199	196
September.....	232	201	193	195	227	282	256	171	231	183	200	197
October.....	232	180	204	178	228	289	252	165	225	188	201	198
November.....	240	175	221	240	230	298	252	171	232	194	201	181

¹ Unimportant groups omitted.

In England and the United States commodities in the textile and clothing group have risen more radically in price than other commodities, food products being in much closer agreement with the general price level. In France "materials" as a group have risen more than foods and in Italy cereals and meats have remained comparatively cheaper than other commodities. The same may be said of vegetable but not of animal food in Sweden. In Italy minerals and metals and textiles have risen more than other groups of commodities and in Sweden meats have risen only less radically than coal.

WHOLESALE PRICE STATISTICS IN OTHER FOREIGN COUNTRIES.

There are certain additional countries for which it would be highly desirable to have up-to-date index numbers, notably Germany, Spain, and Argentina. The situation in Russia is such that market quotations, if published, would be of little significance.

So far as we are aware, no general wholesale price index is being published currently in Germany. Prices have been published in the *Vierteljahrshäfte zur Statistik des Deutschen Reichs* during the war on only a comparatively small number of commodities. Before the war, however, over 200 price quotations were published monthly, for approximately 40 commodities. These were not combined in an index but on the basis of these quotations an index could be constructed with little effort.

There is no wholesale price index published with regularity in Spain but judging from a preliminary survey of three leading financial journals (*España economica y financiera*, *El financiero*, *Semana financiera*), it seems likely that prices of certain groups of commodities may be followed fairly satisfactorily.

So far as we know, there is no wholesale price index published in Argentina. We have not yet made a sufficiently careful study of the Argentinian material available in this country to know how feasible it will be to study prices there.

Before the war the Russian Ministry of Commerce and Industry published a wholesale price index annually, based on 66 commodities, practically unweighted. To judge of the representativeness of the list would require an intimate knowledge of Russian economical development such as we do not possess. By far the largest number of commodities are quoted

in the unmanufactured state, but this is probably due to the comparatively undeveloped condition of Russian industry. We have no recent information regarding this index.

As regards the smaller countries of Europe, with the exception of Holland, wholesale price indexes are either not available at all or available on an annual basis only. In Belgium there is no wholesale price index published with regularity. The same situation exists in Spain and Norway. In Denmark the State Statistical Bureau publishes an annual index based on the import and export values of 38 commodities, weighted, so far as we can judge, on the basis of consumption. The Netherlands Statistical Office publishes monthly separate index numbers for 14 commodities, but no general index number has been compiled.

The Japanese Department of Agriculture and Commerce publishes an index number consisting of approximately 65 commodities, weighted roughly by allowing more than one quotation to important commodities. No statement is made as to the method of obtaining quotations. Both raw and manufactured articles are included in the list, although the predominance is given to raw materials.

PLANS FOR ADDITIONAL INTERNATIONAL PRICE STUDIES.

When the Federal Reserve Board first authorized the study of foreign prices, it was with a view to constructing an international index of prices for the leading countries of Europe and the United States.

It was thought at that time that a group of commodities could be found which would serve as a pattern for a matched index for the leading industrial countries of the world, the idea being that the leading countries of Europe and America were similar enough for prices of one list of commodities to represent their different price levels with fair accuracy. Because of the extreme difficulty of obtaining price material for most of the foreign countries it was thought necessary to limit this list to what might be called basic commodities and a few leading manufactured materials. Accordingly a list was prepared of 65 of the most important commodities in American industrial life. An effort was then made to find quotations for similar commodities in the leading European countries. At the same time the American index was computed on this basis, and also a British index as closely matched as possible. As a result of this study it was concluded that the

method has serious theoretical drawbacks and that from a strictly practical point of view it is impossible of satisfactory execution with the price material available in this country. The most serious objection to such a method lies in the fact that no index can be constructed which will adequately measure the wholesale price level of a group of countries. Even countries which appear to be of practically the same general industrial development differ often very greatly in separate branches. For instance, corn is a commodity of enormous importance in the economic life of the United States, whereas it is of relatively small importance abroad. Countries whose industrial development is as similar as that of England, France, and Germany differ greatly as to the importance of basic commodities in their individual cases. Differences become much greater when countries of widely different development are included in the comparison.

Considered from a practical point of view, it was found impossible to match a considerable number of commodities in every country studied. Even in the case of England, for which we have a larger quantity of price material than for any other country, prices for several commodities could not be found.

A careful study of the results of the experiment with the matched index for the United States and England leads to the conclusion that it formed no better basis for comparison of prices in the two countries than the indexes of the Bureau of Labor Statistics and the Statist. The matched index for England was somewhat superior to the Statist in that it contained prices on a larger number of manufactured articles. It was impossible to obtain expert advice regarding the reliability of the price quotations used, however, or the market information necessary for the construction of a matched index. The matched index for the United States was obviously not so good as the index of the Bureau of Labor Statistics as a general wholesale price index since less inclusive and therefore less representative.

It was decided therefore that if general wholesale price levels in several countries were to be compared, it would be necessary to con-

struct general price indexes for each of those countries. These indexes would obviously not consist of matched commodities, since every country differs from every other as regards the comparative importance of commodities in its industrial life, but would be constructed so as to represent the industrial characteristics of the respective countries. In other words, in countries of high industrial development it would be necessary to have prices of manufactured commodities included in the index; in countries of agricultural importance farm products would be emphasized, etc.

The survey of foreign price statistics showed that it would be impossible with the material available in this country to construct large general wholesale price indexes based upon the prices of manufactured goods as well as raw materials. At the same time it was apparent that with the use of a comparatively small number of quotations certain interesting and important economic problems could be studied currently in the case of a few of the leading countries at least. Experiments were therefore made with the classification of commodities into goods produced, imported, and exported for the United States and England which gave rather interesting results.

At the same time the opinions of certain leading economists in this field were obtained regarding the value of the matched index as compared with the representative commodity index as a basis for international price comparisons. The question of the advisability of the Federal Reserve Board's constructing a new type of index adapted to the study of business conditions, as well as the general price level, was also put to them. The classification of goods into those produced, imported, exported, and consumed was tentatively mentioned. There appears to be a difference of opinion regarding the value of the matched as compared with the representative commodity index, but considerable interest was shown in the idea of a new index and several valuable suggestions were received. The Board has these suggestions under consideration and will announce its plan for future international price studies as soon as it is completed.

GOLD POLICY AND FOREIGN COMMERCE OF THE SCANDINAVIAN COUNTRIES, 1914-1919.

SCANDINAVIAN MONETARY UNION.

Sweden, Norway, and Denmark formed in 1873 what is known as the Scandinavian Monetary Union, by the terms of which the coins of each country were made legal tender in all the three countries. The standard coins, of the face value of 20 and 10 kroner, contain $\frac{1}{24}$ and $\frac{1}{48}$ of a kilogram of fine gold, respectively, and the Governments of the three countries were bound by the treaty to purchase gold from any person offering it at the fixed price of 2,480 kroner per kilogram, less a mintage charge of one-half per cent on the 10-kroner piece and one-quarter per cent on the 20-kroner piece. Expressed in American units, the 10-kroner coin contains 62.2258 grains of pure gold and is worth \$2.6799, the mint value of a Scandinavian krona thus being 26.8 cents. Silver coins and subsidiary coins of the signatory powers are also legal tender throughout the Union territory up to amounts limited by the treaty, but bank notes are not legal tender outside of the country of issue.

Since the monetary policies adopted by Sweden were followed by the other two countries, the following discussion deals with Sweden in more detail than with Norway or Denmark.

SUSPENSION OF GOLD PAYMENTS AND OF GOLD PURCHASES.

At the outbreak of the Great War the authorities of the Bank of Sweden, alarmed by the public's demand for gold and fearing that the bank's reserves might become impaired by large withdrawals of gold, submitted to the legislature an amendment to the bank act which permits the King and the Parliament together, or when the Parliament is not in session, the King alone, to release the bank for a fixed period from the obligation to redeem its notes in gold on demand. Suspension of gold payments was sanctioned by royal order from May 11, 1915, to October 1 of the same year and was then extended to February 4, 1916. In the meantime the gold situation underwent a radical change and on January 3, 1916, the bank resumed gold payments.

During 1916 the gold holdings of the bank showed continuous and marked increases. From 142 millions in January they rose to 161 millions in February and to 184 millions in December. These additions to the gold re-

erves were the result largely of payment by belligerents for goods purchased in Sweden. A situation developed which has few, if any, precedents in the financial history of the world. A continuous stream of gold was pouring into the coffers of the Bank of Sweden, as it was under legal obligation to accept all this gold at its mint value. The bank had only two alternatives in dealing with the situation under the laws in force at the time—either to issue notes in return for all the gold and thereby increase the circulation of the country without reference to commercial needs, or to dispose of some of its earning assets and pay for the gold by notes thus obtained. The issue of notes in payment for gold would add nothing to the bank's earnings, since gold in vault under these circumstances would be a "dead" asset. Even less desirable appeared the sale of the bank's assets, as that policy would gradually transform it into a mere gold deposit vault with no earning power whatever. Swedish economists, confronted with this novel situation of a country with too much gold, reached the conclusion that, just as Swedish merchants would not accept the goods of any country except at the market price, neither should the bank accept gold on any other terms. Sweden needed goods, not gold, and if she could cause the outside world, especially England, to pay for purchases in Sweden by merchandise rather than gold, the country at large as well as the bank would be benefited. In view of these considerations, the bank sponsored another modification of its organic act, by which the King and the Parliament, or the King alone, when the Parliament is not in session, is authorized to suspend for a fixed period the bank's obligation to purchase gold in bars at the mint price; also to suspend the provisions of both the bank and mint acts according to which the bank as well as the mint were bound to pay gold coins for all gold bars tendered.¹ This bill became law on February 8, 1916, and was to continue in operation to February 4, 1917, but has since been extended and is still in force. The order suspending gold purchases was issued on February 8, 1916, and the order suspending the free coinage of gold on April 28 of the same year. At this point Sweden's gold policy came into conflict with the terms of the Scandinavian Monetary Union by which the three signatory powers had bound themselves to treat each other's gold coin as legal tender.

¹ For text of this bill see FEDERAL RESERVE BULLETIN for May, 1918, p. 378.

It was, therefore, necessary, before the suspension of gold purchases would become effective, to have Denmark and Norway adopt the same policy as that pursued by Sweden. At Sweden's request, after a conference of delegates of the three countries in Gothenburg on February 23 and 24, Denmark adopted this course on March 17, and Norway at about the same time.

To recapitulate: The Bank of Sweden up to the outbreak of the war was prepared to redeem all its notes in gold and to purchase whatever gold was offered at a fixed price. The practical result of the amendments to the bank and mint acts permitting the suspension of these functions in case of need is that Sweden in reality is prepared to redeem her notes in gold only so long as no great amount of notes is presented for redemption, and is ready to purchase gold at a fixed price only so long as no large amount of gold is tendered.

It may be noted that the bank was not prohibited from purchasing gold, but simply released from the obligation of purchasing it at a fixed price, and as a matter of fact purchases at a discount were made by the bank, although its operations in this line were not on so large a scale as those of the Bank of Spain (see FEDERAL RESERVE BULLETIN for November, 1919, p. 1039). A measure of these gold purchases is afforded by the growth of the bank's gold holdings, which increased from 125 millions at the end of 1915 to 286 millions at the end of 1918. Possession of this gold, however, did not enable Sweden to secure from the belligerents the merchandise of which she stood in need, for gold had temporarily lost much of its purchasing power in the international market. If, indeed, Sweden's purpose in refusing to accept gold at par was primarily to induce England and other belligerents to pay for their purchases in goods, the policy was not a success, as goods could not be had at any price. As a matter of fact, imports of merchandise from England to Sweden declined from 214 million kronor in 1915, to 164 millions in 1916, and to 65 millions in 1917.

In its practical operation the suspension of the purchase of gold by the Scandinavian banks amounts to a temporary annulment of the essential feature of their Monetary Union, namely, the free circulation of all Scandinavian money throughout the Union territory. As a result, intra-Scandinavian trade balances must be settled by bills of exchange, and the currencies of the three countries, instead of being

interchangeable as was the case while the Monetary Union was in operation, have fluctuated in accordance with their respective trade balances. Thus, the Swedish krona has been at a premium in Norway and Denmark during most of the period under review owing to Sweden's more favorable trade balance with the European belligerent countries.

FOREIGN TRADE AND FOREIGN EXCHANGE.

In prewar years Sweden ordinarily imported more goods than she exported. Her exports consisted largely of timber, wood pulp, iron, and other raw materials, while her principal imports were food, textiles, and coal. The two principal countries with which Sweden traded were Germany and Great Britain. Import and export figures for Sweden are available to the end of the calendar year 1917. It will be seen from the table on page 39 that Sweden continuously exported more goods to Great Britain than she imported from that country. It will also be noted, however, that the excess of exports to Great Britain increased decidedly as the war progressed. During the year 1916 the exports were twice as large as the imports and during the year 1917 more than 3½ times as large. The table on page 42 and the chart on page 40 show fluctuations of exchange quotations in Stockholm. At the outbreak of the war the pound sterling was quoted in Stockholm slightly above par and rose somewhat during the following months, while gold payments were received from England for merchandise purchased in Sweden. This rise continued until March, 1915. From that time on, as the blockade of Germany became more effective and communication more hazardous, also as England's needs became more acute and as she restricted gold payments, the rates for sterling began to decline. By the end of 1915 the pound was quoted at more than 3 per cent discount and by the end of 1916 at more than 7 per cent discount. The decline continued until November 7, 1917, when it reached its lowest level, the discount during that month exceeding 28 per cent. From that time the rate advanced again with fluctuations, the more rapid advance taking place since the signing of the armistice in November, 1918. During December of the present year the British pound has been quoted at Stockholm above par.

Trade balances alone are not sufficient, however, to explain the changes in the value of

the British pound at Stockholm. Another factor is found in the toll collected by Sweden for the use of her ships. Sweden's earnings from foreign shipping, which were about 120 million kronor annually before the war, increased to 242 millions in 1915 and to 416 millions in 1916, while in 1917 they amounted to 229 millions. England alone incurred a bill for shipping amounting to 130 million kronor in 1916. As in the case of other neutrals, part of the claims on foreign countries was used by Sweden to repurchase a large amount of home securities owned abroad. During the period from July 1, 1914, to December 31, 1917, about 343 millions of Swedish securities were repatriated, about 76 millions of which came from England. While the income from the carrying trade operated to enhance Sweden's favorable trade balance, her purchases of securities held abroad were an offset against her net exports of merchandise.

Sweden before the war was a heavy importer from Germany, having an unfavorable balance of trade amounting to about 100 million kronor a year. Beginning with 1915, however, this balance changed in Sweden's favor. At the same time Germany contributed to the earnings of the Swedish merchant marine, and, on the other hand, returned about 179 million kronor of Swedish securities. Mark quotations in Stockholm declined practically without a break from the beginning of the war until October, 1917, then rallied somewhat as the chances of a negotiated peace appeared brighter, only to decline again with the turning of the tide in favor of the Allies in June, 1918. From that time German exchange declined very rapidly, stood at about 41 per cent below par in November, 1918, when the armistice was signed, and continued to fall, reaching in November of this year the level of 85.4 per cent below par.

Throughout the war Sweden purchased more from the United States than she sold to this country, the amount of Sweden's unfavorable balance increasing very decidedly as the war progressed. At the same time, American exchange was below par at Stockholm for the reason that sterling exchange in New York was "pegged" at about 2 per cent below par.¹ Examination of the table of foreign exchanges on page 42 and of the chart on page 40 shows that dollar exchange in Stockholm remained with remarkable constancy about 2 per cent above sterling until March, 1919,

¹ For discussion of the effect of pegging on dollar exchange see FEDERAL RESERVE BULLETIN for November, 1919, p. 1038.

when Great Britain ceased to support her exchange in New York. As a result the dollar immediately rose above par and has remained so since that time. During November American exchange has been quoted in Stockholm at as much as 18 per cent premium, a condition which causes serious concern to Sweden's importers and to American exporters.

Norway's foreign commerce and exchange rates are shown in the tables on page 39 and page 43. In the case of Norway earnings from the foreign carrying trade are an even more important factor than in the case of Sweden. The following statement shows those earnings for the years 1911 to 1917:

Year.	Tonnage carried (1,000 tons).	Earnings (1,000 kroner).
1911.....	1,171	161,086
1912.....	1,261	188,440
1913.....	1,329	218,619
1914.....	1,379	211,478
1915.....	1,413	474,525
1916.....	1,422	1,062,662
1917.....	1,129	1,107,177

From earnings averaging about 200 million kroner during the years 1911 to 1914 Norway's receipts from this source rose to 475 millions in 1915, to 1,063 millions in 1916, and to 1,107 millions in 1917. It will be noted that during 1917 Norway's total imports were about 1,661 millions and her exports 791 millions, so that she had an unfavorable trade balance of about 900 millions. This balance, however, was more than offset by her earnings in the carrying trade. It will also be noted that the actual amounts carried did not increase materially and that the large returns were due to the enormous increase in rates. It is to be remembered, of course, that the extra hazardous nature of navigation in the submarine-infested waters necessitated large advances in freight rates. Nevertheless the increase in these rates is startling: Thus, for example, the rate per ton from the east coast of Great Britain to the eastern ports of Norway quoted at 4.6 kroner in January, 1914, advanced to 8.10 kroner in August and to 11.4 kroner by the end of the year. In 1915 the advance continued and at the end of that year the rate per ton was 18.7 kroner per ton. By the end of 1916 it was 45.5 kroner, while in 1917 the increase was nothing short of spectacular, as in June of that year it reached 260 kroner per ton. During the next three or four months,

which are the latest for which information is available, the rates declined somewhat and in September of that year were 205 kroner per ton.

Thus Norway, not being in a position to export as much merchandise as Sweden and being greatly in need of outside supplies, had an unfavorable merchandise balance even during the war years, but the earnings of her merchant marine considerably more than offset her excess of imports and her true international balance was decidedly favorable.

Denmark, being situated in greater proximity to belligerent Europe and having less immediate access to the northern sea where ocean communication was possible with much less danger from mines and submarines, was not able to do so great a business with Great Britain during the war as in previous years (see tables on pages 39 and 44). Her trade balance with Great Britain was favorable until 1916 but was against her in 1917. British exchange consequently never fell so low in Denmark as in Sweden, the lowest point being reached in November, 1917, when the pound was at about 19 per cent discount. It rallied soon thereafter, however, reached par early in 1919, and has been considerably above par since that time, the latest quotations being approximately 10 per cent above par. Denmark's largest exports during the war were to Germany: from about 300 million kroner during 1914 her exports to that country increased to 487 millions in 1915 and to 691 millions in 1916. During 1917, doubtless as a result of allied pressure, the exports fell to 488 millions. At the same time Denmark's imports from Germany were considerably lower than before the war. Consequently German exchange in Copenhagen fell below par and continued to decline as her trade balance with Denmark became increasingly unfavorable. The German mark was quoted in Copenhagen at a 50 per cent discount in October, 1917, then rallied temporarily, only to decline again, and reached a level of about 83 per cent below par in November of this year.

Denmark, as the other Scandinavian countries, shows considerable earnings from her carrying trade, her income from this source, which was in the neighborhood of 100 millions a year during prewar times, being 219 millions in 1915, 351 millions in 1916 and 330 millions in 1917.

ASSETS AND LIABILITIES OF CENTRAL BANKS.

Tables are attached (pages 45 and 46) showing the assets and liabilities of the Bank

of Sweden (Sveriges Riksbank), the Bank of Norway (Norges Bank), and the National Bank at Copenhagen (Nationalbanken in Kjøbenhavn).

These banks have a monopoly of note issue in their respective countries, the Bank of Sweden being owned by the Government (or rather the houses of Parliament), while the Banks of Norway and of Denmark are privately owned but under Government supervision and sharing their profits with the Government.

It will be noted that the gold holdings of the Bank of Sweden increased from 109 million kronor at the end of 1914 to 286 millions at the end of 1918; the bank's holdings of bills payable in Sweden were much lower at the end of 1915 and 1916 than at the end of 1914, when they amounted to 175 millions, while at the end of 1918 they had increased to 280 millions. Holdings of bills payable abroad increased from 43 millions in 1914 to 91 millions in 1915, and 122 millions in 1916, but declined to 110 millions in 1917 and to 70 millions in 1918. Advances, other than in current account, largely on securities, show a rapid growth from 53 millions at the end of 1916 to 181 millions at the end of 1918. On the liability side an expansion of note circulation from 304 millions in 1914 to 814 millions in 1918 is noted, while deposits increased from 108 millions in 1914 to 197 millions in 1917, but declined to 141 millions in 1918.

The Bank of Norway, for the period from December 31, 1914, to December 31, 1918, reports increases in gold reserves from 38 to 122 million kroner; in domestic discounts from 120 to 434 millions; in deposits from 21 to 128 millions; and in note circulation from 134 to 436 millions. The National Bank at Copenhagen shows a growth of its gold reserves from 79 million kroner on July 31, 1914, to 187 millions on July 31, 1919. During the same period its deposits in current account rose from 17 millions to 115 millions and its note circulation from 156 to 429 millions.

LITERATURE USED.

Sweden:

- Handel, issued by the Department of Commerce, Sweden, for 1911-1919.
- Kommersiella Meddelanden, issued by the Department of Commerce, for January, 1919.
- Statistisk Årsbok, issued by the Swedish Government, for 1911-1918.
- De Svenska Statsmakterna och Krigstidens Folkhushållning, for 1917-18.
- Reglemente for Forvaltningen af Sveriges Riksbank, issued by the Swedish Government in 1907.
- Sveriges Riksbank, dess Tillkomst och Verksamhet, issued by the bank.
- Die Geldpolitik der Bank von Schweden während der Krieger, by Albert Hahn, in Schmollers Jahrbuch, 1917, second issue, p. 53.

Sweden—Continued.

Affarsverlden, Stockholm, for January–November, 1919.
 Göteborgs Handels-och Sjöfarts-Tidning (daily) Gothenburg, June–November, 1919.
 Sveriges Riksbanks Årsbok, for 1911–1918.
 Sveriges Skepsfart, Government report, 1918.
 Gold after the war in relation to inflation and the foreign exchanges, by K. Wiksell, in the Economic Journal, December, 1918, p. 409.
 The depreciation of gold, by G. Cassel, in the Economic Journal September, 1917, p. 346.
 The Scandinavian gold policy, by K. Wiksell, in the Economic Journal, September, 1916, p. 313.
 The present situation of the foreign exchanges, by G. Cassel, in the Economic Journal, March, 1916, p. 62.

Denmark:

Danmarks Vareindforsel-og Udforsel, issued by the Department of Statistics, 1911–1917.
 Statistisk Aarbog, issued by the Government, 1911–1918.
 Handelsberetning, issued by the Wholesale Dealers' Association, 1915–16.
 Nationalbanken i Kjøbenhavn Regnskab, 1911–1919.
 Finanstidende, Copenhagen, March–November, 1919.
 Lovtidende, July 13, 1908, Copenhagen.
 Politiken (daily), Copenhagen, January–March, 1919.

Norway:

Handel, issued by the Government, 1911–1917.
 Statistiske Meddelelser, issued by the Government, 1914–1915 and January–June, 1919.
 Aarbok, issued by the Exchange at Bergen, Norway, 1916–1918.
 Les Lois de la Banque de Norvège, Christiania, 1909.
 Statistisk Aarbok, issued by the Government, 1911–1918.
 Aftenposten (daily), Christiania, August–November, 1919.
 Norges Skibsfart, Government report for 1917.
 See also FEDERAL RESERVE BULLETIN, 1918, pp. 379–384.

Sweden's trade balance with principal countries for the years 1912–1917 (in 1,000 kroner).

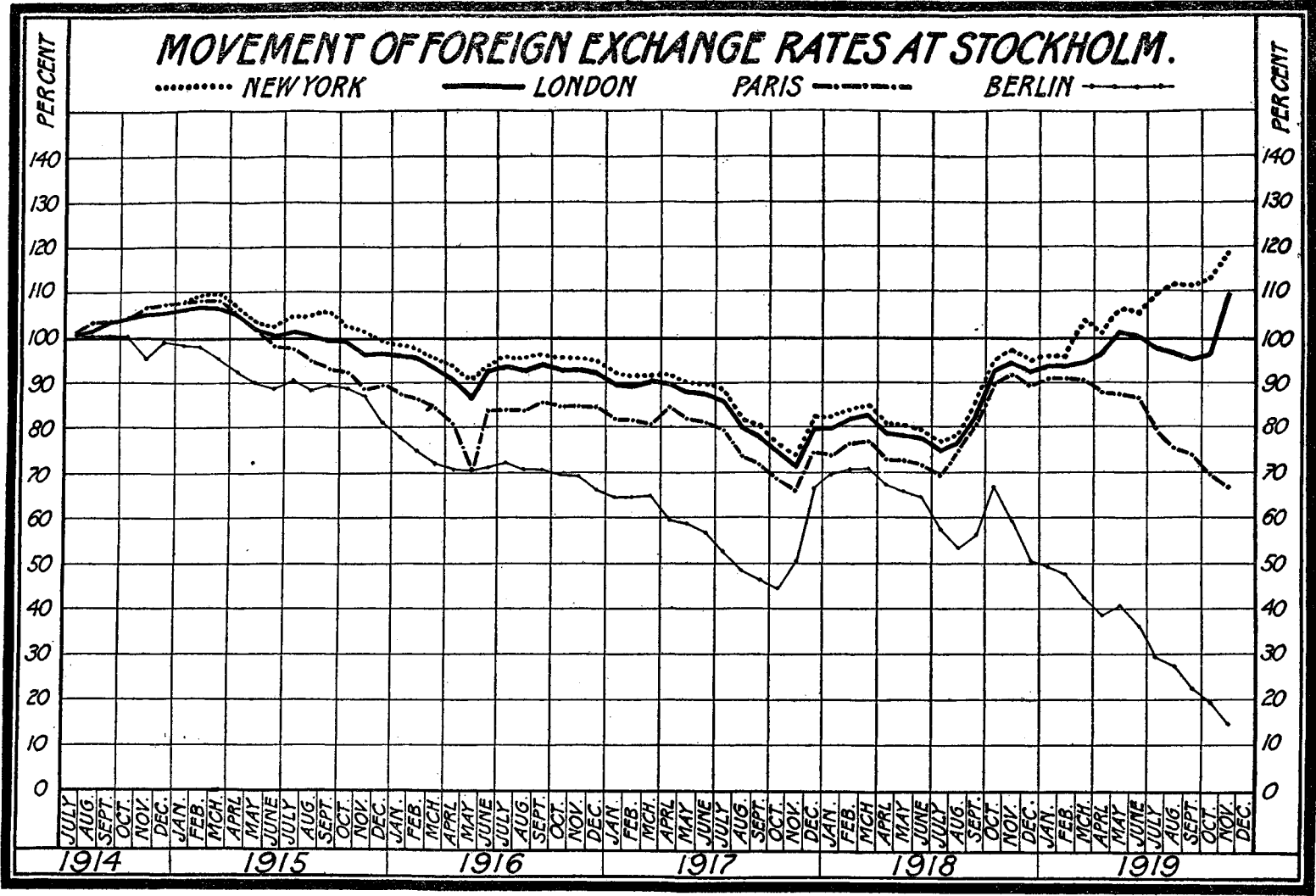
Countries.	1912	1913	1914	1915	1916	1917
Germany:						
Imports.....	273,860	289,900	238,550	251,500	420,173	288,228
Exports.....	170,930	179,080	174,840	486,415	437,532	352,050
Great Britain:						
Imports.....	188,950	206,820	183,810	213,527	164,416	65,080
Exports.....	222,800	237,880	258,320	329,550	320,052	216,123
France:						
Imports.....	33,170	35,280	28,880	23,796	23,562	15,706
Exports.....	53,230	66,260	32,688	31,476	96,593	63,786
United States:						
Imports.....	60,460	76,580	78,076	321,865	213,936	96,122
Exports.....	32,150	34,400	41,208	33,751	75,395	50,428
Norway:						
Imports.....	23,680	25,930	29,036	50,489	61,139	51,667
Exports.....	42,910	54,030	48,882	76,206	115,384	162,713
Denmark:						
Imports.....	49,640	53,680	51,648	69,766	79,590	113,423
Exports.....	67,480	70,650	72,850	80,395	93,844	112,777
Other countries:						
Imports.....	153,130	158,350	116,910	211,567	175,744	128,384
Exports.....	170,970	175,040	143,562	278,567	417,580	391,674
Total imports...	782,890	846,540	726,910	1,142,510	1,138,560	758,610
Total exports...	760,470	817,340	772,350	1,316,360	1,556,380	1,349,551

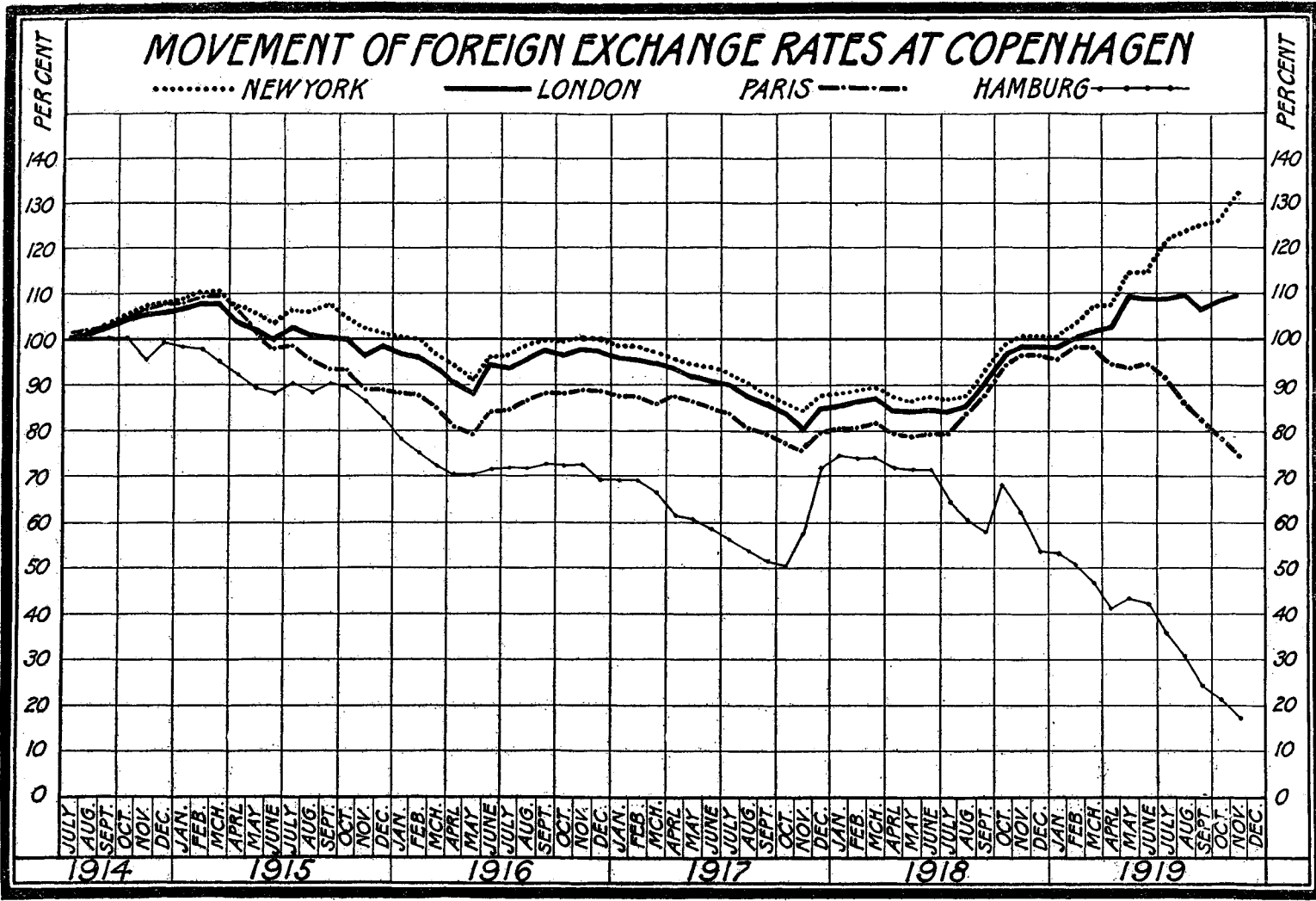
Norway's trade balance with principal countries for the years 1912–1917 (in 1,000 kroner).

Countries.	1912	1913	1914	1915	1916	1917
Germany:						
Imports.....	167,956	176,065	151,299	155,218	176,471	156,483
Exports.....	75,019	67,228	76,167	192,716	291,777	150,133
Great Britain:						
Imports.....	147,995	146,244	159,186	253,584	374,007	430,696
Exports.....	94,832	98,647	105,707	187,672	274,428	301,893
France:						
Imports.....	15,075	11,719	10,587	13,853	23,349	30,997
Exports.....	14,687	14,223	10,034	27,590	79,099	81,584
United States:						
Imports.....	33,807	39,201	73,060	183,627	337,998	551,397
Exports.....	33,432	30,222	44,864	33,354	32,387	22,438
Sweden:						
Imports.....	35,332	46,328	46,937	75,166	132,441	162,275
Exports.....	21,443	26,440	34,681	67,464	68,350	55,877
Denmark:						
Imports.....	26,996	28,347	29,400	33,351	69,140	104,476
Exports.....	8,440	9,158	18,398	30,354	40,538	19,801
Other countries:						
Imports.....	98,574	104,317	96,808	153,169	240,259	224,984
Exports.....	87,819	146,713	120,171	137,827	201,754	159,646
Total imports...	525,735	552,321	567,277	867,968	1,353,665	1,661,302
Total exports...	335,672	392,631	410,022	676,760	988,333	791,372

Denmark's trade balance with principal countries for the years 1912–1917 (in 1,000 kroner).

Countries.	1912	1913	1914	1915	1916	1917
Germany:						
Imports.....	314,246	328,308	264,653	200,380	265,067	237,181
Exports.....	181,646	178,737	301,424	486,701	690,900	488,415
Great Britain:						
Imports.....	135,886	134,561	145,137	253,435	336,518	283,814
Exports.....	373,079	410,338	431,605	385,114	351,456	264,577
France:						
Imports.....	19,406	20,935	17,512	13,291	19,775	13,524
Exports.....	3,302	3,342	6,415	5,511	1,767	1,896
United States:						
Imports.....	69,354	86,979	84,292	313,742	311,061	214,139
Exports.....	9,439	7,853	11,661	12,694	9,397	4,052
Sweden:						
Imports.....	69,060	71,104	83,097	92,805	117,130	137,150
Exports.....	33,352	34,083	37,960	67,772	63,280	113,245
Norway:						
Imports.....	9,166	8,755	17,475	28,450	39,815	30,687
Exports.....	18,541	19,300	22,843	32,138	55,977	72,705
Other countries:						
Imports.....	362,082	380,858	183,062	255,221	268,034	165,965
Exports.....	223,441	242,447	55,538	139,333	136,111	119,567
Total imports...	979,200	1,031,500	795,228	1,157,324	1,357,400	1,082,460
Total exports...	842,800	896,100	867,446	1,129,263	1,308,888	1,064,457





Monthly high and low rates of exchange in Copenhagen on principal foreign countries: 1914-1919.

[Par: 1 £=18.1595 kroner, 100 francs=72 kroner, 1 dollar=3.7314 kroner, 100 Reichsmarken=88.8888 kroner.]

Month and year.	Exchange on—								Percentage of par (based on high rate).			
	London (par 18.16).		Paris (par 72).		New York (par 373).		Hamburg (par 88.89).		London.	Paris.	New York.	Hamburg.
	High.	Low.	High.	Low.	High.	Low.	High.	Low.				
1914.												
July.....	18.33	18.24	73.30	72.50	375.50	375.50	89.15	89.05	100.93	101.81	100.67	100.29
August.....	18.37	18.35	73.70	73.00	377.00	375.50	89.20	89.15	101.15	102.36	101.07	100.34
September.....	18.65	18.40	74.00	73.00	385.00	377.00	89.20	89.00	102.69	102.78	103.22	100.34
October.....	18.90	18.70	76.00	74.50	392.00	385.00	88.95	85.25	104.07	105.56	105.09	100.06
November.....	19.10	18.90	77.00	76.00	400.00	392.00	85.00	84.00	105.17	106.95	107.24	95.62
December.....	19.20	19.20	77.50	77.50	402.00	399.00	88.25	85.50	105.72	107.64	107.77	99.28
1915.												
January.....	19.30	19.20	77.50	77.50	405.00	404.00	87.35	87.00	106.27	107.64	108.58	98.26
February.....	19.50	19.30	78.50	77.50	412.00	405.00	87.10	83.90	107.37	109.03	110.46	97.98
March.....	19.50	18.95	78.50	76.00	413.00	404.00	84.75	82.25	107.37	109.03	110.72	95.34
April.....	18.85	18.45	77.50	73.50	400.00	396.00	82.00	79.50	103.79	107.64	107.24	92.24
May.....	18.52	18.20	73.25	71.00	395.00	386.00	79.60	78.00	101.98	101.74	105.90	89.54
June.....	18.16	18.10	70.50	69.25	385.00	382.00	78.50	77.10	100.00	97.92	103.22	88.31
July.....	18.65	18.15	70.75	68.50	396.00	384.00	80.40	77.20	102.69	98.26	106.17	90.44
August.....	18.33	18.20	69.00	67.50	395.00	392.00	78.65	78.30	100.93	95.83	105.90	88.48
September.....	18.20	18.10	67.00	66.50	400.00	391.00	80.10	78.80	100.22	95.06	107.24	90.11
October.....	18.16	17.60	67.00	65.25	390.00	386.00	79.60	77.50	100.00	93.06	104.56	89.54
November.....	17.45	17.15	64.00	62.25	383.00	371.00	77.00	73.00	96.09	88.89	102.68	86.62
December.....	17.90	16.90	64.00	62.00	379.00	370.00	73.35	69.00	98.56	88.89	101.61	82.51
1916.												
January.....	17.60	17.19	63.50	62.25	375.00	372.00	69.50	65.00	96.91	88.19	100.54	78.18
February.....	17.42	16.89	63.00	61.00	373.00	357.00	67.00	64.50	95.92	87.50	100.00	75.37
March.....	16.94	16.48	61.00	58.50	360.00	352.00	64.30	61.50	93.28	84.72	96.51	72.33
April.....	16.44	15.73	58.25	56.00	351.00	337.00	62.75	60.70	90.52	80.90	94.10	70.59
May.....	16.00	15.35	57.00	54.25	341.00	330.00	62.35	61.00	88.10	79.17	91.42	70.14
June.....	17.10	15.75	60.50	56.50	358.00	339.00	63.25	62.00	94.16	84.03	95.98	71.15
July.....	17.00	16.50	61.00	59.00	360.00	353.00	64.00	63.00	93.61	84.72	96.51	71.99
August.....	17.37	16.85	62.35	60.25	368.00	357.00	63.90	63.70	95.64	86.60	98.66	71.88
September.....	17.65	17.35	63.50	62.35	372.00	366.00	64.50	63.70	97.19	88.19	99.73	72.56
October.....	17.55	17.49	63.50	63.00	370.00	368.00	64.10	64.00	96.64	88.19	99.20	72.11
November.....	17.67	17.53	64.00	63.30	373.00	370.00	64.25	61.00	97.30	88.89	100.00	72.28
December.....	17.63	17.20	63.75	61.75	373.00	367.00	61.50	58.25	97.08	88.54	100.00	69.18
1917.												
January.....	17.40	17.30	63.00	62.50	368.00	366.00	61.50	61.00	95.81	87.50	98.66	69.18
February.....	17.35	17.17	62.75	62.00	367.00	362.00	61.50	59.35	95.53	87.15	98.39	69.18
March.....	17.14	16.45	61.75	59.60	362.00	348.00	59.15	55.00	94.38	85.76	97.05	66.54
April.....	16.95	16.41	62.75	59.60	357.00	347.00	54.75	53.75	93.33	87.15	95.71	61.59
May.....	16.70	16.52	62.15	61.25	352.00	350.00	54.20	52.25	91.96	86.32	94.37	60.97
June.....	16.51	16.30	61.25	60.50	349.00	347.00	52.15	46.75	90.91	85.07	93.57	58.66
July.....	16.35	15.95	60.25	58.50	346.00	337.00	50.00	47.25	90.03	83.68	92.76	56.24
August.....	15.90	15.60	58.00	57.00	336.00	329.00	47.50	46.00	87.55	80.56	90.08	53.43
September.....	15.61	15.30	57.00	56.00	329.00	324.00	46.00	44.75	85.95	79.17	88.20	51.74
October.....	15.26	13.75	55.75	52.00	323.00	294.00	44.75	41.00	84.03	77.43	86.60	50.34
November.....	14.70	13.00	54.50	50.00	315.00	280.00	51.00	39.50	80.94	75.69	84.45	57.37
December.....	15.40	14.55	57.50	54.50	328.00	310.00	64.00	50.25	84.80	79.86	87.94	71.99
1918.												
January.....	15.50	15.12	58.00	56.50	329.00	322.00	66.00	60.00	85.35	80.56	88.20	74.24
February.....	15.68	15.37	58.25	57.25	331.00	325.00	65.50	59.50	86.34	80.90	88.74	73.68
March.....	15.80	15.10	58.75	56.25	334.00	319.00	65.75	60.50	87.00	81.60	89.54	73.96
April.....	15.32	15.00	57.00	56.00	325.00	319.00	64.00	62.00	84.36	79.17	87.13	71.99
May.....	15.30	15.07	56.75	56.00	323.00	317.00	63.75	62.15	84.25	78.82	86.60	71.71
June.....	15.36	15.17	57.00	56.25	325.00	321.00	63.25	55.50	84.58	79.17	87.13	71.15
July.....	15.27	15.08	57.00	56.00	324.00	318.00	57.25	52.50	84.08	79.17	86.86	64.40
August.....	15.53	15.02	60.25	55.75	327.00	316.00	53.85	50.25	85.51	83.68	87.67	60.58
September.....	16.44	15.55	63.00	60.25	347.00	327.00	51.50	50.25	90.52	87.50	93.03	57.93
October.....	17.53	16.45	67.75	64.00	369.00	348.00	60.50	51.35	96.80	94.10	98.93	68.06
November.....	17.85	17.75	69.25	60.00	376.00	374.00	55.60	48.00	98.29	96.18	100.80	62.54
December.....	17.86	17.59	69.25	68.00	376.00	370.00	48.00	44.00	98.34	96.18	100.80	53.99
1919.												
January.....	17.85	17.73	69.00	68.50	375.00	373.00	47.25	44.00	98.29	95.83	100.54	53.15
February.....	18.28	18.23	70.75	70.50	385.00	383.50	45.20	43.00	100.66	98.26	103.22	50.84
March ¹	18.48	18.26	70.65	66.00	400.00	383.50	41.50	36.50	101.76	98.13	107.24	46.68
April.....	18.70	18.36	68.00	66.00	400.50	396.50	37.00	30.00	102.97	94.44	107.37	41.62
May.....	19.32	18.70	67.50	64.50	426.50	401.00	38.80	30.25	109.14	93.75	114.34	43.64
June.....	19.79	18.99	67.75	64.00	427.00	410.00	37.50	27.50	108.97	94.10	114.48	42.18
July.....	19.73	19.52	66.00	61.75	453.00	426.00	32.00	26.00	108.64	91.67	121.45	35.99
August.....	19.88	19.33	62.25	57.00	461.00	453.00	27.35	20.50	109.47	86.46	123.59	30.76
September.....	19.36	18.63	59.50	50.50	465.00	448.00	21.45	15.50	106.60	82.64	124.66	24.13
October.....	19.65	19.32	56.25	53.25	469.50	460.00	18.90	15.15	108.20	78.13	125.87	21.26
November.....	19.92	19.50	53.50	50.25	494.00	467.00	15.15	10.50	109.69	74.31	132.44	17.04

¹ Data for Mar. 4-9 missing.

Assets and liabilities of the Bank of Sweden on Dec. 31, 1914-1918 (in 1,000 kroner).

[Source: Riksbankens Årsbok (the Bank of Sweden's year book).]

	1914	1915	1916	1917	1918
ASSETS.					
Gold in coin and bullion.....	108,537	124,572	183,520	244,457	285,566
Subsidiary coin.....	1,888	2,134	2,339	1,600	365
Checks and sight drafts, including foreign.....	13,328	18,030	17,170	25,210	35,464
Current account deposits held abroad.....	16,751	51,084	39,070	19,150	45,667
Government securities.....	24,574	52,156	62,910	59,856	54,618
Securities of domestic corporations.....	3,002	5,334	5,692	5,539	5,046
Bills payable in Sweden.....	174,938	113,620	121,623	186,345	280,306
Bills payable abroad.....	43,400	91,141	122,413	110,129	70,494
Advances in current account.....	2,505	2,289	2,498	1,396	1,202
Other advances.....	42,694	24,880	52,898	121,296	180,544
Sundry assets.....	71,973	63,964	66,390	85,030	92,310
Total assets.....	503,590	549,204	676,523	860,008	1,051,582
LIABILITIES.					
Capital.....	50,000	50,000	50,000	50,000	50,000
Surplus.....	12,500	12,500	12,500	12,500	12,500
Deposits.....	108,144	129,069	173,130	197,448	141,424
Due to foreign banks.....	9,019	9,955	4,810	1,934	318
Notes in circulation.....	304,058	327,886	417,517	572,722	813,534
Bank orders.....	2,049	2,608	3,598	8,821	11,477
Dividends due and payable to the Government.....	8,800	8,760	8,120		
Sundry liabilities.....	9,220	8,426	6,848	16,583	22,329
Total liabilities.....	503,590	549,204	676,523	860,008	1,051,582

Assets and liabilities of the Bank of Norway on Dec. 31, 1914-1918 (in 1,000 kroner).

[Source: Regnskab for Norges Bank.]

	1914	1915	1916	1917	1918
ASSETS.					
Gold in vault.....	38,394	51,630	123,236	116,393	121,980
Held with Scandinavian banks of issue.....	3,327	15,038	3,039	3,365	3,230
Held with other foreign agencies.....	27,884	63,240	79,206	76,921	69,786
Loans and discounts, domestic.....	119,650	86,343	159,711	409,783	433,841
Bills foreign.....	304	310	551	665	241
Real estate loans.....	1,512	1,385	1,256	1,102	998
Securities.....	8,963	13,394	13,440	13,091	13,221
Sundry assets.....	6,540	2,428	7,486	840	1,073
Total assets.....	207,074	234,368	387,975	622,160	644,370
LIABILITIES.					
Capital.....	25,000	25,000	25,000	35,000	35,000
Surplus.....	13,362	11,944	11,453	17,366	17,048
Notes in circulation.....	134,182	162,211	257,854	326,319	436,212
Deposits.....	¹ 21,140	27,274	83,307	226,451	127,530
Sundry liabilities.....	² 13,390	7,939	10,361	17,024	25,580
Total liabilities.....	207,074	234,368	387,975	622,160	644,370

¹ Exclusive of checking accounts.² Includes checking accounts.

Assets and liabilities of the National Bank at Copenhagen (Denmark) July 31, 1914-1919 (in 1,000 kroner).

[Source: Nationalbankens Regnskab.]

	1914	1915	1916	1917	1918	1919
ASSETS.						
Gold coin and bullion.....	78,515	107,029	161,455	195,113	189,778	187,380
Subsidiary coin.....	6,135	5,413	3,911	2,732	2,417	2,824
Foreign credits.....	14,139	37,575	59,915	41,775	63,988	43,664
Danish Government securities.....	1,919	12,381	21,091	25,789	17,621	32,576
Other Danish securities.....	1,721	7,218	6,377	5,989	8,088	11,402
Foreign Government securities.....	8,083	8,990	8,892	8,647	4,041	4,259
Notes of and credits with other Scandinavian banks of issue.....	229	315	174	15	115	27,515
Domestic bills.....	59,401	35,599	33,133	36,665	40,142	73,778
Foreign bills.....	7,509	1,125	10,952	10,117	10,099	7,463
Loans and discounts.....	17,519	17,324	22,067	18,056	18,959	30,521
Real estate.....	1,772	2,031	2,348	2,806	2,750	3,000
Other assets.....	27,123	34,093	74,699	100,641	156,267	184,840
Total assets.....	224,065	269,093	405,014	448,345	514,265	609,222
LIABILITIES.						
Capital.....	27,000	27,000	27,000	27,000	27,000	27,000
Surplus.....	8,206	8,198	8,320	8,443	8,865	9,283
Notes in circulation.....	156,472	204,325	245,013	289,308	365,535	428,552
Government deposits.....	3,634	3,532	3,426	3,317	3,204	3,067
Current account deposits.....	16,946	4,092	87,898	97,422	84,724	114,927
Other deposits.....	884	11,753	22,006	9,515	9,375	2,390
Due to foreign central banks of issue.....	6,538	4,839	5,724	1,769		
Profit and loss.....	3,223	3,772	3,805	9,722	9,630	12,678
Other liabilities.....	1,162	1,612	1,823	1,849	6,132	11,316
Total liabilities.....	224,065	269,093	405,015	448,345	514,265	609,222

The French National Bank of Foreign Commerce.¹

For about two decades the question of export banks has been under consideration in France. A solution is contained in the law of October 25, 1919. This law provides for the assignment to a "bank to facilitate the foreign trade of France" of a part of the supplementary tax paid to the Treasury by the Bank of France, in accordance with article 4 of the agreement of October 26, 1917, after deducting the amount to be devoted to agricultural credits by virtue of article 3 of the law of December 20, 1918. (For text of the law, see p. 48.)

The general plan of organization of the export bank is as follows: A stock company with a capital of 100,000,000 francs is to be organized under the name of "French National Bank of Foreign Commerce." (Banque Nationale française du commerce extérieur.) The law provides for a subsidy to be granted by the Government to the bank.

Before entering upon an examination of the plan, it will be interesting to recall the phases through which the campaign for the establishment of export banks in France has passed, and to outline the present position of France in the matter of commercial export credit. M. Périer, commercial attaché of the London embassy, made a report in 1908 on the question of export credit which he thought was neglected by the French banks, and the report gave

rise to a great deal of controversy. Even prior to this discussion there had been publications on the subject and a committee of the foreign commerce counselors had taken up the subject on several occasions. The great credit houses and the banks having foreign relations were taken to task. They defended themselves by pointing to the services they were rendering to the export trade by discounting three months' paper and by credits which in some cases they were extending to their clients engaged in the export business. They declared with good reason that they could hardly undertake under all circumstances to handle paper which in the case of Italy matured within four or six months, in the case of Russia within six and even nine months, and in the case of South America in no less than four months. Since their deposits are nearly all payable on demand, they were not in a position to risk such an immobilization of their funds. Furthermore they were asked to take practically all the risk themselves. Their attention was called to the example of German banks, such as the Deutsche Bank and the Disconto-Gesellschaft, which went so far as to become silent partners in export industries. One fact was, however, overlooked, namely, that English merchants for a long time and German merchants since 1874 or 1875 had started to make regular commercial explorations of the countries where they wished to open markets. These pioneers broke the ground and were followed by their nationals who moved to those countries, and by settling

¹ Based on an article in *L'Économiste Français* for June 23, 1919.

there established friendly centers of population. This made possible the building up of a valuable credit organization in foreign countries largely by utilizing information obtained among nationals of the mother country. Such methods were not practicable for France, which has no surplus population to send to foreign countries there to form a helpful nucleus for the development of commercial relations.

The problem is, therefore, a peculiarly difficult one for France. In writings published at that time it was remarked that only a special organization could undertake the risks and that the ablest and most experienced representatives of foreign commerce should be designated to take the lead in establishing such a bank, since they alone would possess the necessary knowledge of foreign markets and of the needs to be met.

A short time later, in 1910, the Bank of France decided to accept for discount commercial bills payable abroad, on condition that they be of French origin, or, if originating abroad, be made payable to merchants resident in France. The bank in this matter, however, maintained its old rules, by requiring for this class of paper three signatures and insisting on a maturity not exceeding three months.

It is clear that this fell far short of what was wanted by the advocates of export credit who saw in it an important, if not the prime, mover of foreign commerce. Advantage was therefore taken in 1911 of the Government's privilege of terminating the charter of the Bank of France to introduce into the agreement of renewal a clause designed to enhance the part of that bank in the matter of granting export credit. This clause granted authority to the bank to extend credits with maturities in excess of three months, a provision advocated on the ground that, as was pointed out above, maturities of export credits would have to be as high as six months, nine months, and in certain cases even longer. The minister of finance at that time refused to have the fundamental statutes of the bank thus modified.

It was at this juncture, while the renewal of the bank's charter was being discussed in the Senate, that a member of that body, M. Barbier, while recognizing that the bank could not directly participate in granting export credit, made the proposal suggested by the plan adopted in the organization of agricultural credit, that it would be proper to ask the Bank of France to give material and moral support to special institutions organized for the purpose of granting export credits. The

final solution arrived at is in line with this proposal, as proved by the law under discussion.

In the meantime, since direct assistance by the Bank of France on the desired basis was not to be permitted, and since it appeared impossible to modify the cautious methods of deposit banks, other means of attaining the end in view were considered. Nearly all the proposals provided that all banks without distinction were to grant export credits, while the Bank of France would help them to mobilize their holdings of long-term paper. None of these plans was ever adopted.

The solution, foreshadowed from the beginning when the participation of credit institutions was discussed, was finally along the following lines: Persons, the nature of whose business and connections made them directly interested in export credit, manufacturers for export, export merchants and brokers, to whom might be added ship brokers and navigation companies, should organize a bank of export, contribute its capital and intrust its management to one of their number, who by his experience in foreign commerce and his character was best qualified to undertake the task. This solution was adopted in principle, though the plan does not contemplate the establishment of an institution entirely independent and endowed exclusively with its own resources. The Government, with the proceeds of the circulation tax to be collected from the Bank of France, will, as in the case of agricultural credit, come to the financial aid of the new institution.

An agreement has been entered into between M. Klotz, minister of finance, and the founders of the "French National Bank of Foreign Commerce," organized as a stock company with a capital of 100,000,000 francs, the founders being leading traders and bankers. This agreement contains the following provisions: The Government places at the disposal of the new institution two-thirds of the amounts paid to the Treasury by the Bank of France in accordance with article 4 of the agreement of October 26, 1917.¹ These amounts shall be used: First, up to a maximum of 2 millions as an annual subsidy; secondly, for making advances during 20 years, the duration of the agreement, without interest up to a maximum of 25 million francs. The sums thus turned over by the Government are to be carried by the Bank of Foreign Commerce in a special account entitled "Special reserve account."

¹For text of Article 4 see page 340 of the April, 1919, number of the Federal Reserve Bulletin.

The subsidy will come to an end when the bank's capital will earn over 6 per cent, or when the advances made directly by the Government, together with the Government's participations in the profits turned back into this fund, in accordance with article 44 of the charter, will have reached the figure of the special reserve fund mentioned above. In any case, the period for which the annual payment of the 2 million franc subsidy will be obligatory for the Government will not be less than five years, beginning with January 1 of the year following the organization of the company. Among minor provisions the following are to be noted: The Government will have authority to draw for purposes of advances to the company in part on the fund made available to the Treasury for "assisting credit organizations," and the subsidy given by the Government shall be part of the annual profit and loss account of the Bank of Foreign Commerce.

The Government is to participate in the profits. From the earnings of the bank 5 per cent is to be deducted for the legal reserve and to make up a sum that would pay a cumulative 6 per cent dividend on the paid-in capital. The balance, except such sums as may be carried forward to the following year's account, is to be divided as follows as long as the régime of Government advances continues: Sixty per cent are to be placed at the disposal of the general assembly of stockholders, 5 per cent to the board of directors, 5 per cent to the staff, and 30 per cent to the Government. The Government, however, is to add its share of the profits to its advances to the bank until such time as these advances shall have reached 25,000,000 francs. After this figure is reached the Government is to receive only 20 per cent of the profits and the board of directors and the staff 10 per cent each. The Government, as an interested party, will have supervisory control over the Bank of Commerce. Two Government examiners will audit the bank's inventory, its annual and current accounts, its cash in vault, its bill portfolio, and all its papers.

The bank is to have its central office in Paris. No branch or agency is to be permitted in France. The central office will collect information and keep the records of the solvency of foreign buyers. The bank must preserve

its character as a special export bank. The operations of the main office, according to the charter, are strictly limited to transactions arising from the export and import of merchandise, and the current accounts opened with the bank will bear interest only on credit balances arising from such transactions. Agencies of the bank abroad will have authority to engage in ordinary banking business, except stock exchange and other speculative operations.

LAW AUTHORIZING ESTABLISHMENT OF FRENCH NATIONAL BANK OF FOREIGN COMMERCE.

ARTICLE 1. The agreement entered into May 28, 1919, by and between the ministers of finance and of commerce, acting in the name of the Government, parties of the first part, and Messrs. J. Block, G. Griolet, and G. Fermé, acting in the name of the French National Bank of Foreign Commerce (in process of formation), parties of the second part, and the supplements to the said agreement dated July 21 and September 24, 1919, are approved.

ART. 2. The agreement and the supplements approved by the preceding article shall be recorded on payment of the regular fee of 3 francs and 75 centimes (3 fr. 75); likewise the act of incorporation of the corporation.

ART. 3. The minister of finance is authorized to pay to the French National Bank of Foreign Commerce, after previous deduction of the amount allotted to the agricultural credit by article 3 of the law of December 20, 1918, two-thirds of the supplementary dues paid by the Bank of France under article 4 of the agreement of October 26, 1917.

These payments shall be made:

1. As a subsidy which may attain a maximum amount of 2 million francs (2,000,000 fr.) per annum, this subsidy to be paid during a period of five years and to cease after that time if the stockholders of the French Bank of Foreign Commerce receive a net dividend in excess of six per cent (6%), or if the amount of the special reserve fund mentioned below reaches the sum of 25 million francs (25,000,000 fr.).

2. The remainder, as an advance without interest, so long as the special reserve fund created by the payments of the Government shall not have reached the amount of 25 million francs (25,000,000 fr.).

ART. 4. The following persons shall not be eligible to the administrative council of the French National Bank of Foreign Commerce or to any salaried positions within the administration of the society or its branches:

1. Members of Parliament.

2. Public officials or persons attached to a public office, who took part in the exercise of their official duties in the preparation of the agreement and the supplements approved by the present law and have not discontinued their functions for at least five months.

The present law has been discussed and adopted by the Senate and the Chamber of Deputies and will be enforced as the law of the land.

Done in Paris, the 23d of October, 1919.

Foreign Exchange Rates.

In the tables and charts below are shown the movements of monthly high exchange rates in New York on (1) principal centers in allied countries, London, Paris and Milan; (2) principal centers in neutral countries, Amsterdam, Stockholm, Zurich, Madrid, and Buenos Aires; (3) principal center in countries having a silver standard, Bombay, Shanghai, and Hongkong. In the tables absolute rates and percentages of par are shown, while the curves are plotted on the basis of percentages of premium or discount at which the currencies of the different countries were quoted in the New York market. Similar information from the beginning of the war to the summer of 1918 was shown in the FEDERAL RESERVE BULLETIN for September, 1918, pp. 837 et seq. The information here presented is for the calendar years 1918 and 1919. Explanations made in the previous study as to the basis of calculations apply also to the present tables and charts.

Sterling exchange remained fixed at about 2 per cent discount until April, 1919, when the British Government discontinued its "pegging" arrangement; French exchange was at about 9 per cent discount during the first seven months of 1918 and at about 5 per cent from August of that year to April, 1919; while lira exchange, after falling as low as 42 per cent discount in May, 1918, rose to about 19 per cent discount

in August, as the result of the activities of the National Institute for Foreign Exchanges, and remained at that level until April, 1919. When the exchanges were "unpegged" in March of this year, sterling, franc, and lira exchanges immediately fell below the previous level, and in December 1919 the high quotations were as follows: \$3.9875 for the pound, 10.08 cents for the franc, and 8.103 cents for the lira, the discounts amounting to 18.06, 47.77, and 58.02 per cent, respectively.

Exchange rates on neutral countries were all above par during 1918, Madrid exchange reaching a premium of over 54 per cent in April of that year. During the present year these exchange rates followed a downward course, and in October were all quoted below par. In December the Spanish peseta, the Argentine peso, and the Swiss franc were at a premium, while the Dutch florin and the Swedish krona were quoted at substantial discounts.

Spectacular advances in the price of silver, especially during the last six months, account for the rise in exchange rates on India and China. The price of the Indian rupee, however, being under direct control of the British Government, has not risen as high as the price of the Hongkong dollar, which was quoted in December at about 125 per cent, or of the Shanghai tael, for which the high December quotation was about 160 per cent above the average 1913 bullion values of these coins.

Movement of exchange rates (highest rates for sight drafts during month) in New York on principal financial centers during period January, 1918, to December, 1919.

1. RATES ON CENTERS IN PRINCIPAL ALLIED COUNTRIES.

	London (4.8665=100).		Paris (19.3=100).		Milan (19.3=100).	
		<i>Per cent.</i>		<i>Per cent.</i>		<i>Per cent.</i>
1918.						
January.....	\$4.7535	97.68	\$17.53	90.83	\$12.03	62.33
February.....	4.7535	97.68	17.51	90.73	11.76	60.93
March.....	4.7535	97.68	17.47	90.52	11.98	62.07
April.....	4.7550	97.71	17.49	90.62	11.38	58.96
May.....	4.7550	97.71	17.53	90.83	11.15	57.77
June.....	4.7550	97.71	17.50	90.67	11.29	58.50
July.....	4.7535	97.68	17.50	90.67	12.48	64.66
August.....	4.76	97.98	18.26	94.61	15.71	81.40
September.....	4.755	97.71	18.28	94.72	15.70	81.35
October.....	4.755	97.71	18.29	94.77	15.75	81.61
November.....	4.7575	97.76	18.55	96.11	15.75	81.61
December.....	4.7585	97.78	18.34	95.02	15.748	81.60
1919.						
January.....	4.7585	97.78	18.33	94.97	15.771	81.40
February.....	4.7585	97.78	18.328	94.96	15.718	81.44
March.....	4.7580	97.77	18.298	94.81	15.718	81.44
April.....	4.6725	96.01	17.006	88.11	14.245	73.81
May.....	4.6925	96.42	16.474	85.36	13.333	69.08
June.....	4.6350	95.24	15.948	82.63	12.738	66.00
July.....	4.57	93.91	15.396	79.77	12.706	65.83
August.....	4.3550	89.49	13.698	70.97	11.60	60.10
September.....	4.2625	87.59	12.787	66.25	10.559	54.71
October.....	4.2325	86.97	11.933	61.83	10.256	53.14
November.....	4.1625	85.53	11.3058	58.58	9.94	51.50
December.....	3.9875	81.94	10.08	52.23	8.103	41.98

Movement of exchange rates (highest rates for sight drafts during month) in New York on principal financial centers during period January, 1918, to December, 1919—Continued.

2. RATES ON CENTERS IN NEUTRAL COUNTRIES.

	Amsterdam (40.2=100).		Stockholm (26.8=100).		Zurich (19.3=100).		Madrid (19.3=100).		Buenos Aires (42.45=100).	
		<i>Per cent.</i>		<i>Per cent.</i>		<i>Per cent.</i>		<i>Per cent.</i>		<i>Per cent.</i>
1918.										
January.....	\$44.25	110.07	\$34.25	127.80	\$22.99	119.12	\$24.40	126.42	\$45.98	108.32
February.....	45.50	113.43	33.50	125.00	22.42	116.17	25.25	130.83	44.04	103.75
March.....	46.75	116.29	34.00	126.87	23.17	120.05	25.63	132.80	44.44	104.69
April.....	48.25	120.02	34.50	128.73	23.53	121.92	29.75	154.15	43.85	103.30
May.....	50.60	125.62	34.75	129.66	26.11	135.28	28.40	147.15	43.91	103.44
June.....	51.00	126.87	35.60	132.84	25.38	131.50	28.55	147.93	43.38	102.19
July.....	52.00	129.35	35.80	133.58	25.38	131.50	27.55	142.75	44.83	105.61
August.....	52.75	131.22	36.25	135.26	25.54	132.33	26.50	137.31	44.60	104.97
September.....	49.50	123.13	33.75	125.93	23.04	119.38	23.37	121.09	45.00	106.01
October.....	46.75	116.29	31.80	118.66	21.65	112.18	22.65	117.36	45.35	106.83
November.....	42.25	105.10	29.00	108.21	20.32	105.28	20.70	107.25	45.50	107.18
December.....	42.75	106.34	29.45	109.88	20.92	108.39	20.20	104.66	45.35	107.83
1919.										
January.....	42.75	106.34	29.10	108.58	20.746	107.49	20.14	104.35	45.15	106.36
February.....	41.25	102.61	28.15	105.04	20.597	106.72	21.10	109.33	44.95	105.89
March.....	41.125	102.30	28.15	105.04	20.70	107.25	21.10	109.33	45.00	106.01
April.....	41.25	102.61	27.125	101.21	20.3252	105.31	20.375	105.57	44.375	104.53
May.....	40.25	100.12	26.70	99.63	20.3252	105.21	20.25	104.92	44.875	105.71
June.....	39.25	97.64	26.25	97.95	19.305	100.03	20.06	103.94	44.07	103.82
July.....	38.75	96.39	25.50	95.15	19.08	98.86	19.72	102.18	43.25	101.88
August.....	37.5625	93.44	24.90	92.91	17.92	92.85	19.75	102.33	42.375	99.82
September.....	38.125	94.84	24.60	91.79	18.28	94.72	19.25	99.74	43.25	101.88
October.....	38.0625	94.68	24.60	91.79	17.985	93.19	19.28	99.90	42.35	99.76
November.....	38.00	94.53	23.85	88.99	18.18	94.20	20.10	104.14	43.375	102.18
December.....	38.25	95.15	22.30	83.21	20.08	104.04	19.90	103.11	43.25	101.88

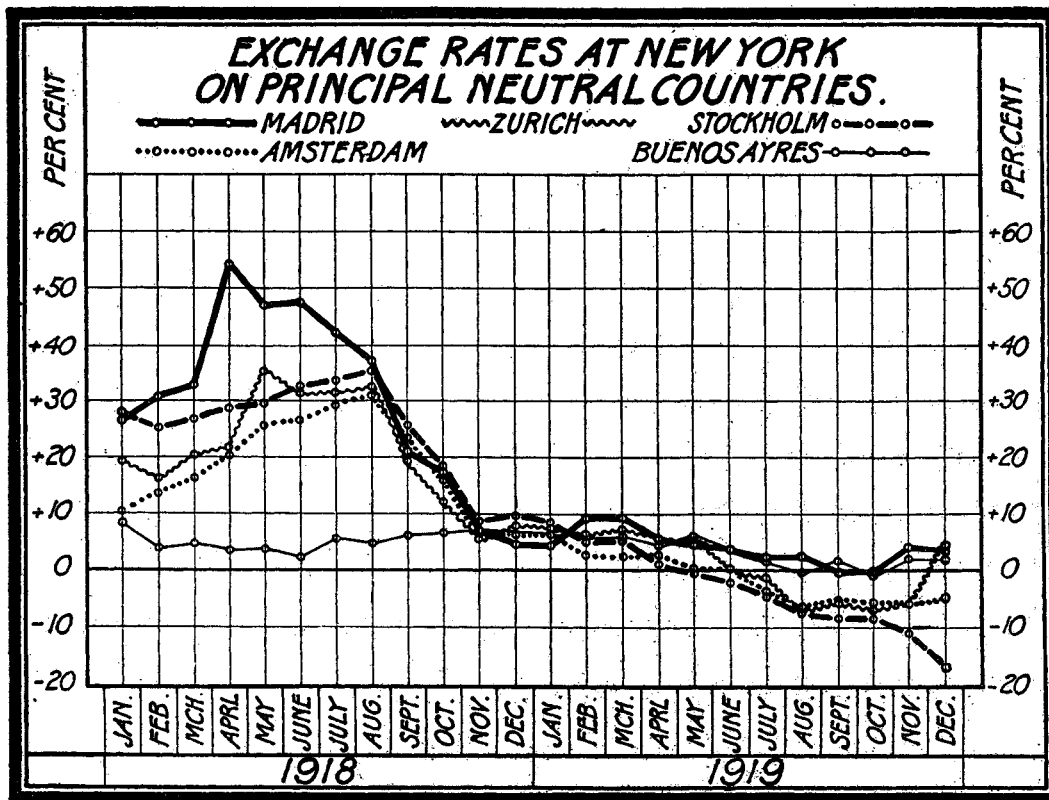
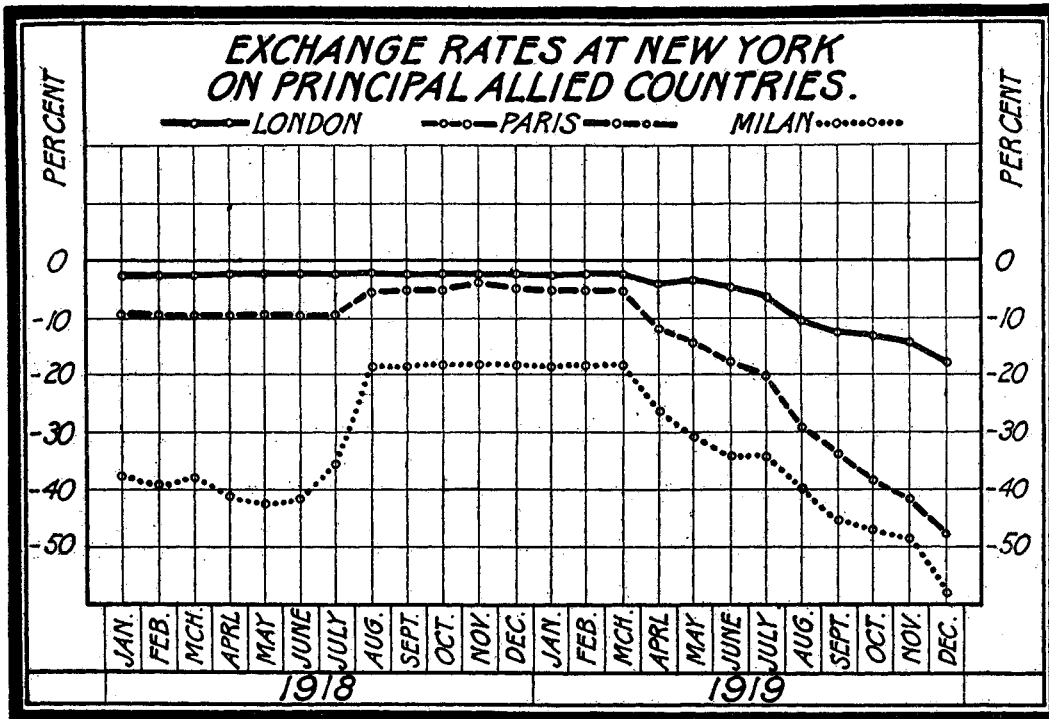
3. RATES ON CENTERS IN SILVER COUNTRIES.

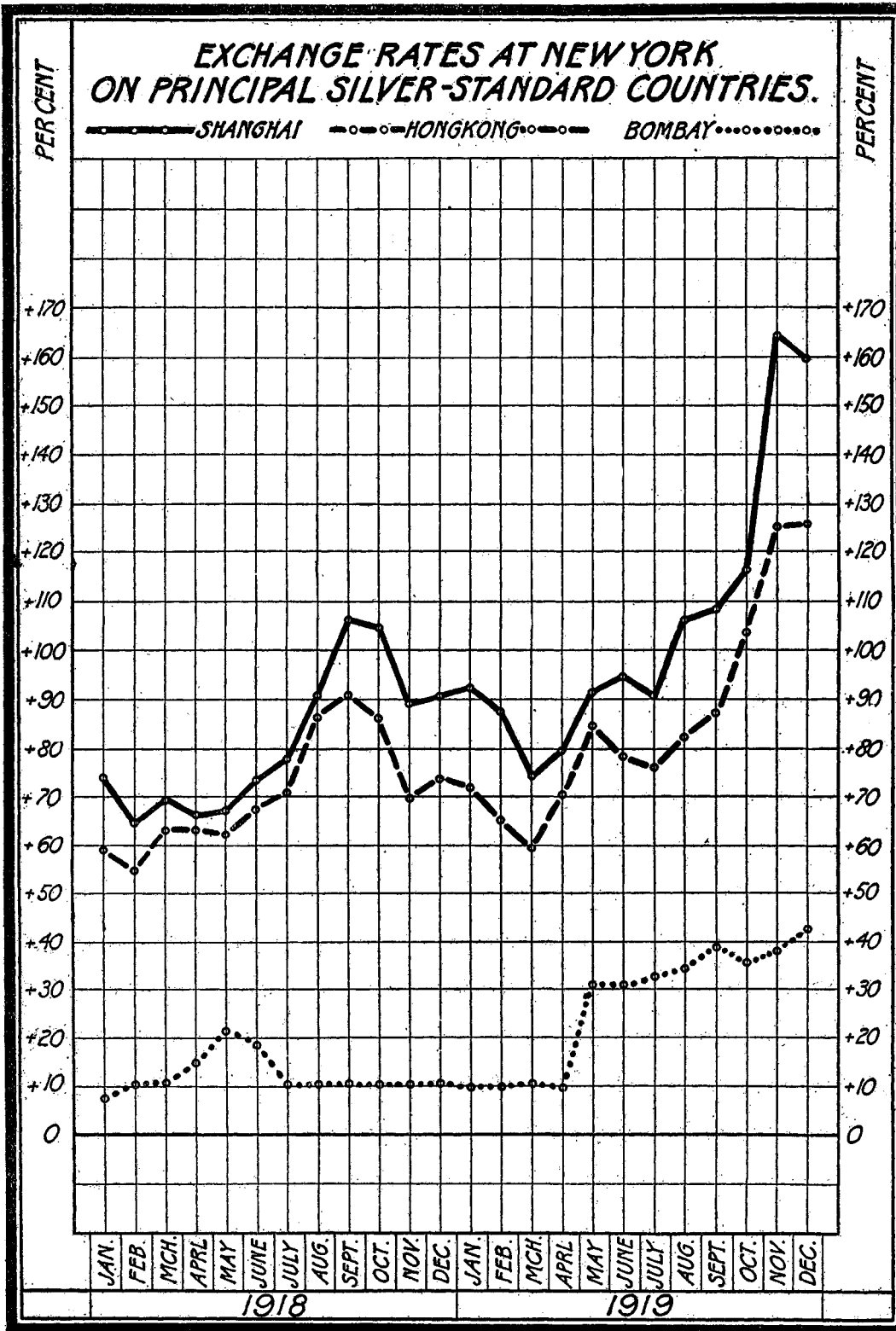
	Bombay (32.44=100).		Shanghai (65.49=100). ³		Hongkong (47.16=100). ³	
		<i>Per cent.</i>		<i>Per cent.</i>		<i>Per cent.</i>
1918.						
January.....	\$35.00	107.89	\$114.00	174.07	\$75.00	159.03
February.....	35.75	110.20	108.00	164.91	73.00	154.79
March.....	36.00	110.97	111.00	169.49	77.00	163.27
April.....	37.25	114.83	109.00	166.44	77.00	163.27
May.....	39.50	121.76	109.50	167.20	76.50	162.21
June.....	38.50	118.68	113.50	173.31	79.00	167.51
July.....			116.50	177.89	80.50	170.70
August.....			125.00	190.87	88.00	186.60
September.....	35.73	110.14	135.00	206.14	90.00	190.84
October.....			134.00	204.61	87.75	186.07
November.....			124.00	189.34	80.00	169.64
December.....	35.875	110.59	125.00	190.87	82.00	173.88
1919.						
January.....	35.65	109.90	126.00	192.40	81.00	171.76
February.....	35.65	109.90	123.00	187.81	78.00	165.39
March.....	35.875	110.59	114.00	174.07	75.25	159.56
April.....	35.65	109.90	117.75	179.80	80.25	170.17
May.....	42.50	131.01	125.50	191.63	87.00	184.48
June.....	42.50	131.01	127.50	194.69	84.00	178.12
July.....	43.00	132.55	125.00	190.87	83.00	176.00
August.....	43.50	134.09	135.00	206.14	86.00	182.36
September.....	45.00	138.72	136.50	208.43	88.50	187.66
October.....	44.00	135.64	142.00	216.83	96.00	203.56
November.....	44.75	137.95	173.00	264.16	106.00	224.77
December.....	46.25	142.57	170.00	259.58	106.50	225.83

¹ Minimum rate for telegraphic transfers fixed Apr. 11 at 35.75; previously 33.5.

² Rates for telegraphic transfers fixed June 18 at 35.73.

³ Average 1913 values on the basis of the average price of silver in London for the calendar year 1913.





Retail Trade Index.

For several months past the Federal Reserve Board has been engaged in the development of an index number designed to show the activity of retail trade. In establishing this index it was sought to obtain from department stores of representative character throughout the country figures showing, either in actual amounts or in percentage form, changes in the volume of net sales, instituting monthly comparisons with the same month last year, as well as showing cumulative season percentages for the two years. In addition, request was made for data showing stocks at the close of the month as compared with such stocks at the close of the same month last year, and at the close of the previous month of the current year. In order to afford a comparison of stocks on hand at the close of each month during the present season with the sales during the same period, request was made for data showing the percentage of average stocks at the end of each month to the average

monthly sales. Finally, the percentage was requested of outstanding orders at the close of the month to total purchases during the calendar year 1918, which was taken as a base. While considerable progress has been made in several districts in obtaining the cooperation of retail establishments, it is not believed desirable to publish in any district such percentage figures until enough establishments have reported to furnish an index which is thoroughly representative of the general condition of trade. In the following statement is given a summary of the reports obtained in district No. 12, which will appear in the annual report of the Federal Reserve agent at San Francisco. These percentages have been computed from actual figures furnished by the several reporting concerns. Since the original request for such data in September of this year there has been an increase of about 30 per cent in the number of stores reporting in this district. Twenty-nine stores furnished such information for the month of November.

Condition of retail trade in Federal Reserve district No. 12.

[Decreases shown in italics.]

	Percentage of increase or decrease.															
	Comparison of net sales with those of corresponding period last year.								Stocks at end of month compared with—							
	Month.				July 1, 1919, to close of—				Same month last year.				Last month.			
	Aug.	Sept.	Oct.	Nov.	Aug.	Sept.	Oct.	Nov.	Aug.	Sept.	Oct.	Nov.	Aug.	Sept.	Oct.	Nov.
Los Angeles.....	48.8	68.3	110.6	88.7	58.3	52.9	69.9	77.2	6.3	<i>0.6</i>	13.9	19.5	5.5	4.2	5.6	0.7
San Francisco.....	31.3	40.9	92.3	45.2	30.0	33.1	46.5	46.3	.5	10.6	15.5	26.5	15.6	13.2	9.7	2.2
Oakland.....	20.7	25.1	68.5	30.3	20.1	22.4	32.3	31.9	<i>7.6</i>	<i>.5</i>	1.4	4.9	6.3	12.6	5.4	.2
Sacramento.....	16.7	32.5	69.2	36.6	15.4	22.4	35.7	35.7	<i>20.3</i>	<i>10.7</i>	<i>4.6</i>	.3	18.7	4.8	3.7	6.1
Seattle.....	23.7	27.6	50.6	21.0	24.4	28.3	31.6	29.5	7.2	17.8	15.2	15.3	22.7	13.2	6.5	2.9
Spokane.....			176.0	46.4			99.9	70.4				13.8				3.4
Salt Lake City.....	23.2	33.4	44.8	42.7	23.9	25.8	24.8	32.0								
Total for district....	30.3	40.6	82.0	46.1	31.0	34.4	46.9	47.5	.9	7.0	11.9	17.5	12.6	10.3	6.5	.5

	Percentage of average stocks at end of each month from July 1, 1919, to date, to average monthly sales for same period.				Percentage of outstanding orders at end of month to total purchases during calendar year 1918.			
	Aug.	Sept.	Oct.	Nov.	Aug.	Sept.	Oct.	Nov.
Los Angeles.....	481.7	459.5	495.6	485.6	27.9	22.7	45.1	53.5
San Francisco.....	418.6	460.5	442.8	453.0	34.1	28.1	25.8	29.5
Oakland.....	547.1	564.7	558.3	559.1				
Sacramento.....	468.2	400.7	355.9	339.3				
Seattle.....	411.6	459.0	422.3	432.0	29.2	28.3	25.1	22.1
Spokane.....				462.4				20.0
Salt Lake City.....					46.5		16.8	11.4
Total for district.....	422.4	470.7	459.3	463.1	34.3	29.1	29.6	29.2

Adjustment of Salaries in Federal Reserve Banks.

Early in the past summer the Division of Analysis and Research was directed by the Federal Reserve Board to undertake the development of a method of adjusting salaries in the Federal Reserve Banks to meet changes in the cost of living. The task naturally divides itself into three parts, as follows:

(1) The determination of price variations in the several classes of consumption goods in each locality.

(2) In order to arrive at the proper weighting for such price changes it is necessary to determine what percentage of the total expenditures of a typical family or individual goes for food, what for clothing, etc., in each salary group in each locality.

(3) In view of the great increase in prices during the last few years the problem is not simply one of adjusting salaries in the future to any changes in the cost of living that may then take place, but also one of determining as far as possible to what extent the advances that have already been made in the rates of compensation meet the enhanced cost of living at present.

Mature consideration of the problem and conferences with men who are daily in touch with the practical situation led to the adoption of the following plan of procedure:

(1) With regard to price variations. A recent study of the Bureau of Labor Statistics shows the changes in price levels of the various classes of consumption goods; that is, food, clothing, housing, etc., which have taken place during the past four or five years. Furthermore, it is the intention of the Bureau of Labor Statistics to repeat this study every six months in the future. It is believed that these figures, coupled with the regular monthly retail food price figures of the Bureau of Labor Statistics, will fully serve the purpose of this study in this respect.

(2) In order to give proper weighting to the price changes in each of these classes of goods the following questionnaire has been prepared.¹ Each employee of the Federal Reserve Banks receiving a salary of \$5,000 per annum or less will be asked to give the information listed in this questionnaire.

Practically all such schedules previously used have been handled personally by trained enumerators and applied to selected family

groups which conformed to certain requirements. In the present case it is deemed best, in order to take every precaution against the divulgence of personal information, to ask the employee to fill in the schedule form privately and to place it unsigned in an envelope, which he or she will then seal and return to the governor of the bank or to some party designated by him, the name of the individual only appearing on a detached slip which is to be filed at the bank for checking purposes. Furthermore, the group to be covered in this study will lack homogeneity in that some of the individuals will be heads of families, some major supports of families, some partial supports of families, some living alone, and others only partially self-supporting. It is felt, however, that in order to secure weights that will be strictly relevant it is preferable to have proportionate expenditures for food, clothing, etc., of as many as possible of the people whose salaries are to be adjusted rather than of a homogeneous group representing one type. For this reason the necessarily brief questionnaire has been prepared in two slightly different forms, one to cover family and one to cover individual incomes and expenditures. One or the other of these forms is to be used as the case demands. Selections by the individual of the form which he or she is to fill in is to be made by such individual in accordance with instructions given on page 1 of the questionnaire.

In view of the fact that a large proportion of the employees of the Federal Reserve Banks are unmarried and live with parents (in some cases paying only a nominal amount for board and room, while others partially support the family), it is thought best to include in the schedule a question which will render it possible to select such cases for whatever treatment may be considered appropriate. In the belief that it will not be practicable to make differences in adjustments for variation in the size of families and, due to the absence of members of the family at various seasons of the year, that the replies to such a question would be of doubtful value, the usual question regarding the size of family has been omitted.

(3) With regard to changes in the rate of compensation during the last few years. Because of the large expansion of the banks during the period of the recent rise in prices it is believed that it will be impossible to get from the Federal Reserve Banks a complete record of compensation rates in effect prior to the recent rise in prices for each type of work now performed in the Federal Reserve Banks. It

¹ Acknowledgment is due Prof. R. E. Chaddock, Prof. W. F. Ogburn, and Mr. F. A. Ross, all of Columbia University, for critical advice with respect to the form of the schedule.

seems, therefore, impossible to determine from the records of these banks alone the amount of adjustment in rates of compensation which has actually taken place since the recent rise in prices. In order to obtain this important information the following plan is being pursued: Each of the Federal Reserve Banks is being asked to furnish us with compensation rates now in effect for each type of work. These rates will be compared with those in effect during late 1915 or early 1916 in banking houses which were at that time fully organized.

QUESTIONNAIRE FOR USE IN OBTAINING INFORMATION REGARDING INCOME AND EXPENDITURES OF EMPLOYEES OF FEDERAL RESERVE BANKS.¹

Before attempting to answer the questions on the following pages, read this page carefully.

If for the whole or a part of the year ending Dec. 31, 1919, you were a married man and lived with your wife, or if you were a married woman and lived with your husband, or if you, whether married or unmarried, were the major support of the family group in which you lived, fill in Section I (pages 2 and 3).

If during that period you were not included in the group described above, fill in Section II (pages 4 and 5).

NOTE.—If you feel that you could give the facts called for more accurately for the family group in which you lived than for yourself individually then fill in Section I, even if according to instructions above you should fill in Section II.

Or, if you were included in the group described in the first paragraph above for only a short period of time during the year ending Dec. 31, 1919, and believe therefore that your expenditures for that period are not typical, then write the word "Section II" in this blank space and fill in Section II. In this case you should, of course, estimate your individual expenditures for the full year on the basis of that part of the year during which you lived singly.

Under no circumstances fill in both Sections I and II. The main purpose of the questions which follow is not to find out how much it costs you to live, but rather to determine what part of your expenditures goes toward clothing, what part toward food, what part toward rent, etc.

[Perforated line.]

(Fill in this slip, detach it, and file with bank.)

Name.....
 Department.....
 Bank.....
 Branch.....

(After questionnaire is filled in, place it in envelope, seal, and return it to Governor of your bank.)

2

SECTION I.

This section is to be filled in by those who, by reason of the fact that for the whole or a part of the year ending Dec. 31, 1919, they were married and lived with husband or wife, or were the major supports of the family groups in which they lived, or, for other reasons, are to give the income and expenditure facts for the family groups rather than for themselves individually.

Before filling in the answers to any of the following questions, read Section I entire.

EXPENDITURES.

1. Total rent paid during the year ending Dec. 31, 1919. \$.....
 (The amount entered here should be the total rent paid for the apartment or house in which the family lived during the period mentioned, even if a part of such house or apartment was occupied by lodgers. In case you were married for only a part of the time, give the yearly rent at the rate paid during the period married. This item should not include amount covering board and room while on vacation.)
2. Rental value of home, if owned. \$.....
 (The meaning of this question is: If for the whole or a part of the year ending Dec. 31, 1919, you owned your home, for how much do you think you could have rented it for that period, as judged by rentals of similar houses in the neighborhood?)

¹ Copies of the questionnaire now in the hands of the banks are to be amended to accord with the copy here presented.

3. Amount paid for heat, light, electric power, during the year ending Dec. 31, 1919.
 (Heat or light furnished with your apartment or house and covered by the rent is not to be included here. The word "heat" is meant to include that used for cooking.)
 4. Amount paid for food during the year ending Dec. 31, 1919.
 (If you have no record of the amount spent for food during the year ending Dec. 31, 1919, we would suggest that you estimate the amount spent per week for food during a typical week of that period and multiply that by 52. The amount here should cover all food expenditures, even though a part of this food is consumed by boarders. Amounts spent for lunches by members of the family should also be included, but not such expenditures of boarders and lodgers. In case you were married for only a part of the time, estimate the amount for the year at the rate of expenditures during the period married.)
 5. Amount paid for clothing during the year ending Dec. 31, 1919.
 (The amount entered here should cover the clothing expenditures of the family group, but not those of boarders and lodgers. In case you were married for only a part of the time, estimate such expenses for a full year.)
 6. Amount spent for furniture and house furnishings during year ending Dec. 31, 1919.
 7. Miscellaneous expenditures:
 - (a) Health (including doctors' fees, medicine, hospital bills, dentists' fees, nurses' fees, eye-glasses, etc.)..... \$.....
 - (b) Recreation—
 - (1) Board and room while on vacation.
 - (2) Movie tickets, theater tickets, pool, billiard and bowling charges, club dues, railroad fare, etc.
 - (c) Education (including newspapers, magazines, school tuition, school supplies, music lessons, etc.).....
 - (d) Other miscellaneous items not mentioned above.....
- Total miscellaneous expenditures.....
- Total expenditures..... \$.....
8. If your expenditures for the year ending Dec. 31, 1919, exceeded your income for that period, how was this deficit met?
 9. Did you keep for all or a part of the year ending Dec. 31, 1919, a record of expenditures? If so, what part?
 10. Did you keep during the year ending Dec. 31, 1919, charge accounts with butcher? Grocer? Clothier? Were these paid by check?

3

INCOME.

1. Total salary received during the year ending Dec. 31, 1919. \$.....
2. Bonus received during the year ending Dec. 31, 1919.
 (The amount entered after 1 and 2 should be, respectively, the amount of salary and bonus actually received for the year ending Dec. 31, 1919, regardless of whether or not you were employed during that time by the Federal Reserve Bank. Thus, all or a part of the amount entered here may have been received from other concerns than the Federal Reserve Bank with which you are now connected. In case you were married for only a part of the time, give your yearly salary at the rate received during the period married, and yearly bonus at rate accruing during period married.)
3. Total salary received by wife (or husband) during the year ending Dec. 31, 1919.
4. Bonus received by wife (or husband) during the year ending Dec. 31, 1919.
 (The amounts entered in 3 and 4 as the salary and bonus, respectively, of your wife (or husband) should be such salary and bonus received during that period, whether coming from the Federal Reserve Bank or from other concerns. In case you were married for only a part of the time, give the yearly salary and bonus of your wife (or husband) for the year at the rate received during the period married, and yearly bonus at the rate accruing during the period married.)
5. Total earnings of all other members of family group during the year ending Dec. 31, 1919.
 (The family group should include everybody living with the family except boarders and lodgers. The word "earnings" here means pay received for work done. No amounts received by such members of the family group from investments, etc., should be entered. Only the earnings of the members of the family group as distinguished from the boarders and lodgers should be entered. The income of the boarders and lodgers should not be entered anywhere on these sheets.)
6. Total income from lodgers during the year ending Dec. 31, 1919.

7. Total income from table boarders during the year ending Dec. 31, 1919.....
 (Lodgers and boarders within the meaning of these questions are those who rent rooms or board with the family on a purely commercial basis; that is to say, those who receive no aid from the family in the sense of reduced rates for any consideration. In case you have an individual or individuals both boarding and lodging with you and paying a flat sum covering both items, enter the amount which would be charged for table board alone after 7, then deduct this sum from the amount paid for board and lodging and enter the remainder after question 6.)
 Total earnings..... \$.....

4

SECTION II.

This section is to be filled in by those who give their expenditures as individuals rather than family expenditures.
 Before filling in the answers to any of the following questions read Section II entire.

EXPENDITURES.

If for the major portion of the year ending Dec. 31, 1919, you lived with your immediate family or nearest relatives, answer questions 2, 4, 5, 6, 7, and 8.
 If for the major portion of the year ending Dec. 31, 1919, you did not live with your immediate family or nearest relatives, answer questions 1, 2-B, 3, 4, 5, 6, 7, and 8.

1. Total rent paid during the year ending Dec. 31, 1919..... \$.....
 (This question is to be answered only by those who for the major portion of the year ending Dec. 31, 1919, did not live with their immediate family or nearest relatives. In case you lived and boarded in the same place, paying a single sum to cover the two items, determine the amount for which table board could be had at this place by one who rooms elsewhere, then deduct this amount from the amount paid for room and board, and consider the remainder as the amount paid for rent. If for a portion of the year you were living with your immediate family or nearest relatives, the answer to this question should nevertheless cover a full year's rent at the rate paid during the part of the year in which you did not live with your immediately family or nearest relatives.)
2. (a) Amount spent weekly for food gotten outside of home, i. e., lunches, etc..... \$.....
 (b) Amount paid weekly to family.....
 (This question, both (a) and (b), is to be answered only by those who for the major portion of the year ending Dec. 31, 1919, lived with their immediate family or nearest relatives.)
- 2-B. Amount paid for food during the year ending Dec. 31, 1919.....
 (This question is to be answered only by those who for the major portion of the year ending Dec. 31, 1919, did not live with their immediate family or nearest relatives. In case you lived and boarded in the same place, paying a single sum to cover the two items, the answer to this question should be determined in this manner: Add to the amount for which table board could be had at this place by one who rooms elsewhere the amount spent for lunches during the period. If for a portion of the year you did live with your immediate family or nearest relatives, the answer to this question should nevertheless cover a full year, such a figure to be determined by first estimating the amount spent weekly for food during that part of the year in which you were not living with your immediate family or nearest relatives and multiplying that figure by 52.)
3. Amount paid for heat and light during the year ending Dec. 31, 1919.....
 (This question is to be answered only by those who for the major portion of the year ending Dec. 31, 1919, did not live with their immediate family or nearest relatives. If for a portion of the year you were living with your immediate family or nearest relatives, the answer to this question should nevertheless cover a full year at the rate paid during that part of the year in which you did not live with your immediate family or nearest relatives. The cost of heat and light, which is included in rent, is not to be entered here.)
4. Amount paid for clothing during the year ending Dec. 31, 1919.....
5. Miscellaneous expenditures:
 (a) Health (including doctor's fees, medicine, nurses' fees, hospital bills, dentists' fees, eyeglasses, etc.)..... \$.....
 (b) Recreation—
 (1) Board and room while on vacation.....
 (2) Movie tickets, theater tickets, railroad fares, pool, billiard and bowling charges, club dues, etc.....

5. Miscellaneous expenditures—Continued.
 (c) Education (including newspapers, magazines, books, school tuition, school supplies, music lessons, etc.).....
 (d) Other miscellaneous items not mentioned above.....
 Total miscellaneous expenditures.....
 Total expenditures..... \$.....
6. If your expenditures during the year ending Dec. 31, 1919, exceeded your income for that period, how was such a deficit met?.....
 7. Did you keep for all or a part of the year ending Dec. 31, 1919, a record of expenditures?.....
 If so, for what part?.....
 8. Did you, for any part of the year ending Dec. 31, 1919, live with your immediate family or nearest relatives?.....

5

INCOME.

1. What is your sex?.....
 (Write the word.)
 2. Total salary received during the year ending Dec. 31, 1919..... \$.....
 3. Bonus received during the year ending Dec. 31, 1919.....
 (The amounts entered after 2 or 3 should be, respectively, the amount of salary and bonus actually received for the year ending Dec. 31, 1919, regardless of whether you were employed during that time by the Federal Reserve Bank; thus all or a part of the amount entered here may have been received from other concerns than the Federal Reserve Bank with which you are now connected.)
 Total earnings..... \$.....

The Edge Act.

Senate bill 2472, known as the "Edge bill," providing for the incorporation of institutions to engage in international or foreign banking or other financial operations, was approved by the President on December 24. The act follows:

[PUBLIC—No. 106—66TH CONGRESS.]

[S. 2472.]

An Act To amend the Act approved December 23, 1913, known as the Federal Reserve Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act approved December 23, 1913, known as the Federal Reserve Act, as amended, be further amended by adding a new section as follows:

"BANKING CORPORATIONS AUTHORIZED TO DO FOREIGN BANKING BUSINESS.

"SEC. 25 (a). Corporations to be organized for the purpose of engaging in international or foreign banking or other international or foreign financial operations, or in banking or other financial operations in a dependency or insular possession of the United States, either directly or through the agency, ownership, or control of local institutions in foreign countries, or in such dependencies or insular possessions as provided by this section, and to act when required by the Secretary of the Treasury as fiscal agents of the United States, may be formed by any number of natural persons, not less in any case than five.

"Such persons shall enter into articles of association which shall specify in general terms the objects for which the association is formed and may contain any other provisions not inconsistent with law which the association may see fit to adopt for the regulation of its business and the conduct of its affairs.

"Such articles of association shall be signed by all of the persons intending to participate in the organization of the corporation and, thereafter, shall be forwarded to the Federal Reserve Board and shall be filed and preserved in its office. The persons signing the said articles of association shall, under their hands, make an organization certificate which shall specifically state:

"First. The name assumed by such corporation, which shall be subject to the approval of the Federal Reserve Board.

"Second. The place or places where its operations are to be carried on.

"Third. The place in the United States where its home office is to be located.

"Fourth. The amount of its capital stock and the number of shares into which the same shall be divided.

"Fifth. The names and places of business or residence of the persons executing the certificate and the number of shares to which each has subscribed.

"Sixth. The fact that the certificate is made to enable the persons subscribing the same, and all other persons, firms, companies, and corporations, who or which may thereafter subscribe to or purchase shares of the capital stock of such corporation, to avail themselves of the advantages of this section.

"The persons signing the organization certificate shall duly acknowledge the execution thereof before a judge of some court of record or notary public, who shall certify thereto under the seal of such court or notary, and thereafter the certificate shall be forwarded to the Federal Reserve Board to be filed and preserved in its office. Upon duly making and filing articles of association and an organization certificate, and after the Federal Reserve Board has approved the same and issued a permit to begin business, the association shall become and be a body corporate, and as such and in the name designated therein shall have power to adopt and use a corporate seal, which may be changed at the pleasure of its board of directors; to have succession for a period of twenty years unless sooner dissolved by the act of the shareholders owning two-thirds of the stock or by an Act of Congress or unless its franchises become forfeited by some violation of law; to make contracts; to sue and be sued, complain, and defend in any court of law or equity; to elect or appoint directors, all of whom shall be citizens of the United States; and, by its board of directors, to appoint such officers and employees as may be deemed proper, define their authority and duties, require bonds of them, and fix the penalty thereof, dismiss such officers or employees, or any thereof, at pleasure and appoint others to fill their places; to prescribe, by its board of directors, by-laws not inconsistent with law or with the regulations of the Federal Reserve Board regulating the manner in which its stock shall be transferred, its directors elected or appointed, its officers and employees appointed, its property transferred, and the privileges granted to it by law exercised and enjoyed.

"Each corporation so organized shall have power, under such rules and regulations as the Federal Reserve Board may prescribe:

"(a) To purchase, sell, discount, and negotiate, with or without its indorsement or guaranty, notes, drafts, checks, bills of exchange, acceptances, including bankers' acceptances, cable transfers, and other evidences of indebtedness; to purchase and sell, with or without its indorsement or guaranty, securities, including the obligations of the United States or of any State thereof but not including shares of stock in any corporation except as herein provided; to accept bills or drafts drawn upon it subject to such limitations and restrictions as the Federal Reserve Board may impose; to issue letters of credit; to purchase and sell coin, bullion, and exchange; to borrow and to

lend money; to issue debentures, bonds, and promissory notes under such general conditions as to security and such limitations as the Federal Reserve Board may prescribe, but in no event having liabilities outstanding thereon at any one time exceeding ten times its capital stock and surplus; to receive deposits outside of the United States and to receive only such deposits within the United States as may be incidental to or for the purpose of carrying out transactions in foreign countries or dependencies or insular possessions of the United States; and generally to exercise such powers as are incidental to the powers conferred by this Act or as may be usual, in the determination of the Federal Reserve Board, in connection with the transaction of the business of banking or other financial operations in the countries, colonies, dependencies, or possessions in which it shall transact business and not inconsistent with the powers specifically granted herein. Nothing contained in this section shall be construed to prohibit the Federal Reserve Board, under its power to prescribe rules and regulations, from limiting the aggregate amount of liabilities of any or all classes incurred by the corporation and outstanding at any one time. Whenever a corporation organized under this section receives deposits in the United States authorized by this section it shall carry reserves in such amounts as the Federal Reserve Board may prescribe, but in no event less than 10 per centum of its deposits.

"(b) To establish and maintain for the transaction of its business branches or agencies in foreign countries, their dependencies or colonies, and in the dependencies or insular possessions of the United States, at such places as may be approved by the Federal Reserve Board and under such rules and regulations as it may prescribe, including countries or dependencies not specified in the original organization certificate.

"(c) With the consent of the Federal Reserve Board to purchase and hold stock or other certificates of ownership in any other corporation organized under the provisions of this section, or under the laws of any foreign country or a colony or dependency thereof, or under the laws of any State, dependency, or insular possession of the United States but not engaged in the general business of buying or selling goods, wares, merchandise or commodities in the United States, and not transacting any business in the United States except such as in the judgment of the Federal Reserve Board may be incidental to its international or foreign business: *Provided, however,* That, except with the approval of the Federal Reserve Board, no corporation organized hereunder shall invest in any one corporation an amount in excess of 10 per centum of its own capital and surplus, except in a corporation engaged in the business of banking, when 15 per centum of its capital and surplus may be so invested: *Provided further,* That no corporation organized hereunder shall purchase, own, or hold stock or certificates of ownership in any other corporation organized hereunder or under the laws of any State which is in substantial competition therewith, or which holds stock or certificates of ownership in corporations which are in substantial competition with the purchasing corporation.

"Nothing contained herein shall prevent corporations organized hereunder from purchasing and holding stock in any corporation where such purchase shall be necessary to prevent a loss upon a debt previously contracted in good faith; and stock so purchased or acquired in corporations organized under this section shall within six months from such purchase be sold or disposed of at public or private sale unless the time to so dispose of same is extended by the Federal Reserve Board.

"No corporation organized under this section shall carry on any part of its business in the United States except such as, in the judgment of the Federal Reserve Board, shall be incidental to its international or foreign business:

And provided further, That except such as is incidental and preliminary to its organization no such corporation shall exercise any of the powers conferred by this section until it has been duly authorized by the Federal Reserve Board to commence business as a corporation organized under the provisions of this section.

"No corporation organized under this section shall engage in commerce or trade in commodities except as specifically provided in this section, nor shall it either directly or indirectly control or fix or attempt to control or fix the price of any such commodities. The charter of any corporation violating this provision shall be subject to forfeiture in the manner hereinafter provided in this section. It shall be unlawful for any director, officer, agent, or employee of any such corporation to use or to conspire to use the credit, the funds, or the power of the corporation to fix or control the price of any such commodities, and any such person violating this provision shall be liable to a fine of not less than \$1,000 and not exceeding \$5,000 or imprisonment not less than one year and not exceeding five years, or both, in the discretion of the court.

"No corporation shall be organized under the provisions of this section with a capital stock of less than \$2,000,000, one-quarter of which must be paid in before the corporation may be authorized to begin business, and the remainder of the capital stock of such corporation shall be paid in installments of at least 10 per centum on the whole amount to which the corporation shall be limited as frequently as one installment at the end of each succeeding two months from the time of the commencement of its business operations until the whole of the capital stock shall be paid in. The capital stock of any such corporation may be increased at any time, with the approval of the Federal Reserve Board, by a vote of two-thirds of its shareholders or by unanimous consent in writing of the shareholders without a meeting and without a formal vote, but any such increase of capital shall be fully paid in within ninety days after such approval; and may be reduced in like manner, provided that in no event shall it be less than \$2,000,000. No corporation, except as herein provided, shall during the time it shall continue its operations withdraw or permit to be withdrawn, either in the form of dividends or otherwise, any portion of its capital. Any national banking association may invest in the stock of any corporation organized under the provisions of this section, but the aggregate amount of stock held in all corporations engaged in business of the kind described in this section and in section 25 of the Federal Reserve Act as amended shall not exceed 10 per centum of the subscribing bank's capital and surplus.

"A majority of the shares of the capital stock of any such corporation shall at all times be held and owned by citizens of the United States, by corporations the controlling interest in which is owned by citizens of the United States, chartered under the laws of the United States or of a State of the United States, or by firms or companies, the controlling interest in which is owned by citizens of the United States. The provisions of section 8 of the act approved October 15, 1914, entitled 'An act to supplement existing laws against unlawful restraints and monopolies, and for other purposes,' as amended by the acts of May 15, 1916, and September 7, 1916, shall be construed to apply to the directors, other officers, agents, or employees of corporations organized under the provisions of this section: *Provided, however,* That nothing herein contained shall (1) prohibit any director or other officer, agent, or employee of any member bank, who has procured the approval of the Federal Reserve Board from serving at the same time as a director or other officer, agent or employee of any corporation organized under the provisions of this section in whose capital stock such member bank shall

have invested; or (2) prohibit any director or other officer, agent, or employee of any corporation organized under the provisions of this section, who has procured the approval of the Federal Reserve Board, from serving at the same time as a director or other officer, agent or employee of any other corporation in whose capital stock such first-mentioned corporation shall have invested under the provisions of this section.

"No member of the Federal Reserve Board shall be an officer or director of any corporation organized under the provisions of this section, or of any corporation engaged in similar business organized under the laws of any State, nor hold stock in any such corporation, and before entering upon his duties as a member of the Federal Reserve Board he shall certify under oath to the Secretary of the Treasury that he has complied with this requirement.

"Shareholders in any corporation organized under the provisions of this section shall be liable for the amount of their unpaid stock subscriptions. No such corporation shall become a member of any Federal reserve bank.

"Should any corporation organized hereunder violate or fail to comply with any of the provisions of this section, all of its rights, privileges, and franchises derived herefrom may thereby be forfeited. Before any such corporation shall be declared dissolved, or its rights, privileges, and franchises forfeited, any noncompliance with, or violation of such laws shall, however, be determined and adjudged by a court of the United States of competent jurisdiction, in a suit brought for that purpose in the district or territory in which the home office of such corporation is located, which suit shall be brought by the United States at the instance of the Federal Reserve Board or the Attorney General. Upon adjudication of such noncompliance or violation, each director and officer who participated in, or assented to, the illegal act or acts, shall be liable in his personal or individual capacity for all damages which the said corporation shall have sustained in consequence thereof. No dissolution shall take away or impair any remedy against the corporation, its stockholders, or officers for any liability or penalty previously incurred.

"Any such corporation may go into voluntary liquidation and be closed by a vote of its shareholders owning two-thirds of its stock.

"Whenever the Federal Reserve Board shall become satisfied of the insolvency of any such corporation, it may appoint a receiver who shall take possession of all of the property and assets of the corporation and exercise the same rights, privileges, powers, and authority with respect thereto as are now exercised by receivers of national banks appointed by the Comptroller of the Currency of the United States: *Provided, however,* That the assets of the corporation subject to the laws of other countries or jurisdictions shall be dealt with in accordance with the terms of such laws.

"Every corporation organized under the provisions of this section shall hold a meeting of its stockholders annually upon a date fixed in its by-laws, such meeting to be held at its home office in the United States. Every such corporation shall keep at its home office books containing the names of all stockholders thereof, and the names and addresses of the members of its board of directors, together with copies of all reports made by it to the Federal Reserve Board. Every such corporation shall make reports to the Federal Reserve Board at such times and in such form as it may require; and shall be subject to examination once a year and at such other times as may be deemed necessary by the Federal Reserve Board by examiners appointed by the Federal Reserve Board, the cost of such examinations, including the compensation of the examiners, to be fixed by the Federal Reserve Board and to be paid by the corporation examined.

"The directors of any corporation organized under the provisions of this section may, semiannually, declare a dividend of so much of the net profits of the corporation as they shall judge expedient; but each corporation shall, before the declaration of a dividend, carry one-tenth of its net profits of the preceding half year to its surplus fund until the same shall amount to 20 per centum of its capital stock.

"Any corporation organized under the provisions of this section shall be subject to tax by the State within which its home office is located in the same manner and to the same extent as other corporations organized under the laws of that State which are transacting a similar character of business. The shares of stock in such corporation shall also be subject to tax as the personal property of the owners or holders thereof in the same manner and to the same extent as the shares of stock in similar State corporations.

"Any corporation organized under the provisions of this section may at any time within the two years next previous to the date of the expiration of its corporate existence, by a vote of the shareholders owning two-thirds of its stock, apply to the Federal Reserve Board for its approval to extend the period of its corporate existence for a term of not more than twenty years, and upon certified approval of the Federal Reserve Board such corporation shall have its corporate existence for such extended period unless sooner dissolved by the act of the shareholders owning two-thirds of its stock, or by an Act of Congress or unless its franchise becomes forfeited by some violation of law.

"Any bank or banking institution, principally engaged in foreign business, incorporated by special law of any State or of the United States or organized under the general laws of any State or of the United States and having an unimpaired capital sufficient to entitle it to become a corporation under the provisions of this section may, by the vote of the shareholders owning not less than two-thirds of the capital stock of such bank or banking association, with the approval of the Federal Reserve Board, be converted into a Federal corporation of the kind authorized by this section with any name approved by the Federal Reserve Board: *Provided, however,* That said conversion shall not be in contravention of the State law. In such case the articles of association and organization certificate may be executed by a majority of the directors of the bank or banking institution, and the certificate shall declare that the owners of at least two-thirds of the capital stock have authorized the directors to make such certificate and to change or convert the bank or banking institution into a Federal corporation. A majority of the directors, after executing the articles of association and the organization certificate, shall have power to execute all other papers and to do whatever may be required to make its organization perfect and complete as a Federal corporation. The shares of any such corporation may continue to be for the same amount each as they were before the conversion, and the directors may continue to be directors of the corporation until others are elected or appointed in accordance with the provisions of this section. When the Federal Reserve Board has given to such corporation a certificate that the provisions of this section have been complied with, such corporation and all its stockholders, officers, and employees, shall have the same powers and privileges, and shall be subject to the same duties, liabilities, and regulations, in all respects, as shall have been prescribed by this section for corporations originally organized hereunder.

"Every officer, director, clerk, employee, or agent of any corporation organized under this section who embezzles, abstracts, or willfully misapplies any of the moneys, funds, credits, securities, evidences of indebtedness or assets of any character of such corporation; or who, without author-

ity from the directors, issues or puts forth any certificate of deposit, draws any order or bill of exchange, makes any acceptance, assigns any note, bond, debenture, draft, bill of exchange, mortgage, judgment, or decree; or who makes any false entry in any book, report, or statement of such corporation with intent, in either case, to injure or defraud such corporation or any other company, body politic or corporate, or any individual person, or to deceive any officer of such corporation, the Federal Reserve Board, or any agent or examiner appointed to examine the affairs of any such corporation; and every receiver of any such corporation and every clerk or employee of such receiver who shall embezzle, abstract, or willfully misapply or wrongfully convert to his own use any moneys, funds, credits, or assets of any character which may come into his possession or under his control in the execution of his trust or the performance of the duties of his employment; and every such receiver or clerk or employee of such receiver who shall, with intent to injure or defraud any person, body politic, or corporate, or to deceive or mislead the Federal Reserve Board, or any agent or examiner appointed to examine the affairs of such receiver, shall make any false entry in any book, report, or record of any matter connected with the duties of such receiver; and every person who with like intent aids or abets any officer, director, clerk, employee, or agent of any corporation organized under this section, or receiver or clerk or employee of such receiver as aforesaid in any violation of this section, shall upon conviction thereof be imprisoned for not less than two years nor more than ten years, and may also be fined not more than \$5,000, in the discretion of the court.

"Whoever being connected in any capacity with any corporation organized under this section represents in any way that the United States is liable for the payment of any bond or other obligation, or the interest thereon, issued or incurred by any corporation organized hereunder, or that the United States incurs any liability in respect of any act or omission of the corporation, shall be punished by a fine of not more than \$10,000 and by imprisonment for not more than five years."

Approved, December 24, 1919.

Change in District Boundaries.

By act of its legislature, the State of Mississippi has created a new county under the title of "Humphreys," by assigning thereto territory formerly included partially in each of Sharkey, Yazoo, Washington, Sunflower, and Holmes Counties. Inasmuch as the newly-created county embraced territory lying within both the Sixth and the Eighth Federal Reserve Districts, the Federal Reserve Board on December 12 reviewed the territorial boundaries of the two Federal Reserve districts and ordered that all of the territory lying within Humphreys County be assigned to the Eighth Federal Reserve District. The Board further defined the northern boundary of the Sixth Federal Reserve District in the State of Mississippi as the northern boundary lines of the counties of Issaquena, Sharkey, Yazoo, Madison, Leake, Neshoba, and Kemper, after the creation of the new county of Humphreys.

Gold Certificates Legal Tender.

Below is reprinted the act making gold certificates legal tender:

[PUBLIC—NO. 103—66TH CONGRESS.]
[S. 3458.]

An Act To make gold certificates of the United States payable to bearer on demand legal tender.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That gold certificates of the United States payable to bearer on demand shall be and are hereby made legal tender in payment of all debts and dues, public and private.

SEC. 2. That all Acts or parts of Acts which are inconsistent with this Act are hereby repealed.

Approved, December 24, 1919.

Election of Directors.

The following directors of Federal Reserve Banks have been elected for the three-year term beginning January 1, 1920.

District No. 1.—Boston:

Class A.—F. S. Chamberlain, New Britain, Conn.
Class B.—E. R. Morse, Proctor, Vt.
Class C.—Jesse H. Metcalf, Providence, R. I.

District No. 2.—New York:

Class A.—James S. Alexander, New York, N. Y.
Class B.—Charles A. Stone, New York, N. Y.
Class C.—Pierre Jay, New York, N. Y.

District No. 3.—Philadelphia:

Class A.—M. J. Murphy, Clarks Green, Pa.
Class B.—Alba B. Johnson, Philadelphia, Pa.
Class C.—H. B. Thompson, Wilmington, Del.

District No. 4.—Cleveland:

Class A.—Ches Lambertson, Franklin, Pa.
Class B.—R. P. Wright, Erie, Pa.
Class C.—L. B. Williams, Cleveland, Ohio.

District No. 5.—Richmond:

Class A.—J. F. Bruton, Wilson, N. C.
Class B.—J. F. Oyster, Washington, D. C.
Class C.—James A. Moncure, Richmond, Va.

District No. 6.—Atlanta:

Class A.—Oscar Newton, Jackson, Miss.
Class B.—W. H. Hartford, Nashville, Tenn.
Class C.—W. H. Kettig, Birmingham, Ala.

District No. 7.—Chicago:

Class A.—Charles H. McNider, Mason City, Iowa.
Class B.—John W. Blodgett, Grand Rapids, Mich.
Class C.—E. T. Meredith, Des Moines, Iowa.

District No. 8.—St. Louis:

Class A.—Sam A. Ziegler, Albion, Ill.
Class B.—W. B. Plunkett, Little Rock, Ark.
Class C.—C. P. J. Mooney, Memphis, Tenn.

District No. 9.—Minneapolis:

Class A.—Theodore Wold, Minneapolis, Minn.
Class B.—F. R. Bigelow, St. Paul, Minn.
Class C.—C. H. Benedict, Lake Linden, Mich.

District No. 10.—Kansas City:

Class A.—W. J. Bailey, Atchison, Kans.
Class B.—M. L. McClure, Kansas City, Mo.
Class C.—F. W. Fleming, Kansas City, Mo.

District No. 11.—Dallas:

Class A.—B. A. McKinney, Durant, Okla.
Class B.—Marion Sansom, Fort Worth, Tex.
Class C.—H. O. Wooten, Abilene, Tex.

District No. 12.—San Francisco:

Class A.—C. K. McIntosh, San Francisco, Calif.
Class B.—E. H. Cox, San Francisco, Calif.
Class C.—Edward Elliott, Berkeley, Calif.

Directors of Los Angeles Branch.

The following are the directors of the Los Angeles branch of the Federal Reserve Bank of San Francisco which was organized and opened for business January 2, 1920: Mr. I. B. Newton, Mr. H. M. Robinson, Mr. J. F. Sartori, Mr. A. J. Waters, Mr. Ira Clerk.

The first two gentlemen have been appointed by the Federal Reserve Board, while the last three are the appointees of the Federal Reserve Bank of San Francisco.

Mr. I. B. Newton, prominent merchant of southern California, was for many years connected with Harper & Reynolds Co., wholesale and retail hardware dealers of Los Angeles. He recently retired from active business. During the war he served on the Los Angeles subcommittee of the Twelfth District Committee on Capital Issues.

Mr. Henry M. Robinson is a well-known citizen of southern California. War activities brought him to Washington, where he served on the Shipping Board, at the end of the war going to Paris as one of the Economics Committee of Five assisting the American Peace Delegation. He was appointed by the President as a member of the Second Industrial Conference and, more recently, as a member, representing the public, of the commission to investigate wages and working conditions in the coal industry, provided for in the strike settlement agreement.

Mr. J. F. Sartori is president of the Security Trust & Savings Bank and president of the Security National Bank, both of Los Angeles.

Mr. A. J. Waters is president of the Citizens National Bank of Los Angeles and president of the Los Angeles Clearing House Association.

Mr. Ira Clerk is assistant deputy governor of the Federal Reserve Bank of San Francisco, and has been appointed acting manager of the Los Angeles branch.

Acceptances to 100 Per Cent.

Since the issuance of the December BULLETIN the following banks have been authorized by the Federal Reserve Board to accept drafts and bills of exchange up to 100 per cent of their capital and surplus:

First National Bank, New Bedford, Mass.
First National Bank, Hoboken, N. J.
Marine Bank, Norfolk, Va.
Atlanta National Bank, Atlanta, Ga.
First National Bank, Clarksville, Tenn.

Directors of Branch Banks.

Directors of branches of Federal Reserve Banks to serve for the year 1920 have been named as follows:

BALTIMORE BRANCH.

(Federal Reserve Bank of Richmond.)

Manager.—M. M. Prentis.
Directors.—M. M. Prentis, Charles C. Homer, William Ingle, Waldo Newcomer, H. B. Wilcox.

BIRMINGHAM BRANCH.

(Federal Reserve Bank of Atlanta.)

Manager.—A. E. Walker.
Directors.—W. H. Kettig, Oscar Wells, T. O. Smith, W. W. Crawford, John H. Frye.

BUFFALO BRANCH.

(Federal Reserve Bank of New York.)

Manager.—Ray M. Gidney.
Directors.—F. L. Bartlett, R. M. Gidney, Clifford Hubbell, E. C. McDougal, H. T. Ramsdell.

CINCINNATI BRANCH.

(Federal Reserve Bank of Cleveland.)

Manager.—L. W. Manning.
Directors.—Judson Harmon, Charles A. Hinsch, W. S. Rowe, L. W. Manning.

DENVER BRANCH.

(Federal Reserve Bank of Kansas City.)

Manager.—C. A. Burkhardt.
Directors.—C. C. Parks, A. C. Foster, C. A. Burkhardt, John Evans, Alva Adams.

DETROIT BRANCH.

(Federal Reserve Bank of Chicago.)

Manager.—R. B. Locke.
Directors.—John Ballantyne, Emory W. Clark, Julius H. Haas, Chas. H. Hodges, R. B. Locke.

EL PASO BRANCH.

(Federal Reserve Bank of Dallas.)

Manager.—R. R. Gilbert.
Directors.—U. S. Stewart, A. F. Kerr, R. R. Gilbert, W. W. Turney, A. P. Coles.

HOUSTON BRANCH.

(Federal Reserve Bank of Dallas.)

Manager.—Sam R. Lawder.
Directors.—Frank Andrews, J. C. Chidsey, J. J. Davis, Sam R. Lawder, G. M. Bryan.

JACKSONVILLE BRANCH.

(Federal Reserve Bank of Atlanta.)

Manager.—Geo. R. De Saussure.
Directors.—John C. Cooper, E. W. Lane, Bion H. Barnett, Giles L. Wilson, Fulton Saussy.

LITTLE ROCK BRANCH.

(Federal Reserve Bank of St. Louis.)

Manager.—A. F. Bailey.
Directors.—J. E. England, A. F. Bailey, Moorhead Wright, G. W. Rogers, C. A. Pratt.

LOS ANGELES BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—Ira Clerk.
Directors.—Ira Clerk, A. J. Waters, I. B. Newton, H. M. Robinson, J. F. Sartori.

LOUISVILLE BRANCH.

(Federal Reserve Bank of St. Louis.)

Manager.—W. P. Kincheloe.
Directors.—Geo. W. Norton, W. C. Montgomery, W. P. Kincheloe, F. M. Sackett, E. L. Swearingen.

MEMPHIS BRANCH.

(Federal Reserve Bank of St. Louis.)

Manager.—John J. Hefin.
Directors.—R. Brinkley Snowden, John D. McDowell, John J. Hefin, T. K. Riddick, S. E. Ragland.

NASHVILLE BRANCH.

(Federal Reserve Bank of Atlanta.)

Manager.—Bradley Curry.
Directors.—W. H. Hartford, P. M. Davis, J. E. Caldwell, E. A. Lindsey, T. A. Embry.

NEW ORLEANS BRANCH.

(Federal Reserve Bank of Atlanta.)

Manager.—Marcus Walker.
Directors.—John E. Bouden, jr., P. H. Saunders, H. B. Lightcap, A. P. Bush, F. W. Foote, R. S. Hecht, Marcus Walker.

OMAHA BRANCH.

(Federal Reserve Bank of Kansas City.)

Manager.—O. T. Eastman.
Directors.—Luther Drake, Geo. E. Abbott, O. T. Eastman, P. L. Hall, R. O. Marnell.

PITTSBURGH BRANCH.

(Federal Reserve Bank of Cleveland.)

Manager.—Geo. De Camp.
Directors.—Chas. W. Brown, James D. Callery, Harrison Nesbit, R. B. Mellon, George De Camp.

PORTLAND BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—C. L. Lamping.
Directors.—E. Cookingham, J. C. Ainsworth, C. L. Lamping, Nathan Strauss, Joseph N. Teal.

SALT LAKE CITY BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—Chas. H. Stewart.
Directors.—L. H. Farnsworth, Chas. H. Stewart, Chapin A. Day, G. G. Wright, Lafayette Hanchett.

SEATTLE BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—C. J. Shepherd.
Directors.—M. F. Backus, M. A. Arnold, C. J. Shepherd, C. H. Clarke, Chas. E. Peabody.

SPOKANE BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—Chas. A. McLean.
Directors.—D. W. Twohy, R. L. Rutter, Chas. A. McLean, Peter McGregor, G. I. Toevs.

State Banks and Trust Companies.

The following list shows the State banks and trust companies which have been admitted to membership in the Federal Reserve system during the month of December.

One thousand one hundred and eighty-one State institutions are now members of the system, having a total capital of \$421,653,766, total surplus of \$447,553,600, and total resources of \$9,608,710,574.

	Capital.	Surplus.	Total.
<i>District No. 2.</i>			
Bank of Nutley, Nutley, N. J.....	\$100,000	\$35,000	\$1,538,980
Citizens Bank of Cape Vincent, Cape Vincent, N. Y.....	50,000	8,000	170,606
State Bank of Endicott, Endicott, N. Y.	50,000	10,000	60,000
Ridgefield Park Trust Co., Ridgefield Park, N. J.....	100,000	25,000	1,579,494
<i>District No. 4.</i>			
Wheeling Bank & Trust Co., Wheeling, W. Va.....	160,000	520,000	5,487,985
Farmers Bank & Trust Co., Georgetown, Ky.....	105,000	60,000	1,006,468
City Deposit Bank, Pittsburgh, Pa.....	200,000	800,000	11,130,344
Potter Title & Trust Co., Pittsburgh, Pa.	500,000	75,000	4,620,382
<i>District No. 6.</i>			
Bank of Cave Springs, Cave Springs, Ga.	25,000	25,000	313,576
<i>District No. 7.</i>			
Farmers State Bank, Bellevue, Mich...	25,000	5,000	154,196
The First State Bank, Carsonville, Mich.	25,000	5,000	481,228
Lake Odessa State Savings Bank, Lake Odessa, Mich.....	25,000	12,500	392,830
Lapham State Savings Bank, Northville, Mich.....	50,000	15,000	721,595
Farmers State Bank, Vicksburg, Mich..	25,000	5,000	484,557
<i>District No. 8.</i>			
The Bank of Versailles, Versailles, Mo..	75,000	7,000	577,984
Bank of Waynesville, Waynesville, Mo.	25,000	5,000	562,378
<i>District No. 9.</i>			
Commercial Bank, Menominee, Mich...	100,000	20,000	717,494
Southern Montana Bank, Ennis, Mont.	25,000	20,000	398,854
American Bank & Trust Co., Missoula, Mont.....	100,000	11,500	1,887,218
Reed Point State Bank, Reed Point, Mont.....	25,000	5,000	188,368
<i>District No. 10.</i>			
The State Savings & Mercantile Bank, Wichita, Kans.....	200,000	20,000	1,786,824
Kilgore State Bank, Kilgore, Nebr.....	25,000	5,100	299,747
Stockgrowers State Bank, Pawhuska, Okla.....	60,000	6,000	301,305
First State Bank, Locust Grove, Okla..	25,000	8,500	230,098
<i>District No. 11.</i>			
Central Savings Bank & Trust Co., Monroe, La.....	250,000	62,500	2,119,517
<i>District No. 12.</i>			
Alameda Savings Bank, Alameda, Calif.	236,300	125,000	4,228,830
Surprise Valley Bank, Cedarville, Calif.	25,000	25,000	346,183
Standard Bank of Orange County, Fullerton, Calif.....	50,000	.....	67,042
Guaranty Trust & Savings Bank, Los Angeles, Calif.....	1,500,000	1,000,000	28,216,489
Los Angeles Trust & Savings Bank, Los Angeles, Calif.....	1,500,000	1,725,000	36,001,546
Security Trust & Savings Bank, Los Angeles, Calif.....	1,800,000	1,100,000	62,634,439
California Bank of San Mateo County, San Bruno, Calif.....	25,000	.....	27,500

	Capital.	Surplus.	Total.
<i>District No. 12—Continued.</i>			
Bank of Sausalito, Sausalito, Calif.....	\$50,000	\$7,000	\$615,839
Butte County Bank, Arco, Idaho.....	25,000	.....	28,750
The Myton State Bank, Myton, Utah..	25,000	10,000	275,665
Commercial Bank, Spanish Fork, Utah.	50,000	10,000	387,987
Bank of Duchesne, Duchesne, Utah....	25,000	2,500	225,941
The Farmers Bank, Ellensburg, Wash..	50,000	50,000	1,684,726
State Bank of Enumclaw, Enumclaw, Wash.....	30,000	10,000	686,502
Citizens Bank of Renton, Renton, Wash.	25,000	5,000	684,907
The Washington Trust Co., Spokane, Wash.....	200,000	40,000	1,196,810

LIQUIDATIONS.

First Guaranty State Bank & Trust Co., Ennis, Tex. (Consolidated with the Ennis National Bank, Ennis, Tex.)
 First State Bank, Dallas, Tex. (Consolidated with Security National Bank of Dallas, Tex.)
 Rio Grande Valley Bank & Trust Co., El Paso, Tex. (Consolidated with the National Bank of El Paso, Tex.)
 Farmers State Bank, Rice, Tex. (Consolidated with First State Bank of Rice, Tex.)

CONVERSION.

Denver Stock Yards Bank, Denver, Colo., into Stock Yards National Bank.

CHANGE OF NAME.

The Citizens Bank & Trust Co., Tampa, Fla., has changed its name to "Citizens-American Bank & Trust Co."

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 November 29, 1919, to December 26, 1919, inclusive:

	Banks.
New charters issued to.....	30
With capital of.....	\$1,955,000
Increase of capital approved for.....	20
With new capital of.....	1,715,000
Aggregate number of new charters and banks increasing capital.....	50
With aggregate of new capital authorized.....	3,670,000
Number of banks liquidating (other than those consolidating with other national banks under the act of June 3, 1864)....	7
Capital of same banks.....	275,000
Number of banks reducing capital.....	1
Reduction of capital.....	75,000
Total number of banks going into liquidation or reducing capital (other than those consolidating with other national banks under the act of June 3, 1864).....	8
Aggregate capital reduction.....	350,000
Consolidation of national banks under the act of Nov. 7, 1918.....	1
Capital.....	50,000
The foregoing statement shows the aggregate of increased capital for the period of the banks embraced in statement was.....	3,670,000
Against this there was a reduction of capital owing to liquidation (other than for consolidation with other national banks under the act of June 3, 1864) and reductions of capital of.....	350,000
Net increases.....	3,320,000

Branch at Oklahoma City.

The Federal Reserve Board on December 17 authorized and directed the Federal Reserve Bank of Kansas City to establish a branch office at Oklahoma City in order to expedite shipments of currency to and from member banks in the State of Oklahoma and to provide better facilities for intrastate clearing of checks.

The Board has recommended to the Federal Reserve Bank of Kansas City that the by-laws assign as territory for the Oklahoma City branch that portion of the State of Oklahoma which is not included in the eleventh Federal Reserve district. An outline of the powers and functions to be exercised by the branch as recommended by the Board is as follows: The branch bank will receive deposits from member banks but will carry no deposit accounts. All amounts received on deposit will be transmitted daily, by telegraph or otherwise, to the Federal Reserve Bank of Kansas City for credit to the accounts of the depositing banks, and each member bank in the territory assigned to the branch, wherever located, may, at its option, make remittances of currency and checks direct to the Federal Reserve Bank of Kansas City. The branch will carry no Government deposits, but will redeem Treasury certificates, pay Government checks, and will close out balances daily with the head office. The branch will carry no earning assets; applications for loans or discounts from member banks and offers for sale of mail transfers, bankers' acceptances, and bills of exchange eligible for purchase by Federal Reserve Banks will be transmitted to the Federal Reserve Bank of Kansas City for final action. Immediate credit, however, may be given in cases where it becomes necessary for member banks to rediscount in order to meet clearing-house debit balances, unexpected deficiencies in reserves, and any other case where quick arrangements are necessary, all actual rediscounting operations, however, to be made at the head office, interest being charged from the date the notes were received by the branch. In cases where notes are secured by United States obligations, the branch may, by authority of the Federal Reserve Bank of Kansas City, hold the collateral and forward the notes to the parent bank with trust receipts showing the amount and nature of collateral held. Banks in the branch bank territory may deal directly with the parent bank. The principal functions to be exercised by the branch will be the clearing and collection of checks and the handling of shipments of currency to and from member banks in its territory. This plan

is the same as the one which governs the operations of the branch banks at Cincinnati, Pittsburg, Buffalo, and other cities.

Foreign Branches.

A list of branches of national banks and international and foreign banks, doing business under agreement with the Federal Reserve Board, which have opened for business during December, is given below:

- National City Bank of New York: Brussels, Belgium.
- Mercantile Bank of the Americas, New York City: Affiliated Institution: Banco Mercantil Americano de Caracas, Venezuela—Maracaibo, Venezuela.

Commercial Failures Reported.

While commercial failures in the United States do not now disclose the marked numerical reduction from 1918 that featured the returns of earlier months this year, yet the 400 defaults reported to R. G. Dun & Co. during three weeks of December compare favorably with the 498 insolvencies of the same period last year. The statement for November, the latest month for which complete figures are available, shows 551 business reverses, involving \$9,177,321 of liabilities, the number being the largest of any month back to last March, and the indebtedness heavier than in October, September, August, and July of the current year. Yet not in any previous November since monthly statistics were first compiled in 1894 have failures been so few in number as in the present instance, the next best exhibit for the month being the 570 defaults of November, 1918, and last month's liabilities are the smallest for November in a decade and a half.

Failures during November.

Districts.	Number.		Liabilities.	
	1919	1918	1919	1918
First.....	61	50	\$535,609	\$795,956
Second.....	99	101	1,548,918	1,674,791
Third.....	29	36	589,611	987,779
Fourth.....	58	55	4,071,586	770,106
Fifth.....	26	25	132,640	364,083
Sixth.....	34	22	301,065	2,742,183
Seventh.....	74	101	434,048	4,837,148
Eighth.....	28	40	235,393	494,104
Ninth.....	6	15	108,176	81,276
Tenth.....	22	17	204,082	198,531
Eleventh.....	28	32	253,516	293,019
Twelfth.....	86	76	762,677	576,190
Total.....	551	570	9,177,321	13,815,166

Fiduciary Powers Granted to National Banks.

Applications for permission to act under section 11-k of the Federal Reserve Act have been approved by the Federal Reserve Board in addition to those heretofore published, as follows:

DISTRICT No. 1.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Bath National Bank, Bath, Me.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, and receiver:
National City Bank, Lynn, Mass.
- Trustee, executor, administrator, and registrar of stocks and bonds:
Naugatuck National Bank, Naugatuck, Conn.
- Trustee, executor, administrator, and guardian of estates:
National Bank of Commerce, New London, Conn.

DISTRICT No. 2.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Cuba National Bank, Cuba, N. Y.
Citizens National Bank, Hornell, N. Y.
First National Bank, Ithaca, N. Y.
Merchants National Bank, Middletown, N. Y.
Chenango National Bank, Norwich, N. Y.
Wilber National Bank, Oneonta, N. Y.

DISTRICT No. 3.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank, Emporium, Pa.
Moshannon National Bank, Philipsburg, Pa.
- Guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank, Trenton, N. J.

DISTRICT No. 4.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Third National Bank, Pittsburgh, Pa.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, receiver, and committee of estates of lunatics:
American National Bank, Newport, Ky.

DISTRICT No. 5.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Rockbridge National Bank, Lexington, Va.
- Guardian of estates, assignee, receiver, and committee of estates of lunatics:
Merchants National Bank, Richmond, Va.

DISTRICT No. 6.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
American National Bank, Nashville, Tenn.

DISTRICT No. 7.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank, Danville, Ill.
Merchants National Bank, Burlington, Iowa.
First National Bank, Fairfield, Iowa.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:
Citizens National Bank, Brazil, Ind.
- Guardian of estates, assignee, receiver, and committee of estates of lunatics:
Farmers National Bank, Sheridan, Ind.
First National Bank, Winamac, Ind.

DISTRICT No. 8.

- Trustee, executor, administrator, guardian of estates, assignee, and receiver:
Edwardsville National Bank, Edwardsville, Ill.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank, Newport, Ark.
First National Bank, Nashville, Ill.
New Albany National Bank, New Albany, Ind.
Lawrenceburg National Bank, Lawrenceburg, Ky.
First National Bank, Ridgeway, Mo.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and committee of estates of lunatics:
First National Bank, Farmersburg, Ind.
- Registrar of stocks and bonds:
Louisville National Banking Co., Louisville, Ky.

DISTRICT No. 9.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Midland National Bank, Minneapolis, Minn.
First National Bank, Wells, Minn.
First National Bank, Miles City, Mont.
First National Bank, Brookings, S. Dak.
- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:
First National Bank, Lewistown, Mont.
- Registrar of stocks and bonds:
Northwestern National Bank, Minneapolis, Minn.

DISTRICT No. 10.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank, Walsenburg, Colo.
Fidelity National Bank & Trust Co., Kansas City, Mo.
Midwest National Bank & Trust Co., Kansas City, Mo.
- Trustee and registrar of stocks and bonds:
Exchange National Bank, Tulsa, Okla.
- Trustee, executor, administrator, guardian of estates, assignee, and receiver:
City National Bank, Lawton, Okla.

DISTRICT No. 11.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Lockwood National Bank, San Antonio, Tex.

DISTRICT No. 12.

- Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
National Bank & Trust Co., Pasadena, Calif.
First National Bank, Payette, Idaho.
First National Bank, Weiser, Idaho.
First National Bank, Clarkston, Wash.

RULINGS OF THE FEDERAL RESERVE BOARD.

Below are published rulings made by the Federal Reserve Board which are believed to be of interest to Federal Reserve Banks and member banks.

Renewal of drafts drawn by the purchaser of goods and secured at the time of original acceptance by warehouse receipts or bills of lading.

As defined in an opinion published on page 380 of the May, 1917, BULLETIN, a draft drawn by the purchaser of goods is not eligible for acceptance merely because it is secured at the time of acceptance by a bill of lading covering the goods bought. It must be established that the proceeds of the draft are applied to the payment of those goods. No national bank may properly accept the renewal of a draft drawn by the purchaser of goods and secured at the time of original acceptance by a bill of lading or warehouse receipt unless the renewal acceptance complies with the terms of the law and the rulings and regulations of the Board applicable to the original acceptance.

[See opinion of General Counsel on p. — of the Law Department.]

Authority of State member bank to advertise that it is under Government protection or supervision.

The Federal Reserve Board has received numerous inquiries as to the right of a State bank which is a member of the Federal Reserve system to advertise that it is under "Government protection" or under Government supervision.

The terms of section 9 of the Federal Reserve Act expressly provide that "as a condition of membership such banks shall likewise be subject to examinations made by direction of the Federal Reserve Board or of the Federal Reserve Bank by examiners selected or approved by the Federal Reserve Board;" that such banks are "required to make reports of condition and of the payment of dividends to the Federal Reserve Bank of which they become a member" and that such banks shall not only comply with the reserve and capital requirements of the Federal Reserve Act but shall also conform to those provisions of law which are imposed on national banks relating to making loans on or purchasing their own stock, etc. State member banks and their officers, agents, or employees are also subject to the provisions of, and to the penalties prescribed by, section 5209 of the Revised Statutes of the United States.

In the opinion of the Federal Reserve Board, therefore, a State bank which becomes a member of the Federal Reserve system voluntarily subjects itself to the restrictions and limitations of various Federal laws and to Federal supervision and may properly advertise that it is subject to Government or Federal supervision, but, in so far as the phrase "Government protection" implies more than supervision, the Board believes that that phrase is inapt and not justified by the terms of the law.

Acceptance of drafts secured by warehouse receipts covering automobiles or automobile tires.

The Federal Reserve Board has been asked whether a draft secured by a warehouse receipt covering automobiles or automobile tires is eligible for acceptance by a member bank under the terms of section 13 of the Federal Reserve Act. That section provides in part that any member bank may accept drafts drawn upon it which are secured at the time of acceptance by warehouse receipts conveying or securing title covering readily marketable staples.

On page 652 of the July, 1919, FEDERAL RESERVE BULLETIN, the Federal Reserve Board has defined a readily marketable staple as follows:

A readily marketable staple may be defined as an article of commerce, agriculture, or industry of such uses as to make it the subject of constant dealings in ready markets with such frequent quotations of prices as to make (a) the price easily and definitely ascertainable and (b) the staple itself easy to realize upon by sale at any time.

The Board has heretofore ruled that an automobile is not a readily marketable staple within the meaning of this definition and that a draft secured by a warehouse receipt covering an automobile is on that account not eligible for acceptance by a member bank. The Board is also of the opinion that automobile tires can not properly be considered readily marketable staples and that a warehouse receipt covering automobile tires, like a warehouse receipt covering an automobile, can not form the basis of an acceptance under the terms of section 13 of the Federal Reserve Act.

This ruling, however, should not be construed to deny the right of a member bank to accept a draft to which is attached at the time of acceptance a bill of lading covering an automobile or automobile tires in the process of shipment, provided that the draft otherwise complies with the terms of the law and the regulations of the Federal Reserve Board.

LAW DEPARTMENT.

The following opinion of General Counsel has been authorized for publication by the Board since the last edition of the BULLETIN:

Renewal of drafts drawn by the purchaser of goods and secured at the time of original acceptance by warehouse receipts or bills of lading.

As defined in an opinion published on page 380 of the May, 1917, BULLETIN, a draft drawn by the purchaser of goods is not eligible for acceptance merely because it is secured at the time of acceptance by a bill of lading covering the goods bought. It must be established that the proceeds of the draft are applied to the payment of those goods. No national bank may properly accept the renewal of a draft drawn by the purchaser of goods and secured at the time of original acceptance by a bill of lading or warehouse receipt unless the renewal acceptance complies with the terms of the law and the rulings and regulations of the Board applicable to the original acceptance.

An opinion has been asked on the question whether a national bank may accept drafts drawn under the following circumstances: A certain tobacco manufacturer is buying tobacco for the purpose of manufacturing for export. It is contended that the whole process from time of purchase of the tobacco to the time of sale of the finished product requires from 9 to 12 months and that in consequence a large volume of money is needed to carry the drawer both on account of the volume of the business and on account of the present high prices of tobacco. Ninety-day drafts are drawn by the manufacturer upon his bank with the understanding that there shall be two renewals of 90 days each, making the whole credit cover a period of 9 months. It is understood that bills of lading or warehouse receipts for the tobacco are placed with the accepting bank at the time the first acceptance is made, but that they are surrendered by the bank to the manufacturer immediately thereafter upon the issue of trust receipts.

Under the terms of section 13 of the Federal Reserve Act any member bank may accept drafts or bills of exchange drawn upon it having not more than six months sight to run "which grow out of transactions involving the importation or exportation of goods; or which grow out of transactions involving the domestic shipment of goods, provided shipping documents conveying or securing title are attached at the time of acceptance; or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples."

It appears from the facts presented that the drawer of the drafts is manufacturing tobacco for the purpose of export, but there is no indication that that drawer has an existing contract providing for the export of the tobacco covered by the documents attached to the draft presented to the bank for acceptance. The mere fact that the drawer is manufacturing goods which he intends ultimately to export does not alone bring it within the scope of a transaction involving the exportation of goods. The Board has frequently ruled that the person for whom the draft is accepted must have a definite bona fide contract for the shipment of the goods within a specified and reasonable time.

It remains to be considered, therefore, solely whether the drafts in question are eligible for acceptance either because they grow out of transactions involving the domestic shipment of goods or because they are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples.

The facts presented indicate that either bills of lading or warehouse receipts are in the hands of the bank at the time that the original draft is presented for acceptance. For the sake of convenience those drafts secured by bills of lading will be discussed separately from the ones secured by warehouse receipts.

Inasmuch as it appears that the purpose of the transaction is to finance the manufacturer pending the manufacture and ultimate sale of tobacco as a finished product, there is great doubt whether even the original draft drawn by him, secured by a bill of lading covering tobacco shipped to him would be eligible for acceptance. Assuming that the bill of lading covers goods shipped by a *seller* to the manufacturer the transaction falls within the scope of an opinion published on page 380 of the May, 1917, BULLETIN, wherein it was held that a draft drawn by the *purchaser* of goods is not eligible for acceptance merely because it is secured by a bill of lading covering the goods bought. The Board has heretofore held that in any such case the draft would be eligible for acceptance only if it could be established that the proceeds of the draft are to be applied by the drawer—that is, the buyer—to the payment of the goods covered by the bill of lading.

But even if any of the original drafts secured by bills of lading come within these facts and

are eligible for acceptance under the ruling just referred to, nevertheless the Board does not believe that the renewal drafts can be considered eligible for two reasons: First, because the law requires that a bill of lading be attached at the time of acceptance—having been surrendered after the acceptance of the original drafts the bill of lading would not be available as the basis of a renewal draft; and, second, because the spirit of the law does not contemplate that acceptances based upon the domestic shipment of goods shall be used as a cloak to finance the carrying of those goods throughout the process of manufacture into finished products.

There is no objection to a national bank's agreeing in advance to accept drafts aggregating certain amounts for a period of more than six months as defined on page 269 of the September, 1915, BULLETIN, but each individual draft drawn under a credit of that character must comply with the provisions of the law relating to the acceptance of the original draft. If it could be shown that the second or so-called renewal drafts comply with those provisions they would be eligible, but not otherwise. Under the facts presented there is no indication that the renewal drafts would comply with these restrictions and for the reasons outlined above there is some doubt as to whether the original drafts, even though accom-

panied by bills of lading at the time of acceptance, would be eligible for acceptance.

With reference to those drafts secured at the time of acceptance by warehouse receipts, the same general principles are applicable. The Board has ruled on various occasions that no draft is eligible for acceptance merely and solely because secured by a warehouse receipt at the time it is presented for acceptance. It must be shown that the purpose of the draft is to carry the goods covered by the warehouse receipt pending a reasonably immediate shipment, a reasonably immediate sale, or a reasonably immediate distribution into the process of manufacture. In so far as the original drafts which are secured by warehouse receipts comply with this principle they should be considered eligible, but there would be no reason to consider the renewal of those drafts eligible for acceptance if only because of the fact that by hypothesis the warehouse receipts are released immediately after the acceptance of the original drafts. They could not, therefore, be available as security for the so-called renewal drafts. In fact the whole plan appears to be one which was devised for the purpose of carrying the goods while in the process of manufacture after they have been removed from warehouse, a purpose clearly not contemplated by the law as the basis of a renewal draft.

WHOLESALE PRICES.

In continuation of figures shown in the December BULLETIN there are presented below monthly index numbers of wholesale prices for the period January, 1919, to November, 1919, compared with like figures for November of previous years; also for July, 1914, the month immediately preceding the outbreak of the great war. The general index number is that of the United States Bureau of Labor Statistics. In addition there are presented separate numbers for certain particular classes of commodities in accordance with plans announced in previous issues of the BULLETIN.

Quotations for three commodities, namely worsted yarns (2-32s, crossbred), sheetings (brown, 4-4 Pepperell), and women's dress goods (cotton warp, cashmere) have been omitted. On the other hand, quotations for apples (Baldwin, fresh, Chicago), flour (buckwheat, New York), and tickings (Amoskeag, 32-inch), which had been dropped temporarily, have been secured for the months of October and November, and the commodities were again included in the calculation of the index numbers for the latter month. One substitution has been made, namely, of quartered-oak bedroom bureaus in place of plain oak. Index numbers for November are provisional, due to the fact that certain data were not received in time to render them available for use in the calculations.

A considerable increase in wholesale prices is noted for the month of November. The general index number of the Bureau of Labor Statistics stands at the record figure of 230, an increase of 7 points over the figure for the month of October and of 4 points over the previous record of 226, the figure for the month of August. Increase is noted in the index number for each of the three principal groups of commodities and is relatively greatest for the group of consumers' goods, namely, 3.6 per cent, from 228 to 236. Among the commodities included in the group, decrease in price occurred in the case of various meats, in particular lard, hams, lamb, and poultry, lemons, oranges and prunes, corn meal (Philadelphia quotation), milk (Chicago quotation), and cottonseed oil. These decreases, however, by no means offset increases in the prices of various foodstuffs, in particular butter, milk (New

York quotation), cheese and eggs, wheat flour, corn meal (Chicago quotation), rice, potatoes, onions, molasses, oleomargarine, coffee, fresh beef (Chicago quotation), bacon and mess pork, various textiles, such as cotton flannel, drillings, print cloths, sheetings, shirtings, tickings, cotton underwear and women's dress goods, several classes of shoes and tableware and glassware.

The index number for the group of producers' goods has increased 2.4 per cent, from 211 to 216, which latter figure is a new high level. Decrease in price occurred only in the case of several commodities, among which linseed oil and copper wire may be mentioned, while increase in price occurred for an extended list of commodities, in particular silver, steel billets and plates, bar iron and wire nails, brick, putty, turpentine and rosin, cotton and worsted yarns, cottonseed meal, bran, olive oil, and various chemicals.

The index number for the group of raw materials has likewise reached a new high level. The figure for the month of November stands at 226, an increase of 2.9 per cent over the October figure of 220. Diversity, however, is exhibited by the changes in the index numbers for the several subgroups included under the head of raw materials. There has been a conspicuous increase in the index number for the farm-products subgroup, from 254 to the record figure of 275, or 8.4 per cent. Timothy hay alone shows a decrease among the commodities included in this subgroup, while increases in price are noted for wheat, corn, oats, and barley, cotton, alfalfa, flax and tobacco. The index number for the forest-products subgroup likewise shows an increase, from 234 to 239, or 2.3 per cent, due to increase in the price of white and yellow pine. The index number for the mineral-products subgroup shows a decrease of 0.5 per cent, from 184 to 183. Increase in price occurred in the case of bituminous screenings, petroleum, pig iron and lead, while decreases were noted for various classes of bituminous coal and copper. The index number for the animal-products subgroup remains unchanged at 212. Increases in the prices of choice to prime steers, goat-skins, silk and wool were offset by decreases in the prices of good to choice steers, packer hides, hogs, poultry, and lambs.

Index numbers of wholesale prices in the United States for principal classes of commodities.

[Average price for 1913=100.]

Year and month.	Raw materials.					Producers' goods.	Consumers' goods.	All commodities (Bureau of Labor Statistics index number).
	Farm products.	Animal products.	Forest products.	Mineral products.	Total raw materials.			
July, 1914.....	102	106	97	91	99	93	103	100
November, 1914.....	98	103	96	89	97	92	103	98
November, 1915.....	104	101	92	100	100	109	105	103
November, 1916.....	166	127	98	157	139	156	143	144
November, 1917.....	239	187	129	160	183	181	182	183
November, 1918.....	234	210	150	185	199	203	219	206
1919.								
January.....	234	208	147	179	196	196	216	203
February.....	224	210	148	175	194	192	205	197
March.....	237	217	149	173	199	190	210	201
April.....	246	224	145	170	202	186	214	203
May.....	255	225	146	170	205	189	219	207
June.....	250	217	156	173	203	196	217	207
July.....	261	233	166	177	214	202	230	219
August.....	251	235	193	180	218	212	241	226
September.....	240	215	227	184	216	212	226	221
October.....	254	212	234	184	220	211	228	223
November.....	275	212	239	183	226	216	236	230

In order to give a more concrete illustration of actual price movements there are also presented in the following table monthly actual and relative figures for certain commodities of a basic character, covering the period January, 1919, to November, 1919, compared with like

figures for November of previous years; also for July, 1914, the month immediately preceding the outbreak of the great war. The actual average monthly prices shown in the table have been abstracted from the records of the United States Bureau of Labor Statistics.

Average monthly wholesale prices of commodities.

[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.	
	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.
July, 1914.....	\$0.7044	114	\$0.1331	105	\$0.8971	103	\$0.8210	83	\$9.2188	108	\$0.1938	105
November, 1914.....	.6806	111	.0742	58	1.1594	133	1.1486	116	9.4063	111	.2175	118
November, 1915.....	.6495	106	.1155	91	1.0182	117	1.1250	114	8.8450	104	.2625	143
November, 1916.....	.9663	157	.1960	154	1.9300	221	1.8116	184	10.3500	122	.3150	171
November, 1917.....	2.0238	329	.2804	221	2.1700	248	2.1700	220	14.3875	169	.3525	192
November, 1918.....	1.2675	206	.3007	237	2.2206	254	2.2375	227	18.1563	213	.2900	158
January, 1919.....	1.3750	223	.2850	224	2.2225	254	2.3788	241	18.4125	216	.2800	152
February, 1919.....	1.2763	207	.2694	212	2.2350	256	2.3450	235	18.4688	217	.2800	152
March, 1919.....	1.4588	237	.2681	211	2.3275	266	2.3575	239	18.5750	218	.2763	160
April, 1919.....	1.5955	259	.2670	210	2.5890	296	2.6300	267	18.3250	215	.2950	160
May, 1919.....	1.7613	286	.2947	232	2.5925	297	2.7800	282	17.7438	209	.3513	191
June, 1919.....	1.7563	285	.3185	251	2.4575	281	2.3613	239	15.4600	182	.4075	222
July, 1919.....	1.9075	310	.3377	266	2.6800	307	2.2580	229	16.8688	198	.4660	264
August, 1919.....	1.9213	312	.3125	246	2.5250	289	2.2394	227	17.6375	207	.5200	283
September, 1919.....	1.5410	250	.3078	242	2.5350	290	2.2385	227	16.8050	198	.4638	252
October, 1919.....	1.3888	226	.3538	279	2.6250	301	2.2394	227	17.5388	207	.4820	262
November, 1919.....	1.4875	242	.3963	312	2.8250	323	2.2881	232	17.5000	206	.4668	255

Average monthly wholesale prices of commodities—Continued.

[Average price for 1913=100.]

Year and month.	Hogs, light, Chicago.		Wool, Ohio, 1- $\frac{1}{2}$ grades, scoured.		Hemlock, New York.		Yellow pine, flooring, New York.		Coal, anthracite, stove, New York, tidewater.		Coal, bituminous, run of mine, Cincinnati.	
	Average price per 100 pounds.	Relative price.	Average price per pound.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per long ton.	Relative price.	Average price per short ton.	Relative price.
July, 1914.....	\$8.7563	104	\$0.4444	94	\$24.5000	101	\$42.0000	94	\$4.9726	98	\$2.2000	100
November, 1914.....	7.4813	88	.4722	100	24.2500	100	42.0000	94	5.1912	103	2.2000	100
November, 1915.....	6.6450	79	.6143	130	21.2500	88	38.0000	85	5.1766	102	2.2000	100
November, 1916.....	9.4063	111	.6857	146	23.7500	98	40.0000	90	5.6946	113	3.7500	170
November, 1917.....	17.3500	205	1.3571	288	30.5000	126	57.0000	128	6.1469	121	3.7500	170
November, 1918.....	17.7063	209	1.4365	305	.....	.....	63.0000	141	7.8071	154	4.1000	186
January, 1919.....	17.4125	206	1.1200	255	36.0000	149	63.0000	141	7.9500	157	4.1000	186
February, 1919.....	17.4688	207	1.0909	232	36.0000	149	64.0000	144	7.9500	157	4.0000	182
March, 1919.....	18.8550	223	1.2000	255	36.0000	149	64.0000	144	7.9044	156	4.0000	182
April, 1919.....	20.3813	241	1.0909	232	36.0000	149	64.0000	144	7.9045	156	4.0000	182
May, 1919.....	20.7000	245	1.0727	228	36.0000	149	65.0000	146	7.9857	158	4.0000	182
June, 1919.....	20.7800	246	1.1818	251	36.0000	149	68.0000	152	8.1174	160	4.0000	182
July, 1919.....	22.3875	265	1.2364	263	41.0000	169	73.0000	164	8.1881	162	4.0000	182
August, 1919.....	21.6125	256	1.2364	263	.....	.....	78.0000	175	8.3145	164	4.0000	182
September, 1919.....	18.2100	215	1.2182	259	43.0000	177	95.0000	213	8.4020	166	4.5000	205
October, 1919.....	14.7250	174	1.2634	268	44.0000	182	100.0000	224	8.4135	166	4.5000	205
November, 1919.....	14.1438	167	1.2545	266	44.0000	182	100.0000	224	8.4273	167	4.1000	186

Year and month.	Coal, Pocahontas, Norfolk.		Coke, Connellsville.		Copper, ingot, electrolytic, New York.		Lead, pig, desilverized, New York.		Petroleum, crude, Pennsylvania, at wells.		Pig iron, basic.	
	Average price per long ton.	Relative price.	Average price per short ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per long ton.	Relative price.
July, 1914.....	\$3.0000	100	\$1.8750	77	\$0.1340	85	\$0.0390	89	\$1.7500	71	\$13.0000	88
November, 1914.....	3.0000	100	1.5500	64	.1125	72	.0350	80	1.4500	59	12.4800	100
November, 1915.....	2.8500	95	2.3750	97	.1788	114	.0490	111	1.8000	73	15.7500	107
November, 1916.....	6.0000	200	5.7500	236	.2363	182	.0700	159	2.6000	106	25.1000	171
November, 1917.....	4.4120	147	6.0000	246	.2350	149	.0613	139	3.5000	143	33.0000	224
November, 1918.....	4.6320	154	6.0000	246	.2600	165	.0805	183	4.0000	163	33.0000	224
January, 1919.....	4.6320	154	5.7813	237	.2038	130	.0558	127	4.0000	163	30.0000	204
February, 1919.....	4.6320	154	5.2188	214	.1731	110	.0508	115	4.0000	163	30.0000	204
March, 1919.....	4.9000	163	4.4688	183	.1509	96	.0524	119	4.0000	163	28.9375	197
April, 1919.....	4.9000	163	3.9000	160	.1530	97	.0507	115	4.0000	163	25.7500	175
May, 1919.....	4.9000	163	3.8437	158	.1600	102	.0508	115	4.0000	163	25.7500	175
June, 1919.....	5.1400	171	4.0000	164	.1756	112	.0530	120	4.0000	163	25.7500	175
July, 1919.....	5.1400	171	4.0950	168	.2150	137	.0561	128	4.0000	163	25.7500	175
August, 1919.....	.....	.....	4.2188	173	.2281	145	.0579	132	4.0000	163	25.7500	175
September, 1919.....	.....	.....	4.5920	188	.2220	141	.0609	138	4.2500	173	25.7500	175
October, 1919.....	5.1400	171	4.8250	198	.2172	138	.0643	146	4.2500	173	25.7500	175
November, 1919.....	4.6320	154	5.9375	243	.2038	130	.0676	154	4.4375	181	28.3125	193

Year and month.	Cotton yarns, northern cones, 10/1.		Leather, sole, hemlock No. 1.		Steel billets, Bessemer, Pittsburgh.		Steel plates, tank, Pittsburgh.		Steel rails, open hearth, Pittsburgh.		Worsted yarns, 2-32's cross-bred.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
July, 1914.....	\$0.2150	97	\$0.3050	108	\$19.0000	74	\$0.0113	76	\$30.0000	100	\$0.6500	84
November, 1914.....	.1550	70	.....	.....	19.2500	75	.0110	74	30.0000	100	.6300	81
November, 1915.....	.2050	93	.3200	113	26.5000	103	.0150	101	30.0000	100	.8500	119
November, 1916.....	.3325	150	.4900	174	52.0000	202	.0375	253	35.0000	117	1.2000	154
November, 1917.....	.4700	212	.4800	170	47.5000	184	.0325	220	40.0000	133	1.9000	245
November, 1918.....	.5927	268	.4900	174	47.5000	184	.0325	220	57.0000	190	2.1500	277
January, 1919.....	.5000	226	.4900	174	43.5000	169	.0300	203	57.0000	190	1.7500	225
February, 1919.....	.4164	188	.4900	174	43.5000	169	.0300	203	57.0000	190	1.7000	219
March, 1919.....	.4132	187	.4900	174	42.2500	164	.0291	197	54.5000	182	1.5000	193
April, 1919.....	.4300	194	.4900	174	38.5000	149	.0265	179	47.0000	157	1.5000	193
May, 1919.....	.4828	218	.4900	174	38.5000	149	.0265	179	47.0000	157	1.5000	193
June, 1919.....	.5608	253	.5100	181	38.5000	149	.0265	179	47.0000	157	1.6000	206
July, 1919.....	.5912	267	.5300	188	38.5000	149	.0265	179	47.0000	157	1.6000	206
August, 1919.....	.6130	277	.5700	202	38.5000	149	.0265	179	47.0000	157	1.6242	209
September, 1919.....	.5903	267	.5700	202	38.5000	149	.0253	171	47.0000	157	1.7500	225
October, 1919.....	.6111	276	.5700	202	38.5000	149	.0281	176	47.0000	157	1.7500	225
November, 1919.....	.6648	300	.5700	202	41.3750	160	.0265	179	47.0000	157	.....	.....

Average monthly wholesale prices of commodities—Continued.

[Average price for 1913=100.]

Year and month.	Beef, carcass, good native steers, Chicago.		Coffee, Rio No. 7.		Flour, wheat, standard patents, 1914-1917, 1919; standard war, 1918, Minneapolis.		Hams, smoked, Chicago.		Illuminating oil, 150° fire test, New York.		Sugar, granulated, New York.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per pound.	Relative price.	Average price per gallon.	Relative price.	Average price per pound.	Relative price.
July, 1914.....	\$0.1350	104	\$0.0882	79	\$4.5938	100	\$0.1769	106	\$0.1200	97	\$0.0420	98
November, 1914.....	.1438	111	.0638	57	5.8813	128	.1663	100	.1200	97	.0483	115
November, 1915.....	.1375	106	.0750	67	5.5000	120	.1625	98	.1200	97	.0588	133
November, 1916.....	.1375	106	.0950	85	9.8250	214	.2031	122	.1200	97	.0735	172
November, 1917.....	.1900	147	.0794	71	10.2250	223	.2900	174	.1300	105	.0818	192
November, 1918.....	.2450	189	.1069	96	10.2100	223	.3541	213	.1750	142	.0882	207
January, 1919.....	.2450	189	.1547	139	10.2750	224	.3494	210	.1750	142	.0882	207
February, 1919.....	.2450	189	.1544	139	10.5500	230	.3338	201	.1750	142	.0882	207
March, 1919.....	.2450	189	.1602	144	11.2125	245	.3381	203	.1810	147	.0882	207
April, 1919.....	.2450	189	.1695	152	12.2150	266	.3595	216	.1850	150	.0882	207
May, 1919.....	.2439	188	.1931	173	12.4188	271	.3769	227	.1850	150	.0882	207
June, 1919.....	.2025	156	.2114	190	12.0125	262	.3506	229	.2000	162	.0882	207
July, 1919.....	.2075	160	.2303	207	12.1550	265	.3835	230	.2050	166	.0882	207
August, 1919.....	.2350	181	.2150	193	12.0063	262	.3838	231	.2180	177	.0882	207
September, 1919.....	.2275	176	.1663	149	11.6200	254	.3480	209	.2200	178	.0882	207
October, 1919.....	.2290	177	.1650	148	12.0313	262	.2900	174	.2200	178	.0882	207
November, 1919.....	.2350	181	.1697	152	12.9500	283	.2859	172	.2200	178	.0882	207

DISCOUNT AND INTEREST RATES.

In the following tables are presented actual discount and interest rates prevailing in the various cities in which the several Federal Reserve Banks and their branches are located during the periods ending November 15 and December 15, 1919. Quotations are given for prime commercial paper, both customers' and purchased in the open market, interbank loans, bankers' acceptances, and paper secured by prime stock exchange or other current collateral. Separate rates are quoted for paper of longer or shorter maturities in the first-named and last-named classes. In addition, quotations are given for commodity paper secured by warehouse receipts and for cattle loans, as reported from centers in which such paper is current.

Quotations are also given of rates charged on ordinary loans to customers secured by Liberty bonds and certificates of indebtedness, as well as quotations in New York for demand paper secured by prime bankers' acceptances. Quotations for new types of paper will be added from time to time as deemed of interest.

A pronounced upward movement in interest rates is noted in the majority of centers during the period under review, although in districts Nos. 6 and 11 rates show little or no such change. The increase is most pronounced in the case of commercial paper purchased in the open market, and is noted to a lesser extent also in the case of bankers' acceptances. While remarked in the changes in high, low, and customary rates for these classes of paper, in the case of customers' commercial paper it is found largely only in the changes in customary rates, and in the case of interbank loans, collateral loans, commodity paper, and paper secured by Liberty bonds and certificates of indebtedness largely in the change in the low rates. Comparison with rates prevailing for the period ending December 15, 1918, reveals a continuance of the decrease in rates remarked in the December BULLETIN for commercial paper purchased in the open market and for low rates for customers' commercial paper, as well as increase in rates for bankers' acceptances and for paper secured by Liberty bonds and certificates of indebtedness.

*Discount and interest rates prevailing in various centers.
DURING 30-DAY PERIOD ENDING NOV. 15, 1919.*

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

¹ Rates for demand paper secured by prime bankers' acceptances, high 6, low 4 1/2.

DURING 30-DAY PERIOD ENDING DEC. 15, 1919.

District.	City.	Prime commercial paper.				Interbank loans.	Bankers' acceptances, 60 to 90 days.		Collateral loans—stock exchange or other current.			Cattle loans.	Secured by warehouse receipts, etc.	Secured by Liberty bonds and certificates of indebtedness.
		Customers'.		Open market.			Indorsed.	Unindorsed.	Demand.	3 months.	3 to 6 months.			
		30 to 90 days.	4 to 6 months.	30 to 90 days.	4 to 6 months.									
		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. 1...	Boston.....	6 5/8	6 5/8	6 5/8	6 5/8	6 5/8	4 1/4	4 1/4	8 6	6 6 6	6 6 6			6 4 1/2
No. 2...	New York.....	6 5 5/8-5 3/4	6 5 5/8-6	6 5 5/8-5 3/4	6 5 5/8	6 5 5/8-5 1/2	5 4 1/4	4 1/4-5	15 5 6	6 5 6	6 5 6			6 4 1/2 5-5 1/2
	Buffalo.....	6 5 6	6 5 6	6 5 5/8-6	6 5 5/8-6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6			6 5 5 1/2-6
No. 3...	Philadelphia...	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	6 5 5/8	4 1/2	4 1/2	6 5 6	6 5 6	6 5 6			6 5 5
No. 4...	Cleveland.....	6 5 1/2	6 6 6	6 5 1/2	6 5 1/2	6 5 5/8	4 1/2	4 1/2	6 6 6	6 6 6	6 6 6			6 6 6
	Pittsburgh.....	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	5 1/2	4 1/2	6 5 6	6 5 6	6 5 6			6 5 6
	Cincinnati.....	6 5 6	6 5 6	6 5 6	6 6 6	6 5 6	4 1/2	4 1/2	6 6 6	6 6 6	6 6 6			6 5 6
No. 5...	Richmond.....	6 5 6	6 5 6	6 5 6	6 6 6	6 5 5/8	6 5 6	6 5 6	6 5 6	6 5 6	6 6 6			6 4 1/2 5
	Baltimore.....	6 5 6	6 5 6	5 1/2 5 1/2	5 1/2 5 1/2	5 1/2 5 1/2	6 6 6	6 6 6	6 5 6	6 5 6	6 5 6			5 1/2 5 1/2
No. 6...	Atlanta.....	7 5 6	7 5 6	6 5 6	6 5 6	7 5 6	6 6 6	6 5 6	7 5 6	7 5 6	7 5 6			8 4 1/2 6
	Birmingham.....	8 6 6	8 6 6	8 5 6	8 5 6	8 6 6	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6			6 4 1/2 6
	Jacksonville.....	8 6 7	8 6 7	6 5 6	6 5 6	6 6 6	6 6 6	7 6 7	8 6 7	8 7 7	8 7 7			7 6 6
	New Orleans.....	7 5 6-6 1/2	6 1/2 5 6	5 1/2 5 1/2	5 1/2 5 1/2	6 5 1/2-6	6 1/2 4 1/2-6	6 5 6	7 5 6	7 5 6-7	7 5 6			7 4 1/2 5 1/2-6
	Nashville.....	6 5 6	6 6 6	6 5 6	6 5 6	6 5 5/8	6 5 6	6 6 6	6 6 6	6 6 6	6 6 6			6 5 1/2 5 1/2
No. 7...	Chicago.....	6 5 1/2-6	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	5 4 1/2	5 4 1/2	6 5 6	6 5 6	6 5 6			6 5 1/2
	Detroit.....	6 6 6	6 6 6	6 5 6	6 5 6	6 5 6	4 1/2	4 1/2	6 6 6	6 6 6	6 6 6			6 6 6
No. 8...	St. Louis.....	6 5 5 1/2	6 5 6	6 5 5 1/2	6 5 5 1/2	6 5 1/2	5 4 1/2	5 4 1/2	6 5 6	6 5 6	6 5 6			6 4 1/2 5 1/2
	Louisville.....	6 5 6	6 5 6	6 5 6	6 5 6	5 5 5	5 4 1/2	5 4 1/2	6 5 6	6 5 6	6 5 6			6 5 5 1/2
	Memphis.....	6 5 6	6 6 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 6 6			6 4 1/2 6
	Little Rock.....	7 6 6 1/2	7 6 7	6 5 1/2	6 6 6	6 6 6	6 6 6	6 6 6	8 6 6-7	7 6 7	7 6 7			7 6 6 1/2
No. 9...	Minneapolis.....	6 5 6	6 1/2 6	6 5 6	6 6 6	6 5 5 1/2	5 4 1/2	4 1/2	8 6 7	8 6 7	8 6 7			6 5 5 1/2
No. 10...	Kansas City.....	7 5 6	7 5 6	5 1/2 5 1/2	5 1/2 5 1/2	7 5 6	6 5 6	6 5 6	6 5 6	8 5 6	8 5 6			8 4 1/2 6
	Omaha.....	6 5 6	6 5 6	6 5 6	6 5 6	7 6 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6			6 5 6
	Denver.....	8 5 6	8 5 6	6 5 1/2-6	6 5 1/2-6	7 6 6	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6			8 4 1/2 6
No. 11...	Dallas.....	8 6 6	8 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6			8 6 6
	El Paso.....	8 6 8	8 6 8	6 6 6	6 6 6	8 6 8	6 6 6	6 6 6	8 6 8	8 6 8	8 6 8			8 6 8
	Houston.....	7 5 6	7 6 6	8 6 7	8 6 7	6 5 6	7 6 7	7 6 7	8 6 7	8 6 7	8 6 7			8 5 8
No. 12...	San Francisco.....	6 5 5 1/2-6	6 5 6	5 1/2 5 1/2	5 1/2 5 1/2	6 5 5 1/2	5 4 1/2	4 1/2	6 6 6	6 5 6	6 6 6			6 5 6
	Portland.....	7 6 6	7 6 6	5 1/2 5 1/2	5 1/2 5 1/2	6 6 6	4 1/2	4 1/2	7 6 6	7 6 6	6 6 6			7 6 6
	Seattle.....	8 5 7	8 5 7	6 5 1/2	6 5 1/2	6 6 6	6 4 1/2	6	8 5 7	8 6 7	8 6 7			8 5 7
	Spokane.....	8 5 7	8 6 7	6 5 1/2	6 5 1/2	6 6 6	6 6 6	6 6 6	8 5 7	8 6 8	8 6 8			8 4 1/2 6
	Salt Lake City.....	8 6 7	8 6 7	6 6 6	6 6 6	7 6 6			8 6 7	8 6 7	8 6 7			7 5 6

¹ Rates for demand paper secured by prime bankers' acceptances, high, 6, low 4 1/2.

PHYSICAL VOLUME OF TRADE.

In continuation of tables in the December FEDERAL RESERVE BULLETIN there are presented in the following tables certain data relative to the physical volume of trade. The

January, 1919, issue contains a description of the methods employed in the compilation of the data and the construction of the accompanying index numbers. Additional material will be presented from time to time as reliable figures are obtained.

Live-stock movements. [Bureau of Markets.]

	Receipts.					Shipments.				
	Cattle and calves, 60 markets.	Hogs, 60 markets.	Sheep, 60 markets.	Horses and mules, 44 markets.	Total, all kinds.	Cattle and calves, 54 markets.	Hogs, 54 markets.	Sheep, 54 markets.	Horses and mules, 44 markets.	Total, all kinds.
1918.	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>
November.....	2,627,695	4,615,328	2,539,315	135,345	9,917,683	1,235,065	1,227,180	1,459,723	135,791	4,048,759
1919.										
January.....	2,111,704	5,861,685	1,567,613	110,411	9,651,413	761,168	1,546,875	608,016	106,459	3,022,518
February.....	1,440,329	4,404,751	1,131,805	82,526	7,059,411	528,326	1,288,134	418,827	76,512	2,311,799
March.....	1,501,597	3,632,874	1,216,988	68,938	6,420,397	563,893	1,272,654	481,907	64,332	2,382,786
April.....	1,751,943	3,668,210	1,388,732	50,770	6,859,655	698,599	1,107,411	575,136	49,634	2,430,780
May.....	1,822,410	3,862,785	1,425,018	33,977	7,144,190	788,086	1,181,745	614,275	34,658	2,618,764
June.....	1,580,256	3,812,466	1,685,236	40,067	7,118,025	709,637	1,378,824	828,046	36,889	2,948,396
July.....	2,007,266	2,998,836	2,177,942	48,691	7,232,735	706,843	963,662	997,338	43,738	2,711,581
August.....	2,019,139	2,108,609	3,211,331	81,917	7,415,996	894,816	690,821	2,014,267	74,268	3,674,172
September.....	2,377,054	2,401,677	3,810,441	140,848	8,730,020	1,150,183	860,614	2,466,937	135,724	4,612,458
October.....	2,989,090	3,144,831	3,605,198	124,497	9,863,616	1,532,297	1,103,837	2,159,531	125,701	4,921,366
November.....	2,680,042	3,775,589	2,751,421	140,192	9,347,244	1,374,452	1,308,095	1,597,007	134,679	4,414,233

Receipts and shipments of live stock at 15 western markets.

[Chicago, Kansas City, Oklahoma City, Omaha, St. Louis, St. Joseph, St. Paul, Sioux City, Cincinnati, Cleveland, Denver, Fort Worth, Indianapolis, Louisville, Wichita.]

RECEIPTS. [Monthly average, 1911-1913=100.]

	Cattle and calves.		Hogs.		Sheep.		Horses and mules.		Total, all kinds.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
1918.										
November.....	2,053,359	204	3,431,782	156	1,677,537	123	64,482	140	7,227,160	156
1919.										
January.....	1,656,046	164	4,603,335	209	1,079,377	79	56,631	123	7,395,419	160
February.....	1,096,118	116	3,451,894	168	774,881	61	48,786	114	5,371,679	125
March.....	1,094,614	109	2,842,663	129	847,842	62	41,805	91	4,826,924	105
April.....	1,255,379	125	2,823,484	128	970,070	71	31,509	68	5,080,442	110
May.....	1,262,065	125	3,049,223	139	934,613	68	21,345	46	5,267,246	114
June.....	1,122,782	111	3,061,838	139	1,116,003	82	28,418	62	5,329,041	115
July.....	1,527,881	152	2,411,539	110	1,558,767	114	37,866	82	5,536,053	120
August.....	1,541,133	153	1,595,759	73	2,220,229	162	57,206	124	5,414,327	117
September.....	1,871,042	186	1,704,944	78	2,890,831	212	88,283	192	6,555,100	142
October.....	2,317,487	230	2,160,079	98	2,405,511	176	79,240	172	6,962,317	151
November.....	2,046,664	203	2,715,955	124	1,743,189	128	84,018	183	6,589,826	143

SHIPMENTS.

1918.										
November.....	921,831	227	659,432	136	903,283	179	63,589	155	2,548,135	177
1919.										
January.....	589,362	145	988,035	204	357,386	71	56,282	137	1,991,065	139
February.....	404,296	107	881,507	195	240,815	51	47,829	125	1,574,447	118
March.....	423,819	104	925,802	191	289,742	58	41,837	102	1,681,200	117
April.....	506,835	125	748,437	154	319,625	63	29,974	73	1,604,871	112
May.....	530,153	130	787,009	162	290,803	58	18,865	46	1,626,830	113
June.....	503,354	124	1,005,505	208	465,776	93	25,322	62	1,999,957	139
July.....	515,071	127	691,283	143	694,942	138	32,836	80	1,984,132	135
August.....	650,252	160	455,705	94	1,352,252	269	49,996	122	2,508,205	175
September.....	872,043	214	501,856	104	1,849,958	367	53,264	203	3,307,121	230
October.....	1,154,995	284	654,755	135	1,382,419	275	80,823	197	3,272,997	228
November.....	993,148	244	788,107	163	945,992	188	78,889	192	2,506,136	196

Exports of certain meat products.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

Table with 14 columns: Beef, canned; Beef, fresh; Beef, pickled and other cured; Bacon; Hams and shoulders, cured; Lard; Pickled pork. Each column has Pounds and Relative (1911-1913=100) sub-columns. Rows include 1918 November and 1919 months (January to November).

Receipts of grain and flour at 17 interior centers.

[Chicago, Cleveland, Detroit, Duluth, Indianapolis, Kansas City, Little Rock, Louisville, Memphis, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Spokane, Toledo, Wichita; receipts of flour not available for Cleveland, Detroit, Indianapolis, Louisville, Omaha, Spokane, Toledo, and Wichita.]

[Compiled from reports of trade organizations at these cities.]

[Monthly average, 1911-1913=100.]

Table with 14 columns: Wheat; Corn; Oats; Rye; Barley; Total grain; Flour; Total grain and flour. Each column has Bushels and Relative (1911-1913=100) sub-columns. Rows include 1918 November and 1919 months (January to November).

1 Flour reduced to its equivalent in wheat on basis of 4 1/2 bushels to barrel.

Shipments of grain and flour at 14 interior centers.

Chicago, Cleveland, Detroit, Duluth, Kansas City, Little Rock, Louisville, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Toledo, Wichita shipments of flour not available for Cleveland, Detroit, Louisville, Omaha, Toledo, and Wichita.]

Table with 14 columns: Wheat; Corn; Oats; Rye; Barley; Total grain; Flour; Total grain and flour. Each column has Bushels and Relative (1911-1913=100) sub-columns. Rows include 1918 November and 1919 months (January to November).

1 Flour reduced to its equivalent in wheat on basis of 4 1/2 bushels to barrel.

Receipts of grain and flour at nine seaboard centers.

[Boston, New York, Philadelphia, Baltimore, New Orleans, San Francisco, Portland (Oreg.), Seattle, Tacoma; receipts of flour not available for Seattle and Tacoma.]

[Compiled from reports of trade organizations at these cities.]

[Monthly average, 1911-1913=100.]

	Wheat.		Corn.		Oats.		Rye.		Barley.		Total grain.		Flour.		Total grain and flour. ¹		
	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Bushels.	Relative.	
1918.																	
November	9,854,356	78	786,141	22	5,253,154	111	1,332,239	938	653,880	39	17,879,770	79	1,656,205	159	25,332,693	92	
1919.																	
January	9,768,801	78	1,411,366	40	9,275,187	195	566,191	398	1,738,326	105	22,759,871	100	2,026,246	194	31,877,978	116	
February	7,805,811	66	783,263	24	4,713,794	106	2,299,664	1,734	995,454	64	16,597,986	78	1,302,061	134	22,457,261	88	
March	13,789,851	109	636,127	18	3,254,914	69	3,880,424	2,731	2,285,954	138	23,847,270	105	1,644,676	157	31,248,312	114	
April	12,581,074	100	1,089,425	31	4,604,521	97	5,069,529	3,568	1,853,372	112	25,197,921	111	2,549,370	244	36,670,086	134	
May	14,157,852	112	1,588,571	45	5,642,176	119	7,061,048	4,970	3,561,412	215	32,011,059	141	2,535,547	243	43,421,021	158	
June	10,260,075	81	1,051,177	30	10,249,644	216	3,670,055	2,583	6,564,620	396	31,795,571	140	2,340,158	224	42,326,282	154	
July	5,806,227	46	901,842	25	6,959,186	146	1,479,951	1,042	9,723,852	586	24,871,058	110	1,514,135	145	31,684,666	116	
August	26,902,757	214	815,132	23	5,676,984	119	64,510	45	4,993,395	301	38,452,778	169	1,385,762	133	44,688,707	163	
September	28,010,858	222	512,072	14	5,345,464	113	535,701	377	2,171,521	131	36,575,616	161	2,306,213	221	46,953,575	171	
October	14,755,827	117	507,065	14	4,335,038	91	1,718,701	1,210	796,839	48	22,113,470	97	2,521,329	241	33,459,451	122	
November	9,152,534	73	438,147	12	3,998,525	84	1,391,024	98	851,651	51	15,831,881	70	1,552,796	149	22,819,463	83	

¹ Flour reduced to its equivalent in wheat on basis of 4½ bushels to barrel.

Stocks of grain at eight seaboard centers at close of month.

[Boston, New York, Philadelphia, Baltimore, New Orleans, Newport News, Galveston, San Francisco.]

[Compiled from reports of trade organizations at these cities.]

[Bushels.]

	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
1918.						
November	13,904,426	252,225	3,548,473	2,385,828	2,845,916	22,936,868
1919.						
January	15,365,491	645,317	5,495,937	1,972,696	3,047,346	26,526,787
February	12,635,613	417,520	6,110,159	1,735,876	3,930,465	24,829,633
March	12,732,472	346,543	5,650,120	1,920,348	4,403,665	25,053,148
April	7,448,922	464,503	5,335,971	3,434,873	5,420,013	22,104,352
May	7,913,182	448,020	4,047,059	1,690,860	4,263,513	18,362,611
June	4,180,160	214,079	5,475,856	514,252	6,783,798	17,168,145
July	5,557,644	265,196	3,760,063	867,491	5,528,176	15,978,570
August	17,396,269	155,491	2,216,989	578,250	5,414,183	25,761,182
September	21,171,440	172,254	1,901,510	516,142	4,061,830	27,823,176
October	25,322,242	82,240	1,898,271	483,270	3,079,360	30,865,359
November	18,728,730	155,490	2,504,833	1,264,494	2,351,012	25,004,563

NOTE.—Figures for San Francisco include also stocks at Port Costa and Stockton.

Cotton.

[New Orleans Cotton Exchange.]

[Crop years 1911-1913=100.]

	Sight receipts.		Port receipts.		Overland movement.		American spinners' takings.		Stocks at ports and interior towns at close of month.	
	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.
1918-19.										
August	401,860	32	226,242	25	50,482	48	372,394	82	1,306,868	111
September	988,156	79	536,190	58	42,028	40	352,025	77	1,644,690	140
October	1,632,921	130	779,371	85	158,768	151	697,623	154	2,189,007	186
November	1,710,666	136	641,283	70	217,450	207	1,007,892	222	2,745,815	233
December	1,709,734	136	690,782	75	157,038	149	929,491	205	2,697,141	229
January	1,392,468	111	705,493	77	157,270	149	705,353	155	2,637,908	224
February	768,444	61	477,696	52	106,368	101	383,157	84	2,689,379	228
March	601,853	48	460,066	50	75,489	72	202,556	45	2,604,549	221
April	494,106	39	462,363	50	79,700	76	149,566	33	2,484,852	211
May	536,139	43	502,082	55	99,041	94	193,016	42	2,417,631	205
Season, total	11,724,104	78	6,735,898	61	1,528,262	121	5,850,715	107	1,928,959	164
1919-20.										
August	313,301	25	238,271	26	49,630	47	302,238	67	1,412,048	120
September	584,776	47	260,698	28	26,138	25	300,001	66	1,501,805	127
October	1,779,927	142	1,029,331	112	110,202	105	621,784	137	2,340,881	199
November	2,329,079	186	1,178,443	128	205,139	195	1,115,226	245	2,616,383	222

California shipments of citrus and deciduous fruits.

	Oranges.		Lemons.		Total citrus fruits.		Total deciduous fruits.
	Carloads.	Relative.	Carloads.	Relative.	Carloads.	Relative.	Carloads.
November..... 1918.	1,125	46	676	167	1,801	63	1,044
January..... 1919.	3,120	128	531	131	3,651	128	109
February.....	3,180	139	658	174	3,838	144	198
March.....	5,113	209	897	221	6,010	211	67
April.....	5,450	223	1,038	256	6,488	228	36
May.....	5,888	241	1,501	371	7,389	259	276
June.....	3,648	149	1,520	375	5,168	181	896
July.....	2,568	105	1,038	256	3,606	127	4,199
August.....	1,785	73	436	108	2,221	78	6,601
September.....	1,840	75	414	102	2,254	79	6,781
October.....	2,706	111	572	141	3,278	115	5,529
November.....	3,257	133	442	109	3,699	130	2,141

Sugar.

[Data of International Sugar Committee for ports of Boston, New York, Philadelphia, Savannah, New Orleans, Galveston, San Francisco.]

[Tons of 2,240 pounds.]

	Receipts.	Meltings.	Raw stocks at close of month.		Receipts.	Meltings.	Raw stocks at close of month.
November..... 1918.	138,141	172,528	50,989	May..... 1919.	471,205	446,685	201,301
January..... 1919.	243,806	197,145	66,189	June.....	429,617	493,293	151,692
February.....	389,815	337,420	122,757	July.....	394,557	435,247	115,341
March.....	355,710	361,010	106,889	August.....	333,686	356,048	85,660
April.....	450,938	387,548	185,315	September.....	352,345	295,278	55,644
				October.....	279,962	202,525	39,193
				November.....	183,084	203,267	48,376

[Data for ports of New York, Boston, Philadelphia.]

[Weekly Statistical Sugar Trade Journal.]

[Tons of 2,240 pounds. Monthly average 1911-1913=100.]

	Receipts.		Meltings.		Raw stocks at close of month.			Receipts.		Meltings.		Raw stocks at close of month.	
	Tons.	Relative.	Tons.	Relative.	Tons.	Relative.		Tons.	Relative.	Tons.	Relative.	Tons.	Relative.
November..... 1918.	139,343	76	139,000	76	43,112	25	May..... 1919.	325,736	177	307,000	167	126,313	73
January..... 1919.	172,054	93	147,000	80	36,544	21	June.....	271,875	148	313,000	171	85,198	49
February.....	283,172	165	229,000	134	90,716	53	July.....	264,782	144	292,000	159	57,975	34
March.....	232,471	128	261,000	142	62,187	36	August.....	246,419	134	229,000	125	75,394	44
April.....	318,492	173	277,000	151	107,582	62	September.....	262,137	142	292,000	159	45,531	26
							October.....	233,650	127	216,000	118	63,181	37
							November.....	154,674	84	177,000	96	40,855	24

Naval stores.

(Data for Savannah, Jacksonville, and Pensacola.)

[In barrels.]

[Compiled from reports of trade organizations at these cities.]

	Spirits of turpentine.		Rosin.			Spirits of turpentine.		Rosin.	
	Receipts.	Stocks at close of month.	Receipts.	Stocks at close of month.		Receipts.	Stocks at close of month.	Receipts.	Stocks at close of month.
1918.					1919.				
November.....	13,003	124,471	55,508	255,037	May.....	26,358	47,115	50,435	229,404
					June.....	31,904	33,733	63,456	221,612
1919.					July.....	27,747	30,656	77,062	235,707
January.....	7,645	125,541	34,835	285,808	August.....	21,013	24,756	74,402	203,812
February.....	5,583	121,676	22,154	259,974	September.....	21,574	27,021	72,616	190,580
March.....	4,226	97,450	14,338	243,813	October.....	19,367	27,389	67,080	186,231
April.....	8,379	75,546	19,493	225,657	November.....	18,757	28,741	77,125	204,281

Lumber.

[From reports of manufacturers' associations.]

[M feet.]

	Southern pine.			Western pine.			Douglas fir.			Eastern white pine.			North Carolina pine.		
	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.
1918.															
November.....	194	312,126	353,810	38,46	90,078	74,103	121	261,189	240,986	16	23,529	23,828	42	32,596	36,012
1919.															
January.....	200	330,137	325,241	21,49	40,354	68,910	122	225,688	227,129	13	7,565	15,172	40	28,629	23,896
February.....	195	328,069	309,494	24,43	46,037	71,103	122	228,031	238,035	15	6,802	17,081	39	25,806	18,034
March.....	193	378,752	361,125	27,48	71,426	81,328	120	254,660	255,544	11	7,118	17,525	41	32,110	22,672
April.....	203	397,005	397,677	43,49	124,341	97,679	114	264,623	266,308	11	11,431	14,020	38	22,369	21,577
May.....	205	414,899	460,238	45,48	140,037	127,730	111	845,984	888,803	11	24,548	17,136	31	14,375	17,393
June.....	204	360,084	426,193	49	156,561	139,923	115	300,410	327,304	12	29,741	26,525	38	20,733	28,866
July.....	206	401,939	466,786	48	148,533	140,680	114	268,634	301,050	9	27,652	22,470	35	22,326	34,191
August.....	204	417,036	423,002	48	152,748	140,236	118	416,422	397,290	11	20,247	26,839	36	27,177	30,159
September.....	202	416,640	372,727	51	154,102	138,537	126	332,905	261,797	12	16,913	22,574	35	33,146	35,468
October.....	201	421,025	356,124	52	156,823	143,252	124	419,108	339,321	10	12,888	18,189	26	24,055	22,079
November.....	202	391,347	344,717	51	110,525	117,472	126	324,511	241,301	11	2,786	21,596			

RECEIPTS AND SHIPMENTS OF LUMBER AT CHICAGO.

[Chicago Board of Trade.]

[Monthly average, 1911-1913=100.]

	Receipts.		Shipments.			Receipts.		Shipments.	
	M feet.	Relative.	M feet.	Relative.		M feet.	Relative.	M feet.	Relative.
1918.					1919.				
November.....	142,230	67	72,723	95	May.....	162,365	77	66,001	86
					June.....	184,862	87	80,762	105
1919.					July.....	200,148	94	90,134	118
January.....	134,604	63	47,922	62	August.....	170,385	80	87,953	115
February.....	97,511	49	45,585	64	September.....	205,909	97	93,120	121
March.....	124,040	59	46,902	61	October.....	203,638	98	95,674	125
April.....	144,253	68	59,055	77	November.....	176,972	83	70,175	92

Coal and coke.

[Bituminous coal and coke, U. S. Geological Survey; Anthracite coal, Anthracite Bureau of Information.]
[Monthly average, 1911-1913=100.]

	Bituminous coal, estimated monthly production.		Anthracite coal, shipments over 9 roads.		Coke, estimated monthly production.					
	Short tons.	Relative.	Long tons.	Relative.	Beehive.		By-product.		Total.	
					Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
1918.										
November.....	43,895,000	118	5,276,659	94	2,339,197	89	2,523,746	287	4,862,948	139
1919.										
January.....	41,485,000	112	5,934,241	105	2,401,567	92	6,779,482	257	12,772,392	122
February.....	31,566,000	91	3,871,932	74	1,822,894	75				
March.....	33,719,000	91	3,938,908	70	1,768,449	68				
April.....	32,164,000	87	5,224,715	93	1,316,960	50				
May.....	37,547,000	101	5,711,915	101	1,135,840	43				
June.....	37,055,000	100	5,619,591	100	1,170,752	45				
July.....	42,754,000	115	6,052,334	108	1,512,178	58				
August.....	42,880,000	116	6,144,144	109	1,733,971	66				
September.....	47,403,000	128	5,687,401	101	1,790,466	68				
October.....	54,579,000	147	6,560,150	117	1,551,980	59				
November.....	20,303,000	55	5,971,671	106	1,680,775	64				

Movement of crude petroleum in United States.

[U. S. Geological Survey.]
[Barrels of 42 gallons each.]

	Marketed.		Stocks at end of month (barrels).		Marketed.		Stocks at end of month (barrels).
	Barrels.	Relative.			Barrels.	Relative.	
1918.				1919.			
November.....	29,914,000	156	131,295,000	May.....	29,985,000	156	130,321,000
1919.				June.....	31,644,000	165	133,995,000
January.....	30,196,000	158	127,777,000	July.....	33,894,000	177	140,093,000
February.....	26,910,000	150	126,982,000	August.....	33,862,000	177	136,467,000
March.....	30,234,000	158	129,213,000	September.....	33,667,000	176	137,131,000
April.....	29,386,000	153	130,729,000	October.....	33,319,000	174	135,461,000
				November.....	32,114,000	168	131,601,000

Total output of oil refineries in United States.

[Bureau of Mines.]

	Crude oil run (barrels).	Gasoline (gallons).	Kerosene (gallons).	Gas and fuel (gallons).	Lubricating (gallons).
1918.					
October.....	29,237,767	314,251,318	164,928,640	661,780,441	72,244,633
1919.					
January.....	26,967,332	303,710,556	158,501,260	589,630,056	68,304,613
February.....	25,232,876	283,518,194	164,181,787	553,853,753	62,503,072
March.....	27,866,775	311,306,755	170,290,930	574,774,156	67,063,995
April.....	27,775,217	319,807,838	183,453,728	588,806,408	70,954,128
May.....	30,267,227	354,472,377	190,345,026	652,166,738	76,442,252
June.....	28,920,764	338,336,985	178,974,224	632,205,805	64,636,153
July.....	31,202,522	342,491,757	205,727,289	638,185,469	67,037,414
August.....	32,362,057	326,846,167	219,502,888	685,702,461	72,920,214
September.....	32,601,044	339,582,564	199,244,293	683,409,674	70,236,692
October.....	33,682,968	363,456,747	227,104,346	680,158,446	78,658,410

STOCKS AT CLOSE OF MONTH.

	Crude oil run (barrels).	Gasoline (gallons).	Kerosene (gallons).	Gas and fuel (gallons).	Lubricating (gallons).
1918.					
Oct. 31.....	15,438,576	260,328,329	419,409,944	596,116,351	135,196,542
1919.					
Jan. 31.....	15,380,185	383,212,692	332,393,181	646,411,414	158,370,431
Feb. 28.....	14,820,601	458,449,187	303,062,436	692,816,000	152,297,163
Mar. 31.....	15,106,361	546,062,429	294,677,623	749,067,806	165,495,254
Apr. 30.....	15,184,844	593,616,170	276,356,837	807,895,498	170,122,088
May 30.....	16,372,314	594,035,688	244,635,631	788,740,572	173,754,109
June 30.....	16,775,723	593,896,610	252,542,434	811,790,637	175,384,775
July 31.....	15,304,915	514,919,358	279,855,061	817,809,519	173,884,303
Aug. 31.....	15,131,549	434,531,446	296,065,646	830,329,785	170,572,819
Sept. 30.....	13,925,441	371,125,419	311,843,057	862,135,385	158,967,070
Oct. 31.....	14,091,945	354,160,071	329,160,795	828,574,452	152,536,736

Iron and steel.

[Great Lakes iron ore movements, Marine Review; pig-iron production, Iron Age; steel-ingot production, American Iron and Steel Institute.]

[Monthly average, 1911-1913=100; iron ore, monthly average, May-November, 1911-1913=100.]

	Iron ore shipments from the upper Lakes.		Pig iron production.		Steel ingot production.		Unfilled orders U. S. Steel Corporation at close of month.	
	Gross tons.	Relative.	Gross tons.	Relative.	Gross tons.	Relative.	Gross tons.	Relative.
November..... 1918.	4,333,828	72	3,354,074	145	3,060,760	128	8,124,663	154
January..... 1919.			3,302,260	143	3,082,427	130	6,684,268	127
February.....			2,940,168	136	2,688,011	120	6,010,787	114
March.....			3,090,243	133	2,662,265	110	5,430,572	103
April.....	1,412,239		2,478,218	107	2,239,711	93	4,800,685	91
May.....	6,615,341	109	2,108,056	91	1,929,024	80	4,282,310	81
June.....	7,980,839	132	2,114,863	91	2,219,219	92	4,892,855	93
July.....	9,173,429	151	2,428,541	105	2,508,176	104	5,573,661	106
August.....	4,423,133	73	2,743,388	118	2,746,081	114	6,109,103	116
September.....	8,178,483	135	2,487,965	107			6,284,638	119
October.....	6,201,833	102	1,863,558	80			6,472,668	123
November.....	3,152,319	52	2,392,350	103			7,128,330	135

Imports of pig tin.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Pounds.		Relative.		
	Pounds.	Relative.	Pounds.	Relative.	
November..... 1918.	10,734,179	118	May..... 1919.	449,270	5
January..... 1919.			June.....	112,000	1
February.....	8,461,444	93	July.....	113,120	1
March.....	6,271,977	74	August.....	9,572,459	109
April.....	8,284,970	91	September.....	11,087,403	122
	501,903	6	October.....	16,210,512	178
			November.....	15,233,671	168

Raw stocks of hides and skins.

[Bureau of Markets.]

[In pieces.]

	Cattle hides.	Calfskins.	Kipskins.	Goat.	Kid.	Cabretta.	Sheep and lamb.
1919.							
Jan. 31.....	5,922,514	1,294,949	515,523	4,239,381	245,815	601,686	6,844,680
Feb. 28.....	5,791,095	1,266,021	429,704	5,683,585	227,513	843,344	9,033,943
Mar. 31.....	5,108,516	1,219,935	415,882	7,987,277	181,952	559,576	8,264,864
Apr. 30.....	5,256,384	1,845,254	421,474	12,080,410	724,209	1,520,522	9,095,816
May 31.....	4,549,004	2,273,368	386,244	15,121,868	1,246,075	2,044,524	8,039,531
June 30.....	4,696,332	2,285,015	558,033	16,991,195	2,521,016	1,697,754	8,118,702
July 31.....	4,966,081	2,389,368	554,516	15,589,944	1,964,828	2,767,694	6,815,160
Aug. 31.....	5,498,844	2,145,320	585,269	18,263,446	880,276	2,348,769	7,126,885
Sept. 30.....	6,158,289	2,055,084	947,546	13,930,167	823,740	2,655,774	8,661,215
Oct. 31.....	6,436,765	2,007,208	1,097,039	15,302,942	2,239,604	2,574,499	10,122,930
Nov. 30.....	6,719,202	1,806,367	1,086,211	14,243,129	331,389	2,677,336	9,336,964

NOTE.—Figures for Nov. 30 are provisional.

Textiles.

[Silk, Department of Commerce; cotton, Bureau of the Census; wool, Bureau of Markets; idle machinery, January-September, 1918, inclusive, National Association of Wool Manufacturers.]

[Cotton, monthly average crop years 1912-1914=100; silk, monthly average 1911-1913=100.]

	Cotton consumption.		Cotton spindles active during month.	Wool consumption (pounds).	Percentage of idle woolen machinery on first of month to total reported.						Imports of raw silk.	
	Bales.	Relative.			Looms.		Sets of cards.	Combs.	Spinning spindles.		Pounds.	Relative.
					Wider than 50-inch reed space.	Under 50-inch reed space.			Woolen.	Worsted.		
1918.												
November.....	455,611	101	33,115,369	33,282,723	21.1	26.8	11.1	23.8	11.9	30.1	2,336,345	114
1919.												
January.....	556,721	124	33,856,472	32,573,970	40.3	32.6	32.2	30.7	36.5	37.5	1,461,827	71
February.....	433,516	103	33,282,593	23,186,818	52.3	41.5	38.7	39.8	41.1	48.6	1,742,812	91
March.....	433,720	96	32,642,376	29,320,063	58.1	42.4	39.1	47.8	41.8	52.7	1,784,412	87
April.....	475,753	106	33,213,026	39,159,945	48.4	38.9	26.5	34.2	28.4	36.1	2,988,838	146
May.....	487,998	109	33,556,011	45,084,834	36.6	32.9	17.1	22.5	16.8	25.8	4,878,646	238
June.....	474,407	105	33,943,405	48,849,892	29.6	26.6	15.4	12.8	15.2	21.1	3,848,354	188
July.....	509,793	113	34,184,407	54,973,093	22.0	26.0	9.7	7.6	8.9	13.5	5,202,407	254
August.....	502,536	112	34,187,310	48,938,476	22.1	21.9	9.4	6.5	8.9	10.9	3,802,500	186
September.....	491,313	109	34,216,662	52,985,961	19.9	22.8	8.1	5.5	7.9	12.8	6,755,271	330
October.....	555,344	123	34,307,367	60,018,415	16.0	20.7	8.2	5.9	7.7	7.2	3,955,845	193
November.....	490,698	109	34,483,775	52,428,854	14.8	18.2	7.6	5.3	6.7	6.7	4,841,407	237
December.....					13.9	19.1	10.5	5.3	8.4	6.2		

Production of wood pulp and paper.

[Federal Trade Commission.]

[Net tons.]

	Wood pulp.	News print.	Book.	Paper board.	Wrap-ping.	Fine.		Wood pulp.	News print.	Book.	Paper board.	Wrap-ping.	Fine.
1918.							1919.						
November.....	270,849	101,403	65,374	148,671	59,572	30,322	May.....	294,067	105,819	76,821	151,651	56,579	25,010
1919.							June.....	277,142	114,896	71,938	152,957	60,656	27,122
January.....	283,270	116,154	70,443	140,859	50,490	27,675	July.....	260,685	113,929	75,613	169,593	63,769	30,036
February.....	238,228	103,248	62,616	125,208	45,480	24,600	August.....	260,987	113,413	82,737	189,782	64,861	33,122
March.....	278,675	114,746	65,699	136,175	48,069	23,514	September.....	266,915	111,434	81,024	184,897	63,353	31,923
April.....	284,984	116,278	67,628	138,802	48,158	22,470	October.....	308,710	125,216	89,440	202,524	67,110	34,808
							November.....	147,672	116,603	84,085	182,940	68,394	32,468

Sale of revenue stamps for manufacturers of tobacco in the United States (excluding Porto Rico and Philippine Islands).

[Commissioner of Internal Revenue.]

	Cigars.		Cigarettes.	Chewing and smoking tobacco.	Cigars.		Cigarettes.	Chewing and smoking tobacco.	
	Large.	Small.	Small.		Large.	Small.	Small.		
1918.									
August.....	Number. 624,491,239	Number. 60,880,910	Number. 3,442,446,234	Pounds. 40,764,853	1919.				
1919.					April.....	Number. 510,357,494	Number. 73,314,273	Number. 2,650,182,742	Pounds. 29,883,710
January.....	518,706,482	72,453,974	3,079,212,253	29,308,616	May.....	551,659,749	57,611,547	2,767,699,400	33,340,102
February.....	476,329,947	60,138,630	3,126,274,662	27,472,269	June.....	576,976,572	48,855,070	3,140,393,217	31,312,150
March.....	549,098,351	84,493,873	3,845,079,275	29,227,678	July.....	569,965,088	47,290,267	3,585,111,783	33,838,667
					August.....				

Output of locomotives and cars.

[Locomotives, United States Railroad Administration; cars, Railway Car Manufacturers' Association.]

	Locomotives.		Output of cars.				Locomotives.		Output of cars.		
	Domestic shipped.	Foreign completed.	Domestic.	Foreign.	Total.		Domestic shipped.	Foreign completed.	Domestic.	Foreign.	Total.
1918.	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	1919.	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
November.....	224	252	6,743	2,330	9,093	May.....	207	31	4,573	8,533	13,106
1919.						June.....	160	44	1,735	5,307	7,092
January.....	232	84	8,172	3,635	11,807	July.....	121	73	2,777	6,936	9,713
February.....	135	164	6,623	4,657	11,280	August.....	160	173	18,509	5,015	23,524
March.....	258	128	5,978	5,795	11,773	September.....	111	51	19,980	4,302	24,282
April.....	197	36	7,777	7,373	15,150	October.....	39	23	10,445	3,715	14,160
						November.....	9	23	8,967	2,622	11,589

Vessels built in United States, including those for foreign nations, and officially numbered by the Bureau of Navigation.

[Monthly average, 1911-1913=100.]

	Number.	Gross tonnage.	Relative.		Number.	Gross tonnage.	Relative.
1918.				1919.			
November.....	171	357,660	1,480	May.....	250	395,408	1,636
1919.				June.....	272	422,889	1,750
January.....	132	264,346	1,094	July.....	245	397,628	1,645
February.....	135	271,430	1,203	August.....	238	455,338	1,884
March.....	186	298,005	1,233	September.....	202	378,858	1,568
April.....	201	375,605	1,554	October.....	210	357,519	1,479
				November.....	143	347,051	1,486

Tonnage of vessels cleared in the foreign trade.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Net tonnage.				Per cent- age of Ameri- can to total.	Rela- tive.		Net tonnage.				Per cent- age of Ameri- can to total.	Rela- tive.
	American.	Foreign.	Total.	Rela- tive.				American.	Foreign.	Total.	Rela- tive.		
1918.							1919.						
November.....	1,770,935	1,991,725	3,762,660	97	47.1	186	May.....	2,424,837	2,469,194	4,894,031	126	49.5	196
1919.							June.....	2,339,320	2,511,501	4,850,821	125	48.2	191
January.....	1,166,391	1,896,123	3,062,514	78	38.1	151	July.....	2,362,571	2,920,247	5,282,818	136	44.7	177
February.....	1,262,487	1,671,070	2,933,557	75	43.0	170	August.....	2,957,249	2,797,818	5,755,067	148	51.4	203
March.....	1,161,416	1,737,171	2,898,587	75	40.1	158	September.....	2,627,480	2,481,676	5,109,156	131	51.4	203
April.....	1,744,753	2,058,220	3,802,973	98	45.9	181	October.....	2,645,778	2,073,560	4,719,338	121	56.1	222
							November.....	2,251,871	1,910,489	4,162,360	107	54.1	214

Net ton-miles, revenue and nonrevenue.

[United States Railroad Administration.]

	1918.		1919.	
November.....		35,564,236,000	May.....	32,440,708,000
1919.			June.....	31,953,366,000
January.....		30,383,169,000	July.....	34,914,294,000
February.....		25,681,943,000	August.....	36,361,653,000
March.....		28,952,925,000	September.....	38,860,311,000
April.....		28,629,739,000	October.....	40,343,750,000
			November.....	32,539,248,000

Commerce of canals at Sault Ste. Marie.
 [Monthly average, May-November, 1911-1913=100.]
 EASTBOUND.

	Grain, other than wheat.		Wheat.		Flour.		Iron ore.		Total.	
	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Short tons.	Relative.	Short tons.	Relative.
November..... 1918.	7,189,456	81	52,702,409	274	1,054,630	91	4,417,282	74	6,355,760	91
April..... 1919.	4,176,041	.....	16,729,000	.....	.....	.....	1,139,326	.....	1,756,266	.....
May.....	9,370,374	105	29,096,116	151	910,524	78	6,622,227	112	7,895,542	113
June.....	6,694,901	75	6,402,051	33	1,031,630	89	8,004,897	135	8,554,979	122
July.....	7,100,008	80	2,391,840	12	915,420	79	8,912,609	150	9,343,396	133
August.....	5,234,741	59	1,487,218	8	935,700	81	4,727,994	80	5,080,651	72
September.....	2,918,591	33	10,180,991	53	917,420	79	7,978,562	124	8,525,794	122
October.....	4,351,059	49	22,252,196	116	1,544,510	133	6,059,450	102	7,063,120	101
November.....	8,664,903	97	17,388,391	90	1,402,260	121	3,299,532	56	4,201,681	60

WESTBOUND.

	Hard coal.		Soft coal.		Total.		Total freight.	
	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
November..... 1918.	487,569	157	1,517,020	79	2,157,751	87	8,513,511	90
April..... 1919.	142,864	.....	415,824	.....	616,897	.....	2,373,163	.....
May.....	248,263	80	2,239,738	117	2,670,784	107	10,566,326	111
June.....	227,200	73	2,266,984	118	2,664,437	107	11,219,416	118
July.....	344,462	111	2,037,265	106	2,572,756	103	11,016,152	125
August.....	185,387	60	1,189,558	62	1,529,310	61	6,609,961	70
September.....	231,030	75	1,156,841	60	1,677,123	67	10,202,917	107
October.....	498,505	161	1,848,511	98	2,650,799	107	9,713,919	102
November.....	466,135	150	307,241	16	932,615	37	5,134,496	54

BANK TRANSACTIONS DURING NOVEMBER-DECEMBER.

In the table below are shown debits to individual account for five weeks ending December 24, 1919, as reported by 154 of the country's most important clearing houses. In addition, debits to individual account for each of the five weeks are compared with figures for the corresponding weeks of 1918, comparable data being available for 145 centers.

Aggregate debits to individual account for the first three weeks under review showed a continued recession from the very large totals of the preceding four weeks. For the third week of the period the total was 9,491 millions, as compared with 11,134 millions for the week ending November 19. The following week, however, during which the December 15 in-

stallments of income and excess profits taxes fell due, saw an increase of about 1,500 millions in debits to individual account, which for that week again exceeded 11 billions. For the week ending December 24 the total, notwithstanding the Christmas expansion of retail trade, was about 550 millions below the figure for the preceding week.

Debits to individual account reported for the five-week period, November 21 to December 24, 1918, show a movement substantially parallel to that shown for the corresponding weeks of 1919, the low total for the last week of the earlier period being due to the fact that it consisted of only five business days.

Debits to individual account at clearing-house banks during each of the five weeks ending Dec. 24, 1919 and 1918.

[In thousands of dollars.]

Federal Reserve District.	1919 Week ending—					1918 Week ending—				
	Dec. 24.	Dec. 17.	Dec. 10.	Dec. 3.	Nov. 26.	Dec. 24.	Dec. 18.	Dec. 11.	Dec. 4.	Nov. 27.
No. 1—Boston:										
Bangor.....	3,072	3,359	3,299	2,926	3,128	1,739	2,717	2,622	2,836	2,903
Boston.....	363,354	407,148	321,572	348,011	347,560	214,173	231,125	236,821	223,957	247,621
Fall River.....	11,987	12,493	9,916	10,166	14,230	6,594	7,859	6,729	4,675	8,032
Hartford.....	21,053	27,527	21,503	24,058	16,790	16,815	20,301	18,555	21,896	18,078
Holyoke.....	3,917	4,097	3,745	2,945	4,629	2,890	3,374	2,596	2,736	3,070
Lowell.....	8,705	7,826	5,498	5,969	9,679	5,220	5,474	5,034	5,508	6,452
New Bedford.....	9,041	12,359	9,445	9,737	9,130	5,297	5,878	5,425	5,137	7,292
New Haven.....	18,444	19,489	17,558	16,593	16,347	13,970	16,739	15,053	14,036	17,822
Portland.....	.....	8,887	7,736	8,889	6,828	6,620	7,510	8,576	8,587	9,285
Providence.....	46,916	51,310	38,201	36,918	35,259	27,461	31,172	27,987	27,841	30,837
Springfield.....	19,149	18,029	17,006	17,213	17,768	9,233	10,625	9,462	8,744	11,647
Waterbury.....	8,159	9,143	8,949	6,740	7,722	6,653	7,933	8,841	4,090	7,436
Worcester.....	21,286	22,204	16,270	16,153	19,254	14,653	14,987	13,852	11,959	22,478
No. 2—New York:										
Albany.....	23,555	26,105	19,267	19,267	17,207	19,893	18,282	19,416	18,561	20,981
Binghamton.....	4,007	4,385	3,882	3,698	3,615	2,593	3,139	2,539	2,368	2,415
Buffalo.....	67,011	73,321	60,403	66,619	67,359	48,658	55,780	57,179	60,370	71,678
New York.....	5,590,623	5,784,012	5,068,752	5,046,831	5,364,902	3,501,307	3,815,554	3,699,541	3,607,712	4,159,526
Passaic.....	6,622	6,729	5,435	5,189	5,075	3,936	3,893	3,425	3,570	3,721
Rochester.....	31,124	33,796	30,742	31,657	22,970	21,318	25,065	22,661	25,065	22,689
Syracuse.....	17,547	16,634	14,885	15,032	15,452	11,472	15,138	12,306	12,632	12,803
No. 3—Philadelphia:										
Altoona.....	3,106	3,319	3,151	3,155	3,740	2,195	2,137	2,877	1,883	2,975
Chester.....	5,137	5,213	4,878	4,989	4,848	4,219	5,388	5,145	4,175	4,981
Harrisburg.....	3,347	4,871	3,935	3,900	3,610	5,328	6,375	5,950	5,270	6,420
Johnstown.....	3,189	2,999	3,015	3,089	2,786	2,530	3,190	2,514	2,731	2,950
Lancaster.....	5,301	5,479	5,046	4,872	5,316	3,552	4,208	4,148	4,105	4,238
Philadelphia.....	390,100	420,652	332,631	323,616	335,399	263,385	294,752	294,545	266,434	332,868
Reading.....	4,355	5,697	4,410	4,223	4,044	3,193	4,404	3,533	3,476	3,868
Scranton.....	15,356	12,130	14,225	13,295	17,568	11,719	9,565	11,626	9,169	14,099
Trenton.....	12,572	13,446	12,118	11,191	11,101	8,315	9,642	9,715	9,547	9,547
Wilkes-Barre.....	7,124	8,993	7,671	7,510	8,277	5,431	6,401	6,449	6,265	5,902
Williamsport.....	4,065	4,068	3,484	3,366	3,462	3,570	3,210	3,001	2,836	3,081
Wilmington.....	11,809	14,728	9,867	10,730	8,614	11,455	9,317	10,596	9,403	10,054
York.....	4,330	5,003	3,617	3,750	3,804	2,813	3,345	2,896	3,161	3,254
No. 4—Cleveland:										
Akron.....	28,074	27,320	21,817	24,323	27,517	13,326	14,273	14,956	14,132	14,869
Cincinnati.....	61,295	83,193	56,127	56,151	63,094	40,775	58,564	53,326	50,720	63,815
Cleveland.....	175,453	203,261	154,746	177,779	161,696	124,846	133,144	141,275	109,670	147,953
Columbus.....	27,562	32,736	28,659	29,292	26,185	21,966	25,231	22,987	20,486	24,344
Dayton.....	10,948	12,756	11,631	12,842	11,415	11,677	10,937	10,426	12,388	11,183
Erie.....	8,015	8,187	6,534	6,571	6,706	6,058	6,945	6,496	6,327	6,709
Greensburg, Pa.....	4,672	5,893	4,250	5,878	3,387	2,250	2,713	3,098	3,975	2,594
Lexington, Ky.....	10,967	11,876	8,238	4,806	5,447	4,482	4,317	3,467	3,408	3,207
Oil City.....	2,898	3,992	2,837	1,722	2,817	2,018	4,866	2,869	1,558	2,937
Pittsburgh.....	211,964	189,718	173,742	169,551	194,441	164,042	181,756	156,824	155,000	249,496
Springfield, Ohio.....	3,574	3,947	3,663	2,914	3,025	2,550	3,067	2,595	2,552	2,438
Toledo.....	29,893	34,795	28,191	30,534	27,730	24,405	24,785	22,896	20,051	31,496
Wheeling.....	6,275	8,848	8,748	10,445	5,862	4,960	7,697	6,512	7,100	8,501
Youngstown.....	12,948	13,671	11,526	11,022	12,477	15,906	9,970	12,562	9,816	15,842

Debits to individual account at clearing-house banks during each of the five weeks ending Dec. 24, 1919 and 1918—Contd.

[In thousands of dollars.]

Federal Reserve District.	1919 Week ending—					1918 Week ending—				
	Dec. 24.	Dec. 17.	Dec. 10.	Dec. 3.	Nov. 26.	Dec. 24.	Dec. 18.	Dec. 11.	Dec. 4.	Nov. 27.
No. 11—Dallas:										
Albuquerque.....	1,656	1,936	1,959	1,741	1,952	1,229	1,590	1,501	1,578	1,459
Austin.....	4,637	3,280	4,531	4,253	5,158	2,400	3,980	3,555	2,814	3,625
Beaumont.....	5,350	4,894	5,024	12,359	4,738	4,187	3,581	4,307	3,370	3,935
Dallas.....	51,024	52,192	49,191	46,655	54,297	29,796	30,274	29,569	26,367	33,567
El Paso.....	9,731	9,804	9,250	9,303	9,428	4,539	5,782	5,570	4,829	4,936
Fort Worth.....	26,355	31,018	26,443	26,922	31,467	14,814	15,847	12,167	14,169	12,377
Galveston.....	10,595	9,836	11,457	4,030	12,269	7,726	10,040	8,913	7,785	7,667
Houston.....	43,536	43,749	39,944	41,492	41,944	23,100	27,331	26,882	25,534	28,599
San Antonio.....	8,826	9,121	9,042	8,427	9,275					
Shreveport.....	7,952	7,275	8,540	8,040	9,979	5,335	5,594	5,830	5,157	4,506
Texarkana.....	2,399	1,608	1,517	1,561	1,746	2,049	1,527	1,263	976	1,419
Tucson.....	1,346	1,560	1,751	1,615	1,569	1,258	1,530	1,711	1,863	1,503
Waco.....	4,376	4,395	4,506	5,787	4,312	2,800	3,936	4,010	3,399	3,277
No. 12—San Francisco:										
Berkeley.....	2,538	3,001	2,983	2,946	2,247					
Boise.....	3,471	3,713	3,783	3,474	3,452	1,837	2,901	2,546	2,754	2,574
Fresno.....	9,977	11,440	9,431	13,175	11,545	5,829	7,164	6,966	6,269	6,523
Long Beach.....	4,734	5,016	5,043	4,541	4,311	1,996	2,718	2,082	2,805	2,421
Los Angeles.....	95,241	103,592	88,750	91,606	95,478	52,831	56,715	54,191	52,347	61,624
Oakland.....	19,455	22,654	21,347	19,792	16,954	13,827	12,368	14,385	10,980	12,063
Ogden.....	5,657	6,759	4,692	4,609	6,206	5,436	5,720	4,547	4,451	2,673
Pasadena.....	4,669	4,900	4,950	5,385	4,574	1,866	2,135	2,025	2,093	2,226
Portland.....	48,241	51,409	39,139	39,343	49,042	37,726	42,542	40,653	44,173	60,466
Reno.....	2,765	3,014	2,554	3,032	3,120	1,943	1,682	1,846	1,787	1,663
Sacramento.....	13,717	20,199	20,592	23,497	17,208	10,764	14,276	15,255	11,775	12,066
Salt Lake City.....	22,031	27,849	22,208	20,031	22,036	18,389	22,193	15,832	19,141	19,704
San Diego.....	7,062	7,346	7,475	6,340	4,571	4,061	5,063	4,709	4,787	4,970
San Francisco.....	219,373	242,184	202,088	193,668	215,540	150,138	161,586	152,794	140,373	173,151
San Jose.....	6,624	7,110	5,743	6,126	6,633					
Seattle.....	49,828	60,117	48,109	53,117	56,911	44,584	49,988	48,234	47,671	55,686
Spokane.....	13,273	13,610	13,107	15,681	11,818	8,812	8,961	9,259	8,874	9,396
Stockton.....	5,546	7,150	7,609	7,013	5,092	2,968	5,133	4,307	4,275	4,930
Tacoma.....	10,030	11,865	10,454	9,361	10,123	9,474	11,341	10,667	11,421	11,420
Yakima.....	3,811	3,237	3,888	3,085	4,062	2,041	2,034	2,033	2,363	2,404

Recapitulation showing figures for clearing-house centers reporting each of the five weeks ending Dec. 24, 1919.

[In thousands of dollars.]

Federal Reserve district.	Number of centers included.	1919 Week ending—				
		Dec. 24.	Dec. 17.	Dec. 10.	Dec. 3.	Nov. 26.
No. 1—Boston.....	12	535,083	594,984	472,962	497,389	501,496
No. 2—New York.....	7	5,740,489	5,944,982	5,203,366	5,188,330	5,498,580
No. 3—Philadelphia.....	13	439,791	506,598	408,048	397,686	412,569
No. 4—Cleveland.....	14	594,538	640,193	520,709	543,830	551,799
No. 5—Richmond.....	6	185,856	204,686	185,052	178,463	184,089
No. 6—Atlanta.....	15	277,098	293,870	273,537	272,349	265,108
No. 7—Chicago.....	23	1,193,903	1,228,465	1,019,529	1,045,420	1,164,155
No. 8—St. Louis.....	5	253,535	274,129	232,753	242,906	240,438
No. 9—Minneapolis.....	10	178,664	179,856	173,333	169,329	176,739
No. 10—Kansas City.....	16	330,090	336,766	304,901	305,277	338,504
No. 11—Dallas.....	13	177,783	190,668	173,205	172,185	188,134
No. 12—San Francisco.....	20	548,043	616,165	523,945	525,822	550,923
Grand total.....	154	10,454,873	11,001,362	9,491,340	9,538,986	10,072,525

Recapitulation showing figures for clearing-house centers reporting each of the five weeks ending Dec. 24, 1919, and 1918.

[In thousands of dollars.]

Federal Reserve district.	Number of centers included.	1919 Week ending—					1918 Week ending—				
		Dec. 24.	Dec. 17.	Dec. 10.	Dec. 3.	Nov. 26.	Dec. 24.	Dec. 18.	Dec. 11.	Dec. 4.	Nov. 27.
No. 1—Boston.....	12	535,083	594,984	472,962	497,389	501,496	324,698	358,184	352,677	333,415	383,663
No. 2—New York.....	7	5,740,489	5,944,982	5,203,366	5,188,330	5,496,580	3,609,177	3,936,651	3,817,620	3,730,278	4,293,708
No. 3—Philadelphia.....	13	439,791	508,598	408,048	397,686	412,569	327,705	361,934	362,995	328,455	404,237
No. 4—Cleveland.....	14	594,538	640,193	520,709	543,830	551,799	439,261	488,265	460,289	417,183	585,384
No. 5—Richmond.....	6	185,856	204,686	185,052	178,463	184,080	133,825	148,108	143,736	136,528	133,773
No. 6—Atlanta.....	15	277,098	293,870	273,537	272,349	265,108	185,639	203,415	203,602	204,342	188,158
No. 7—Chicago.....	20	1,169,904	1,204,053	992,817	1,021,081	1,141,207	795,761	896,581	854,060	832,944	935,669
No. 8—St. Louis.....	5	253,535	274,129	232,753	242,906	240,438	202,017	246,926	226,585	203,568	243,025
No. 9—Minneapolis.....	9	177,337	178,426	172,017	168,201	175,491	173,350	196,707	196,727	181,854	192,107
No. 10—Kansas City.....	14	327,476	333,444	302,359	303,410	335,525	270,623	272,300	260,281	247,058	277,620
No. 11—Dallas.....	12	168,957	171,547	164,163	163,758	178,859	99,233	111,012	105,278	97,841	106,870
No. 12—San Francisco.....	18	538,881	606,054	515,219	516,750	542,043	374,522	414,560	392,331	377,839	445,960
Grand total.....	145	10,408,945	10,952,966	9,443,002	9,494,153	10,025,195	6,935,811	7,634,643	7,376,181	7,091,305	8,190,174

DISCOUNT AND OPEN MARKET OPERATIONS OF THE FEDERAL RESERVE BANKS.

Discount operations during the month of November totaled \$7,414,498,375, as compared with the record figure of \$8,060,317,969 shown for October. The totals are exclusive of bills discounted for other Federal Reserve Banks, which aggregated 58 millions in November, as against 126.5 millions the month before. Discount operations were smaller for November than for October at all the Federal Reserve Banks, except the Boston and Chicago banks. The decline was nominal in New York, while the decrease at the Philadelphia bank, because of the relatively large amount of 60 and 90 day paper discounted, constituted nearly three-fourths of the total for the system.

War paper constituted, the same as in October, about 91 per cent of the total paper discounted during the month. The amount of customers' paper, secured by Government obligations, discounted by the Federal Reserve Banks, however, was about twice as large in November as in October (328 millions, as against 164 millions), while member banks' collateral notes so secured amounted to \$6,433,967,114, as compared with \$7,184,708,069 the month before. This shift from collateral notes to rediscounts is due in large part to changes in discount rates which in most of the banks no longer favor 15-day paper. Discounts of collateral notes secured by eligible commercial or agricultural paper also show a decline, the total for November being but \$15,694,638, as against \$45,663,016 for October. Discounts of trade acceptances for the month of November aggregated \$21,923,920, as against \$16,110,069 in October, and included \$2,704,863 (as against \$2,377,501) of acceptances in the foreign trade, all of which were reported by the New York bank. Bankers' acceptances discounted during the month totaled \$2,052,898, as compared with \$1,271,426 for October, and all other discounts, i. e., commercial and agricultural paper rediscounted by member banks, aggregated \$613,002,521, the corresponding figures being \$648,265,547 for October and \$447,060,323 for September.

About 95 per cent of the total discounts for the month was 15-day paper, i. e., bills maturing within 15 days from date of discount or rediscount with the Federal Reserve Bank. Six-month bills, consisting of agricultural and live-stock paper, totaled \$11,838,214, compared with \$9,645,742 for October, and \$5,443,693 for September. The average maturity of all the paper discounted during the

month works out at 11.36 days, as against 9.54 days for October for all the banks combined, while for the Philadelphia bank it works out at 14.32 days for November, as against 6.93 days for October. About 78 per cent of the paper discounted in November took the $4\frac{1}{2}$ per cent rate, about 9 per cent the 4 per cent rate, and about 8 per cent the $4\frac{3}{4}$ per cent rate. During October about 86 per cent of the paper was discounted at the 4 per cent rate. The average rate of discount charged during November works out at 4.53 per cent, as against 4.19 per cent in October.

On the last Friday in November the Federal Reserve Banks held a total of \$2,214,139,000 of discounted bills, compared with \$2,128,547,000 on the last Friday in October, 1919, and \$1,815,195,000 on the last Friday in November of the year before. Of the total discounts on hand at the end of November about 78 per cent was the share of war paper, compared with about 84 per cent at the end of September and about 79 per cent at the end of October, 1918.

Discounted trade acceptances on hand at the end of November totaled \$27,694,000, a larger figure than the corresponding amount for the end of October (\$16,261,000) or for the end of November of last year (\$23,126,000). Holdings of agricultural paper totaled \$27,023,000, as against \$28,447,000 at the end of October, and \$27,492,000 on the corresponding date of the previous year, while holdings of live-stock paper were \$25,527,000, compared with \$27,028,000 the month before, and \$34,052,000 about the end of November of last year. Of the total agricultural paper on hand about 73 per cent was held in the Chicago and Kansas City banks, while about 90 per cent of the live-stock paper on hand represented the holdings of the Kansas City, Minneapolis, and Dallas banks.

During the month the membership in the Federal Reserve System shows a net increase of 32, the number of members at the close of November being 9,009, as compared with 8,977 at the end of October. Member banks accommodated by discount of paper in November numbered 3,649, as against 3,839 in October. In the following exhibit is shown the number of member banks in each Federal Reserve district at the end of November and of October, together with the number in each district accommodated during each of the two months.

Federal Reserve Bank.	Number of member banks in district.		Number of member banks accommodated.	
	Nov. 30.	Oct. 31.	November.	October.
Boston.....	430	430	265	244
New York.....	748	744	405	396
Philadelphia.....	676	675	375	389
Cleveland.....	841	841	282	245
Richmond.....	583	575	252	297
Atlanta.....	427	429	185	247
Chicago.....	1,366	1,366	613	614
St. Louis.....	533	532	211	223
Minneapolis.....	915	911	280	224
Kansas City.....	1,032	1,026	354	391
Dallas.....	758	753	235	359
San Francisco.....	700	695	192	210
Total.....	9,009	8,977	3,649	3,839

Bills purchased in the open market during November, largely by the New York bank both for its own account and for account of other Federal Reserve Banks, totaled \$340,695,505, compared with \$335,261,712 purchased in October, and \$205,048,335 in September. Of the total bills purchased, \$335,044,925 were bankers' acceptances, about three-fourths of which were based upon foreign trade transactions. Purchases of trade acceptances amounting to \$3,686,930 were reported by the Boston, New York, Cleveland, and San Francisco banks, nearly four-fifths of this amount

being based on foreign trade transactions. The average maturity of all bills purchased during the month was 55.55 days, compared with 48.36 days for October, while the average rate of discount charged works out at 4.47 per cent, as against 4.26 per cent for the preceding month.

On November 30 the Federal Reserve Banks reported a total of \$501,910,000 of purchased bills on hand, compared with \$394,355,000 on October 31, 1919, and \$379,524,000 on November 30, 1918. The half-billion mark in acceptance holdings was passed for the first time in November of this year. Of the most recent total, all but \$6,580,000 were bankers' acceptances, of which \$347,852,000 were bills accepted by member banks, \$55,876,000 by private banks, \$55,244,000 by nonmember State banks and trust companies, and \$36,358,000 by foreign banks and their agencies. Of the \$6,580,000 of purchased trade acceptances held at the end of the month, \$1,646,000 were domestic trade acceptances, and \$4,934,000 were foreign trade acceptances. Of the latter figure, \$2,633,000 were reported by the New York bank and \$850,000 by the San Francisco bank, these amounts representing largely acceptances drawn by exporters in the Far East.

Total investment operations of each Federal Reserve Bank during the months of November, 1919 and 1918.

Federal Reserve Bank.	Bills discounted for member banks.	Bills bought in open market.	Municipal warrants.	United States bonds.	United States Victory notes.	United States certificates of indebtedness.	Total United States securities.	Total investment operations.	
								Nov., 1919.	Nov., 1918.
Boston.....	\$426,922,264	\$63,977,798				\$1,516,000	\$1,516,000	\$492,416,062	\$373,350,564
New York.....	4,466,207,075	152,609,063				35,948,000	35,948,000	4,654,764,138	3,248,858,733
Philadelphia.....	683,636,792	2,832,489				3,343,000	3,343,000	689,812,281	388,823,184
Cleveland.....	292,186,678	19,053,191				3,163,000	3,163,000	314,402,869	226,108,683
Richmond.....	264,080,662	3,805,212					200,300	268,086,174	287,101,641
Atlanta.....	174,033,036	4,365,746			\$300	200,000	1,101,000	179,499,782	167,886,039
Chicago.....	448,183,255	33,701,105				2,845,000	2,845,000	484,729,360	383,127,310
St. Louis.....	180,110,764	5,325,336				1,275,000	1,275,000	186,711,100	158,469,909
Minneapolis.....	88,805,613	10,649,919				176,000	176,000	99,631,532	40,879,414
Kansas City.....	145,934,891					2,000,000	2,000,000	147,934,891	110,124,747
Dallas.....	70,671,433	1,912,400				4,510,000	4,510,000	77,093,833	77,998,599
San Francisco.....	173,725,912	42,463,246		\$50		810,000	810,050	216,999,208	126,980,039
Total, November, 1919.....	7,414,498,375	340,695,505		50	300	56,887,000	56,887,350	7,812,081,230	.....
Total, November, 1918.....	5,154,597,322	195,697,512	\$11,383	93,550		219,309,000	219,402,550	.....	5,569,708,767
Total 11 months ending Nov. 30, 1919.....	71,883,099,002	2,424,719,574	1,000	1,328,125	374,250	3,973,827,500	3,975,529,875	78,283,349,451	.....
Total 11 months ending Nov. 30, 1918.....	33,537,850,316	1,653,805,357	1,709,602	73,959,463		4,028,472,160	4,102,431,623	.....	39,295,796,898

¹ 4½ per cent Liberty bond.

Average amount of earning assets held by each Federal Reserve Bank during November, 1919, earnings from each class of earning assets, and annual rate of earnings on basis of November, 1919, returns.

Federal Reserve Bank.	Average daily holdings of the several classes of earning assets.				
	Discounted bills.	Purchased bills.	United States securities.	Municipal warrants.	Total.
Boston.....	\$147,255,981	\$49,517,395	\$22,538,950	.....	\$219,312,326
New York.....	829,776,757	74,248,602	76,713,767	.....	980,739,126
Philadelphia.....	205,069,357	1,394,054	31,663,083	.....	238,126,494
Cleveland.....	150,177,449	68,051,442	26,135,750	.....	244,364,641
Richmond.....	98,848,446	7,891,569	13,034,260	.....	119,774,275
Atlanta.....	108,329,831	12,333,698	15,782,216	.....	134,445,745
Chicago.....	242,983,736	96,318,470	44,583,330	.....	383,885,536
St. Louis.....	70,056,523	25,266,197	18,424,167	.....	113,746,887
Minneapolis.....	55,021,800	21,088,700	8,521,033	.....	84,631,533
Kansas City.....	100,757,092	1,774,437	22,693,433	.....	125,224,962
Dallas.....	49,661,464	5,505,363	13,576,217	.....	68,743,044
San Francisco.....	89,742,205	91,666,903	13,448,930	.....	194,858,038
Total, November, 1919.....	2,145,630,641	455,056,830	307,115,136	.....	2,907,802,607
Total, November, 1918.....	1,768,745,862	378,035,734	126,788,514	\$28,642	2,273,598,752

Federal Reserve Bank.	Earnings from—					Calculated annual rate of earnings from—				
	Dis-counted bills.	Pur-chased bills.	United States securities.	Munic- ipal warrants.	Total.	Dis- counted bills.	Pur- chased bills.	United States securities.	Munic- ipal warrants.	Total.
Boston.....	\$531,076	\$174,235	\$38,650	.....	\$743,961	Per cent. 4.39	Per cent. 4.28	Per cent. 2.09	Per cent.	Per cent. 4.13
New York.....	2,978,404	257,023	158,606	.....	3,394,033	4.37	4.15	2.51	.....	4.21
Philadelphia.....	727,253	4,989	55,854	.....	788,096	4.31	4.35	2.14	.....	4.02
Cleveland.....	542,710	242,913	47,793	.....	833,416	4.33	4.34	2.22	.....	4.15
Richmond.....	357,353	29,196	21,542	.....	408,091	4.40	4.50	2.01	.....	4.15
Atlanta.....	369,165	44,709	25,253	.....	439,127	4.37	4.56	2.01	.....	4.11
Chicago.....	884,718	349,910	76,973	.....	1,311,601	4.43	4.42	2.10	.....	4.16
St. Louis.....	254,808	94,798	31,662	.....	381,268	4.43	4.56	2.09	.....	4.08
Minneapolis.....	203,273	74,587	14,170	.....	292,030	4.49	4.30	2.02	.....	4.20
Kansas City.....	385,997	6,433	41,694	.....	434,124	4.66	4.41	2.24	.....	4.22
Dallas.....	187,430	21,181	26,300	.....	234,911	4.59	4.68	2.35	.....	4.20
San Francisco.....	333,755	321,191	22,718	.....	677,664	4.53	4.26	2.06	.....	4.23
Total, November, 1919.....	7,755,942	1,621,165	561,215	.....	9,938,322	4.40	4.33	2.22	.....	4.16
Total, November, 1918.....	6,203,988	1,355,558	259,049	\$118	7,821,708	4.27	4.36	2.49	4.79	4.19

Bills discounted during the month of November, 1919, distributed by classes; also average rates and maturities of bills discounted by each Federal Reserve Bank.

Federal Reserve Bank.	Customers' paper secured by Government war obligations.	Member banks' collateral notes.		Trade acceptances.	Bankers' acceptances.	All other discounts.	Total.	Average maturity in days.	Average rate (365-day basis).
		Secured by Government war obligations.	Otherwise secured.						
Boston.....	\$37,427,227	\$340,468,760	\$1,256,084	\$2,237,225	\$52,879	\$45,480,089	\$426,922,264	15.61	Per cent. 4.56
New York.....	156,316,670	4,077,121,327	.....	19,758,892	721,163	221,789,023	4,466,207,075	7.12	4.49
Philadelphia.....	91,297,964	550,862,817	3,000	959,873	.....	40,513,138	683,636,792	14.32	4.34
Cleveland.....	8,626,048	240,665,940	.....	2,031,238	.....	40,863,452	292,136,678	17.77	4.55
Richmond.....	7,656,906	245,927,700	400,000	536,361	.....	9,559,695	264,080,662	10.90	4.46
Atlanta.....	3,043,184	135,408,300	1,410,000	1,017,726	.....	33,153,826	174,033,036	21.79	4.51
Chicago.....	8,645,278	330,954,550	1,303,180	2,263,244	.....	105,012,003	448,183,255	24.53	4.61
St. Louis.....	4,963,899	149,007,353	17,000	1,163,770	840,262	24,113,480	180,110,764	13.50	4.52
Minneapolis.....	880,773	62,095,835	295,530	73,422	.....	25,446,003	88,805,613	26.73	4.74
Kansas City.....	3,413,352	99,819,663	10,426,194	69,350	153,670	32,047,662	145,934,891	27.33	4.91
Dallas.....	130,339	65,087,719	368,650	435,844	.....	4,648,881	70,671,433	19.14	4.55
San Francisco.....	4,941,644	136,547,109	215,000	1,361,975	284,924	30,375,269	173,725,912	17.04	4.58
Total.....	327,857,284	6,433,967,114	15,694,638	21,923,920	2,052,898	613,002,521	7,414,498,375	11.36	4.53

¹ Includes \$2,704,863 of trade acceptances in the foreign trade.

Bankers' and trade acceptances in the foreign and domestic trade and dollar exchange bills purchased during the month of November, 1919; also average rates and maturities of total bills purchased by each Federal Reserve Bank.

Federal Reserve Bank.	Bankers' acceptances.			Trade acceptances.			Dollar Exchange.	Total bills purchased.	Average maturity in days.	Average rate (365-day basis).
	In the domestic trade.	In the foreign trade.	Total.	In the domestic trade.	In the foreign trade.	Total.				
Boston.....	\$21,276,457	\$40,939,649	\$62,216,106	\$457,704	\$778,988	\$1,236,692	\$525,000	\$63,977,798	55.53	4.45
New York.....	25,381,106	124,065,725	149,446,831	242,682	1,592,050	1,834,732	1,327,500	152,809,083	46.83	4.45
Philadelphia.....	700,920	2,131,569	2,832,489	.....	.....	.....	.....	2,832,489	79.08	4.34
Cleveland.....	5,069,622	13,907,233	18,976,855	66,336	.....	66,336	10,000	19,053,191	65.07	4.46
Richmond.....	2,139,700	1,665,512	3,805,212	.....	.....	.....	.....	3,805,212	71.64	4.57
Atlanta.....	3,813,946	1,551,800	4,365,746	.....	.....	.....	.....	4,365,746	63.55	4.56
Chicago.....	7,661,321	26,039,784	33,701,105	.....	.....	.....	.....	33,701,105	67.73	4.50
St. Louis.....	3,944,138	1,381,198	5,325,336	.....	.....	.....	.....	5,325,336	46.68	4.49
Minneapolis.....	3,012,018	7,557,409	10,569,427	.....	.....	.....	80,492	10,649,919	70.67	4.47
Kansas City.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dallas.....	712,400	1,200,000	1,912,400	.....	.....	.....	.....	1,912,400	49.40	4.77
San Francisco.....	8,891,707	33,001,711	41,893,418	22,872	526,298	549,170	20,658	42,463,246	66.78	4.53
Total.....	82,603,335	252,441,590	335,044,925	789,594	2,897,336	3,686,930	1,963,650	340,695,505	55.55	4.47

Bills discounted by each Federal Reserve Bank during the three months ending Nov. 30, 1919, distributed by rates of discount; also average rates and maturities of all bills discounted by each bank during the three months.

Federal Reserve Bank.	4 per cent.		4½ per cent.		4¾ per cent.		4¾ per cent.		5 per cent.	
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.
Boston.....	\$634,677,848	\$380,973	\$86,358,409	\$590,028	\$343,083,715	\$483,235	\$62,623,438	\$400,321	\$47,086	\$809
New York.....	8,207,486,378	5,204,709	68,310,570	648,193	3,963,730,414	3,159,606	204,803,422	528,394	2,429	386
Philadelphia.....	2,288,919,744	1,654,105	71,116,712	595,467	444,551,546	461,895	34,542,025	69,160	11,777	48
Cleveland.....	524,358,519	708,952	149,227,200	297,961	89,600,020	173,637	139,013,079	447,326	.....	.....
Richmond.....	88,780,700	115,266	598,277,174	606,491	212,497,400	257,948	28,411,529	162,278	56,906	1,855
Atlanta.....	377,739,571	590,649	59,457,148	135,879	97,531,374	208,389	57,678,220	413,102	249,097	4,202
Chicago.....	451,382,500	710,922	289,224,265	547,095	294,264,757	583,101	194,624,025	1,356,392	.....	.....
St. Louis.....	420,949,091	419,506	8,035,655	46,789	138,792,892	191,735	40,788,539	319,649	20,000	44
Minneapolis.....	138,369,520	216,551	3,042,420	17,895	57,556,080	100,310	37,841,758	211,107	16,489,017	165,071
Kansas City.....	110,223,400	168,002	118,033,507	221,705	115,361,568	217,613	37,601,651	84,448	65,012,803	445,603
Dallas.....	160,900,617	244,017	92,318,355	158,743	45,660,253	87,710	11,994,993	65,425	11,450,363	110,759
San Francisco.....	.....	.....	376,884,236	595,881	79,913,142	107,425	4,423,339	42,367	29,783,206	222,720
Total.....	13,403,787,888	10,413,652	1,920,285,651	4,462,127	5,872,543,161	6,032,604	854,446,918	4,099,969	123,122,684	950,497

Federal Reserve Bank.	5½ per cent.		5½ per cent.		5¾ per cent.		Total.		Average maturity in days.	Average rate (365-day basis).
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.		
Boston.....	.....	.....	.....	.....	.....	.....	\$1,126,790,496	\$1,855,366	13.80	4.38
New York.....	.....	.....	.....	.....	.....	.....	12,434,333,213	9,541,288	6.66	4.21
Philadelphia.....	.....	.....	.....	.....	.....	.....	2,839,144,804	2,780,683	8.62	4.15
Cleveland.....	\$213,854	\$3,609	.....	.....	.....	.....	902,422,672	1,631,569	15.40	4.28
Richmond.....	.....	.....	\$14,900	\$41	.....	.....	928,038,609	1,142,879	10.35	4.34
Atlanta.....	.....	.....	16,374	365	.....	.....	592,671,784	1,352,586	19.33	4.31
Chicago.....	112,000	210	7,815,804	164,862	.....	.....	1,237,424,251	3,862,082	22.17	4.47
St. Louis.....	27,213	611	148,094	3,347	.....	.....	608,761,494	981,681	13.58	4.33
Minneapolis.....	.....	.....	2,870,984	65,283	.....	.....	256,269,779	776,217	24.21	4.57
Kansas City.....	.....	.....	10,842,563	242,516	.....	.....	457,075,492	1,379,887	23.44	4.70
Dallas.....	2,890,351	59,492	.....	.....	.....	.....	325,214,832	726,146	18.53	4.40
San Francisco.....	.....	.....	1,820,162	40,608	.....	.....	492,824,085	1,009,001	16.66	4.49
Total.....	3,243,418	63,982	23,528,881	516,522	13,000	32	22,200,971,601	26,539,385	10.12	4.31

Acceptances purchased by each Federal Reserve Bank during the three months ending Nov. 30, 1919, distributed by rates of discount; also average rates and maturities of acceptances purchased by each bank during the three months.

Federal Reserve Bank.	4 per cent.		4 1/4 per cent.		4 1/2 per cent.		4 3/4 per cent.		5 per cent.		5 1/4 per cent.	
	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.
Boston.....	\$12,956,247	\$32,014	\$23,265,947	\$92,410	\$7,268,850	\$29,628	\$9,938,218	\$64,590	\$26,291,815	\$163,361	\$6,865,171	\$40,19
New York.....	60,258,735	156,167	1,215,438	2,804	33,382,595	196,328	49,865,216	404,939	148,446,772	524,991	5,086,979	41,849
Philadelphia.....	542,959	846					365,657	2,701	2,330,241	23,786		
Cleveland.....	9,425,224	25,939			17,031,190	99,276	18,273,826	149,131	8,579,712	66,842	2,647,993	6,232
Richmond.....												
Atlanta.....												
Chicago.....	11,528,356	26,034	2,600	8	24,181,875	143,107	15,331,053	127,007	9,125,088	80,419	6,275,793	65,377
St. Louis.....	242,420	616			1,148,301	5,613	3,316,771	24,982	2,115,881	12,418	4,544,091	8,199
Minneapolis.....	944,741	2,703	809,219	4,430	15,449,786	87,871	5,633,579	46,304	4,703,939	44,900	160,670	533
Kansas City.....									600,000	5,327		
Dallas.....									200,000	233		
San Francisco.....	17,039,772	48,923	203,368	396	33,525,060	194,841	32,159,350	257,055	18,438,928	156,277	1,407,157	10,814
Total.....	112,938,454	293,242	25,496,572	100,048	131,987,657	756,664	134,884,280	1,076,709	220,832,376	1,078,604	26,987,854	173,197

Federal Reserve Bank.	4 3/4 per cent.		4 7/8 per cent.		5 per cent.		5 1/8 per cent.		5 1/4 per cent.		5 1/2 per cent.	
	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.
Boston.....	\$7,026,292	\$40,787	\$10,270,618	\$81,593	\$10,741,631	\$82,537	\$3,923,738	\$27,580	\$4,951,861	\$44,554	\$1,160,610	\$10,126
New York.....	15,218,800	93,958	1,810,938	11,861	34,170,224	292,800	2,543,934	23,465	4,263,037	43,959	113,991	1,233
Philadelphia.....	401,552	4,283										
Cleveland.....	3,140,843	18,344	297,854	1,607	7,513,817	76,260	230,941	2,301	308,886	1,520	38,085	74
Richmond.....					13,823,215	92,947						
Atlanta.....					18,003,156	146,542						
Chicago.....	5,736,975	32,619	417,309	2,131	14,186,518	140,341	328,182	3,162	1,939,075	21,537	150,000	1,777
St. Louis.....	2,271,280	14,267	260,000	1,196	1,059,704	10,577	135,467	743	745,000	1,461	300,000	586
Minneapolis.....	1,243,873	7,542	215,000	1,227	4,553,426	45,605	279,343	2,951	174,939	1,820		
Kansas City.....												
Dallas.....					1,540,292	8,062						
San Francisco.....	7,505,140	47,658	1,015,503	6,156	20,498,762	195,789	1,482,211	14,664	1,828,204	15,527	144,145	1,055
Total.....	42,544,755	259,458	14,287,222	105,771	126,090,745	1,091,360	8,923,816	74,866	14,211,002	130,378	1,906,831	14,851

Federal Reserve Bank.	4 3/4 per cent.		4 7/8 per cent.		5 per cent.		5 1/8 per cent.		5 1/4 per cent.		Total.		Average maturity in days.	Average rate (365-day basis.)
	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.	Amount.	Dis-count.		
Boston.....	\$3,751,641	\$3,460									\$128,412,639	\$712,833	46.46	P. ct.
New York.....	5,102,344	55,570	\$50,000	\$548	\$171,937	\$2,065	\$322,055	\$2,307	\$106,620	\$1,415	362,129,615	1,856,259	43.18	4.33
Philadelphia.....	100,000	1,171									3,740,409	32,787	73.90	4.33
Cleveland.....	2,433,387	12,850									69,921,758	460,376	55.81	4.31
Richmond.....	165,000	1,466									13,988,215	94,413	53.95	4.57
Atlanta.....											18,003,156	146,542	65.12	4.56
Chicago.....	521,504	5,421	226,000	2,651	50,000	609	400,000	4,924	166,960	2,053	90,567,898	659,177	61.08	4.35
St. Louis.....	10,000	82									16,148,915	80,740	41.92	4.35
Minneapolis.....	497,703	4,979	9,543	112							34,675,761	250,877	61.29	4.31
Kansas City.....											600,000	5,327	76.25	4.25
Dallas.....	2,280,000	18,721									4,020,292	27,066	51.93	4.73
San Francisco.....	3,300,650	35,406	126,594	1,380	122,052	1,319					138,796,896	987,260	59.87	4.34
Total.....	18,162,229	139,126	412,137	4,691	343,969	3,993	722,055	7,231	273,580	3,468	881,005,554	5,313,657	50.63	4.35

Discounted bills, including member banks' collateral notes, held by each Federal Reserve Bank on the last Friday in November 1919, distributed by classes.

[In thousands of dollars; i. e., 000 omitted.]

Federal Reserve Bank.	Agricultural paper.	Live stock paper.	Customers paper secured by Government war obligations.	Member banks collateral notes.		Trade acceptances.	Bankers' acceptances.	All other discounts.	Total.
				Secured by Government war obligations.	Otherwise secured.				
Boston.....	48		73,202	52,990	150	2,159	72	36,807	165,428
New York.....	199		144,345	609,489		11,237	874	94,758	860,902
Philadelphia.....	72		81,461	104,122	3	1,103		11,506	198,267
Cleveland.....	152	117	12,622	117,650		2,264		30,363	163,168
Richmond.....	558		13,583	69,977	385	808		12,589	97,900
Atlanta.....	1,257	181	4,149	61,594	390	1,949		32,651	102,171
Chicago.....	13,144		9,744	166,759	159	2,637		73,016	265,459
St. Louis.....	271	291	6,900	42,251	349	1,770	996	20,473	73,301
Minneapolis.....	813	5,054	2,211	29,787	128	86		22,375	60,454
Kansas City.....	6,516	13,982	5,353	42,397	3,715	296	33	22,989	95,281
Dallas.....	1,736	4,058	308	29,373	323			9,390	45,188
San Francisco.....	2,257	1,844	3,641	53,237	115	3,385	74	22,067	86,620
Total.....	27,023	25,527	357,549	1,379,626	5,717	27,604	2,049	388,984	2,214,139
Per cent.....	1.2	1.1	16.1	62.3	0.3	1.3	0.1	17.6	
Total Nov. 30, 1918.....	27,492	34,052	369,506	1,031,720	24,843	23,126		304,456	1,815,195
Per cent.....	1.5	1.9	20.4	56.8	1.4	1.3		16.7	100.0

Acceptances purchased by each Federal Reserve Bank and held on Nov. 30, 1919, distributed by classes of accepting institutions

[In thousands of dollars; i. e., 000 omitted.]

Federal Reserve Bank.	Bank acceptances.					Trade acceptances.			Grand total.	
	Member banks.	Non-member trust companies.	Non-member State banks.	Private banks.	Foreign bank branches and agencies.	Total.	Domestic.	Foreign.		Total.
Boston.....	26,371	614	1,670	5,612	150	34,417	851	1,451	2,302	36,719
New York.....	56,250	1,035	14,361	11,526	10,481	93,653	670	2,633	3,303	96,956
Philadelphia.....	2,402		429	228	76	3,135				3,135
Cleveland.....	33,852	1,439	11,231	12,484	5,536	64,542	102		102	64,644
Richmond.....	11,032	100	196	342	50	11,720				11,720
Atlanta.....	11,229	500				11,729				11,729
Chicago.....	89,240	1,150	3,400	6,024	1,837	101,701				101,701
St. Louis.....	25,098	595	3,274	2,658	2,013	33,638				33,638
Minneapolis.....	20,101	200	127	164	228	20,820				20,820
Kansas City.....	6,888	250	1,578	697	892	10,305				10,305
Dallas.....	10,964		250	1,167	432	12,803				12,803
San Francisco.....	54,435	563	12,232	14,974	14,613	96,867	23	850	873	97,740
Total:										
Nov. 30, 1919.....	347,852	6,446	48,798	55,876	36,358	495,330	1,646	4,934	6,580	501,910
Oct. 31, 1919.....	271,701	8,021	36,707	42,877	28,511	387,617	1,740	4,938	6,738	394,355
Sept. 30, 1919.....	208,784	8,255	24,821	33,420	21,873	297,153	531	2,385	2,916	300,129
Nov. 30, 1918.....	310,069	2,028	10,703	27,871	19,818	370,489	4,016	5,019	9,035	379,524
Nov. 30, 1917.....	171,723	5,338	753	18,201	3,163	199,178			6,275	205,453

OPERATION OF THE FEDERAL RESERVE CLEARING SYSTEM, NOV. 16, TO DEC. 15, 1919.

	Items drawn on banks in Federal Reserve city (daily average).		Items drawn on banks in district outside Federal Reserve city (daily average).		Total items drawn on banks in own Federal Reserve district (daily average).		Items drawn on banks in other districts (daily average).	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
Boston.....	24,981	\$28,274,243	103,893	\$16,818,755	128,874	\$45,092,988	16,040	\$13,830,322
New York.....	30,577	91,498,599	161,111	86,415,522	191,688	177,914,121	41,303	23,989,119
Philadelphia.....	48,710	32,903,101	59,650	8,496,791	108,360	41,399,892	29,131	9,815,139
Cleveland.....	7,765	9,307,823	103,265	29,984,645	111,030	39,292,468	4,340	3,692,107
Richmond.....	3,506	9,331,767	73,075	20,822,862	76,581	30,154,629	9,319	6,833,995
Atlanta.....	3,772	4,525,414	40,201	12,203,663	43,973	16,729,077	4,693	3,030,998
Chicago.....	27,929	29,765,000	111,301	19,231,000	139,230	48,996,000	8,236	1,643,000
St. Louis.....	8,533	10,882,216	69,272	12,912,190	77,805	23,794,406	1,159	603,852
Minneapolis.....	8,652	11,423,858	32,192	3,104,821	40,844	14,528,679	4,788	3,105,567
Kansas City.....	8,885	13,230,112	107,913	17,751,238	116,798	30,981,350	10,915	4,528,498
Dallas.....	4,907	5,390,592	61,501	15,591,603	66,408	20,982,195	8,456	3,750,553
San Francisco.....	4,130	4,998,504	51,721	11,261,656	55,851	16,260,160	1,655	2,126,292
Total:								
Nov. 16 to Dec. 15, 1919.....	182,347	251,531,229	975,095	254,594,746	1,157,442	506,125,965	139,915	76,999,447
October 16 to Nov. 15, 1919.....	177,569	236,521,957	915,794	246,055,511	1,093,363	482,577,463	129,399	78,178,485
Sept. 16 to Oct. 15, 1919.....	164,761	235,072,612	824,862	223,417,562	919,623	453,490,174	119,387	74,965,478
Nov. 16 to Dec. 15, 1918.....	85,174	219,162,199	590,685	167,471,893	675,859	386,634,092	88,326	66,301,701

	Items handled by both parent bank and branches (daily average).		Items drawn on the Treasurer of the United States (daily average).		Number of member banks in district.	Number of nonmember banks on par list.	Incorporated banks other than mutual savings banks not on par list.
	Number.	Amount.	Number.	Amount.			
Boston.....			6,226	2,505,850	431	245	
New York.....	2,105	1,110,469	37,109	18,217,562	756	319	
Philadelphia.....			5,018	2,055,997	677	414	
Cleveland.....	3,030	1,128,837	5,184	1,509,745	842	1,079	8
Richmond.....	491	703,012	1,681	377,403	584	466	1,014
Atlanta.....	5,901	2,948,961	3,412	938,748	426	348	1,227
Chicago.....	510	616,000	9,431	2,872,000	1,374	3,700	489
St. Louis.....	984	283,576	4,628	998,248	535	2,222	443
Minneapolis.....			1,030	437,650	921	1,874	1,030
Kansas City.....	5,744	1,811,097	4,669	694,599	1,037	3,138	186
Dallas.....	4,042	1,404,816	5,031	384,545	759	1,105	98
San Francisco.....	4,502	2,011,869	4,652	5,513,917	713	941	114
Total:							
Nov. 16 to Dec. 15, 1919.....	27,309	12,018,634	88,071	36,506,264	9,055	15,851	4,609
Oct. 16 to Nov. 15, 1919.....	27,594	12,683,739	107,551	37,355,291	9,008	14,860	5,515
Sept. 16 to Oct. 15, 1919.....	23,162	11,417,988	93,437	45,272,641	8,955	13,852	6,457
Nov. 16 to Dec. 15, 1918.....	13,394	10,704,900	135,173	60,766,938	8,612	10,409	

OPERATION OF THE FEDERAL RESERVE BANKS.

During the five weeks between November 21 and December 26 discount operations of the Federal Reserve Banks fluctuated within moderate limits. Fiscal operations of the Treasury during the period were extremely heavy, including the issue on December 1 of 162.2 millions of 4½ per cent loan certificates and 260.3 millions of 4½ per cent tax certificates, and, two weeks later, the issue of 728.1 millions of 4½ per cent tax certificates; also the redemption on December 15 of the balance of two series of tax certificates issued during the summer of 1919, besides the redemption before maturity of a considerable amount of certificates falling due in January and February, 1920, and the payment on December 15 of semiannual interest on the first Liberty and Victory loans. These operations apparently are reflected in the gradual reduction of the amount of war paper held by the Federal Reserve Banks during the greater part of December, the low level of 1,414.9 millions on December 19 marking a decrease of 259 millions since November 21. Since then, following the issue of the tax certificates, there has been a substantial increase in these holdings, the December 26 total of 1,510.3 millions contributing 68.8 per cent of the total discounted bills held on that date, as against 78.8 per cent five weeks before. This decrease in the absolute and relative amounts of war paper holdings has, however, been fully offset by the practically continuous increase in the holdings of ordinary commercial paper, the December 26 total of 684.5 millions exceeding the November 21 total by 233.8 millions, with the result that the total discounts held by the banks on the later date, 2,194.9 millions, show a net increase of 70.3 millions over the corresponding November 21 total. This increase is made up largely of paper maturing within 16 to 60 days from date of report, while holdings of 15-day paper were 33.4 millions less than five weeks before, a development the beginning of which was pointed out in the December issue of the BULLETIN (p. 1186). Since October 31, the

Friday preceding the revision of the discount rates and the discontinuance of the differentia between the rates on 15 and 90 day war paper, the percentage share of 15-day discounts in the total discounts held has declined from about 83 to 68 per cent.

Acceptances on hand continued their upward course, the December 26 total, 585.2 millions, marking a new high record and an increase of 105.2 millions since November 21, nearly all in the holdings of the New York bank. A decrease of 11.8 millions in Treasury certificate holdings represents largely the amount liquidated during the most recent week by the New York bank.

War paper holdings of the several Federal Reserve Banks include amounts held under rediscount for other Federal Reserve Banks. During the five weeks under review the amount of such paper increased from 20.4 millions, the total held by Chicago and St. Louis for the Philadelphia bank, to 40.6 millions, the aggregate held for the Philadelphia and Kansas City banks. Acceptance holdings of eight Federal Reserve Banks purchased from the Boston and New York banks, with and without the indorsement of the selling banks, show an increase from 111.6 to 128.1 millions.

Both members' reserve deposits and Government deposits show substantial declines for the period, resulting in a decrease of net deposits from 1,846.8 to 1,704.5 millions. Federal Reserve note circulation, on the other hand, shows a steady expansion from 2,817.2 to 3,057.6 millions, or at an average weekly rate of over 48 millions, the increase being especially marked during the last two weeks of the year.

Export withdrawals of both gold and silver apparently account for the reduction of 40.9 millions in gold reserves and of 51.4 millions in total cash reserves. The combined result of the changes in deposit and note liabilities and the reduction of reserves is seen in the decline of the reserve ratio of the Federal Reserve Banks from 46.9 to 44.8 per cent.

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Nov. 28 to Dec. 26, 1919—Continued.

[In thousands of dollars; i. e., 000 omitted.]

RESOURCES—Continued.

	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	At- lanta.	Chi- cago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
U. S. certificates of indebtedness:													
Nov. 28.....	22,562	77,684	31,471	25,883	11,860	15,665	40,236	17,366	8,380	14,820	11,225	10,880	288,032
Dec. 5.....	22,081	75,407	31,760	25,146	12,260	15,665	39,903	17,900	8,380	15,811	8,645	11,495	283,853
Dec. 12.....	21,752	68,154	30,918	25,136	12,260	15,665	39,841	17,133	8,380	13,916	9,220	10,839	273,219
Dec. 19.....	21,598	97,493	31,134	25,131	12,200	15,666	39,885	17,309	8,575	13,899	9,145	11,463	303,558
Dec. 26.....	21,661	67,347	30,529	24,817	12,200	15,666	39,754	17,216	8,480	15,249	9,090	11,438	273,507
Total earning assets:													
Nov. 28.....	221,877	1,036,914	234,258	254,659	122,805	130,127	410,095	125,458	89,136	129,274	73,182	196,956	3,024,741
Dec. 5.....	204,624	995,433	236,229	236,025	125,301	128,599	401,056	124,449	87,247	124,833	66,824	202,412	2,933,082
Dec. 12.....	231,942	1,015,816	245,018	243,812	134,564	124,500	390,422	117,658	87,211	131,604	73,601	184,939	2,981,087
Dec. 19.....	220,432	936,754	242,032	239,047	136,474	126,189	393,973	126,696	91,744	128,362	73,803	176,305	2,891,836
Dec. 26.....	233,642	1,048,160	244,752	250,160	138,187	122,498	427,851	133,540	93,054	131,530	74,851	182,370	3,080,495
Bank premises:													
Nov. 28.....	1,078	3,994	500	889	491	503	2,936	691	600	402	394	400	12,878
Dec. 5.....	1,091	3,994	500	889	491	503	2,936	691	600	402	399	400	12,896
Dec. 12.....	1,091	3,994	500	890	507	515	2,936	691	600	402	399	400	12,985
Dec. 19.....	1,091	3,994	500	890	508	515	2,936	691	600	402	399	400	12,986
Dec. 26.....	1,091	3,994	500	895	519	515	2,936	691	600	402	399	400	13,002
Uncollected items and other deductions from gross deposits:													
Nov. 28.....	78,835	249,903	88,495	78,112	85,648	41,665	111,150	70,776	22,968	77,448	60,341	48,085	1,013,426
Dec. 5.....	66,250	225,597	75,934	65,025	78,423	36,836	106,157	65,712	24,024	76,894	49,952	49,495	920,299
Dec. 12.....	83,747	234,567	81,244	74,347	76,519	42,846	119,738	68,236	25,609	81,232	51,365	44,077	983,527
Dec. 19.....	95,697	254,786	90,192	96,071	91,538	51,911	151,294	78,915	28,821	89,306	55,856	55,837	1,140,224
Dec. 26.....	81,682	235,089	86,294	91,234	90,283	50,072	139,834	70,669	29,285	90,664	62,236	47,758	1,075,100
5 per cent redemption fund against Federal Reserve Bank notes:													
Nov. 28.....	1,072	2,896	1,450	1,112	696	822	1,856	390	206	957	559	655	12,671
Dec. 5.....	1,072	2,884	1,450	1,262	575	804	1,876	497	134	957	530	655	12,696
Dec. 12.....	1,072	2,886	1,475	1,162	679	832	1,847	576	322	957	498	655	12,961
Dec. 19.....	1,072	2,922	1,475	1,204	587	939	1,964	476	518	957	554	665	13,333
Dec. 26.....	1,072	2,929	1,475	1,146	443	798	2,116	647	428	958	560	665	13,237
All other resources:													
Nov. 28.....	317	1,340	281	697	751	180	1,087	227	147	505	269	858	6,659
Dec. 5.....	284	1,363	350	753	2,181	200	1,092	245	173	514	390	783	8,328
Dec. 12.....	286	1,353	933	443	628	119	2,524	290	128	515	246	811	8,276
Dec. 19.....	296	1,287	5,802	628	595	148	793	332	126	540	303	414	11,314
Dec. 26.....	280	1,306	1,061	344	1,506	141	1,785	316	157	481	261	424	8,062
Total resources:													
Nov. 28.....	457,550	1,955,586	453,683	500,259	310,272	270,646	896,995	303,290	173,763	304,089	194,275	409,633	6,230,041
Dec. 5.....	441,465	1,870,283	445,950	486,439	300,801	265,571	890,293	291,544	170,127	291,872	183,152	413,899	6,041,396
Dec. 12.....	462,898	1,885,526	463,904	499,684	304,159	269,830	915,607	296,917	172,237	285,833	187,001	415,645	6,159,241
Dec. 19.....	474,383	1,854,119	477,638	507,626	323,123	284,132	926,356	302,828	175,993	291,139	187,146	420,121	6,224,604
Dec. 26.....	473,770	1,907,518	472,962	525,565	312,669	285,700	948,706	302,370	174,769	302,126	195,654	423,623	6,325,432
¹ Includes bills discounted for other Federal Reserve Banks:													
Nov. 28.....							19,500	4,000					23,500
Dec. 5.....							20,850	3,500					24,350
Dec. 12.....							5,000			10,900			15,900
Dec. 19.....							8,100			20,000			28,100
Dec. 26.....							14,670			25,945			40,615
² Includes bankers' acceptances bought from other Federal Reserve Banks:													
With their indorsement—													
Nov. 28.....					5,080		15,210	15,118		5,066			40,474
Dec. 5.....					5,080		15,210	15,118		5,065			40,473
Dec. 12.....					5,080		15,210	14,927		5,065			40,282
Dec. 19.....					5,080	5,065	25,307	19,933		5,065		10,081	70,536
Dec. 26.....					5,080	5,065	25,307	19,301		5,065		10,081	69,899
Without their indorsement—													
Nov. 28.....				23,269			33,161	13,446		10,005	5,012	11,547	96,440
Dec. 5.....				20,367			27,732	10,551		10,005	5,012	10,185	83,852
Dec. 12.....				16,757			25,553	10,408		10,005	1,637	8,722	73,112
Dec. 19.....				14,900			23,008	9,883		10,005	1,301	6,566	65,663
Dec. 26.....				12,265			20,113	9,721		9,805	1,113	5,184	68,201

Maturities of bills discounted and bought, also of United States certificates of indebtedness.

[In thousands of dollars; i. e., 000 omitted.]

	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.	Total.
Bills discounted:						
Nov. 28.....	1,582,690	135,642	293,789	183,448	18,640	2,214,209
Dec. 5.....	1,476,085	125,065	298,600	189,634	18,724	2,108,108
Dec. 12.....	1,490,897	116,113	322,123	191,451	18,827	2,139,416
Dec. 19.....	1,328,659	134,643	362,091	151,465	18,854	1,995,712
Dec. 26.....	1,484,790	244,890	292,715	152,125	20,858	2,194,878
Bills bought:						
Nov. 28.....	89,003	85,690	201,297	117,339	2,266	495,595
Dec. 5.....	82,562	116,662	185,802	129,183	.....	514,219
Dec. 12.....	78,472	128,987	187,068	147,024	.....	541,551
Dec. 19.....	123,248	106,219	183,830	147,969	.....	561,266
Dec. 26.....	123,727	100,060	209,278	152,147	.....	585,212
United States certificates of indebtedness:						
Nov. 28.....	30,235	13,012	14,158	17,324	213,303	288,032
Dec. 5.....	29,075	13,242	8,454	6,289	226,793	283,853
Dec. 12.....	22,158	9,221	6,551	8,630	226,659	272,219
Dec. 19.....	48,578	2,072	6,221	9,029	237,658	304,558
Dec. 26.....	15,745	4,865	3,940	10,715	238,242	273,507

FEDERAL RESERVE NOTES.

Federal Reserve note account of each Federal Reserve Bank at close of business on Fridays, Nov. 28 to Dec. 26, 1919.

[In thousands of dollars; i. e., 000 omitted.]

	Boston.	New York.	Phila- del- phia.	Cleve- land.	Rich- mond.	At- lanta.	Chi- cago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Federal reserve notes:													
Received from agent—													
Nov. 28	228,196	845,849	233,830	264,509	146,779	153,207	499,786	161,494	85,550	107,443	72,436	260,573	3,059,652
Dec. 5	232,779	868,304	234,433	265,747	147,937	154,417	507,521	161,921	86,329	108,502	73,776	266,711	3,108,377
Dec. 12	236,708	885,698	237,620	270,217	148,351	155,452	513,377	163,549	86,399	108,916	74,480	267,979	3,148,740
Dec. 19	245,517	909,863	243,606	272,493	153,427	159,650	523,257	168,952	87,621	109,944	75,623	270,605	3,220,560
Dec. 26	253,669	929,663	249,438	284,335	155,232	162,809	533,733	167,515	88,916	111,005	77,977	277,801	3,292,098
Held by bank—													
Nov. 28	7,368	78,451	10,779	13,498	5,223	4,640	24,794	20,485	1,766	5,694	3,260	31,487	207,375
Dec. 5	9,706	93,333	11,821	15,363	5,641	3,668	27,137	19,872	1,315	6,160	2,770	30,182	227,018
Dec. 12	9,971	107,528	8,543	14,880	4,577	4,621	28,174	20,839	1,224	7,032	3,444	30,472	241,305
Dec. 19	7,306	103,248	10,365	12,305	6,000	5,730	25,083	21,248	1,457	7,137	3,223	28,564	231,666
Dec. 26	7,214	104,719	9,165	11,451	6,539	6,210	23,720	19,063	1,441	5,905	3,091	35,934	234,452
In actual circulation—													
Nov. 28	220,828	767,398	223,051	251,011	141,556	148,567	475,062	141,009	83,784	101,749	69,176	229,086	2,852,277
Dec. 5	223,073	774,971	222,612	250,384	142,296	150,749	480,334	142,049	85,014	102,342	71,006	230,529	2,881,359
Dec. 12	226,737	778,170	223,077	253,327	143,774	150,831	485,203	142,710	85,169	101,884	71,036	237,507	2,907,435
Dec. 19	238,211	806,615	233,241	260,183	147,427	153,920	498,174	147,704	86,164	102,807	72,402	242,041	2,983,894
Dec. 26	246,455	824,944	240,273	272,834	148,693	156,599	510,018	148,452	87,475	105,100	74,836	241,867	3,057,646
Gold deposited with or to credit of Federal Reserve agent:													
Nov. 28	62,090	282,877	78,522	105,502	46,923	53,553	247,491	69,100	34,354	38,917	24,996	104,369	1,148,724
Dec. 5	71,692	291,356	77,435	113,420	45,381	55,067	243,826	61,207	35,733	40,126	26,651	105,217	1,172,191
Dec. 12	70,621	290,070	78,872	117,050	43,595	56,022	249,082	74,195	34,997	39,139	26,015	108,685	1,183,343
Dec. 19	71,930	288,751	79,453	116,925	42,031	60,535	251,202	65,238	34,275	39,977	26,451	124,811	1,201,654
Dec. 26	73,782	307,385	82,491	125,048	41,036	64,734	245,883	65,920	35,570	39,858	27,378	130,447	1,240,032
Paper delivered to Federal Reserve agent:													
Nov. 28	198,776	956,361	159,400	227,862	100,780	102,356	364,958	106,739	66,115	105,586	57,991	171,606	2,618,530
Dec. 5	182,004	917,238	161,014	208,542	106,593	104,330	356,193	105,973	68,495	100,204	54,213	171,269	2,536,068
Dec. 12	209,651	944,892	179,503	214,840	115,852	108,170	345,929	99,292	68,573	108,820	60,415	159,909	2,615,648
Dec. 19	198,295	836,153	178,544	219,807	116,906	109,634	349,436	108,234	70,606	108,561	60,693	149,185	2,494,034
Dec. 26	211,342	977,365	176,867	222,792	120,967	106,172	333,370	115,098	69,456	107,359	61,795	159,315	2,711,898

CONDITION OF MEMBER BANKS IN SELECTED CITIES.

Liquidation of 38.8 millions of United States securities, of 43.4 millions of war paper (exclusive of rediscounts), and of 16.9 millions of loans secured by stocks and bonds, accompanied by an increase of 131.5 millions in all other loans and investments (also exclusive of rediscounts), are the principal developments in the condition of about 790 member banks in leading cities for the five-week period November 14–December 19, 1919. During the period, the Treasury issued, on December 1 and December 15, a total of 1,150.6 millions of tax and loan certificates and redeemed the outstanding balances of two series of tax certificates issued during June and July, 1919, as well as a portion of the loan certificates due early in 1920. The banks' holdings of Treasury certificates, which stood at 835.5 millions on November 14, declined to 816.5 millions on November 28, as the result of redemptions before maturity and sales to customers, but increased to about 862 millions on December 5 after two new issues were placed. Between December 5 and December 19 one new issue was allotted and large amounts of certificates were redeemed on and before maturity, the net result for the entire five-week period being a slight increase of 8.8 millions in certificate holdings. Liberty bonds held declined 8.6 millions, and Victory notes 39.2 millions, presumably as the result of absorption of these amounts by the public.

A new classification of rediscounts with the Federal Reserve Banks, showing separately the amounts of rediscounted paper secured by Government obligations and otherwise secured or unsecured, was presented for the first time in the condition statement for December 12. This information makes it possible to determine the total amount of war paper held by the banks or rediscounted by them with the Federal Reserve Banks. This gross figure was 1,342.8 millions on December 12, and 1,328.9 millions on December 19, indicating a net liquidation of 13.9 millions for that week. The aggregate amount of paper rediscounted by the reporting banks with the Federal Reserve Banks increased from 675.1 millions on November 14 to 792.3 millions on December 19. Of the latter amount, 306.3 millions was secured by Government war obligations, while 486 millions represents paper otherwise secured or unsecured. The banks' own bills payable with Federal Reserve Banks declined from 1,070.3 millions on November 14 to 846.1 millions five weeks later. The shift from collateral notes to rediscounts is due in part

to changes in discount rates which with most Federal Reserve Banks no longer favor 15-day paper. Of the bills payable on December 19 all but 4.7 millions are collateralized by United States war obligations.

Loans secured by stocks and bonds, after showing a considerable amount of liquidation for the three weeks November 14–December 5, resumed their upward course during the most recent two weeks of the period under review, with the net result that the aggregate of these loans, which was 3,287.4 millions on November 14, was still 3,270.5 millions on December 19, and constituted on that date 20.9 per cent of the banks' total loans and investment, as compared with 21.1 per cent five weeks earlier. A larger decrease from 2,817.5 to 2,735.1 millions is shown for the aggregate amount of war securities and war paper held by the reporting banks, these holdings constituting 17.5 per cent of the banks' total loans and investments at the end of the period, compared with 18.1 per cent at the beginning.

Fluctuations in volume of Government deposits during the period under review reflected the Treasury's transactions in placing and redeeming certificates of indebtedness and also the payment by the public of the December installment of income and excess profits taxes. The high points in Government deposits are consequently shown for December 5, 415.1 millions, and for December 19, 647.9 millions. Other demand deposits (net) in general followed a course opposite to that shown for Government deposits, and reached the lowest levels on December 5, the Friday following the flotation of two series of tax certificates, and December 19, following a further issue of certificates and the December 15 tax payment resulting in heavy withdrawals of both individual and bank deposits from reporting banks. On the most recent date net demand deposits were 240.5 millions below the figure for November 14. Time deposits, after some fluctuations, stand at practically the same amount at the end as at the beginning of the five-week period.

Reserve balances with the Federal Reserve Banks declined almost without interruption during the period under review, and on December 19 stood 111.3 millions below the November 14 figure. This decline reflects to some extent the net reduction in the accommodation obtained by the member banks from the Federal Reserve Banks, as measured by the combined total of the banks' own bills payable

IMPORTS AND EXPORTS OF GOLD AND SILVER.

Gold imports into and exports from the United States.

[In thousands of dollars, i. e., 000 omitted.]

	During 10 days ending Nov. 20, 1919.	During 10 days ending Nov. 30, 1919.	During 10 days ending Dec. 10, 1919.	From Jan. 1 to Dec. 10, 1919.	From Jan. 1 to Dec. 10, 1918.
IMPORTS.					
Ore and base bullion.....	461	195	549	15,714	14,846
United States mint or assay office bars.....					6
Bullion, refined.....	251	535	39	32,391	39,246
United States coin.....		3	21	10,766	6,785
Foreign coin.....			2,500	7,858	183
Total.....	712	733	3,109	66,729	61,066
EXPORTS.					
Domestic:					
Ore and base bullion.....				20	204
United States mint or assay office bars.....	10,019	2,282	3,300	105,869	4,485
Bullion, refined.....	5	3	4	12,625	3,399
Coin.....	8,397	12,865	20,743	226,949	31,187
Total.....	18,421	15,150	24,047	345,463	39,275
Foreign coin.....	15	78	87	599	426
Total exports.....	18,436	15,228	24,134	346,062	39,701

Excess of gold exports over imports since Jan. 1, 1919, \$279,333,000. Excess of gold imports over exports since Aug. 1, 1914, \$792,073,000.

Silver imports into and exports from the United States.

[In thousands of dollars; i. e., 000 omitted.]

	During 10 days ending Nov. 20, 1919.	During 10 days ending Nov. 30, 1919.	During 10 days ending Dec. 10, 1919.	From Jan. 1 to Dec. 10, 1919.	From Jan. 1 to Dec. 10, 1918.
IMPORTS.					
Ore and base bullion.....	1,865	2,147	2,280	68,365	42,335
United States mint or assay office bars.....					51
Bullion, refined.....	244	212	160	7,776	20,436
United States coin.....	19	21	99	1,007	1,239
Foreign coin.....	32	563	6	5,122	4,337
Total.....	2,160	2,943	2,545	82,270	68,398
EXPORTS.					
Domestic:					
Ore and base bullion.....				5	19
United States mint or assay office bars.....	456	296	83	72,255	50,970
Bullion, refined.....	8,165	1,115	6,289	109,740	154,173
Coin.....	26	3,885	10,759	17,252	3,107
Total.....	8,647	5,296	17,131	199,252	208,169
Foreign:					
Ore and base bullion.....				1	
Bullion, refined.....	2,361	251	1,394	22,323	5,574
Coin.....	191	1,384	162	5,537	6,403
Total.....	2,552	1,635	1,556	27,861	11,977
Total exports.....	11,199	6,931	18,687	227,113	220,146

Excess of silver exports over imports since Jan. 1, 1919, \$144,843,000. Excess of silver exports over imports since Aug. 1, 1914, \$426,604,000.

Estimated general stock of money, money held by the Treasury and by the Federal Reserve system, and all other money in the United States, Dec. 1, 1919.

	General stock of money in the United States	Held in United States Treasury as assets of the Government. ¹	Held by or for Federal Reserve Banks and agents.	Held outside United States Treasury and Federal Reserve system.	Amount per capita outside United States Treasury and Federal Reserve system.
Gold coin ²	\$2,833,221,135	\$386,383,890	\$1,362,566,644	\$435,330,240	.....
Gold certificates.....			368,667,330	280,273,031	.....
Standard silver dollars.....	308,145,759	66,384,518		82,416,283	.....
Silver certificates.....			6,311,444	151,331,248	.....
Subsidiary silver.....	246,540,741	4,539,321	* 3,675,137	238,276,283	.....
Treasury notes of 1890.....				1,702,266	.....
United States notes.....	346,681,016	19,192,220	4 56,188,371	271,300,425	.....
Federal Reserve notes.....	3,063,390,865	39,346,741	183,739,175	2,840,304,949	.....
Federal Reserve Bank notes.....	263,022,800	57,552,256	8,507,204	196,063,340	.....
National bank notes.....	722,142,160	44,327,374	3,489,894	674,324,892	.....
Total:					
Dec. 1, 1919.....	7,783,144,476	617,776,320	1,993,145,199	5,172,222,957	\$48.54
Nov. 1, 1919.....	7,721,561,106	604,552,807	2,083,098,639	5,033,909,660	47.28
Oct. 1, 1919.....	7,662,898,238	616,213,318	2,087,709,369	4,958,975,551	46.61
July 1, 1919.....	7,588,473,771	578,848,043	2,167,280,313	4,842,345,415	45.00
Apr. 1, 1919.....	7,586,752,855	550,628,454	2,195,151,766	4,840,972,635	45.17
Jan. 1, 1919.....	7,780,793,606	454,948,160	2,220,705,767	5,105,139,679	47.83
Oct. 1, 1918.....	7,391,008,277	380,246,203	2,084,774,897	4,925,987,177	46.34
July 1, 1918.....	6,742,225,784	356,124,750	2,018,361,825	4,367,739,209	41.31
Apr. 1, 1918.....	6,480,181,525	339,856,674	1,873,524,132	4,266,800,719	40.47
Jan. 1, 1918.....	6,256,198,271	277,043,358	1,723,570,291	4,255,584,622	40.53
Oct. 1, 1917.....	5,642,264,856	242,469,027	1,429,422,432	3,970,373,397	37.97
July 1, 1917.....	5,480,009,884	253,671,614	1,280,880,714	3,945,457,556	37.88
Apr. 1, 1917.....	5,312,109,272	258,198,442	952,964,705	4,100,976,125	39.54

¹ Includes reserve funds against issues of United States notes and Treasury notes of 1890 and redemption funds held against issues of national bank notes, Federal Reserve notes, and Federal Reserve Bank notes.

² Includes balances in gold settlement fund standing to the credit of the Federal Reserve Banks and agents.

³ Includes standard silver dollars.

⁴ Includes Treasury notes of 1890.

DISCOUNT RATES.

Discount rates approved by the Federal Reserve Board up to Dec. 31, 1919.

Federal Reserve Bank.	Discounted bills (including member banks' 15-day collateral notes) maturing within 90 days, secured by—		Liberty bonds and Victory notes.	Trade acceptances maturing within 90 days. ¹	Discounted bills, secured otherwise than by Government war obligations, also unsecured, maturing within—	
	Treasury certificates of indebtedness bearing interest at—				90 days (including member banks' collateral notes). ²	91 to 180 days (agricultural and livestock paper).
	4½ per cent.	4½ per cent.				
Boston.....	4½	4½	4½	4½	4½	5
New York.....	4½	4½	4½	4½	4½	5
Philadelphia.....	4½	4½	4½	4½	4½	5
Cleveland.....	³ 4½	4½	4½	4½	4½	5
Richmond.....	4½	4½	4½	4½	4½	5
Atlanta.....	4½	4½	4½	4½	4½	5
Chicago.....	4½	4½	4½	4½	4½	5
St. Louis.....	4½	4½	4½	4½	4½	5
Minneapolis.....	4½	4½	⁴ 4½	4½	⁴ 4½	5
Kansas City.....	4½	4½	5	5	5	5
Dallas.....	4½	4½	5	5	5	5
San Francisco.....	4½	4½	4½	4½	4½	5

¹ Rate also applies to bankers' acceptances discounted by the New York and Cleveland banks.² Rate on paper secured by War Finance Corporation bonds, 1 per cent higher.³ Rate of 4½ per cent on customers' paper.⁴ Rate of 5 per cent for maturities 61 to 90 days.

NOTE.—Acceptances purchased in open market, minimum rate 4 per cent.

FOREIGN EXCHANGE RATES.

Monthly ranges of exchange rates on leading foreign money centers, quoted in New York during the three months ending December, 1919.

	Exchange at par.	October.		November.		December.	
		Low.	High.	Low.	High.	Low.	High.
London:							
60-day bankers' bills.....dollars for £..	4.8665	4.13	4.215	3.97	4.1425	3.6325	3.9550
Demand bills.....do.....	4.8665	4.15	4.2325	4.00	4.1625	3.6575	3.9875
Cable transfers.....do.....	4.8665	4.1575	4.24	4.01	4.17	3.6650	3.9950
Paris:							
Demand bills.....francs for 100 dollars..	518.1347	887.00	838.00	983.00	884.50	1,183.00	992.00
Cable transfers.....do.....	518.1347	885.00	836.00	981.00	883.00	1,181.00	990.00
Berlin:							
Demand bills.....dollars for 100 marks ¹ ..	23.82	3.25	4.375	2.10	3.25	1.90	2.60
Milan:							
Demand bills.....lire for 100 dollars..	518.1347	1,080.00	975.00	1,272.00	1,006.00	1,367.00	1,234.00
Cable transfers.....do.....	518.1347	1,078.00	973.00	1,270.00	1,075.00	1,365.00	1,232.00
Prague:							
Demand bills.....dollars for 100 kronen ¹ ..	20.28	2.35	3.85	1.50	2.40	1.70	2.10
Vienna:							
Demand bills.....do.....	20.28	.85	1.65	.68	1.00	.50	.73
Jugo-Slavia:							
Demand bills.....do.....	20.28	1.45	2.15	1.00	1.50	.79	1.00
Warsaw:							
Demand bills.....dollars for 100 marks ¹ ..	23.82	2.30	3.85	1.40	2.35	.92	1.65
Brussels:							
Demand bills.....francs for 100 dollars ¹ ..	518.1347	868.50	835.00	941.00	832.00	1,120.00	940.00
Madrid:							
Demand bills.....dollars for 100 pesetas..	19.30	19.08	19.28	19.28	20.10	18.90	19.90
Helsingfors:							
Demand bills.....dollars for 100 markka ¹ ..	19.30	3.50	5.25	3.00	4.475	3.00	3.45
Athens:							
Demand bills.....dollars for 100 drachma ¹ ..	19.30	17.25	18.90	16.50	18.00	14.80	16.50
Sofia:							
Demand bills.....dollars for 100 lev ¹ ..	19.30	3.00	4.50	2.50	3.00	2.25	2.70
Bucharest:							
Demand bills.....dollars for 100 lei ¹ ..	19.30	4.25	5.75	3.25	4.40	2.80	3.65
Belgrade:							
Demand bills.....dollars for 100 dinar ¹ ..	19.30	5.00	7.50	4.85	5.44	4.20	4.80
Amsterdam:							
Demand bills.....dollars for 100 florins..	40.20	37.4375	38.0625	37.25	38.00	37.25	38.25
Stockholm:							
Demand bills.....dollars for 100 kronor..	26.80	23.90	24.00	22.30	23.85	20.65	22.30
Copenhagen:							
Demand bills.....dollars for 100 kroner..	26.80	21.20	21.75	20.00	21.20	17.45	19.90
Christiania:							
Demand bills.....do.....	26.80	22.60	23.20	21.50	22.65	19.45	21.50
Zurich:							
Demand bills.....francs for 100 dollars..	518.1347	566.00	556.00	560.00	550.00	560.00	498.00
Canada:							
Demand bills.....dollars for 100 Canadian dollars ² ..	100.00	96.00	96.75	94.75	96.25	90.3125	95.25
Mexico City:							
Demand bills.....dollars for 100 pesos ¹ ..	49.85	49.00	49.125	49.125	50.50	50.32	50.50
Bogota:							
Demand bills.....dollars for 100 Colombian dollars ¹ ..	97.33	98.00	100.50	100.00	100.50	98.50	100.00
Montevideo:							
Demand bills.....centavos to dollar ¹ ..	96.69	99.50	96.80	96.80	94.00	95.40	94.80
Buenos Aires:							
Demand bills.....dollars for 100 gold pesos ¹ ..	96.48	103.60	104.00	101.80	103.85	101.70	102.25
Rio de Janeiro:							
Demand bills.....dollars for 100 paper milreis ¹ ..	* 54.62	25.00	25.70	25.00	25.25	27.75	33.00
Valparaiso:							
Demand bills.....dollars for 100 paper pesos ¹ ..	* 36.50	20.00	21.25	20.50	20.50	19.34	20.50
Yokohama:							
Demand bills.....dollars for 100 yen.....	49.85	50.50	50.75	50.25	50.75	50.00	50.50
Hongkong:							
Demand bills.....dollars for 100 Hongkong dollars.....		87.00	96.00	94.00	106.00	95.00	106.50
Shanghai:							
Demand bills.....dollars for 100 Shanghai taels.....		135.50	142.00	140.50	175.00	155.00	170.00
Singapore:							
Demand bills.....dollars for 100 Singapore dollars ¹ ..	56.78	53.00	56.00	54.00	54.00	54.00	54.00
Calcutta:							
Demand bills.....dollars for 100 rupee.....	32.44	42.00	44.00	42.00	44.75	43.75	46.25
London average price of silver at nominal rate of £ (\$4.8665)							
dollars per fine ounce.....		1.40511		1.53508		1.67549	
New York average price of silver (dollars per fine ounce).....		1.19154		1.27609		1.31976	

¹ Cable rates.

² Checks (demand).

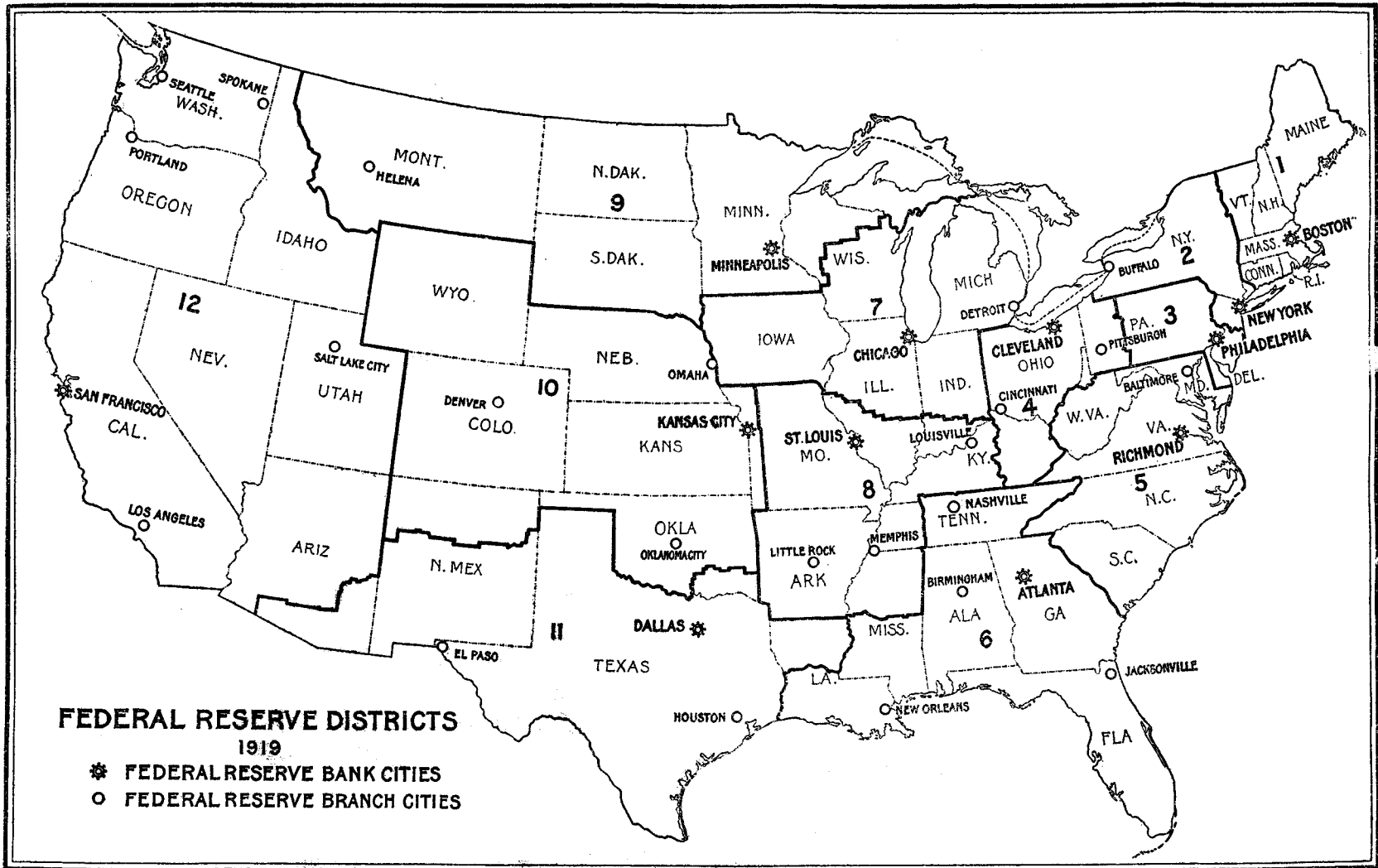
³ Rate for a gold milreis.

⁴ Rate for gold peso.

INDEX.

	Page.		Page.
Act amending Federal Reserve Act, providing for incorporation of institutions to engage in foreign banking (Edge Act).....	56	Debits to individual account.....	84
Act making gold certificates legal tender.....	60	Denmark:	
Acceptances:		Banking conditions in, 1914-1918.....	38
Automobiles or automobile tires, acceptance of drafts secured by warehouse receipts covering.....	65	Condition statement of National Bank of Copenhagen, 1914-1919.....	46
Banks granted authority to accept up to 100 per cent of capital and surplus.....	60	Directors:	
Holdings by Federal Reserve Banks during November.....	93	Branch banks—	
Purchased by Federal Reserve Banks during November.....	91	Election of.....	61
Purchased by Federal Reserve Banks during three months ending Nov. 30, 1919, distributed by rates of discount.....	92	Los Angeles branch.....	60
Renewal of drafts drawn by the purchaser of goods and secured at the time of acceptance by warehouse receipts or bills of lading.....	65, 66	Resignation of W. C. Procter of Cincinnati branch.....	10
Advertising of State member bank that it is under Government protection or supervision.....	65	Federal Reserve Banks—	
Agricultural paper held by Federal Reserve Banks during November.....	93	Election of Class A, B, and C for three-year term.....	60
Amendment to Federal Reserve Act providing for incorporation of institutions to engage in foreign banking, text of, as approved (Edge Act).....	56	Resignation of W. B. Thompson of Federal Reserve Bank of New York.....	10
Automobiles and automobile tires, acceptance of drafts secured by warehouse receipts covering....	65	Resolution of Board regarding political affiliations.....	10
Bank transactions, debits to individual account....	84	Discount and interest rates prevailing in various centers.....	72
Banking situation, discussion of.....	10	Discount operations of Federal Reserve Banks:	
Boundaries of sixth and eighth Federal Reserve districts, change in, by establishment of Humphreys County, Miss.....	59	During November.....	88
Branches, foreign, of American banks.....	63	Three months ending Nov. 30, distributed by rates of discount.....	91
Branches of Federal Reserve Banks:		Discount rates:	
Directors elected.....	61	Advance in.....	2
Los Angeles branch, opening of.....	60	In effect, Dec. 31, 1919.....	110
Oklahoma branch authorized.....	63	Prevailing in various centers.....	72
Business and financial conditions during December. Special reports by Federal Reserve agents.....	13, 19	Earning assets held by Federal Reserve Banks during November.....	90
Certificates of indebtedness, receipts from, during December.....	1	Edge Act:	
Charters issued to national banks during December. Charts:	62	Operations of foreign trade under.....	5
Exchange rates at New York—		Text of, as approved.....	56
On principal allied and neutral countries....	51	Election of directors:	
On principal silver standard countries....	52	Branch banks.....	61
Foreign exchange rates at Copenhagen.....	41	Los Angeles branch.....	60
Foreign exchange rates at Stockholm.....	40	Federal Reserve Banks.....	60
Par point map.....	94	Expenditures of the Government during December	1
Check clearing and collection:		Failures, commercial, reported.....	63
Map showing States in which banks remit at par.	94	Federal Reserve Act, amendment to, providing for incorporation of institutions to engage in foreign banking (Edge Act).....	56
Number of nonmember banks on par list.....	94	Federal Reserve banking in 1919, review of.....	11
Operation of system, Nov. 16-Dec. 15.....	94	Federal Reserve Banks:	
Clearing-house bank debits.....	84	Branches of—	
Collateral notes held by Federal Reserve Banks during November.....	93	Election of directors.....	61
Commercial failures reported.....	63	Los Angeles branch opened.....	60
Conference of representatives of clearing houses with Board to discuss interest rates on bank balances.....	3	Oklahoma branch authorized.....	63
Currency:		Directors elected for three-year term.....	60
Depreciation abroad, discussion of.....	6	Discount operations of.....	88
Stock of, in the United States.....	109	Questionnaire for use in readjustment of salaries of employees.....	54
		Resources and liabilities of.....	95
		Federal Reserve districts, change in boundaries of sixth and eighth, by establishment of Humphreys County, Miss.....	59
		Federal Reserve note account of Federal Reserve Banks and agents.....	100
		Fiduciary powers granted to national banks during December.....	64
		Financial aid for Europe, discussion of.....	6
		Foreign branches of American banks.....	63
		Foreign countries, financial aid to, discussion of...	6
		Foreign credits, discussion of.....	4

	Page.		Page.
Foreign exchange:		Money, stock of, in the United States.....	109
Discussion of.....	4	National banks:	
Rates in New York during three months ending December.....	111	Charters issued to, during December.....	62
Rates in New York on principal centers in allied, neutral, and silver-standard countries.....	49	Fiduciary powers granted to, during December.....	64
Denmark, rates of exchange in Copenhagen, 1914-1919.....	44	Norway:	
Norway, rates of exchange in Christiania, 1914-1919.....	37, 43	Banking conditions in, 1914-1918.....	37
Sweden, rates of exchange in Stockholm, 1914-1919.....	36, 42	Condition statement of Bank of Norway, 1914-1918.....	45
Foreign trade:		Oklahoma City, branch bank authorized at.....	63
Discussion of.....	4	Open-market operations of the Federal Reserve Banks.....	88
French National Bank of Commerce organized to promote.....	46	Physical volume of trade.....	74
Denmark, 1914-1918.....	38, 39	Prices:	
Norway, 1914-1918.....	37, 39	Changes in the price level.....	8
Sweden, 1914-1918.....	36, 39	International price index, establishment of, by Board.....	26
Operations under the Edge Act.....	5	Retail trade index, establishment of, by Board.....	53
French National Bank of Foreign Commerce, establishment of.....	46	Wholesale, in United States, index numbers of.....	68
Gold certificates legal tender, act making.....	60	Questionnaire for use in readjusting salaries in Federal Reserve Banks.....	54
Gold imports and exports.....	9, 108	Reserve percentages of Federal Reserve Banks during December.....	1
Government financing during December, discussion of.....	1	Reserves, new method of figuring deposits upon which reserve is to be computed.....	3
Imports and exports:		Resources and liabilities:	
Gold and silver.....	9, 108	Federal Reserve Banks.....	95
Denmark.....	39	Member banks in selected cities.....	102
Norway.....	39	Retail trade index, establishment of, by Board.....	53
Sweden.....	39	Rulings:	
November, 1918 and 1919.....	4	Acceptance of drafts secured by warehouse receipts covering automobiles or automobile tires.....	65
Index of retail trade, establishment of, by Board.....	53	Authority of State member bank to advertise that it is under Government protection or supervision.....	65
Index of wholesale prices:		Renewal of drafts drawn by the purchaser of goods and secured at the time of original acceptance by warehouse receipts or bills of lading.....	65
In United States.....	68	Salaries of Federal Reserve Bank employees, readjustment of, questionnaire for use in.....	54
International.....	26	Scandinavian countries, banking conditions in, 1914-1919.....	35-46
Interest rates:		Silver:	
Call rates.....	3	Advance in price in London and New York markets.....	7
Conference of representatives of clearing houses with Board to discuss rates on bank balances.....	3	Imports and exports.....	9, 108
Prevailing in various centers.....	72	State banks:	
Investment operations of Federal Reserve Banks during November.....	89	Admitted to system during December.....	62
Law department:		Authority of State bank member to advertise that it is under Government protection or supervision.....	65
Renewal of drafts drawn by purchaser of goods and secured at time of acceptance by warehouse receipts or bills of lading.....	66	Sweden:	
Live-stock paper held by Federal Reserve banks during November.....	93	Banking conditions in, 1914-1919.....	35
Los Angeles, Calif., branch bank opened at.....	60	Condition statement of Bank of Sweden, 1914-1918.....	45
Maturities:		Trade, physical volume of.....	74
Acceptances purchased during November.....	91	Treasury financing during December, discussion of.....	1
Acceptances purchased during three months ending Nov. 30.....	92	Wholesale prices:	
Bills discounted during November.....	90	Index numbers—	
Bills discounted during three months ending Nov. 30.....	91	International.....	26
Bills discounted and bought.....	99	United States.....	68
Member banks:			
Number discounting during November.....	89		
Number in each district.....	89		
Resources and liabilities of.....	102		



The branches at Helena, Mont., and Oklahoma City, Okla., have been authorized by the Federal Reserve Board but are not yet open for business.