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The second edition contains detailed analyses of business conditions, special articles, review of foreign banking, and complete statistics showing the condition of Federal Reserve Banks. For this second edition the Board has fixed a subscription price of $4 per annum to cover the cost of paper and printing. Single copies will be sold at 40 cents. Foreign postage should be added when it will be required. Remittances should be made to the Federal Reserve Board.

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

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FEDERAL RESERVE BULLETIN

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REVIEW OF THE MONTH.

Treasury finance.

The month of December has been an exceptionally important period in Treasury finance. On December 15 the fourth quarterly installment of income and excess profits tax payments for the year 1919 fell due and was paid. Approximately $670,000,000 was realized from this source. On December 15, also, interest payments on the first Liberty loan and on the Victory loan became due in the approximate amount of $140,000,000. Because of the unusually large requirements of the Treasury, growing out of its interest payments for the month and of the necessity of meeting maturing certificates of indebtedness, of which about $700,000,000 fell due in the course of the month, the Secretary of the Treasury on December 7 announced the sale of an issue of $500,000,000 of Treasury certificates of indebtedness. These certificates were issued under the same general terms and conditions which had prevailed in previous issues, the rate of interest being $5\frac{3}{4}$ per cent for the 6-month and 6 per cent for the 12-month maturities. Total subscriptions amounted to $790,449,500, of which $589,680,500 were allotted. The gross receipts of the department for the month on ordinary account amounted to $931,989,397, while similar disbursements amounted to $404,575,091. A surplus on ordinary account was shown in the amount of $527,414,306 for the month ending December 31, 1920, and for the first six months of the fiscal year 1921 in the amount of $459,504,944.

The outcome of the transactions of the Treasury, in so far as their effect upon banking is concerned, was not materially different from that which has existed at previous quarterly periods when income and excess profits tax installments were received. At such dates there is a sharp temporary contraction of liabilities on the part of Federal Reserve Banks, while there is a transfer of deposit credits from member banks to Federal Reserve institutions. Owing to the existence of commercial and financial depression, difficulties were encountered by some individuals and business establishments in obtaining the funds with which to settle their last installment of taxes due to the Government. One result of this situation was an increase in borrowing at some of the banks, while in other cases securities were disposed of for the purpose of obtaining funds with which to make settlement with the Government. This latter factor tended to produce much heavier sales on the stock exchanges of the country for a few days prior to December 15. Incidentally the tendency of the operations connected with or growing out of Government financing during the month was to render the money market rather more stringent than would otherwise have been true.

Future policy.

The developments during the months of November and December have strongly emphasized the importance of future Treasury policy in its relation both to the banking and business of the country. It is evident that the Nation has practically reached the close of the period of post-war financing and that from this time forward excess-profits-tax receipts are likely to be much less than heretofore. Revision of the excess-profits tax has been recommended to Congress for some time past. On the other hand, the continued existence of a large volume of outstanding floating indebtedness maintains the Treasury Department as a continuously influential factor in the money market. These and other phases of the situation were fully reviewed by the Secretary of the Treasury in his annual report to Congress, in which he calls attention to the decrease during the past year in the volume of outstanding certificates which had brought them down to a total of $2,337,-000,000 on October 31, a decrease of about $1,125,000,000 within the preceding twelve-month period. Further reduction of these outstanding certificates is, however, as the Secretary clearly points out, entirely dependent upon the maintenance of "adequate revenues from taxation" and "rigid economy in expenditures" on the part of the Government. The near approach of the date when the Victory notes will become due and payable tends moreover to emphasize still further the necessity of a far-sighted policy in connection with Treasury finance in order that the volume of obligations to be met may not become unmanageable. As the Secretary states in his report:

"* * * Within a period of about two and a half years ending in May, 1923, there will thus become payable about 7½ billions of Government war obligations, of which approximately 4¼ billions represent Victory notes. Earlier plans and expectations were disarranged by the unexpectedly large burdens placed upon the Treasury by the transportation act. According to the estimates, there will be paid on account of the railroads during the current fiscal year probably a billion dollars, of which over 300 millions has already been called for and paid. Added to these expenditures are large payments to the railroads on account of the settlement of matters arising under Federal control. It is obvious that these payments limit the progress which the Government had expected to make in the retirement of the floating debt. It is expected, however, that perhaps the heaviest payments on account of the railroads will have been completed by the spring of next year, and then for the remaining months of the fiscal year the Treasury looks forward to a more rapid reduction of the floating debt. By the end of the fiscal year, in the absence of unforeseen contingencies, the floating debt should be brought considerably below two billions, perhaps to as low as a billion and a half. The balance should be retired during the fiscal year 1922, except such an amount as it may be necessary to keep outstanding in order to avoid money strain in connection with the quarterly payments of income and profits taxes and to finance the Government's current requirements in the intervals between the heavy tax receipts. By the end of the fiscal year 1922 the Victory loan should also have been reduced by at least a half billion dollars as a result of sinking-fund operations.

"The remainder of the Victory loan, perhaps 3¾ billions, will then have become substantially floating debt, as it will mature during the following fiscal year. Provision should be made, therefore, under proper Treasury regulations and, if necessary, by partial calls for redemption, for the acceptance of Victory notes during the fiscal year 1923, before maturity, in payment of income and profits taxes. In this way and through further sinking-fund operations it should be possible to reduce the Victory loan so that at maturity it would stand at about three billions of dollars. * * *"

These purposes, however, may be accomplished only, as already remarked, in the event that the income of the Government is maintained. On this point the Secretary says:

"* * * If rigid economy is practiced and the estimates reduced wherever possible, there is some hope that by the close of the fiscal year 1922 the floating debt may be extinguished, provided, of course, that adequate revenues from taxation are maintained. There is no certain means, however, of predicting the course of business or of incomes and profits, and it is a certainty that tax receipts even under existing law will not keep up to the 1920 level. There are also frequent efforts by extraordinary measures, like the soldiers' bonus, to bring about a radical increase in expenditures. In these circumstances—as was suggested in my letter of May 18, 1920, to the chairman of the Committee on Ways and Means of the House of Representatives—the only question which should be considered is whether a due regard for the protection of the Treasury does not impose upon the Congress a real duty to seek out additional sources of tax revenue for the next two years. The country at times is being encouraged to expect a reduction of taxes. Revision of taxes should be effected. There can and should be a better distribution of the tax burden. Unwise taxes should be eliminated. But any scheme which would after this fiscal year yield for several years to come less than four billions of dollars would be incompatible with safety and sound finance. * * *"

As the means to attain the end of which he speaks, the Secretary suggests a variety of possible measures, included among them being a revision of the higher schedules or rates of the income tax, the establishment of a new system of flat corporation surtaxes, and the establishment of various excise and luxury taxes, which he describes in considerable detail.

Immediate measures of revision were outlined in the letter of March 17, 1920, which the Secretary addressed to Hon. J. W. Fordney, chairman of the Committee on Ways and Means, to which reference was made in the BULLETIN for April last. The banking significance of the suggestions thus placed before Congress is seen in the necessity of reducing the dependence of the Treasury upon current borrowing from the banks on the one hand and the desirability on the other of effecting an actual reduction in the amount of indebtedness outstanding, as well as of insuring a satisfactory market among investors for such issues of obligations as may be offered to the public in connection with the refunding of part or all of the Victory notes.

Finance and banking.

While, as pointed out by the Secretary of the Treasury, there has been very decided progress during the past year in reducing the volume of outstanding certificates of indebtedness, equally important progress has been made in eliminating from our banks holdings both of these certificates and of longer term public obligations. The condition of affairs in this regard is well worthy of special note. In the following tables are presented the positions both of Federal Reserve Banks and of the member banks in 100 selected cities which report weekly to the Board as regards their holdings of Government bonds and securities, of paper collateraled thereby, and of other investment paper:

Government securities, also discounted and purchased paper, held by 12 Federal Reserve Banks, monthly, 1920.

[In millions of dollars.]

Last Friday in—	Government securities.	Discounted paper collateraled by Government securities.	Other discounted paper.	Purchased paper.
January	304	1,458	716	561
February	294	1,573	881	531
March	290	1,441	1,008	452
April	294	1,465	1,070	407
May	306	1,448	1,[illegible]71	419
June	352	1,278	1,154	399
July	325	1,241	1,251	345
August	301	1,315	1,352	322
September	298	1,220	1,484	308
October	296	1,204	1,597	298
November	321	1,192	1,543	248
December	288	1,141	1,578	256

Government securities, also loans and other investments, held by member banks, monthly, 1920.

[In millions of dollars.]

Last Friday in—	Government bonds and securities, exclusive of circulation bonds.	Paper collateraled by Government securities.	All other loans and investments.
January	1,576	1,227	13,550
February	1,478	1,168	13,756
March	1,280	1,160	14,111
April	1,411	1,090	14,160
May	1,414	1,062	14,200
June	1,291	1,026	14,345
July	1,235	981	14,373
August	1,232	966	14,463
September	1,179	950	14,742
October	1,096	912	14,741
November	1,122	906	14,435
December	1,123	909	14,435

It is in connection with the portfolios of the selected member banks that the change in the banking situation and the improvement in liquidating power is best seen. As shown by the quoted figures there has been a marked decline in the holdings of Government bonds and securities. This decline in the case of the member banks alone amounts to about 29 per cent of the amount held last January. Another, though less marked, decline is noted in the case of paper collateraled by Government securities, which has fallen off from the peak point of last January in a proportion equal to about 27 per cent. "Other loans and investments" have offset by fully 7 per cent the reduction which has taken place in the collateraled paper, while, as often pointed out, this increase represents an advance in the quantity of support extended to active current business. Summed up, therefore, the results of the year's operations have been an important change in the actual position of the portfolios both of reserve and of member banks, so that the place formerly occupied by credits of a noncommercial and investment character is being more and more taken by credits which are the direct outgrowth of business operations.

Conservation of resources.

With progress thus being made toward restoration of a more liquid condition in our banking portfolios, it is essential to note any factors that might result in endangering the advance made from time to time. This question has come up in an acute form during the past few weeks in connection with two proposals. These are (1) that there be a restoration of the activity of the War Finance Corporation and (2) that direct assistance be given by the Government or by Federal Reserve Banks to interests which are suffering from reduction of prices of their products. The "revival" of the War Finance Corporation would be expected to result in the granting of export credits by that organization, the purpose being to take off accumulated surpluses of cotton, grain, and other items and to place them at the disposal of foreign countries in which a shortage of raw materials had developed, although there exists there abundant labor power for the working up of the raw materials into finished products. The idea of a grant of direct Government loans (or, what is the same thing, of loans made by the banks upon the strength of Government deposits left with them), or of easier rediscounts furnished by Reserve banks, has for its object the enabling of producers to withhold their goods from the market pending the time when prices of such commodities succeed in reaching a higher level. These plans have resulted in the resolution adopted by the Senate on December 13 and by the House on December 18, the resolution being sent to the President on December 19, vetoed by him on January 3 and passed by the Senate over his veto on the same date. Prior to the action of Congress hearings had been held by the Senate and House Committees on Agriculture in joint session, at which the views of the Secretary of the Treasury and the Governor of the Federal Reserve Board were heard. The reason for looking with disfavor upon the idea of reviving the War Finance Corporation was stated by the Secretary of the Treasury in the following language used in his annual report and repeated in substance to the congressional committees:

"* * * In the circumstances, producers whose products could not be satisfactorily marketed and whose prices were falling demanded that the Treasury intervene. They asked either that it deposit money in certain sections or that the activities of the War Finance Corporation be resumed. * * *

"Neither of these things was feasible. The Treasury had no money to lend and no money to deposit except for Government purposes. It is not in the banking business and should not be. It is borrowing money periodically to meet current obligations at a cost of about 6 per cent. * * *

"Furthermore, the War Finance Corporation was a war agency and was created to help win the war. It was clearly desirable that war agencies should cease to function as quickly as possible. The only power of the corporation which had any possible bearing on the situation is one which was inserted after the armistice with a particular possible state of facts in view. Fearing that with the cessation of exports for military purposes after the armistice exports might not go forward, Congress empowered the corporation, in order to promote commerce with foreign nations, to make advances under certain conditions. The War Finance Corporation had no money of its own. It or the Treasury would have had to borrow the money, and borrow it at a cost of about 6 per cent. * * *"

Governor Harding, in his discussion of the banking aspect of the plans contemplated in the proposed resolution, expressed the following views:

"The Federal Reserve Board has always advocated the policy of orderly marketing of crops. We realize that it is best for the producer, best for the consumer, best for the banking interests, and best for the railroads. Suppose an entire crop which takes the better part of a year to produce, a staple crop, should be dumped on the market in the course of two or three weeks or a month or two. The result would be that the pressure of the volume of that commodity, no matter how great the demand for it might be, on the market at one time would depress the price for it. It would tax the banks to furnish the money in advance of the consumptive need for the crop, and it would also tax the warehouse capacity, and the railroads would be burdened in furnishing transportation facilities.

"Orderly marketing means some marketing; it means some buying and some selling, a gradual and steady process. I would regard as an ideal condition the steady movement of a staple crop extended over a period of five or six months, thus causing no strain on anybody and giving the producer the benefit of the average price.

"It has been pointed out that there are certain staples for which there is at present no market at all. Well, I do not see anything to do in such cases but to arrange for renewals on the best terms possible. But there are other staples for which there is some market, although prices are not satisfactory to the producers."

These considerations were influential in leading to the elimination in the House of Representatives of that part of the resolution which directed or suggested a relaxation of banking credit.

There have been a number of variants of the plan suggested in the congressional resolution to which reference has already been made. One of these is seen in the proposal to advance funds to Germany in an amount equal to the holdings of former German property in the hands of the Alien Property Custodian, the proceeds of the credit to be used in the purchase of cotton, grain, and other products. Some similar demands have been made in connection with plans for financing goods in warehouses. All such proposals tend to increase the amount of "frozen credit" in the hands of the banks. They thus not only reduce the amount of goods to which the consumer has access but they also tend to reduce the amount of fluid credit which can be used for the purpose of promoting active business enterprise. As pointed out by Governor Harding in his testimony before the Senate committee, there has been no reduction in the total amount of credit available in the country at large. Aggregate liabilities of Federal Reserve Banks on account of reserve deposits and Federal Reserve notes combined at the close of December were $5,116,944,000 as compared with the corresponding figure of $4,898,767,000 a year earlier. The question at issue, therefore, is simply how the volume of credit already existing shall be used—whether it shall be used for the financing of new production, the maintenance of institutions which are actually disposing of goods and facilitating their movement from producer to consumer, or whether it shall be used for the purpose of withholding goods from the market or possibly of shipping them to foreigners who are not now in position to settle for them through return shipments. As to this latter point there should be no misunderstanding. It is not only desirable but practically essential that satisfactory arrangements be made for the financing of a legitimate and reasonable export trade, such action facilitating, as it necessarily will, the restoration of industry abroad and consequently the eventual liquidation of the claims which we now hold upon foreign countries. Such long-term advances, however, should be financed through the agency of actual investment credits provided by the placing of bonds or other evidences of indebtedness in the hands of individuals or institutions who are in position to supply the funds that are needed to "carry" these obligations until their foreign recipients are able to settle them.

Rate of discount.

In this same connection it is well to note that the request for special relaxation of credit in favor of a particular group of producers is only one phase of a demand for the general relaxation of credit. Subsequent to the opening of Congress at the beginning of December, bills affecting the functions or policies of the Federal Reserve System were introduced. Among them was Senate bill No. 4560, which, if enacted, would have fixed the maximum rate of interest or discount which Federal Reserve Banks could charge at 5 per cent per annum. This bill having been brought to the attention of the Federal Reserve Board with a request for an expression of its opinion, the Governor of the Board on December 16 addressed to Hon. George P. McLean, chairman of the Senate Committee on Banking and Currency, a statement in which he expressed the opinion of the Board, as follows:

"The Federal Reserve Board desires to put itself on record as unalterably opposed to this bill or to any other bill which in any way attempts to limit the power now vested in it and in the Federal Reserve Banks to regulate the rates of discount which those banks may charge. * * * In conclusion and by way of summary, if this bill should become a law it is the Board's firm belief that the Federal Reserve Banks would find it impossible while functioning in a normal way to protect their gold reserves, that the Federal Reserve System would within a very short time cease to be in any sense a reserve system and would become a mere instrument for the acceleration and perpetuation of expansion, and that a wholesale scramble for the funds of the Federal Reserve Banks would ensue which would leave those banks only two alternatives—one, to lend their funds at the rate prescribed until the exhaustion of their reserves had been completed, and the other to fix a definite limit upon their total volume of loans, thus adopting a rigid system of credit rationing. In the one case they would reach a point where they would be unable to make further rediscounts, no matter how insistent or meritorious the demands might be, and in the other they would find it necessary to place all applications for discount accommodations on a waiting list until repayment of prior loans made new funds available."

The views expressed in the letter from which quotation has been made are amply borne out by the experience of the Bank of England and of other foreign reserve banks in making discount rates for the regulation of money market conditions. In the general practice of central banks, rates have usually been slightly above the market rates—a plan which has been followed by the Bank of England for many years past. A study of the money market in the United States during the past year shows clearly that the present rates of discount prevailing in the United States are not the result of the rates of discount established at the Federal Reserve Banks, but are the outgrowth of the natural interaction of demand for and supply of capital following upon the relaxation of Government control of interest and discount rates.

Check to foreign business.

As just explained, however, the reason for objecting to most of the plans currently set forth for the extension of long-term credit is not found in their purpose but in the method they seek to apply. Indeed, the call for a rational system of foreign trade financing has become more and more evident during the past month or more in consequence of the growth of serious congestion in foreign ports. This congestion has now been carried to so advanced a point that in the case of some countries trading is practically at a standstill. At various South American points, for instance, official reports show that very large quantities of American goods were shipped to buyers in those countries but that these buyers have not been able to make settlement. In other cases the buyers have canceled their orders because of the belief that they could now buy at a lower level of prices in the United States. The result has been at some points to fill customhouses and warehouses with unsold goods which are "held up" pending a decision whether the buyers can be induced to take and pay for them either at the level of prices originally agreed upon or at some new level. This condition of affairs would not be so acute as it is were it not for the fact that staple products of various foreign countries have ceased to find a satisfactory market in the United States. Such articles as sugar, rubber, hides, and other basic exports to the United States are either not in demand in this country at the present time, owing to the congestion here and the slackening of manufacturing activity, or else the prices they command are so low that their foreign owners are not willing to part with them at existing rates.

The actual buying power of many foreign countries in the United States, already unfortunately reduced by war conditions, has been still further curtailed, the effect being to aggravate unfavorable conditions in exchange. One outcome of this situation, as already noted in previous issues, has been the establishment of moratoria in various countries or the creation of a condition of affairs practically equivalent to a moratorium. Coupled with the embargoes upon the movement of gold and specie which already existed, such action necessarily brings about a depreciation of exchange which is abnormal even from the standpoint of current conditions. A means of obtaining relief from the existing situation which is now much under discussion is that of placing in the United States loans of a sufficient amount to fund a substantial part of the outstanding indebtedness. This may be the most available means of relief. Evidently, however, it would have been better had there been from the outset in the trade with the countries which require such assistance recognition of the needs of the situation and a corresponding provision for placing the trade upon an investment basis. That has unfortunately been lacking in many instances. A representative of the State Department, for example, who has just inquired into conditions in Cuba, finds that a loan of from $50,000,000 to $100,000,000 will be needed in order to restore finance and trade equilibrium in that country and to render it possible to end the moratorium existing there. While in no small measure the difficulty in our foreign trade is due to the sudden changes in prices that have occurred, it is also true that these changes themselves are in some degree the outcome of miscalculation and an improper basis of trading. The lesson of the present situation is emphatically that of making regular arrangements for putting our foreign obligations upon an investment footing.

Foreign v. domestic credit.

The developments in our foreign trade during the past two months have clearly shown a marked increase in the unfunded trade balance in favor of the United States which is being carried on the books of banks and of merchants. In the October issue it was estimated that this unfunded balance up to the close of September was probably conservatively to be figured at $3,000,000,000. Taking the trade figures now available up to the end of November as a base and assuming a continuance of trade during the month of December at approximately the same rate as for November, it may be fair to anticipate a trade balance for the year of about $2,800,000,000 in our favor, an estimate which would add fully $600,000,000 to the estimate previously published. If this assumption be correct, our foreign trade since the armistice will show a credit balance still unfunded and amounting to about $3,600,000,000 in our favor as against the remainder of the world. The question has been raised by some whether this credit balance may have operated to curtail the credit applicable to domestic business. In other words, it has been argued by some that as this great volume of credit has been extended to foreigners it must have had the effect of reducing the amount of credit which could be extended to our own citizens. From this, inference has been drawn that a continued favorable balance of trade would have a continuously unfavorable effect upon domestic commerce and industry, inasmuch as it would mean the transfer of an increasing proportion of bank credits from domestic business to export business. This view hardly recognizes the fundamental facts in the situation.

The credits which are opened on behalf of European importers or buyers by banks in the United States are American credits, not foreign credits. They are opened for the purpose of enabling the European importer to obtain a domestic credit in the United States with which he can pay for Amercain products destined for European use. It is a domestic credit, not a foreign credit, that is granted by the American financial institution involved in the transaction. It is a domestic credit foreign in its incidence only in that it is granted to a foreign buyer in order to finance an export from the United States to a foreign country. It is, therefore, only the goods constituting the export which leave the country. The credit opened by the American bank remains behind as a part of the total volume of banking credit outstanding in the United States, and passes from hand to hand as is the case with all ordinary banking credits.

Still more apparent is this the case when the credit which finances the export to Europe is an ordinary credit granted to the American producer or exporter. Neither class of these two transactions can properly be said to reduce the quantity of credit available or in use in the United States. This may be seen by a glance at the situation which has developed during the past few months. The credit which has been extended for the support of our export trade has, as is often remarked, been largely extended to individuals and firms in the form of loans which have enabled them to continue their process of production here at home. They have, in short, continued their employment of labor and their demand for raw materials, and the "credit" granted to them by the banks has thus continued its existence as domestic credit, being transferred by those who received it to others from whom these recipients bought the goods or services. The effect of our foreign trade, therefore, has not been to diminish the amount of credit granted but rather to increase it, and this, in fact, is the more serious criticism to be made in connection with our present export trade. Too much of it has taken the form of "credit," which has continued in existence long after it should have been canceled or paid.

Our foreign credit has been of such a nature as to require for its proper management the absorption of bonds or long-term obligations of one kind or another which could be used to "fund" the outstanding indebtedness, thereby reducing the quantity of credit granted by the banks and transferring it to the investor in the shape of securities. A packer, for example, who sells abroad $3,500,000 worth of meats, for which he receives, say, £1,000,000 in credit in an English bank, may borrow dollars in New York or Chicago against this balance. With these dollars he buys more animals, and the seller thereof still further enlarges his operations by the use of the proceeds. Thus the "credit" continues its local existence until the claim against the English bank is liquidated by some form of payment. It is because of the lack of such a funding arrangement that the outstanding balance in our favor has grown so great and now constitutes an element of concern in our international trade situation. Those who view our foreign trade as in some sense prejudicial to home conditions of credit or production should constantly bear in mind that the effect of it is not the limitation of bank credit, but its undue expansion, and that the harm resulting from it, if harm there be, is found in the fact that it deprives us of the use of our productive resources, which might otherwise, theoretically at least, be retained and applied at home; while it results under present conditions in unduly enlarging the amount of nonliquid or "frozen" bank credit which remains in existence on the books of our various financial institutions and which consequently exerts an undue effect in the raising of prices for those goods which are in fact retained at home. The situation at present is such that while we export capital we get credit in return. Danger lies in a shortage of capital, not in a curtailment of credit.

Foreign exchange rates.

Conditions as thus indicated are, of course, not favorable to the reestablishment of normal conditions in foreign exchange. During the month of December foreign exchange rates have shown renewed tendency to decline and have in general maintained themselves on a low level. This has not been consistently true throughout the month, sporadic improvement in the values of sterling or other currencies occurring from time to time. Indeed, at about the middle of the month sterling rates on one occasion reached a figure considerably higher than any that had been established for several weeks past, but then, as on other occasions, the existence of the high rate promptly led to efforts on the part of holders of foreign balances to realize, with the result that quotations again became depressed. In the following table are reviewed the principal changes in exchange rates week by week during the past month:

Foreign exchange rates.

	Dec. 4.		Dec. 11.		Dec. 18.		Dec. 24.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.
England	3.4875	3.4550	3.4600	3.4275	3.5375	3.4463	3.5350	3.4875
France	.0607	.0597	.0596	.0585	.0613	.0560	.0594	.0584
Italy	.0368	.0356	.0355	.0349	.0348	.0339	.0343	.0338
Spain	.1316	.1305	.1300	.1266	.1315	.1292	.1298	.1271
Argentina	.3475	.3425	.3550	.3538	3563	.3413	.34625	.34125
China:								
Hong Kong	.6500	.6075	.6000	.5400	.5600	.5450	.5625	.5475
Shanghai	.8500	.7950	.7900	.7050	.7400	.7200	.7250	.7200
Japan (Yokohoma)	.5038	.5038	.5038	.5038	.5038	.4950	.4925	.4875
Germany	.0146	.0140	.0137	.0129	.0140	.0133	.0139	.0138
Switzerland	.1568	.1561	.1557	.1547	.1541	.1507	.1522	.1520
Sweden (Stockholm)	.1945	.1930	.1935	.1920	.1980	.1925	.1975	.1970
Holland	.3050	.3038	.3048	.3040	.3140	.3042	.3125	.3115
Belgium	.064[illegible]	.0631	.0626	.0619	.0634	.0612	.0625	.0619
Canada	.882	.873	.870	.863	.863	.846	.850	.840
Silver in New York	.71	.68⅛	.68	.59¼	.66	.62¼	.65⅜	.62

One factor which during the month has been of special importance in depressing rates of exchange on oriental and silver-using countries in general has been the price of silver bullion. While the so-called "domestic silver" has been maintained in value at or near $1 per ounce as a result of the purchasing policy of the United States Treasury, the price of silver bullion in the open market has been quite steadily downward. It has now reached practically a prewar level, as may be seen from the following brief table:

Price of silver bullion.[1]

Dec. 16, 1913	$0.57⅝
Dec. 15, 1916	.76¾
Dec. 14, 1917	.85⅝
Dec. 15, 1918	1.01⅝
Dec. 15, 1919	1.31½
Dec. 15, 1920	.66

[1] Prices taken from Journal of Commerce, New York. Quoted as official" 1913-1917, as "bar" 1918-19, as "foreign" in 1920.

This fall in the price of silver has had a correspondingly depressing effect on the oriental exchanges, which have in a measure fluctuated in sympathy with changes in the value of silver bullion. In trade with South America and with some other nations which have largely overbought of American goods, exchange rates have become nominal and the purchase of remittances has been practically impossible. Thus for some weeks past foreign exchange transactions between Australia and the United States and between this country and several of the South American countries has been nearly out of the question, the banks declining to furnish dollars in the United States in return for claims upon banks in those markets. The reason for this situation is found in the existence of a large unfunded bank balance in favor of the United States in all those countries, or, what is the same thing, the existence of very large mercantile indebtedness in those countries due to American merchants and constituting a demand for dollars in New York which could not be satisfied through ordinary methods of remittance. The shipment of gold or specie being embargoed, this practically rendered the making of payments out of the question and made it necessary for the banks in effect to suspend the extension of further accommodation to such branches of trade.

Foreign banking.

The situation at the end of the year, both as affecting the United States and foreign countries, is necessarily very deeply influenced by the foreign banking position. A review of the situation abroad appears, however, to afford comparatively little support for the hopes of improvement which were strongly expressed at the opening of the year. At that time predictions were made that in some countries, especially in Great Britain, a strong stand against banking inflation would result in material reduction of outstanding currency and liabilities in the course of the 12-month period, while the attitude adopted by the British Treasury with respect to the currency notes then in circulation appeared to hold out good promise of a sound plan for the handling of public finance in its monetary aspects. The developments of the year scarcely seem to bear out the ideas then suggested, the 12 months of 1920 being on the whole a period of continued inflation and excess both in currency and banking credit. During the year the reserve of the Bank of England has fallen to a materially lower point, going on December 1 to 7.32 per cent, although later showing some recovery from this extreme of depression, followed by fluctuation. A very similar course of events has been witnessed in France, although the situation is better than in 1919, while in Germany banking conditions have appeared to move steadily from bad to worse. The actual course of events in some of the principal banking countries of Europe is indicated in the following brief tabulation, which contrasts conditions toward the close of 1920 with those which existed about a year earlier:

Comparison of conditions of leading European central banks, November, 1919, and November, 1920.

End of month.	Great Britain.			Bank of France.	
	000,000 £.			000,000 francs.	
	Gold reserve.[1]	Bank and currency note circulation.[2]	Deposits at Bank of England.	Gold reserve.[3]	Note circulation.
November, 1919	116	422	120	5,577	37,424
November, 1920	153	458	123	5,492	38,807

End of month.	Italy.[4]			German Reichsbank.		
	000,000 lire.			000,000 marks.		
	Reserve.[5]	Note circulation.[6]	Deposits.[7]	Gold reserve.	Note circulation.[8]	Deposits.
November, 1919	2,074	15,600	2,389	1,091	44,841	11,138
November, 1920	[9] 2,216	18,912	2,493	1,092	76,655	17,340

[1] Held by Bank of England and by the Treasury as note reserve.
[2] Bank notes held as reserve in currency notes account excluded.
[3] Includes gold held abroad.
[4] Items are aggregates for Banca d'Italia, Banco di Sicilia, and Banco di Napoli.
[5] Reserve includes gold, silver and foreign holdings, but not holdings of Treasury.
[6] Government notes not included.
[7] Includes deposits on current account bearing interest, and drafts payable on demand.
[8] Includes Reichsbank notes and Darlehnskassenscheine.
[9] Italian figures apply to end of September.

One of the striking features in the finances of most of the European countries is seen in the continued maintenance of the unfunded or floating debt at a very high level. The existence of this unfunded debt has everywhere had substantially the same effects. It has necessitated a resort on the part of the public treasuries to the banks in order to obtain the support which was needed to carry the obligations pending the time that they could be put into the hands of investors. The advance of the rates of interest on such unfunded indebtedness, which was determined upon in Great Britain and was paralleled in other countries, including our own, has had the effect of encouraging investors to take up and hold some part at least of these short-term public obligations. The success thus had has been only partial, and its incompleteness has given rise to proposals like those recently under consideration in England, which have contemplated the funding of the floating debt through the issue of long-term bonds to be sold in the United States. In France the tendency of public authorities has been to allow the floating debt to run with successive renewals pending the time that arrangements could definitely be made for collecting the reparations which had been levied upon Germany. The slowness of progress toward such collection has been a discouraging element in the situation, but has not brought about an equalization of the budget in France, financiers preferring to continue the negotiations with Germany in the hope of obtaining budgetary relief, of which they stood in need. A new session of the Brussels financial conference, which convened on December 16 and which was charged with immediate consideration of the German reparations question, may possibly prove to be the final stage in the progress of the reparation problem, and so of making possible some adjustment in connection with the short-term indebtedness now employed as a means of carrying the differences between the product of taxation and the total amount of the budget on all scores. During the course of the year it has been recognized as more and more essential that in some way there should be a disposal of this floating debt and that recourse to the banks for current funds to be used in Government operations should cease. Until, however, the whole question of the German reparations is disposed of and a fairly definite adjustment arrived at, no final or positive settlement of the budget or exchange issues is likely to be attained. This is clearly the considered opinion of experts who have examined the situation with the most care.

Financial conferences.

The Geneva conference of the League of Nations, which has been in session during the past month, has practically adopted the plan for international credit which was developed at and recommended by the Brussels conference and which practically follows the suggestions made by M. Ter Meulen. Details of the Ter Meulen plan were published in the FEDERAL RESERVE BULLETINS for November and December. The Geneva conference has provided for the working out of further details of these credit proposals at the hands of an expert commission shortly to be appointed, while in the meantime a new financial conference was summoned to meet at Brussels and began holding its sessions on December 16. Two phases of the Brussels-Geneva scheme are worthy of special note. One is the so-called "Veredlungs-kredit" or "finishing credit." Under it arrangements are to be made for the shipment of raw products from one country to another in which there is an available supply of labor, the understanding being that the product of the industrial operation is then to be worked up into consumption goods, a proportion of which shall be returned to the shippers of the raw material in order that it may be sold on the home market and the proceeds applied to reimbursing those who shipped the material in the first place. The other phase of the plan is the provision of an issue of bonds secured by assets of various kinds which are to be deposited by foreign applicants for credit with the treasury of their own country. Such a treasury, after satisfying itself that the offered securities are sound, is then authorized to issue its own bonds to the would-be borrower. The League of Nations undertakes to oversee all such credits by determining what amount can reasonably be issued in any one country, thus assuring the rationing or proper distribution of such credit as is available in the world to those countries which stand most in need of it. Both plans have much to recommend them, and the principle of both has already been employed in a limited way in the postwar financing of various countries. The question how far they will actually succeed in solving the present international credit problem essentially depends upon the amount of saved or available capital which can be found in the world at large and the rate at which the bonds are issued. The plans, however, ought to be of service in bringing about a better interchange of products and an adjustment of the supply of credit to the demand for it. Much of the success will, of course, be based upon the skill with which these plans are actually developed and put into operation. The extent to which such securities can be widely popularized among investors the world over will be an important element in the working out of the plan. This is already recognized, it being admitted that an extensive bond-selling campaign would be necessary in a country like our own, for example, if the rank and file of investors are to be induced to put their savings into the securities thus offered to them. Underlying the whole question is, of course, the matter of taxation and budgetary control. Unless the countries which issue such bonds are themselves in a solvent condition, their budgets either efficiently balanced or in prospect of being so, the advantage of having government bonds issued on a basis of deposited securities in the way suggested would be comparatively limited. Nearly as good results could probably be obtained in that case through some other method of hypothecating the underlying assets put up by the private borrowers. Failure to bring about an agreement designed to reduce armaments the world over is necessarily a somewhat serious handicap to the eventual success of this credit proposal. Should such a reduction of armaments and corresponding saving of funds be brought about, the proceeds to be applied to reduction of taxation, or to industrial use, or to the lessening of public debt, the effect upon the quotation of the proposed bonds would undoubtedly be a very marked one.

Gold and silver movements.

During the month ending December 10 the net inward movement of gold was $31,051,000, as compared with a net inward movement of $62,519,000 for the month ending November 10. Net imports of gold since August 1, 1914, were $847,380,000, as may be seen from the following exhibit:

[In thousands of dollars.]

	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. 31, 1919	76,534	368,185	[1]291,651
Jan. 1 to Dec. 10, 1920	384,256	316,631	67,625
Total	2,237,406	1,390,026	847,380

[1] Excess of exports over imports.

England furnished $40,550,000, or over 80 per cent, and France $4,672,000 of the $50,481,000 of gold imported during the monthly period ending December 10; Colombia, Canada, the Netherlands, Mexico, and the Dutch West Indies furnishing most of the remainder. Of the gold exports, amounting to $19,430,000, over 92 per cent or $18,006,000, was consigned to Japan, and the remainder principally to Canada, Hongkong, and Mexico. Since the removal of the gold embargo on June 9, 1919, total gold exports have amounted to approximately $670,427,000. Of this total, $192,414,000 was consigned to Japan, $146,555,000 to Argentina, $69,715,000 to Hongkong, $67,396,000 to China, $40,812,000 to British India, $29,778,000 to Spain, and the remainder principally to Mexico, Uruguay, the Dutch East Indies, the Straits Settlements, Canada, and Venezuela.

During the same monthly period the net outward movement of silver was $136,000, as compared with a net outward movement of $282,000 for the month ending November 10. Net exports of silver since August 1, 1914, were $454,707,000, as may be seen from the following exhibit:

[In thousands of dollars.]

	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. 31, 1919	89,410	239,021	149,611
Jan. 1 to Dec. 10, 1920	85,424	110,759	25,335
Total	378,426	833,133	454,707

Mexico furnished $3,399,000, or over three-fifths, of the $5,568,000 of silver imported during the monthly period ending December 10, most of the remainder coming from Peru, Chile, Honduras, the Dutch East Indies, and Canada. Of the silver exports, amounting to $5,704,000, over one-half, or $2,930,000, was consigned to Hongkong, $1,315,000 to China, and the remainder principally to Canada, British India, Japan, and Mexico.

The banking situation.

Principal changes in the condition of reporting member banks between November 19 and December 10 included the liquidation of about 92 millions of tax certificates in anticipation of their redemption on December 15, an increase of about 20 millions in loans supported by corporate securities and a reduction of nearly 150 millions in other loans and investments, composed mainly of commercial loans and discounts. For the first three weeks the reporting banks' aggregate loans and investments show a reduction of 212 millions, while their borrowings from the Federal Reserve Banks went up nearly 25 millions. In connection with December 15 tax payments and Government operations on the same date, including the redemption of about 700 millions of tax certificates, the payment of semiannual interest on the first Liberty bonds and on Victory notes, also the issuance of about 590 millions of 1921 tax certificates, there is seen a considerable increase of all classes of loans, also of the banks' investments in Treasury certificates. During the week ending December 17 the reporting member banks increased their certificate holdings by nearly 120 millions and their loans and other investments by 96.5 millions, while at the close of the subsequent week they report a decrease of 8.9 millions since November 19 in United States securities, increases of 7.3 millions in their loans secured by Government war obligations, and of 59.6 millions in their loans supported by corporate securities, as against a decline of 94.7 millions in their other loans and investments, or a total increase in loans and investments for the five weeks of 9.7 millions. On the other hand, redemption of Treasury certificates by the Government enabled the banks to reduce their borrowings from the Federal Reserve Banks during the week ending December 17 by about 112 millions. These borrowings were, however, resumed on a large scale during the following week, reaching a total of 2,176.8 millions, or slightly over 13 per cent of the banks' total loans and investments on December 24, compared with 2,119.2 millions on November 19, or 12.6 per cent of the banks' total loans and investments on that date.

During the period between November 26 and December 30 the Federal Reserve Banks' holdings of discounted bills fluctuated between 2,776.8 millions on December 3 and 2,596.7 millions on December 17, the Friday following the redemption of nearly 700 millions of tax certificates. During the following week a large volume of tax checks passed through the clearing houses, besides the Government made its first call for funds deposited the week before, and the result is seen in larger scale borrowings by member banks and an increase by 135 millions in the Federal Reserve Bank holdings of discounted bills. Holdings of acceptances declined from 247.7 millions on November 26 to 234.6 millions on December 17 (a low record for the year), but show a gain to 255.7 millions on Thursday, December 30. Treasury certificates on hand show considerable fluctuations in keeping with the amounts of special certificates held by the banks to cover temporary advances to the Government. The total of such special certificates reached the high figure of 93 millions on December 17, following the large disbursements of the Government in interest payments and in redemption of the tax certificates, but declined to 18 millions on the following Thursday. No certificates of this class were held by the Reserve Banks on Thursday, December 30.

A further decrease is shown in the volume of interbank rediscounting, the total of paper held under discount for other Reserve Banks by the Boston, Philadelphia, and Cleveland banks showing an almost continuous reduction from 154.1 to 115.3 millions. The list of rediscounting institutions included at the close of the period under review the Federal Reserve Banks of Richmond, Atlanta, Minneapolis, Kansas City, and Dallas, both the New York and St. Louis banks having redeemed their outstanding rediscounted paper. The Atlanta and Minneapolis banks show smaller amounts outstanding than five weeks before.

Net deposits fluctuated between 1,667.3 millions on December 3 and 1,542.6 millions on December 17. On December 30 the total stood at 1,604.2 millions, or 19.4 millions below the corresponding November 26 total, variations in this item reflecting to some extent the varying amounts of the "float" carried by the Reserve Banks, and to a lesser extent changes in reserve balances carried by the member banks. Federal Reserve note circulation, after some reduction during the first two weeks, shows the usual preholiday expansion, the increase for the two weeks preceding Christmas being 93.1 millions, compared with over 150 millions, for the corresponding two weeks in 1919. During the last week of the year the return flow of Federal Reserve notes to the Federal Reserve Banks set in, and Federal Reserve note circulation shows a decline of over 60 millions for the week. Gold with foreign agencies shows a reduction of nearly 67 millions, this amount representing the balance of the ear-marked gold held until recently by the Bank of England for account of the Federal Reserve Banks, which having been received in this country, is now included with the banks' other reserve holdings of gold. The account "Gold with foreign agencies" now stands at 3.3 millions, the amount of ear-marked gold held for the account of the Federal Reserve Banks by the Bank of France. Total gold reserves, as the result of further net gold imports and deposits by the Treasury, on December 30 stood at 2,059.3 millions, an increase of 35.4 millions since November 26, while total cash reserves show an even larger gain for the period from 2,195.3 to 2,249.2 millions.

The banks' reserve ratio fluctuated between 44.1 per cent on December 3 and 45.5 per cent on December 17, the highest ratio attained during the year. On the following Thursday, mainly because of the large increase in the banks' note liabilities, the ratio shows a decline to 45.1 per cent. Reduction in Federal Reserve note circulation, together with an increase in cash reserves during the following week, caused a rise of the ratio to 45.4 per cent at the close of the year.

BUSINESS, INDUSTRY, AND FINANCE, DECEMBER, 1920.

Further progress in business readjustment has been the characteristic feature of commercial and industrial development during the month of December. Such readjustment has been accompanied by a further decline in prices, which has brought the level shown by the Board's index number at the close of November to 190 per cent of the level of 1913 (a decline for the month of about 8½ per cent). An increase of unemployment growing out of reductions of business activity, which have cut operations to figures varying from 40 per cent to 75 per cent of normal, has affected labor unfavorably. Wage cuts running as high as 20 per cent to 25 per cent in some lines have accompanied the shrinkage of demand, and there has been a falling off of export trade. On the other hand, banking power has been well maintained, normal credit accommodation has been extended to legitimate business, the reserve ratio has grown stronger, and interreserve bank borrowing has been in part liquidated. At the member banks liquidation of loans is beginning and better conditions are foreshadowed.

From district No. 1 (Boston) it is reported that the liquidation in commodities, while drastic, has been on the whole orderly, regular demands for credit have been granted, and the banking situation is stronger.

From district No. 2 (New York) it is reported that money rates have grown easier, wholesale price declines have been the sharpest of the present movement, manufacturing is in reduced volume, and export trade is declining. Retail trade has been well maintained. There has been an adequate supply of banking accommodation.

From district No. 3 (Philadelphia) it is reported that there has been but little change of conditions from the preceding month, manufacturing and wholesaling being quiet, while retail trade is larger than last year.

From district No. 4 (Cleveland) it is reported that money conditions are encouraging, prices are still receding, manufacturing continues to be restricted in volume, railroad efficiency is large, while curtailment of output and lowering of wages are in evidence throughout the iron and steel trade.

From district No. 5 (Richmond) it is reported that business in wholesale and manufacturing lines is inactive, building operations at a minimum, and unemployment prevalent, but signs of improvement are noted.

From district No. 6 (Atlanta) it is reported that most of the cotton crop has been harvested but is being largely held, while farmers generally feel the effect of low prices. Other markets are quiet. Coal production has increased. Lower prices of pig iron have not produced any great amount of business.

From district No. 7 (Chicago) it is reported that liquidation of bank loans is progressing favorably. Farmers are suffering from low prices, but effort is being made to supply the credit they require. Retail trade has held up well, all things considered.

From district No. 8 (St. Louis) apathy in buying is reported. Price cuts have gone further and there is increase of unemployment. Transportation has largely improved and banking conditions are even better than heretofore.

From district No. 9 (Minneapolis) it is reported that grain receipts have somewhat fallen off, while stocks of grain have increased. Flour production has improved. Prices in general have declined. Bank conditions are stronger. Retail trade has held its own.

From district No. 10 (Kansas City) it is reported that there is slowing down of business in nearly all lines, but there is a general belief that conditions will soon be righted and a foundation is being laid for decidedly better business. Only slight evidences of liquidation are to be noted.

From district No. 11 (Dallas) it is reported that there will be a "large carry over" both of debts and commodities into 1921. Movement of goods shows decrease pretty generally, but retail trade has held up well.

From district No. 12 (San Francisco) it is reported that retail trade is good, wholesaling less active, crops moving steadily to market, livestock and allied interests in favorable position, and financial prospects favorable.

Agriculture.—The weather conditions which have prevailed generally throughout the agricultural sections have been favorable for farm operations. The husking of corn has been carried forward rapidly and is practically finished in most districts. In district No. 4 (Cleveland), however, husking has been slow and the warm, moist weather has injured the quality of corn to some extent. The weather conditions have also aided materially in fall plowing and the preparation of the ground for next season's crop. Winter wheat has made a good start and is in a good condition to go through the winter. In some sections there has been some damage from the Hessian fly, but the colder weather will tend to eliminate this evil.

An indication of the extent to which cotton picking has progressed is afforded by the number of bales ginned prior to December 1, which was 10,144,921 in 1920, as against 8,844,368 in 1919. In some sections rains have delayed picking to some extent, while in other sections farmers are reported to be abandoning the cotton because of the decline in price and the relative scarcity of pickers, together with the high wages demanded. In southern Oklahoma cotton picking continues, although reports are to the effect that a considerable portion of the crop will be pastured after the first picking. There has been considerable deterioration in the quality of the lint, due to the wet weather, and the bulk of the ginning is reported to be grading below middling.

Movement of cotton to market has been relatively slow, receipts showing a sharp and unseasonable falling off. In some sections it is reported that sellers have complained that they were unable to sell their cotton at any price unless it was of superior grade. However, cotton farmers in many sections show a tendency to hold as much as possible of their crop off the market, in the hope of an advance in price. Many new cotton storage warehouses have been constructed. The low prices realized for cotton have resulted in considerable attention being given to the reduction of next year's acreage, some planters proposing a decrease of one-third and crop rotation has been urged.

Live stock.—Live stock on farms and ranges in district No. 10 (Kansas City) is "generally healthy and in good condition." The tendency is fast disappearing to abandon the business and sacrifice the stock. As feed is cheap and plentiful, there is more of an incentive to put flesh on the animals in spite of the low prices prevailing. Southwestern ranges and live stock, with few exceptions, "are entering the winter in the best condition they have enjoyed for many years." Receipts of cattle at 15 western markets increased from 1,628,564 head during October to 1,781,261 head during November, the respective index numbers being 162 and 177, as compared with 2,038,786 head, corresponding to an index number of 202 during November, 1919. Receipts of hogs increased greatly between October and November, being 2,624,185 head during November, as compared with 1,836,748 head during October and 2,659,251 head during October, 1919, the respective index numbers being 119, 84, and 121. On the other hand, receipts of sheep were less, being 1,542,477 head during November, corresponding to an index number of 113, as compared with 1,865,330 head during October, corresponding to an index number of 136, and 1,742,668 head during November, 1919, corresponding to an index number of 128. November cattle receipts at Fort Worth, however, were the smallest on record for that month since 1912, and "were generally of an undesirable quality." With declines in the prices of hogs in December receipts for the first half of the month in the principal markets in district No. 10 (Kansas City) again fell below those of a year ago. The St. Paul cattle market was depressed to the lowest levels of this year, in part as a result of large receipts (especially of common and poor grade, which are always hard to market at this time of the year), slackened country demand for stockers and feeders, inadequate stock cars for shipping, and low prices at eastern markets. Heavy marketings and declines in grains and provisions contributed to a decline in hog prices, closing prices for the highest grades on November 30 being \$9 to \$9.65, as compared with \$12 to \$12.25 on October 30.

Other crops.—The tobacco situation has shown but very little change during the past month. The opening of the western dark markets in Kentucky was disappointing to the farmers because of the prevailing low prices, together with the decreased demand. In district No. 5 (Richmond) "the farmers have shown a tendency to sell their off-color and poorer grades, apparently holding their best tobacco until after the holidays in the hope of better prices." Export demand for leaf tobacco is very small, while manufacturers' stocks are reported large and their purchases have been kept at a minimum. The slackening of demand for manufactured goods continues, with the result that some factories are closed while others are running only on part time. The decreased demand is most noticeable in the case of cigars, and the retailers' orders are falling off in consequence.

Fruits.—Shipments of California fruit have been very satisfactory, and transportation facilities have been excellent throughout the shipping season. While the boxed apple crop is placed at 27,633,000 boxes, as compared with 35,415,000 boxes in 1919, approximately two-thirds of the crop is out of the producing districts and the storage holdover much smaller than in 1919. Shipments of oranges are slightly below shipments during the same period last year, but shipments of lemons have been the largest ever recorded in California.

Grain and flour.—The movement of grain to market has varied somewhat at different centers. In district No. 10 (Kansas City), November wheat receipts at the principal markets were about 13 per cent larger than the receipts for the month of October, but were 11.6 per cent below the receipts of November, 1919. On the other hand, in district No. 9

(Minneapolis) receipts at Minneapolis and Duluth were 15.5 per cent below October receipts, but were 47.1 per cent above receipts for November, 1919. It is reported that about 50 per cent of this year's crop is still on the farm as against about 35 per cent at the same time last year. In district No. 10 "notwithstanding the fact that a bumper crop of corn was raised in the big corn-producing States as compared with the small crop of last year, the primary receipts of corn at the markets of this district were about 42 per cent below the receipts in the same period of 1919." In Minneapolis and Duluth corn receipts were well above November, 1919, and more than double receipts for October, 1920. Receipts of oats, barley, rye, and flax decreased as compared with October, but in each case were above receipts for November, 1919. The prices of grains throughout the various markets have shown a decline with only a few minor exceptions. The closing price of cash wheat No. 1 dark northern at Minneapolis on November 30 was $\$1.50\frac{7}{8}$ to $\$1.54\frac{7}{8}$, while the closing price on October 30 was $\$2.13\frac{1}{4}$ to $\$2.17\frac{1}{4}$. In district No. 10 (Kansas City) it is reported that "wheat prices rallied the first week in December after a continued decline in November, but at the end of the second week a weakness was developed which brought wheat down almost to the low level of the last week in November."

The flour market continues dull. "Millers report conditions in their business the most unsatisfactory experienced in recent years," states the report from district No. 8 (St. Louis). Hard-wheat patents were quoted in Kansas City on December 14 at $8.50 to $9, as compared with $9.35 to $9.50 on November 16. Aside from the absence of demand, particular complaint is made of the instability of wheat futures and the resulting disorganization of the flour market. There has been a further slowing down of milling operations in this district. The total output of a selected group of mills in November was 1,285,155 barrels, as compared with 1,970,977 in November, 1919, and operations during the six weeks ending December 11 have been at 53.3 per cent of capacity, as compared with 87.8 per cent for the same period last year. Production in district No. 9 (Minneapolis) during the four weeks ending November 27 was 2,460,495 barrels, an increase of 8 per cent over the figure of 2,279,990 barrels for the four weeks ending October 30, but was only 82 per cent of output a year ago, which was 3,012,465 barrels, the reporting mills representing 75 per cent of the total production in the district. Present operations are at 52 per cent of capacity, as compared with 69 per cent a year ago. Mill operations in district No. 8 (St. Louis) are only 45-50 per cent of capacity. St. Louis mills have effected a cut in the wages of all operatives of 50 cents a day.

Cotton textiles.—Although a slight increase in the buying of cotton by New England mills has occurred during the past month, according to the report from district No. 1 (Boston), purchases have been much below normal, while mills in the Carolinas are said "to have been out of the market for some time" (District No. 5, Richmond). In view of the limited demand and the size of the crop, which, according to final estimates of the Department of Agriculture will amount to 12,987,000 bales, it is not surprising that price declines have been continuously recorded. From November 20 to December 20 there was a decline of slightly more than 10 per cent in the price of spot cotton in New York, while the fall from the maximum price recorded in July amounted to 63.75 per cent. For 22 towns in the Carolinas the Bureau of Markets quoted prices averaging only 14.41 on December 11, and district No. 5 (Richmond) reports that the market was limited even at this low level.

The New England mills are estimated to have been operating at even lower capacity during the middle of December than they were during the previous month, when 30 per cent to 40 per cent of operating capacity represented the average for district No. 1 (Boston). In district No. 5 (Richmond) it is stated that in Gaston County, N. C., where the fine-yarn industry of the district is largely concentrated, the mills have closed down entirely.

The report on cotton consumption issued by the Census Bureau in November reflects the cessation of manufacturing activity, the amount consumed, 332,057 bales, falling below that reported for August, 1914, by 51,943 bales. The cotton consumption of the New England mills for the month ending November 30 was only 100,442 bales, as compared with 168,167 bales reported for August. On the other hand, the reduction in cotton stocks of these mills from 610,311 bales in August to 463,369 bales in October resulted in the increased buying previously referred to and caused a slight increase in stocks held to be registered in November, when 485,651 bales on hand were reported.

Woolen textiles.—District No. 1 (Boston) says that there is "a more distinct note of optimism in the Boston wool trade than for some time, it being estimated that sales for the second week in December amounted to 6,000,000 pounds, about equally divided between domestic and foreign." British Government holdings, however, offered at auction the second week in December resulted in sales of only 1,500 bales out of a total offering of

7,400 bales. While there is as yet no evidence of reaction from the depression prevailing in the market for woolen and worsted textiles, district No. 3 (Philadelphia) states that two or three large mills report increased demand for dress goods, more particularly women's wear. On the other hand, some mills in the district are further reducing the scale of operations or considering a complete suspension of operations. Yarn mills in district No. 3 (Philadelphia) report less business than during the preceding month, even with yarn prices 50 per cent to 60 per cent below the peak points. "Manufacturers of hosiery, underwear, sweaters, etc.," it is said, "have sufficient yarns to enable those who are operating at all to maintain their curtailed schedules." The American Woolen Co.'s auction sale of 9,000 pieces of overcoating (Dec. 14–16) brought prices of about 25 per cent to 40 per cent of those prevailing at the opening level for 1920.

Hosiery.—Practically no business is being transacted in hosiery lines in district No. 3 (Philadelphia), as a result of the uncertainties of price fluctuations which have been aggravated by forced sales of stocks. As a result, it is estimated that the operating capacity of the mills is less than 20 per cent of normal. Returns received for November from 34 reporting firms in the hosiery industry, which sell to the wholesale trade, show a reduction in the value of the product manufactured during the month (selling price) of 74 per cent as compared with the same month in 1919 and 18.8 per cent as compared with the previous month. The value of finished products on hand at the end of the month (selling price) was 95.2 per cent in excess of stocks held a year ago. There was, however, a reduction of 5.9 per cent as compared with the previous month. Unfilled orders on hand at the end of the month (selling price) had dropped 87.5 per cent as compared with November, 1919, and 21.1 per cent as compared with the preceding month. Six reporting firms which sell to the retail trade show a decrease in the value of the product manufactured of 64.3 per cent as compared with November, 1919, and 24.8 per cent as compared with the previous month. Unfilled orders on hand at the end of the month (selling price) were 6.2 per cent less than during the previous month, which had registered a great decrease, amounting to 71.8 per cent, as compared with September.

Underwear.—Similar conditions prevail in the underwear industry in district No. 3 (Philadelphia), many mills being closed, while others are operating at from 20 per cent to 40 per cent of capacity. The mild weather has also interfered with the placing of additional orders for heavy-weight goods, and stocks already manufactured have been sold at a sacrifice. Twenty-one concerns manufacturing underwear, located in district No. 3 (Philadelphia), record a decrease in the value of the product manufactured of 63.9 per cent during November, 1920, as compared with November, 1919, and 39 per cent as compared with the preceding month. Finished products on hand at the end of the month were 322.1 per cent in excess of amounts held at the end of November, 1919, and showed only a negligible decrease of 1.6 per cent as compared with the previous month of October. Orders booked during the month were 25.7 per cent less than during the corresponding month last year and 16.5 per cent less than in October. Unfilled orders at the end of the month were 95.8 per cent below the amounts outstanding at the end of November, 1919.

Thirty-five firms belonging to the National Association of Finishers of Cotton Fabrics, which represent 72 per cent of the white goods, 62 per cent of the dyed goods, and 32 per cent of the printed goods, report the total number of yards finished during the month of November, 1920, as 40,591,156 as compared with 52,833,213 yards finished during the preceding month of October. The percentage of capacity operated during the month averaged 25 per cent for all reporting firms, as against 35 per cent during the preceding month. The firms located in districts Nos. 1 and 2 had an operating percentage slightly below the average, the figures being 21 per cent in each case, whereas district No. 3 reported operating capacity of 38 per cent. The average number of days' work ahead at the end of November was 4.3 as compared with 4.4 for the preceding month.

There has been very little change in the raw silk market during the past month, as there has been no general increase of manufacturing activity to create a buying demand. In Paterson looms are working at 6.7 per cent of their maximum capacity in terms of loom hours as compared with 8.6 per cent last month. Elsewhere in New Jersey the depression is not so extreme, however. Indeed, district No. 3 (Philadelphia) reports a renewal of interest on the part of buyers for dress and waist houses, with the result that some mills which were shut down have resumed operations, two of the largest mills at full time. Improvement, however, is by no means general, many firms in the district showing no signs of increased activity.

Shoes and leather.—Leather prices have suffered further declines, heavy native steer (packer) hides selling for 16 cents and 19 cents per pound on December 15, as compared with 53 cents in August, 1919. Calfskins selling as high as $1 in August, 1919, were quoted at 15 cents the middle of the present month. As a matter of fact, quotations are largely nominal in the absence of any general buying demand.

Reports received from 24 representative boot and shoe manufacturers of New England about the middle of November indicated that conditions were at least no worse in that industry than during the preceding month, six concerns reporting a decreased production, being offset by six which had increased their output, while the other 12 reported conditions to be unchanged. The majority of these concerns reported shipments to be either equal to or in excess of those of the preceding month.

Iron and steel.—Further decreases in the prices of iron and steel products have occurred, and in practically all items the wide "spread" which separated independent price levels from those of the leading interest has disappeared. It is reported from district No. 3 (Philadelphia) that "demand in most lines, more prominent, however, in steel plates and other finished products, is almost entirely absent," and "cancellations have become more prevalent." The unfilled orders of the United States Steel Corporation decreased from 9,836,852 tons at the close of October to 9,021,481 tons at the close of November, the respective index numbers being 187 and 171. The market situation is reflected in the continued decrease in productive activity. Pig-iron production during November was 2,934,908 tons, corresponding to an index number of 127, as compared with 3,292,597 tons during October, corresponding to an index number of 142. Steel-ingot production likewise decreased, from 3,015,982 tons during October to 2,638,670 tons during November, the respective index numbers being 125 and 109. Structural steel bookings during November were 49,250 tons, or 27½ per cent of capacity, as against 45,600 tons, or 25½ per cent of capacity during October. Curtailment of operations in district No. 3 (Philadelphia) has progressed more rapidly during the current month than at any time previous, and almost without exception reports indicate that present operations are only at 40 per cent of capacity, while further decrease is planned. A number of independent steel works in district No. 4 are shut down completely, as are many merchant blast furnaces which have been accumulating stocks of pig iron, while many independent steel plants are operating at not over 50 per cent to 60 per cent. A decided contrast, however, exists between the situation of the independents and the leading interest. The latter entered large orders in past months at the minimum prices and has been enabled to keep up operations on these orders, various subsidiaries now operating at about 90 per cent of capacity. Accompanying the readjustment process in the industry have been wage reductions announced by various independent producers.

Coal.—Production of bituminous coal has continued upon a high level. The November figure was 51,012,000 tons, corresponding to an index number of 138, as compared with 50,744,000 tons during October, and 18,688,000 tons during November, 1919, the respective index numbers being 137 and 50. The output for the week ending December 4 set a new high record for the year, but was bettered during the following week. This was in spite of the fact that on November 29 the priority in the use of open-top cars was withdrawn completely. Demand is not as insistent, with the lessened activity in various industries, and there has been a marked falling off in the export trade, in particular during the past two months. The fuel situation thus is easier in certain sections, so that, for example, in district No. 8 (St. Louis), "daily improvement is reported." Coke has experienced a further decline in price.

Production of anthracite coal during November was 7,519,000 tons, as compared with 8,188,000 tons in October and 7,870,000 tons in November, 1919, the respective index numbers being 102, 111, and 106. There has been virtually no loss of time from transportation difficulties. Efforts of the fair price committee are reported from district No. 3 (Philadelphia) to be holding down mine prices to a fair margin of profit above cost of production and to have been limiting the rehandling of coal by wholesalers. The market is becoming more steady and complaints of shortages from eastern cities are becoming less numerous.

Petroleum.—November crude petroleum production in district No. 11 (Dallas) was 13,347,352 barrels, a new record, as compared with 12,277,297 barrels during October. Production in district No. 10 (Kansas City), however, is commencing to show a slight decline from the peak in October. It is reported that production is in excess of the amount which can be handled readily by the pipe lines, and refiners are temporarily storing some oil. Drilling activities in Texas have been steadily declining since July, and this is partly attributable to the overtaxed condition of pipe lines and storage in many of the most active fields. Operators in some of the fields in district No. 10 (Kansas City) are curtailing developments to some extent, but extensive enlargements of refineries are in progress. The petroleum market in that district is experiencing the usual seasonal dullness, "but there has been no general or sweeping decline in either crude petroleum or in its refined products." A reduction in the price of crude oil of 50 cents per barrel was announced in November in the Texas coastal fields, due to the heavily increased production. Subsequently reductions of 15 to 25 cents per barrel were reported in the fuel oil markets of north Texas.

Nonferrous metals.—Further decrease of activity was noticed in the zinc industry in district No. 10 (Kansas City) during November. Shipments of zinc ore from the Missouri-Kansas-Oklahoma southwestern district during November were 37,470 tons, as compared with 40,479 tons during the same month last year. Shipments of lead ore, however, were somewhat greater than in November, 1919, being 6,368 tons, as against 6,210 tons. The average price of zinc ore was the lowest average price for any month of the year, the price being $40 per ton at the opening of the month and $32.95 at the close. Lead prices dropped $10 per ton. Additional properties shut down in the district, many for three to four months, and mines continuing to operate were forced to cut wages, beginning December 1, from 10 to 25 per cent, reductions to remain in effect as long as present zinc prices prevail. Production of refined copper in district No. 9 (Minneapolis), as reported by companies producing 75 per cent of the total output of the district, was 19,926,725 tons during November, as compared with 20,194,498 tons during October and 25,156,563 tons during November, 1919. The decrease is ascribed to the lack of export demand and prevailing low prices. The number of miners employed decreased 12 per cent from October to November, or from 27,035 to 23,805, as compared with 29,374 for November, 1919. Wages were reduced in Michigan either in November or on December 1, although not in Montana. Trade sources indicate some recovery both in price and in demand in the nonferrous metal markets as a whole at the opening of December, but this was soon followed by a reaction, and lower price levels were reached. The price of lead was reduced by the leading interest about December 3 to 5 cents, which was the outside market level, and about December 21 to 4.75 cents, but demand has continued light in this metal, as well as in copper, zinc, and tin.

Employment and wages.—An increasing percentage of unemployment is noted throughout the country, but the situation is most serious in the eastern districts, especially in the manufacturing centers, where mills and factories are either closed or operating on part-time schedules. Wage reductions have also become more general during the past month, especially in the textile industries, a large percentage of the New England mills having announced wage cuts of about 22½ per cent, effective December 20. District No. 1 (Boston) says: "The closing of the worsted mills in Lawrence the last week in November affected approximately 1,500 employees, while some 16,000 have been affected by wage reductions in the cotton mills; wage reductions in Lowell, Mass., in the cotton mills involve 25,000 employees and in New Bedford, Mass., about 40,000; in Manchester, N. H., upward of 16,000 are affected by reduced wage schedules announced to take effect on January 3, 1921." The Massachusetts Department of Labor and Industries estimates that 25 per cent of the membership of reporting unions were unemployed the middle of December, while in many instances working hours have been curtailed.

In district No. 2 (New York) it is stated that the number of workers is about 20 per cent below the maximum reached in the spring. The principal decline during December occurred in the metal and kindred industries in upper New York State, but in this district also the most serious conditions prevail in the textile and clothing trades, it being estimated that only 5,000 of the 65,000 normally employed in men's clothing factories in New York City are now at work. In factories engaged in the manufacture of women's clothing, about 40 per cent of the 75,000 workers ordinarily employed are still retained. In Paterson employment in the silk mills is about 10 per cent of normal. The New York report further says: "Those idle in Rochester include 9,200 clothing factory workers and 5,000 shoe-factory workers, and the remainder are made up from those formerly employed in the building and metal trades and miscellaneous factory enterprises. In Syracuse 100 factories formerly employing 40,000 persons have laid off 18,725. Auburn, Fulton, and Oneida, providing employment for 15,000 in the early spring, now employ 10,000. The depression in the knit-goods trade has been reflected in Utica and Cohoes, where only about 10 per cent of the maximum number of such workers are now employed. In Troy eight of the nine large collar and shirt factories were closed during December, making idle 10,000 workers, mostly women and girls. In Rome, Ilion, Little Falls, and Herkimer, where about 23,500 persons were employed last spring, 8,500 are now idle. These figures and the more general data for the State as a whole refer in the main to persons working in industrial establishments who constitute in this State about one-third of the wage-earning population. Other types of workers have been much less affected by the slackening in business activity."

In the southeastern districts also considerable unemployment exists, although conditions are not so acute. The textile mills in these sections have likewise reduced wages anywhere from 20 per cent to 25 per cent. District No. 8 (St. Louis) says that although unemployment is much less marked than elsewhere in the country "it has noticeably increased during the past 30 days," the lumber, furniture, clothing, and metal industries being most affected. So far wage reductions in this district have been insignificant.

In district No. 10 (Kansas City) reports indicate "very general unemployment, due in part to the usual winter slowing down but also resulting from lack of demand for local products. The curtailment of operation has been fairly general, occurring in the mining and petroleum industries, in railroading, and to some extent in mercantile establishments." An exception to this situation is noted, however, in the coal mines of Missouri, Kansas, Oklahoma, and Arkansas, where the percentage of unemployment is less than during preceding months. Reports from 144 of the larger industrial establishments in five leading towns in Oklahoma, which employ a total of 17,000 persons, show a reduction of forces amounting on the average to about 7 per cent. Oil refineries in some instances have reduced the number of employees as much as 40 per cent. There have been some reductions in the forces of packing houses, and flour mills in certain sections of the State have reduced their working forces nearly 50 per cent. It is said that there is more unemployment in Colorado than at any time for the past three years, this being especially true for the three largest cities. The building trades, however, are said to be working steadily and the situation in the coal and metalliferous mines is good. In Kansas, although there is some increase in unemployment among unskilled workers, the situation on the whole is fairly good. In Wyoming, also, there has been some unemployment, but it has not been exceptionally pronounced. In district No. 12 (San Francisco) unemployment is increasing, the unemployed in the State of Washington being estimated at 20,000, while in Portland 10,000 laborers are stated to be without work.

Wholesale trade.—During October the decline in the volume of net sales of reporting wholesale firms had become quite general not only as compared with the preceding month, but with the same month a year ago. The downward tendency continued during November has become more pronounced in lines not previously so seriously affected. In district No. 3 (Philadelphia) 26 reporting hardware firms show decreases of 10.1 per cent in November as compared with the preceding month, although sales are still 10.2 per cent in excess of those for November, 1919. The sales of 51 wholesale grocery houses in the district fell 15.8 per cent as compared with a year ago, although showing a negligible increase over the preceding month. It is stated that buying in this field is largely for immediate consumption. As a matter of fact, in volume and number of sales, the wholesale grocery business is probably about as active as a year ago, but price reductions have brought about decreases in the money volume of sales. In district No. 4 (Cleveland) slight reductions are shown in volume of sales of dry goods and grocery firms amounting to 4.2 per cent and 3.8 per cent, respectively, with 3 dry-goods houses and 13 grocery firms reporting. On the other hand, hardware sales (4 firms reporting) are still 16.7 per cent above those for November, 1919, while 3 wholesale drug concerns have increased sales 45.8 per cent as compared with November, 1919. In district No. 5 (Richmond) wholesale hardware houses registered declines of 7.8 per cent in volume of sales as compared with a year ago and 14.9 per cent as compared with the month of October. In this district declines in all lines, namely, groceries, dry goods, boots and shoes, hardware, and furniture were reported, the percentage decreases as compared with November, 1919, being 5.7 per cent for groceries (9 firms reporting), 51.2 per cent for dry goods (8 firms), 35.7 per cent for boots and shoes (9 firms), and 84 per cent for furniture (4 firms). Last year it was said that "at the close of November the reporting firms had large amounts in orders outstanding, but this year the orders reported amount to practically nothing. Back orders with which the firms began the year have been filled as new business fell of, or else have been canceled before shipment could be made. A dry goods wholesaler reported $125,000 in outstanding orders on November 30, 1919, but only $3,000 on November 30, 1920. Another firm selling the same line estimates that they had unfilled orders around a half million dollars at the end of November last year, but had not enough to mention this year on the same date. A boot and shoe dealer reports $15,000 in unfilled orders on November 30, 1920, compared with $200,000 on the same date a year ago. Four furniture makers reported outstanding orders as of November 30, 1920, as but $37,932, compared with $909,430 on the same date last year.

In district No. 6 (Atlanta) average decreases are shown for all reporting lines both as compared with November, 1919, and with the preceding month, the declines being especially heavy in the case of dry goods and shoes from the returns of a year ago. The 11 reporting dry goods firms show average sales decreases of 49.4 per cent as compared with November, 1919, and 9.5 per cent as compared with the preceding month. Similarly 9 wholesale shoe houses register declines of 40.2 per cent and 31.5 per cent, respectively. Twelve grocery firms give average sales 18.2 per cent below the totals for the same month last year and 11.7 per cent lower than those of the preceding month, while the corresponding figures for 9 hardware firms are 9.4 per cent and 12.2 per cent, respectively. Decreases in sales as compared with November, 1919, are heavy for all reporting lines in district No. 7 (Chicago), amounting to 16.2 per cent for 23 grocery houses, 20.1 per cent for 8 shoe firms, and 29.1 per cent for 8 dry goods firms. All concerns report cautious buying and downward price trends. In district No. 10 (Kansas City) the only exception to the downward movement is found in the case of drugs, declines being especially heavy in groceries and furniture as compared with a year ago, while furniture, grocery, and hardware sales are much below October averages. In district No. 11 (Dallas), also, the solitary exception to the general declines reported occurs in wholesale drugs, sales being 8 per cent in excess of those for November, 1919, although 21 per cent below the average for the preceding month, with 5 firms reporting. Four grocery firms report declines of 10 per cent from the preceding month, and 34 per cent as compared with November, 1919; for 2 hardware concerns, the declines are 3 per cent and 27 per cent, respectively; for 3 dry goods firms, 13 per cent and 29 per cent; and for 2 dealers in farm implements, 37 per cent and 47 per cent. In district No. 12 (San Francisco) 137 wholesale firms reporting for 8 lines, namely, groceries, dry goods, hardware, drugs, shoes, stationery, furniture, and auto tires, show average declines as compared with the preceding month and with November, 1919, drugs again being alone in maintaining an increase, having advanced 15.7 per cent as compared with November, 1919. The declines as compared with a year ago amount to 32.9 per cent for auto tires, 23.8 per cent for furniture, 33.3 per cent for shoes, 21.6 per cent for dry goods, 11.9 per cent for groceries, and 8.8 per cent for hardware. Declines from the averages of the preceding month were 47.7 per cent for auto tires, 19.5 per cent for furniture, 28.2 per cent for shoes, 24.5 per cent for dry goods, 14.7 per cent for groceries, 18.1 per cent for hardware, and 11.5 per cent for drugs. Demand is reported to be restricted, buyers filling only immediate needs, while current orders are small and, in some cases, practically negligible.

Retail trade.—The retail trade situation is characterized by a continued lowering of prices and an increased volume of business, due both to these price reductions and to Christmas shopping. The percentage increase of net sales over those of November, 1919, in Boston was 11.4, in Philadelphia 8.5, in Richmond 13.1, and in San Francisco 11.3. The cause of the comparatively large volume of business during November is well expressed in the report from district No. 10 (Kansas City) which says: "While this may reasonably be ascribed in part at least to the seasonal influences imparted by the Christmas spirit, it is quite evident that the attractive prices at which goods are offered are having a good deal to do with the increased volume of sales." It is reported in some districts that prices are now approaching the replacement values, while it is reported in district No. 8 (St. Louis) that "the past 30 days have been marked by numerous and drastic cuts in retail prices, but the reductions are in a large measure isolated and specialized." The department stores are gradually liquidating the large sums which were tied up in stocks when the present declines started, but the outstanding orders are very low and little attention has been paid to the replacement of depleted stocks because the stores are holding out with the view to restocking at lower figures during the early months of 1921. This is shown by the percentage of outstanding orders at the end of November to the total purchases during the calendar year 1919, which is 7.7 per cent in Boston, 4 per cent in Philadelphia, and 3 per cent in Richmond.

Building.—Causes operative in preceding months to hamper the resumption of building continued to prevent a revival of activity. The deterrent effects of high wage levels and high prices of building materials, together with restricted funds for investment have been accentuated by the usual decline to be expected at this season. In New York State and northern New Jersey building contracts for November were $20,000,000 below the October total, but contracts within the district for the 11 months period were $579,000,000, 16 per cent in excess of totals for the same period in 1919. In district No. 4 (Cleveland) the decrease in total valuation of permits for 12 cities from the same month last year was 51 per cent and a slightly greater decline occurred in district No. 5 (Richmond), where totals were 54.6 per cent below those for November, 1919. In district No. 6 (Atlanta) a few cities show increases, but the general trend is downward. In district No. 8 (St.

Louis) Louisville, Memphis, and Little Rock all report declines in the value of permits, as compared with November, 1919. More inquiries are said to have been received by architects, builders, and contractors, but actual undertakings are few. In district No. 9 (Minneapolis) the number of permits amount to 81 per cent of the total for November, 1919, and the valuation is only 33 per cent of that of a year ago. There was a decline in the number of permits in every city except Fargo and Missoula, and declines in valuation occurred in all cities except St. Paul, Missoula, and Great Falls. In district No. 10 (Kansas City) the decrease in the value of permits as compared with the same month last year was 50.6 per cent, although estimated costs of building up to December 1 were 11.5 per cent larger than during the corresponding period last year. In district No. 11 (Dallas) the value of permits issued in 9 leading cities was 42.9 per cent below valuations in November, 1919, although the total number of permits increased from 1,387 to 2,001. As a matter of fact, heavy decreases in Fort Worth, Shreveport, Dallas, and El Paso account for the drop, as elsewhere increases had occurred. In district No. 12 (San Francisco) the decline in building activity has not at any time been so pronounced as in the other districts, and although the value of permits declined 8.7 per cent from October figures, the totals are still 1.6 per cent greater than those reported in November, 1919. It is difficult to estimate the influence of the seasonal change in bringing about the decrease since October, as last year the November figures registered an advance.

Production of lumber has declined generally. In district No. 5 (Richmond) many mills have closed entirely, and a diminished production for November is reported by four lumber associations of the San Francisco district. The largest of these, the West Coast Lumberman's Association, with 121 mills, reports for the four weeks ending November 27, orders of 182,417,000 feet against a cut of 264,305,000 feet. The decline has been due partly to seasonal curtailment of operations, as some of the larger mills are closing for the yearly overhauling of machinery, and in other sections snow has reduced operations. In district No. 3 (Philadelphia) there has been little buying of lumber because builders are unable to secure funds and because the public in general anticipate further reductions. In the Atlanta district the lumber situation shows some improvement. While a number of mills in New Orleans are expected to remain closed until after the holidays, in Alabama many are resuming operations. Increased demand has taken place for southern pine, and in consequence prices have strengthened.

Prices.—The Board's index number of wholesale prices showed a further marked decline during November. In October the number stood at 108 per cent above 1913 prices, in November at 90 per cent. This means there has been a decline of 28 per cent from the peak of last May and of 8.5 per cent during November. Imports and exports are much nearer the prewar level than are commodities for domestic consumption. Further decreases in prices of commodities which were already affected by the decline rather than an extension of price cutting to other industries featured the month. In other words, agricultural products, textiles, hides and leather, and iron and steel products declined very strikingly, while coal, petroleum, gasoline, paper, brick, and cement remained largely unaffected. In the latter groups of commodities reductions are reported here and there in the open market, but quoted contract prices appear to be at approximately the same level as in earlier months. In the case of petroleum, reductions occurred in the Texas coastal field, but in other districts no important changes have been made. In the coal industry prices are reported as easier in December. Contract quotations on leading grades of anthracite and bituminous for November, however, were at the same high level as in October.

In three important industries—cotton, wool, and boots and shoes—where the liquidation process has been of longest duration, further price reductions were made in November, but it was reported from several sources in December that buying had been on a larger scale than in recent months. Falling prices for farm products have led to a withholding of commodities from market in the case of cotton, corn, and tobacco. Reports from all sections of the country are to the effect that lumber prices were heavily reduced during November. Structural steel along with other steel products likewise declined, but cement and brick prices remained firm.

Retail food prices decreased 2½ per cent during November, according to an index number of the Bureau of Labor Statistics, computed from the prices of 22 articles of food in different sections of the country. The rate of decline was only slightly more rapid than during October and September. Federal Reserve agents also report decreases in retail prices during November and December, although in most districts emphasis was placed on the fact that in spite of extreme reductions in certain lines, notably clothing, retail prices as a whole were declining less rapidly than wholesale.

CONDITION OF WHOLESALE TRADE.

Percentage of increase (or decrease) in net sales in November, 1920, as compared with the preceding month.

District.	Groceries.		Dry goods.		Hardware.		Boots and shoes.		Furniture.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 3..	+ 0.8	51	......	......	−10.1	26	......	......	......	......
No. 5..	− 9.2	9	−12.7	8	−14.9	9	−19.3	9	−62.3	4
No. 6..	−11.7	12	− 9.5	11	−12.2	9	−31.5	9	......	......
No. 10.	−17.8	2	......	......	−20.8	2	......	......	−27.3	3
No. 11.	−10	4	−13	3	− 3	2	......	......	......	......
No. 12.	−14.7	28	−24.5	13	−18.1	23	−28.2	15	−19.5	17

District.	Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 10.	−13.9	2	......	......	......	......	......	......	......	......
No. 11.	−21	5	......	......	......	......	−37	2	......	......
No. 12.	−11.5	7	......	......	−18.6	15	......	......	−47.7	13

Percentage of increase (or decrease) in net sales in November, 1920, as compared with November, 1919.

District.	Groceries.		Dry goods.		Hardware.		Shoes.		Furniture.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 3..	−15.8	51	......	......	+10.2	26	......	......	......	......
No. 4..	− 3.8	13	− 4.2	3	+16.7	4	......	......	......	......
No. 5..	− 5.7	9	−51.2	8	− 7.8	9	−35.7	9	−84.0	4
No. 6..	−18.2	12	−49.4	11	− 9.4	9	−40.2	9	......	......
No. 7..	−16.2	23	−29.1	8	......	......	−20.1	8	......	......
No. 10.	−41.2	2	−10	1	− 7.5	2	......	......	−34.2	3
No. 11.	−34	4	−29	3	−22	2	......	......	......	......
No. 12.	−11.9	29	−21.6	13	− 8.8	23	−33.3	16	−23.8	18

District.	Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 4..	+45.8	3	......	......	......	......	......	......	......	......
No. 10.	+ 7.3	2	......	......	......	......	......	......	......	......
No. 11.	+ 8	5	......	......	......	......	−47	2	......	......
No. 12.	+15.7	7	......	......	+16.4	16	......	......	−32.9	15

REPORT OF KNIT GOODS MANUFACTURERS.

Order and production report for month ending Dec. 31, 1920.

Number of mills reporting	38
Unfilled orders first of month (dozens)	54,378
New orders received during month (dozens)	42,875
Total (A) (dozens)	97,253
Shipments during month (dozens)	44,696
Cancellations during month (dozens)	8,592
Total (B) (dozens)	53,288
Balance orders on hand Jan. 1 (A minus B)	43,965

Total production of winter and summer underwear for the 6 months ending Dec. 31, 1920.

	Number of mills reporting.	Actual production (dozens).	Per cent of normal.
July	57	583,190	73.4
August	64	585,071	67.3
September	63	606,257	74.2
October	61	393,422	50.4
November	63	191,831	23.2
December	61	98,671	11.0

For the month (38 mills).

	Dozens.	Per cent of actual production.
Orders	42,875	10.3
Shipments	44,696	10.7
Cancellations	8,592	2.0
Production	65,508	15.8

Twenty-three representative mills which reported for November and December furnish the data for the following tables:

[In dozens.]

	November.	December.	Loss.	Gain.
Unfilled orders first of month	77,988	50,591	27,397	....
New orders	53,515	39,581	13,934	....
Shipments	75,756	41,984	33,772	....
Cancellations	1,910	8,592	....	6,682
Production	109,802	63,384	46,418	....

FINISHED COTTON FABRICS.

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

The accompanying figures are compiled from statistics furnished by 35 out of 59 members of the National Association of Finishers of Cotton Fabrics.

It is probably fair to state that in the absence of having specific detail at hand, but according to our best estimate, it is probably well within the fact that the figures given for the various classes of work would cover approximately the following percentages of the entire industry: White goods, 72 per cent; dyed goods, 62 per cent; printed goods, 32 per cent. The figures given represent reports from exactly the same finishers for the two months, both for the totals and for the subdivisions, and therefore are strictly comparable.

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

Production and shipments of finished cotton fabrics.

	October, 1920.				November, 1920.			
	White goods.	Dyed goods.	Printed goods.	Total.	White goods.	Dyed goods.	Printed goods.	Total.
Total finished yards billed during month:								
District 1	8,013,004	9,014,636	4,924,251	23,220,197	5,326,612	6,915,463	4,261,029	17,517,053
2	4,903,370	1,015,884	3,756,640	12,269,565	4,906,934	1,002,986	2,885,407	11,248,069
3	6,595,292	3,148,126	...	10,352,804	4,419,688	1,866,217	...	6,632,263
5	4,250,607	50,957	...	4,301,264	3,461,194	24,028	...	3,485,222
6	25,160	523,846	...	549,306	28,041	344,978	...	373,019
8	...	...	...	2,140,077	...	...	...	1,335,530
Total	23,787,433	13,753,449	8,680,891	52,833,213	18,142,469	10,153,672	7,146,436	40,591,156
Total finishing charges billed during month:								
District 1	$187,368	$415,783	$308,059	$998,242	$114,998	$316,082	$242,534	$771,396
2	$108,262	$39,465	$223,789	$448,195	$109,032	$34,561	$165,609	$375,723
3	$256,829	$135,549	...	$406,795	$135,680	$104,079	...	$248,429
5	$88,961	$783	...	$89,744	$70,177	$158	...	$70,335
6	$561	$21,087	...	$21,648	$611	$14,648	...	$15,259
8	...	...	...	$33,978	...	...	...	$24,099
Total	$641,981	$612,667	$531,848	$1,998,602	$430,498	$469,528	$408,143	$1,505,241
Total average per cent of capacity operated:								
District 1	32	30	20	26	25	19	20	21
2	44	13	42	40	31	11	34	21
3	82	31	...	53	56	24	...	38
5	55	...	...	55	47	...	...	47
6	...	...	...	33	...	...	...	17
8	...	...	...	81	...	...	...	51
Average for all districts	46	28	23	35	35	19	22	25
Total gray yardage of finishing orders received:								
District 1	6,197,932	6,158,694	2,282,297	15,610,146	4,156,235	4,459,175	2,968,701	12,535,869
2	2,965,270	683,257	994,202	5,916,737	2,470,071	493,028	424,040	4,351,709
3	4,678,913	2,740,454	...	7,902,503	4,307,447	2,533,755	...	7,170,320
5	1,928,287	134	...	1,928,421	2,132,265	44,182	...	2,176,447
6	31,308	135,095	...	166,403	39,461	314,807	...	354,268
8	...	...	...	1,801,109	...	...	...	2,282,315
Total	15,801.719	9,717,634	3,276,499	33,325,319	13,105,479	7,844,947	3,392,741	28,870,928
Number of cases of finished goods shipped to customers (case equal approximately 3,000 yards):								
District 1	2,709	2,536	1,169	12,193	1,977	2,007	1,246	9,229
2	2,592	283	...	5,408	2,287	25	...	3,930
3	2,136	1,460	...	3,867	1,548	1,019	...	2,790
5	1,915	...	...	2,551	1,487	...	...	2,237
6	...	...	...	...	...	...	...	...
8	...	...	...	202	...	...	...	73
Total	9,352	4,279	1,169	24,221	7,299	3,051	1,246	18,259
Number of cases of finished goods held in storage at end of month:								
District 1	5,021	5,416	4,051	24,235	4,771	4,675	3,997	23,605
2	3,321	356	...	9,570	4,030	19	...	9,926
3	500	355	...	5,957	367	372	...	5,790
5	510	...	...	2,164	990	...	...	2,614
6	...	...	...	...	...	...	...	...
8	...	...	...	1,121	...	...	...	1,415
Total	9,352	6,127	4,051	43,047	10,158	5,066	3,997	43,350
Total average work ahead at end of month (expressed in days):								
District 1	4.2	2.1	1.4	2.6	3.0	1.5	2.5	2.3
2	10.6	1.9	10.0	5.0	13.2	.8	4.4	4.8
3	10.0	4.8	...	6.8	7.4	5.2	...	6.0
5	13.0	...	...	13.0	11.8	...	...	11.8
6	...	...	...	2.3	...	...	...	2.8
8	...	...	...	20.0	...	...	...	30.0
Average for all districts	7.3	2.6	2.6	4.4	7.0	2.2	2.8	4.3

FEDERAL RESERVE BANKING DURING 1920.

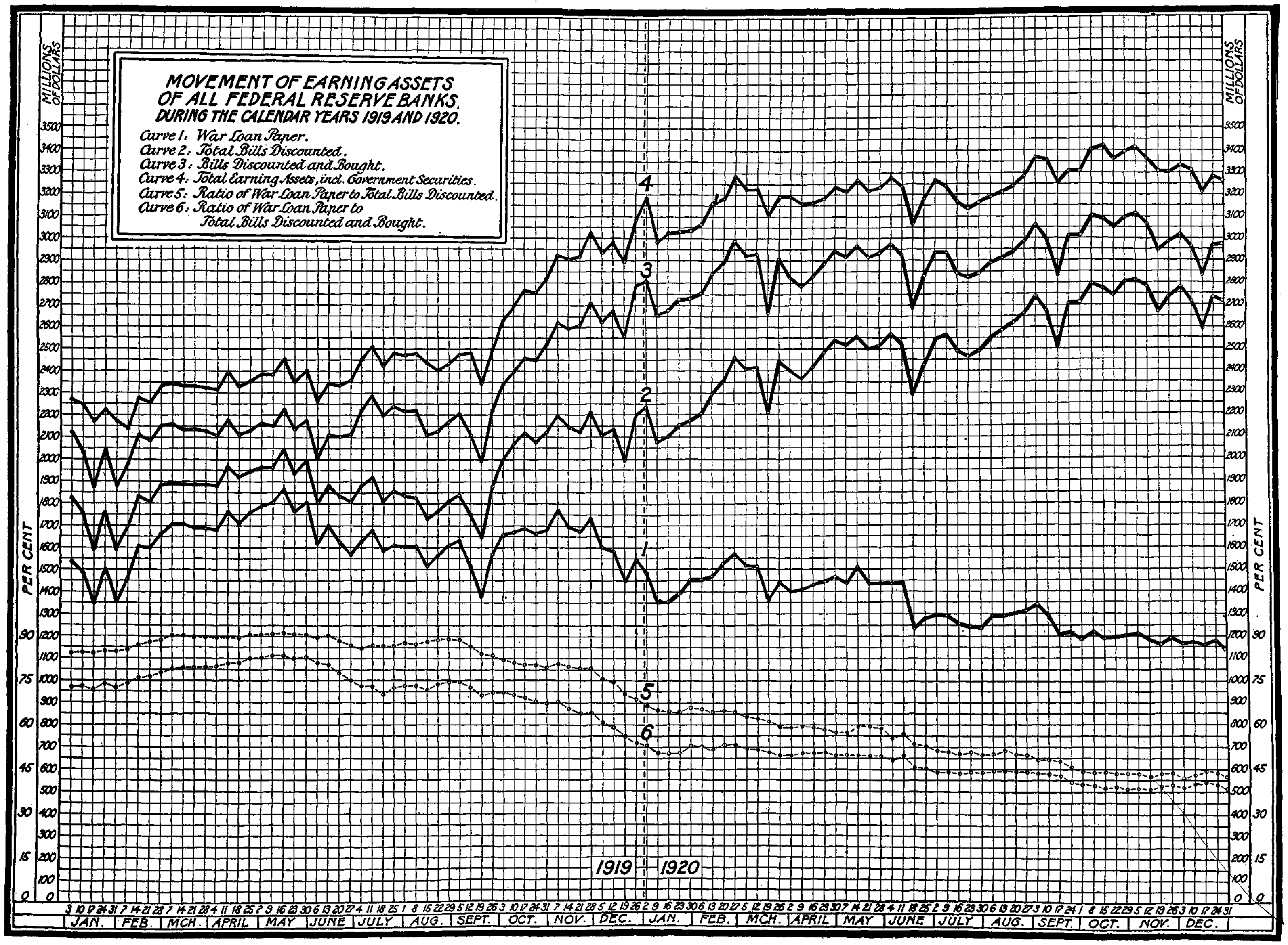
Changes in the condition of the Federal Reserve Banks during the year just passed should be considered in connection with the changes in the credit policy originated about the close of 1919 and continued during the year under review. Early in the year the Federal Reserve Banks raised their discount rates on commercial paper, but the influence of the higher rates is seen in retarding the progress of borrowings rather than in restricting them. In fact, total Federal Reserve Bank holdings of discounted bills, 2,231.2 millions at the beginning of the year, increased by over 300 millions up to the end of April, and by another 200 millions during the next four months. The peak of 2,826.8 millions was reached on November 5, while the total held on December 30, 2,719.1 millions, is 487.9 millions larger than the total held at the beginning of the year.

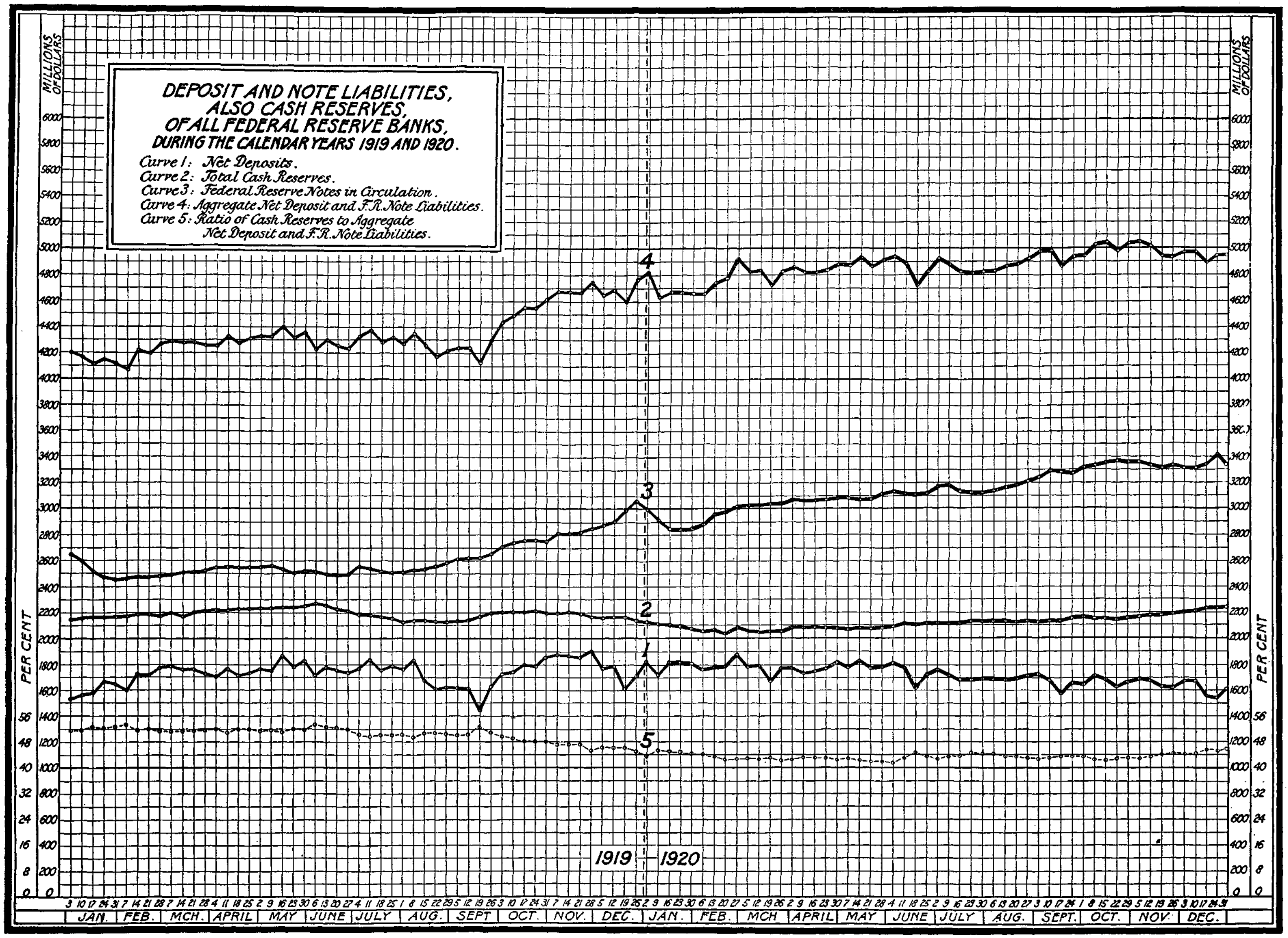
Another important change in policy affected the holdings of paper secured by Government war obligations. Preferencial rates on paper secured by Liberty bonds and Victory notes were abrogated by some Federal Reserve Banks and raised by others to a level more nearly approximating the rate level for ordinary commercial paper. In the case of paper secured by Treasury certificates the rates adopted were in most cases identical with the higher coupon rates fixed by the Government, thus holding out no inducement to the member banks to carry these securities among their own investments and use them as collateral for loans at the Federal Reserve Banks, but rather providing a stimulus to place them in the hands of ultimate investors. The result is seen in the gradual decrease of the amounts of war paper held during the year by the Reserve Banks. From nearly 1,500 millions at the opening of the year the holdings of paper secured by Government war obligations declined to 1,141 millions on December 30. Of the latter total 188 millions, or 16.5 per cent, were secured by Treasury certificates, compared with 461.5 millions, or over 31 per cent, held at the opening of the year—this decrease corresponding in a general way to the reduction in the amount of certificates held by the member banks. Much smaller reductions are shown in the Reserve Banks' holdings of paper secured by Liberty bonds and Victory notes, the December 30 total, 953 millions, being only 70 milllions less than the amount reported at the beginning of the year. On the other hand, holdings of other discounted paper, which at the opening of the year totaled 746.9 millions, show an almost steady growth, being in excess of 1,500 millions at the end of September, and fluctuating between about 1,500 and 1,600 millions during the last three months of the year. At the end of the year, out of a total of 2,719.1 millions of discounted bills, about 42 per cent was composed of paper secured by United States war obligations, against 67 per cent of a total of 2,231.2 millions held on the first Friday of the year.

Holdings of bills purchased in open market show an almost uninterrupted decline for the period under review. From a total of 574.6 millions at the beginning of the year, a decline to 255.7 millions on December 30 is shown, the decrease of 318.9 millions being due largely to the increased demand for this class of bills by savings banks, trust companies, also corporate and individual investors. No appreciable changes are shown in the amounts and classes of United States bonds held.

Fluctuations in the holdings of Treasury certificates during the year are largely the result of the issuance by the Government from time to time of temporary certificates pending collection of funds from depositary institutions. The largest figures are shown for the four Fridays following the quarterly income tax dates, when temporary advances to the Government by the Federal Reserve Banks for the redemption of tax certificates were at their maximum. Total earning assets of the Federal Reserve Banks, which stood at 3,181.8 millions on January 2, reached the high point of 3,422 millions on October 15, and at the end of the year stood at 3,263 millions, an increase of over 80 millions for the year.

Government balances with Federal Reserve Banks were considerably smaller than for the previous year, partly because of a smaller volume of Government expenditures but also because of the development of a better technique in the handling of Government funds. The daily average of Government deposits for 1920 was 36 millions, compared with 99 millions the year before. The lowest amount of Government deposits is shown for August 10, when the total was only 7.4 millions, while on September 17, subsequent to the series of fiscal operations in connection with the payment of the September 15 installment of income and excess profits taxes and the issuance and redemption of tax certificates, the highest figure for the year, 135.2 millions, was reached. Members' reserve deposits fluctuated within comparatively narrow limits, the largest total of 1.943.6 millions being shown for January 16 and the


MOVEMENT OF EARNING ASSETS OF ALL FEDERAL RESERVE BANKS DURING THE CALENDAR YEARS 1919 AND 1920.
Curve 1: War Loan Paper.
Curve 2: Total Bills Discounted.
Curve 3: Bills Discounted and Bought.
Curve 4: Total Earning Assets, incl. Government Securities.
Curve 5: Ratio of War Loan Paper to Total Bills Discounted.
Curve 6: Ratio of War Loan Paper to Total Bills Discounted and Bought.
MILLIONS OF DOLLARS
PER CENT
1919
1920
JAN. FEB. MCH. APRIL MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.


DEPOSIT AND NOTE LIABILITIES, ALSO CASH RESERVES, OF ALL FEDERAL RESERVE BANKS, DURING THE CALENDAR YEARS 1919 AND 1920.
Curve 1: Net Deposits.
Curve 2: Total Cash Reserves.
Curve 3: Federal Reserve Notes in Circulation.
Curve 4: Aggregate Net Deposit and F.R. Note Liabilities.
Curve 5: Ratio of Cash Reserves to Aggregate Net Deposit and F.R. Note Liabilities.
MILLIONS OF DOLLARS
PER CENT
1919
1920
JAN. FEB. MCH. APRIL MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC. JAN. FEB. MCH. APRIL MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

smallest of 1,711.8 millions for November 26. Other deposits, including foreign Government credits, declined from 116.3 millions on January 2 to 22.2 millions on December 30, largely as the result of withdrawals by the Argentine Government of deposits made during the war. Net deposits of the Federal Reserve Banks show a general downward tendency for the year, the December 30 total of 1,604.2 millions being 280.4 millions below the maximum amount shown for February 27, and 264.9 millions below the corresponding total at the beginning of the year, decreases in reserve and net deposits reflecting reductions in demand deposits of member banks, especially during the latter part of the year.

Federal Reserve note circulation, after the usual contraction at the beginning of the year, when a return flow of notes issued during the holiday season occurs, shows an almost uninterrupted expansion from the minimum amount of 2,844 millions on January 23 to a maximum of 3,404.9 millions on December 23. The total of 3,344.7 millions on December 30 marks a reduction of 60.2 millions for the week, but an expansion of 345.7 millions since the beginning of January, note expansion rather than growth of deposits accompanying the increase in the borrowings of member banks. Federal Reserve Bank note circulation shows a practically steady decline from 259 millions on January 2 to 177 millions on May 14, but since that date an increase to 217 millions on December 30 is noted.

During the early part of the year the Federal Reserve Banks lost gold, largely through export to South America and to the Orient, and on March 26 total gold holdings were 1,935 millions, marking a reduction of 128 millions from January 2. Since that time, partly as the result of gold shipments from England in anticipation of the maturity of the Anglo-French bonds on October 15, there has been an increase in gold reserves, the total of 2,059.3 millions on December 30 being only 3.3 millions below the total shown on January 2. During the latter part of the year all the gold held with foreign agencies, except 3.3 millions held by the Bank of France for Federal Reserve Bank account, was returned to this country. Since the gold held abroad was counted as part of the banks' reserves, its transfer from abroad has had no effect on the reserve ratio. Total cash reserves show an increase of 127.9 millions, or from 2,121.3 millions on January 2 to 2,249.2 millions on December 30, the larger part of the increase being due to deposits of silver by the United States Treasury.

Interbank discounting showed a considerable increase about the end of April, when nearly 150 millions of rediscounted bills were carried by the Boston, New York, and Cleveland banks for seven other Federal Reserve Banks. After a slight recession these operations were resumed on an increasing scale early in August, and on October 29 the Boston, Philadelphia, and Cleveland banks reported a maximum for the year of over 247 millions of bills held under discount for eight other Reserve Banks. At the close of the year total discounts of the above three banks included 115.3 millions of paper discounted for five other Reserve Banks in the South and Middle West.

During the year the paid-in capital of the Federal Reserve Banks increased from 87.4 to 99.8 millions, or by 12.4 millions, corresponding to an increase of over 411 millions in capital and surplus of member banks. This gain is due primarily to increases in capitalization of existing member banks and to a smaller extent to accessions of new members.

The reserve ratio of the Federal Reserve Banks, as a consequence of the changes detailed above, is higher at the end of the year than at its beginning, the percentage being 45.4 on December 30, compared with 43.7 on January 2. The ratio was brought up to 44.5 per cent on June 18, and to 45.5 per cent, the maximum for the year, on December 17, the Fridays following two of the quarterly income tax dates.

It may be of interest to note that at the Bank of England the ratio of reserves to note and deposit liability combined, calculated on a basis similar to our own, has been maintained during the year on a level approximately the same as that of the Federal Reserve Banks, though the English ratio is subject to wider and more rapid fluctuations caused largely by Government operations in selling Treasury bills and obtaining ways and means advances, on the one hand, and by redemptions of these short-term obligations, on the other. In general, the ratio for the Bank of England has fluctuated during the year between 40 and 50 per cent. On December 1 it stood at 42.4 per cent, comparable with a ratio of 44.1 per cent shown on December 3 for the Federal Reserve Banks.

On pages 26 and 27 are presented charts illustrating the movement from week to week in 1919 and 1920 of the principal asset and liability items of the Federal Reserve Banks; also changes in the ratio of war loan paper to total discounts and to total bills held by the Federal Reserve Banks, and changes in the reserve ratio.

RECENT MONETARY AND EXCHANGE DEVELOPMENTS IN INDIA.

Indian currency conditions during the war and their relation to the course of the price of silver were discussed in the FEDERAL RESERVE BULLETIN for October, 1919, page 945, where a sketch of India's monetary history and of the machinery of Indian exchange is also given. On December 22, 1919, the committee appointed by the Secretary of State for India to inquire into Indian exchange and currency made its report and its findings were summarized in the FEDERAL RESERVE BULLETIN for March, 1920, page 253. In the December, 1920, BULLETIN, page 1298, there was reprinted the official resolution putting into effect on October 1 the amendments to the Indian currency and coinage acts adopted by the Indian Legislative Council in conformity with the recommendations of the committee. In view of the developments in India since the close of 1919, this appears to be an opportune time for discussing some of the economic conditions underlying the currency and exchange situation confronting India to-day.

REPORT OF CURRENCY COMMITTEE OF 1919.

Just as the Indian currency committee of 1914 dealt primarily with the difficulties caused by the low price of silver, so the committee of 1919 considered methods of overcoming the difficulties produced by the high price of silver. One way of overcoming these difficulties was to reduce the silver content of the rupee, but the committee was disinclined to do that as the Indian population was accustomed to consider the rupee as a standard and would have resented any tampering with its time-honored standard of value. Rather than to debase the rupee the committee chose to increase its legal parity from 15 rupees to a sovereign to 10 rupees to a sovereign, i. e., to make the rupee equivalent to 11.3 grains of pure gold, instead of 7.5 grains as before. The committee chose to link the rupee to the gold sovereign rather than to the pound sterling for the reason that the pound sterling was depreciated and its value subject to fluctuations. When the discount on pounds sterling will have disappeared and the sovereign and the pound will have become once more interchangeable, then the 10 to 1 ratio will apply equally to the pound and to the sovereign. If, on the other hand, the rupee were to be fixed in relation to the pound, the committee felt that the ratio would have to be a very high one in order to prevent the melting of the rupee for its silver content, and in the future, after the expected disappearance of the discount on the pound, this ratio would result in an exaggerated valuation of the rupee. The committee determined that the ratio should be 10 rupees to a sovereign for the reason that this figure is high enough to prevent the silver content of the rupee (165 grains) from exceeding its monetary or gold value for any considerable length of time, since in order to make it profitable to melt rupees at the new rate silver would have to be beyond the melting point of British, American, and French coins, and in the committee's opinion silver could not be maintained at such a high level without causing the melting of these coins and thus increasing the supply and reducing the price of silver.

An essential part of the recommendations of the committee was that the import and export of gold to and from India be free from Government control, because a parity with gold could not be maintained without a free gold market. The committee also recommended the removal of the restrictions on the import of silver and of the silver import duty, as well as the ultimate removal of the export restrictions, although it realized that during the duration of the extremely high prices of silver control over silver exports would have to be maintained. In connection with paper currency it was recommended that the absolute limit on fiduciary circulation, which under the latest regulation was 1,200 million rupees, be abolished and a 40 per cent requirement for the metallic portion of the paper currency reserve be substituted. The ratio of metallic reserve actually adopted is 50 per cent. Furthermore, it was recommended that of the securities held in reserve not more than 200 millions be securities of the Government of India. A provision for emergency circulation not to exceed 50 million rupees to be deposited with Presidency banks in times of money stringency was also recommended. In regard to the gold standard reserve, which is made up of profits from the coinage of rupees and was created for the purpose of stabilizing the exchange value of rupees, the committee recommended that it be continued. This reserve at present consists not of gold but of securities, and the committee felt that its conversion into gold was not practicable or advisable under present conditions, since gold can be used to better advantage in currency reserves. The securities in the gold standard reserve are to have maturities not exceeding 12 months, and a portion of the reserve not exceeding one-half may be held in India. The committee advised the reopening of the Bombay branch of the Royal Mint for the coinage of sovereigns and half-sovereigns, but no action along this line has yet been taken.

GOVERNMENT ACTION SINCE THE REPORT OF THE CURRENCY COMMITTEE.

Since the submission of the report of the currency committee nearly all of its recommendations have been adopted by the Government of India. All restrictions on gold imports for private account were removed on June 21, 1920, while restrictions on gold exports had been set aside even at an earlier date. As early as February the Government began to buy gold at the new rate of 11.3 grains per rupee and to sell drafts on London at the rate of 10 rupees per sovereign. Silver imports were permitted on February 2 and silver exports on July 2, when the price of silver began to decline. On June 21 sovereigns and half-sovereigns were declared no longer legal tender in India and holders of such coins were given 21 days in which to turn them in at the treasuries in exchange for 15 rupees. On October 1, by virtue of an act passed on September 8, sovereigns and half-sovereigns regained their legal tender quality, but at the new rate of 10 rupees per sovereign. The mohur, which has the same gold content as the sovereign, but carries on its reverse the legend "15 rupees," will continue to be accepted by the Government at that rate, the intention being to call in practically all of those coins and to demonetize them. In order to reduce the premium on gold, the Government sold considerable quantities at the Indian bazaars.

MOVEMENT OF THE PRICES OF SILVER AND INDIAN EXCHANGE.

At the time when the currency committee's recommendations began to be put into effect the price of silver was at its highest, being quoted at over $1.31 per ounce in New York. In accordance with this price and the general condition of the market, the Indian Government offered reverse councils, i. e., Government drafts in India on London, for sale at about 2 shillings gold per rupee less cost. At that rate there was an unprecedented demand for these drafts. The main reason for this demand was that large sums had been accumulated by British and other interests in India during the war and that there was a rush to transmit them to England at the favorable rate. India's exports and imports for a period of years and for the most recent months are shown in the following table. One reason for the large imports in recent months is that the stock of merchandise as well as of machinery was depleted during the war period when the physical volume of imports was comparatively small.

British-Indian exports and imports of merchandise on private account.

[In thousands of rupees.]

	Exports.	Imports.	Net exports.	Net imports.
Year ending Mar. 31:				
1910	1,878,795	1,170,600	708,195	....
1911	2,098,820	1,293,540	805,280	....
1912	2,278,442	1,385,748	892,694	....
1913	2,465,472	1,610,159	855,313	....
1914	2,488,788	1,832,480	656,308	....
1915	1,815,917	1,379,289	436,628	....
1916	1,973,802	1,313,403	660,399	....
1917	2,408,868	1,496,220	912,648	....
1918	2,425,500	1,504,200	921,300	....
1919	2,538,450	1,690,350	848,100	....
1920	3,270,274	2,079,993	1,190,281	....
April, 1920	271,814	203,188	68,626	....
May, 1920	258,588	219,588	39,000	....
June, 1920	231,870	260,020	....	28,150
July, 1920	200,000	280,000	....	80,000
August, 1920	210,000	310,000	....	100,000
September, 1920	220,000	290,000	....	70,000
October, 1920	210,000	320,000	....	110,000

India's excess exports of merchandise amount on the average to about 750 million rupees a year. Of this 750 millions something over one-half is offset by payments of interest on investments, of pensions, and of expenditures on account of the India Government in London, this amount being roughly measured by the net sales of council drafts, i. e., council drafts less reverse drafts. The remainder of India's favorable trade balance is settled through imports of gold and silver into India. Generally speaking, the Government sells council drafts in London to the extent that it needs funds transferred to England from India, while reverse councils are sold for the purpose of maintaining the exchange rate, i. e., when the price of sterling drafts in India becomes too high in terms of rupees, the India Government offers drafts for sale, thereby tending to stabilize the exchange value of the rupee. These drafts are taken up in England out of the proceeds of the gold standard reserve, which was created for that purpose out of the profits of the coinage of rupees and is kept largely in London where the payments must be made. The sale of reverse council drafts has the effect of contracting the circulation of India, as the drafts are bought with rupees which are thus returned to the Government. Between January 31 and September 30 the circulation was reduced in this manner from 1,852 million to 1,576 million rupees, a decrease of 276 millions. Since the sale of reverse councils was discontinued on September 23, the circulation has begun to expand, the figure on November 30 being 1,602 millions.

Movement of the price of silver and of sterling and rupee exchange, 1919 and 1920.

[Exchange rates are highest quotations on sight drafts for each month.]

Date.	Average New York price of silver.		New York exchange on England.		New York rupee exchange.		London exchange on India (rupee=24d.).[1]
	Price per fine ounce.	Per cent of average price for 1913 ($0.60641).	4.8665=100.	Per cent.	48.67=100.[1]	Per cent.	
1919.							
January	$1.01558	167.45	4.7585	97.78	35.65	73.25	17$\frac{25}{32}$
February	1.01500	167.35	4.7585	97.78	35.65	73.25	17$\frac{25}{32}$
March	1.01495	167.34	4.758	97.77	35.875	73.71	17$\frac{25}{32}$
April	1.01500	167.35	4.6725	96.01	35.65	73.25	17$\frac{28}{32}$
May	1.08020	178.10	4.6925	96.42	42.50	87.32	19$\frac{7}{8}$
June	1.11402	183.68	4.6350	95.24	42.50	87.32	19$\frac{7}{8}$
July	1.07332	176.97	4.57	93.91	43.00	88.35	19$\frac{7}{8}$
August	1.12386	185.30	4.3525	89.44	43.50	89.38	21$\frac{7}{8}$
September	1.15636	190.66	4.2625	87.59	45.00	92.46	23$\frac{15}{16}$
October	1.20692	198.99	4.3225	86.97	44.00	90.40	23$\frac{15}{16}$
November	1.30446	215.08	4.1625	85.53	44.75	91.95	24$\frac{1}{4}$
December	1.33072	219.41	3.9875	81.94	46.25	95.03	27$\frac{7}{8}$
1920.							
January	1.33899	220.77	3.7875	77.83	46.25	84.48	27$\frac{7}{8}$
February	1.32665	218.74	3.4525	70.94	49.00	100.68	32$\frac{1}{8}$
March	1.27287	209.87	3.9525	81.22	50.00	102.73	30$\frac{7}{8}$
April	1.20576	198.84	4.0175	82.55	47.25	97.08	26$\frac{7}{8}$
May	1.03495	170.67	3.9150	80.45	45.75	94.00	26$\frac{7}{8}$
June	[2] .92789	153.01	3.9875	81.94	43.50	89.38	24$\frac{3}{8}$
July	[2] .92935	153.25	3.95125	81.19	38.50	79.10	22$\frac{13}{32}$
August	[2] .96948	159.87	3.7075	76.18	37.25	76.54	22$\frac{1}{2}$
September	[2] .94510	155.85	3.5625	73.20	34.75	71.40	22$\frac{1}{8}$
October	[2] .84187	138.83	3.5075	72.07	32.50	66.78	19$\frac{5}{8}$
November	[2] .7849	129.41	3.5275	72.48	30.25	62.15	19$\frac{3}{4}$
December	[2] .65503	107.35	3.5275	72.48	28.50	58.56	18

[1] Until Oct. 1, 1920, par of exchange for rupees was 16 pence, or 32.64 cents, but for the sake of comparability percentages have been figured on the new base throughout.
[2] Price of domestic silver, 99.535 per fine ounce.

When the Government was selling sterling drafts at the rate of 28 to 30 pence per rupee, i. e., at about 10 rupees or less per sovereign, the demand for such drafts became so heavy, and the difference between the Government rate and the market rate was so pronounced that the Government was obliged to change the rate from 10 rupees to a sovereign to 10 rupees to a pound sterling. The amount of reverse councils sold up to September is estimated at over 50 million pounds. At the same time, as a result of the cessation of the demand for silver from China, the price of silver was rapidly falling, so that the gold value of the silver in a rupee was no longer equal to its par value as a coin. In other words, the problem from one of how to keep down the price of the rupee became one of how to keep it up.

A little retrospect may throw light on the situation. The rupee before 1893 had a value measured by the value of the 165 grains of silver it contained, that is to say, India was on a silver basis. From 1893 to 1920 India was on the gold exchange basis and the rupee had a gold value for exchange purposes of approximately 7.5 grains of gold. But the value of its silver content rising continually in recent years, the value of the rupee had to be raised, as otherwise it would have been melted for export. As the result of the new parity and of the drop in the price of silver the rupee is in a somewhat anomalous condition. Theoretically, it is linked with gold, but the Government has not cared to give gold in exchange for rupees in view of the great premium commanded by gold in India, though it was the committee's intention ultimately to make sovereigns and rupees interchangeable at will at the 1 to 10 rate.[1] It was feared that to issue gold for rupees would result in a heavy drain on the gold reserves which the Government was not prepared to risk, especially as the gold in the reserves was declining (See attached table on currency reserves.)

Since March, 1920, the value of the silver content of the rupee no longer equaled its value at the gold parity. The practical consequence of the situation is that the rupee, whether paper or coin, is inconvertible token money, so far as foreign trade is concerned, and its exchange value is dependent to a great extent on India's balance of international payments. In a western country, with a free gold market, the falling exchange value of the rupee would have led to the export of large quantities of gold, but in India there was a great demand for gold in the interior, where

[1] Witness the language of the 1919 report: "We consider that the Government of India should maintain the prewar practice of making gold coin available when it is demanded by the public" (p. 29); also, "In normal times, and whenever the supplies of silver permit, the Government of India will doubtless offer all facilities for the conversion of legal tender gold into legal tender silver coin, and *vice versa;* but, in view of the present shortage of silver, we consider that the obligation to give rupees for sovereigns should be withdrawn" (p. 30).

the immemorial custom is to use gold for ornaments and for religious ceremonies, and where also, in view of inadequate banking facilities, the hoarding of gold as a means of storing one's wealth is still prevalent. In view of these facts, gold commanded such a high price in the bazaars of India that it did not pay to export gold even in the face of a very low exchange value of the rupee. Gold was thus used for domestic purposes, while the exchange value of the rupee responded to the demand for foreign drafts. India's trade balance in recent months, as shown in the table, has been unfavorable, which is almost unprecedented for that country and may be due to the large demand for textiles and iron and steel products to replenish the stock depleted during the war. The demand for sterling and dollar exchange has been exceedingly heavy and the value of the rupee has dropped as low as 24 cents in the New York market. The situation is rendered still worse, because wheat exports from India are prohibited, in view of the shortage of food. Recently the Government has arranged to permit the export of 400 thousand tons of wheat at a fixed price in the course of the next 6 or 8 months.

To sum up, a perplexing state of affairs exists in India and future developments are difficult to forecast. It is safe to assume that as soon as the balance of trade becomes favorable to India, a tendency for the price of the rupee to rise will appear. This year's crop prospects are only fair, however, which may delay the recovery of the favorable trade balance. No further decline in rupee exchange is to be expected so long as the export of gold is permitted, since the point has even now been reached where large amounts of gold have been shipped to Japan in payment of balances accumulated during the war. An exchange rate can not well fall below the gold shipment point so long as there is no interference with the free movement of the metal.

The rupee can not, however, be expected to rise to and remain at its par value in exchange transactions until it becomes freely convertible into gold in India, and in turn, convertibility can hardly be expected so long as gold commands a substantial premium in the market. It appears, therefore, that the new ratio of 10 rupees to 1 sovereign will remain purely theoretical so long as the market price of gold will exceed by a considerable margin the statutory ratio of 1 rupee for 11.3 grains of gold, or 10 rupees per sovereign, while the minimum below which the price of the rupee can not fall is the value of its silver content. So that, in effect, the value of the rupee at the present time is more closely connected with the price of silver than with the rupee's statutory gold value.

A paragraph in the Indian currency committee's summary of conclusions reads as follows:

> If, contrary to expectations, a great and rapid fall in prices were to take place, and if the costs of production in India fail to adjust themselves with equal rapidity to the lower level of prices, then it might be necessary to consider the problem afresh.

It appears from the developments discussed in this study that the state of affairs mentioned by the committee has come about and that a reconsideration of its conclusions in the light of these developments may become necessary.

Notes in circulation in India, composition of reserve, and percentage of metallic reserve at close of each month, September, 1919, to November, 1920.

[In thousands of rupees.]

Date.	Notes in circulation.	Metallic reserves.					Securities held in reserve.	
		Silver coin and silver bullion.	Gold coin and gold bullion in India.	Gold coin and gold bullion in England.	Total.	Percentage of circulation.	In India.	In England.
1919.								
Sept. 30	1,718,600	509,700	184,500	29,100	723,300	42.08	170,300	825,000
Oct. 31	1,752,900	509,200	192,500	55,900	757,600	43.22	170,300	825,000
Nov. 30	1,796,700	474,400	235,400	91,600	801,400	44.60	170,300	825,000
Dec. 31	1,829,100	436,700	296,100	101,000	833,800	45.59	170,300	825,000
1920.								
Jan. 31	1,851,500	403,300	351,000	116,200	870,500	47.00	156,000	825,000
Feb. 29	1,830,300	389,900	413,000	46,400	849,300	46.40	156,000	825,000
Mar. 31	1,745,200	398,500	443,700	34,500	876,700	50.23	195,900	672,600
Apr. 30	1,707,400	393,700	453,800	9,500	857,000	50.18	237,700	612,700
May 31	1,669,200	413,700	428,600	7,400	849,700	50.90	311,800	507,700
June 30	1,643,400	455,500	434,800	24,900	915,200	55.69	355,500	372,700
July 31	1,638,700	503,600	446,200	....	949,800	57.96	406,200	282,700
Aug. 31	1,632,700	552,900	391,200	....	944,100	57.82	473,300	215,300
Sept. 30	1,576,300	580,600	361,500	....	942,100	59.75	471,400	162,800
Oct. 31	1,595,800	594,100	[1] 237,500	....	831,600	52.11	680,700	83,500
Nov. 30	1,602,100	599,300	[1] 238,600	....	837,900	52.30	680,700	83,500

[1] On Oct. 1 the gold in the paper currency reserve was revalued at the new rate of 10 rupees per sovereign instead of 15.

Transfer of Subtreasury Functions to Federal Reserve Banks.

During the past few months the Federal Reserve Board and the Treasury Department have been cooperating in effecting the discontinuance of the United States subtreasuries and the transfer of certain of their functions and duties to the Federal Reserve Banks. The authority for discontinuance of the Subtreasuries was given by the legislative, executive, and judicial appropriation act, approved May 29, 1920, which provides, as follows:

INDEPENDENT TREASURY.

Section 3595 of the Revised Statutes of the United States, as amended, providing for the appointment of an Assistant Treasurer of the United States at Boston, New York, Philadelphia, Baltimore, New Orleans, St. Louis, San Francisco, Cincinnati, and Chicago, and all laws or parts of laws so far as they authorize the establishment or maintenance of offices of such assistant treasurers or of subtreasuries of the United States are hereby repealed from and after July 1, 1921; and the Secretary of the Treasury is authorized and directed to discontinue from and after such date or at such earlier date or dates as he may deem advisable, such subtreasuries and the exercise of all duties and functions by such assistant treasurers or their offices. The office of each assistant treasurer specified above and the services of any officers or other employees assigned to duty at his office shall terminate upon the discontinuance of the functions of that office by the Secretary of the Treasury.

The Secretary of the Treasury is hereby authorized, in his discretion, to transfer any or all of the duties and functions performed or authorized to be performed by the assistant treasurers above enumerated, or their offices, to the Treasurer of the United States or the mints or assay offices of the United States, under such rules and regulations as he may prescribe, or to utilize any of the Federal Reserve Banks acting as depositaries or fiscal agents of the United States, for the purpose of performing any or all of such duties and functions, notwithstanding the limitations of section 15 of the Federal Reserve Act, as amended, or any other provisions of law: *Provided*, That if any moneys or bullion, constituting part of the trust funds or other special funds heretofore required by law to be kept in Treasury offices, shall be deposited with any Federal Reserve Bank, then such moneys or bullion shall by such bank be kept separate and distinct from the assets, funds, and securities of the Federal Reserve Bank and be held in the joint custody of the Federal Reserve agent and the Federal Reserve Bank: *Provided further*, That nothing in this section shall be construed to deny the right of the Secretary of the Treasury to use member banks as depositaries as heretofore authorized by law.

The Secretary of the Treasury is hereby authorized to assign any or all the rooms, vaults, equipment, and safes or space in the buildings used by the subtreasuries to any Federal Reserve Bank acting as fiscal agent of the United States.

All employees in the subtreasuries in the classified civil service of the United States, who may so desire, shall be eligible for transfer to classified civil service positions under the control of the Treasury Department, or if their services are not required in such department they may be transferred to fill vacancies in any other executive department with the consent of such department. To the extent that such employees possess required qualifications, they shall be given preference over new appointments in the classified civil service under the control of the Treasury Department in the cities in which they are now employed.

In each of the subtreasury cities there is either a Federal Reserve Bank or a Federal Reserve Branch Bank, and to these many functions of the respective subtreasuries have been transferred. The following subtreasuries have thus far been discontinued, on the dates named: Boston, October 25, 1920; Chicago, November 3, 1920; New York, December 6, 1920; San Francisco, December 20, 1920; New Orleans, January 5, 1921; St. Louis, January 8, 1921.

Branches of Federal Reserve Banks in Minneapolis, Minn., Kansas City, Mo., Buffalo, N. Y., Detroit, Mich., Philadelphia, Pa., Memphis, Tenn., Louisville, Ky., and Little Rock, Ark., have also been authorized to perform subtreasury functions in part, including particularly exchanges of currency or coin. The subtreasury at Baltimore will be discontinued on or about January 15, and those at Cincinnati and Philadelphia shortly thereafter.

Methods Followed by City Banks in Granting Accommodation to Correspondents.

This is the second article[1] presenting the results of a study made by the Division of Analysis and Research of the Federal Reserve Board of the methods pursued by reserve city banks in granting accommodation to their correspondents. The previous article presented the results of data obtained from leading New York City institutions. The present article is based upon information obtained from banks located in Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco, or the Federal Reserve Bank cities of the seventh, eighth, ninth, tenth, eleventh, and twelfth Federal Reserve districts. A similar survey is now in progress in various southern and eastern centers, and the results will be published in a later issue of the BULLETIN.

To indicate more clearly the relative importance with respect to this type of business of the centers considered in the present article, the following table has been prepared, showing loans, both direct and indirect, made by national banks in these cities to other banks and trust companies.

[In thousands of dollars.]

	Number of banks.	Loans.
Chicago	[a] 23	35,346
St. Louis	6	10,781
Minneapolis	6	7,973
Kansas City	13	29,409
Dallas	5	5,278
San Francisco	9	7,311
Total		96,098
Total for all reserve and other cities having a population of over 50,000		474,393

[a] Includes central reserve and other reserve city banks in Chicago.

[1] The first article appeared in the June, 1920, issue, pp. 584-592.

The figures are taken from the annual report of the Comptroller of the Currency for 1919, volume 1, pages 78–81, and relate to December 31, 1918.

The following figures, taken from pages 46–47, show loans by national banks in these cities to other banks and trust companies in the form of bills payable and rediscounts separate from loans on certificates of deposit, as of March 4, 1919:

[In thousands of dollars.]

	Bills payable and rediscounts.	Certificates of deposit.	Total.
Chicago	16,239	284	16,523
St. Louis	8,160	25	8,185
Minneapolis	1,810	1,511	3,321
Kansas City	11,199	1,333	12,532
Dallas	3,923	895	4,818
San Francisco	3,497	2,599	6,096
Total	44,828	6,647	51,475
Total for all central reserve and reserve cities	234,050	17,310	251,360

I. SOURCES OF INFORMATION.

Contents of the file.—The credit folders vary from a very elaborate one of five sections used by a St. Louis bank to mere chronological filing of all statements, reports, memoranda, and correspondence in the case of several banks. The elaborateness of the folder affords an indication of the relative importance placed upon maintaining the impressions on the subject bank in the mind, instead of having them recorded in writing and filed away. The number of borrowing accounts, of course, must be considered in this connection and undoubtedly is an important factor in determining the extent to which each method is used. In the centers under consideration relatively greater use is made of the simpler types of folder than is the case in New York. The officers as a whole prefer to rely more upon their personal knowledge of the subject bank. The folder mentioned above has the following divisions: "Agencies," "statements," "special information," "investigation," and "correspondence." The folders of the other banks differ greatly. A Kansas City institution has a folder of two parts, one containing any correspondence relating to loans made and the other containing all individual statements and reports from outside sources relating to the bank and its officers. A Dallas bank reports the use of a separate file for each bank in the case of correspondents only, statements and data relating to other banks being placed in the miscellaneous file under the name of the town where the bank is located.

As in New York, annual revision of the file is the general practice and, it is stated from Minneapolis, "owing to the fact that loans are granted only one time in the year," this is considered sufficient. One Chicago bank states that it revises files "at least every two years." One bank each in Chicago and Minneapolis report semiannual revision instead.

Experience of other institutions.—In the previous article it was pointed out that in New York it is the general policy to write to the correspondents of the subject bank and request their views and experiences on the subject bank, and also that the banks in general placed considerable stress on the results of these inquiries. In the centers considered in the present article, a similar practice prevails, but less importance appears to be attached to the results. Undoubtedly the closer personal contact which exists in these centers between the lending banks and their correspondents plays a large part in the matter. Two large San Francisco banks make little use of correspondents' expressions of opinion. Another uses reports of correspondents only on country banks, and a Kansas City bank uses this source only when the subject bank is located at some distance and it is not in close touch with the official personnel. On the other hand, it is the general report from Chicago, which would naturally be expected to approximate most closely the New York practice, that "little dependence and importance is placed upon the reports of correspondents." However, some banks of course consider the views of correspondents important, and accordingly we find that one St. Louis bank asks for an expression of opinion from correspondents at least every six months. Banks throughout the territory covered in this article write to correspondents when adverse information comes to their attention, and in this way verify to a certain extent the accuracy of the reports. There is also the general feeling that form inquiries obtain little information specific enough to be of real value. One bank in Kansas City explains "that it is only by giving your own experience and the reason for the investigation that anything of value will be received." This view as to form letters is in accord with that expressed in New York, where various banks reported they frequently had answers so general to be of little service.

Approximately the same information is requested by all banks when inquiry is made of a correspondent. This covers such points as (1) integrity and ability of the management; (2) past relations with the subject bank, whether the account has been satisfactory, etc.; (3) whether any adverse information has come to its attention, etc. Some banks, especially in Chicago, also request information on the borrowings of the subject bank; i. e., the extent of its borrowings, and whether it is a habitual borrower or only appears to borrow for seasonal needs.

In most cases the exigencies of each case determine the number and location of the correspondents of whom inquiry is made. In Chicago, however, it is stated to be the general policy of the banks not to write to banks in the same town, or even in the immediate vicinity, of the subject bank. Such institutions are regarded as either obligated or prejudiced, as the case may be, and their answers influenced accordingly. One San Francisco bank states that the frequency of its inquiries is based upon the extent and frequency of applications for accommodation by the subject banks. In St. Louis a bank never requests a new expression of opinion unless some information has come to its attention which causes it to think a thorough investigation is necessary. One San Francisco institution states that it writes to from two to ten or more banks, depending on the size and importance of the matter under investigation, perhaps writing in certain cases to two or three banks in the principal cities of the State of the subject bank; two or three Chicago banks; two or three New York banks; and one each in Kansas City, Philadelphia, St. Louis, and Boston. The bank communicates regularly with the banks to see if there has been a change in the opinions expressed, and to other banks when new connections are made. Another San Francisco bank checks all depositing banks about once a year through their banks, using the principal depositaries each time, and varying what appear to be secondary depositaries.

Statement of the subject bank.—As a general rule the published statement of the subject bank is considered sufficient. However, there are a few exceptions. Some banks do not regard such statements as sufficiently detailed to be of real service. Thus one bank in Minneapolis has a special detailed form, which it sends to its correspondents every six months. A second objection to the brief published statement is raised by a Dallas institution, which states that "nothing is disclosed relative to the character of the bank's loan account or investment in securities." To remove this objection the subject bank fills out a special form, not only giving the assets and liabilities in detail, but also a full statement of the amounts due from correspondents, together with the amount and name of each bank involved.

While it is the general policy of the banks to compile a comparative statement from statements of the subject bank, many do not do so, and instead merely file the published statements in chronological order. There is much diversity in the comparative statement form used by various banks, as is shown by the following table indicating the data employed by certain of the banks:

1	2	3
Loans and discounts. Overdrafts. Fixed assets. Stocks and investments. Cash.	Loans and discounts. Furniture and fixtures. Other real estate. Cash and sight exchange. Stocks, bonds, securities, etc. Banking house and real estate.	Loans and discounts. Overdrafts. Real estate. U. S. and other bonds. Cash and exchange.
Total assets.	Total assets.	Total assets.
Capital. Surplus and undivided profits. Deposits. Bills payable. Rediscounts.	Capital stock. Surplus fund. Undivided profits. Individual deposits. Bank deposits. Bills payable and rediscounts.	Capital. Surplus and profits. Deposits. Bills payable. Circulation. Due Federal Reserve Bank. Rediscounts.
Total liabilities.	Total liabilities.	Total liabilities.

4	5	6
Loans and discounts. Overdrafts. United States bonds. Premium on U. S. bonds. Other bonds, stocks, etc. Banking house. Furniture and fixtures. Other real estate. Due from banks and bankers. Checks and other cash items. Cash on hand. Redemption fund. Due U. S. Treasurer. Other assets.	Loans. Overdrafts. Expenses. Real estate. Furniture and fixtures. U. S. bonds. Premium. Five per cent fund. Other stocks and bonds. Warrants. Due from— Kansas City. New York. Chicago. St. Louis. St. Joseph. Wichita. Oklahoma City. Omaha. Cash.	Quick assets: Cash and exchange Loans and discounts. Overdrafts. Cust. Accept. Liab. U. S. bonds and C. ind. Liberty bonds. Bonds and securities. Total. Liabilities: Circulation. Due to banks. Individual deposits, demand. Individual deposits, time. Bonds borrowed. Bills payable. Accept. liabilities. Rediscounts. Other liabilities.
Total assets.	Total assets.	
Capital stock. Surplus fund. Undivided profits. Circulating notes. Due to banks. Individual deposits. Demand certificates. Time certificates. Certified checks. U. S. deposits. Bills rediscounted. Bills payable. Other liabilities.	Capital. Surplus. Undivided profits. Interest. Exchange. Circulation. Deposits: Individual. County. Government. Demand certificates. Time certificates. Certificates for borrowed money. Bills payable. Bills rediscounted. Tax account.	Total. Margin in quick. Fixed assets: Banking house. Furniture and fixtures. Other real estate. Other assets. Total. Capital. Surplus. Undivided profits.
Total liabilities.	Total liabilities.	Total capital, surplus and undivided profits.

In addition to the comparative statement form, many banks compile various supplementary data, such as a record of overdrafts, average monthly balances, amounts in transit, eastern funds deposited, gross value of account, cost of account, and maximum and minimum loans. In some cases this is included on the comparative statement form, while in others a special form is used.

Representatives' visits and agency reports.—The majority of reporting institutions do not have a regular staff of field men making personal visits to country banks. The two chief reasons for this are, that (1) the relatively small number of borrowing accounts in many cases does not require the full services of a traveling representative, and (2) the personal contact between the officers of the city bank and the borrowing bank's official personnel, added to a general knowledge of conditions in the territory, is sufficient. In view of this most institutions make a personal visit only when a special investigation is deemed necessary, and then send an officer. Representatives, however, attend bankers' conventions. The information gathered there in most cases is later written up in the form of memoranda and placed in the proper folders. Some banks believe this offers one of their most profitable sources of information, due to the fact that many men will say things which they do not care to put in writing. Only one of the Chicago banks from whom information was obtained maintains a staff of men in the field to call upon borrowing banks, and this was not instituted until recently. Another bank has two men in this work, but the other banks have either found the practice unsatisfactory, or else the number of borrowing banks too small to justify it. The other institutions which maintain regular field men are scattered among most of the other centers included in the study.

Diversity of practice exists with respect to obtaining mercantile agency reports. One bank gets them on all its borrowing accounts at least once a year. In Dallas, Chicago, and Minneapolis also most reporting institutions make use of such reports, explaining they find them of value in gathering information concerning the directors and officers of the subject bank. One Dallas bank considers agency reports of no value because those who prepare the reports know little of the banking business and, like most people, "believe that a country bank is good until it closes its doors." In San Francisco and Kansas City, as a general rule, mercantile agency reports are not obtained, although some banks find them a valuable source of data relative to the official personnel.

II. RELATION OF AMOUNT OF ACCOMMODATION TO BALANCE MAINTAINED—"CLEAN-UP" REQUIREMENTS.

Balances.—Chicago, St. Louis, and Minneapolis banks attach more importance to the minimum balance kept than do the other cities under consideration. One of the large Chicago banks requires a 20 per cent balance and does not consider a balance of $1,000 or $2,500 a basis for loans. Several institutions report they make loans to country banks on a minimum balance of 10 per cent, but require 15 per cent from city banks. One bank fixes a minimum dollar amount of $5,000. This requirement is not without exception, such as in cases where officers, or more especially directors, of the borrowing bank are affiliated with larger institutions that maintain substantial balances with it, or in the case of very infrequent borrowers, which have been carrying accounts for a number of years, where a 10 per cent minimum alone is required. Some Chicago banks have also, of late, been making loans against balances of less than 10 per cent, generally to small banks located in the Dakotas or Montana that have been in need of help but unable to maintain a satisfactory balance. In St. Louis one bank requires a minimum balance of 15 to 20 per cent, and adds that it is only in exceptional cases, such as for an infrequent loan entirely covered by readily marketable securities, to a very strong institution, that the balance is only 10 per cent. A second institution in this city states that while it has no formal rule, but in making a loan takes into consideration fully the value of the account as shown by complete analysis, balances maintained by borrowing banks with it are over 20 per cent. Minneapolis banks report the highest minimum average balance requirements. One bank insists that its correspondents maintain on deposit at all times nearly 50 per cent of their loans. Another institution requires only a 25 per cent balance on deposit during the heavy borrowing season. However, no limit on the maximum loan is set by the borrowing bank's capital or its capital and surplus. In Dallas, San Francisco, and Kansas City the average balance required ranges from 33⅓ per cent to no set limit. Certain San Francisco banks report that they do not insist upon a certain minimum balance, and no reporting bank in that center fixes an absolute minimum, although one institution says a balance of 10 per cent is never found except in the case of a small bank. In Dallas balances average about 10 per cent, the balances kept, of course, being a factor in determining the amount of accommodation to be extended. In Kansas City most reporting banks have a minimum average balance rule, but several explain there are many exceptions to it. The most frequent reason for these exceptions is stated to be crop failure for several seasons in succession, in which case accommodation is granted against a very low average balance.

In most centers there is no special difference in the proportion of the average balances maintained to amount of accommodation granted between large and small banks or banks in different sections served. In Chicago, however, some banks report that the smaller country banks as a rule maintain a lower percentage. The explanation is suggested that they attempt to keep too many city accounts and do not have sufficient funds to make any of them substantial. It was indicated above that recently a number of small banks located in the Dakotas and Montana have kept low average balances. In one or two other cities a bank reports that the small banks have the lowest proportionate balances, but the above-mentioned center is the only one where the statement is generally made.

Overdrafts do not appear to offer an important problem throughout this territory. One Chicago bank states that it looks with disfavor upon small balances and overdrafts, but that there may be offsetting circumstances. Another institution in the same city states that the relation between small balances and overdrafts depends entirely upon the net earnings analysis of the account in determining whether a loan should be made. In St. Louis one bank says when overdrafts are frequent it insists upon a discontinuance of the practice under penalty of closing the account. A second St. Louis institution, however, does not "believe it always indicates an unsatisfactory condition of affairs."

Character of borrowing.—With very few exceptions requirement of an annual "clean-up" is the policy of all banks included in the present study. One Chicago institution reports that during the last two years it has not required this from its good borrowing accounts because of the heavy Government financing and the unsettled financial conditions. Minneapolis banks generally require all country correspondents to completely liquidate their loans at least once a year. In this district the heavy borrowing occurs in the fall, commencing in August when the harvest begins. Loaning continues until the crop is marketed, and liquidation takes place in October, November, and December. Some loans are also made in the spring to finance seeding, but this seldom occurs except after a previous bad season. These loans necessarily are not liquidated until after the crop is marketed. In St. Louis, a "clean-up" is insisted upon by or during December from banks in the cotton territory, while banks financing other crops than cotton have the "clean-up" time varied to suit the marketing season. One bank in this city states that its correspondents borrow between April and August, and liquidate between October and December, remaining out of debt until the following April. In Kansas City, Dallas, and San Francisco all but one reporting bank insist upon an annual "clean-up." One Dallas bank states it insists on a periodical "clean-up," and does not think the borrowing institution should be back in the market borrowing money for a period of five or six months. The one bank having no formal requirement regarding annual liquidation adds that in case a "clean-up" is not made it ascertains the reason thereof. One bank in Kansas City reports that it requires a "clean-up" once or twice a year, depending upon the nature of the business of the borrowing bank. "Our California banks only borrow during the crop-moving period," states a San Francisco bank.

The usual method of insisting on a periodical liquidation of all loans is by making an annual "clean-up" part of the agreement covering the loan. One bank located in Chicago adds emphasis by increasing the rate of interest with each renewal. Several institutions require a reduction of the loan with each renewal, but this requirement depends upon the exigencies of the case. One Dallas bank states that "we try to impress upon them at the time the loan is made that a bank is not chartered for the purpose of borrowing money, except for specific purposes—first, the making of a crop under adverse conditions, and second, taking care of the crop after it is made." The importance of prompt liquidation in connection with their credit standing is explained to borrowers by a Kansas City bank.

By far the greatest volume of loans are for seasonal needs, although during the past two years more loans for other than seasonal needs have been made than previously. These have been occasioned mainly by Government financing, and, among Chicago banks, by land settlements this year. Unusual withdrawals of deposits, of course, call for special loans. Several banks report that when application is made for a loan other than to help in financing crops, arrangements are made for each special case. Only one bank in the territory, a Kansas City institution, reports that it makes a general practice of lending for other than seasonal requirements. The centers included in the present study thus stress lending for seasonal purposes only, to a greater extent than is the case in New York.

III. FORMS OF ACCOMODATION.

Security of the loan.—As in New York, the greater volume of accomodation granted by city banks to their correspondents is in the form of loans against the borrowing bank's note secured by collateral rather than through rediscount of commercial paper for them. The percentage of unsecured loans varies considerably both among the various centers and among the institutions in each center. The highest figure given is by a large San Francisco bank, which places its unsecured loans at 75 per cent of the total accommodation extended, and its rediscounts at 5 per cent. Other San Francisco institutions all show a much lower proportion, and one requires security for all advances. In Kansas City the percentage of unsecured direct loans varies from five to fifteen. One Dallas bank has about 10 per cent unsecured, but another requires either the indorsement of the board of directors of the borrowing bank or collateral for the face amount of the loan, and in the case of the smaller banks, the full limit of the State law, which is one and one-half times the face value and frequently guaranty of the board of directors. Loaning against an unsecured note is generally not favored in Chicago, and banks which do not furnish collateral are required to have the guaranty or indorsement of responsible individuals, usually the directors of the borrowing institution. Loans of Minneapolis banks reporting are all secured, while in St. Louis the proportion of unsecured loans ranged from virtually nothing to 5 per cent.

In these centers, also, as in New York, the majority of the collateral consists of bills receivable. In Chicago, the "overwhelming preponderance" consists of them, one of the largest institutions showing 90 per cent and another 85 per cent of its collateral in that form. One institution, however, located in San Francisco, states that it has only one loan against which the collateral is bills receivable. Some institutions instance the less work involved in checking financial statements, collecting at maturity, etc., in the case of securities collateral. On the other hand, several institutions report that they have no loans secured by stock and bonds other than Liberty bonds. In Minneapolis, stocks and bonds other than Liberty bonds are used as collateral only to a neiglible extent. There appears to be a decreasing volume of loans made against Liberty bonds, although some banks still report that as high as 50 per cent of the accommodation which they have extended is secured in this way. The proportion varies between banks, rather than between cities. One or two institutions at present are making no loans against Liberty bonds, while other banks prefer them to any other class of security, and accordingly request Liberty bonds as collateral when the borrowing bank has them. In some institutions it is noted that a better rate is given on a loan so secured than on one secured by bills receivable. Some institutions prefer securities to bills receivable as collateral, the Chicago banks being stated to be about evenly divided on this point.

The margins which are required vary somewhat between banks. Some banks in Kansas City and Dallas loan on Government obligations to the full face value, thus relying upon the maker's name. In various other cases 5 or 10 per cent over the market value is required, while in Minneapolis the amount is given as 20 per cent of the face value to conform with Federal Reserve Bank practice. In Chicago practice is to require a 15 per cent margin on Liberty bonds, 5 per cent on Victory notes, and loan to the full amount on certificates of indebtedness. Loans on other stocks and bonds in general carry 20–25 per cent collateral, and the margin is frequently the same as on bills receivable. Some banks, however, require only a 10 or 15 per cent margin. One bank in Chicago varies its requirement on bills receivable from 20 to 30 per cent in the case of large or good-sized banks to $1\frac{1}{2}$ to 1 in the case of small banks. In Minneapolis the 50 per cent margin generally required by all banks on bills receivable is increased by one bank to 100 per cent in the event of a renewal, but is more in the nature of a penalty for slow payment than a safeguard for the loan. In special circumstances, of course, margins will be increased, and the full limit of the State laws may be required.

Use of bills receivable.—Some institutions from which data were obtained do a very large rediscount business. Two banks report that 60 per cent or more of the total accommodation they extend is in this form. One of these banks is located in San Francisco and the other in Kansas City. One bank in Dallas estimates its percentage of rediscounts at 35 per cent. Such high percentages are the exceptions, however, rather than the general rule, and in most institutions the percentage of rediscounts does not exceed 5 or 10 per cent, and especial care is taken to safeguard the bank against any loss, one bank reporting that its rediscounts amount to little more, in view of their protection and recourse, than a loan against very high-grade collateral. Some banks rediscount on special occasions, such as when, after buying commercial paper in the market as an investment for a country bank, the latter finds itself in need of funds and requests the city bank to rediscount the paper for it. One bank which does this to some extent explains that at the time the paper is originally bought for its correspondent it does not obligate itself in any way, such as with a repurchase agreement. The condition of the correspondent at the time repurchase is made is the governing factor, not the circumstances under which the paper was previously bought. "With commercial paper," however, it is stated from Chicago, "there is no objection in any instance to rediscounting."

Various reasons are found for the rediscount of paper by banks with their city correspondents instead of obtaining a straight loan with it as collateral. A Chicago bank states that "usually we make an exception and rediscount instead of insisting upon a collateral loan to meet the wish of a banker who is still old-fashioned in this respect and objects to borrowing on the bank's notes." One bank rediscounts commercial paper when the statement of the maker warrants a larger advance than the country bank can legally make, and a second institution where the limit of bills payable which the bank can make has been reached. One San Francisco bank states, "if bank's own commercial paper, we prefer to rediscount; if not, we consider their note secured by bills receivable just as acceptable." On the other hand, a Chicago institution which in the past has been doing a considerable rediscount business says, "more and more we are insisting upon bills payable secured by their bills receivable."

No noticeable change in general is remarked in the methods of securing accommodation since 1914 by the banks from whom data were obtained. One Minneapolis institution believes that the member banks of the Federal Reserve system tend to reserve their eligible paper for use in connection with borrowings at the Federal Reserve Bank, while city banks "have adopted the practice of accepting as collateral any good customer's notes of a sound borrowing bank, merely insisting on the ratio of one and one-half to one of collateral against loans." One Kansas City bank, however, notices just the opposite change, stating "we have asked our correspondents to give us eligible paper whenever possible, and there has been a measurable response to this request."

Maturity of loans.—There are considerably less demand loans made in this territory than in New York. In Kansas City, Minneapolis, and St. Louis all the banks from whom data were obtained report that they make no demand loans to banks. In Minneapolis it is further explained that the conditions under which borrowing occurs, namely in summer and fall to be repaid after crops are marketed, are especially adapted to time loans, and hence there are no calls for demand loans. In Chicago, San Francisco, and Dallas most banks make such loans only in exceptional cases, for example where the borrowing bank requires funds for a few days while getting paper rediscounted at the Federal Reserve Bank. One San Francisco bank, however, has about half its bank loans on demand, but all other reporting banks which have any such loans at all, show only a very small proportion. Some banks which accept a demand note from a country correspondent return it within a few days in case the loan is not liquidated and request a note with a definite maturity. The maturities for time loans vary from 30 days to 6 months, with the majority for 90 days. As almost all the accommodation in this territory is for seasonal needs, the loans made for 90 days may at times if necessary be renewed for another 90 days, at the end of which time harvesting will be completed, and crop returns available. A few institutions, all in different cities, report that they make no loans for over 90 days, believing that the country bank should not need funds from outside sources over three months in order to make the necessary advances to borrowers in its own territory.

Holding of collateral.—Collateral is usually held by the lending bank. Infrequent exceptions are made by banks when there is no question as to the integrity of the management of the borrowing bank. Kansas City is the only city in which the banks consulted state that they do not at any time allow the correspondent to either hold the collateral itself or deposit it with another institution which acts as agent for the lending bank. Where collateral is held by a bank other than the lender a trust receipt is generally employed. One bank allows the borrowing bank at times to set aside certain securities and bills receivable in the name of one of the directors of the borrowing bank, rather than with some other institution. This variation from the general practice is due to the fact that it saves the trouble and expense of shipping, insurance, etc., and also facilitates substitution. Facilitating substitutions of course decreases in importance as the proportion of collateral consisting of Government obligations increases. A reduction is not usually required in the case of substitutions. Some banks send the collateral back after examining it under a trust receipt, while several banks send maturing paper to their correspondent in order that prompt collection may be made. One institution never allows other banks to hold the collateral covering any of its loans unless it consists of warehouse receipts and substitution is to be allowed, in which event a bank in the locality of the borrowing institution acts as agent of the lending bank and holds the collateral. No difference is noted in practice in this regard as between the different sections of the country by the banks from whom data were obtained.

Special forms of accommodation.—The striking difference in the form in which accommodation is granted in the centers considered here and in New York is in the relatively large use of the certificate of deposit as a means of borrowing in several of the western centers. Reference to the table given at the opening of the present article indicates that the centers fall into three classes: (1) Chicago and St. Louis, which show a very small use of certificate of deposit borrowing; (2) Dallas and Kansas City, where greater use is made, but much less than in (3) Minneapolis and San Francisco, where the proportion for national banks is somewhat less than half. Some banks in Chicago, St. Louis, and Kansas City have a formal rule against such loans. One Chicago bank which loans a very limited amount in this manner states: "We are making every effort to educate bankers in the practice of borrowing in the regular way." Another institution which shows special consideration to one or two banks says their institutions have formed a habit of borrowing money by the issuance of certificates of deposit for the express purpose of not wanting to show the indebtedness under bills payable. As was above indicated, this is exactly why many banks included in the present study and practically all New York banks oppose the making of such loans. In some States, such as South Dakota and Wisconsin, loaning on certificates of deposit is prohibited by law, in which case notes are generally used instead. In Minneapolis and San Francisco, however, certificate of deposit borrowing forms a large percentage of the total accommodation extended. One bank in San Francisco extends perhaps almost 90 per cent of its accommodation to other banks in this form, the California banks in general issuing their certificates of deposit. The average in Minneapolis is between 80 and 90 per cent. In Minnesota, North Dakota, and Montana this is practically the universal method. Some banks make no distinction between the two forms of obligation, and regard certificates of deposit and notes as of the same value. A few banks note a variation in the form of accommodation at different times of the year. One bank in Dallas states that "during the marketing season, banks may more frequently issue certificates of deposit or the bank's obligation indorsed by directors for temporary advances. During the growing season, the bank's obligation supported by collateral is more frequently used, the loan covering a longer period. Paper of longer maturities offered in both spring and summer months; shorter maturities during the fall and winter."

The two other special forms of accommodation more commonly found, i. e., borrowing by the personal note of the directors or officers and sale of securities or paper with a repurchase agreement are reported to be found to a limited extent, as is the case also in New York. A few banks buy paper with repurchase agreement, and a larger number buy securities, especially Government obligations, in this way. However, there is no general policy as to this, and the banks reporting this practice are widely scattered, while they report that such transactions are infrequent.

IV. PARTS OF THE ANALYSIS.

Analysis of bills receivable offered as collateral.—Credit information concerning, or statement of the maker, frequently accompany paper offered when obtaining accommodation. In Chicago the estimated net worth of the several makers or indorsers of each loan pledged is required. One Dallas bank observes that "it is nearly impossible for us to analyze bills receivable. On all that we can analyze, we secure the commercial rating." One Kansas City bank in most cases obtains a memorandum of the assets and liabilities of the maker of unsecured loans in excess of $1,000. Another Dallas bank and a San Francisco bank also vary the analysis according to the size of the paper, requiring definite information or making separate inquiries on notes of considerable size, in addition to the statement of the applying bank as to the maker's character and line of business. The extent to which the receivables are scrutinized differs, of course, also with the standing of the subject bank. One Chicago institution frequently checks up on its bills receivable, and with the permission of the borrowing bank asks for information from other banks located in the same town in regard to the financial responsibility and moral risk of the makers.

The borrowing bank's statement.—The extent to which analysis is made of the statement of condition varies considerably. One bank states that "we are relying more especially upon our knowledge of the management and general conditions, needs of the community, etc., in the particular location from which request is made for accommodation." This same thought will also find expression in the exceptions which are allowed to the ratios between the various items which are customarily considered in analyzing the statement. These items were indicated in the preceding article, and include the volume of business, the character of assets, and the borrowings. One Dallas bank gives little attention to the relation between deposits and capital investment for the reason that in its territory "deposits rarely reach a point out of proportion to capital." In Chicago one bank refuses to loan to institutions carrying fixed asssets in excess of 50 per cent of capital and surplus, or when the ratio of deposits to capital investment exceeds 10 to 1, explaining in such cases that they believe the borrowing bank should pay in additional capital instead of borrowing money. It is not the general rule to fix even a rough line of credit for correspondents. Most institutions prefer to consider every application on its individual merits rath r than to have previously made commitments. In a few cases a maximum line is established above which the lending bank will not consider applications for loans, but in these cases the maximum line appears to be rather for the use of the lending bank, and does not represent a commitment on the part of the latter. Most institutions which establish a maximum line of credit limit it to 100 per cent of the capital and surplus, although one institution in Chicago has placed it at 50 per cent of the capital and surplus. Another institution, located in St. Louis, states that it determines the loan limit by "capital investment, liquidity, and amount of balances maintained."

A few institutions attempt to gather information on "charge-offs" by the country banks they serve in relation to the growth of undivided profits. While such information, if obtained, is significant, there are, however, as one bank in Dallas explains, other factors which may affect the undivided profits, such as overhead expense being out of proportion to gross profits, or the policy of the management in the payment of large dividends, thereby preventing the accumulation of a "healthy" undivided profits account. This particular bank placed little emphasis on the growth of the undivided profits account from year to year, and refers to the fact that it, like most banks, has no special facilities for obtaining such information. One institution requires figures as to profit and loss operations, showing charge-offs, etc., when they believe the institution is carrying slow assets. Another institution states it "considers a bank that charges off losses and shows no gain and no undivided profits, a better risk than one that shows gain and undivided profits without charging off."

Handling of the account—Experience of other banks.—The way the borrowing institution handles its account with the lending bank naturally is relied upon much more than the experience of other institutions with the account. In drawing conclusions, important considerations are the average balance, the overdrafts and drawings against uncollected funds. One bank attaches importance to the manner in which the subject is dealt with by other institutions, in the event that another bank has the principal account of the country bank. Naturally any adverse reports from other institutions receive consideration, and are generally made the basis of an investigation. The manner in which the account is handled on the books is also an important factor in deciding whether or not a bank will require a reduction of a loan or permit a substitution of collateral.

A varying amount of importance is attached to advances made by other institutions. In most cases the other loans are added to the amount of the loan applied for, the total then being considered in relation to the total assets of the applying bank to see if its condition warrants the additional advance. One bank states that the fact that some conservative, successful bank had advanced funds to the applying bank, would tend to make it give the application more favorable consideration than otherwise. In Chicago loans by other banks are given little consideration, unless the aggregate is over 100 per cent of the capital and surplus of the applying bank.

Fluctuations in Loans and Discounts of Eleven Banks of New York City, 1913-1919.[1]

PART I.

The present study of fluctuations in loans and discounts is part of a general review of changes in condition of 11 banks of New York City, which courteously permitted excerpts to be made from their daily statements for a period of seven years, in order that an examination might be made of day-to-day fluctuations in the principal items under assets and liabilities. Although the total resources of the seven national banks and four trust companies included in the study approximated $4,300,000,000 at the end of 1919, the statistics are limited in scope when compared with the weekly returns made by the clearing-house

[1] Prepared under the direction of A. P. Youngman, Divison of Analysis and Research.

banks of New York City. Their chief value lies in the fact that they are based upon a day-to-day survey of changes in condition of individual banks for a period during which our banking system has been subjected to radical changes, and has been forced to meet extraordinary demands growing out of war.

OUTLINE OF STUDY.

The first part of the study is confined to an examination of percentual changes in the loans and discounts of each bank for the period 1913–1919. The second part deals with the borrowing activities of these banks as shown by outstanding bills payable and rediscounts for the years 1918 and 1919. The data for 1917 are incomplete for four banks, and are not therefore given in as much detail as for the two later years.

Following these surveys of the course of loans and discounts and of rediscounts, similar examination will be made of percentual changes in individual deposits and in bank deposits for each bank. In this connection, the shifting importance of *other investments* as contrasted with loans and discounts can be further discussed. How did the war, for example, affect the distribution of investments as between loans and discounts on the one hand and securities on the other? Did it accentuate the tendency of those banks and trust companies whose direct investments in securities were already great, to expand this item more rapidly than did other banks? Or did banks previously unaccustomed to invest directly in securities in large amounts expand their holdings with greater relative rapidity? In short, did the characteristic emphasis of the several banks in matters of investment policy alter during the war or did it tend to persist in so far as war-time exigencies permitted? Generalizations based upon returns compiled from many banks can not, of course, answer such questions.

EXCLUSION OF OTHER INVESTMENTS.

In attempting to follow the movement of loans and discounts for each bank, a truer picture of banking activity will be given if *other investments* are excluded. Not only will the exclusion accentuate or define those differences in investment policy which are obscured by the inclusion of *loans, discounts, and other investments* under the same caption, but more light ought to be thrown in consequence upon the purposes and results of rediscounting. Segregation helps to explain why some banks have borrowed so much more heavily than others from the Federal Reserve Bank. It is also an aid to the understanding of differences in times and in methods of borrowing. To be sure, total loans and discounts are swollen by loans against Government securities and there is more or less shifting from United States securities directly held to customers' loans against United States securities. These loans are nevertheless in a very different category from direct investments in United States securities. The latter may have been acquired on credit, the resultant United States deposit requiring no reserve. The former gives rise to deposits requiring reserves, although if the proceeds of the loan are being used to pay for bonds, the deposit will eventually be shifted to Government account. The chief objection, however, to the elimination of loans against United States securities from total loans is the impossibility of differentiating between those loans which would never have been contracted except for investment purposes and those whose proceeds are being used in all sorts of ways—loans which would have been collateraled in some other fashion if United States securities had not been available.

LOANS AND DISCOUNTS.

A number of difficulties were encountered in assembling day-to-day returns of loans and discounts for the several banks. The only way to test the comparability of the items has been to check them with reports made to the United States Comptroller of the Currency and the New York State Superintendent of Banks, and then to find out by direct inquiry the reasons for the discrepancies that usually exist between the official statements of condition and the daily ones. The United States Comptroller, for example, requires banks reporting at dates of call to subtract from total loans and discounts the following items: (1) Notes and bills rediscounted (other than acceptances sold); (2) acceptances of other banks payable at a future date, guaranteed by the reporting bank by indorsement or otherwise; and (3) foreign bills of exchange or drafts sold with indorsement of the reporting bank. But in calling for a condensed statement from individual banks for publication in the second volume of his annual report, the Comptroller asks for gross amounts of *loans and discounts* which include besides overdrafts and rediscounts the above-mentioned contingent liabilities on indorsed acceptances of other banks and foreign bills of exchange. Since the banks, as a rule, do not include items (2) and (3) among *loans and discounts* in their daily statements, and since, for the purpose in hand, it seems undesirable to do so, the statistics of loans and discounts, although including item (1) *notes and bills rediscounted*, fall below published totals in the annual report by these excluded amounts of contingent liabilities which are very large in two instances.[1] In the case of Bank O, however, the contingent liabilities on acceptances of other banks indorsed have not been excluded. The daily statement is in highly condensed form and these totals have been added to the figures for daily loans and discounts. An examination of the detailed statements made to the Comptroller over the years for which the item appears shows that the amounts are fairly stable and percentually insignificant. At worst, the growth in 1919 would slightly raise the percentage of total loans and discounts for the later months of the year.

WORK OF ASSEMBLING.

The heterogeneity of the forms in which the daily statements appear made the work of assembling difficult. Since the daily statement is a record designed to meet the special needs of the bank and its officers, it is not surprising that no two banks are alike in methods of presentation. In some cases there are elaborate classifications of loans affording a fairly detailed insight into investment policies of the banks; in other cases the classifications are all-embracing and sometimes misleading to an outsider. As a result, additions, both simple and lengthy, and occasional subtractions are required to bring the totals into general conformity with one another. The most serious obstacle encountered in bringing about the uniformity necessary for the purpose in hand grows out of the variety of practice that prevails in segregating *loans* from *other investments*. To be sure, items not placed in accordance with official rulings are eventually thrown into total loans and discounts—or taken out, as the case may be—on dates of call; but otherwise they appear on the daily statement under various headings. One bank, for example, included all its United States certificates of indebtedness under time loans, and these had to be subtracted from the daily totals by reference to other records. Another institution classified under *other investments*, securities held by it under repurchase agreements (large amounts as it happened) which were transferred to loans only at dates of call. Moreover, to the uninitiated these holdings were not described in a way to differentiate them from other stock and bond investments. Another bank which also carried securities under repurchase agreements had classified them as *loans*, but under a designation which required definition. In all cases, differences of this sort have been corrected in accordance with the official practice except in instances noted below.

FOREIGN LOANS.

Loans made by foreign branches of two of the banks had to be excluded as they are only available for the dates of call and their inclusion would be undesirable for comparative purposes even if obtainable. In one of these cases estimates of amounts of such loans were obtained and it was found that the resultant percentage fluctuations did not differ materially from those used except in one month. Banks with foreign departments sometimes maintain entirely separate bookkeeping systems and only transfer balances to the daily statement instead of distributing investments among the various items. For this reason, in the case of Bank Z, the average amounts of foreign loans were estimated on the basis of the Comptroller's calls, as the amounts were nearly the same for all the dates and assurance was given that they were consistently so. It so happened that the resultant changes amounted to only a fraction of 1 per cent in any month. In the case of the same bank, certain short-term municipal notes carried as *loans* on the general ledger had been transferred to investments in the daily statement and were allowed to remain there. Otherwise, except for a few minor items (kept under investments for all purposes except calls), whose addition to loans would have been laborious and would have been practically without effect upon computations, uniformity of practice in combining loans and discounts has, it is hoped, been secured.

MERGERS.

The continuity of the comparisons has been interfered with in four instances by mergers. Fortunately, in two cases (Banks N and X) these occurred in 1914 and did not affect the computations of the chain indices in 1917, 1918, 1919. The averages were corrected by increasing the totals for the earlier months of the year in which the mergers took place by a constant percentage representing the addition to loans thereby brought about. In the third case (that of Bank O) occurring in 1919, loans were reduced for the later months in similar fashion in computing percentages for the tables showing the range of fluctuations in the daily averages of loans and discounts as given by months. In the fourth case (Bank A), the merger was effected in 1917 and it seemed best in this instance to increase loans for the preceding months of 1917 by a fixed amount instead of by the addition of a constant percentage. (See Tables I and II.) No corrections, how-

[1] Individual overdrafts as a rule do not appear on the daily statements, being kept as separate memoranda. Hence in all but one instance, in which the effect upon the results was insignificant, they have been excluded.

ever, were introduced for the statistics contained in Tables A and B in the second part of the study.

VOLUME OF LOANS.

The total volume of loans and discounts of the 11 banks, as averaged for the year in each case, on the basis of daily holdings, amounted to $1,900,000,000 in round numbers in 1919. as compared with not quite $620,000,000, the sum of the averages for 1913. As will be shown, however, by Chart X facing this page, the rate of increase has been very unequal for the different banks, while the extent of the fluctuations up and down show an extraordinary difference of degree and often of direction.[1] The banks rank as follows according to:

Rank.	(1) Total resources, 1919 (last official statement).	(2) Loans and discounts, 1919 (averages based on daily statements).	(3) Loans and discounts, 1913 (averages based on daily statements).
1	M	M	C
2	C	C	Z
3	B	B	M
4	E	A	A
5	A	Z	B
6	X	X	X
7	Z	N	E
8	D	D	D
9	N	Y	N
10	O	E	Y
11	Y	O	O

Since the present study deals in percentage shifts, the banks naturally lend themselves to classification according to the character of the percentual changes in loans and discounts for the period. An examination of Chart X, referred to above, and of Table I, makes it evident that on the whole the banks have become increasingly unstable as regards the volume of loans and discounts held, but that, notwithstanding this fact, differences in degree of instability persist so that it is possible to group them roughly into (1) banks with a wide range of deviation from the yearly average throughout the period under examination, as, for example, Banks E and M; (2) banks with an intermediate range of deviations—some manifesting a fair degree of stability for single years, but with a great spread in the averages for other years, as banks O and C; others showing a wide range within the year but with greater steadiness of range when comparing one year with another, as Banks A and D. Banks B and Y have also been placed in this intermediate group; (3) banks with a relatively limited range of deviation as compared with the other banks in the group, as, for example, Banks X, Z, and N.

[1] Chart X is based on actual averages without corrections for mergers.

TABLE I.—*Difference in range between (1) highest and lowest daily averages of loans and discounts for months, and (2) highest and lowest daily holdings of loans and discounts (expressed as percentages of the daily average of total loans and discounts for each year).*

[Corrected as previously indicated to allow for mergers. Based on items correct to the nearest $1,000.]

	Bank A.		Bank B.		Bank C.		Bank D.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
1913	13.7	23.2	16.8	30.5	13.6	23.9	17.5	26.2
1914	19.3	28.4	17.0	32.4	26.0	34.8	34.6	44.5
1915	51.0	62.1	54.6	67.4	55.9	65.3	64.6	73.7
1916	19.1	31.4	16.6	26.4	14.6	23.3	20.2	30.8
1917	26.3	47.5	20.3	29.6	22.0	48.9	25.8	45.1
1918	21.1	30.9	41.6	52.2	37.4	50.0	20.4	36.9
1919	30.7	39.5	25.0	30.5	9.6	18.6	28.1	39.4

	Bank E.		Bank M.		Bank N.		Bank O.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
1913	30.4	61.3	43.4	49.9	10.3	24.1	11.4	44.4
1914	47.3	75.6	39.2	54.8	10.2	35.3	16.5	29.1
1915	82.2	109.4	88.6	100.7	29.9	40.0	85.4	112.1
1916	34.1	56.7	17.9	26.4	11.6	20.8	26.7	38.7
1917	46.9	97.3	16.8	32.1	16.8	24.8	25.0	51.4
1918	49.6	80.7	54.0	73.4	15.7	23.5	45.0	70.2
1919	82.6	138.2	32.8	43.9	22.6	33.9	16.8	31.1

	Bank X.		Bank Y.		Bank Z.	
	(1)	(2)	(1)	(2)	(1)	(2)
	P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
1913	14.4	22.1	10.5	20.8	7.9	16.0
1914	26.5	36.8	10.3	18.0	12.8	22.0
1915	39.6	51.4	53.4	71.7	36.4	44.6
1916	15.3	22.6	27.9	45.2	11.0	21.0
1917	30.0	43.9	16.5	27.1	9.2	28.0
1918	15.4	21.9	30.4	41.6	17.3	25.8
1919	7.7	21.0	27.9	39.2	22.1	27.3

DAY-TO-DAY FLUCTUATIONS.

The characteristic tendencies come out even more strongly in an examination of day to day fluctuations in loans and discounts. Table I gives the range of the daily averages for months, and of the actual daily amounts of loans held, for each bank, as expressed in percentages of the daily averages for the successive years. The justification for the attempt at grouping on the basis of the variability of the monthly average is usually reenforced by an examination of the figures showing the daily range. The classification is by no means hard and fast and it may be that certain banks in the intermediate group could be transferred to the first group. It will be noted that Bank M in the first group is first both in total resources and in loans in 1919; Bank E, fourth in total resources, is only tenth in loans; whereas two of the three banks in the lowest group rank higher in volume of loans than in total resources.

The classification does not take account of differences in the rate of growth of loans and discounts from year to year. Bank E, for example, has shown a relatively lower rate of increase from year to year than other banks, falling from seventh to tenth place. Bank Z also has dropped from second to fifth place, whereas Bank N in the same group has advanced from ninth to seventh place. It is the variability in the amount of such holdings from month to month, not the rate of increase from year to year, that is emphasized by the grouping.

As the information in regard to the several banks was secured under pledge not to make individual returns public, actual figures are nowhere employed. It is very desirable, however, in comparing percentage fluctuations to secure at least a rough idea of the relative amounts of actual loans and discounts in order to know whether large percentual fluctuations apply to a relatively small bank or to one of the largest ones. For this purpose, Chart X, showing the course of loans and discounts for all banks for the years 1913–1919, has been drawn on the logarithmic scale, thereby making it possible not only to show percentage increases or decreases from month to month but also enabling one to place absolute amounts in relation to one another. Two-deck logarithmic paper was used in order to facilitate comparison of banks whose loans and discounts fall below $100,000,000 with those which rise above that sum. This chart shows the general trend for each bank, and can be used to supplement impressions given by the statistics. (See Chart X.) Charts drawn on the arithmetic scale have also been prepared showing for one typical bank in each group the percentage changes in the daily averages of loans and discounts from month to month expressed in terms of the daily averages for the year. (See Chart Y following Chart X.)

(Excerpt from "Elements of Statistics" (Bowley), p. 188, 3d edition)

"* * * When we are attacking questions of causation it very frequently happens that we are more concerned to know the proportionate increase than the actual increase. * * * We need a diagram not of quantities, but of ratios, where equal vertical distances represent no longer equal absolute increments, but equal proportional increments; that is, equal rates of increase. By the use of logarithms a universal scale can be constructed which serves this purpose. The nonmathematical student can easily accustom himself to the use of diagrams so constructed, by studying one where the actual amounts represented are entered, and noticing that whatever part of the scale he takes, doubling, halving, increasing by 20 per cent, and so on, are always represented by the same vertical distances, respectively. * * *"

It should be remembered, however, that the vertical scale measuring increases is not the same as that for decreases. For example, a 30 per cent decrease is always represented by the same vertical distance, on any part of the scale, but the distance is not the same as for a 30 per cent increase. (Cf. scales of increase and of decrease, Chart X.)

IRREGULAR LOAN MOVEMENT.

Throughout the period under examination the movement of loans and discounts is highly irregular. The uncertain industrial outlook in 1913, the outbreak of war in Europe in 1914, the coincident panic, the subsequent trade revival and unexampled growth of the years 1915 and 1916, were unsettling factors that took away all semblance of normality from statistics of banking growth. Then followed the declaration of war by this country and the all-controlling and upsetting influence exercised by fiscal needs. Opportunity for normal expansion and contraction of loans has been lacking. It is only surprising that in the midst of the turmoil there is a certain persistence of type in the movement of the loans and discounts of the individual banks that warrants an attempt at classification.

During the year 1915 the change in percentage relationships is unprecedented. In all cases there is a marked rise due to the fact that the year witnessed a tremendous growth of trade and industry following the uncertainty and panic immediately succeeding the outbreak of the war in Europe. A contraction of loans had no sooner been achieved than an expansion came on a great scale and a steady advance upward was registered. It is interesting to note that the range for all banks with the one exception of Bank E was greater in 1915 than in any war year, but the movement was regular, almost uniformly upward. It is also noticeable that the increase was as spectacular in the case of the trust companies as in that of the banks then belonging to the Federal Reserve System.

The outstanding fact which is emphasized by the charts is the increasing irregularity of loans and discounts for all banks, with the maintenance, however, of relative status, i. e., the banks showing greatest stability in earlier years are also found to have steadier loan holdings during the war period while the percentual changes of banks that were erratic to begin with continue to be pronounced. (See Charts X and Y and Table I.) The frequency table on page 46 showing by years the number of times different per cents occur in different months again evidences the progressive spread that has occurred in those fluctuations as compared even with such abnormal years as 1913–1914 (excepting 1915, however). (See Table II.)

A more detailed analysis has been made of the statistics of loans and discounts for the war years 1917, 1918, and for 1919, the daily averages for each month being expressed as a percentage of the daily averages for the preceding month, giving a series of chain relatives for each bank. Table III on page 47 shows the comparative frequencies of the values of chain relatives by months during the three years.

CHAIN RELATIVES.

A comparison of the classified chain relatives of the individual banks for the years 1917, 1918, and 1919 with those contained in the frequency table published on page 159 of the Review of Economic Statistics for April, 1919, which shows monthly average loans of the New York City clearing-house banks (January, 1879, to January, 1914, inclusive), gives added emphasis to the fact of increasing irregularity.

The medians of the relatives as computed from the clearing-house returns are as follows:

Jan./Dec.	101.3	July/June	101.3
Feb./Jan.	103.7	Aug./July	100.6
Mar./Feb.	100.7	Sept./Aug.	99.2
Apr./Mar.	99.4	Oct./Sept.	100.0
May/Apr.	100.0	Nov./Oct.	99.4
June/May	100.8	Dec./Nov.	99.2

TABLE II.—*Loans and discounts: Daily averages for each month expressed as percentages of the daily average for the year.*

[Frequency of occurrence of different per cents in different months.]

[Based on items correct to nearest $1,000.]

Per cent.	January.							February.							March.							April.						
	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919
65- 70			2							1																		1
70- 75		1	2							2							1							1				
75- 80			3							2			1				3			1	1						1	
80- 85		2	2		2				2	2			2	1		1	1			2	1			2			3	1
85- 90		3	2	1		2	2			4	1	4	2	3		1	4			2	3			4			1	4
90- 95		3		2	4	3	4		1		1	3		3	1		2	1	4	2	2			4	1	1	1	1
95-100	3	2		2	3	5	2	1	6		1	2	6	3	6	4			3	3	2	6	3		1	5	4	2
100-105	4			3	2	1	2	4	1		4	2			2	4		6	3	1	1	2	5		6	2		1
105-110	3			3			1	4			4				1			4	1			2	2		2		1	
110-115														1							1				1	2		1
115-120								1	1						1											1		
120-125	1																											
125-130								1								1							1					

Per cent.	May.							June.							July.							August.						
	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919
65- 70							1																					
70- 75			1			1																						
75- 80			1																									
80- 85			1		1	2				1								2										
85- 90			1			2	1			1							1					1			1	1		
90- 95	2		5		2	2	5	3		7	1		2	1		3	4	5	1	1		1		1	4	1		2
95-100	6	1	1	5	5	2		7	2	2	7	5	6	1	8	3	5	4	2		3	2	5	4	2		2	5
100-105	2	7	1	6	2	1	3	1	4		3	2	1	3	3	2	1		6	4	4	4	4	4	3	3	4	2
105-110	1	3			1	1	1		5			4	2	4		1			2	4	3	3	2	2	1	5	3	
110-115														1		1				1						1		1
115-120														1		1				1	1						1	1
120-125																											1	

Per cent.	September.							October.							November.							December.						
	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919	1913	1914	1915	1916	1917	1918	1919
80- 85																1			1			1						
85- 90							1	1	1				1		1								1		1			1
90- 95	1			2	1		1	1				1		1	2	1		1	2	1	1	4	2		1		1	
95-100	3	2	3	6	1	3	1	1	4		4	4	2	1	3	5			3	1	3	5	4		3	1	1	2
100-105	4	5	2	1	6	5	6	8	3	1	5	4	2	2	5	4		5	2		3	1	3		4	5	2	3
105-110	3	3	3	1	2	2			1		1	1	4	3				4	1	2	1		1		1	1	1	1
110-115		1	3		1		1		2	5	1		2	2			1		2	2	1			2	1	3	1	3
115-120				1		1	1			2		1		1			3	1		1	1						3	1
120-125										1							2			2				1			2	
125-130																	1			1				2		1		
130-135										1							1			1				1				
135-140																	1							1				
140-145										1							1				1			1				
145-150																								1				
150-155														1			1							1				

TABLE III.—*Loans and discounts: Daily averages for each month expressed as percentages of the daily averages for the preceding month.*

[Comparative frequencies of values of chain relatives, by months, in three years.]

[Based on items correct to the nearest $100,000.]

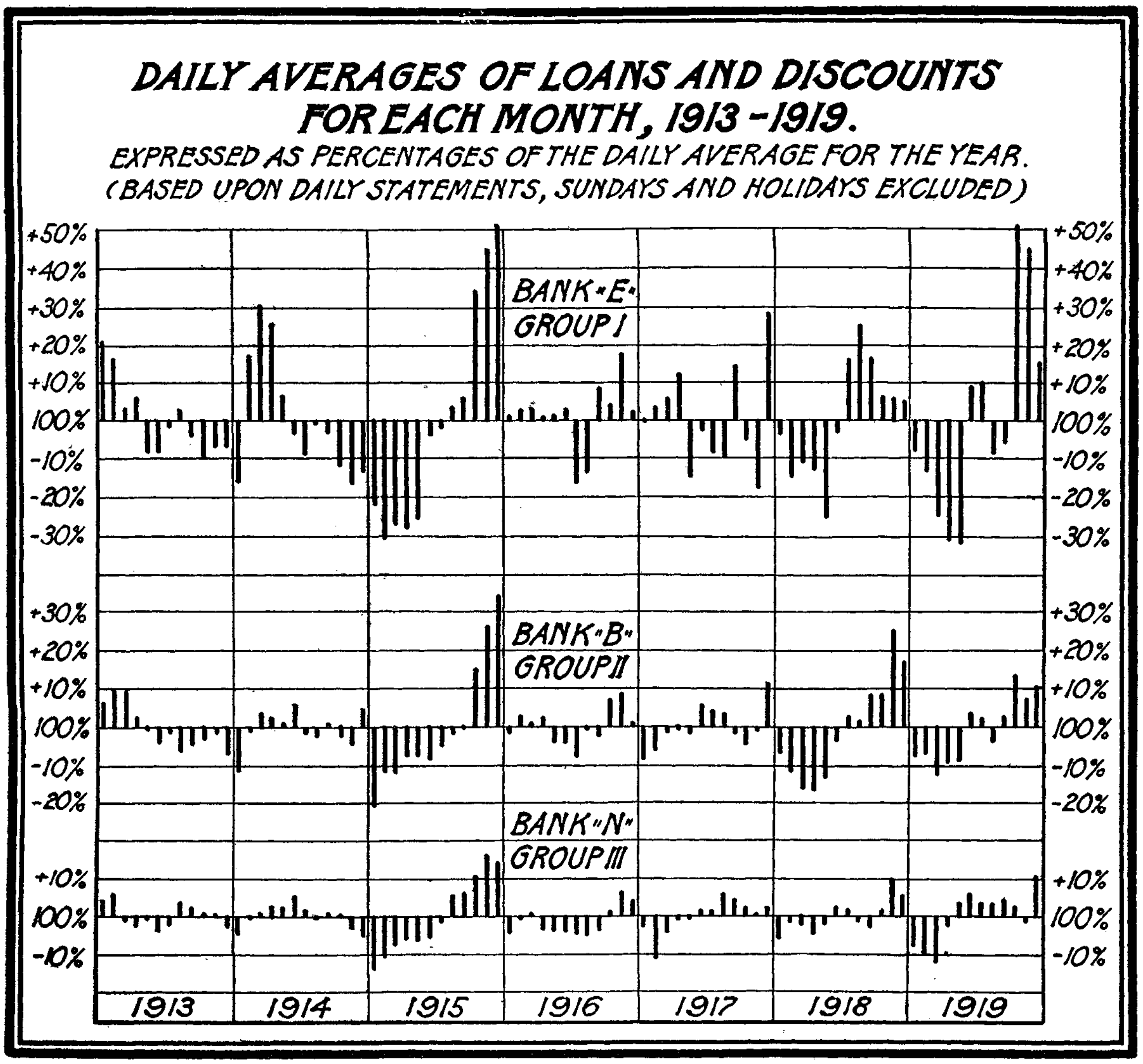
Range.	January. December.			February. January.			March. February.			April. March.			May. April.			June. May.		
	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917
60-65		1																
65-70																		
70-75																		
75-80					1										1			
80-85																		
85-90		1			2		1							1				
90-95	4	2		3	3	2	1	4		2					3			
95-100	4	2	2	5		2	5	3		4	6	2	3	2	3	2	2	4
100-105	1	3	1	2	3	5	3	2	6	4	3	5	5	7	3	1	2	3
105-110	2	2	6	1	1	2	1	2	5		2	3	3		1	2	2	2
110-115			2		1					1		1		1		3	3	1
115-120																	1	1
120-125																2		
125-130																		
130-135																	1	
135-140																		
140-145																		
145-150																		
150-155																		
155-160																1		
160-165																		

Range.	July. June.			August. July.			September. August.			October. September.			November. October.			December. November.		
	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917	1919	1918	1917
60-65																		
65-70																		
70-75																		
75-80																1		
80-85				1								1						
85-90								2					1		1		1	
90-95	2		1	3		2		2	2	1	2		1		3	1	1	
95-100	3	2	5	4	7	3	2	4	6	1	3	7	7	2	3	5	7	3
100-105	5	4	2	2	1	2	6	2	2	5	3	2	2		2	3	2	3
105-110	1	1	2	1	2	4	2	1		3	3	1		4	1			3
110-115		2	1											4	1	1		1
115-120		2			1									1				
120-125																		
125-130									1									
130-135							1											
135-140																		
140-145																		
145-150																		
150-155																		
155-160																		1
160-165										1								

The cases in which the increase exceeded 6 per cent in any month for the entire period were eight in number, three occurring in February. The cases in which decreases equaled or exceeded 6 per cent were one each in January, March, May, June, October, and December. A glance at Table III shows how marked are the divergencies of the relatives of the individual banks from any normal trend that may be postulated on the basis of the clearing-house figures. To be sure these latter computations were based upon composite returns from the clearing-house banks and individual erratic tendencies would be absorbed in many instances.[2] However, when 11 banks, representing such large amounts of banking resources as those in question, show variations as extreme as indicated in the table presenting comparative frequencies of values of chain relatives in the years 1917, 1918, 1919, it is evident that all tests of normality that might once have been applied fall down. Even eliminating Bank E and Bank M, responsible for the most extreme fluctuations, the spread still remains very great.

[2] The clearing-house returns include in addition to loans and discounts, "stocks, bonds, and mortgages owned by the bank." Although the inclusion of such other investments further vitiates comparison with statistics of loans and discounts, the comparison still has value, because for the prewar period investment holdings would probably remain fairly steady comparing one month with another.

CHART Y.



Bank "E" has a limited number of large accounts and heavy investments in securities in relation to loans. It is among the leading "Wall Street" banks.

Bank "B" occupies an intermediate position. It represents commercial banking operations, does a Wall Street business, and controls heavy bankers' balances.

Bank "N" has a large number of individual accounts and is said to be engaged primarily in commercial banking operations. Investments in securities are relatively small.

Although these three typical banks happen to fall into three different groups, the method of grouping has not been based upon any distinctions as to type of business done. It rests of necessity upon superficial differences that are apparent to anyone examining the statistics. A thoroughgoing interpretation of the changes in loans and discounts of the individual banks would necessitate an intimate knowledge of the scope of their activities, the kinds of business financed by them, and the seasonal peculiarities of such businesses.

COMPARISON WITH CLEARING-HOUSE BANKS.

Furthermore, not only are individual variations abnormal as compared with the composite clearing-house returns, but the upward and downward trends for the 11 banks taken as a whole are quite incalculable from month to month during the three-year period studied. For example, in 1918 and in 1919 January shows a decline over December of the preceding year in a majority of instances, whereas the median point for the clearing-house banks for the period 1879–1914 was 101.3; February shows a decline in these years, but in 1917 advances were recorded for 7 of the 11 banks (C. H. 103.7). Similarly, in March, 1918, and in March, 1919, there is a decline in 7 cases (C. H. 100.7). April shows a decline in 6 cases both in 1918 and in 1919, but advances in 9 cases in 1917 (C. H. 99.4). In May declines occur in 3 cases in 1918, in 3 cases in 1919, and in 7 cases in 1917 (C. H. 100.0). In June for all three years there was an advance over May in a majority of cases (C. H. 100.8); in July there was an advance in 1918 in all but two cases and in the other years a fairly even division (C. H. 101.3). In the majority of cases August shows a drop in 1919 and 1918 (C. H. 100.6), and September an advance in 1919 and a drop in 1918 and 1917 (C. H. 99.2). October drops in 1917, advances in 1918 and 1919 (C. H. 100.0); November advances in 1918, drops markedly in 1919 (C. H. 99.4); December advances in 1917 and drops in 1918 and 1919 in the majority of cases (C. H. 99.2). Even if there were evidence of a tendency to conform to any general trend in the movements upward or downward, the percentage changes are so extreme in comparison with the restrained limits of the clearing-house returns for the earlier years that they would be of little use in enabling one to forecast trends. As it is, there is a lack of consistency in the month to month changes when comparing one bank with another and lack of consistency in month to month changes from one year to another in the case of the same banks.[3]

[3] The Review of Economic Statistics for June, 1920, p. 145, contains the following statement:

"During the prewar period the corrected items of the following series fluctuated with interest rates:

"Loans of New York City clearing-house banks,

"Deposits of New York City clearing-house banks,

"Dividend payments by industrial corporations.

"The significance of the first two of these series has been changed by the introduction of the Federal Reserve System. The enormous rise in prices has, of course, had its effect on the volume of loans and deposits. During 1919, all banking operations were affected by government financing. Moreover, the data for 1903-1914 included commercial banks only; since 1914, the consolidated statements excluding trust companies have not been issued. For all of these reasons, loans and deposits of the New York banks have been discarded for the present as indices of banking conditions.

EFFECT OF REDISCOUNTS.

With the rediscount facilities afforded by the Federal Reserve Banks, it is to be expected that the month to month fluctuations in loans and discounts would be exaggerated. In a sense, that may be said to have been one of the chief objectives of banking reform—to make it easier to enlarge loan holdings at certain seasons of the year, not to keep them within rigid limits. If borrowing from Federal Reserve Banks had been undertaken solely for carrying loans instead of largely for the purpose of financing the purchase of securities, or if it were possible to differentiate actually as well as technically between the two classes of applications, one might measure somewhat the extent to which borrowing or rediscounting in 1917, 1918, and 1919 had enhanced the fluctuations of loans as compared with the already erratic movements of 1913–1916.

It is obvious that any seasonal tendencies have been obscured, neutralized, or even reversed by war-time needs and by readjustment activities following the war. The fairly general and decided upward trend at the end of the year in 1917, 1918, and 1919 testifies to that fact. That the composition of loans should be altered by war needs goes without saying. All banks would have large additions to loans collateraled by United States securities. Those banks investing heavily in United States securities would also borrow more heavily to pay for them. But such investments would not affect the ability to lend to private borrowers, and if rediscounting operations had been confined to financing purchases of United States securities, there would be no reason to expect that loans and discounts would show a tendency to shift more violently in the later years of the period studied. As a matter of fact, it is evident that the rediscounting facilities afforded by the Federal Reserve Banks not only took care of the purchase of Government securities but made possible the creation of "war" loans without necessitating the displacement of other loans to an equal amount, just as in normal times seasonal needs would make possible the granting of new loans without corresponding contraction, if rediscounting facilities were available. It is not without significance, therefore, that the banks which have resorted most largely to borrowing are usually found among those whose loan holdings have been highly irregular. The banks which have done the least borrowing have maintained, as compared with other banks, a steadier line of loans and discounts, although all have shared in the increasing unevenness.

PART II.

To demonstrate the statements made above, it is necessary to follow the operations of the individual banks, in order to see to what extent and under what conditions they borrowed from the Federal Reserve Bank. The detailed examination of their borrowing operations has been confined to 1918–19 as the data for 1917 are incomplete for several banks. The returns for 1917 which are available, however, merely reinforce the conclusions reached by a study of the statistics for 1918–19.

Borrowing operations of the banks have been considered primarily in their relation to loans and discounts on the one hand, and to United States deposits on the other, with a view to determining some of the underlying reasons which led to applications for loans and rediscounts. (It is hoped that a study of changes in individual deposits and in bankers' deposits, now in preparation, will throw further light on this subject.)

So much stress has been placed upon the extent to which borrowing at the Federal Reserve Banks has resulted from Government calls of sums on deposit created by loans made to the Government against holdings of its securities, that it is interesting to observe the cases in which operations of this sort are severely limitèd. In two cases, at least, Banks N and X, borrowing was resorted to relatively late and only became considerable at the end of the period studied when business and industrial needs rather than governmental demands were pressing.

STATISTICAL STUDY.

Tables A and B contain the statistics upon which the study is based. Table A shows for each bank for 1918 and 1919 the percentage deviations from corresponding items for the previous month, of daily averages of (1) loans and discounts, (2) bills payable and rediscounts, and (3) United States deposits. Table B shows the percentage relations of daily averages for months and for years of (1) bills payable and rediscounts and (2) United States deposits to daily averages of total loans and discounts for corresponding periods during 1918 and 1919. Table C gives data similar to that presented in Table B for the seven banks for which returns were secured in 1917.

For purposes of the present study, it appears desirable to ignore the distinction between bills payable and rediscounts. To subtract rediscounts from total loans, for example, and not deduct bills payable would give an entirely false idea of the relative position of two banks, one of which is shifting part of its burdens whether of loans or of investments by means of bills payable, while the other is resorting to rediscounts. In the case of Bank Z, for example, bills payable are collateraled by bills receivable over a considerable period. If one were to include these bills receivable in total loans and discounts and exclude eligible paper of the same sort rediscounted, the proceeding would be illogical and would lead to false conclusions. For purposes of the present comparison, therefore, rediscounts have been added to loans and discounts as previously stated and total figures of bills payable and rediscounts have been compared with total loans including rediscounts.

In the banks examined, bills payable have usually been collateraled either entirely or almost wholly by certificates of indebtedness. In the case of Bank E this is exclusively so: the use of bills receivable by Bank Z is exceptional. Some of the banks have made fairly extensive use of customers' paper collateraled by United States securities, as, for example, Banks B and C. But the facts are that the purpose of the rediscount does not dictate the form it shall take. The only way to establish a connection (or lack of it) between the general lending activities of the bank and its need of rediscounts is to combine bills payable, however secured, with rediscounts. Even so, if investments are combined with loans for purposes of comparison, the reasons for mounting rediscounts are obscured. They may be due to payments called for by the Government or investments in securities or they may be occasioned by increasing loans. There is no way of knowing, however.

TABLE A (1918).—*(1) Loans and discounts, (2) bills payable and rediscounts, and (3) United States deposits.—Percentage deviation of the daily average for each month from the corresponding daily average for the preceding month.*

[Based on items correct to nearest $100,000.]

	Bank A.			Bank B.			Bank C.			Bank D.			Bank E.			Bank M.		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)[1]	(1)	(2)	(3)	(1)	(2)	(3)
1918.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
February	+ 2.2	(2)	+127.9	− 5.3	− 22.6	+44.8	− 5.1	− 30.2	+206.8	+ 7.3	+ 1.8	+165.5	−11.7	(2)	+113.1	−23.2	− 7.8	+32.0
March	− 5.4	(2)	− 32.3	− 4.9	+ 3.6	−15.2	− 5.2	+ 22.3	+ 30.4	+ 5.2	+54.2	+ 20.8	+ 4.3	(2)	+ 92.1	+ 8.7	+ 89.1	−31.6
April	+ 0.3	(2)	− 8.6	− 0.8	− 23.5	− 6.4	− 1.7	+125.5	+ 8.2	+ 5.3	+20.1	− 35.5	− 1.8	+44.5	+ 28.1	+ 1.3	+222.9	−45.7
May	+ 4.2	+452.0	+ 14.6	+ 4.0	− 42.6	+25.2	+ 1.8	+ 32.1	− 0.2	+ 0.6	− 1.9	+ 60.0	−13.9	+70.1	+ 23.4	+ 0.7	+ 22.8	− 4.3
June	+ 2.3	− 7.2	− 18.2	+11.3	(2)	+46.3	+15.9	− 2.6	+ 1.8	− 2.0	−45.2	+ 50.0	+30.0	+24.4	− 52.9	+11.5	− 45.7	− 1.0
July	+ 1.9	− 39.8	+ 11.7	+ 6.5	+108.1	+ 5.0	+10.9	− 95.0	− 31.5	+ 3.7	+16.8	− 13.9	+19.0	−42.5	+ 55.5	+14.5	− 54.3	+61.4
August	+ 2.8	+ 44.1	− 11.4	− 1.3	+ 49.6	−16.7	− 2.9	+156.3	+ 32.2	− 0.5	+45.1	− 16.1	+ 7.7	+ 7.5	− 12.2	− 4.6	+185.4	−16.0
September	− 5.3	+ 24.3	− 42.1	+ 6.8	+ 19.6	−48.6	− 2.6	+ 65.3	− 37.4	−12.4	+ 4.9	− 40.4	− 6.6	+64.8	− 25.3	+ 0.9	+117.5	−29.3
October	− 0.6	− 14.5	+101.9	+ 0.6	− 35.1	− 3.7	+ 2.0	+352.1	+ 22.3	− 6.6	−40.4	− 9.7	− 9.1	+20.9	+ 64.8	+ 9.9	+ 25.0	− 3.7
November	+16.6	+ 67.8	+ 29.8	+14.5	0.0	+46.1	+14.8	+ 48.7	− 19.3	+ 6.1	−26.0	+ 35.7	− 0.3	− 0.9	+ 26.5	+14.0	− 34.6	−24.2
December	− 0.3	+ 71.7	− 63.0	− 6.3	+ 0.5	− 1.3	− 0.6	− 26.8	− 18.8	+ 1.9	+29.0	+ 23.7	− 0.7	+39.3	− 67.5	− 4.3	− 15.1	−23.1

	Bank N.			Bank O.			Bank X.			Bank Y.			Bank Z.		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)[1]	(1)	(2)	(3)
1918.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
February	+3.7	(2)	+ 74.5	−14.0	(2)	+18.3	+ 0.6	(2)	− 0.9	+10.2	....	+ 59.5	− 6.5	+29.1	+273.5
March	− .6	(2)	+ 9.3	− 6.7	[3]+509.3	−65.2	− 0.9	(2)	−24.2	+ 0.3	+66.1	+ 1.7	− 5.5	+38.4	− 8.7
April	−2.0	(2)	− 40.7	− 3.8	− 5.3	+62.9	− 2.5	....	−35.2	+ 0.8	+29.0	− 45.0	+ 5.5	+ 5.7	− 16.4
May	+3.0	(2)	+117.1	+10.4	+169.4	−45.5	− 1.3	+ 45.5	+27.1	− 3.0	+ 5.0	+ 36.4	+ 3.8	−24.0	+ 77.3
June	+4.1	(2)	− 18.4	+14.1	− 51.5	+22.9	− 0.2	+ 65.6	+16.0	+ 5.6	+11.1	+ 60.0	+ 6.2	+11.9	− 16.3
July	− .2	(2)	....	+15.5	− 59.6	+ 3.4	− 1.0	+109.4	+66.7	+ 1.2	− 1.4	− 6.9	+ 2.1	+88.3	− 21.5
August	−3.4	(2)	+ 6.5	+ 8.2	+ 63.1	+55.7	+16.4	+ 19.8	+25.6	− 4.0	− 4.4	− 6.0	− 4.1	− 7.3	+ 27.4
September	−1.5	....	− 36.3	−12.4	− 35.5	−58.9	− 1.0	+ 73.7	−59.9	+ 4.9	+55.3	− 60.3	− 3.3	−15.2	− 52.1
October	+4.8	+380.0	+ 78.5	+ 9.1	+ 45.0	+17.1	− 3.4	− 31.6	− 1.4	+ 5.1	+ 3.4	+ 4.0	− 1.3	− 4.0	− 23.2
November	+8.1	+ 6.3	− 8.0	+ 5.9	− 44.8	+17.3	− 3.7	− 77.8	− 6.9	+10.5	+35.4	+242.3	+ 6.6	−39.0	− 47.2
December	−3.3	− 99.0	− 66.7	− 4.1	+187.5	−48.1	+ 1.7	(2)	−10.4	− 1.4	+12.7	− 61.8	−13.8	− 8.6	+139.3

[1] Computations for both years based upon weekly statements made to the Federal Reserve Bank of New York showing United States deposits on hand.

[2] No rediscounts or bills payable reported. (The percentage computations showing increases or decreases in bills payble and rediscounts are in each case compared with returns for the last preceding month in which they are reported, not antedating Jan. 1 1918, however.)

[3] Base less than $1,000,000.

TABLE A (1919).—*(1) Loans and discounts, (2) bills payable and rediscounts, and (3) United States deposits—Percentage deviation of the daily average for each month from the corresponding daily average for the preceding month.*

[Based on items correct to nearest $100,000.]

	Bank A.			Bank B.			Bank C.			Bank D.			Bank E.			Bank M.		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
1919.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
January	− 5.7	− 2.2	+ 22.0	− 3.6	+101.3	+ 12.7	−4.6	+16.1	− 1.7	− 6.6	+22.2	−20.2	− 8.9	− 31.6	+ 45.3	+1.0	+ 51.7	+101.9
February	− 8.3	− 12.6	+ 16.6	+ 0.9	+ 79.2	+ 59.2	−1.2	+18.6	+51.5	+ 0.3	+22.3	+20.0	− 6.0	− 42.6	− 38.6	−3.3	− 21.6	+ 17.0
March	− 0.6	− 0.7	− 14.3	− 6.3	− 14.9	− 39.0	−1.7	+13.2	−42.8	+ 2.0	+ 3.2	+ 5.5	−13.0	− 4.4	+ 28.8	+2.3	+ 13.3	+ 10.5
April	+ 2.3	+ 1.8	− 16.7	+ 3.8	− 56.3	+ 59.8	+2.9	−19.5	+44.1	− 1.9	+ 5.4	−24.2	− 7.6	− 9.8	+112.4	0.0	− 19.6	− 26.7
May	+ 3.6	− 25.6	− 24.0	+ 0.6	0.0	− 56.9	−0.1	+20.8	−49.5	+ 5.6	+10.9	−33.3	− 2.1	+175.7	− 51.5	+0.2	+ 2.3	− 40.3
June	+22.8	− 57.1	+263.2	+13.3	+ 23.6	+ 14.1	+5.7	−30.2	+60.5	+24.4	−10.2	−22.9	+59.9	− 33.9	+269.6	+6.4	− 12.2	+105.8
July	+ 3.3	+234.0	− 64.5	− 1.2	− 54.6	+ 40.3	−2.0	− 8.2	+ 8.5	− 7.6	− 0.4	+ 8.1	+ 1.1	+ 24.3	− 63.1	+9.7	− 14.2	− 32.7
August	− 2.4	− 7.9	− 20.5	− 6.0	− 80.7	− 21.6	−7.2	+ 1.6	− 5.9	+ 6.6	− 4.1	+77.5	−17.2	0.0	+ 3.2	−0.7	− 3.6	+ 85.9
September	+ 3.4	+ 14.4	+ 64.1	+ 6.6	+487.0	+183.1	+0.3	+24.2	+82.1	− 2.8	−32.6	−18.3	+ 2.8	− 20.4	+ 56.2	+5.3	− 50.3	+ 32.6
October	0.0	+ 18.5	+ 7.3	+ 9.8	+168.2	+ 26.6	+2.3	+19.2	−17.6	− 5.8	−20.5	−44.8	+60.9	+ 11.7	− 7.8	+9.9	+102.9	+ 20.9
November	−13.0	− 66.5	− 50.4	− 5.0	+ 15.2	− 54.8	−1.7	−49.0	−53.9	− 8.8	−12.9	−43.7	− 3.9	+ 40.2	− 56.2	+1.5	+179.1	− 52.5
December	− 1.0	+ 25.0	+ 95.5	+ 2.9	+ 38.8	− 30.4	+4.5	+33.1	+76.1	− 0.3	−15.6	+72.2	−20.4	− 49.3	+ 19.2	−1.2	+ 2.9	− 10.7

	Bank N.			Bank O.			Bank X.			Bank Y.			Bank Z.		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
1919.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
January	+ 5.2	(1)	+ 69.5	− 4.7	+123.1	− 30.3	−5.3	− 5.7	+ 18.3	+9.3	− 6.5	+ 91.2	− 3.5	+35.6	− 1.5
February	− 2.2	(1)	− 5.2	− 4.4	+ 72.8	+ 8.8	−0.2	+ 51.5	− 16.9	+5.2	+20.7	− 26.6	− 5.9	+12.9	+ 59.1
March	− 2.4	(1)	− 5.5	− 1.8	+ 7.9	+ 12.7	+5.0	− 42.0	+ 37.3	−0.7	− 2.2	0.0	+ 0.3	+ 3.9	− 25.8
April	+10.7	(1)	− 31.4	− 6.5	− 42.7	− 20.8	−2.2	+179.3	− 46.2	−1.5	−16.5	− 51.1	− 2.0	−37.8	+ 58.1
May	+ 6.0	(1)	− 4.2	+ 4.4	+ 21.4	− 23.9	+3.9	+ 19.1	− 11.6	−2.8	−12.1	− 13.1	+ 5.2	+66.6	− 43.5
June	+ 2.9	[2]+280.0	+304.3	+11.9	− 7.5	− 50.1	−5.0	− 66.9	+ 84.2	−0.9	−16.4	+250.0	+10.2	+26.1	− 64.3
July	− 3.0	+100.0	− 66.7	+ 1.0	+ 35.5	− 30.8	+0.2	+351.5	− 75.7	−8.1	−18.2	− 40.0	+ 1.9	−18.8	− 52.0
August	+ 0.2	+ 57.0	+ 19.3	− 1.8	− 38.1	[2]+316.3	+1.8	− 81.9	+229.3	−7.8	− 2.8	− 33.3	− 1.4	+18.3	+420.0
September	+ 0.8	[2]+ 50.0	− 51.3	+32.2	− 48.1	+ 7.4	+2.0	+ 85.2	+ 76.7	−1.9	− 3.5	− 10.7	+ 1.8	− 0.7	− 58.0
October	− 1.3	[2]+544.0	− 61.2	+ 6.4	+114.8	− 51.5	+2.4	+ 66.0	− 13.9	+3.8	− 2.4	− 4.0	+ 4.9	+ 0.6	− 61.5
November	− 3.9	− 29.3	[2]− 42.9	− 3.9	+ 10.3	− 52.0	−2.4	− 43.4	− 53.5	−1.0	+24.2	− 31.5	+ 0.5	+ 4.4	− 50.0
December	+11.9	+212.2	[2]+700.0	− 4.9	+ 24.2	[2]+408.6	+1.9	+ 6.3	+ 28.0	−6.6	−18.5	− 33.3	− 1.8	− 9.8	[2]+620.0

[1] No rediscounts or bills payable reported.

[2] Base less than $1,000,000.

TABLE B.—(1) *Bills payable and rediscounts, and* (2) *United States deposits—Daily averages for months and for years expressed as percentages of the daily averages of total loans and discounts for the same periods.*

[Based on items correct to nearest $1,000.]

Average for—	Bank A.		Bank B.		Bank C.		Bank D.		Bank E.		Bank M.		Bank N.		Bank O.		Bank X.		Bank Y.		Bank Z.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	[1](2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	[1](2)	(1)	(2)
1918.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
Year 1918..	5.6	10.2	6.0	7.1	12.6	14.3	20.0	7.7	68.5	60.0	13.4	9.5	1.1	6.3	5.9	13.2	4.8	7.2	22.4	7.4	14.5	6.3
Jan.......	1.4	7.6	8.4	5.4	8.4	4.8	16.7	2.9	31.3	15.6	2.4	15.3	([2])	3.8	1.2	25.0	([2])	9.2	([2])	6.3	7.6	2.2
Feb.......	([2])	16.8	6.8	8.2	6.2	15.4	16.9	7.3	([2])	47.9	2.9	26.3	([2])	6.3	([2])	34.4	([2])	9.1	8.6	9.1	10.5	8.8
Mar.......	([2])	12.1	7.5	7.3	8.0	21.1	25.0	8.4	([2])	69.7	5.1	16.5	([2])	7.0	8.9	12.8	([2])	7.0	14.2	9.1	15.3	8.5
Apr.......	([2])	10.9	5.7	7.0	18.3	23.3	28.5	5.3	50.0	91.0	16.2	8.9	([2])	4.2	8.9	21.8	1.7	4.6	18.2	4.9	15.4	6.7
May.......	7.6	12.7	3.1	8.3	23.7	22.8	27.7	8.4	98.7	130.3	19.8	8.4	([2])	9.0	21.6	10.7	2.5	5.9	19.7	7.1	11.2	11.4
June.......	6.9	9.7	([2])	11.0	19.9	20.1	15.4	12.7	94.4	47.2	9.7	7.5	([2])	7.0	9.3	11.6	4.2	6.9	20.8	10.7	11.7	9.1
July.......	4.1	10.6	5.5	10.8	0.9	12.4	17.4	10.5	45.6	61.7	3.9	10.6	([2])	7.1	3.2	10.3	8.9	11.6	20.2	9.8	21.8	7.0
Aug.......	5.7	9.1	8.4	9.2	2.4	26.9	25.5	8.8	45.6	50.3	11.5	9.3	([2])	7.7	4.8	15.0	9.2	12.5	20.2	9.6	21.0	9.3
Sept.......	7.5	5.6	9.5	4.4	4.1	10.8	30.4	5.9	80.4	40.1	24.8	6.5	1.2	5.0	3.6	7.0	16.1	5.1	29.7	3.6	18.5	4.6
Oct.......	6.4	11.3	6.1	4.2	18.0	13.0	19.5	5.6	111.1	72.9	28.2	5.7	5.5	8.5	4.8	7.6	11.4	5.1	29.4	3.5	18.0	3.6
Nov.......	9.2	12.8	5.4	5.4	23.3	9.1	13.5	7.2	106.2	92.4	16.2	3.8	5.3	7.3	2.4	8.4	2.6	5.1	35.8	11.2	10.3	1.8
Dec.......	15.9	4.6	6.0	5.7	17.2	7.5	17.2	8.8	149.1	30.2	14.4	3.0	0.6	2.6	7.5	4.5	([2])	4.5	41.2	4.3	10.9	4.9
1919.																						
Year 1919..	12.3	5.8	11.2	8.2	20.8	8.9	21.3	4.9	95.5	60.9	14.8	4.9	2.4	3.0	20.1	4.1	3.3	4.4	29.6	4.3	18.1	3.6
Jan.......	16.5	6.1	12.4	6.6	21.1	7.7	22.4	7.5	112.0	48.3	21.6	6.0	([2])	4.0	17.4	5.5	2.5	5.5	35.2	7.5	15.4	5.1
Feb.......	15.8	7.6	22.1	10.5	25.3	11.8	27.3	9.0	68.5	31.5	17.5	7.3	([2])	3.8	31.5	6.3	3.9	4.6	40.4	5.2	18.5	8.5
Mar.......	15.7	6.5	20.0	6.8	29.1	6.9	27.7	9.6	75.2	46.7	19.4	7.9	([2])	3.7	34.8	7.2	2.1	6.0	39.8	5.2	19.2	6.3
Apr.......	15.7	5.3	8.4	10.4	22.7	9.6	29.7	7.3	73.3	10.7	15.6	5.8	([2])	2.3	21.5	6.1	6.2	3.3	33.8	2.5	12.2	10.2
May.......	11.3	3.9	8.4	4.5	27.5	4.9	31.2	4.6	207.1	53.3	15.9	3.4	([2])	2.1	24.8	4.4	7.1	2.8	30.5	2.3	19.2	5.5
June.......	3.9	11.5	9.2	4.5	18.2	7.4	22.5	2.9	85.7	137.5	13.2	6.7	1.7	8.3	20.4	2.0	2.5	5.4	25.8	8.2	21.9	1.7
July.......	12.7	3.9	4.2	6.4	17.1	8.2	24.2	3.3	105.3	50.2	10.3	2.4	3.5	2.8	27.4	1.4	11.4	1.3	22.8	5.3	17.5	0.8
Aug.......	12.1	3.2	8.6	5.4	18.7	8.3	21.8	5.4	126.7	62.7	10.0	4.6	0.5	3.4	17.3	5.7	2.0	4.3	24.2	3.9	21.0	4.4
Sept.......	13.4	5.1	4.5	13.3	19.7	15.0	15.2	4.6	98.1	95.1	4.7	5.7	0.8	1.6	6.8	4.7	3.6	7.3	23.8	3.5	20.5	1.8
Oct.......	15.9	5.5	12.8	18.0	23.5	12.1	12.9	1.7	68.5	54.5	8.7	6.4	5.3	0.6	13.7	2.1	6.0	6.2	22.4	3.2	19.6	0.7
Nov.......	6.1	3.1	13.5	7.4	11.9	5.7	12.3	1.6	99.9	24.8	24.0	2.9	4.0	0.3	15.8	1.1	3.4	3.1	28.1	2.0	20.4	0.3
Dec.......	7.7	6.2	19.7	5.4	15.2	9.6	10.3	2.8	63.7	37.2	24.9	2.7	11.0	2.8	20.5	5.7	3.6	3.6	24.4	1.4	18.7	2.4

[1] Computations based on weekly returns of United States deposits made to the Federal Reserve Bank of New York.
[2] No rediscounts or bills payable reported.

TABLE C.—(1) *Bills payable and rediscounts* [1] *and* (2) *United States deposits—Daily averages for months and for the year expressed as percentages of the daily averages of total loans and discounts for the same periods.*

[Based on items correct to nearest $1,000.]

Average for—	Bank B.		Bank C.		Bank E.		Bank N.		Bank O.		Bank X.		Bank Z.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)1	(2)	(1)	(2)
1917.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
June....................	5.0	3.6	1.8	3.8	28.8	12.8	....	2.5	5.8	5.1	4.7	3.0	2.1	1.9
July....................	1.2	0.9	....	2.9	6.6	12.8	....	5.7	0.5	0.9	1.4	0.7	3.2	3.6
August..................	....	2.6	....	4.4	....	41.0	....	3.7	0.2	0.8	....	1.0	1.2	1.8
September...............	2.1	5.9	....	10.1	5.6	76.5	....	2.8	2.8	2.7	....	3.0	1.1	1.4
October.................	1.1	8.3	6.4	19.3	84.8	74.0	....	6.0	11.3	8.5	....	4.0	2.4	1.4
November................	1.3	17.9	26.0	57.0	129.5	71.3	....	28.8	5.8	20.4	....	10.0	3.0	13.8
December................	2.9	19.3	31.2	33.8	7.6	120.5	....	11.2	11.0	28.6	....	10.0	8.4	8.6

May figures not included given for few days at end of month.

[1] Includes United States Certificates sold under repurchase agreements.

The direct comparison of bills payable and rediscounts with loans and discounts, excluding other investments, undeniably gives startling results in some cases, as, for example, in those instances in which rediscounts in excess of 100 per cent of loans appear. If extraordinarily high percentages are found, it is obvious that the bank in question is heavily interested in other investments (although if loans are mounting at the same time, there will be a secondary cause of rediscounting activity to be reckoned with).

The question that arises in examining the ratios of bills payable and rediscounts to loans and discounts is an insistent one. Why was there such unequal resort to the privilege of buying United States securities on credit and then borrowing to meet calls for payment, especially as final payment could be effected easily when the redemption of certificates occurred or when Government funds were subsequently deposited? In short, since the operation involved expansion of investments without necessitating a corresponding increase in current funds, it is surprising that it was not done more extensively even by banks customarily putting their resources in loans rather than in other securities. The question has been frequently put to bankers, but has never been satisfactorily answered. One can see that, in the case of banks carrying a large proportion of trust or savings funds and facing the prospect of heavy withdrawals at the time of the Liberty loan campaigns, the necessities of the case would dictate extensive investments in United States securities. Similarly banks carrying large amounts of funds in securities that could be easily liquidated and accustomed to a high degree of fluctuation in loans would be freer to convert their assets into Government securities at the beginning. But subsequently, the profitableness of such operations must have appealed to all banks, whatever the character of their business.

CHANGES IN REDISCOUNTS AND BILLS PAYABLE AND IN UNITED STATES DEPOSITS.

To study the interaction between rediscounts and bills payable on the one hand and United States deposits on the other, it is necessary to consult both Tables A and B. It does not follow that a striking inverse correlation between rediscounts and United States deposits, as shown by the chain indices in Table A, reflects any very significant relationship of the absolute figures. To get some further light on this point, it is necessary to turn to Table B, giving percentages of daily averages for each month of bills payable and rediscounts and of daily averages of United States deposits to the daily average of total loans and discounts for the corresponding period. One can with the aid of Table B determine whether the shifts upward and downward are of comparable magnitude. To illustrate: An increase of 11.9 per cent in bills payable and rediscounts in Bank Z in June, 1918, parallels a decrease of 16.3 per cent in United States deposits. (See Table A.) In May, however, bills payable and rediscounts had averaged 11.2 per cent of total loans for that month and United States deposits 11.4 per cent. (See Table B.) It is evident that although the absolute drop has been greater in the case of United States deposits, the absolute magnitudes are in measurable relation to each other. To illustrate again: Bank C in June, 1919, showed a decrease of 30.2 per cent in the daily average of bills payable and rediscounts compared with the preceding month. At the same time the daily average of United States deposits rose 60.5 per cent. (See Table A.) However, as United States deposits in May averaged only 4.9 per cent of the daily average of loans and discounts for that month against 27.5 per cent for the daily average of bills payable and rediscounts, it is patent that the absolute increase of 60.5 per cent is small when compared with the decrease of 30.2 per cent in bills payable. (See Table B.)

The method of averaging by months somewhat obscures at times the extent of the existing inverse correlation; but weekly averages proved to be even less satisfactory. A day-to-day plotting of the actual figures would yield the best results, as a descending line of bills payable and rediscounts may cross an ascending line of United States deposits in the middle of the month or vice versa. Indeed the upward and downward movements may extend over a period of several months. Unfortunately daily statements could not be effectively used without divulging actual returns, but it has been possible to use charts based upon daily returns as supplementary aids in interpreting the monthly averages.

When United States deposits result from credit purchases of certificates or credit on loan account there is, of course, no reason to expect that an increase in such deposits will bring about a decrease in bills payable and rediscounts. But following increases in United States deposits due to actual receipts as in months of tax payments, there is reason to expect a reduction of bills payable in the case of banks that have previously borrowed to meet calls for payment on securities purchased on credit or bonds bought similarly. It is noticeable in June, 1918, that there is a reduction in average bills payable and rediscounts in a majority of the banks and an increase in the average of United States deposits. This is even more generally true in June, 1919.[4]

PEAK OF REDISCOUNTS.

Notwithstanding the marked differences in the practices of the various banks both as to time and extent of rediscounting and in the relative amount of United States deposits carried, a few partial generalizations can be made. Both in 1918 and in 1919 a bare majority of the banks reach the peak of their rediscounting activities in the months of October, November, and December, when daily averages of rediscounts and bills payable for the month bear the highest percentage relation to the daily averages for the year. (See Table X.)

In 1919, however, it will be noted that the daily average for successive months of United States deposits on the whole bears a steadily diminishing relationship to the daily average of total loans and discounts, while the daily average of bills payable and rediscounts after a

[4] Sometimes the increase in United States deposits grows out of purchases of United States certificates on credit, preceding tax payments, the subsequent redemption of certificates resulting in the reduction of bills payable following the tax-due dates.

mid-year period of contraction becomes on the whole an increasing percentage of the daily average of total loans and discounts for corresponding periods. Not only that, but there is an increasing tendency for loans and rediscounts to move upward and downward in unison, whereas Government withdrawals, even when occurring at times when rediscounts are rising, become ever less adequate to explain the magnitude of those rediscounts. It will be noted, for example, by consulting Table B, that in 1918 the daily average for the year of United States deposits in the majority of cases was greater than the daily average of rediscounts, but in 1919 the situation is reversed. In short, it is evident that the increases in rediscounts are taking care of loan increases to an ever greater extent. As might be expected under such circumstances, loans not only continue to show a wide range of fluctuations in 1919, but in some banks, the upward and downward swings cover a wider range as expressed in percentages than they did in 1918. (See Chart X.)

TABLE X.—*Daily averages for each month expressed as percentages of the daily average for the year.*

BILLS PAYABLE AND REDISCOUNTS.

[Based on items correct to nearest $1,000.]

	Bank A.	Bank B.	Bank C.	Bank D.	Bank E.	Bank M.	Bank N.	Bank O.	Bank X.	Bank Y.	Bank Z.
1918.											
January	23.8	129.7	63.1	75.2	44.8	18.1	....	19.1	....	....	53.7
February	....	100.3	44.0	76.4	....	16.7	....	....	....	36.7	69.5
March	....	104.3	53.9	118.2	....	31.4	....	116.6	....	61.1	96.0
April	....	78.9	121.5	141.8	64.8	101.8	....	112.7	34.2	78.6	101.9
May	129.4	45.1	160.4	138.9	110.0	125.1	....	300.5	48.9	82.3	77.1
June	120.3	....	156.3	76.0	136.9	67.9	....	147.1	82.4	91.7	86.4
July	72.4	94.4	78.7	88.8	78.8	31.0	....	59.2	172.7	90.4	163.0
August	103.8	141.2	20.2	129.1	84.6	88.4	....	95.0	206.9	86.5	150.7
September	129.6	169.5	33.4	135.2	139.5	192.3	108.4	63.5	358.4	133.8	128.0
October	110.3	110.0	150.8	80.9	168.7	240.3	502.0	91.5	244.4	138.9	123.0
November	185.5	110.0	224.4	59.7	167.1	157.1	529.6	49.2	53.9	187.4	75.0
December	318.6	115.8	164.2	77.2	232.9	133.6	54.9	144.6	....	212.0	68.4
UNITED STATES DEPOSITS.											
1918.											
January	71.2	71.1	31.3	34.5	25.1	160.3	56.4	181.9	125.2	73.1	34.8
February	162.3	102.6	96.3	91.4	67.5	211.7	98.7	216.5	124.1	116.7	130.3
March	109.9	86.8	125.6	109.6	102.5	144.8	108.6	74.7	94.3	117.7	118.8
April	100.2	81.6	136.0	71.3	131.3	78.8	64.1	122.7	61.1	64.3	99.3
May	114.9	101.7	135.7	113.8	161.9	75.4	139.5	66.7	77.8	89.2	176.2
June	94.3	149.2	138.1	170.4	76.2	74.4	113.2	82.1	90.3	141.7	147.9
July	105.2	156.5	94.6	146.3	118.7	120.4	114.2	84.4	150.1	131.5	116.1
August	93.3	130.3	125.0	122.6	104.1	101.2	120.8	132.6	188.4	124.1	148.5
September	53.9	67.5	78.1	73.2	77.6	71.6	77.2	53.8	76.2	48.6	71.1
October	108.8	64.8	95.6	66.0	128.0	68.8	137.6	64.2	74.3	50.4	54.6
November	143.7	94.2	77.2	89.4	162.0	52.3	126.5	75.1	69.9	176.4	29.0
December	52.3	93.4	62.6	111.3	52.6	39.7	43.2	38.5	61.8	66.6	69.9
BILLS PAYABLE AND REDISCOUNTS.											
1919.											
January	127.4	103.1	101.0	93.3	107.1	124.5	....	78.7	60.2	130.4	78.9
February	111.4	184.7	119.7	113.9	61.5	97.5	....	135.9	92.1	157.3	88.8
March	110.8	157.1	135.6	117.5	58.7	110.6	....	147.4	53.1	154.1	92.4
April	112.7	68.5	109.2	124.0	53.0	88.9	....	83.9	149.5	128.6	57.4
May	84.0	68.5	132.0	137.3	146.2	91.0	....	102.8	178.5	113.0	95.6
June	36.0	84.9	92.1	123.4	96.8	80.1	75.6	94.5	61.2	94.6	120.6
July	120.4	38.3	84.7	122.7	120.3	68.7	154.6	128.3	274.2	77.4	97.7
August	112.0	7.4	86.0	117.9	119.9	66.2	23.2	79.3	49.6	75.4	115.9
September	127.9	43.7	91.2	79.7	95.5	32.9	35.4	41.0	91.4	72.7	115.2
October	151.6	117.1	108.7	63.4	107.2	66.9	231.2	85.6	153.0	70.9	115.8
November	50.8	135.2	55.4	55.3	150.3	186.8	166.0	98.0	86.5	88.2	120.7
December	63.3	190.2	73.8	46.5	76.3	192.2	514.0	121.6	91.4	71.7	109.0
UNITED STATES DEPOSITS.											
1919.											
January	99.5	74.6	87.1	134.2	72.7	106.6	123.0	119.8	120.4	187.4	128.8
February	114.4	118.6	131.8	161.2	44.6	124.7	115.5	130.3	100.3	135.6	203.6
March	98.2	72.3	75.4	170.5	57.5	137.6	109.0	146.9	137.1	135.8	151.9
April	81.1	115.5	108.6	128.4	122.1	101.0	76.0	116.3	73.0	65.6	240.4
May	61.8	50.0	54.8	85.9	59.3	60.1	73.7	88.5	64.9	57.5	135.3
June	224.6	56.7	88.2	66.5	244.5	124.0	293.4	44.1	118.4	204.0	48.0
July	79.8	79.9	95.3	71.6	90.4	49.9	97.2	30.6	28.5	120.6	23.3
August	63.2	62.7	89.9	127.2	93.3	92.5	118.2	127.2	95.9	81.1	120.1
September	104.2	117.3	163.6	103.2	145.7	122.6	56.4	136.6	168.5	72.2	49.6
October	111.4	224.6	134.9	57.1	134.4	148.1	21.9	66.3	146.5	69.4	20.3
November	55.3	101.4	62.2	31.8	58.9	70.2	11.5	31.8	70.6	42.6	9.8
December	108.4	70.7	109.5	55.3	70.1	62.7	102.1	161.8	83.7	27.8	69.5

CLASSIFICATION OF BANKS.

Before examining the statistics of individual banks in more detail, a tentative classification might be made for the sake of clarity. Just as the 11 banks were grouped according to the extent of the fluctuations in their total loans and discounts (as averaged for months), so they may be classified according to the magnitude of their rediscounting operations as compared with total loans. Or they may be divided with reference to the extent of the inverse correlation existing between bills payable and rediscounts, on the one hand, and United States deposits on the other. In general, banks that have borrowed heavily also give evidence of active participation in governmental financing operations, while those that have done the least borrowing show little connection between rediscounts and accessions or withdrawals of Government funds. It follows that banks doing the greatest amount of borrowing, and participating most extensively in dealings in United States securities, can usually be grouped together by all three methods of classification. But there are at least two exceptions to this generalization. Bank Z, which has relatively stable loan holdings, is among the heavy borrowers whose rediscounts are not explicable by reference to Government operations, and Bank Y, also a heavy borrower, with fluctuating loans, varies its rediscounts throughout in close correspondence with changes in its loans.

Under normal conditions one would expect a bank accustomed to varying the amount of its loans and discounts rather freely, and used to carrying investments in other securities in more than the average amounts in relation to loans, to have less need of rediscounting facilities than banks of the opposite type. Banks with their resources more fully invested in loans and discounts, and accustomed to pursue an even lending policy, might be expected to feel more quickly the pressure of extraordinary demands for loans or unusually large withdrawals. They would have smaller available secondary reserves, such as readily convertible securities, upon which they could rely and would presumably apply sooner for the assistance of a rediscounting agency. Yet there were not only great differences in the extent of the reliance upon rediscounting by the several banks, but as a result of the character of the war-time need, the banks that would normally have been expected to do the least borrowing did the most.

SPECIAL ANALYSIS.

The analysis of the operations of the several banks which follows is more confidently expressed in some cases than in others, because, as will be evident, the amount of supplementary information that can be used in interpreting the figures is fairly detailed in some cases, while in others it is highly condensed and inadequate.

BANK E.

Bank E holds a unique position among the other banks in respect to the high ratios existing between daily averages of bills payable and of United States deposits to daily averages of total loans and discounts for corresponding periods. Both in 1918 and in 1919, daily averages of United States deposits are very large, being 60 per cent of the daily average of total loans and discounts in 1918 and 60.9 per cent in 1919. The daily average of bills payable, however, which amounted to 68.5 per cent of the daily average of total loans and discounts in 1918, has risen to 95.5 per cent in 1919 (Cf. Table B). It is evident, therefore, that in the latter year, bills payable are helping to carry a greater percentage of the regular loans and discounts. In other words, they do not result so largely from Government calls for sums due on United States securities purchased on credit or from other withdrawals of government funds. As might be expected, therefore, with an expansion of rediscounting activity accompanying a reduction in the size of government operations, the fluctuations in the holdings of loans and discounts in 1919 become even more pronounced than they were in 1918. In view of the large investments in United States certificates and the heavy Government deposits on hand, it is easy to see why the effect of tax payments is more apparent and the resultant changes in condition more extreme in the case of Bank E than in any of the other 10 banks. A day to day following of the movement of bills payable and United States deposits affords striking evidence of the inverse correlation existing between these items during the period preceding and following tax dates. In June, 1918, it will be noticed that the daily average of United States deposits showed a drop from May of 52.9 per cent, while bills payable increased 24.4 per cent. Withdrawals of United States deposits began in May and continued until the end of June, concurrently with a rise in bills payable. Then an accession of Government funds brought a decrease in bills payable, the effect of which is seen in the heavy

July drop in bills payable. The daily statements show that a July increase in United States deposits is due to purchases of United States certificates paid for by credit on the books of the bank. Bills payable on the other hand, remain fairly steady during the month, although below the level of the preceding month. (Cf. Table A.)

In September and December, 1918, Government withdrawals were found in conjunction with increases in bills payable. In September, however, although withdrawals of United States deposits led to an increase in bills payable, the extent to which such deposits were withdrawn is not adequately reflected in the average monthly figures, because reductions were partially counterbalanced in the latter part of the month by credit created additions to deposits resulting from purchases of new certificates. (Cf. daily statements.) The December reductions in United States deposits were accompanied by a steady increase in bills payable until the middle of the month, after which date bills payable dropped somewhat. Nevertheless the amount outstanding at the end of the year still remained at a very high figure. (Daily statements.) For July to December, inclusive, the daily averages of loans and discounts are above the figures for the earlier months, while bills payable in October, November, and December amount to 111.1 per cent, 106.2 per cent, and 149.1 per cent of total loans and discounts, considerably above the ratio of United States deposits to total loans, which amounted to 72.9 per cent, 92.4 per cent, and 30.2 per cent, respectively. (Cf. Table B.)

In 1919 again a pronounced drop in the daily average of United States deposits in May was due to steady Government withdrawals throughout the month, resulting in mounting bills payable, the maximum figure being reached at the end of the month when United States deposits were at their lowest point. (Cf. Table A.) In June the increase in United States deposits occurs at the beginning of the month when bills payable are being maintained at a high level. The increase is evidently the result of credit purchases of United States certificates. Following tax payments there is no increase in United States deposits, but bills payable fall with a reduction in certificate holdings due to redemptions. In September again, a heavy increase in United States deposits dates from the middle of the month with a coincident sharp drop in bills payable. October and November withdrawals of Government funds mark a steady advance of bills payable with a downward plunge at the beginning of December when certificate issues held were redeemed. The level of bills payable remains nevertheless high in December, averaging 63.7 per cent of the daily average of total loans and discounts, and it is evident that notwithstanding the close interaction throughout between bills payable and United States deposits, the former in receding fail to revert to the previous low levels, whereas United States deposits show diminishing averages. (Cf. Table B.) Loans and discounts, however, advance and in the concluding three months of 1919 average 150.4 per cent, 144.5 per cent, and 115 per cent, respectively, of the daily average for the year. (Cf. Chart Y.)

BANK M.

Bank M is another bank which carried heavy investments in United States securities in 1918 and 1919. In 1918 there is evidence of a certain amount of inverse correlation between bills payable and rediscounts on the one hand and United States deposits on the other. The heavy reductions in United States deposits in April, for example, are found in conjunction with a sharp rise in bills payable and rediscounts. But otherwise the average amounts of withdrawals are insignificant in comparison with the average increases in bills payable and rediscounts. (Cf. Table A.) After the June decreases in bills payable and rediscounts, resulting from redemption of United States certificates, a low level of rediscounts was maintained through July. Then there followed a period of increased borrowing. The daily average of bills payable and rediscounts rose from 3.9 per cent of the daily average of total loans and discounts in July to 24.8 per cent and 28.2 per cent of the daily average of total loans and discounts in September and October respectively, falling to 16.2 per cent in November and 14.4 per cent in December. (Cf. Table B.) Meanwhile loans and discounts were approaching the peak points for the year, the November average being 130.5 per cent of the yearly average, while the December average dropped slightly to 124.9 per cent (statistics not tabulated). United States securities directly held had, on the contrary, been reduced to a minimum in November and December, so that the loan increases were no doubt partly accounted for by additions to borrowers' loans collateraled by United States securities, following installment payments on the fourth Liberty loan.

In 1919 withdrawals of United States deposits appear to have had little to do with increases in bills payable and rediscounts. In the early part of the year, holdings of United States securities were heavy and their gradual redemption kept borrowing in check. In fact, until October the daily average of bills payable and rediscounts for successive months falls steadily except for a March rise and a negligible increase in May. Thereafter, the expansion that occurred appears to have virtually nothing to do with Government operations. The rising amounts of bills payable and rediscounts, however, become an ever increasing proportion of total loans and discounts, jumping from 8.7 per cent of average loans in October to 24 per cent in November and 24.9 per cent in December. (Cf. Table B.) At the same time total loans and discounts rise above their daily average for the year to 114.1 per cent in October, 115.8 per cent in November, and 114.6 per cent in December. (Statistics not tabulated.) No doubt the tieing up of loans resulting from labor troubles and transportation difficulties which were responsible for a very general increase in borrowing operations at the end of the year affords at least a partial explanation of the rise which occurred n the case of Bank M.

BANK A.

Bank A has rediscounted much less heavily than either Bank E or Bank M in proportion to its outstanding loans and discounts. In fact, during the early months of 1918 there are no bills payable or rediscounts recorded, excepting a small amount in January. (Cf. Table B.) The direct holdings of United States securities are, however, heavier than for the later months of the year. In March there is an increase in the average amounts of United States securities directly held, while there is a drop in the average holdings of loans and discounts of about the same magnitude. A resort to borrowing in May accompanies an increase in loans, United States securities showing a commensurate decline. (For holdings of United States securities see weekly returns to Federal Reserve Bank of New York.) Installment payments on the third Liberty loan were due in this month and probably explain the loan increases with accompanying borrowing.

In the course of the year bills payable and rediscounts become a fairly steadily increasing percentage of loans and discounts, which in their turn reach their maximum in November and December, when the daily averages for the month are 113.6 per cent and 113.3 per cent, respectively, of the daily average for the year. (Statistics not tabulated.) As payments on the fourth Liberty loan were being made in these months and as United States securities directly held were below the level of earlier months, it looks as if responsibility for payments on United States bond issues had been shifted to customers in the form of collateral loans, installment payments being met for them by the bank, however, through a further resort to bills payable or rediscounts.

In 1919 Bank A displays marked unevenness in loans and discounts with a pronounced swell for the period from June to October. It will be noticed that bills payable and rediscounts maintain a high and fairly stable percentual relation to the daily average of loans and discounts for all months up to November, with the exception of June. (Cf. Table B.) The sustained high level of loans goes along with a diminution in amount of United States securities held, reductions coming at times when redemptions of United States certificates occur. (Cf. weekly returns made to Federal Reserve Bank of New York.) It is evident that these redemptions have not been made an occasion for contraction, as bills payable are not reduced in consequence. On the contrary, they are maintained at a high figure until November, when a sharp drop is brought about, coincident with loan contraction, loans falling in September from 116.5 per cent of the daily average for the year to 101.4 per cent in November. (Statistics not tabulated.) The reduction which took place in June in bills payable and rediscounts was traceable to certificate redemptions, United States deposits being high throughout the month with no evidence of additions or withdrawals. The December increase in Government deposits which came in the middle of the month coincided with a redemption of United States certificates and reduced holdings. Nevertheless borrowing increased toward the end of the month, although loans dropped slightly. (Cf. Table A.)

BANK C.

Bank C is a bank having heavy direct investments in United States securities in 1918 (cf. daily statements) and highly variable amounts of bills payable and rediscounts outstanding. Its holdings of United States certificates are steadily increasing during the early months, reaching a maximum in May and June when United States deposits, evidently credit-created, are also at a high point. The high daily averages of bills payable and rediscounts for April, May, and June are explicable on the score of Government calls to pay for certificates purchased. (Cf. daily statements.) Loans and discounts remain below the daily average for January until June. With redemptions in United States certificates at the end of June, bills payable and rediscounts disappear entirely for a time. Throughout the summer months they remain at a low figure. (Cf. Table A.)

In the fall again there are large additions to holdings of United States certificates. Diminishing United States deposits and increases in loans which are at maximum in November and December, bring increases in bills payable and rediscounts, which in November and December are absolutely higher than they were in the preceding May and June. The loan increases follow reductions in United States certificates and represent loans to customers against United States securities in the months when installment payments on the fourth Liberty loan were due. (Cf. daily statements giving loans classified in detail.)

In 1919 Bank C shows a steady reduction in loans against United States securities and after July the daily average of total loans and discounts is constantly below the average for the year until December. (Cf. Chart X showing loan contraction early in the year.) The ratio of bills payable and rediscounts to total loans and discounts, although high throughout the year, is lower for the last half year, October excepted. (Cf. Table B.) The reduction in bills payable and rediscounts has coincided very largely with the redemption of United States certificates. In the months when United States deposits have been withdrawn the daily averages of bills payable have, as a rule, increased, as in March, May, and October. Toward the end of March there is a reduction in bills payable and rediscounts following a reduction in certificate holdings. The December increase in the daily average of bills payable and rediscounts appears to be related to loans as they increase together for a while. During the month, however, a drop in bills payable is found in conjunction with a reduction in loans against United States securities.

BANK B.

In the case of Bank B the daily averages of bills payable and rediscounts are moderately low in relation to the daily averages of total loans and discounts during 1918. Rediscounts of loans to customers against United States securities explain some part of the fluctuations in amounts of bills payable and rediscounts. (Cf. daily statements giving loans classified in detail.) Although few United States securities were carried directly, large loans were made against them as collateral and very heavy increases in loans occurred at the end of 1918, when the daily averages for November and December amounted to 125 per cent and 117.1 per cent, respectively, of the daily average for the year. (Cf. Chart Y.)

In 1919 the daily average of bills payable and rediscounts reaches a maximum in December, when the average amounts to 19.7 per cent of the daily average of total loans and discounts for the month. February is not far behind December in the actual daily average of rediscounts, while the ratio of the daily average to the daily average of total loans and discounts is even greater, 22.1 per cent. (Cf. Table B.) In February an increase in rediscounts of loans to customers against United States securities occurred, following last installment payments on the fourth Liberty loan. Eventually these rediscounts disappear, but at the end of the year, following Victory loan financing, they are a large item. Again a pronounced end of the year increase in loans comes with the increase in bills payable. As in other cases, the unsatisfactory industrial conditions prevailing at this time help to explain the increase. Reductions in United States deposits in November and December would also accentuate the need for borrowing. (Cf. Table A.)

BANK O.

As compared with the other banks, Bank O has maintained a moderately low percentage of bills payable and rediscounts to total loans in 1918, excepting the month of May, when a decided increase follows upon Government withdrawals of deposits. Its loan fluctuations are rendered more extreme, however, by the fact that with the reduction of security holdings, following redemptions of United States certificates, increases in its reserves appear to have been made the occasion of expanding loans. (Cf. daily statements.)

In 1919 the position of the bank has altered in that bills payable and rediscounts have become increasingly heavy in relation to total loans and discounts, while United States deposits are on the average but a small percentage of the average bills payable and rediscounts. There is no evidence of any significant connection between reductions in the former and increases in the latter, given the disproportion in the absolute sums involved. With reductions in amounts of United States securities held, there did not follow commensurate reductions in bills payable and rediscounts, which were sustained at a high level until August, when there was a drop. A subsequent increase resulted in the attainment of a high ratio of the daily average of bills payable and rediscounts to the daily average of total loans and discounts in the fall months. (Cf. Table B.)

BANK N.

Bank N is one of the banks having relatively stable holdings of loans and discounts which has borrowed in restricted amounts. It did not resort to borrowing operations until the fall of 1918, beginning in September. There are slight increases in November in the daily average of bills payable coinciding with a drop in the daily average of United States deposits. Both items are small, however, but the withdrawals are much larger than the increase in bills payable. Moreover, United States deposits drop sharply from a high figure at the beginning of the month, whereas bills payable are relatively steady throughout. The December decrease in loans was accompanied by a disappearance of bills payable, loans against United States securities remaining about the same.

As the investments of this bank are chiefly in loans (as compared with other banks, direct investments in securities being much below the average), and as this was also true for the war period, it follows that United States deposits were relatively small, and Government withdrawals had little to do with the creation of bills payable and rediscounts. Hence the course of loans and discounts needs to be examined. As loans were fairly stable during the early part of 1918, it is easy to see why the bank was the last one to resort to borrowing. And, when it did begin in the fall, there is a rise in loans, traceable probably to Liberty loan operations, as it was accompanied by an increase in loans to customers against United States securities. (Cf. daily statements.) Although there is some measure of inverse correlation between bills payable and rediscounts and United States deposits in July, September, and October, 1919, it will be evident upon examination of the percentage relationships of these items to total loans and discounts in the preceding months, that there is little relationship between the absolute figures. (Cf. Tables A and B.) In September, furthermore, a low percentage of bills payable indicates disappearance of the item on all but four days of the month. A day to day following of these items fails to reveal any connection between Government demands and the rediscounting activities of the bank. The sharp increase in rediscounts in December undoubtedly was the outcome of business and industrial exigencies, and accompanies an increase in loans. Bills payable are consistently high during December and at the end of the month they are at the peak. Loans to customers against Liberty bonds have fallen, however, to insignificant sums. United States bonds on hand or pledged have become negligible. Bills payable are largely secured by bills discounted and time loans in place of certificates and United States bonds. (Cf. daily statements.) In the course of the year loans have become a percentually larger proportion of total investments, although there has been a liquidation of war paper, of which the holdings were at no time heavy.

BANK X.

Bank X may be classed with Bank N, in that it has maintained relatively stable holdings of loans and discounts while its bills payable and rediscounts as compared with total loans and discounts have averaged less both in 1918 and in 1919 than those of any other bank except Bank N. In the early part of 1918 it has no bills payable or rediscounts to record, and during the year the only significant connection between bills payable and rediscounts on the one hand and withdrawals of United States deposits on the other is found in September, when the average reduction in the latter is close to the increase in the former. The percentage reduction in the daily average of United States deposits as compared with August is 59.9 per cent, while the increase in the daily average of bills payable and rediscounts is 73.7 per cent. (Cf. Table A.) In August, however, the daily average of bills payable and rediscounts had only amounted to 9.2 per cent of the daily average of total loans and discounts for that month, while United States deposits had constituted 12.5 per cent thereof. (Cf. Table B.) Even in this case the day-to-day changes do not show any measure of inverse correlation between decreases in United States deposits and increases in rediscounts. There was an early August rise in bills payable and rediscounts, a late August drop in United States deposits, and fairly steady items for both in September. In 1919, in months in which the daily average of United States deposits is reduced, the daily average of bills payable and rediscounts does increase, to be sure, but amounts involved are small and a day-to-day following of items shows that the correspondence is not very significant.

From July to October, inclusive, in 1918 the relatively large amounts of bills payable and rediscounts outstanding are found in connection with a high level of loans, but rediscounts had been increasing steadily from May to October, becoming proportionately larger in relation to the daily average of total loans (see Table B), rising from 1.7 per cent of the daily average of loans in April to 16.1 per cent in September, and then dropping to 11.4 per cent in October. A possible explanation is that in these months when subscriptions on the third and fourth Liberty loans were being received, unexpected withdrawals occasioned some part of the resort to borrowing. Thereafter a reduction in loans in October and November is accompanied by a marked drop in bills payable and rediscounts, followed by a complete disappearance of these items in December. In 1919, after July, the daily average of bills payable and rediscounts constitutes only a small percentage of the daily average of total loans and discounts (October excepted) (cf. Table B) although the daily average of loans and discounts is at a maximum in October and December. (Statistics not tabulated.)

BANK Z.

Bank Z would also be classified with Bank N and Bank X in so far as relative stability of loans and discounts controls the grouping. But it happens that it has throughout borrowed heavily, while the ratio of the daily average of bills payable and rediscounts to the daily average of total loans and discounts is higher in 1919 than in 1918. Its holdings of United States securities, including certificates of indebtedness, are large, but bills payable and rediscounts do not contract as might be anticipated, at times when redemptions of United States certificates occur. (Cf. daily statements.) For the early months of 1918 withdrawals of United States deposits as shown by reductions in the daily averages are paralleled by increases in the daily average of bills payable and rediscounts and in May and June, 1919, this is also true. (Cf. Table A.) On the whole, however, day-to-day following of changes would indicate slight relation between the course of United States deposits and rediscounting operations and a much more intimate connection with changes in loans and discounts. As a matter of fact, daily averages of United States deposits are insignificant when compared with the daily averages of bills payable and rediscounts in 1919, becoming steadily smaller as the year progresses. Although amounts carried are larger in 1918, the disproportion is also great in the latter months of that year.

Since the heavy borrowing has not exaggerated the fluctuations in loans and discounts, which remain relatively steady in this case, and since there is a lack of evidence that United States securities have been shifted to any great extent to customers' loans, the data at hand would indicate that borrowing has been resorted to in order to carry a considerable part of ordinary loans. As the bank is one holding large numbers of bankers' balances, it is entirely probable that withdrawals have induced resort to rediscounting. It is significant that the rate of increase of the loans and discounts of this bank has been much less than that of other banks, the average for 1919 even falling below that for 1917. (Cf. Chart X.)

BANK Y.

In Bank Y bills payable and rediscounts follow the course of loans and discounts more consistently than in any other case, Government security holdings having practically no effect upon the amounts of bills payable and rediscounts outstanding. In April, September, and December, 1918, to be sure, a reduction in the daily average of United States deposits is shown with an increase in the daily average of bills payable and rediscounts. (Cf. Table A.) But the bills payable and rediscounts are much larger absolute amounts than are explicable on the basis of requirements induced by Government calls, especially since United States security holdings are at no time excessive. Loans show a steady increase during the year, however, but the rate of increase of bills payable and rediscounts is even more rapid, the daily average amounting to 41.2 per cent of the daily average of total loans and discounts in December, 1918. (Cf. Table B.)

In 1919 the process is reversed. Loans and discounts are steadily reduced, with a minor increase in the daily average for October Daily averages of bills payable and rediscounts fall with them (cf. Table A) although they are still large at the end of the year, being 24.4 per cent of the daily average of total loans and discounts in December. (Cf. Table B.) United States securities held have also been steadily reduced during the year. (Cf. weekly returns to Federal Reserve Bank of New York.) In short, there is evidence of a sustained policy of contraction, following a very unusual expansion of loans, made possible by means of rediscounting.

BANK D.

Bank D is a bank with a high proportion of bills payable and rediscounts to total loans in both years. In both years, too, the daily averages of United States deposits for all months is much below the daily averages of bills payable and rediscounts. The reductions in June, 1918, in bills payable and rediscounts are probably due to redemptions in United States certificates held. The October drop is also coincident with reductions in United States securities owned, indicating redemptions of outstanding certificates. (Cf. weekly reports to Federal Reserve Bank of New York.) In the months when bills payable and rediscounts were high, withdrawals of United States deposits occurred which may have resulted in slightly increasing the amounts of bills payable and rediscounts outstanding.

In 1919, following the attainment of maximum loan holdings in June, which coincided with increases in loans against United States securities, and resulted in the maintenance of a high proportion of bills payable and rediscounts to total loans and discounts, there was a gradual reduction of loans and a drop in bills payable and rediscounts facilitated by successive redemptions of certificate issues which reduced bills payable to a minimum in December. (Cf. Table A.) The result of this policy was that, with two exceptions, the ratio of the daily average of bills payable and rediscounts to the daily average of total loans and discounts was lower in December than for the other banks, although the January ratio had been exceeded in only two cases. (Cf. Table B.)

Incomplete data for 1917 bear out the statements based upon conditions in 1918 and 1919, as regards the characteristic rediscounting activities of the several banks. (Cf. Table C.) The influence of Government demands, however, is probably more patent, less complicated by a multiplicity of factors, than in the two later years. The effect of the payments on the first Liberty loan is apparent in the resort to rediscounts and bills payable which in all cases but one begins at the end of May. By August, certificate redemptions have led to a great reduction or disappearance of bills payable and rediscounts. Again at the end of the year, the second Liberty loan payments induce fresh resort to rediscounting.

VARIATION OF INVESTMENTS.

From the start differences in policy are manifest in the widely varying ratios of investments in United States securities to loans and discounts. When these ratios are high, credit purchases have been the rule and subsequent withdrawals have led to the creation of heavy amounts of bills payable and rediscounts. Bank E from the start has large United States deposits, increasing as purchases of United States certificates pile up. Withdrawals are met by the creation of bills payable, with a drop at times of certificate redemptions. October and November show a sustained high level of rediscounting, with Liberty loan installments again being called for. Bank N, on the contrary, has financed its purchases of United States securities without resort to rediscounting, and Bank X has confined its rediscounting to June and the early part of July. Bank C has invested heavily in certificates bought on credit as evidenced by the size of United States deposits and heavy rediscounts at times of call. Bank B, which is carrying very large United States deposits in the last two months of the year, has done only a moderate amount of rediscounting. Bank Z begins with a small but steadily increasing amount of rediscounts, which have become considerable by November. Bank O pursues an uneven policy, with pronounced variations in the daily averages of bills payable and rediscounts from month to month.

The great rise in loans in November and December, especially in the case of Banks B, C, and E, all of which had evidently invested largely in United States securities as shown by the size of United States deposits, no doubt evidences an increase in loans to customers against United States securities following installment payments on the second Liberty loan.

In conclusion it may be said that the limited statistical survey which has been attempted emphasizes the need of further analysis of the causes underlying fluctuations in the loans and discounts of individual banks. During the period covered, many extraordinary influences were at work which produced extraordinary changes in the condition of all banks, individually and collectively. But these influences operated with very unequal degrees of intensity upon the several institutions studied. It would be interesting to pursue the inquiry over a longer period of time, for years when the fiscal needs of the Government have fallen into the background and conditions have become more normal. It would be instructive to see to what extent differences in lending policy, in the degree and the direction of changes in loans and discounts, tend to persist.

Such a study of the fluctuations in the loans and discounts of individual banks, in attempting to explain the reasons for individual variations, would consider the seasonal or nonseasonal nature of the businesses financed, try to determine whether the several bank managements had adopted a conscious policy in regard to the permissible degree of loan expansion and contraction, and finally take account of any fortuitous occurrences that may have been operative to produce changes.

REQUESTS FOR REDISCOUNTS.

Such an investigation would also help to throw light on the reasons for and the legitimacy of requests for rediscounts. It is clear that the proximate reasons assigned for making such requests do not necessarily constitute a fundamental explanation of them. During the period studied, for example, rediscounts were often the immediate result of Government withdrawals. But loans may have been previously increasing and cash holdings consequently reduced, even with Government calls in prospect. Or deposits belonging to banks and to individuals may have been drawn down to an unexpected extent, necessitating rediscounts despite a conservative loan policy which would ordinarily have obviated the necessity of an application for rediscounts.

The exclusive study of combined statements of condition is apt to give a too-emphatic impression of unanimity of policy in the expansion or contraction of loans on the part of the banks belonging to any system. As a matter of fact loan contraction in one or several instances may be offset by expansion in other cases. Or, a more likely situation, a pronounced change in the loan holdings of one bank may exert an undue influence upon the combined results. Again, difficulties arise in interpreting the rise and fall in rediscounts when totals are given for a group of banks. One bank may have been forced to rediscount for example, because of depleted reserves, due to a policy of loan expansion; another may have had to cover withdrawals of deposits, without having previously enlarged its loans, etc. But unless the combined statements bring such changes into relief, the real causes of an increase in rediscounts may either remain unknown or else be misstated.

The Investment Trust as a Channel for Investment Abroad.[1]

FRANCE.

Probably the foremost financial company in France to-day that at one time carried on exclusively an investment trust business is the Crédit Mobilier Français. This institution has since its foundation undergone several changes. After its reorganization in 1871, when the capital was increased to 80,000,000 francs, it operated exclusively as an investment trust. The capital was reduced, however, in 1878, to 40,000-000 francs, and again in 1883 to 30,000,000 francs. In 1902 the Office des Rentiers became associated with the Crédit Mobilier, and the new combination worked with a capital of 7,525,000 francs. During the years subsequent to 1910 great success accompanied the transactions of the Crédit Mobilier. Several loans to foreign Governments were floated by it, and the reorganization of foreign industrial corporations and banks was undertaken with advantage. The institution increased gradually its capital to 80,000,000 francs, and is to-day principally engaged, apart from the financing of undertakings, in the flotation of loans.

Interest in American securities in France led to the creation of the Société Financière Franco-Américaine, which was founded in 1905 in Paris with a capital of 50,000,000 francs. The company has been in liquidation since June, 1916. Concerning the organization and purposes of this company a few details would not seem to be out of place.

The company was founded in accordance with the laws of July 24, 1867, August 1, 1893, July 9, 1902, and November 16, 1903, for the purpose of engaging, on its own account, in partnership with other persons, or for the account of third parties, in operations covering personal property, and especially American securities. The company's functions included buying, subscribing, issuing, selling, and negotiating all public securities and personal property, French or foreign, especially American, whether transferable or not, wholly paid up or only in part; it was to receive on deposit such securities, performing all operations and services as might be required in respect to same; carrying out all commercial and financial operations previously indicated, and in general all operations required of a banking institution; affiliating with, by contributions, participations, loans, opening of credits, subscriptions, purchase of stocks or bonds, etc., any institution already established or to be created with an object similar to its own. The company was authorized to purchase or construct all buildings necessary for its installation.

The head office was fixed at Paris, with another office at New York as the seat of the New York committee. Branches and agencies could be established wherever considered necessary. The duration of the company was fixed at 50 years from the date of its definite establishment unless previously dissolved or extended.

The capital consists of 50,000,000 francs, divided into 10,000 shares each of 5,000 francs. Each share has an equal claim on the assets of the company and to dividends distributed. The capital could be increased or decreased on the recommendation of the board of directors with the sanction of the stockholders.

The company was authorized to contract loans by the issue of bonds, or by other methods. The board of directors, without the ratification of the general meeting of the bondholders, was authorized to fix the amount of such loans, as well as the terms, method of issuing, and repayment thereof. The limit of such loans was fixed at twice the amount of the nominal capital of the company.

The company was administered by a board of directors composed of from 7 to 12 members, selected from the stockholders. These members were appointed and removable at a stockholders' meeting. Each director was obliged to own at least 10 shares of stock. The first board of directors was appointed for six years by the general constituent assembly. At the end of the first six years the whole board was to be renewed in its entirety. Subsequently the membership of the board was to be renewed so that the tenure of office of a director would not exceed six years. A president and vice president were elected by the board. The board was to hold meetings at least once a month. Certain decisions of the board had to be voted by a majority of three-quarters of the board. The board was given full powers without reservations to act in the name of the company and to carry out all necessary operations.

[1] Continuation of article published in the November (1920) FEDERAL RESERVE BULLETIN, pages 1168-1173.

The directors residing in the United States, the "New York committee," represented the company in America. The relations between the board of directors and the New York committee, as well as the powers which were delegated to the directors who formed this committee, were determined by the board of directors. No operations in American securities could be made without the consent of the majority of the members of the New York committee. The board of directors could delegate all or part of its powers to expedite its business to one or several directors or attorneys taken from outside the board. The board determined and governed the functions of the directors and attorneys. It was to fix the salary to be given to the directors and attorneys, as well as all traveling expenses. The board was empowered to confer powers on whoever it might desire by special order and for a specific object.

A general meeting of stockholders was to be held in the semester following the closing of the annual budget. All stockholders owning one or more shares could participate. At least one-fourth of the capital subscribed had to be represented at this meeting. The general meeting was to be presided over by the chairman of the board of directors, or, if he was unable to do so, by a director designated by the board of directors.

INVESTMENTS IN AMERICAN SECURITIES.

The primary object of the company was, as pointed out above, to invest in American securities and to profit by the difference in the rates of interest paid in the United States and in France. Prior to the decision to liquidate, the company had not been as successful as originally anticipated. When the stock of the company was floated, the high prices prevailing in the American markets did not offer opportunities for investment on favorable terms, and it was decided that the company would await a period of depression in the United States which would allow the purchase of securities at depreciated prices and thus permit of a higher rate of interest being obtained on the investments. When, however, such a period of depression occurred, the French market, in its turn, showed similar tendencies, with the result that the margin between the rates of interest in France and America was not large enough to warrant the purchase of securities in the latter country. The company was consequently obliged to abandon one of the most important items in its program, and its operations were greatly restricted for a considerable period.

Soon after the outbreak of war in August, 1914, the situation became even more acute, as the rates of interest in France continued to advance and eventually became higher than in the United States, thus eliminating the principal object for which the company was formed. It was, therefore, decided at a stockholders' meeting on June 29, 1916, to wind up the business of the company.

A few other companies having the character of investment trusts may be mentioned. The Banque des Fonds Publics et des Valeurs Industrielles was founded in Paris in 1877, with a capital of 3,000,000 francs, but has been in liquidation since 1909. An investment trust for railway securities is the Société Générale des Chemins de Fer Economiques, which was founded in 1880 through the cooperation of practically all the great banks of Paris. It has a capital of about 25,000,000 francs invested in French, Belgian, and Italian railways. Another investment trust for railway obligations is the Compagnie des Chemins de Fer Departementaux, which was founded in 1881 and has a capital of 30,000,000 francs. Probably the largest institution of this kind to-day is the Société Parisienne pour l'Industrie des Chemins de Fer et des Tramways Electriques, with a capital of 50,000,000 francs. The extent of its interests may be gathered from the investments in the following railways: Société d'Electricite de Paris, Ateliers et Constructions Electriques du Nord et de l'Est, Société d'Electricite du Hainaut, Métropolitain de Paris, Chemins de Fer Economiques du Nord, Compagnie Belge de Chemins de Fer Réunis, Tramways d'Astrachan, Tramways de Taschkent, Cairo Electric Railway and others. Other companies holding railway securities are: Omnium Lyonnais de Chemins de Fer et de Tramways, founded in Lyons in 1896, originally with a capital of 20,000,000 francs, reduced in 1898 to 10,000,000 francs, and controlling numerous street railways and subways; and the Société Française de Tramways Electriques et Chemins de Fer, with a capital of 3,000,000 francs, invested in Hungarian, Russian and other street railways.

COAL MINING INVESTMENTS.

There have been a number of French investment trusts investing in stocks of coal mines. Most of them had, however, only a rather brief existence, as, for example, the Société Générale de Crédit Minier et Industriel, with a capital of 3,000,000 francs; Société Française pour l'Industrie et les Mines; Société Omnium Française de Valeurs Minières et Industrielles, with a capital of 3,000,000 francs. An investment trust which, like most of the other companies, is also a financial company, invests in gold mines, is the Anglo-French Exploration Co. This company was founded by English, French, and German capital. Its capital, amounting to about 1,000,000 pounds, is invested in the following bonds and stocks: British Government bonds; East India Railway debentures; London County; National Railways of Mexico; Central Argentine Railway; Camp Bird (Ltd.); General Motor Cab Co.; Great Cobar (Ltd.); Simmer Deep (Ltd.); Nelson Steam Navigation Co.; Africander Proprietary Gold Mines; Anglo-French Navigation Coal Estates; Anglo-French Matabele Land Co.; Van Ryn Deep (Ltd.); Van

Boksburg Gold Mines; Rand Klip (Ltd.); Cordoba Copper Co.; City Deep (Ltd.); Kleinfontein Estates and Township; Anglo-French Land Co. of the Transvaal; Apex Mines; Brakpan Mines; Colcoath Mine (Ltd.); Crown Mines, Great Cobar (Ltd.); Great Fitzroy Mines; Mount Elliott (Ltd.); Mount Lyell Mining & Railway Co.; Randfontein Deep; Vorspoed Diamond Mining Co.; Alaska Mexico Gold Mining Co.; and others.

BELGIUM.

It may not be incorrect to say that the first investment trust ever created, long before such institutions were formed in Scotland, was the Société Générale de Belgique, which was founded in Brussels in August, 1822. The business of investment trusts is carried on nowadays by a great number of banks, which are, however, at the same time financing or promoting companies. Practically all such banks are interested to a greater or less degree in industrial and transportation undertakings.

The promotion of street railway undertakings in all parts of the world is made a speciality of the Belgian banks, and a large amount of capital is invested in such transportation systems. One of the older banks of this character is Crédit Général Liégeois, founded in 1865. It was changed in 1885 from a partnership to a corporation. Its capital is 30,000,000 francs, and it holds stock in a large number of industrial enterprises and railway companies, including the Entreprise Générale de Travaux, which controls the Société Générale de Tramways et d'Applications d'Electricité; the latter possesses electrical plants in Russia, and is interested in the Société Nationale des Chemins de Fer et Tramways en Italie. Another investment trust and financial company is the Banque Liégeoise, founded in 1835. It has an authorized capital of 30,000,000 francs, and is interested in numerous tramway companies in Italy, Spain, Greece, and Russia, and electrical enterprises. A similar position is held by the Crédit Anversois, being a subsidiary of the Crédit Général Liégeois and founded in 1898 with a capital of 12,000,000 francs. The present capital is 35,000,000 francs.

The largest institution, exclusively an investment trust and neither conducting a banking nor a financing business, is the Banque Belge de Chemins de Fer, founded in 1894 in Brussels by an international banking consortium, consisting of the Banque de Paris et des Pays-Bas, the Wiener Bankverein, Schweizerische Kreditanstalt, Société Générale des Chemins de Fer Economiques, Deutsche Bank, Dresdner Bank and other banks. It was created by the consortium purely for the purpose of purchasing and selling and subscribing to stocks and securities of railroads and street railways. It has a capital of 25,000,000 francs and holds a large amount of securities of American and other foreign railways.

STREET RAILWAY INVESTMENTS.

Belgium, to a degree unsurpassed by any other country, has invested in street railways in all parts of the world, and has created for that purpose a number of investment trusts. A few of these trust companies may be mentioned: Compagnie Générale de Railways et d'Electricité, Brussels, 1904, capital 35,000,000 francs; Fédération Française et Belge de Tramways, Brussels, 1898, capital 7,500,000 francs; Compagnie Générale Auxiliaire d'Enterprises Electriques, Brussels, 1909, capital 10,000,000 francs; Trust Franco-Belge de Tramways et d'Electricité, Brussels, 1898, in liquidation.

A company that is interested in securities of public utilities in the Argentine, Spain, Hungary, Italy, Rumania, Denmark, Belgium, Russia, and South America is the Société Financière des Transports et d'Entreprises Industrielles, of Brussels. It was established in 1898 by an international syndicate of bankers, and has paid average dividends, from 1904 to 1911, on a capital of 20,000,000 francs of about 8 per cent per annum.

For purposes of investment in American railway securities, there was founded in 1911 an international investment trust in Brussels, the Société Financière de Valeurs Américaines. Among the founders were the Deutsche Bank; Warburg & Co., of Hamburg; the Société Générale of Brussels; Banque de Bruxelles; Banque de Paris et des Pays-Bas; Société Générale pour Favoriser, etc., in Paris; Société Française de Banque et de Dépots; Banque Française pour le Commerce et l'Industrie; Kuhn, Loeb & Co., New York, and others. The authorized capital amounted to 30,000,000 francs, of which 20 per cent was paid in.

SWITZERLAND.

A considerable number of institutions in the nature of investment trusts is found in Switzerland. The city of Geneva seems to be the home of most of the older companies. The Banque de Fonds was founded in 1885 and the Société Financière Franco-Suisse in 1892. The two companies acquired a large part of Turkish and Serbian loans and issued their own debenture bonds. The Banque de Fonds has been liquidated. The Société Financière Franco-Suisse has become affiliated with the Union Financière de Genève, a banking and financial company, but has preserved the character of an investment trust. Its purpose was, originally, to acquire only Government bonds and securities guaranteed by Governments. In 1895 the company started, however, to make investments in municipal and railway bonds. But investments in railway securities may not exceed 25 per cent of the entire investments. Its present capital consists of $800,000 in common shares. Outstanding, $5,500,000 in 4 per cent bonds. The company owns an assortment of city and railroad bonds of Japan, Russia, Turkey, the Balkans, and North, Central, and South American countries. Average dividends paid on common shares from 1907 to 1917, about 12 per cent per annum. It may be well to quote articles 2, 3, and 4 of the company's statutes:

ARTICLE 2. The society has as its principal object the acquisition and realization (1) of funds guaranteed by States, cities or communities; (2) obligations issued by railroads enjoying an annual kilometric guaranty given by the State; (3) obligations of societies of landed credits, or of railroads holding legally constituted guaranties. At all times in this latter class the proportion can not be represented by more than one quarter of the placements of the society.

The society may carry on the usual operations, commercial or financial, which are the object of the normal activity of banking establishments, in so far as these operations are not in contradiction with the present statutes. The society may equally receive on deposit securities, either of public bodies or of private enterprises, and deliver certificates in multiplies or fractional parts, and make all the necessary operations which the possession of these securities may require for the purpose of safeguarding them.

ART. 3. The administration of the society will be at Geneva. Agencies in other cities can be created by decision of the council of administration. These agencies may be placed in banking establishments already existing.

ART. 4. The duration of the society is unlimited. It may at all times be liquidated by the general assembly of stockholders.

GENEVA COMBINATION.

In order to take advantage of a favorable opportunity for speculating in American stocks, several banking houses of Geneva founded in 1896, in cooperation with the banking firm of Iselin & Co., of New York, the Société Financière Suisse Américaine, with a capital of 2,500,000 francs. The great success attained by this company is indicated by the dividends distributed during the years immediately following: 1897, 12 per cent; 1898, 20 per cent. In 1898 the company was liquidated after a payment of a dividend of 100 per cent and the redemption of its obligations. When in 1907 another occasion presented itself for advantageous buying of American stocks, the company was revived. Its capital was then 5,000,000 francs, which was increased to 8,250,000 francs in 1909.

One of the Swiss organizations, the Société Financière pour Entreprises Electriques aux Etats-Unis, Geneva, is especially interested in electrical enterprises in the United States, and its council of administration is not exclusively limited to Swiss citizens, but also includes three persons in the United States. The investments are more of the public utility type than of any other, and are widely distributed throughout the United States, being electrical power companies in most instances. The powers of the society are contained in articles 2, 3, and 4 of the statutes, as follows:

ARTICLE 2. The society has for its objects to engage, in all countries, and more especially in the United States, for its own account, for the account of others, or in participation with others, in all operations, affairs or enterprises, commercial, financial or industrial, all enterprises of public utility, and in particular those pertaining to the furnishing of lighting and electrical power.

ART. 3. The administration will be at Geneva. There may be created agencies or branches in other countries by decision of the council of administration. A committee may be established in the United States.

ART. 4. The duration of the society is unlimited. It may be dissolved at any time by decision of the general assembly in conformity with article 30 hereafter enumerated.

There are other companies interested in investments in American securities. In 1907 there was founded in Basel by a banking consortium the Schweizerische Gesellschaft für Anlagewerte, with a capital of 20,000,000 francs. Investments are principally made in American industrials.

Speyer & Co., in Basel, created in 1903, in cooperation with a few other banks, the Société Suisse pour les Valeurs de l'Amérique du Nord, with a capital of 5,000,000 francs, doubled in 1907. Investments may only be made in American securities. In 1906 a company under the name of Omnium Electrique and with a capital of 800,000 francs, for the purpose of participating in electrical enterprises, was founded in Geneva. The capital was reduced in 1910 to 300,000 francs.

To mention a few other companies created for different purposes: Glückauf, A.-G. für Industrielle Unternehmungen, Zürich; Société Suisse d'Applications Industrielles, Geneva; Schweizerische Bank für Kapitalanlagen, Zürich-Effekten Gesellschaft, A.-G., Winterthur; Société Financiére pour l'Industrie au Canada, Geneva; Société Financière Italo-Suisse, Société Anonyme, Geneva; Société Financière pour l'Industrie au Mexique, Geneva; Société Franco-Suisse pour l'Industrie Electrique, Geneva.

Most of the great Swiss banks have founded as subsidiaries investment trust companies. This system has, however, at times been used for fraudulent purposes, for example by the Zentralbank in Bern. This bank founded investment trusts and procured capital from the public intent on speculation. There was founded in September, 1906, the Trustgesellschaft für

Industriewerte in Bern, and in March, 1907, another company, the Internationale Eisenbahnbank in Bern. Soon after the foundation of these two companies, the directors of the Zentralbank began to unload on the subsidiaries at high prices securities of which they wanted to dispose, with ruinous effects on the subsidiaries.

GERMANY.

Investment trust companies have not obtained great importance in Germany. The absence of such companies for the purpose of investing in foreign securities is particularly noticeable. There was always plenty of opportunity for capital to invest in domestic enterprises. The German investment trusts are also financial and controlling companies, and they are closely affiliated with the banks.

The oldest German investment trust is the Aktiengesellschaft für Rheinisch-Westfälische Industrie, founded in 1871 by the A. Schaaffhausenscher Bankverein and a few other concerns, with a capital of 6,000,000 marks. The capital was decreased in 1884 to 1,500,000 marks. Its success may be gauged from the dividends distributed: 1905, 19 per cent; 1906, 40 per cent; 1907, 6 per cent; 1908, 4 per cent; 1909, 6 per cent; 1910, 6 per cent; 1911, 4 per cent; 1912, 4 per cent; 1913, 4 per cent.

Another company, founded in 1871 by the Barmer Verein and others for the purpose of the general development of industry, building, and banking, is the Bergisch-Märkische Industriegesellschaft. Originally it had a capital of 4,500,000 marks, which was reduced during the years 1878-1885 to about 3,000,000 marks. In 1897 the company became affiliated with the Deutsche Bank and its subsidiary, the Bergisch-Märkische Bank, and the capital was increased to 6,000,000 marks. The company paid a dividend in 1910, 4 per cent; in 1911, 0; 1912, 0; 1913, 7 per cent; 1914, 6 per cent.

The Aktiengesellschaft für Rheinische-Westfälische Industrie and the Bergisch-Märkische Industriegesellschaft were for more than 20 years the only investment trusts in Germany. The years subsequent to 1890 witnesses a period of great financial activity and a number of new institutions in the nature of investment trusts were founded. Most of the companies devoted themselves to financing of new enterprises. One of the investment trusts is the Hannoverische Gesellschaft für Industrielle Unternehmungen, a creation of the Norddeutsche Bank of Hamburg and of the banking house of Ephraim Meyer & Sons, of Hanover. Its capital is 5,000,000 marks, and the following dividends were paid: 1910-11, 6 per cent; 1911-12, 6 per cent; 1912-13, 6 per cent; 1913-14, 4 per cent; 1914-15, 4 per cent.

There may be mentioned the Bank für Industriebeteiligungen, founded in Berlin in 1901 with a capital of 1,000,000 marks. Investments were principally made in Hungarian mining operations. The company was liquidated in 1903 with great loss to the investors. The Deutsche Industriegesellschaft, A. G., of Regensburg, founded in 1898, which has now a capital of 1,400,000 marks, and the Aktiengesellschaft für Industrielle Unternehmungen of Blankenburg A. H., founded in 1906, which has a capital of 1,000,000 marks, are two other examples of investment trusts. But their success has not been striking.

Election of Directors.

The following directors of Federal Reserve Banks have been elected for the three-year term beginning January 1, 1921:

District No. 1—Boston:
- Class A.—Thomas P. Beal, Boston, Mass.
- Class B.—Philip R. Allen, East Walpole, Mass.
- Class C.—Frederic H. Curtiss, Boston, Mass.

District No. 2—New York:
- Class A.—R. H. Treman, Ithaca, N. Y.
- Class B.—Richard H. Williams, Madison, N. J.
- Class C.—W. L. Saunders, New York, N. Y.

District No. 3—Philadelphia:
- Class A.—Joseph Wayne, jr., Philadelphia, Pa.
- Class B.—Edwin S. Stuart, Philadelphia, Pa.
- Class C.—Richard L. Austin, Philadelphia, Pa.

District No. 4—Cleveland:
- Class A.—Robert Wardrop, Pittsburgh, Pa.
- Class B.—Thomas A. Combs, Lexington, Ky.
- Class C. ——— ———.

District No. 5—Richmond:
- Class A.—L. E. Johnson, Alderson, W. Va.
- Class B.—D. R. Coker, Hartsville, S. C.
- Class C.—Caldwell Hardy, Richmond, Va.

District No. 6—Atlanta:
- Class A.—P. R. Kittles, Sylvania, Ga.
- Class B.—Leon C. Simon, New Orleans, La.
- Class C.—Jos. A. McCord, Atlanta, Ga.

District No. 7—Chicago:
- Class A.—E. L. Johnson, Waterloo, Iowa.
- Class B.—A. R. Erskine, South Bend, Ind.
- Class C.—James Simpson, Chicago, Ill.

District No. 8—St. Louis:
- Class A.—John G. Lonsdale, St. Louis, Mo.
- Class B.—Le Roy Percy, Greenville, Miss.
- Class C.—John W. Boehne, Evansville, Ind.

District No. 9—Minneapolis:
- Class A.—J. C. Bassett, Aberdeen, S. Dak.
- Class B.—N. B. Holter, Helena, Mont.
- Class C.—John H. Rich, Minneapolis, Minn.

District No. 10—Kansas City:
- Class A.—E. E. Mullaney, Hill City, Kans.
- Class B.—Harry W. Gibson, Muskogee, Okla.
- Class C.—Asa E. Ramsay, Kansas City, Mo.

District No. 11—Dallas:
- Class A.—Ed. Hall, Bryan, Tex.
- Class B.—J. J. Culbertson, Paris, Tex.
- Class C.—W. F. Ramsey, Dallas, Tex.

District No. 12—San Francisco:
- Class A.—John W. Baer, Pasadena, Calif.
- Class B.—A. B. C. Dohrmann, San Francisco, Calif.
- Class C.—John Perrin, San Francisco, Calif.

Directors of Branch Banks.

Directors of branches of Federal Reserve Banks to serve for the year 1921 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, E. J. Barcalo, T. E. Lannin.

CINCINNATI BRANCH.

(Federal Reserve Bank of Cleveland.)

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

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 B. 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.—W. C. Weiss.
Directors.—U. S. Stewart, A. F. Kerr, W. W. Turney, A. P. Coles, W. C. Weiss.

HELENA BRANCH.

(Federal Reserve Bank of Minneapolis.)

Manager.—O. A. Carlson,
Directors.—R. O. Kaufman, Chas. J. Kelly, H. W. Rowley, L. M. Ford, Thomas Marlow.

HOUSTON BRANCH.

(Federal Reserve Bank of Dallas.)

Manager.—E. F. Gossett.
Directors.—Frank Andrews, J. J. Davis, E. F. Gossett, G. M. Bryan, R. M. Farrar.

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.—C. J. Shepherd.
Directors.—A. J. Waters, I. B. Newton. H. M. Robinson, J. F. Sartori, C. J. Shepherd.

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

NASHVILLE BRANCH.

(Federal Reserve Bank of Atlanta.)

Manager.—J. B. McNamara.
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, Leon C. Simon.

OKLAHOMA CITY BRANCH.

(Federal Reserve Bank of Kansas City.)

Manager.—C. E. Daniel.
Directors.—Wm. Mee, E. K. Thurmond, Dorset Carter, T. P. Martin, jr., C. E. Daniel.

OMAHA BRANCH.

(Federal Reserve Bank of Kansas City.)

Manager.—L. H. Earhart.
Directors.—Luther Drake, Geo. E. Abbott, L. H. Earhart, 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.—F. Greenwood.
Directors.—E. Cookingham, J. C. Ainsworth, Nathan Strauss, F. Greenwood.

SALT LAKE CITY BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—R. B. Motherwell.
Directors.—L. H. Farnsworth, R. B. Motherwell, Chapin A. Day, G. G. Wright, Lafayette Hanchett.

SEATTLE BRANCH.

(Federal Reserve Bank of San Francisco.)

Manager.—C. R. Shaw.
Directors.—M. F. Backus, M. A. Arnold, C. H. Clarke, C. R. Shaw.

SPOKANE BRANCH.

(Federal Reserve Bank of San Francisco.)

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

State Banks and Trust Companies Admitted.

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, 1920.

One thousand four hundred and eighty-seven State institutions are now members of the system.

	Capital.	Surplus.	Total resources.
District No. 1.			
Massachusetts Trust Co., Boston, Mass.	$1,000,000	$500,000	$16,712,551
District No. 2.			
Fidelity Trust Co., Newark, N. J.	3,000,000	630,634	31,818,766
The Orleans County Trust Co., Albion, N. Y.	100,000	50,000	867,359
District No. 4.			
First Trust & Savings Co., Cleveland, Ohio	1,250,000	1,000,000	32,817,744
District No. 6.			
Central State Bank, Lakeland, Fla.	100,000	....	352,440
Bank of Bowersville, Bowersville, Ga.	25,000	5,000	124,212
The Farmers & Merchants Bank, Hartwell, Ga.	100,000	12,000	494,262
Oglethorpe County Bank, Lexington, Ga.	25,000	25,000	337,130
Bank of Monroe, Monroe, Ga.	300,000	75,000	1,085,669
Plains Bank, Plains, Ga.	50,000	10,000	562,223
The Central Bank, Swainsboro, Ga.	25,000	....	25,000
District No. 7.			
State Bank of Early, Early, Iowa	40,000	20,000	388,288
Commercial Savings Bank, Farragut, Iowa	40,000	10,000	247,393
Farmers State Bank, Grand River, Iowa	25,000	15,000	364,848
Hudson Savings Bank, Hudson, Iowa	50,000	20,000	648,994
Schaller Savings Bank, Schaller, Iowa	25,000	25,000	390,188
Farmers Savings Bank, Ute, Iowa	25,000		139,255
Commercial State Bank, Constantine, Mich.	25,000	5,000	348,061
Sparta State Bank, Sparta, Mich.	30,000	8,000	525,284
District No. 8.			
Bolivar County Bank, Rosedale, Miss.	150,000	....	547,273
District No. 9.			
Farmers State Bank, Hayfield, Minn.	25,000	14,000	638,418
Bank of Commerce, Forsyth, Mont.	75,000	37,500	944,324
Montana Trust & Savings Bank, Helena, Mont.	150,000	75,000	1,969,591
Little Horn State Bank, Wyola, Mont.	25,000	6,750	117,364
Philipsburg State Bank, Philipsburg, Mont.	40,000	15,000	491,471
Bank of Boulder, Boulder, Mont.	50,000	25,000	649,005
The Farmers State Bank, Worden, Mont.	25,000	5,000	248,080
The Metals Bank & Trust Co., Butte, Mont.	300,000	200,000	6,566,581
District No. 11.			
First Guaranty State Bank, Cross Plains, Tex.	30,000	....	256,165
Del Rio Bank & Trust Co., Del Rio, Tex.	100,000	80,000	770,621
Security Bank & Trust Co., El Paso, Tex.	200,000	20,000	2,293,340
District No. 12.			
Guaranty Bank & Trust Co., Seattle, Wash.	250,000	49,500	1,209,574

VOLUNTARY LIQUIDATIONS.

The American Bank, Baltimore, Md.
Pan American Bank & Trust Co., New Orleans, La.
Bank of Commerce, High Point, N. C.
Stockgrowers Bank & Trust Co., Pocatello, Idaho.
Union Commercial Bank, Mobile, Ala.

CHANGE OF NAME.

Alliance Bank, Rochester, N. Y., to Lincoln-Alliance Bank.

The Guardian Trust & Savings Bank, Toledo, Ohio, to The Commerce Guardian Trust & Savings Bank.

The Hibernia Savings Bank, Portland, Oreg., to Hibernia Commercial & Savings Bank.

Penn Counties Trust Co., Allentown, Pa., to Penn Trust Co.

The Liberty Bank, St. Louis, Mo., to The Liberty Central Trust Co.

CONSOLIDATION.

The Citizens Savings & Trust Co. and the First Trust & Savings Co., of Cleveland, Ohio, have consolidated and membership continued under the name of The Union Trust Co.

CONVERSION.

Commercial Bank & Trust Co. to The Commercial National Bank & Trust Co., Laurel, Miss.

Fiduciary Powers Granted to National Banks.

The applications of the following banks for permission to act under section 11(k) of the Federal Reserve Act have been approved by the Board during the month of December, 1920:

DISTRICT NO. 1.

Registrar of stocks and bonds:
The Baxter National Bank of Rutland, Rutland, Vt.

DISTRICT NO. 2.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The Peoples National Bank of Elizabeth, Elizabeth, N. J.
The Manufacturers National Bank of Troy, N. Y.

DISTRICT NO. 3.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The First National Bank of Hazleton, Hazleton, Pa.
The Lycoming National Bank of Williamsport, Williamsport, Pa.

DISTRICT NO. 4.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, receiver, and committee of estates of lunatics:
The Ashland National Bank, Ashland, Ky.
Trustee and registrar of stocks and bonds:
The City National Bank of Canton, Canton, Ohio.
Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver.
The Fourth National Bank of Cadiz, Cadiz, Ohio.

DISTRICT NO. 6.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Commercial National Bank & Trust Co., Laurel, Miss.

DISTRICT NO. 7.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The First National Bank of El Paso, El Paso, Ill.
The Farmers National Bank of Shelbyville, Shelbyville, Ind.
The Swedish-American National Bank of Rockford, Ill.
The Waukegan National Bank, Waukegan, Ill.
The City National Bank of Battle Creek, Mich.
Trustee:
The City National Bank of Lansing, Lansing, Mich.

DISTRICT NO. 10.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The National Bank of Commerce, Hominy, Okla.
The First National Bank of Thermopolis, Thermopolis, Wyo.
The Nebraska City National Bank, Nebraska City, Nebr.

DISTRICT NO. 11.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:
The First National Bank of Albuquerque, N. Mex.

DISTRICT NO. 12.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The First National Bank of Hoquiam, Hoquiam, Wash.
Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:
The Metropolitan National Bank, Seattle, Wash.

Federal Advisory Council.

The following have been elected as members of the Federal Advisory Council to serve during the year 1921:

District No. 1—Philip Stockton, Boston, Mass.
District No. 2—Paul M. Warburg, New York City.
District No. 3—L. L. Rue, Philadelphia, Pa.
District No. 4—Corliss E. Sullivan, Cleveland, Ohio.
District No. 5—Joseph G. Brown, Raleigh, N. C.
District No. 6—Edward L. Lane, Jacksonville, Fla.
District No. 7—John J. Mitchell, Chicago, Ill.
District No. 8—F. O. Watts, St. Louis, Mo.
District No. 9—C. T. Jaffray, Minneapolis, Minn.
District No. 10—E. F. Swinney, Kansas City, Mo.
District No. 11—R. L. Ball, San Antonio, Tex.
District No. 12—A. L. Mills, Portland, Oreg.

Edge Act Corporation Organized.

On Wednesday, December 29, 1920, the Federal Reserve Board approved the articles of association and organization certificate of the Federal International Banking Co., a corporation organized under the provisions of section 25(a) of the Federal Reserve Act, commonly known as the "Edge Act." The capital of this corporation is $7,000,000 and its home office is in New Orleans, La. It is incorporated for the purpose of engaging in the business of international or foreign banking or other international or foreign financial operations. Pending the issue of a final permit to commence business the corporation has authority to exercise only those powers which are incidental and preliminary to its organization.

Export and Exchange Transactions with Russia.

The following statement for the press was issued on December 20, 1920:

The Secretary of the Treasury and the Federal Reserve Board announce that, with the approval of the Department of State and in order to give force and effect to the action of that Department in removing restrictions in the way of trade and communication with Soviet Russia, as announced by that Department on July 7, 1920, all rules and regulations restricting the exportation of coin, bullion, and currency to that part of Russia now under the control of the so-called Bolshevik Government, or restricting dealings or exchange transactions in Russian rubles, or restricting transfers of credit or exchange transactions with that part of Russia now under the control of the so-called Bolshevik Government, have been suspended, effective December 18, 1920, until further notice.

Commercial Failures Reported.

Reflecting the changed business conditions and falling prices, the country's commercial mortality discloses a more marked tendency toward increase, the 1,025 failures reported to R. G. Dun & Co. for three weeks of December largely exceeding the 400 defaults of the same period of 1919. During the latter period, however, the insolvencies were abnormally moderate. The statement for November, the most recent month for which complete statistics are available, shows 1,050 failures for $30,758,130 of liabilities, against 551 defaults for $9,177,321 in the corresponding month last year. The November insolvencies are the largest of any month since March, 1918, and the indebtedness is the heaviest on record for November. Separated according to Federal Reserve districts, the November returns reveal more failures in every instance than in that month of 1919, while only in the fourth district are the liabilities smaller.

Failures during November.

District.	Number.		Liabilities.	
	1920	1919	1920	1919
First	105	61	$3,486,558	$535,609
Second	281	99	10,776,972	1,548,918
Third	47	29	1,010,956	589,611
Fourth	66	58	1,113,724	4,071,586
Fifth	47	26	1,184,105	132,640
Sixth	90	34	1,911,992	301,065
Seventh	125	74	3,647,520	434,048
Eighth	58	28	829,889	235,393
Ninth	37	6	1,235,761	108,176
Tenth	35	22	1,582,279	204,082
Eleventh	50	28	839,548	253,516
Twelfth	109	86	3,138,826	762,677
Total	1,050	551	30,758,130	9,177,321

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 27 to December 31, 1920, inclusive:

	Banks.	Amount.
New charters issued to	23	
With capital of		$1,490,000
Increase of capital approved for [1]	26	
With new capital of		1,675,000
Aggregate number of new charters and banks increasing capital	49	
With aggregate of new capital authorized		3,165,000
Number of banks liquidating (other than those consolidating with other national banks under the act of June 3, 1864)	8	
Capital of same banks		5,325,000
Number of banks reducing capital	0	
Reduction of capital		0
Charter expired by limitation	1	
Capital of such bank		50,000
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) and expiring by limitation	9	
Aggregate capital reduction		5,375,000
Consolidation of national banks under the act of Nov. 7, 1918	4	
Capital		3,450,000
The foregoing capital shows the aggregate of increased capital for the period of the banks embraced in statement		3,165,000
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 expiration of charter		5,375,000
Net reduction		2,210,000

[1] Includes two increases in capital aggregating $100,000 incident to consolidations under act of Nov. 7, 1918.

RULINGS OF THE FEDERAL RESERVE BOARD.

Acceptances drawn by dealers engaged in the export and domestic sale of the same class of goods.

The Federal Reserve Board has received an inquiry as to whether bankers' acceptances, drawn by dealers engaged in both export and domestic trade under a certain form of contract with the accepting banks, are eligible for rediscount and purchase by Federal Reserve Banks under the Board's new regulations of the series of 1920. The form of contract was prepared some time ago to comply with the requirements of an opinion of the Board's counsel dated April 1, 1918. In that opinion published on page 314 of the April, 1918, BULLETIN and on page 438 of the May, 1918, BULLETIN, it was suggested that drafts, drawn by a dealer purchasing the same class of goods both for export and domestic sale and accepted by a bank to finance the purchase and sale of the goods to be exported, might be considered eligible bankers' acceptances if the dealer's contract with the accepting bank, provided "(a) that he has entered into a contract for the export of the goods of a fixed amount; (b) that the total amount of drafts drawn by him under the credit opened to finance the export of such goods shall at no time exceed the aggregate amount of the import or export transactions contracted for and in process of execution; (c) that the proceeds of drafts drawn against the accepting bank under this credit are to be used in connection with the export contracts referred to, and that the proceeds of the sale of the goods exported will be applied in payment of the acceptances unless the dealer has in the meantime placed the bank in funds to meet them at maturity or has secured such acceptances by shipping documents, warehouse receipts, or other similar document conveying or securing title to readily marketable staples."

This suggestion was further commented upon in an opinion published on page 439 of the May, 1918, BULLETIN. As a result of these opinions the form of contract in question was submitted to and approved by the Federal Reserve Board containing the provisions suggested in the above quotation. This form is now used, the Board understands, by a number of concerns, engaged in both foreign and domestic trade, when arranging for acceptance credits with their banks.

In the cases under consideration the drafts are drawn to finance the purchase or production of goods to be exported, and the export shipment of the goods has not actually occurred at the time of acceptance. Under the Board's Regulations A and B, series of 1920, bankers' acceptances so drawn in export or import transactions are eligible for rediscount or purchase by Federal Reserve Banks only when they comply with the requirements of Regulation A, section B, subdivision (b) (1) "that there be in existence a specific and bona fide contract providing for the exportation or importation of such goods at or within a specified and reasonable time, and that the customer agree that the accepting bank will be furnished in due course with shipping documents covering such goods or with exchange arising out of the transaction being financed by the credit."

It is apparent that a contract of the kind suggested in the opinion of April 1 does not comply with these requirements.

Under the terms of the Federal Reserve Act the Federal Reserve Board is vested with broad discretion in the matter of regulating the rediscounts and open market purchases of Federal Reserve Banks. The Board's ruling, incorporated in the published opinion of April 1, 1918, was made during the war and at a time when it was necessary to facilitate in every way the exportation of goods essential to the prosecution of the war. The opinion permitted the use of bankers' acceptances under circumstances which would not justify their use at the present time. The Board's regulations of the series of 1920, which have just been issued, supersede all previous rulings which are inconsistent with them and make acceptances drawn under the form of contract suggested in the opinion of April 1, 1918, ineligible for rediscount or purchase.

If dealers purchasing or producing the same class of goods both for export and domestic sale wish to finance their export transactions by means of eligible bankers' acceptances, it will be necessary that their contracts with the accepting banks shall contain different provisions than those suggested in the opinion of April 1, 1918. The Board now suggests that the contracts between such dealers and their accepting banks contain the following provisions, (a) that the dealer has entered into contracts providing for the exportation of goods of a specified amount within a specified and reasonable time; (b) that the total amount of drafts drawn by the dealer under credits opened to finance the exportation of such goods shall at no time exceed the aggregate amount of the export transactions contracted for and in process of execution; (c) that the proceeds of drafts drawn against the accepting bank under this credit will be used to consummate the export contracts referred to, that the dealer will furnish in due course to the accepting bank shipping documents covering such goods, and that the proceeds of the sale of the goods exported will be applied in liquidation of the acceptance credit.

The furnishing of "exchange arising out of the transaction being financed by the credit" is intended as an alternative to the furnishing of shipping documents only in import transactions, so that this phrase, which appears in Regulation A, may be disregarded in considering export transactions.

Under the Regulations of 1920 acceptances drawn to finance the purchase or production of goods under contract for export are eligible for rediscount or purchase only when the customer definitely agrees that the accepting bank will be furnished in due course with shipping documents covering such goods. Such acceptances will no longer be eligible, therefore, if the customer is given the option to furnish warehouse receipts or similar documents covering goods not intended for export, and thus to change the nature of the acceptances by converting them from acceptances based upon export transactions into acceptances based upon domestic transactions.

Right of national banks to invest in the stock of international financial corporations.

The Federal Reserve Board recently has received a number of inquiries as to whether a national bank desiring to invest in the stock of corporations organized or to be organized under the provisions of the so-called Edge Act, which constitutes section 25 (a) of the Federal Reserve Act, must make application to the Federal Reserve Board for permission to purchase such stock, and if so, whether such applications must be filed prior to January 1, 1921, in view of the provisions of the so-called McLean-Platt amendment to section 25. In order to correct certain misapprehensions which appear to have arisen in this connection, the Federal Reserve Board feels that it is advisable to set forth its interpretation of the pertinent provisions of section 25 and section 25 (a).

Section 25, as amended September 7, 1916, and September 17, 1919, makes provision for the investment by national banks in the stock of certain kinds of international financial corporations organized under the laws of the United States or of any State thereof. At the time of the passage of these amendments, however, there was no provision for the incorporation of international financial corporations under the laws of the United States. The Edge Act has now provided a means for the incorporation of such corporations under Federal law, thus enabling national banks to exercise to the full extent the rights which were given to them by the amendments to section 25. In addition to making provision for the organization of international financial corporations, the Edge Act, among other things, expressly provides:

> 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.

It is evident, therefore, that this provision of section 25(a) to some extent has modified the provisions of section 25, so far as the right of national banks to invest in the stock of corporations organized under the laws of the United States is concerned.

Section 25 and section 25(a) both contemplate two classes of international financial corporations, (1) international banking corporations engaged in granting ordinary short time commercial credits, and (2) international investment corporations engaged in granting long time credits and in issuing their own debentures secured by foreign securities. Section 25 authorizes a national bank with a capital and surplus of $1,000,000 or more to make application to the Board for permission to invest not to exceed 10 per cent of its capital and surplus in the stock of one or more corporations organized under the laws of the United States or of any State thereof and principally engaged in international or foreign banking; and the McLean-Platt amendment of September 17, 1919, authorizes any national bank, irrespective of the amount of its capital and surplus, until January 1, 1921, to make application to the Board for permission to invest not to exceed 5 per cent of its capital and surplus in the stock of one or more corporations organized under Federal or State law and principally engaged in such phases of international financial operations (as distinguished from international banking operations) as may be necessary to facilitate exports from the United States. Section 25 (a), however, without qualification, authorizes any national bank to invest in the stock of international financial corporations organized under that section, whether engaged in international banking or in the international investment business, provided, only, that the aggregate amount of stock held in all corporations engaged in the business of the kinds described in that section and section 25 does not exceed 10 per cent of the subscribing bank's capital and surplus.

It will be noted that the pertinent provision of section 25(a) contains no such restrictions upon the powers of national banks to invest in the stock of international financial corporations as are found in section 25, other than the provision with regard to the aggregate amount of stock which a national bank may hold in all such corporations. As the provision of section 25(a) is limited to corporations organized under that section, this specific provision must be construed as superseding the more general restrictions in section 25 as to the capital and surplus requirements of the subscribing bank and as to the amount which may be invested, the time limit and the phases of the international financial operations of the corporations in whose stock the national bank desires to invest, so far as investments by national banks in corporations organized under the laws of the United States are concerned.

In view of these considerations it is clear that the January 1, 1921, limitation in the McLean-Platt amendment restricting the right of national banks to make application to the Board only until January 1, 1921, does not relate to the right of a national bank to invest in the stock of an Edge corporation, whether the Edge corporation is organized for the purpose of engaging in international banking operations or in an international investment business. Similarly, the provisions of the McLean-Platt amendment which places a limitation of 5 per cent upon the amount which a national bank may invest in a corporation of the kind described therein, has been modified by virtue of the provisions of section 25 (a) to the extent that a national bank may now invest not more than 10 per cent of its capital and surplus in a corpora ion organized under the laws of the United States, irrespective of whether such corporation is organized to carry on a banking business or an investment business, provided that the aggregate amount of stock held in all corporations engaged in business of the kind described in section 25 (a) and in section 25, whether organized under the Edge Act or under State law, does not exceed 10 per cent of the subscribing bank's capital and surplus.

In brief, under the present provisions of sections 25 and 25 (a) the situation after January 1, 1921, will be as follows: Any national bank, irrespective of its capital and surplus, may invest in the stock of any corporation organized under the provisions of section 25 (a), regardless of whether such corporation is a foreign banking corporation or a foreign investment corporation issuing its own debentures; a national bank having a capital and surplus of $1,000,000 or more may invest in the stock of a State incorporated banking institution, but may not invest in the stock of a State incorporated investment corporation; a national bank having a capital and surplus of less than $1,000,000 may not invest in the stock of a corporation organized under State law, whether that corporation is a banking corporation or an investment corporation; and the aggregate of the investments of any national bank in the stock of corporations engaged in the buisness of the kind described in sections 25 and 25 (a) may not exceed 10 per cent of the subscribing bank's capital and surplus.

The Board has ruled that a national bank which desires to invest in the stock of corporations such as are described in section 25 and in section 25 (a) must make application to the Board for permission to subscribe to such stock, irrespective of whether the corporation is to be organized under section 25 (a) or under State law. The Board will not consider an application by a national bank to subscribe to the stock of a corporation to be organized under State law until the corporation has filed an agreement with the Board to restrict its operations as the Board may require, pursuant to the provisions of section 25, and will not consider an application to subscribe to the stock of a corporation to be organized under section 25 (a) until the corporation has submitted its title to the Board for approval and reservation for 30 days, pursuant to the Board's regulation K, series of 1920, and the Board has approved this title.

In the case of an Edge corporation which is in the process of organization, the Board has ruled that while it will consider an application after the approval of its title the Board will approve the application only upon the condition that the national bank shall not be authorized to pay out any money in payment for such stock until the international financial corporation in which the national bank desires to invest shall have been duly incorporated under the provisions of section 25 (a) and shall have received from the Board a preliminary permit to exercise such of the powers conferred upon it by that section as are incidental and preliminary to its organization.

Heretofore the Board has not required that these applications be in any particular form, but has accepted as an application a letter signed by an officer of the national bank requesting permission to invest in the stock of the international financial corporation. In view of the increasing number of national banks desirous of investing part of their capital and surplus in the stock of such corporations, the Board recently has prepared a form of application for use by national banks, and will hereafter require national banks desiring to purchase stock in international financial corporations to make application to the Board upon this form. The applications in the first instance must be forwarded to the Federal Reserve agent of the district in which the applying bank is located, who will in turn forward them to the Federal Reserve Board with his recommendation noted thereon. This form is suitable for use in making applications to purchase stock either in Edge corporations or in corporations organized under State law.

LAW DEPARTMENT.

Proposed bill to amend section 11 (m).

On December 30, 1920, Governor Harding of the Federal Reserve Board appeared by request before the Committee on Banking and Currency of the House of Representatives, to which had been referred the bill to extend the provisions of section 11 (m) of the Federal Reserve Act for a further period of one year until December 31, 1921. During the discussion of the bill it developed that there was some opposition on the part of the committee to extending the provisions of the section without any qualification as to the manner in which the member banks' customers may have acquired the United States bonds and notes used as security for the customers' paper rediscounted by Federal Reserve Banks in excess of the limitation of 10 per cent of the member bank's capital and surplus prescribed in section 13 upon the amount of the paper of any one borrower which a Federal Reserve Bank may rediscount for any member bank. Accordingly, at the request of the committee, the Board submitted a bill which would in effect extend the provisions of section 11 (m) until December 31, 1921, in so far as is necessary to authorize the Federal Reserve Board to permit the Federal Reserve Banks to rediscount the paper of any one borrower up to 20 per cent of the member bank's capital and surplus, provided, that such paper in excess of 10 per cent of the member bank's capital and surplus is secured by Liberty bonds or Victory notes of which the borrower is the original subscriber, or by United States certificates of indebtedness. This bill was introduced into the House of Representatives on December 31, 1920, by Hon. Louis T. McFadden, chairman of the Committee on Banking and Currency. The text of the bill as introduced is as follows:

AN ACT To amend section 11 of the act approved December 23, 1913, known as the Federal Reserve Act, as amended.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 11 of the act approved December 23, 1913, known as the Federal Reserve Act, as amended, be further amended by striking out the whole of subsection (m), and by substituting therefor a subsection to read as follows:

"(m) Upon the affirmative vote of not less than five of its members, the Federal Reserve Board shall have power to permit Federal reserve banks to discount for any member bank notes, drafts, or bills of exchange bearing the signature or endorsement of any one borrower in excess of the amount permitted by section nine and section thirteen of this act, but in no case to exceed twenty per centum of the member bank's capital and surplus: *Provided, however,* That all such notes, drafts, or bills of exchange discounted for any member bank in excess of the amount permitted under such sections shall be secured by not less than a like face amount of bonds or notes of the United States issued since April twenty-fourth, nineteen hundred and seventeen, for which the borrower shall in good faith prior to January 1, 1921, have paid or agreed to pay not less than the full face amount thereof, or certificates of indebtedness of the United States: *Provided further,* That the provisions of this subsection (m) shall not be operative after December thirty-first, nineteen hundred and twenty-one."

Amendment to New Jersey banking laws.

An act enacted by the New Jersey Legislature and approved March 22, 1920 (Ch. 26, N. J. Laws of 1920), provides that the Federal Reserve Board shall have the right, if it deems necessary, to examine member banks and trust companies organized under the laws of New Jersey, and that the State authorities having supervision over such banks and trust companies may disclose to the Federal Reserve Board, or its examiners, all information with reference to the affairs of any New Jersey bank or trust company, which has become, or desires to become, a member of the Federal Reserve System. The act reads, in part, as follows:

1. Any bank or trust company incorporated under the laws of this State which has or shall become a member of a Federal reserve bank, shall continue to be subject to the supervision and examinations required by laws of this State, except that the Federal Reserve Board shall have the right, if it deems necessary, to make examinations; and the authorities of this State having supervision over such bank or trust company may disclose to the Federal Reserve Board, or to examiners duly appointed by it, all information in reference to the affairs of any bank or trust company which has become, or desires to become, a member of a Federal Reserve Bank.

The New Jersey banking laws as amended by this act contain the substance of all the provisions of the act recommended by the Federal Reserve Board to bring about greater coordination in the powers of State and National banks and to promote uniformity in State and Federal banking laws, except that the State authorities are not authorized to accept examinations made by Federal authorities in lieu of those required by State law.

RETAIL TRADE.

In the following tables is given a summary of the data obtained from representative department stores in each Federal Reserve district showing the activity of retail trade during the past several months. In districts Nos. 1, 5, 9, 11, and 12 the data were received in (and averages computed from) actual amounts (dollars). In districts Nos. 2, 3, 4, 6, 7, 8, and 10 the material was received in the form of percentages, the averages for the cities and districts computed from such percentages being weighted according to volume of business done during the calendar year 1919. For the month of November, the tables are based on reports from 26 stores in district No. 1, 14 in district No. 2, 41 in district No. 3, 14 in district No. 4, 24 in district No. 5, 11 in district No. 6, 7 in district No. 7, 6 in district No. 8, 10 in district No. 9 15 in district No. 10, 18 in district No. 11, and 27 in district No. 12. The number of stores varies somewhat, due to the inclusion of new stores from time to time in the reporting list.

Condition of retail trade in the twelve Federal Reserve districts.

[Percentage of increase.]

District and city.	Comparison of net sales with those of corresponding period previous year.																	
										Jan. 1, 1920, to close of—				July 1, 1920, to end of—				
	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.
District No. 1:																		
Boston	38.9	16.8	19.4	27.8	16.3	11.6	16.0	0.1	15.0	30.7	26.1	24.7	25.3	16.3	24.1	15.9	9.7	11.0
Outside	29.4	26.0	25.5	28.5	27.2	9.1	14.7	2.2	1.7	36.4	33.1	30.5	30.0	27.2	18.1	16.9	11.1	9.0
District	37.5	18.5	20.7	28.0	19.9	10.9	15.4	.6	11.4	31.6	27.5	25.8	26.2	19.9	15.1	15.2	10.1	10.4
District No. 2:																		
N.Y. City and Brooklyn	66.6	15.0	41.1	26.4	22.4	10.9	[1]3.2	1.7	7.6	59.3	35.0	35.3	32.7	22.4	13.0	3.6	5.2	3.0
Outside	50.4	22.4	22.8	32.3	26.9	26.4	16.9	15.4	18.9	38.1	33.6	30.1	31.7	26.9	27.1	23.4	19.6	22.8
District	64.8	15.8	35.4	28.4	24.4	15.9	3.6	6.2	11.6	57.0	34.9	33.7	33.8	24.4	17.5	10.2	10.0	10.0
District No. 3:																		
Philadelphia	......	......	......	......	......	......	......	......	8.5	......	......	......	......	......	......	......	......	12.0
Outside	......	......	......	......	......	......	......	......	8.5	......	......	......	......	......	......	......	......	18.5
District	37.5	12.4	50.7	34.3	23.8	22.6	15.2	15.8	8.5	26.2	20.5	30.9	31.0	23.8	24.9	19.6	17.3	14.6
District No. 4	45.5	18.4	31.3	31.5	29.9	25.7	24.6	20.8	26.1	38.2	33.6	32.1	34.6	29.9	27.3	25.9	23.9	24.8
District No. 5	23.1	.9	11.0	21.4	15.7	20.9	7.5	12.4	13.1	12.1	8.8	9.3	11.4	15.7	21.1	14.1	13.6	13.5
District No. 6	27.4	23.4	31.0	24.3	11.6	27.6	12.6	25.1	14.6	29.9	22.0	28.1	29.3	11.6	19.6	16.9	19.7	18.8
District No. 7	65.2	33.3	49.7	59.6	41.2	33.2	28.6	8.3	17.6	57.4	43.5	49.6	58.7	41.2	29.6	35.5	32.6	24.2
District No. 8	......	......	......	......	......	20.8	11.8	10.5	10.8	......	......	......	......	......	18.0	16.8	16.5	13.8
District No. 9	......	17.0	4.3	11.8	11.6	8.8	.3	[1]2.9	2.9	......	19.8	5.6	12.0	11.6	......	......	......	3.8
District No. 10	24.6	19.6	10.9	12.9	14.1	9.9	7.8	[1]1.9	9.2	26.9	24.9	21.2	17.9	14.1	14.2	11.1	5.2	12.9
District No. 11	......	......	......	......	25.9	25.6	12.4	16.0	12.7	......	......	......	......	25.9	25.2	20.9	21.6	17.9
District No. 12:																		
Los Angeles	58.4	43.6	38.2	39.0	35.1	48.9	29.1	19.3	31.2	61.2	56.1	52.2	49.8	35.1	42.4	37.9	33.9	33.7
San Francisco	35.4	28.5	40.9	23.6	21.0	18.6	10.4	11.5	9.9	39.7	36.6	37.6	35.3	21.0	19.6	17.3	15.4	11.7
Oakland	31.0	14.9	17.1	15.2	16.9	15.3	......	22.0	7.2	32.3	27.9	25.6	23.3	16.9	14.7	......	21.3	18.2
Sacramento	65.1	33.9	34.4	32.1	20.1	3.1	......	9.9	......	60.9	47.5	39.4	38.3	20.1	13.3	......	16.1	......
Seattle	19.2	4.3	6.3	11.1	.2	[1]8.0	[1]4.5	[1]14.6	[1]16.4	21.8	16.2	13.9	13.4	.2	[1]4.4	[1]4.2	[1]7.3	[1]9.2
Spokane	19.8	10.9	48.8	62.8	22.7	12.7	......	4.6	5.6	26.8	23.1	29.1	35.7	22.7	16.8	......	9.4	8.4
Salt Lake City	10.5	7.1	26.4	18.3	20.6	11.6	......	8.9	14.7	15.1	12.8	16.4	14.7	20.6	16.1	......	14.0	12.2
District	37.8	13.8	31.2	27.8	21.2	21.7	14.5	8.2	11.3	41.0	36.9	34.7	33.2	21.2	21.4	19.8	16.8	14.8

District and city.	Stocks at end of month compared with—																	
	Same month previous year.									Previous month.								
	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.
District No. 1:																		
Boston	42.3	45.2	44.5	43.8	32.1	26.3	20.7	9.5	7.1	9.9	4.0	[1]3.4	[1]5.6	[1]7.0	4.9	9.5	[1]4.2	9.0
Outside	44.9	43.2	43.8	36.3	30.4	26.4	21.7	15.9	10.6	11.9	2.8	[1]1.8	[1]5.1	.2	3.2	9.7	3.0	[1]2.0
District	42.8	44.7	44.3	41.4	31.5	26.4	21.0	11.6	8.2	10.2	3.7	[1]2.9	[1]5.5	[1]4.7	4.3	9.5	[1]1.8	4.9
District No. 2:																		
New York City and Brooklyn	69.6	53.8	47.9	45.5	46.2	30.7	18.0	17.2	5.1	27.9	[1].3	[1]6.6	[1]5.4	[1]4.3	7.3	5.7	1.0	[1]4.8
Outside	60.6	51.6	51.7	38.4	30.9	26.3	20.2	15.6	3.8	9.3	[1]1.4	[1]1.7	[1]7.7	4.6	5.6	9.3	[1].4	[1]7.0
District	68.6	53.6	49.1	43.2	39.5	29.3	18.7	16.7	4.6	25.8	[1].4	[1]5.0	[1]6.1	[1].5	6.8	6.9	.5	[1]5.6

[1] Decrease.

Condition of retail trade in the twelve Federal Reserve districts—Continued.

[Percentage of increase.]

District and city.	Stocks at end of month compared with—																	
	Same month previous year.									Previous month.								
	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.
District No. 3:																		
Philadelphia	......	......	......	......	......	......	......	......	5.7	......	......	......	......	......	......	......	......	[1]5.0
Outside	......	......	......	......	......	......	......	......	17.4	......	......	......	......	......	......	......	......	[1]4.1
District	24.3	25.7	30.4	26.7	28.4	31.0	20.6	16.0	10.1	12.3	5.4	[1]6.7	[1]3.0	3.3	6.2	8.4	.9	[1]4.7
District No. 4	56.1	63.9	57.0	53.3	48.3	40.4	34.0	34.9	22.5	11.6	7.3	[1].9	[1]1.0	[1]1.4	9.4	9.2	4.8	[1]6.4
District No. 5	51.5	59.5	67.1	57.2	44.6	29.6	21.1	15.1	5.3	14.1	[1].1	2.3	[1]9.2	2.5	2.3	10.2	.1	[1]7.7
District No. 6	41.1	29.9	50.2	47.2	51.6	39.8	37.2	30.1	16.3	4.7	3.0	[1].5	[1]5.6	5.6	5.4	13.1	.8	[1]6.7
District No. 7	64.9	39.9	49.7	77.1	70.1	64.1	55.5	51.7	39.7	10.1	.0	2.1	.0	8.4	14.6	4.8	1.0	[1]5.9
District No. 8	......	......	......	......	......	24.2	35.4	30.5	17.0	......	......	......	......	......	5.6	11.6	1.8	[1]4.3
District No. 9	......	27.6	18.7	30.7	12.6	17.7	22.6	12.0	7.1	......	4.7	.8	3.1	[1]4.7	2.9	6.9	.5	[1]4.2
District No. 10	38.9	43.3	40.7	39.6	43.6	39.1	29.1	25.0	11.8	7.8	3.1	[1]6.1	[1]8.8	8.9	9.8	4.6	[1]1.9	[1]5.0
District No. 11	......	......	......	......	69.5	59.5	52.8	42.3	31.5	......	......	......	......	8.3	22.3	6.6	[1]3.0	[1]9.3
District No. 12:																		
Los Angeles	58.3	64.9	65.0	62.9	47.5	31.2	33.4	21.6	16.4	7.8	3.7	[1].5	[1].4	[1].8	[1]2.5	13.7	.2	[1]4.2
San Francisco	62.2	60.7	54.9	58.5	43.1	27.1	16.2	15.4	8.0	6.1	2.4	[1]6.5	[1]5.2	[1].5	1.4	7.4	15.4	[1].8
Oakland	35.2	34.4	29.7	33.9	27.7	22.5	......	8.3	3.8	6.5	[1].5	[1].6	[1]2.6	[1]2.9	2.3	......	.6	[1]3.1
Sacramento	61.8	29.4	34.1	......	......	11.4	......	17.5	......	3.7	......	[1]1.5	.1	......	9.8	......	.3	......
Seattle	53.8	55.5	46.7	35.6	23.4	[1]8.4	3.9	.5	[1]4.4	14.9	......	[1]6.7	[1]8.7	[1]4.2	[1].9	6.3	2.8	[1]2.9
Spokane	63.3	39.0	59.6	57.3	45.8	45.5	......	40.1	33.6	27.9	[1]40.2	[1]5.7	[1]4.4	[1].8	9.1	......	[1]2.7	[1]4.2
Salt Lake City	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
District	58.0	56.5	52.6	52.5	40.1	25.3	20.6	15.6	20.1	9.6	......	[1]4.7	[1]3.0	[1].8	.7	4.9	1.2	[1]3.4

District and city.	Percentage of average stocks at end of each month to average monthly sales for same period.									Percentage of outstanding orders at end of month to total purchases during previous calendar year.								
	Feb. 1, 1920, to end of—				July 1, 1920, to end of—													
	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Mar., 1920.	Apr., 1920.	May, 1920.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.
District No. 1:																		
Boston	509.5	389.8	348.4	339.2	419.2	447.1	412.7	388.4	368.4	18.8	15.8	15.4	15.4	18.5	13.7	11.4	7.5	5.4
Outside	320.5	464.7	442.5	431.7	436.4	472.1	485.9	482.6	456.6	18.6	15.5	7.5	10.0	9.1	14.2	14.7	10.8	10.4
District	389.9	405.2	366.5	358.0	425.1	455.1	433.5	415.6	398.6	18.7	15.7	12.7	12.3	12.0	14.0	13.1	9.1	7.7
District No. 2:																		
New York City and Brooklyn	384.7	403.1	392.4	379.9	390.0	489.3	613.7	479.4	464.1	18.8	17.6	15.5	16.8	15.7	16.8	14.7	9.2	6.9
Outside	372.3	392.8	415.7	349.5	485.8	506.3	492.1	441.3	430.6	20.3	21.8	13.9	17.7	18.9	14.3	12.0	6.6	4.1
District	383.4	402.0	399.4	369.9	440.1	496.7	573.9	466.9	452.3	19.0	18.2	14.8	17.2	17.4	15.9	13.6	8.1	5.5
District No. 3:																		
Philadelphia	......	......	......	......	......	......	......	......	360.4	......	......	......	......	......	......	......	......	4.7
Outside	......	......	......	......	......	......	......	......	520.5	......	......	......	......	......	......	......	......	2.9
District	380.0	347.0	382.6	357.5	399.8	471.2	500.3	437.2	418.0	24.8	23.5	17.6	19.3	19.8	14.2	10.1	5.9	4.0
District No. 4	369.1	439.0	362.8	362.3	403.6	412.7	468.8	466.8	452.1	19.4	34.8	13.2	16.2	18.9	17.0	13.3	7.6	5.9
District No. 5	423.8	422.2	421.5	497.0	505.9	560.7	512.9	489.0	454.5	16.9	12.1	9.9	9.7	16.1	14.8	8.4	7.1	3.0
District No. 6	......	......	......	......	......	......	......	403.9	381.6	20.9	20.1	20.6	17.0	17.4	15.6	11.0	6.9	5.8
District No. 7	298.6	332.5	305.8	328.3	432.7	427.9	410.7	371.0	431.7	31.4	31.2	31.9	19.5	19.3	23.2	15.7	5.1	6.5
District No. 8	......	......	......	......	......	432.6	377.0	396.8	324.4	......	......	......	......	......	17.2	9.2	6.1	3.9
District No. 9	......	189.4	31.8	109.0	107.9	......	......	337.6	......	......	9.6	19.5	20.0	13.7	9.1	......	12.4	11.9
District No. 10	337.6	272.1	285.4	353.7	384.1	334.0	340.4	343.3	526.8	14.6	18.0	5.4	25.3	15.6	9.7	8.8	3.1	1.9
District No. 11	......	......	......	......	......	425.5	523.9	454.0	416.7	......	......	......	......	18.6	12.7	10.0	4.1	3.2
District No. 12:																		
Los Angeles	468.3	390.7	480.4	481.3	522.5	454.2	486.0	462.5	478.0	33.9	39.0	29.7	26.2	22.8	15.5	12.0	9.3	7.6
San Francisco	494.9	492.3	469.8	508.8	539.9	512.8	511.5	511.9	515.8	31.0	27.7	23.9	26.0	25.9	21.1	10.8	13.6	9.6
Oakland	619.7	585.2	589.5	573.8	625.1	598.3	......	732.5	567.4	......	......	......	......	......	......	......	......	......
Sacramento	......	......	533.4	531.3	......	423.3	......	387.4	......	......	......	......	......	......	......	......	......	......
Seattle	542.6	527.9	539.7	524.6	470.2	532.7	508.0	502.5	454.5	17.6	17.2	14.2	16.3	16.3	12.2	8.6	6.4	7.0
Spokane	605.8	528.8	605.4	579.4	652.6	675.5	......	579.0	544.3	34.7	......	31.1	25.1	29.9	......	......	......	......
Salt Lake City	......	......	......	......	......	......	......	......	......	......	......	......	......	18.7	......	......	......	......
District	515.3	456.0	508.0	516.0	536.5	489.6	504.0	467.3	488.5	27.2	21.6	23.2	23.1	22.3	14.2	9.5	9.8	7.0

[1] Decrease.

FOREIGN TRADE INDEX.

There is presented below a series of indexes designed to reflect movements in foreign trade of the United States, with fluctuations due to price changes eliminated. The commodities chosen for these indexes are those for which prices are compiled by the Federal Reserve Board in the preparation of its international price index. The list includes 25 of the most important imports, the value of which in 1913 formed 47.7 per cent of the total import values, and 29 of the most important exports, the value of which in 1913 formed 56.3 per cent of the total export values. The list of the commodities is given in the July BULLETIN.[1]

Total exports, after a continuous increase for the past three months, showed a decrease for November. While this decrease was noted in every class of exports, it is most noticeable in the case of producers' goods. Total imports, on the other hand, after showing a decrease for every month since June, showed an appreciable increase for November. The very large increase in the imports of producers' goods more than compensated for the decrease in the imports of raw materials and consumers' goods. Cane sugar and India rubber were largely responsible for the increase in the imports of producers' goods.

Value of exports and imports of selected commodities at 1913 prices.

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

[Monthly average values, 1913=100.]

	Exports.								Imports.							
	Raw materials (12 commodities).		Producers' goods (10 commodities).		Consumers' goods (7 commodities).		Grand total exports (29 commodities).		Raw materials (10 commodities).		Producers' goods (12 commodities).		Consumers' goods (3 commodities).		Grand total imports (25 commodities).	
	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.
1913.																
January	100,027	116.8	11,762	101.4	30,715	100.9	142,504	111.6	61,347	121.9	40.107	108.3	14.219	108.0	115,673	115.1
February	71,074	83.0	12,266	105.8	30,790	101.2	114,130	89.4	55,332	110.0	41,060	110.9	14,335	108.9	110,727	110.1
March	61,681	72.0	11,836	102.1	28,698	94.3	102,215	80.1	55,555	110.4	45,753	123.6	13,378	101.6	114,686	114.1
April	71,446	83.0	14,128	121.8	28,708	94.3	114,282	89.5	52,271	103.9	42,346	114.4	10,896	82.7	105,513	104.9
May	68,856	80.4	11,661	100.6	29,923	98.3	110,440	86.5	50,089	99.5	38,409	103.7	7,718	58.6	96,216	95.7
June	46,963	54.8	11,612	100.1	28,242	92.8	86,817	68.0	40,822	81.1	38,606	104.3	8,382	63.7	87,810	87.3
July	51,325	59.9	11,109	95.8	27,686	91.0	90,120	70.6	40,298	80.1	35,990	97.2	9,698	73.6	85,986	85.4
August	74,869	87.4	11,547	99.5	29,370	96.5	115,786	90.7	42,470	84.4	37,385	101.0	11,078	84.1	90,933	90.4
September	103,614	120.9	10,622	91.6	32,190	105.8	146,426	114.7	52,659	104.6	41,184	111.2	15,883	120.6	109,726	109.2
October	137,772	160.9	12,608	108.7	34,612	113.8	184,992	144.9	44,407	88.2	22,721	61.4	15,929	121.0	83,057	82.6
November	126,836	148.1	9,987	86.1	31,246	102.7	168,069	131.6	48,107	95.6	28,788	77.8	15,059	114.4	91,954	91.5
December	113,326	132.3	10,053	86.7	33,089	108.7	156,468	122.5	60,904	121.0	31,929	86.2	21,446	162.9	114,279	113.7
Year	1,027,789	100.0	139,191	100.0	365,269	100.0	1,532,249	100.0	604,261	100.0	444,278	100.0	158,021	100.0	1,206,560	100.0
1919.																
January	84,066	98.2	18,444	159.0	56,748	186.4	159,258	124.7	44,552	88.5	53,071	143.3	14,434	108.1	112,057	111.4
February	58,488	68.3	14,598	125.9	53,338	175.2	126,424	99.0	47,774	94.9	66,708	180.2	14,230	109.6	128,712	128.0
March	57,659	67.3	16,161	139.3	61,585	202.3	135,405	106.1	54,947	109.2	82,546	223.0	25,223	191.6	162,716	161.8
April	65,112	76.0	19,356	166.9	80,639	264.9	165,107	129.3	63,385	125.9	88,017	237.7	18,869	143.3	170,271	169.3
May	67,595	78.9	15,972	137.7	58,731	192.9	142,298	111.4	81,274	161.4	89,890	242.8	24,861	188.8	196,025	195.0
June	98,335	114.8	28,618	247.1	96,088	315.1	223,041	174.7	86,256	171.4	61,886	167.2	18,512	140.6	166,654	165.7
July	71,917	84.0	17,150	147.9	52,553	172.7	141,620	110.9	86,443	171.7	77,401	209.1	29,492	224.0	193,336	192.3
August	81,250	94.9	19,574	168.8	49,194	161.6	150,018	117.5	85,571	169.9	42,132	113.8	20,953	159.1	148,656	147.8
September	70,285	82.1	19,359	166.9	43,342	142.4	132,986	104.1	123,524	245.3	70,033	189.2	25,240	191.7	218,797	217.6
October	70,322	82.1	17,182	148.1	45,844	150.6	133,348	104.4	99,114	196.8	74,736	201.9	20,386	154.8	194,236	193.2
November	99,589	116.3	15,740	135.7	46,473	152.7	161,802	126.7	98,690	196.1	79,198	213.9	21,254.	161.4	199,142	198.1
December	89,585	104.6	13,208	113.9	43,563	143.1	146,356	114.6	79,965	158.9	71,886	194.2	21,521	163.4	173,372	172.4
Year	914,203	88.9	215,362	154.7	688,098	188.4	1,817,663	118.6	951,495	157.5	857,504	193.0	254,975	161.4	2,063,974	171.1
1920.																
January	93,141	108.7	15,647	134.9	35,406	116.3	144,194	112.9	103,796	206.2	90,655	244.9	24,064	182.7	218,515	217.3
February	70,130	81.9	14,198	122.4	41,645	136.8	125,973	98.7	87,086	173.0	107,162	289.5	19,964	151.6	214,212	213.1
March	90,805	106.0	17,279	149.0	56,428	185.4	164,512	128.9	97,039	192.8	125,496	339.0	25,999	197.4	248,534	247.2
April	68,048	79.4	17,063	147.1	51,689	169.8	136,800	107.1	87,588	174.0	97,187	262.5	29,076	220.8	213,851	212.7
May	63,650	74.3	17,546	151.3	62,457	205.2	143,653	112.5	64,177	127.5	84,134	227.2	14,887	113.1	163,198	162.3
June	55,200	64.5	14,663	126.4	46,113	151.5	115,976	90.8	75,225	149.5	95,699	258.5	21,463	163.0	192,387	191.3
July	66,924	78.1	19,138	165.0	43,325	142.4	129,387	101.3	60,942	121.0	93,910	253.7	24,562	186.5	179,414	178.4
August	67,225	78.5	15,708	135.4	28,594	94.0	111,527	87.3	61,321	121.8	94,866	256.2	22,624	171.8	178,811	177.8
September	70,699	82.5	13,883	119.7	28,599	94.0	113,181	88.6	51,388	102.1	61,163	165.2	17,226	130.8	129,777	129.1
October	101,708	118.7	17,649	152.2	37,859	124.4	157,216	123.1	44,866	89.1	48,683	131.5	17,613	133.8	111,162	110.6
November	95,148	111.1	14,390	124.1	33,996	111.7	143,534	112.4	43,612	86.6	61,422	165.9	14,610	111.0	119,644	119.0

[1] An additional list of 11 commodities of imports is given in October BULLETIN.

WHOLESALE PRICES ABROAD.[1]

Index numbers of wholesale prices (all commodities).

[1913=100.]

	United States; Federal Reserve Board (90 quotations).	United States; Bureau of Labor Statistics (328 quotations).	United Kingdom: Statist (45 commodities).	France; Bulletin de la Statistique Générale (45 commodities).	Italy; Prof. Bachi (40 commodities).	Sweden; Svensk Handelstidning (47 quotations).	Japan; Bank of Japan for Tokyo (56 commodities).	Australia; Commonwealth Bureau Census and Statistics (92 commodities).	Canada; Department of Labor (272 quotations).	Calcutta, India; Department of Statistics (75 commodities).
1913	100	100	100	100	100	[2] 100	100	....	100	....
1914	....	100	101	101	95	116	96	[3] 100	101	[4] 100
1915	....	101	126	137	133	145	97	141	110	....
1916	....	124	159	187	202	185	117	132	135	....
1917	....	174	206	262	299	244	149	[5] 155	177	....
1918	....	197	226	339	409	339	193	170	206	....
1919	....	215	242	357	364	330	235	180	217	....
1919.										
November	219	230	271	405	436	308	280	199	227	....
December	226	238	276	423	455	317	288	197	238	....
1920.										
January	242	248	288	487	504	319	301	203	248	218
February	242	249	306	522	556	342	313	206	254	209
March	248	253	307	555	619	354	321	209	258	198
April	263	265	313	588	679	354	300	217	261	200
May	264	272	305	550	659	361	271	225	263	210
June	258	269	300	493	615	366	247	233	258	206
July	250	262	299	496	613	363	239	234	256	209
August	234	250	298	501	632	365	235	236	244	209
September	226	242	292	526	660	362	230	230	241	208
October	208	225	282	502	662	346	226	215	234	206
November	190	207	263	460	658	331	221	208	225	194

[1] The index numbers printed in this article are constructed by the various foreign statistical offices according to methods described in the BULLETIN for January, 1920. In all cases, except that of the United States, the original basis upon which the index numbers have been computed has been shifted to the 1913 base. The monthly and yearly index numbers are therefore only approximate. The latest figures are received by cable and are subject to correction.

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

[3] July, 1914=100.

[4] End of July, 1914=100.

[5] Last six months of 1917.

No material change is to be noted in conditions abroad during the past few weeks. Wholesale prices were definitely on the decline in most countries, but the reaction had not gone far enough either to relieve the ultimate consumer materially or to bring about an active resumption of business among traders. Production had been curtailed in many industries, resulting in partial or complete unemployment for large numbers of workers. At the same time inflation of bank credit had increased, probably in large measure because of the situation arising from the rapid decline in commodity values, but also because of Government financing and end of year requirements.

ENGLAND.

Prices in England declined very rapidly during November, the Statist index number standing at 282 at the end of October and 263 at the end of November. Practically all groups of commodities were affected, meats and domestic coal being the most important exceptions.

Developments of the past few weeks in practically all commodity lines have been of interest, but the situation in the wool and coal industries is of special significance because of continued Government control. During December free wool sales as well as Government auctions were held. At the Government sales only a small amount of trading occurred, offerings totaling 54,000 bales, while sales amounted to only 16,000 bales. According to reports, the upset price of the Government is too high to attract buyers. Sales at the free wool auctions have been considerably larger, but prices ruled lower than at the Government sales and were also well under November prices.

There has been much agitation recently over the disposition of the enormous quantity of carry-over wool held by the British Government. These large stocks constitute a serious problem to all members of the wool trade, growers in particular opposing a general revision of prices. The latest development is a recommendation on the part of the Australian wool growers (backed by their own Government) that the British Government terminate its wool contract with them on December 31 of this year and make an equal division of the cash, wool, and other assets resulting from its control of the wool business. The growers then plan to form a wool realization association with a capitalization of £25,000,000 for the marketing of the wool.

Prices of wool tops in December were very strikingly reduced from quotations of earlier months and piece goods was likewise lower. A large portion of the Yorkshire mills are running only 24 hours a week.

All regulations regarding the price of export and bunker coal were revoked on December 1. Domestic coal prices continue at the same level as during earlier months, the Government fixed price being still effective. Export coal prices, however, have begun to decline, and it is reported that stocks of export coal are accumulating in the Cardiff region. Production during recent weeks has been maintained at the high point of the year, while demand from abroad has been curtailed.

The following table shows the course of wholesale prices according to the Statist index number:

Statist index number of wholesale prices.

[1913=100.]

Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Foodstuffs.	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	252	192	213	218	152	228	212	198
1918	248	210	238	229	167	265	243	225
1919	252	215	275	238	190	271	268	243
November	266	226	332	258	226	325	292	280
December	270	228	336	260	234	334	296	286
1920:								
January	274	230	356	265	256	343	312	302
February	297	237	415	286	267	362	329	318
March	345	237	393	300	263	360	318	312
April	346	265	392	315	263	354	321	311
May	351	244	473	318	273	308	311	298
June	359	244	496	325	269	308	282	285
July	343	278	425	325	276	298	277	283
August	317	295	404	319	281	298	278	285
September	319	291	334	308	283	286	279	282
October	334	290	257	302	276	261	268	266
November	308	293	238	291	265	212	253	245

The condition of the Bank of England on November 24 was rather stronger than for the last week of October. Deposits were £13,500,000 lower than at the end of October, bank and currency note circulation was reduced, and gold holdings increased (due to receipts from France). During the next weeks, however, considerable strain was felt, especially at the first of December, because of the repayment of £12,500,000 of exchequer bonds which matured on that date and the distribution of £50,000,000 in interest on the war loan. This resulted in an increase in other deposits and a decrease in the ratio of reserve to liabilities from 11⅞ per cent on November 24 to 7⅞ per cent on December 1, the lowest point reached since 1866. During the next two weeks conditions improved slightly, but on December 22 and 29 the reserve ratio was again down to between 7 and 8 per cent. As a result of the December 1 payments by the Government, the floating debt was greatly increased. Treasury bills outstanding increased from £1,097,000,000 the last week in November to £1,127,000,000 the first week in December, and temporary advances from the bank and other departments increased from £231,000,000 to £268,000,000. The volume of currency notes was reduced during the month of November, but was again increased in December.

The suspension of payment by Farrow's Bank, which was capitalized at £361,000, was due to unsound management rather than to general financial conditions.

1920	Deposit and note accounts.				Government floating debt.			Discount rates.	
	Bank notes.[1]	Currency notes and certificates outstanding.	Deposits, public and other.	Coin and bullion.[2]	Treasury bills.	Temporary advances.	Total floating debt.	3 months' bank bills.	6 months' trade bills.
End of—	*000's.*	*000's.*	*000's.*	*000's.*	*000's.*	*000's.*	*000's.*	*Per cent.*	*Per cent.*
January	£84,258	£329,554	£155,272	£128,434	£1,111,000	£208,000	£1,319,000	$5\frac{19}{32}$	$6\frac{3}{8}$
February	92,426	324,994	190,147	138,946	1,070,000	188,000	1,258,000	$5\frac{7}{8}$	$6\frac{3}{4}$
March	99,371	335,372	137,170	140,672	1,107,000	205,000	1,312,000	$5\frac{5}{8}$	$6\frac{3}{4}$
April	101,284	337,377	140,381	141,018	1,048,000	249,000	1,297,000	$6\frac{21}{32}$	$7\frac{1}{2}$
May	103,614	348,316	117,784	140,955	1,062,000	221,000	1,283,000	$6\frac{25}{32}$	$7\frac{1}{2}$
June	106,658	357,356	191,715	146,382	1,050,000	244,000	1,294,000	$6\frac{5}{8}$	$7\frac{5}{8}$
July	106,869	361,911	133,796	151,734	1,058,000	204,000	1,262,000	$6\frac{11}{16}$	$7\frac{1}{2}$
August	106,294	356,012	115,955	151,529	1,067,000	183,000	1,250,000	$6\frac{23}{32}$	$7\frac{1}{2}$
September	108,791	353,795	127,167	151,615	1,139,000	143,000	1,282,000	$6\frac{11}{16}$	$7\frac{1}{2}$
October	108,839	355,872	136,977	151,699	1,028,000	241,000	1,269,000	$6\frac{21}{32}$	$7\frac{1}{2}$
November	109,218	349,284	123,304	152,613	1,097,000	231,000	1,328,000	$6\frac{11}{32}$	$7\frac{1}{2}$

[1] Less notes in currency notes account. [2] Held by the Bank of England and by the Treasury as note reserve.

London bank clearings constantly decreased during the successive weeks of November. During the first week they amounted to £793,000,000, while during the last week they had been reduced to £676,000,000. During the first two weeks of December the totals were higher again, but declined in the third week.

London bankers' clearing-house returns.

[In thousands of pounds sterling.]

Date (1920).	Total.
Week ending—	
Nov. 3	792,787
Nov 10	705,253
Nov. 17	683,045
Nov. 24	675,708
Dec. 1	753,233
Dec. 8	764,810
Dec. 15	670,589

Foreign trade during the month of November showed an increase of £7,000,000 in exports, a decrease of £3,000,000 in reexports, and of £5,000,000 in imports. As regards England's balance of trade, this is the most favorable showing yet obtained, and the total exports for the month are the largest in value of any month since the war with the single exception of July, 1920. The only unfavorable features of the report were the relatively small quantity of raw materials and the relatively large quantity of finished goods imported.

Date.	Value of foreign trade.			Production (metric tons).			Ship tonnage under construction (gross tons).
	Imports.	Exports.	Reexports.	Coal.	Pig iron.	Steel ingots and castings.	
	000's.	*000's.*	*0,0's.*	*000's.*	*000's.*	*000's.*	
Monthly average, 1913	£39,061	£43,771	£9,131	24,336	869	649	[1] 2,002,699
1920.							
January	183,498	105,880	25,464	[2] 22,657	676	766	....
February	170,514	85,964	22,604	19,435	656	811	....
March	176,648	103,699	27,031	19,505	710	854	3,394,425
April	167,154	106,252	20,407	17,131	655	779	....
May	166,816	119,319	20,260	[2] 22,131	738	848	....
June	170,491	116,352	20,124	19,048	726	745	3,578,000
July	163,342	137,452	17,848	[2] 22,926	750	800	....
August	153,255	114,903	13,368	16,970	752	709	....
September	152,692	117,456	13,351	18,885	741	884	3,731,000
October	149,389	112,295	16,134	[2] 14,044	533	544	....
November	144,260	119,365	13,115	15,920	404	504	....

[1] Average of four quarterly estimates. Figures following are estimates taken at the end of each quarter.
[2] Five weeks in the month.

	Average percentage increase in cost of living,[1] base, July, 1914.	Per cent of trade-union members unemployed (membership 1,636,012 at end of September).
1920.		
January	125	2.9
February	130	1.6
March	130	1.1
April	132	.9
May	141	1.1
June	150	1.2
July	152	1.4
August	155	1.6
September	161	2.2
October	164	5.3
November	176	3.7
December	169	....

[1] Food, rent, clothing, fuel, light, etc.

Figures applying to increase in cost of living are for the beginning of month and those for trade-union unemployment are for end of month.

The index number of the cost of living in England showed a decline during November for the first time since the post war boom began. During October the index increased from 164 per cent to 176 per cent above the average in July, 1914, mainly because of the removal of the bread subsidy. In November, however, the effects of the decline in wholesale prices began to be felt in retail prices as well. Unemployment had reached considerable proportions in October, many people being thrown out of work as a result of the coal strike. During November and December conditions were further aggravated, establishments continuing on a part-time basis even after the strike was over. The ministry of labor estimates 60,000 members of trade-unions were out of work at the end of November; 415,000 individuals were registered in the insured trades as out of work at the same time.

FRANCE.

Subscriptions to the French National 6 per cent loan closed on November 30, 1920. Receipts total about 27,000,000,000 francs, of which 12,500,000,000 francs were paid in the form of French Government securities of former loans. The large total is particularly welcome in view of the current needs of the French treasury. An examination of the state of the national finances has been taking place in the finance commissions of both the Senate and the Chamber of Deputies since the middle of November. The budget approved for the year 1920 provided (as has been previously noted in the BULLETIN) for the following expenditures:

	000's of francs.
Ordinary expenses	21,761,108
Extraordinary expenses	5,420,303
Expenses recoverable from Germany	20,751,128
Total	47,932,539

The budget for 1921 recently submitted by the Finance Minister, M. François Marsal, provides for the following items of expense:

	000's of francs.
Ordinary expenses	22,327,409
Extraordinary expenses	5,420,731
Special expenses	16,539,100
Total	44,287,240

The last item is made up principally of interest on a portion of the public debt (5 billion francs) and expenses in the devastated regions (10 billion francs). M. François-Marsal estimates that the Government's ordinary receipts during 1921 will be 19,735 million francs, and its extraordinary receipts 5,228 millions. This would seem to leave a deficit of almost 3 billion francs in the "ordinary" and "extraordinary" budgets, leaving the "special" budget out of consideration entirely. (This last is regarded as eventually recoverable from Germany and will be met by a loan.) The commissions of finance of the Chamber and Senate have recently requested the Finance Minister to reduce the expenses contemplated for 1921 by about 3 billion francs in order that receipts and the expenses of the ordinary and extraordinary budget may balance. Both commissions emphasize the need for doing away with Government departments which are "useless and out of harmony with the exigencies of the present financial situation," and the commission from the Chamber of Deputies says that it wishes to obtain the consent of the ministers of the Army and the Navy for new and important economies. Work on the 1921 budget will not be finished by the first of the year and provisional credits will have to be voted for January and February.

The following table gives a survey of the French financial situation during November. The only important changes to be noted in the statement of the Bank of France are in note circulation, which decreased slightly, and in deposits which increased about 450 million francs. This latter increase is about equally divided between Government and private deposits.

French financial situation.

[In francs.]

	Bank of France.					Situation of the Government.		
	Gold reserves (000,000's)	Silver reserves (000,000's)	Deposits[1] (000,000's)	Circulation (000,000's)	Advances to the Government for purposes of the war[2] (000,000's)	Government[3] revenue (000,000's)	Public debt (000,000's)	Price of 3 per cent perpetual rente.
1913, average	3,343	629	830	5,665	....	320	35,000	86.77
1920, end of—								
January	[4] 3,602	255	3,172	37,583	25,300	885	[5] 206,616	58.75
February	[4] 3,603	251	3,277	37,889	25,800	794	....	57.60
March	[4] 3,606	247	4,039	37,569	26,300	859	....	58.82
April	[4] 3,608	244	3,469	37,688	25,300	1,057	....	57.40
May	[4] 3,609	240	3,751	37,915	26,050	857	....	59.35
June	[4] 3,610	241	3,653	37,544	26,000	908	....	57.25
July	[4] 3,611	248	3,416	37,696	25,550	1,109	[6] 233,729	58.90
August	[4] 3,612	255	3,267	37,905	25,800	882	....	56.30
September	[4] 3,531	256	3,307	39,208	26,600	1,120	....	54.15
October	[4] 3,537	264	3,474	39,084	26,600	1,332	....	56.20
November	[4] 3,543	265	3,927	38,807	26,600	1,088	....	55.40

[1] Includes Treasury and individual deposits.
[2] Under the laws of Aug. 5 and Dec. 26, 1914, July 10, 1915, and Feb. 16, 1917.
[3] From indirect taxation and Government monopolies.
[4] Not including about 1,978 million francs held abroad.
[5] As of Dec. 31, 1919.
[6] Foreign debt calculated at par.

Wholesale prices in France continued to decline during the month of November. The wholesale price index number of the Statistique Générale dropped from 502 in October to 480 in November. Prices of meat and vegetables, which were still increasing in October, began to move downward in November, and sugar and coffee reached further low levels during the month. The decline in meat prices was due to the fact that the Government imported and marketed frozen meat at fixed prices. Sugar-beet production in France was much larger this year than last, and lower prices have resulted. Production of refined sugar for the 1920–21 season is estimated at 244,260 tons, 70 per cent more than the estimated yield of the season af 1919–20.

Textile prices were also much lower in November; Buenos Aires fine wool at Havre dropped from 9.80 francs per kilo the last of October to 8.90 francs the last of November. Cotton at Havre fell from 430 francs per 50 kilos the last of October to 298 francs the last of November.

Toward the last of November orders for textiles had become so rare that a reduction in working hours was necessary in the Lille district. There is also unemployment in the textile mills of the Vosges, but reports from the region of Mulhouse, Alsace, show some improvement in the situation there. Silk prices also declined during November, and the Lyon market reports continued inactivity.

Metal prices rose slightly the first of the month and then dropped below October levels. They are not yet as low, however, as they were last year at this time.

The following table gives the group index numbers of the Statistique Générale:

Group index numbers—France.

[Bulletin de la Statisque Générale.]

[1913=100.]

Date.	Animal food.	Vegetable foods.	Sugar, coffee, and cocoa.	Foods (20).	Minerals.	Textiles.	Sundries.	Raw materials (25).
1913	100	100	100	100	100	100	100	100
1914	103	103	106	104	98	109	99	101
1915	126	126	151	131	164	132	145	145
1916	162	170	164	167	232	180	199	206
1917	215	243	201	225	271	303	302	291
1918	286	298	231	281	283	460	420	387
1919	392	313	253	336	272	444	405	373
1919, end of—								
November	424	351	271	369	323	620	415	435
December	432	380	278	375	357	649	419	454
1920:								
January	452	432	419	440	413	787	465	525
February	484	474	436	474	444	828	503	561
March	500	516	439	498	460	884	548	600
April	522	511	429	506	498	953	587	646
May	480	480	424	472	459	841	601	614
June	482	400	392	434	428	734	517	540
July	501	370	405	432	469	746	500	548
August	515	359	399	432	475	737	524	558
September	531	412	544	487	468	715	540	558
October	533	421	422	469	453	637	527	528
November	519	390	371	441	424	510	498	476

Recent dispatches from France say that retail as well as wholesale prices are declining. Evidently the decline was not widely felt in November, however, as the Statistique Générale's retail price index number for Paris showed an increase of 6 points for the month. This index includes 13 articles, weighted according to annual consumption of a workingman's family of four people. The base period is July, 1914.

Retail prices in Paris.

[July 1914=100.]

Month.	1914	1915	1916	1917	1918	1919	1920
January		122	137	139	191	248	290
February						226	297
March						248	339
April		116	135	147	218	257	358
May						268	378
June						263	369
July	100	122	132	183	206	261	373
August						238	373
September						259	407
October		120	138	184	237	283	420
November						280	426
December						285	

Preliminary figures on French foreign trade for November, 1920, show a distinct decline in exports over previous months. Imports, however, are larger than they were last month. The following table gives a summary of the trade for this year:

Foreign trade of France.[1]

[In thousands of francs.]

	Imports.				Exports.				
	Food.	Raw materials.	Manufactured articles.	Total.	Food.	Raw materials.	Manufactured articles.	Parcel post.	Total.
1913 average [2]	151,465	412,144	138,169	701,778	69,908	154,841	301,420	47,182	573,351
1919 average [3]	719,122	1,101,811	660,610	2,481,543	80,805	161,401	440,314	43,577	726,097
1920:									
January	538,365	985,410	478,408	2,002,183	84,561	187,626	415,007	35,204	722,398
February	653,630	1,336,987	651,299	2,641,916	150,060	347,480	767,423	58,866	1,323,829
March	871,857	1,478,987	772,007	3,122,851	114,223	349,521	834,031	39,884	1,337,659
April	675,799	1,398,592	813,216	2,887,607	125,678	353,344	844,901	52,987	1,376,910
May	547,825	1,193,960	644,911	2,386,696	103,355	348,361	726,654	31,658	1,210,028
June [4]	558,951	1,302,867	726,856	2,588,674	216,849	421,735	1,100,931	69,862	1,809,377
July [5]									
August [6]	723,749	1,171,091	905,613	2,800,453	210,888	440,482	1,631,883	116,255	2,399,508
September	608,822	1,294,160	724,894	2,627,876	229,892	446,131	1,363,469	112,081	2,151,573
October	667,709	1,243,294	684,442	2,595,445	262,808	337,464	1,597,808	134,472	2,332,552
November [7]	549,834	1,389,928	732.416	2,672,000	200,388	405,858	1,136,356	140,996	1,883,598

[1] Not including gold, silver, or the reexport trade.
[2] Calculated in 1913 value units.
[3] Calculated in 1918 value units.
[4] January–June, 1920, figures are calaulated in 1918 value units. French foreign trade figures are originally recorded in quantity units only, and the value of the trade is calculated by applying official value units to the quantities imported and exported. Normally the monthly statements of trade appear computed at the rates of the year previous, and only at the end of the year is the trade evaluated at the prices prevailing during that year. Because of the disturbed price conditions in France this year, however, it was not until July that the 1919 price units were decided upon and applied.
[5] Monthly French foreign trade figures are published only in cumulative form, and as the value rates used were changed in July it is impossible to give separate figures for that month.
[6] Calculated in 1919 value units.
[7] Figures subject to revision.

ITALY.

The Italian situation is still marked by falling exchange rates and continued inflation of bank credit, but wholesale prices have begun to decline. Exchange rates which began their second spectacular decline of the year in the month of July continued to depreciate throughout November and December, lire being worth only 3.38 cents in New York on December 27. Wholesale prices, which stood at 662 in October (as compared with 100 in 1913), had declined to 658 in November. This decline is so slight as to be almost immaterial except for the fact that it indicates that the peak of the present upward movement has been passed. Increases occurred during the month in prices of foodstuffs (probably because of the removal of Government subsidies of one sort and another), but prices of textiles and minerals declined.

Group index numbers—Italy.

Prof. Bachi. [1913=100.]

Date.	Cereals and meats.	Other foodstuffs.	Textiles.	Minerals and metals.	Other goods.
1913	100	100	100	100	100
1914	102	84	96	100	96
1915	132	93	113	207	133
1916	156	135	184	380	197
1917	215	171	326	596	266
1918	315	229	475	750	391
1919	316	340	427	414	360
1919.					
November	328	371	633	568	351
December	338	373	658	584	405
1920.					
January	363	396	777	671	418
February	365	399	840	857	443
March	381	418	962	996	489
April	395	494	1,064	1,076	535
May	441	499	840	1,088	525
June	445	511	742	917	534
July	434	508	759	903	542
August	445	510	794	957	540
September	459	520	837	1,040	541
October	446	502	810	1,092	572
November	475	535	763	1,077	585

Bank statistics are not available for more recent date than September 30, but in view of the situation as disclosed by foreign exchange rates and prices, it is unlikely that conditions have improved very materially since then. On that date the note circulation of the three banks of issue stood at almost 19,000 million lire as compared with something under 3,000 million lire before the war. Between January and September, 1920, the increase in this item amounted to more than 20 per cent. During 1920 gold and silver holdings of the banks remained practically stationary, but holdings of foreign securities increased from a value of 868 million lire to 1,063 million lire. Deposits of these same banks increased from 2,376 million lire on January 31 to 2,444 million lire September 30. April, June, and September saw the most rapid increases in this item, while the totals were somewhat reduced during May and July. The ratio of reserves to note circulation after deducting 20 per cent required for demand liabilities was 9.87 per cent on September 30.

The floating debt of Italy on June 30 was about as large as her note circulation. The latter item amounted to something under 18 billion lire on that date, while treasury bills were in circulation to the amount of 15 billion lire. In addition, there were over 2 billion lire in State notes in circulation, while of the total bank note circulation of about 18 billion lire 8 billion lire had been issued for the account of the State.

Banks of issue.—Aggregate note circulation, deposits, and reserves for Banca d'Italia, Banco di Napoli, and Banco di Sicilia.

[In millions of lire.]

Date.	Circulation.	Deposits and demand liabilities.	Reserve.			
			Gold.	Silver.	Foreign holdings.	Total.
1920						
Jan. 31	15,634	2,376	1,038	115	868	2,021
Feb. 29	15,448	2,224	1,038	115	894	2,047
Mar. 31	15,932	2,296	1,028	115	910	2,063
Apr. 30	16,429	2,377	1,038	115	882	2,035
May 31	16,861	2,264	1,038	115	912	2,065
June 30	17,817	2,379	1,038	115	957	2,110
July 31	17,899	2,196	1,039	115	954	2,113
Aug. 31	17,955	2,276	1,039	115	1,018	2,171
Sept. 30	18,912	2,494	1,039	115	1,063	2,216

Total public debt on that date amounted to 72,574 million lire as compared with 53,622 at the same date in 1919. Of this sum 43,500 millions was perpetual debt, while 29,200 millions consisted of long-term treasury certificates, railway certificates, credits opened in the United States, bonds placed in foreign countries, etc.

The principal revenues in the first two months of the current fiscal year (July and August) amounted to 1,479 million lire, against 1,083 millions for July and August, 1919. Revenues from Government monopolies were 200 millions over those for the same period of the preceding year, which were 80 millions more than those for July-August, 1918. The yield from taxes on consumption shows in the first two months of the current fiscal year an increase of 12 million lire over the same period of the preceding year, but a decrease of 12.5 millions as compared with 1918.

October 18 was the date on which the first installment of the 1920 quota of the tax on capital was due. Official reports are not yet available showing the amount collected. The tax is levied on all fortunes of 50,000 lire or more, at a progressive rate, graduating from 4.50 per cent to 50 per cent. The payment is extended over a period of 20 years (or 10 years for those estates of which three-fifths or more consist of personal property), a discount of 6 per cent a year being granted those who pay before their annual installment falls due. According to the provisional figures obtained in October the number of persons assessed is 361,000, or 1 per cent of the total population; the total wealth assessed, 70 billion lire; the annual yield of the tax, 450 millions; the number of persons having fortunes of 1 million lire or more, 6,000, and their aggregate fortunes, about 14 billion lire. These figures are only tentative, and it is thought that with the enforcement of the law regarding the registering of bearer bonds the number of individuals subject to the tax will be found to be much larger.

Italian foreign trade, January-July, 1919 and 1920, (excluding gold and silver).

[Based on 1919 value units.]

[In millions of lire.]

Month.	Imports.		Exports.		Excess of imports over exports.	
	1920	1919	1920	1919	1920	1919
January	1,002	1,061	497	260	505	801
February	1,141	1,368	616	301	525	1,067
March	1,431	1,656	683	367	748	1,289
April	1,363	1,651	679	350	684	1,301
May	1,401	1,364	662	358	739	1,006
June	2,076	1,431	752	484	1,324	947
July	1,040	1,555	521	432	519	1,123
Total	9,454	10,085	4,411	2,551	5,043	7,534

With foreign exchange rates depreciated even more than domestic values, conditions during 1920 have been favorable for Italian export trade. Total exports for the first 7 months of the year show an increase of 73 per cent in values over those of the same period in 1919. This is presumably a true increase, since the figures for both years are based upon values in 1919. Exports for June were at the highest level of the year, the July exports showing a considerable decline. Italian imports are still far larger than exports, the unfavorable balance amounting to 5 billion lire during the first seven months of the year. Total imports, however, have been slightly lower during 1920 than they were in 1919, and the unfavorable balance is considerably smaller.

On October 10, the Commissioner of Food Supply estimated that the budgetary deficit this year on account of the bread subsidy might exceed 7 billion lire. About a month later a bill for financing the bread subsidy was proposed by the Government. This bill provides that the receipts from certain taxes (such as the income tax) shall be applied to the deficit on this account and that the price of wheat to the regional consortia be raised to the national requisition price (domestic grain price). It is estimated that the latter regulation will increase the price of bread from 1 lire per kilogram to 1.30-1.40 lire per kilogram. These provisions will yield something over 4½ billion lire, it is estimated, but even so the total cost of the subsidy will not be met.

The crop situation as a whole seems to be somewhat less favorable than last year. Except in the case of maize, potatoes, and beets, 1920 crops are estimated as lower than 1919.

Estimates of production of agricultural products in Italy, 1919 and 1920.

[In quintals.]

	1920	1919
Wheat	38,400,000	46,204,000
Rye	1,150,000	1,161,000
Barley	1,270,000	1,813,000
Oats	3,500,000	5,036,000
Rice	4,300,000	4,867,000
Maize	22,000,000	21,806,000
Potatoes	14,000,000	13,875,000
Beets	15,000,000	15,000,000

GERMANY

The tendency toward the consolidation of individual financial and industrial undertakings which has been characteristic of German economic development in the last few years, has been of particular interest in the last few months. In the chemical industry agreements were made between dye manufacturers and nitrogen concerns. Three great oil mills united under Dutch influence, and a starch combination was formed. The most striking development of this sort which occurred in the industrial field during November was the absorption by the Rhine-Elb Union (the "electromining trust" organized by Hugo Stinnes) of the Siemens Electrical interests. This union now produces coal and electric power, as well as iron ore, semifinished and finished iron and steel products. Its capitalization amounts to 603 million marks (according to figures published in the Frankfurter Zeitung) and its employees number 200,000.

German financial situation.

[In marks.]

	Reichsbank statistics.			
	Reserve.		Note circulation.	Deposits.
	Gold.	Reichs- und Darlehnskassenscheine.		
	000,000's.	*000,000's.*	*000,000's.*	*000,000's.*
1913 average	1,067.6	32	1,958	668
End of—				
April	1,092	15,193	47,940	16,499
May	1,092	15,907	50,017	17,024
June	1,092	17,252	53,975	23,414
July	1,092	17,874	55,969	17,282
August	1,092	18,686	58,401	15,772
September	1,092	19,861	61,735	20,054
October	1,092	21,341	63,596	17,945
November	1,092	20,363	[1]64,284	17,340

	Situation of the Government.			
	Receipts from taxes and Government monopolies.	Floating debt.	3 per cent imperial loan.[1]	5 per cent war loan.[2]
	000,000's.	*000,000's.*		
1913 average	265	....	75.90	....
End of—				
April	2,072	....	74.50	98.75
May	2,599	....	67.50	98.70
June	3,227	141,987	62.90	98.30
July	3,739	148,750	60.64	98.50
August	3,635	....	60.80	98.70
September	4,126	156,825	62.25	99.90
October	5,121	161,920	66.25	99.00
November	....	165,918	72.30	98.80

[1] In addition there were in circulation about 12.5 billions of Darlehnskassenscheine.
[2] Quotations of the Berlin Bourse.

Among the German banks similar amalgamations have been proceeding for several years. The Deutsche Bank has made the greatest strides in this direction. In 1913 its capital was 200 million marks. In 1914 it absorbed the Bergisch-Märkische Bank and increased its capital 50 million marks; in 1917 it took over the Schlesischer Bankverein of Breslau and the Norddeutsche Creditanstalt of Königsberg and raised its capital to 275 million marks; and in 1919 it annexed the Elberfelder Bankverein. Early in the current year it severed connections with the latter bank, but in November it continued its policy of expansion by raising its capital to 400 million marks, and took over the Hannoversche Bank, the Braunschweigische Privatbank, and the Privatbank of Gotha, and became a controlling interest in the Württembergische Vereinsbank. The four other large banks which have been pursuing this same policy are the Disconto-Gesellschaft, the Dresdner Bank, the Commerz-und-Disconto Bank, and the Nationalbank für Deutschland. The last-named bank has been particularly active in recent years in uniting industrial with financial groups. Recent dispatches from Frankfurt say that it took over the Holstenbank in Neumünster in November and that it is preparing to take over the Hanover banking house of Bernhard Caspari, which has many close industrial connections.

The table opposite gives a brief summary of the German financial situation in November. The Reichsbank holdings of Reichs-und Darlehnskassenscheine decreased slightly in November, but its note circulation, after declining during the first two weeks of the month, has reached another high point. Deposits show a slight decrease as compared with the last week in October.

The fiscal situation of the German Government is still the object of great concern in the Reichstag. A bill has been introduced providing for the early collection in 1921 of the emergency war levies, so that the floating debt may be materially reduced by the middle of next year.

German exchange fluctuations were chaotic throughout November. The value of important foreign currencies as expressed in German marks rose steadily until the third week in November, when a sharp drop occurred. The movement was again reversed, however, in the last week of the month. The following table shows the recent trend of Berlin exchange on London, New York, Paris, and Switzerland:

	Berlin exchange on—			
	London.	New York.	Paris.	Switzerland.
Marks to the	Pound sterling.	Dollar.	Franc.	Franc.
Par	20.40	4.20	0.80	0.80
1920.				
Oct. 27	249.75	72.555	4.525	11.239
Nov. 3	269.70	77.295	4.8950	12.1475
Nov. 10	286.70	85.160	4.9950	13.0765
Nov. 18	242.25	69.305	4.3955	10.9890
Nov. 24	239.75	68.430	4.2200	10.7390
Dec. 1	242.00	69.18	4.2100	10.8400
Dec. 8	254.70	74.05	4.3700	11.5100

These violent fluctuations in exchange have a chaotic effect on German economic life. When the value of the mark is lowered it is almost impossible to import goods from abroad, and when it becomes high German manufacturers are unable to find foreign purchasers.

The following table gives wholesale prices in Germany for several important commodities:

Wholesale prices in Germany.

	1913 average.	First quarter, 1920.	Second quarter, 1920.	Third quarter, 1920.	October, 1920.	November, 1920.
Wheat, Berlin....marks per 100 kilos..	[1] 19.9	....	....	[2] 155.5	[2] 155.5	[2] 155.5
Rye, Berlin....do....	[1] 16.4	....	....	[2] 141.5	[2] 141.5	[2] 141.5
Oats, Berlin....do....	[1] 16.2	....	....	[2] 136.5	[2] 136.5	[2] 136.5
Barley, Breslau....do....	[1] 15.6	....	....	[2] 135.0	[2] 135.0	[2] 135.0
Wool, South German, washed A-B....marks per kilo[3]..	3.2	....	....	83	110	110
Raw silk, 11/13, Crefeld....do....	[4] 42.4	2,633	1,683	866	1,050	1,125
Cotton, raw, Bremen....do....	[1] 1.29	[5] 62	[6] 44	47	46	41.88
Cottonyarn, 36's....per kilo[3]..	2.14	144	[6] 116	77	85.50	90
Calfskins....per pound[3]..	[1] 1.9	....	[6] 15	16	24.50	21.03
Pig iron, Hamburg....marks per ton..	77.50	1,512	1,769	1,660	1,660	1,660
Medium plates....marks per ton[3]..	110	3,828	4,927	4,298	4,060	3,360
Copper, refined, Hamburg....marks per 100 kilos[3]..	148.9	2,978	1,490	1,422	1,962.5	1,968.8
Lead, double refined, Hamburg....do....	37.4	1,319	622	556	731.2	855
Zinc, smelted, Hamburg....do....	50.2	1,281	677	710	915	892.5
Tin, Banca or Straits, Hamburg....do....	218.7	11,300	6,350	4,874	6,131.3	6,725
Bituminous coal (Nut I and II), Rhenish-Westphalian Syndicate..marks per ton..	13.13	167	236	238	238	238
Foundry coke, Rhenish-Westphalian Syndicate....do....	19.75	213	296	300.2	300.2	300.2

[1] Statistisches Jahrbuch für das Deutsche Reich.
[2] Price fixed by the Government.
[3] Prices from the Frankfurter Zeitung.
[4] Applies to raw silk 12 to 14 instead of 11 to 13.
[5] January quotation only.
[6] June quotation only.

The trend of the uncontrolled prices in Germany this year has been divided into three distinct movements. During January and February and in some cases as late as April prices rose. From that time on, until June and July, there were sharp price declines. Raw silk prices fell from 3,500 marks per kilo in March to 850 marks in July and August. Lead prices fell from 1,750 marks per 100 kilos in February to 375 in June and other prices declined similarly. During the month of August prices increased again, and there was a fairly steady rise after that time in the price of most commodities not controlled by the Government.

In the second half of November, however, this third movement was reversed in the case of some important commodities. Prices for nonferrous metals, raw cotton, and cotton yarn declined slightly during the last of the month. In the first week of December prices of raw silk and organzine, hides and leather, and some vegetable prices also decreased. Coal prices have remained unchanged, since the Government has refused to allow the coal syndicates to increase their prices since May. Wages of coal miners have been increased several times during that period, and the coal operators protest that they can not continue to produce coal at the present prices.

The question of coal production has been before the German public in the last month. On November 10 a subcommittee on the socialization of coal mines reported to the Reichstag. It recommended a plan not for the taking over of the coal mines by the Government, but for the consolidation of all coal production in the hands of a gigantic trust. If this scheme is adopted, shares in the organization will be issued in small denominations so that they may be purchased by the miners. No action has as yet been taken on this plan of reorganization.

The Bureau of Foreign and Domestic Commerce of the United States has recently published the following statement in regard to German foreign trade in 1919 and the first five months of 1920:

German foreign trade.

	Imports.	Exports.
1919.	*Marks.*	*Marks.*
January	397,000,000	161,000,000
February	408,000,000	195,000,000
March	440,000,000	292,000,000
April	626,000,000	270,000,000
May	1,468,000,000	251,000,000
June	2,688,000,000	406,000,000
July	3,538,000,000	570,000,000
August	3,817,000,000	735,000,000
September	4,191,000,000	790,000,000
October	5,179,000,000	1,089,000,000
November	4,446,000,000	1,284,000,000
December	5,178,000,000	4,014,000,000
Total January-May	3,339,000,000	1,169,000,000
Total for the year	32,376,000,000	10,057,000,000
1920.		
January	6,560,000,000	3,219,000,000
February	5,932,000,000	4,262,000,000
March	5,683,000,000	4,216,000,000
April	4,768,000,000	5,344,000,000
May	5,537,000,000	6,647,000,000
Total January-May	28,480,000,000	23,688,000,000

"The reversal of the trade balance in April and May of 1920 is explained in part by the fact that the goods exported in those two months were free from the ausfuhrabgaben, or export duties. The manufacturers and the merchants naturally made haste to fill current orders as soon as possible in order to obtain the benefit of the exemption. It should be noted also that considerable quantities of goods purchased or ordered by foreign visitors at the Leipzig Fair were shipped in April and May.

"The favorable balance of trade for the two months has been greeted in some quarters as a good omen, but it is pointed out by the "Handelsberichte" of October 28, 1920, that the favorable balance is only apparent, not real. It seems to be due to the method of valuation rather than to an actual increase of exports. In Germany declared values are registered for all exports, but the value of most of the imports is estimated officially on the basis of average prices prevailing during the year. For the several months of 1920 the imports have been valued on the basis of prices prevailing in 1919, the resulting figure of imports being much too low in comparison with the exports, as the mark had depreciated in 1920. The exports were stated in the low marks of 1920, the imports in the higher marks of 1919.

"Arrangements are now being made to improve the method of valuation so that a real trade balance may be shown by the figures of trade. It is probable that declarations of value will be made compulsory for all categories of imports.

"It should also be remembered, when the value of the exports is under consideration, that the total includes goods delivered to the allied powers as compensation under the treaty of peace. Such goods can not properly be considered articles of commerce. The deliveries of coal alone represent a value of 792,000,000 marks for the first five months of 1920, the value being estimated on the basis of domesticprices."

JAPAN.

The accompanying table shows the condition of the Bank of Japan during the past seven years. Among the items the increase in the advances on foreign bills between 1916 and 1918 is perhaps the most striking, indicating as it does the remarkable activity of the bank in connection with foreign trade. Advances on foreign bills at the end of 1913 amounted to only 44 million yen, whereas at the end of 1918 they were approximately 10 times as great, amounting to 444 million yen. During 1919 and 1920 there has been a decided falling off in this item, especially in the interval between December 31, 1919, and June 30, 1920. Gold embargoes abroad made it necessary for the bank to assist exporters in financing foreign trade during the war period. These advances were made through the exchange banks by means of note issues on the part of the Bank of Japan.

During the war period the item "Private loans and discounts" increased at a far less rapid pace than advances on foreign bills. On December 31, 1913, they amounted to 80 million yen, while at the end of 1918 they were 142 million yen. However, since June 30, 1919, this item has increased very strikingly, while advances on foreign bills have declined, with the result that private loans and discounts on June 30, 1920, were far larger than advances on foreign bills on that date. The increase in loans and discounts is an interesting indication of the fact that during the war, while business conditions were easy, the connections between the Bank of Japan and the private banks was not so close as during the last year, when conditions have been far more critical within the country.

Another group of items which showed very striking increases during the war were deposits at overseas agencies and coin, bullion, and notes. During the war the Bank of Japan accumulated large holdings of gold. Part of this specie was shipped to Japan, but at the same time very large portions were kept abroad. With the rapid increase in foreign trade it was necessary for the bank to keep increasingly large deposits abroad.

The second table shows the condition of the Bank of Japan as regards certain important items at monthly intervals during 1919 and 1920. This table shows that while specie reserves have been steadily increasing during 1920, the note issue has been on the decline. The decline during 1920 in the branches and agencies account (including overseas agencies account) indicates that specie has been shipped to Japan from abroad. The freedom of the movement of gold probably explains in part at least the decrease in the item "advances on foreign bills." It is also affected by the fact that recently the city banks have had large sums available for the use of the exchange banks. At the same time the volume of foreign trade has been steadily on the decline.

The decrease in loans and discounts items since July probably indicates that the stringency which existed in the earlier months of the year has been somewhat relieved.

Foreign trade during the month of November showed an excess of imports over exports. The total imports amounted to 112 million yen and the total exports to 105 million yen. During the first seven months of 1920 the foreign trade of Japan showed an adverse balance, but between August and October exports were larger than imports. The fact that November trade again shows an unfavorable balance indicates that foreign demand is abnormally light.

Statement of the Bank of Japan, 1913-1920 (slightly summarized).

[In thousands of yen.]

	1913, Dec. 31.	1914, Dec. 31.	1915, Dec. 31.	1916, Dec. 31.	1917, Dec. 31.	1918, Dec. 31.	1919, June 30.	1919, Dec. 31.	1920, June 30.
ASSETS.									
Government securities (franchise)	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Advances on foreign bills	44,835	46,682	20,787	120,543	199,119	444,225	374,051	358,113	294,837
Private loans and discounts	79,595	40,703	37,701	68,039	73,076	142,432	152,337	357,955	365,270
Deposits	32,048	33,130	42,470	54,708	41,330	44,527	44,515	51,926	40,556
Public bonds	55,530	55,877	43,951	36,723	34,534	32,002	40,663	76,998	84,001
Coins, bullion, and notes	225,568	219,564	250,179	402,718	655,854	716,713	710,029	953,295	982,202
Due from correspondents	361	294	46	93	33	86	95	57	175
Deposits at oversea agencies	151,993	122,711	267,678	303,985	446,503	801,283	880,171	969,538	773,396
Due from auxiliary branches	36,082	40,718	60,756	34,386	24,760	29,060	40,272	35,523	40,009
Deferred assets	693	1,594	1,709	675	1,975	1,889	1,606	1,554	2,556
Bank premises	2,622	2,576	2,568	2,498	2,432	2,194	2,238	2,235	2,210
Capital at call	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Deposits of reserve for small Government notes					19,825	91,210	114,395	145,300	184,890
Total	673,828	608,349	772,346	1,078,868	1,543,943	2,340,101	2,404,883	2,996,991	2,815,607
LIABILITIES.									
Notes issued	426,389	385,589	430,138	601,224	831,372	1,144,739	1,080,315	1,555,101	1,349,065
Reserve for small Government notes					19,825	91,210	114,395	145,300	184,890
Government deposits	86,035	62,012	174,910	330,850	547,725	915,805	1,029,034	1,111,106	1,055,759
Sinking funds for bonds	32,233	40,385	58,481	23,422	24,454	27,562	35,980	34,635	36,001
Due to Government for loans issued					2		1	1	23
Private deposits	14,960	15,441	11,582	25,930	21,517	48,170	41,985	33,731	68,898
Due to correspondents	55	31	32	14	42	93	24	330	102
Deferred liabilities	30,840	10,691	2,328	1,500	1,900	14,236	1,332	4,080	8,619
Overdue tax							2,470	6,287	8,285
Capital	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Reserve and surplus	33,318	34,198	34,874	35,928	37,045	38,284	39,346	40,418	43,865
Total	673,828	608,349	772,346	1,078,868	1,543,943	2,340,101	2,404,883	2,996,991	2,815,607

Important items of the statement of the Bank of Japan.

[In thousands of yen.]

	Discounts.	Loans.	Advances on foreign bills.	Branch and agency account.	Coin, bullion, and notes.	Government deposits.	Private deposits.
1919.							
January 12	44,769	46,157	326,820	834,770	713,597	901,189	35,082
February 16	21,601	47,814	343,752	821,152	712,347	1,013,963	27,905
March 16	12,769	47,390	309,373	870,719	711,549	1,081,256	21,651
April 13	15,486	55,624	264,725	895,196	707,225	1,059,643	23,651
May 18	30,776	57,962	279,171	902,447	706,257	1,098,112	35,447
June 15	67,016	57,933	336,906	936,567	705,367	1,039,189	39,512
July 13	42,678	48,184	371,329	914,207	711,013	1,046,747	32,860
August 17	71,828	56,641	348,399	934,543	765,569	1,095,378	28,952
September 14	100,660	55,947	297,049	993,742	755,603	1,117,846	25,464
October 12	90,332	55,136	258,818	1,033,601	805,713	1,110,181	38,251
November 16	66,383	51,728	273,036	1,016,747	825,011	1,094,900	37,346
December 14	107,509	47,062	293,626	1,013,521	886,054	1,094,315	48,617
1920.							
January 10	146,184	55,457	283,012	1,008,687	951,236	1,136,466	43,502
February 14	188,140	55,862	323,125	971,466	941,237	1,136,703	37,883
March 27	290,457	73,259	281,372	894,816	925,697	1,143,223	37,613
April 17	349,876	52,812	287,754	876,385	921,609	1,167,357	65,529
May 15	369,054	51,945	302,457	862,271	920,490	1,177,682	119,543
June 12	308,522	52,101	250,014	846,994	967,174	1,101,408	80,814
July 17	237,613	45,380	228,369	816,873	993,897	1,094,885	93,699
August 14	174,594	47,393	199,264	812,796	1,033,635	1,093,484	71,322
September 11	140,246	47,737	125,400	850,373	1,050,533	1,049,508	72,611

Group index numbers—Calcutta, India, Department of Statistics.

[End of July, 1914=100.]

Date.	Building materials.	Manufactured articles.	Metals.	Hides and skins.	Cotton manufactures.	Raw cotton.	Jute manufactures.	Other textiles.	Oils.	Raw jute.	Oil seeds.	Tea.	Sugar.	Pulses.	Cereals.	Other foods.
End of July, 1914	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August, 1918	....	....	317	83	....	240	328	240	......	89	96	......	95	179	....	[1] 119
1920.																
January	118	225	226	253	356	214	181	153	159	125	200	96	377	207	167	204
February	118	217	215	233	364	185	164	158	155	123	190	92	363	191	158	199
March	127	218	222	211	351	179	150	159	135	118	166	87	321	160	151	192
April	114	201	219	209	357	158	170	161	116	119	163	90	377	159	156	185
May	128	215	248	160	365	135	142	164	123	120	169	90	511	150	157	183
June	131	233	244	116	364	144	147	164	119	83	171	73	482	149	156	180
July	139	235	249	100	364	132	151	168	119	89	169	74	503	159	151	188
August	142	235	257	99	360	139	163	168	115	91	167	72	477	160	154	185
September	158	237	245	105	347	154	163	164	115	105	179	65	456	170	154	186
October	154	282	245	96	343	142	136	164	132	104	184	64	392	169	155	178
November	161	246	243	89	341	133	118	164	118	90	163	62	348	168	150	173

[1] Includes pulses.

Group index numbers—Sweden, Svensk Handelstidning.

[1913=100.]

Date.	Vegetable food.	Animal food.	Raw materials for agriculture.	Coal.	Metals.	Building material.	Paper pulp.	Hides and leather.	Textiles.	Oils.
1913-14	100	100	100	100	100	100	100	100	100	100
1914 [1]	136	101	114	123	109	104	....	118	103	111
1915	151	140	161	177	166	118	116	158	116	120
1916	152	182	180	266	272	165	233	229	166	149
1917	181	205	198	551	405	215	267	206	247	212
1918	221	419	304	856	398	275	300	195	....	....
1919	261	409	340	804	258	286	308	211	....	....
1919.										
November	230	361	317	840	225	280	316	228	328	204
December	241	362	319	840	237	294	343	258	350	204
1920.										
January	248	328	317	864	248	295	388	258	353	204
February	273	305	319	936	259	371	476	269	380	226
March	270	304	318	960	291	367	682	268	380	275
April	265	284	320	1,008	283	367	767	263	368	275
May	269	283	320	1,069	324	367	788	252	374	275
June	250	273	311	1,252	318	381	778	212	368	303
July	252	277	312	1,252	293	388	767	202	336	303
August	271	307	310	1,117	286	388	756	191	328	322
September	273	312	308	1,085	273	388	753	180	310	340
October	258	306	309	1,026	256	390	740	166	250	340
November	264	290	303	910	253	387	609	161	233	332

[1] Average for six months ending Dec. 31, 1914.

Group index numbers—Australian Commonwealth—Bureau of Census and Statistics.

[July, 1914=100.]

Date.	Metals and coal.	Textiles, leather, etc.	Agricultural products.	Dairy products.	Groceries and tobacco.	Meat.	Building materials.	Chemicals.
July, 1914	100	100	100	100	100	100	100	100
1915	117	93	202	127	110	150	116	149
1916	154	131	113	124	127	155	136	172
1917	213	207	110	116	131	155	194	243
1918	220	232	135	121	138	147	245	315
1919	193	217	186	137	147	145	261	282
1919.								
November	184	254	238	142	151	132	278	267
December	186	259	224	142	156	132	281	266
1920.								
January	189	273	227	143	156	147	282	268
February	192	283	226	149	161	149	287	272
March	205	281	226	162	160	126	298	280
April	205	277	234	169	192	160	298	280
May	214	265	252	177	197	170	307	297
June	214	260	261	187	195	208	307	297
July	211	252	244	188	193	261	307	283
August	209	251	238	189	193	284	312	282
September	211	222	231	209	196	273	295	276
October	222	220	208	214	196	226	289	276
November	222	(1)	206	212	195	211	281	255

[1] Mutilation in table.

Group index numbers—Canadian Department of Labor.[1]

[1913=100.]

Date.	Grains and fodder.	Animals and meats.	Dairy products.	Fruits and vegetables.	Other foods.	Textiles.	Hides, leather, etc.	Metals.	Implements.	Building materials, lumber.	Fuel and lighting.	Drugs and chemicals.
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	206	161	149	233	180	201	168	217	174	118	163	236
1918	231	197	168	214	213	273	169	229	213	147	188	250
1919	226	199	192	206	222	285	213	173	228	171	201	205
1919.												
November	240	176	221	240	230	298	252	171	232	194	201	181
December	251	182	230	240	232	306	231	181	232	224	209	189
1920.												
January	269	195	228	265	245	316	237	191	235	232	212	190
February	275	195	216	290	251	321	245	199	231	243	215	189
March	280	198	206	295	254	322	222	210	237	268	215	194
April	291	200	196	316	264	366	239	214	237	268	245	201
May	301	207	189	358	275	323	215	213	237	294	257	203
June	302	206	183	338	274	314	186	207	238	295	279	206
July	292	211	194	295	283	305	183	209	242	282	294	218
August	271	204	198	142	277	300	173	209	243	285	298	218
September	254	202	202	190	261	296	169	207	259	273	296	217
October	229	194	207	177	249	292	156	203	259	265	211	211
November	201	184	209	203	236	273	153	195	259	265	270	205

[1] Unimportant groups omitted.

Group index numbers—United States, Bureau of Labor Statistics.

[1913=100.]

Date.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building material.	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	189	178	181	175	208	124	198	145	153
1918	219	191	240	163	181	152	221	195	192
1919	234	214	270	173	161	195	178	246	217
1919.									
November	240	219	325	179	164	236	176	299	220
December	244	234	335	181	169	253	179	303	220
1920.									
January	246	253	350	184	177	268	189	324	227
February	237	244	356	187	189	300	197	329	227
March	239	246	355	192	192	325	205	329	230
April	246	270	353	213	195	341	212	331	238
May	244	287	347	235	193	341	215	339	246
June	243	279	335	246	190	337	218	362	247
July	236	268	317	252	191	333	217	362	243
August	222	235	300	267	193	328	216	363	240
September	210	222	278	284	192	318	222	371	239
October	182	204	257	282	184	313	216	371	229
November	165	195	234	258	170	274	207	369	230

WHOLESALE PRICES IN THE UNITED STATES.

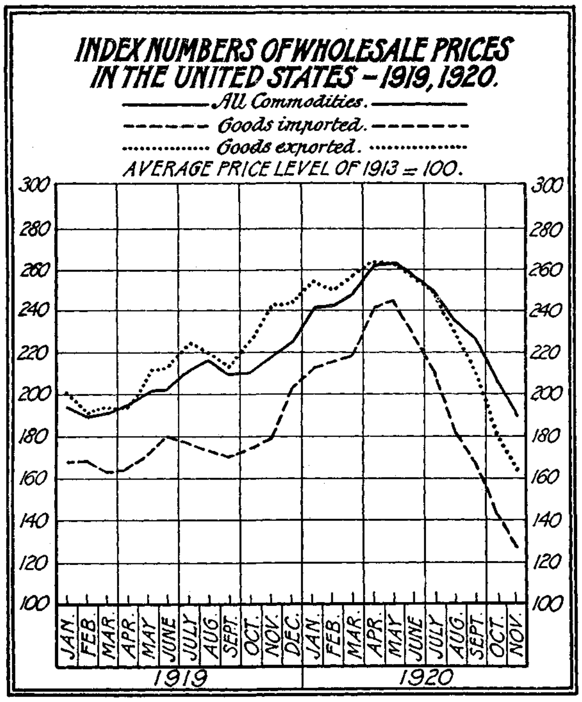
The Board's index number of wholesale prices showed another material decline in November. The number stood at 208 for October and 190 for November, a decline of 8.5 per cent. Another marked downward movement characterized the index of prices of imported goods, the number registering 127 for November as compared with 142 in October and 246 in May. Export goods likewise declined some 18 points during the month.

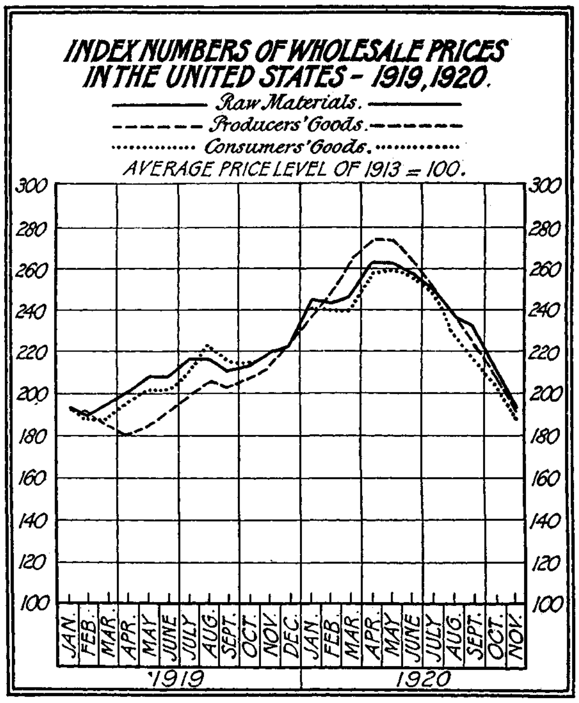
Price declines, however, were not limited to goods entering into foreign trade, practically all commodities being considerably reduced, except coal, petroleum, gasoline, cement, brick, newsprint, which were unchanged, and certain foodstuffs which normally advance during the winter.

Index numbers of wholesale prices in United States—Federal Reserve Board.

[Average price for 1913=100.]

Date.	Goods produced.	Imported.	Exported.	Consumed.	Raw materials.	Producers' goods.	Consumers' goods.	All.
1913.								
Average for the year	100	100	100	100	100	100	100	100
1919.								
January	197	168	200	195	195	192	196	195
February	191	168	192	190	190	191	188	189
March	193	163	194	191	196	185	188	191
April	198	165	194	196	201	181	197	196
May	204	172	211	201	209	184	202	202
June	204	180	214	202	208	192	202	203
July	214	176	224	211	217	200	211	211
August	221	174	·219	218	217	206	224	218
September	215	170	212	212	211	203	216	211
October	215	174	226	211	213	207	214	212
November	222	179	242	217	220	213	219	219
December	231	203	245	225	229	223	225	226
1920.								
January	244	212	255	240	245	236	240	242
February	244	216	252	242	242	247	240	242
March	250	218	256	247	246	263	241	248
April	265	242	264	263	263	274	257	263
May	266	246	262	264	263	274	261	264
June	260	226	256	257	258	265	255	258
July	253	208	248	249	249	251	250	250
August	238	182	229	234	237	235	229	234
September	231	164	211	227	233	225	218	226
October	213	142	181	211	211	209	203	208
November	195	127	163	193	192	190	187	190





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

[Bureau of Labor Statistics.]

[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
November, 1919	276	212	239	183	226	216	236	230
January, 1920	291	213	273	190	239	245	259	248
February, 1920	278	206	315	194	240	246	256	248
March, 1920	288	200	348	197	247	246	263	253
April, 1920	304	196	367	224	260	263	280	265
May, 1920	314	179	367	234	260	271	285	272
June, 1920	301	186	363	245	261	262	279	268
July, 1920	287	184	359	256	258	251	272	263
August, 1920	259	181	351	265	251	238	250	250
September, 1920	232	186	344	277	248	224	240	242
October, 1920	191	172	339	272	230	209	224	225
November, 1920	170	159	289	246	205	194	214	207

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, 1920, to November, 1920, compared with like figures for November of previous years. 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
November, 1919	1.4875	242	.3963	312	2.8250	323	2.2881	232	17.5000	206	.4688	255
January, 1920	1.4750	240	.4035	318	2.9313	336	2.6338	267	15.9375	187	.4000	218
February, 1920	1.4125	229	.3944	311	2.6875	308	2.4900	252	14.9688	176	.4025	219
March, 1920	1.5515	252	.4060	320	2.7550	315	2.5000	253	14.4000	169	.3640	198
April, 1920	1.6913	275	.4144	326	3.0063	344	2.7725	281	13.9063	163	.3613	196
May, 1920	1.9825	322	.4038	318	3.0750	352	2.9750	302	12.6000	148	.3538	192
June, 1920	1.8390	299	.4030	317	2.9000	332	2.8950	294	15.0313	177	.3410	185
July, 1920	1.5388	250	.3950	311	2.8313	324	2.8050	284	15.3813	181	.2944	160
August, 1920	1.5310	249	.3380	266	2.5500	292	2.4735	251	15.3500	180	.2850	155
September, 1920	1.2938	210	.2706	213	2.4903	285	2.4919	253	15.2500	179	.2840	154
October, 1920	.8778	143	.2088	164	2.1063	241	2.2047	224	14.6875	173	.2550	139
November, 1920	.8003	130	.1780	140	1.7528	201	2.0570	209	14.5750	171	.2325	126

Year and month.	Hogs, light, Chicago.		Wool, Ohio, $\frac{1}{4}$–$\frac{3}{8}$ 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
November, 1919	14.1438	167	1.2545	266	44.0000	182	100.0000	224	8.4273	167	4.1000	186
January, 1920	15.1250	179	1.2364	263	53.0000	219	112.0000	251	8.4291	167	4.1000	186
February, 1920	14.9813	177	1.2364	263	57.0000	235	139.0000	312	8.4118	166	4.1000	186
March, 1920	15.5000	183	1.2364	263	57.0000	235	139.0000	312	8.4109	166	4.1000	186
April, 1920	15.7125	186	1.2000	255	57.0000	235	160.0000	359	8.4368	167	5.5000	250
May, 1920	14.7550	175	1.1636	247	57.0000	235	160.0000	359	8.9964	178	6.0000	273
June, 1920	15.3500	182	1.0000	212	57.0000	235	160.0000	359	9.3672	185	6.0000	273
July, 1920	15.8875	188	.9091	193	57.0000	235	160.0000	359	9.4580	187	6.0000	273
August, 1920	15.7350	186	.8727	185	57.0000	235	157.0000	352	9.6087	190	6.0000	273
September, 1920	17.0688	202	.8364	178	57.0000	235	157.0000	352	10.4363	206	7.1000	323
October, 1920	14.7875	175	.7273	154	57.0000	235	152.0000	341	10.4732	207	7.1000	323
November, 1920	12.1400	144	.6909	147	57.0000	235	124.5000	279	10.5417	208	7.1000	323

Average monthly wholesale prices of commodities—Continued.

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	85
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	.2863	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
November, 1919	4.6320	154	5.9375	243	.2038	130	.0676	154	4.4375	181	28.3125	193
January, 1920	4.6320	154	6.0000	246	.1931	123	.0872	198	5.0625	207	37.7500	255
February, 1920	4.6320	154	6.0000	246	.1906	121	.0881	200	5.5125	225	42.2500	287
March, 1920	4.6320	154	6.0000	246	.1858	118	.0923	210	6.1000	249	41.6000	283
April, 1920	6.4800	216	10.5000	430	.1919	122	.0896	204	6.1000	249	42.5000	289
May, 1920	6.4800	216	12.0000	492	.1906	121	.0856	195	6.1000	249	43.2500	294
June, 1920	6.4800	216	14.3000	586	.1900	121	.0848	193	6.1000	249	44.0000	299
July, 1920	6.4800	216	14.3750	589	.1900	121	.0860	195	6.1000	249	45.7500	311
August, 1920	6.4800	216	15.5500	637	.1900	121	.0898	204	6.1000	249	48.1000	327
September, 1920	7.2800	243	15.3125	628	.1869	119	.0816	185	6.1000	249	48.5000	330
October, 1920	7.2800	243	14.3125	587	.1675	106	.0731	166	6.1000	249	43.7500	298
November, 1920	7.2800	243	8.8500	363	.1455	92	.0628	143	6.1000	249	36.5000	248

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 crossbred.	
	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
November, 1919	.6648	300	.5700	202	41.3750	160	.0265	179	47.0000	157	2.2000	283
January, 1920	.7271	329	.5600	199	48.0000	186	.0274	185	50.7500	169	2.2500	290
February, 1920	.7465	337	.5700	202	55.2500	214	.0350	236	54.5000	182	2.2500	290
March, 1920	.7549	341	.5700	202	60.0000	233	.0365	247	54.5000	182	2.2000	283
April, 1920	.7784	352	.5700	202	60.0000	233	.0375	253	54.5000	182	2.2000	283
May, 1920	.7672	347	.5700	202	60.0000	233	.0375	253	54.5000	182	2.0000	258
June, 1920	.7299	330	.5700	202	60.0000	233	.0355	240	54.5000	182	2.0000	258
July, 1920	.7009	317	.5700	202	62.5000	242	.0338	228	54.5000	182	1.7500	225
August, 1920	.6310	285	.5500	195	61.0000	237	.0325	220	54.5000	182	1.7500	225
September, 1920	.5429	245	.5100	181	58.7500	228	.0325	220	54.5000	182	1.6000	206
October, 1920	.4343	196	.4900	174	55.0000	213	.0309	209	54.5000	182	1.5000	193
November, 1920	.3695	167	.4700	167	49.7000	193	.0281	190	54.5000	182	1.3000	167

Year and month.	Beef, carcass, good native steers, Chicago.		Coffee, Rio, No. 7.		Flour, wheat, standard patents (1918, standard war), 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	.0493	115
November, 1915	.1375	106	.0750	67	5.5000	120	.1625	98	.1200	97	.0568	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
November, 1919	.2350	181	.1697	152	12.9500	283	.2859	172	.2200	178	.0882	207
January, 1920	.2320	179	.1628	146	14.4438	315	.2944	177	.2240	182	.1537	360
February, 1920	.2125	164	.1478	133	13.5375	295	.3056	184	.2400	195	.1495	350
March, 1920	.2050	158	.1500	135	13.1650	287	.3155	190	.2500	203	.1372	321
April, 1920	.2090	161	.1514	136	14.2813	312	.3313	199	.2600	211	.1919	449
May, 1920	.1950	151	.1559	140	15.0313	328	.3556	214	.2600	211	.2247	526
June, 1920	.2225	172	.1498	135	14.1600	309	.3650	220	.2600	211	.2120	497
July, 1920	.2550	197	.1306	117	13.6688	298	.3769	227	.2600	211	.1910	447
August, 1920	.2550	197	.0936	84	12.2350	267	.3725	224	.2600	211	.1490	349
September, 1920	.2600	201	.0819	74	12.5938	275	.3634	219	.2750	223	.1426	334
October, 1920	.2520	195	.0759	68	11.2063	244	.3575	215	.2900	235	.1078	252
November, 1920	.2400	185	.0746	67	9.2950	203	.3065	184	.2900	235	.0962	225

DISCOUNT AND INTEREST RATES.

In the following table are presented actual discount and interest rates prevailing during the 30-day period ending December 15, 1920, in the various cities in which the several Federal Reserve Banks and their branches are located. A complete description of the several types of paper for which quotations are given will be found in the September, 1918, and October, 1918, FEDERAL RESERVE BULLETINS. Quotations for new types of paper will be added from time to time as deemed of interest.

No marked tendencies in rates are again on the whole exhibited during the period under review. Changes are relatively infrequent and are scattered, although a tendency toward a decrease of rates appears in some cases. No significant changes are noted in general for any single type of paper. Present rates continue higher in almost all centers than rates during the same period in 1919.

Discount and interest rates prevailing in various centers during 30-day period ending Dec. 15, 1920.

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.	Ordinary loans to customers secured by Liberty bonds and certificates of indebtedness.
		Customers.		Open market.										
		30 to 90 days.	4 to 6 months.	30 to 90 days.	4 to 6 months.		Indorsed.	Unindorsed.	Demand.	3 months.	3 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	8 6 7	8 6½ 7	8 7½ 8	8 7¾ 8	7 6 6½	6¼ 6 6⅛	6½ 6⅛ 6¼	8 8 8	8 7½ 7½	8 7½ 7½	....	....	7 6 6½
No. 2	New York[1]	8 6 6–7	8 6 6–7	....	....	7½ 6 6–7	7⅛ 6 6–6½	8 6 6¼–7¼	9 4 6–7	7 6 6	8 6 6	....	....	7 4¼ 6
	Buffalo	7 6 7	7 6 7	....	....	8 6 7	....	....	8 6 6–7	7 6	7 6	....	....	7 6 ....
No. 3	Philadelphia	6 6 6	6 6 6	8 7¾ 8	8 7¾ 8	6 6 6	....	7 6¼ 6⅜	6 5½ 6	6 5 11/16 6	6 6 6	....	....	6 6 6
No. 4	Cleveland	7 6 7	7 6 7	....	....	6 6 6	....	6⅜ 6⅜	7 6 7	7 6 7	7 6 7	....	7 6 7	6 5¾ 6
	Pittsburgh	6 6 6	6 6 6	8 8 8	8 8 8	6 6 6	6⅜ 6⅛ 6⅛	6½ 6¼ 6⅜	6 6 6	6 6 6	6 6 6	....	6 6 6	6 6 6
	Cincinnati	7 6 6–6½	7 6 6½	7 6½ 6½	7 6 6½–7	7 6 6	6¾ 6 6½	6¾ 6¼ 6½	7½ 7 7	7 7 7	7 7 7	....	7½ 6½ 7	6½ 6 6
No. 5	Richmond	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 6
	Baltimore	6 6 6	6 6 6	....	....	6 6 6	6 6 6	....	6 6 6	6 6 6	6 6 6	....	....	6 6 6
No. 6	Atlanta	8 7 7	8 7 7	8 7 7	8 7 7	7 7 7	8 7 8	8 7 8	8 7 7	8 7 7	8 7 7	....	8 7 7	8 7 7
	Birmingham	8½ 6 7	8 6 7	8½ 8 8	8 8 8	8 6 6–7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	....	8 6 7–8	8 6 7
	Jacksonville	8 6 7½	8 6 7	....	....	7 6 7	8 7 7½	8 7 7½	8 7 7½	8 6 8	8 6 8	....	8 7 7½	8 6 7½
	New Orleans	8 6 7½–8	8 6 7½–8	....	....	8 6½ 7–8	....	8 7½ 8	8 6 7½–8	8 6 7½–8	8 6 7½–8	....	8 6 8	8 6 6–7½
	Nashville	8 6 7	8 6 7	....	....	8 6 6	....	....	....	8 6 7	8 6 7	....	8 6 7	7 6 6
No. 7	Chicago	7 6 7	7 6 7	....	....	8 7 7	....	....	7 6 7	7 6 7	7 6 7	7 7 7	7 7 7	7 6 ....
	Detroit	7 6 7	7 6 7	8 8 8	8 8 8	7 6 6½	6½ 6¼ 6⅜	6⅜ 6¼ 6⅜	7 6½ 7	7 6½ 7	7 6½ 7	....	....	7 6 7
No. 8	St. Louis	7½ 6½ 7	7½ 6½ 7	....	....	8 6½ 7	7 7 7	6¾ 6⅛ 6½	8 7 7	8 6½ 7	8 6½ 7	....	....	7 6 7
	Louisville	8 6 6	8 6 6	8 8 8	8 8 8	6 6 6	6½ 6¼ 6¼	6½ 6¼ 6¼	6 6 6	6 6 6	6 6 6	....	6 6 6	6 6 6
	Memphis[2]	....	....	....	....	....	....	....	....	....	....	....	....	....
	Little Rock	8 7	8 7	....	....	7 6½ 7	....	....	8 7	8 7 8	8 7 8	....	....	8 7 ....
No. 9	Minneapolis	7½ 7½ 7½	7½ 7½ 7½	8 7¾ 8	8¼ 8 8	7½ 7 7	6⅝ 6¼ 6½	7 6¼ 6½	8 7½ 8	8 7½ 8	8½ 8 8	....	8 7½ 7½	7½ 7 7
No. 10	Kansas City	8 6 7	8 6 7	8 8 8	8 8 8	8 6 7	....	....	8 6 7–8	8 6 7–8	8 6 7–8	8 7 7	8 7 7	8 6 7
	Omaha	9 7 8½	9 7 8½	....	....	8½ 7 8	....	....	....	9 7 8	9 7 8	10 7 8	....	8 6½ 7
	Denver	8 6 7	8 6 7	....	....	8 6 7	....	....	8 6½ 7	8 6 7	8 6 7	8 6½ 7	....	8 6½ 7–8
No. 11	Dallas	8 6 7	8 6 7	8 8 8	8 8 8	7 6 6¾	....	....	8 6½ 7	8 6½ 7	8 6½ 7	8 7 7½	8 7 7½	8 6 7½
	El Paso	10 7 8	10 7 8	8 8 8	8 8 8	9 7 8	....	....	10 7 8	10 8 8	10 8 8	10 8 9	....	10 6 8
	Houston	8 6 7	7 6 7	....	....	7 6 6	6¼ 6⅛ 6⅛	....	8 6 7	8 6 7	7 6½ 7	8 7 7	8 7 7	8 6 7
No. 12	San Francisco	7 6 6½	7 6 6½	8 6 8	8 6 7–8	7 6 6½	6½ 6 6¼	6¼ 6 6¼	8 6 6½	8 6 6½	8 6 6½	....	....	7 6 6½
	Portland	8 6 7	8 6 7	8¼ 7½ 8	8¼ 7½ 8	7 6 7	6½ 6 6½	6½ 6 6¼	8 6 7	8 6 7	8 6 7	....	....	8 6 7
	Seattle	8 6 7	8 7 8	8 7¾ 8	8 8 8	8 6½ 7	7 6⅜ 7	6½ 6¼ 6⅜	8 6½ 8	8 6½ 7½	8 7 8	....	....	8 6½ 8
	Spokane	8 7 7	8 7 7	....	....	7 6½ 7	....	....	8 7 7	8 7 8	8 7 8	....	....	8 7 8
	Salt Lake City	8 7 8	8 7 8	8¼ 8 8	8¼ 8 8	8 7 8	....	....	8 7 8	9 7 8	9 8 8	....	....	8 7 8
	Los Angeles	8 6 7	8 6 7	8 7 7	8 7 7	8 5 6	6½ 6¼ 6¼	6½ 6¼ 6¼	8 6 7	8 6 7	8 6 7	....	....	8 6 7

[1] Rates for demand paper secured by prime bankers' acceptances, high, 7, low, 6, customary, 6.

[2] No report.

PHYSICAL VOLUME OF TRADE.

In continuation of tables in the December (1920) 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.

Receipts of live stock at 15 western markets during November showed an increase of about 11 per cent over October, but continued to remain below the receipts for the corresponding month of 1919. This increase was due largely to an increase in the receipts of hogs. Shipments decreased, both when compared with last month and the same month a year ago. Stocker and feeder movements showed a seasonal decrease, but continued lighter than during the same period a year ago. Receipts of grain at 17 interior centers during November showed a decrease over the October figure, but were only slightly above the receipts for November, 1919. Receipts of flour at these centers decreased slightly during November, and fell off considerably from the same month a year ago. Cotton sight receipts during November showed a seasonal increase, but were considerably less than receipts during November, 1919. American spinners' takings during November fell to a new low figure, being only about one-eighth of the takings during the same month a year ago.

The railroad net ton mileage after a considerable falling off during September showed an increase during October, almost reaching the year's high figure, which was recorded during August. The tonnage of vessels cleared during November showed a considerable decrease when compared with October, 1920, but a very large increase over November, 1919.

Both receipts and shipments of lumber at Chicago and St. Louis during December showed a very slight increase over November, 1920, but were considerably below the receipts and shipments for December, 1919. The production of southern pine, Douglas fir, and North Carolina pine decreased considerably during November when compared with October, 1920, and November, 1919. A large decrease was noted in western pine and eastern white pine when compared with October, 1920, and the production of the latter was considerably greater than for November, 1919. California shipments of citrus fruits during November showed a slight increase, but were only about one-half the amount of the shipments for November, 1919. Shipments of deciduous fruits showed a considerable decrease during November from the October shipments, but were still slightly above the figure for November, 1919. Receipts of raw sugar at North Atlantic ports during December showed a very large increase and were considerably above receipts for November, 1919. Meltings also showed a very large increase, and were slightly above meltings for the same month last year, while stocks of raw sugar at these ports at the close of December showed a very slight increase over stocks at the close of November, but a large increase over the stocks held at the close of November, 1919.

The production of bituminous coal during November showed a very slight increase over October, but was almost three times the production figure for November, 1919, during which month a strike occurred in this industry. The production of anthracite coal showed a slight decrease, both when compared with October, 1920, and November, 1919. Crude petroleum production during November decreased when compared with the high production figure for October, 1920, but was considerably greater than the production during November, 1919. Production of pig iron during December showed a decrease of about 8 per cent when compared with November, but was slightly above the production for December, 1919, while steel ingot production during December showed a falling off of about 12 per cent when compared with November. The unfilled orders of the United States Steel Corporation at the close of December showed a decline and were also slightly below the unfilled orders at the close of December, 1919.

Wool consumption during November decreased 28 per cent when compared with October, 1920, and 54 per cent when compared with November, 1919. The percentage of idle woolen machinery on December 1 reflected a further decline in activity in the industry, for an increase was shown for each principal class. Cotton consumption during November showed a further decline, the figure for November being 17 per cent less than for October, 1920, and 32 per cent less than for November, 1919. The number of cotton spindles active during November also showed a further large decrease, both when compared with last month and the same month a year ago. The imports of raw silk continued to decline, being 14 per cent less than the October figure and 73 per cent less than for November, 1919.

Livestock movements.

[Bureau of Markets.]

	Receipts.					Shipments.				
	Cattle and calves, 59 markets.	Hogs, 59 markets.	Sheep, 59 markets.	Horses and mules, 43 markets.	Total, all kinds.	Cattle and calves, 54 markets.	Hogs, 54 markets.	Sheep, 54 markets.	Horses and mules, 43 markets.	Total, all kinds.
1919.	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*	*Head.*
November	2,672,364	3,718,906	2,750,900	140,092	9,282,262	1,374,492	1,308,095	1,597,007	134,679	4,414,273
1920.										
January	1,868,723	5,275,412	1,560,051	138,541	8,842,727	752,605	1,665,274	669,458	138,145	3,225,482
February	1,468,370	3,423,992	1,387,111	108,056	6,387,529	591,691	1,287,169	572,634	110,827	2,562,321
March	1,803,073	3,963,245	1,255,490	82,584	7,104,392	570,323	1,399,485	483,550	87,896	2,541,254
April	1,542,150	3,030,801	1,441,072	48,036	6,062,059	593,362	1,119,205	724,718	47,998	2,485,283
May	1,766,394	4,234,022	1,421,009	40,901	7,462,326	771,865	1,374,902	769,718	40,021	2,956,506
June	1,870,121	3,741,202	1,592,450	32,199	7,235,972	789,953	1,295,936	768,172	33,539	2,887,600
July	1,657,743	2,837,685	2,000,758	35,668	6,531,854	721,328	1,095,470	1,015,612	37,152	2,869,562
August	1,952,086	2,516,240	2,561,661	73,423	7,103,410	869,849	953,088	1,459,150	69,971	3,352,058
September	2,279,345	2,435,589	2,826,693	57,468	7,599,095	1,079,170	931,261	1,581,680	60,414	3,652,525
October	2,196,939	2,826,277	2,945,709	38,657	8,007,582	1,159,459	1,064,175	1,932,083	37,994	4,193,711
November	2,403,990	3,862,243	2,419,596	22,477	8,708,306	1,148,861	1,394,347	1,474,299	22,963	4,040,470

[1] St. Louis no longer considered as having a public stockyard.

Receipts and shipments of live stock at 15 western markets.

[Chicago, Kansas City, Oklahoma City, Omaha, East 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.
November, 1919	2,038,786	202	2,659,251	121	1,742,668	128	83,838	182	6,524,543	141
1920.										
January	1,400,031	139	3,912,449	178	1,035,591	76	90,022	196	6,438,093	139
February	1,068,092	110	2,440,154	115	948,116	72	75,488	170	4,531,850	102
March	1,203,499	119	2,910,909	132	900,299	66	56,880	124	5,071,587	110
April	1,040,903	103	2,150,281	98	928,191	68	31,235	68	4,150,610	90
May	1,209,656	120	3,128,249	142	796,160	58	21,889	54	5,158,954	112
June	1,290,265	128	2,746,390	125	1,006,528	74	21,056	46	5,064,239	110
July	1,188,019	118	2,115,639	96	1,301,458	95	26,257	57	4,631,373	100
August	1,459,565	145	1,818,245	83	1,688,719	124	55,371	120	5,021,900	109
September	1,736,009	172	1,597,622	73	1,893,312	139	38,950	85	5,265,893	114
October	1,628,564	162	1,836,748	84	1,865,330	136	24,716	54	5,355,358	116
November	1,781,261	177	2,624,185	119	1,542,477	113	12,149	26	5,960,072	129

SHIPMENTS.

	Cattle and calves.		Hogs.		Sheep.		Horses and mules.		Total, all kinds.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
November, 1919	993,148	244	788,107	163	945,992	188	78,710	192	2,805,957	195
1920.										
January	548,841	135	1,026,763	212	403,382	80	89,990	219	2,068,976	144
February	427,608	109	814,253	174	334,012	69	78,540	198	1,654,413	119
March	418,310	103	923,526	191	298,878	59	61,625	150	1,702,339	119
April	414,967	102	712,087	147	373,381	74	31,348	76	1,531,783	107
May	515,062	127	822,907	170	316,002	63	24,037	59	1,678,008	117
June	528,273	130	797,946	165	399,613	79	22,363	55	1,748,195	122
July	508,199	125	737,923	152	644,557	128	27,728	68	1,918,407	134
August	640,295	157	627,670	130	899,342	179	52,163	127	2,219,470	155
September	819,371	202	540,812	112	1,027,510	204	40,890	100	2,428,583	169
October	866,327	213	584,742	121	1,192,912	237	24,051	59	2,668,032	186
November	810,284	199	784,468	162	952,159	189	12,782	31	2,559,693	178

Shipments of stockers and feeders from 35 markets.

	Cattle and calves.	Hogs.	Sheep.	Total, all kinds.		Cattle and calves.	Hogs.	Sheep.	Total, all kinds.
November, 1919	712,582	88,994	859,162	1,660,738	May	291,895	66,144	252,221	610,260
					June	270,053	42,156	226,696	538,905
1920.					July	217,292	25,826	322,869	565,987
January	346,430	80,719	300,449	727,598	August	279,402	34,479	567,430	881,311
February	237,939	82,981	140,219	461,139	September	474,852	44,483	789,773	1,309,108
March	240,121	104,962	135,246	480,329	October	573,136	59,155	1,055,370	1,687,661
April	242,996	72,834	267,664	583,494	November	547,116	52,777	855,545	1,455,438

Exports of certain meat products.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Beef, canned.		Beef, fresh.		Beef, pickled, and other cured.		Bacon.		Hams and shoulders, cured.		Lard.		Pickled pork.	
	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.
November, 1919	1,393,238	210	15,694,002	1,265	2,997,652	112	65,288,694	390	16,844,285	113	42,106,339	96	4,934,696	111
1920.														
January	1,081,643	163	22,872,223	1,844	1,670,500	83	77,501,002	463	13,905,923	93	38,823,902	88	4,251,187	96
February	735,132	115	13,010,793	1,085	1,631,457	63	75,891,195	469	24,217,706	168	36,644,906	86	3,710,308	87
March	847,397	128	6,036,166	487	2,290,835	86	75,002,410	448	31,088,859	208	69,429,785	158	3,160,456	71
April	1,606,737	243	17,687,306	1,426	2,241,460	84	24,356,349	145	15,640,236	105	40,758,401	93	2,784,535	63
May	5,976,493	902	4,304,038	347	3,056,449	114	5,412,388	301	17,896,764	120	55,544,483	126	3,816,157	86
June	6,787,622	1,024	12,526,669	1,010	2,563,702	96	60,730,935	363	21,277,089	143	45,069,517	102	3,962,649	90
July	5,217,838	788	5,506,812	444	1,973,004	74	31,562,761	188	8,385,089	56	47,061,422	107	2,926,247	66
August	1,231,070	186	343,352	28	2,152,982	81	23,333,156	139	9,360,469	63	31,020,802	71	2,257,511	51
September	244,261	37	1,964,543	158	1,613,657	60	41,371,561	247	8,997,124	60	46,326,353	105	3,279,902	74
October	207,503	31	522,251	42	1,995,039	75	49,838,768	298	8,787,853	59	54,173,979	123	3,549,456	80
November	282,761	43	3,091,895	249	1,678,091	63	57,934,259	346	11,197,880	75	57,316,309	130	2,605,431	59

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.]

	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.	Bushels.	Relative.	Bushels.	Relative.
November, 1919	35,729,832	133	14,606,137	65	17,699,925	88	2,579,579	233	3,582,873	50	74,198,346	95	3,541,957	181	90,137,153	104
1920.																
January	25,074,624	93	24,139,094	108	20,925,941	104	4,378,610	396	3,298,544	46	77,816,813	100	2,298,692	117	88,160,927	102
February	18,115,324	70	26,051,855	120	20,575,654	105	3,263,686	305	2,470,622	36	70,477,141	94	2,059,421	109	79,744,536	95
March	18,007,798	67	24,306,196	108	19,149,624	95	3,548,739	321	2,928,440	41	67,940,797	87	1,617,544	83	75,219,745	87
April	15,260,236	57	11,326,509	50	12,952,593	64	2,914,553	263	2,245,881	31	44,699,772	57	888,423	45	48,697,676	56
May	20,510,063	76	12,107,950	54	16,724,389	83	3,758,507	340	2,690,076	38	55,790,985	72	1,913,075	98	64,399,823	74
June	21,020,640	78	27,251,166	121	14,260,053	71	3,177,770	287	2,721,367	38	68,430,996	88	2,113,979	108	80,057,876	92
July	29,714,399	110	20,824,268	93	18,734,180	93	3,096,026	280	2,659,921	37	75,028,794	96	2,052,110	105	84,263,289	97
August	43,039,021	160	9,840,320	44	30,728,748	152	3,191,103	288	3,007,508	42	89,806,700	115	1,949,339	99	98,578,726	114
September	46,181,275	171	20,696,955	92	31,031,569	154	5,571,428	503	6,630,056	92	110,111,283	141	1,843,954	94	118,409,076	137
October	45,403,825	168	19,064,508	85	21,235,162	105	4,455,979	403	5,795,028	81	95,954,502	123	2,137,639	109	105,573,878	122
November	39,272,827	146	11,407,224	51	15,282,651	76	3,706,653	335	6,618,362	92	76,287,717	98	2,054,262	105	85,531,896	99

[1] Flour reduced to its equivalent in wheat on basis of 4½ 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.]

	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.	Bushels.	Relative.	Bushels.	Relative.
November, 1919	20,627,718	134	6,612,129	47	15,588,356	103	3,110,541	439	2,827,956	73	48,766,700	99	5,741,936	170	74,605,412	115
1920.																
January	17,514,087	114	12,326,051	87	15,822,099	104	3,685,914	521	2,007,718	51	51,355,869	104	4,140,314	122	69,987,282	108
February	14,114,215	95	11,977,640	87	13,073,089	89	2,113,505	309	1,306,340	35	42,584,789	89	3,156,962	96	56,791,118	91
March	11,027,336	71	11,165,894	79	14,243,957	94	3,062,530	433	1,574,887	40	41,074,604	83	2,960,175	87	54,395,392	84
April	11,058,643	72	5,371,811	38	8,691,440	57	8,811,500	1,245	1,651,509	42	35,584,903	72	1,702,132	50	43,244,497	67
May	20,720,121	134	5,939,145	42	20,444,288	135	6,977,479	986	1,488,387	38	55,569,420	112	2,877,122	85	68,516,469	106
June	20,242,046	131	10,088,237	71	12,805,056	84	5,428,886	767	1,905,225	49	50,469,450	102	3,725,330	91	67,233,435	104
July	19,002,099	123	9,100,527	64	11,345,429	75	4,476,238	632	2,092,672	54	46,016,965	93	3,767,678	111	62,971,516	97
August	24,934,816	162	6,260,144	44	12,814,067	84	2,880,003	407	2,231,851	57	49,120,881	99	3,605,105	106	65,343,854	101
September	28,700,593	186	6,284,075	44	12,690,866	84	4,339,057	613	3,556,180	91	55,570,771	112	3,187,454	94	69,914,314	108
October	26,258,795	170	10,336,378	73	10,601,178	70	4,742,380	670	4,529,091	116	56,467,822	114	3,758,735	111	73,382,130	114
November	24,950,771	162	7,890,500	56	10,729,045	71	2,998,524	424	4,249,954	109	50,818,794	103	3,949,699	117	68,592,440	106

[1] Flour reduced to its equivalent in wheat on basis of 4½ 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, 1911-19131=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.	Bushels.	Relative.	Bushels.	Relative.
November, 1919	9,152,534	73	438,147	12	3,998,525	84	1,391,024	979	851,651	51	15,831,881	70	1,552,796	149	22,819,463	83
1920.																
January	5,711,009	45	1,491,759	42	2,663,274	56	2,643,611	1,861	1,297,839	78	13,807,492	61	1,561,693	150	20,835,111	76
February	4,898,690	40	1,244,393	36	2,331,246	51	3,211,668	2,338	1,315,291	82	13,001,288	59	1,102,606	109	17,963,015	68
March	6,486,745	51	1,203,649	34	3,646,727	77	4,119,986	2,900	1,300,871	78	16,757,978	74	1,752,860	168	24,645,848	90
April	5,441,434	43	1,317,555	37	1,546,590	33	3,440,350	2,421	685,054	41	12,430,963	55	843,916	81	16,228,605	59
May	10,621,723	84	767,332	22	2,382,271	50	5,117,806	3,602	556,764	34	19,445,896	86	1,301,211	125	25,301,346	92
June	13,374,721	106	1,878,334	53	3,194,897	67	6,506,053	4,579	1,191,767	72	26,145,772	115	1,486,365	142	32,834,415	120
July	18,710,633	149	3,305,542	93	3,499,101	74	5,048,019	3,553	2,098,083	126	32,661,378	144	1,660,849	159	40,135,198	146
August	28,098,022	223	1,576,842	44	2,671,365	56	3,407,799	2,398	2,289,791	138	38,043,819	168	1,390,077	133	44,299,166	162
September	31,693,246	252	1,456,958	41	3,069,700	65	4,133,465	2,909	1,815,227	109	42,168,596	186	1,422,872	136	48,571,520	177
October	29,028,202	230	1,844,753	52	1,828,515	38	5,436,354	3,826	2,558,276	154	40,696,100	179	1,463,830	140	47,283,335	173
November	24,410,356	194	2,401,181	68	1,874,271	39	3,329,710	2,344	2,721,320	164	34,736,838	153	3,683,380	353	51,312,048	187

[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.
November, 1919	18,728,730	155,490	2,504,833	1,264,494	2,351,012	25,004,559
1920.						
January	8,485,491	711,501	2,398,639	2,397,156	2,587,543	16,580,330
February	6,634,682	948,239	1,571,209	2,671,743	2,340,787	14,166,660
March	6,280,682	851,287	1,351,457	2,389,321	1,891,862	12,764,609
April	7,704,155	967,475	389,958	1,944,350	2,034,983	13,040,921
May	10,781,927	437,521	819,790	1,889,965	1,071,920	15,001,123
June	8,492,819	459,568	901,756	2,035,334	1,193,082	13,082,559
July	11,923,745	744,167	1,323,940	1,275,554	3,187,611	18,455,017
August	13,915,892	1,097,945	1,532,272	777,445	4,052,189	21,375,743
September	15,517,070	1,146,514	2,398,157	2,414,910	4,110,158	25,586,809
October	17,277,003	1,292,818	2,521,049	1,742,178	3,577,450	26,410,498
November	17,794,605	1,371,013	2,327,249	1,906,527	3,097,922	26,497,316

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.
1919-20.										
August	327,001	26	238,271	26	49,630	47	302,238	67	1,412,048	120
September	632,902	50	260,698	28	26,138	25	300,001	66	1,501,805	127
October	1,835,273	146	1,029,331	112	110,202	105	621,784	137	2,340,881	199
November	2,445,698	195	1,178,443	128	245,237	233	1,155,324	254	2,616,383	222
December	2,218,773	177	1,069,693	116	242,940	231	1,214,337	267	2,765,040	235
January	1,583,473	126	982,030	107	205,233	195	793,453	175	2,470,496	210
February	1,050,964	87	725,515	82	138,084	136	374,093	85	2,510,482	213
March	796,632	64	621,808	68	108,573	103	270,269	59	2,276,737	193
April	552,943	44	499,187	54	48,565	46	276,805	61	2,148,038	182
May	360,607	29	289,809	32	57,661	55	214,678	47	1,913,407	162
Season total	12,432,856	83	7,299,667	66	1,674,828	133	6,365,990	117	1,461,000	124
1920-21.										
August	308,262	25	159,586	17	25,322	24	251,841	55	1,365,397	116
September	771,590	62	443,149	48	17,324	16	254,460	56	1,607,602	136
October	1,470,426	117	971,334	106	87,215	83	395,165	87	2,101,839	178
November	1,790,236	143	1,075,803	117	87,510	83	144,571	32	2,597,820	220

California shipments of citrus and deciduous fruits.

[October, 1920 on, California Fruit News and Bureau of Markets.]

[1911-1913=100.]

	Oranges.		Lemons.		Total citrus fruits.		Total deciduous fruits.
	Carloads.	Relative.	Carloads.	Relative.	Carloads.	Relative.	Carloads.
November, 1919	3,257	133	442	109	3,699	130	2,141
1920.							
January	2,457	100	630	156	3,087	108	123
February	2,683	114	852	218	3,535	128	139
March	4,715	193	651	161	5,366	188	155
April	3,720	152	508	125	4,228	148	22
May	5,048	206	1,353	334	6,401	225	24
June	3,294	135	1,576	389	4,870	171	1,263
July	2,822	115	664	164	3,486	122	3,179
August	1,707	70	751	185	2,458	86	7,239
September	1,409	58	464	115	1,873	66	9,021
October	752	31	925	228	1,677	59	11,880
November	1,602	66	377	93	1,979	69	2,792

Sugar.

[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.	
	Tons.	Relative.	Tons.	Relative.	Tons.	Relative.
November, 1919	154,674	84	177,000	96	40,855	24
1920.						
January	208,554	113	181,000	99	37,986	22
February	316,667	178	269,000	152	85,653	50
March	335,532	182	333,000	182	88,185	51
April	310,580	169	307,000	167	91,765	53
May	254,616	138	286,000	156	60,381	35
June	301,318	164	319,000	174	42,699	25
July	386,328	210	325,000	177	104,027	60
August	308,313	168	287,000	156	125,340	73
September	109,302	59	164,000	89	70,642	41
October	109,335	59	118,000	64	61,977	36
November	186,274	101	179,000	98	69,251	40

Naval stores.

[Data for Savannah, Jacksonville, and Pensacola.]

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

[In barrels.]

	Spirits of turpentine.		Rosin.	
	Receipts.	Stocks at close of month.	Receipts.	Stocks at close of month.
November, 1919	18,757	28,741	77,125	204,281
1920.				
January	8,300	24,910	47,874	165,927
February	3,762	17,900	29,303	140,559
March	1,876	4,819	14,660	103,443
April	7,644	3,996	27,029	98,517
May	23,473	6,174	68,163	78,113
June	33,522	19,654	94,904	108,656
July	39,158	30,906	117,088	135,979
August	33,997	27,963	111,497	144,109
September	32,162	44,396	97,797	176,612
October	30,260	49,885	88,766	195,837
November	23,893	49,209	83,177	247,253

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.
November, 1919	202	391,347	344,717	51	110,525	117,472	126	324,511	241,301	11	2,786	21,596	31	24,925	26,926
1920.															
January	202	386,481	404,706	53	69,895	144,180	128	327,568	344,568	21	38,007	63,614	25	24,678	26,283
February	203	383,239	369,047	51	85,583	147,180	124	332,511	295,934	21	32,551	59,687	15	15,534	15,202
March	205	436,944	424,775	50	130,425	156,211	123	342,948	329,012	21	43,771	61,620	24	29,633	29,896
April	205	438,056	359,461	51	167,165	133,114	126	359,651	274,597	21	46,222	61,757	13	13,659	10,613
May	205	430,271	347,404	51	183,621	132,181	124	424,687	383,346	20	12,731	26,323	14	15,992	18,657
June	204	385,293	287,487	52	197,461	125,770	127	343,801	271,815	20	25,771	41,557	12	14,259	10,481
July	207	385,842	331,273	49	177,262	103,500	127	242,612	225,666	20	37,459	49,668	20	20,756	15,217
August	204	383,540	337,677	50	171,143	123,344	123	366,433	322,908	20	46,149	55,991	19	19,511	14,130
September	204	376,566	378,195	49	164,312	98,806	127	299,277	238,965	20	48,962	45,445	20	21,887	16,043
October	206	344,427	329,751	49	146,424	69,936	120	355,614	299,704	19	40,124	30,928	24	19,487	14,877
November	203	315,343	320,756	52	107,846	60,259	123	263,452	212,226	19	20,295	19,751	24	14,617	12,929

Receipts and shipments of lumber at Chicago and St. Louis.

[Chicago Board of Trade and Merchants' Exchange of St. Louis.]

[Monthly average, 1911-1913=100.]

	Receipts.		Shipments.	
	M feet.	Relative.	M feet.	Relative.
December, 1919	445,226	96	245,477	97
1920.				
January	403,604	87	219,783	87
February	421,692	94	224,286	91
March	500,230	108	296,047	117
April	236,975	51	131,933	52
May	313,447	67	195,965	77
June	393,738	85	212,339	84
July	399,615	86	184,767	73
August	370,352	80	220,368	87
September	375,456	81	242,857	96
October	398,333	86	220,116	87
November	342,971	74	190,282	75
December	351,695	76	192,072	76

Coal and coke.

[U. S. Geological Survey.]

[Monthly average, 1911-1913=100.]

	Bituminous coal, estimated monthly production.		Anthracite coal, estimated monthly production.[1]		Beehive coke, estimated monthly production.	
	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
November, 1919	18,688,000	50	7,870,000	106	1,647,000	63
1920.						
January	48,689,000	131	7,495,000	101	1,982,000	76
February	40,127,000	112	6,447,000	90	1,783,000	68
March	46,792,000	126	7,973,000	108	2,025,000	77
April	37,939,000	102	6,316,000	85	1,602,167	61
May	39,753,000	107	8,077,000	109	1,689,500	65
June	43,710,000	118	8,292,000	112	1,710,333	65
July	45,523,000	123	8,382,000	113	1,693,000	65
August	48,389,000	131	8,145,000	110	1,776,000	68
September	51,093,000	138	4,714,000	64	1,820,000	70
October	50,744,000	137	8,188,000	111	2,065,000	79
November	51,012,000	138	7,519,000	102	1,622,000	62

[1] Revised figures.

Crude petroleum.

[U. S. Geological Survey.]

[Barrels of 42 gallons each.]

	Produced.		Stocks at end of month (barrels).
	Barrels.	Relative.	
November, 1919	32,114,000	168	131,601,000
1920.			
January	33,980,000	177	127,164,000
February	33,212,000	179	126,339,000
March	36,461,000	190	125,597,000
April	36,283,000	189	124,991,000
May	36,931,000	193	124,689,000
June	37,295,000	195	126,763,000
July	38,548,000	201	128,168,000
August	39,397,000	206	129,043,000
September	37,889,000	198	128,788,000
October	39,924,000	208	129,451,000
November	39,090,000	204	131,694,000

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).
Oct. 31, 1919	33,682,968	363,456,747	227,104,346	680,158,446	78,658,410
1920.					
January	30,815,160	336,719,157	195,956,392	617,555,156	75,878,635
February	29,208,723	322,588,697	194,523,334	589,684,857	74,243,073
March	33,592,004	367,137,678	191,110,175	686,945,963	81,818,973
April	32,852,010	355,597,451	184,469,017	643,088,785	85,568,064
May	34,578,282	381,079,291	180,877,089	707,198,355	89,252,410
June	34,906,078	415,158,911	173,581,000	689,878,061	94,964,222
July	37,024,052	423,419,770	172,213,511	751,193,898	92,369,504
August	39,757,770	444,141,422	189,010,459	834,322,503	91,078,569
September	40,549,316	453,881,096	199,140,024	836,700,086	86,230,371
October	40,687,250	465,787,745	213,742,156	823,114,603	93,229,723

STOCKS AT CLOSE OF MONTH.

	Crude oil run (barrels.)	Gasoline (gallons).	Kerosene (gallons).	Gas and fuel (gallons).	Lubricating (gallons).
Oct. 31. 1919	14,091,945	354,160,071	329,160,795	828,574,452	152,536,736
1920.					
Jan. 31	13,200,727	515,934,364	327,548,646	652,080,901	141,690,177
Feb. 29	13,500,599	562,996,489	330,120,942	590,322,125	132,759,244
Mar. 31	14,346,458	626,393,046	334,617,117	580,182,858	130,630,597
Apr. 30	15,145,691	643,552,644	376,358,123	590,687,009	140,355,972
May 31	15,331,375	577,671,795	419,077,605	618,939,135	135,882,485
June 30	16,172,280	504,055,601	421,343,353	641,968,363	133,212,551
July 31	17,086,253	413,279,319	410,853,047	655,152,293	131,866,455
Aug. 31	17,960,558	323,239,991	378,548,791	708,608,472	130,797,810
Sept. 30	18,830,079	288,195,394	379,300,705	771,126,965	130,449,829
Oct. 31	19,237,730	301,283,731	383,828,239	799,024,084	136,194,914

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, 1919	3,152,319	52	2,392,350	103			7,128,330	135
December, 1919			2,633,268	114			8,265,366	157
1920.								
January			3,015,181	130	2,968,102	127	9,285,441	176
February			2,978,879	133	2,865,124	127	9,502,081	180
March			3,375,907	146	3,299,049	141	9,892,075	188
April	230,854		2,739,797	118	2,638,305	113	10,359,747	197
May	6,976,085	115	2,985,682	129	2,883,164	123	10,940,466	208
June	9,233,566	152	3,043,540	131	2,980,690	127	10,978,817	208
July	9,638,606	159	3,067,043	132	2,802,818	120	11,118,468	211
August	9,270,763	153	3,147,402	136	3,000,432	128	10,805,038	205
September	8,923,482	147	3,129,323	135	2,999,551	128	10,374,804	197
October	8,848,986	146	3,292,597	142	3,015,982	129	9,836,852	187
November	5,305,738	88	2,934,908	127	2,638,670	113	9,021,481	171
December			2,703,855	117	2,340,365	100	8,148,122	155

Imports of pig tin.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Pounds.	Relative.
November, 1919	15,233,671	168
1920.		
January	8,772,953	97
February	13,925,843	158
March	11,980,019	132
April	10,345,130	114
May	9,102,341	100
June	11,232,325	124
July	17,584,167	193
August	11,195,937	123
September	9,596,819	106
October	6,741,331	74
November	9,550,535	105

Raw stocks of hides and skins.

[Bureau of Markets; July, 1920, on, Bureau of the Census.]

[In pieces.]

	Cattle hides.	Calfskins.	Kipskins.	Goat.	Kid.	Cabretta.	Sheep and lamb.
Oct. 31, 1919	6,436,765	2,007,208	1,097,039	15,302,942	2,239,604	2,574,499	10,122,930
1920.							
Jan. 31	6,773,360	1,920,184	1,036,372	13,474,529	927,436	1,893,614	8,902,067
Feb. 29	6,559,337	1,859,697	1,141,620	16,481,328	665,524	2,197,683	9,460,914
Mar. 31	6,558,300	1,930,218	966,850	15,968,660	468,188	2,047,519	9,227,252
Apr. 30	6,072,895	2,281,370	834,711	14,666,590	156,871	1,947,499	8,911,681
May 31	5,849,375	2,724,056	924,042	14,131,330	791,150	2,253,785	9,004,621
June 30	6,212,946	3,107,393	915,499	14,562,713	60,999	2,070,471	10,993,228
Sept. 30	5,926,708	3,542,388	1,083,193	[1] 13,408,277	....	2,197,149	11,235,417
Oct. 31	6,770,509	3,850,183	1,377,998	[1] 12,147,070	....	2,104,133	13,626,406

[1] Kid skins included.

Textiles.

[Silk, Department of Commerce; cotton and idle wool machinery, Bureau of the Census; wool consumption, Bureau of Markets.]

[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.	
					Looms.		Sets of cards.	Combs.	Spinning spindles.			
	Bales.	Relative.			Wider than 50-inch reed space.	Under 50-inch reed space.			Woolen.	Worsted.	Pounds.	Relative.
November, 1919.	491,250	109	34,499,755	52,428,854	14.8	18.2	7.6	5.3	6.7	6.7	4,841,407	237
1920.												
January	591,725	132	34,739,071	63,059,862	14.5	18.5	8.8	7.2	9.1	10.2	4,855,989	237
February	516,594	119	34,668,643	55,247,652	12.2	17.6	7.6	6.9	7.1	7.9	3,696,121	187
March	575,704	128	34,667,747	58,344,602	14.9	19.8	9.8	7.0	10.3	11.7	2,491,651	122
April	567,839	126	34,346,737	57,887,832	13.1	16.9	9.6	7.1	9.5	7.0	2,227,857	109
May	541,080	120	34,066,236	50,649,381	15.2	18.2	10.6	6.7	11.5	7.0	2,505,798	122
June	555,521	124	34,503,754	40,679,920	26.8	22.4	21.1	15.9	23.1	14.2	3,221,177	157
July	525,405	117	34,666,842	32,372,064	42.5	32.3	38.0	35.0	42.0	32.7	2,581,920	126
August	483,193	107	34,471,515	32,849,956	49.5	29.9	39.6	33.4	45.5	37.6	2,690,690	132
September	457,647	102	34,040,806	30,928,337	51.8	34.8	39.6	37.3	44.6	38.0	1,968,801	96
October	399,837	89	33,669,804	33,703,523	49.0	34.9	38.3	26.3	43.2	26.0	1,531,850	75
November	332,057	74	31,654,126	24,150,141	46.9	37.7	39.5	32.8	42.8	34.8	1,319,995	65
December	....	....	....	....	51.2	44.8	50.3	41.4	51.7	42.7	....	....

Production of wood pulp and paper.

[Federal Trade Commission.]

[Net tons.]

	Wood pulp.	News-print.	Book.	Paper board.	Wrapping.	Fine.
November, 1919	324,488	116,603	84,085	182,940	63,394	32,468
1920.						
January	302,541	129,663	96,419	211,934	70,109	32,886
February	266,191	114,235	85,532	176,855	61,574	29,202
March	327,143	127,847	95,851	207,863	68,403	33,671
April	350,194	128,269	95,251	199,395	75,347	33,493
May	363,815	129,230	92,856	213,475	70,511	31,575
June	337,115	130,380	94,957	215,131	72,987	34,121
July	312,334	129,853	95,526	218,771	73,487	34,078
August	305,965	128,818	94,424	215,633	75,226	33,122
September	293,913	121,005	94,142	218,743	70,917	34,207
October	319,877	124,818	93,849	196,604	73,100	34,526
November	326,041	122,993	89,564	133,818	65,920	31,208

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

[Commissioner of Internal Revenue.]

	Cigars.		Cigarettes.	Manufactured tobacco.
	Large.	Small.	Small.	
	Number.	*Number.*	*Number.*	*Pounds.*
November, 1919	655,421,893	56,080,813	4,768,598,203	32,965,088
1920.				
January	663,634,243	58,837,900	4,528,760,833	33,608,313
February	593,832,200	43,358,500	3,536,117,847	31,531,460
March	753,239,958	55,052,100	4,373,778,917	38,422,481
April	663,577,579	56,548,853	3,756,989,397	34,327,970
May	676,227,828	59,943,280	3,953,345,380	34,875,839
June	708,112,284	52,735,587	4,088,834,583	34,231,058
July	678,751,956	51,766,100	3,053,336,563	30,988,646
August	672,020,289	48,171,240	3,569,397,443	32,138,941
September	678,640,116	50,175,580	3,557,482,503	32,094,569
October	704,799,089	60,882,760	3,840,334,806	27,123,774
November	668,060,015	57,026,500	3,529,206,006	18,513,654

Output of locomotives and cars.

[Locomotives, United States Railroad Administration; February on, reports from individual producers; cars, Railway Car Manufacturers Association.]

	Locomotives.		Output of cars.		
	Domestic shipped.	Foreign completed.	Domestic.	Foreign.	Total.
	Number.	*Number.*	*Number.*	*Number.*	*Number.*
November, 1919	39	23	8,967	2,622	11,589
1920.					
January	48	22	4,650	1,914	6,564
February	43	85	3,960	1,066	5,026
March	45	59	3,053	2,040	5,093
April	36	96	2,313	1,934	4,247
May	83	112	2,792	1,402	4,194
June	99	72	2,780	731	3,511
July	122	54	2,731	434	3,165
August	114	125	3,409	1,210	4,619
September	126	69	3,955	1,203	5,058
October	198	106	6,309	684	6,993
November	204	73	6,243	985	7,228

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.
November, 1919	143	347,051	1,436
1920.			
January	115	253,680	1,050
February	140	267,231	1,144
March	170	279,709	1,157
April	164	251,442	1,040
May	184	185,145	776
June	198	267,076	1,105
July	173	217,239	899
August	178	259,210	1,073
September	135	261,962	1,084
October	120	227,162	940
November	119	213,966	885

Tonnage of vessels cleared in the foreign trade.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Net tonnage.			Relative.	Percentage American to total.	Relative.
	American.	Foreign.	Total.			
November, 1919	2,251,871	1,910,489	4,162,360	107	54.1	214
1920.						
January	1,933,385	1,949,798	3,883,183	100	49.8	197
February	1,702,407	1,628,212	3,330,619	89	51.1	202
March	2,040,031	2,040,538	4,080,569	105	50.0	198
April	2,504,038	1,960,634	4,464,672	115	56.1	222
May	2,729,790	2,436,247	5,166,037	133	52.8	209
June	3,199,274	3,141,913	6,341,187	163	50.5	200
July	3,302,538	3,616,052	6,918,590	178	47.7	189
August	3,616,267	3,929,602	7,545,869	194	47.9	190
September	3,421,531	3,513,599	6,935,130	178	49.3	195
October	3,500,312	3,756,512	7,256,824	187	48.2	191
November	3,302,367	2,868,294	6,170,661	159	53.5	212

Net ton-miles, revenue and nonrevenue.

[United States Railroad Administration; March, 1920, on, Interstate Commerce Commission.]

October, 1919	40,343,750,000
1920.	
January	34,769,722,000
February	32,758,789,000
March	37,990,993,000
April	28,490,595,000
May	37,884,967,000
June	38,179,565,000
July	40,435,508,000
August	42,706,835,000
September	40,999,843,000
October	42,562,685,000

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, 1919	8,654,903	97	17,388,391	90	1,402,260	121	3,299,532	56	4,201,881	60
December, 1919	4,183,727	....	7,807,045	....	430,090	....	40,880	....	409,576	....
1920.										
April	6,008,000	....	4,274,611	....	....	....	162,630	....	454,726	....
May	11,904,942	134	13,497,995	70	658,910	57	6,683,820	113	7,483,836	107
June	3,076,986	35	5,976,125	31	1,082,521	93	8,707,350	146	9,153,884	131
July	3,133,419	35	7,838,470	41	1,171,250	101	9,235,086	156	9,749,701	139
August	2,315,909	26	7,512,510	39	1,038,221	89	8,784,821	148	9,278,071	132
September	3,102,770	35	11,624,488	60	621,010	53	8,721,412	147	9,290,129	133
October	7,198,311	81	28,470,696	148	1,142,991	98	8,656,823	146	9,876,641	141
November	9,921,968	111	37,236,311	193	1,317,800	114	5,553,173	94	7,065,488	101
December	4,967,830	....	27,025,281	....	444,830	....	137,564	....	1,111,527	....

WESTBOUND.

	Hard coal.		Soft coal.		Total.		Total freight.	
	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
November, 1919	466,135	150	307,241	16	932,615	37	5,134,496	54
December, 1919	69,143	....	....	....	89,616	....	499,192	....
1920.								
April	10,000	....	50,831	....	82,483	....	537,209	....
May	202,000	65	531,375	28	937,374	38	8,421,210	89
June	271,020	87	966,382	50	1,493,935	60	10,647,819	112
July	300,150	97	1,294,162	67	1,827,978	73	11,577,679	122
August	341,690	110	2,533,614	132	3,147,219	127	12,425,290	131
September	177,123	57	2,040,774	106	2,458,002	99	11,748,131	124
October	376,388	121	2,493,907	130	3,123,658	126	13,000,299	137
November	329,845	106	1,869,723	97	2,354,092	95	9,419,580	99
December	51,050	....	316,225	....	393,752	....	1,505,279	....

BANK DEBITS DURING NOVEMBER-DECEMBER.

Aggregate debits to individual account, as reported by banks in 151 important clearing house centers, fluctuated between 8,112 millions for the week ending December 1 and 9,821 millions for the week ending December 22, which saw the collection of a large amount of checks in payment of the December 15 installment of income and excess profits taxes. The comparatively low total for the week ending December 29 is due to the fact that it includes Christmas Day, a legal holiday throughout the country. On the basis of daily averages, the most recent week, with its large volume of checks used in shopping and for holiday bonuses, shows even larger figures than the preceding week, the respective averages being 1,700 and 1,637 millions.

A comparison with average figures for the corresponding five weeks in 1919 shows a reduction for New York City banks from 5,376 to 4,684 millions, or of about 692 millions, or 13 per cent, while for the other reporting centers the reduction was from 4,495 to 4,170 millions, amounting to 325 millions, or 7 per cent. The lower figures for New York City are due to a number of causes, including the new arrangements which reduce the volume of checks in payment for stock exchange transactions, while outside of New York the dominant factor in causing the smaller volume of debits is to be found in the lower level of prices prevailing during the review period as compared with the closing weeks of the preceding year.

Debits to individual accounts at clearing-house banks.

SUMMARY BY FEDERAL RESERVE DISTRICTS.

[In thousands of dollars.]

Federal Reserve district.	Number of centers included.	1920 Week ending—					1919 Week ending—				
		Dec. 1.	Dec. 8.	Dec. 15.	Dec. 22.	Dec. 29.	Dec. 3.	Dec. 10.	Dec. 17.	Dec. 24.	Dec. 31.
Boston	13	424,841	410,923	464,772	501,014	391,415	506,278	480,698	603,841	541,096	509,013
New York	7	4,258,091	4,525,760	5,132,517	5,399,147	4,850,958	5,188,330	5,203,366	5,944,982	5,740,489	5,530,189
Philadelphia	11	400,860	404,435	446,929	481,723	418,498	389,563	399,703	496,030	432,089	409,248
Cleveland	13	348,007	355,804	389,401	417,921	363,449	374,279	346,967	450,475	382,574	398,007
Richmond	7	166,108	189,027	189,900	187,682	157,142	190,949	196,189	215,175	196,557	180,825
Atlanta	15	216,630	217,908	209,082	228,450	190,365	272,349	273,537	293,870	277,098	236,855
Chicago	22	1,016,353	1,014,228	1,108,322	1,172,768	945,248	1,041,919	1,014,661	1,223,778	1,189,581	1,005,826
St. Louis	5	206,312	201,897	218,492	231,154	184,953	242,906	232,753	274,129	253,535	229,282
Minneapolis	11	162,473	180,564	177,863	163,227	132,211	172,184	176,347	183,277	181,741	161,807
Kansas City	15	274,860	285,067	285,013	284,820	241,251	304,887	304,442	336,126	329,404	286,581
Dallas	12	141,043	158,953	156,047	164,146	139,439	164,145	164,665	173,393	169,831	169,136
San Francisco	20	496,382	532,273	581,755	589,336	484,528	525,822	523,945	616,165	548,043	492,678
Total	151	8,111,960	8,476,839	9,360,093	9,821,388	8,499,457	9,373,611	9,317,273	10,811,241	10,242,038	9,609,447

NOTE.—Figures for the following centers while shown in the body of the statement, are not included in the summary, complete data for these centers not being available for each week under review: Manchester, N. H.; Sioux Falls, S. Dak.; Huntington, W. Va.; Moline, Ill.; Washington, D. C.; Pittsburgh, Pa.; Reading, Pa.; Harrisburg, Pa.; Springfield, Ill.; Atchison, Kans.; Shreveport, La.

Debits to individual accounts at clearing-house banks—Continued.

DATA FOR EACH REPORTING CENTER.

[In thousands of dollars.]

Federal Reserve district.	1920 Week ending—					1919 Week ending—				
	Dec. 1.	Dec. 8.	Dec. 15.	Dec. 22.	Dec. 29.	Dec. 3.	Dec. 10.	Dec. 17.	Dec. 24.	Dec. 31.
District No. 1—Boston:										
Bangor	3,242	4,918	3,678	4,279	3,748	2,926	3,299	3,359	3,072	2,903
Boston	275,931	261,079	306,849	318,997	256,944	348,011	321,572	407,148	363,354	342,182
Fall River	5,788	6,287	7,550	8,375	6,493	10,166	9,916	12,493	11,987	9,864
Hartford	24,443	23,908	24,889	27,189	21,167	24,058	21,503	27,527	21,053	21,281
Holyoke	3,622	3,588	3,592	3,951	3,062	2,945	3,745	4,097	3,917	3,869
Lowell	5,142	5,170	5,089	6,154	4,509	5,969	5,498	7,826	8,705	6,822
Manchester	4,462	6,699	6,258	4,900	4,143					
New Bedford	5,122	5,897	6,932	6,859	4,719	9,787	9,445	12,359	9,041	7,603
New Haven	17,845	18,551	18,927	21,313	15,434	16,503	17,558	19,489	18,444	16,130
Portland	8,594	10,198	9,248	9,731	7,176	8,889	7,736	8,857	6,013	7,206
Providence	36,303	33,563	37,973	44,771	32,434	36,918	38,201	51,310	46,916	49,463
Springfield	15,027	14,419	14,361	17,818	14,056	17,213	17,006	18,029	19,149	17,077
Waterbury	6,909	6,961	7,289	10,889	6,952	6,740	8,949	9,143	8,159	6,903
Worcester	16,873	16,384	18,395	20,688	14,721	16,153	16,270	22,204	21,286	17,710
District No. 2—New York:										
Albany	19,006	22,787	17,749	25,134	20,208	19,324	19,267	26,105	23,555	19,860
Binghamton	3,583	3,975	4,147	5,036	3,638	3,698	3,882	4,385	4,007	3,582
Buffalo	64,394	66,263	74,086	79,088	62,361	66,619	60,403	73,321	67,011	67,075
New York	4,121,721	4,377,423	4,979,311	5,226,247	4,713,837	5,046,831	5,068,752	5,784,012	5,590,623	5,388,508
Passaic	4,691	4,630	5,382	5,843	3,967	5,169	5,435	6,729	6,622	5,356
Rochester	28,871	34,644	34,270	38,112	33,959	31,657	30,742	33,796	31,124	29,046
Syracuse	15,825	16,038	17,572	19,687	12,988	15,032	14,885	16,634	17,547	16,762
District No. 3—Philadelphia:										
Altoona	3,348	3,317	3,939	3,762	3,681	3,155	3,151	3,319	3,106	2,812
Chester	4,585	4,778	5,355	5,949	4,355	4,989	4,878	5,213	5,137	3,976
Harrisburg	2,000				5,994	3,900	3,935	4,871	3,347	3,500
Johnstown	4,998	4,944	5,966	6,229	5,597	3,089	3,015	2,999	3,189	2,694
Lancaster	5,396	4,974	5,573	5,587	4,005	4,872	5,046	5,479	5,301	4,786
Philadelphia	330,573	334,332	367,788	392,833	344,958	323,616	332,631	420,652	360,100	345,200
Reading	3,148				6,575	4,223	4,410	5,697	4,355	4,433
Scranton	14,288	14,872	15,586	17,167	15,016	13,295	14,225	12,130	15,356	12,426
Trenton	11,472	11,500	11,843	18,032	11,117	11,191	12,118	13,446	12,572	12,440
Wilkes-Barre	8,359	7,900	9,631	8,944	9,154	7,510	7,671	8,993	7,124	8,473
Williamsport	3,672	4,868	6,190	5,824	4,384	3,366	3,484	4,068	4,065	3,504
Wilmington	10,086	8,608	10,556	12,172	12,621	10,730	9,867	14,728	11,809	9,257
York	4,083	4,342	4,502	5,224	3,610	3,750	3,617	5,003	4,330	3,680
District No. 4—Cleveland:										
Akron	16,055	16,790	17,648	18,020	13,898	24,323	21,817	27,320	28,074	22,364
Cincinnati	57,977	57,306	71,323	70,907	69,720	56,151	56,127	83,193	61,295	77,276
Cleveland	151,807	160,169	174,879	192,633	165,053	177,779	154,746	203,261	175,453	186,198
Columbus	29,082	31,302	34,323	36,234	32,350	29,292	28,659	32,736	27,562	31,240
Dayton	11,874	11,136	7,572	11,783	10,817	12,842	11,631	12,756	10,948	11,674
Erie	7,317	7,948	8,138	8,664	7,056	6,571	6,534	8,187	8,015	5,864
Greensburg	7,243	5,088	6,128	6,940	5,819	5,878	4,250	5,893	4,672	1,675
Lexington	4,103	4,167	4,575	4,516	4,049	4,806	8,238	11,876	10,967	7,093
Oil City	3,318	4,111	4,891	3,933	2,754	1,722	2,837	3,992	2,898	2,464
Pittsburgh	204,255	201,018	234,825		220,437	169,551	173,742	189,718	211,964	195,539
Springfield	2,853	3,581	3,909	3,974	3,196	2,914	3,663	3,947	3,574	4,212
Toledo	27,950	30,442	28,532	33,895	25,907	30,534	28,191	34,795	29,893	27,327
Wheeling	10,550	9,536	11,710	10,665	9,052	10,445	8,748	8,848	6,275	7,751
Youngstown	17,878	14,228	15,773	15,757	13,778	11,022	11,526	13,671	12,948	12,869
District No. 5—Richmond:										
Baltimore	95,794	110,435	112,972	115,380	97,068	100,162	99,921	120,953	106,626	103,898
Charleston	7,800	5,203	6,409	6,459	5,593	12,486	11,137	10,489	10,701	10,701
Charlotte	6,643	6,886	6,753	6,866	5,660	8,625	9,088	8,237	9,423	7,929
Columbia	4,967	5,696	5,448	5,354	4,436	9,140	9,958	8,162	8,385	7,246
Huntington	6,565	6,282	6,156	7,462	5,182					
Norfolk	17,064	23,017	19,959	16,922	14,464	22,103	22,582	23,421	22,745	16,943
Raleigh	4,800	4,900	5,000	5,050	5,030	6,100	5,800	5,800	4,800	5,800
Richmond	29,040	32,890	33,359	31,651	24,891	32,333	37,703	38,113	33,877	28,308
Washington	33,119	37,615	41,490	40,137	31,582					
District No. 6—Atlanta:										
Atlanta	23,517	24,961	26,649	28,908	22,349	34,980	34,882	39,949	36,090	32,309
Augusta	6,279	6,749	6,933	7,202	5,079	11,883	12,149	12,184	11,616	8,895
Birmingham	17,391	17,112	17,048	20,039	14,258	15,297	14,918	16,186	18,328	14,452
Chattanooga	9,458	11,276	10,944	11,911	8,602	12,436	12,864	13,373	13,176	10,485
Jacksonville	11,044	14,131	12,610	13,844	10,393	12,867	13,615	12,373	12,618	12,581
Knoxville	8,795	7,110	6,427	7,271	5,417	7,141	5,877	7,371	6,627	6,313
Macon	4,041	4,697	5,254	5,758	3,898	7,977	9,849	8,790	9,742	6,315
Mobile	7,950	7,787	7,143	8,024	6,439	9,134	8,644	8,570	7,819	7,363
Montgomery	3,960	4,152	4,440	4,526	2,972	6,018	5,800	5,672	5,665	5,330
Nashville	21,207	21,799	21,547	21,203	19,248	23,116	25,622	26,718	27,034	21,905
New Orleans	79,878	75,504	66,162	76,606	74,078	96,611	96,327	106,115	90,463	81,042
Pensacola	1,664	1,867	1,948	1,952	1,377	2,166	2,448	2,494	2,003	1,939
Savannah	13,924	12,454	14,315	13,511	10,646	23,874	22,233	26,117	27,452	21,275
Tampa	5,652	6,593	6,079	6,143	4,266	6,442	6,375	5,900	6,552	4,935
Vicksburg	1,870	1,716	1,583	1,552	1,343	2,407	1,934	2,058	1,913	1,716
District No. 7—Chicago:										
Bay City	3,770	3,153	3,643	3,884	2,765	3,315	3,427	4,550	4,052	2,945
Bloomington	2,593	2,534	2,531	2,539	1,902	2,922	2,858	2,695	2,385	2,302
Cedar Rapids	9,736	10,896	10,670	12,219	8,940	7,789	9,467	7,857	9,177	7,967
Chicago	669,598	672,181	745,514	767,708	642,934	682,468	666,999	797,632	843,992	683,870
Davenport	8,303	8,204	7,007	7,238	6,289	8,868	7,770	7,560	6,726	6,594
Decatur	2,941	3,285	3,393	3,556	2,495	4,231	3,608	4,196	3,089	3,584
Des Moines	14,516	17,034	17,306	16,820	15,066	18,115	19,336	19,552	21,768	18,038
Detroit	126,428	119,008	131,656	166,277	102,300	138,855	125,214	197,770	117,194	113,823
Dubuque	3,312	3,471	3,098	3,412	2,629	2,715	2,620	2,575	3,069	2,519

Debits to individual accounts at clearing-house banks—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

Federal Reserve district.	1920 Week ending—					1919 Week ending—				
	Dec. 1.	Dec. 8.	Dec. 15.	Dec. 22.	Dec. 29.	Dec. 3.	Dec. 10.	Dec. 17.	Dec. 24.	Dec. 31.
District No. 7—Continued.										
Flint	4,281	5,540	4,429	5,810	4,050	10,789	8,859	6,851	9,997	8,876
Fort Wayne	6,571	7,092	8,070	8,506	7,057	6,984	7,259	8,480	7,977	6,940
Grand Rapids	22,623	21,050	19,976	19,826	20,729	18,934	18,599	18,874	18,347	17,717
Indianapolis	29,497	32,326	40,807	38,054	31,414	30,999	33,234	37,806	35,008	31,292
Jackson	3,148	3,636	3,484	4,118	3,160	4,295	4,052	4,414	4,439	3,721
Kalamazoo	4,942	5,376	6,012	5,682	4,636	4,151	4,241	4,820	4,592	4,652
Lansing	4,610	5,027	4,877	5,147	3,113	5,296	6,357	6,385	6,353	6,015
Milwaukee	66,910	59,825	63,200	68,505	59,221	56,869	55,502	55,502	58,560	50,970
Moline	1,912	3,055	2,248	3,376	2,346	......	......	......	......	......
Peoria	8,845	9,096	9,076	9,172	7,341	10,842	10,062	11,634	9,140	8,650
Rockford	5,769	5,785	5,313	6,308	5,187	5,165	4,951	5,608	5,985	5,237
Sioux City	11,853	12,731	11,403	11,538	7,791	12,255	13,193	12,141	10,383	12,659
South Bend	3,147	3,429	3,711	3,384	3,752	3,194	3,818	3,228	3,829	4,065
Springfield	2,374	4,859	......	......	3,202	3,501	4,868	4,687	4,322	5,211
Waterloo	2,960	3,549	3,146	3,065	2,477	2,868	3,235	3,648	3,519	3,390
District No. 8—St. Louis:										
Evansville	4,355	5,097	5,476	5,267	4,617	4,415	5,311	5,104	6,231	5,387
Little Rock	10,098	11,168	12,606	13,525	10,704	11,381	10,961	11,663	9,802	8,121
Louisville	27,712	24,776	28,067	30,919	19,379	40,477	33,191	41,348	30,971	34,460
Memphis	27,293	28,209	28,908	29,075	22,734	40,709	43,275	43,699	47,694	39,180
St. Louis	136,854	132,647	143,435	152,368	127,519	145,924	140,015	172,315	158,837	142,134
District No. 9—Minneapolis:										
Aberdeen	1,642	1,801	1,504	1,585	2,781	1,809	1,904	1,925	1,537	1,409
Billings	2,834	3,276	1,990	2,021	2,170	2,931	2,160	2,210	2,361	2,280
Duluth	28,794	33,265	31,654	26,778	24,384	15,229	18,727	19,632	19,035	14,246
Fargo	3,363	3,183	2,871	2,634	2,000	2,855	3,014	3,421	3,077	2,766
Grand Forks	1,524	2,003	1,746	1,456	1,030	2,152	2,371	1,913	1,889	1,669
Great Falls	3,255	3,136	2,519	2,738	2,352	3,290	2,887	2,983	2,392	2,095
Helena	2,874	2,977	2,626	2,972	2,271	2,572	2,839	2,701	2,749	2,437
Minneapolis	80,991	94,444	90,972	83,822	66,527	96,357	97,358	100,939	102,334	93,795
St. Paul	33,797	32,416	38,005	35,414	25,925	41,943	41,927	44,044	43,000	38,058
Sioux Falls	5,500	5,400	5,000	4,500	4,100	......	......	......	......	......
Superior	2,285	2,524	2,545	2,427	1,942	1,918	1,844	2,079	2,040	1,765
Winona	1,114	1,539	1,431	1,380	829	1,128	1,316	1,430	1,327	1,287
District No. 10—Kansas City:										
Atchison	434	405	......	......	......	390	459	640	686	514
Bartlesville	3,568	3,038	3,627	3,142	3,429	3,899	2,884	2,948	4,213	3,463
Cheyenne	1,807	2,268	2,413	2,001	1,440	1,477	2,083	2,682	1,928	2,335
Colorado Springs	3,881	2,775	3,351	2,866	2,220	2,818	3,186	3,174	2,977	3,209
Denver	36,719	46,966	44,187	45,846	39,543	50,274	43,034	52,063	42,945	39,099
Joplin	2,650	2,863	3,211	2,848	2,279	3,512	3,364	4,050	3,395	2,993
Kansas City, Kans	4,386	4,329	4,528	4,484	4,656	3,483	3,558	3,234	3,938	3,734
Kansas City, Mo	78,035	81,368	78,536	85,602	72,145	92,434	100,012	110,395	109,616	90,756
Muskogee	6,522	5,747	6,388	5,848	5,353	5,823	5,840	5,458	7,143	6,099
Oklahoma City	26,383	26,018	22,596	22,858	20,565	17,221	17,585	18,008	17,758	16,580
Omaha	46,523	48,183	46,510	46,301	33,691	62,173	57,107	62,534	65,217	50,639
Pueblo	3,925	4,943	5,072	6,319	4,384	5,738	5,217	7,016	6,396	5,055
St. Joseph	14,449	14,342	18,110	17,531	12,983	15,925	21,954	20,386	22,019	13,282
Topeka	3,562	3,686	3,774	2,526	2,768	5,888	5,551	4,593	5,084	6,143
Tulsa	31,127	27,626	32,835	27,083	27,345	21,639	20,837	28,025	23,560	32,333
Wichita	11,323	10,915	9,875	9,565	8,450	12,583	12,230	11,560	13,215	10,861
District No. 11—Dallas:										
Albuquerque	1,890	2,129	1,713	1,978	1,574	1,741	1,959	1,936	1,656	1,581
Austin	3,350	3,960	3,894	3,663	2,650	4,253	4,581	3,280	4,637	3,997
Beaumont	3,382	4,622	4,413	4,625	3,101	12,359	5.024	4,894	5,350	4,133
Dallas	39,553	43,444	39,764	42,095	34,123	46,655	49,191	52,192	51,024	54,135
El Paso	9,347	11,531	10,645	10,990	8,670	9,303	9,250	9,804	9,731	8,230
Fort Worth	26,951	24,718	24,980	24,877	24,187	26,922	26,443	31,018	26,355	33,841
Galveston	10,300	13,271	23,347	24,824	23,011	4,030	11,457	9,836	10,595	10,727
Houston	32,392	38,584	30,872	35,479	29,130	41,492	39,944	43,749	43,536	37,595
San Antonio	6,405	8,554	7,948	8,096	6,085	8,427	9,042	9,121	8,826	8,032
Shreveport	8,032	8,955	......	8,687	7,838	8,040	8,540	7,275	7,952	7,067
Texarkana	1,711	1,884	2,903	1,800	1,650	1,561	1,517	1,608	2,399	1,816
Tucson	1,590	1,560	1,491	1,394	1,684	1,615	1,751	1,560	1,346	1,349
Waco	4,172	4,696	4,077	4,325	3,574	5,787	4,506	4,395	4,376	3,700
District No. 12—San Francisco:										
Berkeley	2,534	3,408	2,985	2,994	2,279	2,946	2,983	3,001	2,538	2,227
Boise	2,672	2,987	2,949	3,539	2,503	3,474	3,783	3,713	3,471	3,966
Fresno	14,857	19,140	13,852	10,988	11,564	13,175	9,431	11,440	9,977	9,892
Long Beach	6,213	6,167	5,622	5,637	4,299	4,541	5,043	5,016	4,734	4,704
Los Angeles	95,932	103,085	116,332	120,913	104,672	91,606	88,750	103,592	95,241	84,790
Oakland	19,456	23,311	21,946	24,429	22,900	19,792	21,347	22,654	19,455	16,359
Ogden	4,894	5,964	5,437	8,185	4,738	4,609	4,692	6,759	5,657	5,071
Pasadena	4,876	6,065	6,258	6,254	4,552	5,385	4,950	4,900	4,669	4,057
Portland	36,201	40,505	46,154	41,513	37,837	39,343	39,139	51,409	48,241	45,303
Reno	2,730	3,156	3,013	3,026	2,528	3,032	2,554	3,014	2,765	2,804
Sacramento	18,833	8,133	22,187	15,133	14,720	23,497	20,592	20,199	13,717	15,924
Salt Lake City	12,052	20,498	18,566	26,992	16,643	20,031	22,208	27,849	22,031	19,363
San Diego	7,349	8,597	9,966	7,422	6,038	6,340	7,475	7,346	7,062	7,286
San Francisco	198,196	207,208	226,194	238,885	190,658	193,668	202,088	242,184	219,373	189,300
San Jose	5,344	5,338	5,975	4,677	3,587	6,126	5,743	7,110	6,624	5,453
Seattle	35,415	36,455	41,024	36,870	29,420	53,117	48,109	60,117	49,828	45,260
Spokane	11,340	13,011	12,747	12,991	11,607	15,681	13,107	13,610	13,273	11,868
Stockton	6,048	6,165	6,304	5,585	4,484	7,013	7,609	7,150	5,546	5,592
Tacoma	8,413	9,745	11,324	10,463	7,538	9,361	10,454	11,865	10,030	9,460
Yakima	3,027	3,335	2,920	2,840	1,961	3,085	3,888	3,237	3,811	3,999

DISCOUNT AND OPEN-MARKET OPERATIONS OF THE FEDERAL RESERVE BANKS DURING NOVEMBER, 1920.

Discount and open-market operations of the Federal Reserve Banks during November and October, 1920 and 1919, are shown in summary form for the entire system in the table below. Detailed figures for each Federal Reserve Bank for the most recent month are given on pages 109 to 111.

Total discount and open-market operations of Federal Reserve Banks in November and October, 1920 and 1919.

[In thousands of dollars.]

	1920		1919	
	November.	October.	November.	October.
Total discount and open-market purchases	8,713,909	8,013,263	7,812,081	8,468,032
Discounts, total	7,882,933	7,548,456	7,414,498	8,060,318
Secured by Government war obligations	4,349,752	4,305,307	6,761,542	7,348,942
Otherwise secured and unsecured, total	3,533,181	3,243,149	652,956	711,376
Commercial n. e. s., agricultural and live-stock paper	3,504,703	3,213,743	628,979	694,040
Trade acceptances	15,200	19,150	21,924	16,064
Bankers' acceptances	13,278	10,256	2,053	1,272
Average maturity (in days)	12.17	13.26	11.36	9.54
Average rate (365-day basis), per cent	6.45	6.40	4.53	4.19
Open-market operations:				
Bills purchased, total	231,840	281,832	340,696	335,262
Bankers' acceptances, total	221,670	269,284	335,545	329,864
In the domestic trade	52,619	66,244	82,850	81,819
In the foreign trade	169,051	203,040	252,695	248,045
Trade acceptances, total	1,008	1,670	3,687	4,989
In the domestic trade	250	735	790	1,938
In the foreign trade	758	935	2,897	3,051
Dollar exchange	9,162	10,878	1,464	409
Average maturity (in days)	35.11	35.51	55.55	48.36
Average rate (365-day basis), per cent	6.05	6.05	4.47	4.26
United States securities purchased:				
Bonds	....	48	....	....
Certificates of indebtedness	599,136	182,927	56,887	72,452

Discount operations in November aggregated 7,883 millions, or 335 millions more than the month before and 469 millions more than in November of the past year. The figures in the table are exclusive of bills discounted for other Federal Reserve Banks, which totaled 293 millions in November and 393 millions in October of this year, and 58 millions in November and 127 millions in October, 1919. While discount operations for the system were larger in November than in October for the system as a whole, two of the twelve Federal Reserve Banks, those of Philadelphia and of Kansas City, report materially smaller figures than the month before, and two other banks, those of Minneapolis and of San Francisco, report substantially unchanged totals for the two months.

Increased volume is shown for discounts of both paper secured by Government war obligations and of paper not so secured, the former increasing from 4,305 to 4,350 millions, and the latter from 3,243 to 3,533 millions. Discounts of trade acceptances declined from 19 to 15 millions; while those of bankers' acceptances increased from 10 to 13 millions. All other discounts, composed of commercial paper not otherwise specified and of agricultural and livestock paper, show by far the largest increase, aggregating 3,505 millions, compared with 3,214 millions in October and 629 millions in November of last year.

Average maturity of paper discounted in November was 12.17 days, compared with 13.26 days the month before, while the average rate of discount shows a slight increase, from 6.4 per cent in October to 6.45 per cent in November, as compared with 4.53 per cent in November of the year before.

Total bills purchased in November were 50 millions less than in October and 109 millions less than in November, 1919, this decrease being due largely to the development of a demand for acceptances by outside investors. Of the total of 232 millions of bills purchased in November, 222 millions were bankers' acceptances, 1 million was trade acceptances, and 9 millions were dollar exchange. Of the bankers' acceptances purchased, about 53 millions were bills drawn in the domestic trade and 169 millions bills drawn in the foreign trade, while of the trade acceptances about 75 per cent were bills in the foreign trade. The average maturity of purchased bills was 35.11 days, marking a slight decline from the 35.51 days shown for the month before and a decided reduction from the 55.55 days shown for November, 1919. The average rate charged on purchased acceptances was 6.05 per cent in November as in October, which may be compared with 4.47 per cent, the average for November of the preceding year.

During the month under review 33 banks were added to the membership of the system, the total number of member banks increasing from 9,558 at the end of October to 9,591 at the end of November, while the number of banks accommodated through discount of paper increased from 4,952 in October to 5,275 in November, constituting 55 per cent of the total membership, as against 51.8 per cent the month before. The number of member banks in each district at the end of October and of November and the number and percentage accommodated during each of the two months are shown in the table following.

Federal Reserve Bank.	Member banks in district.		Member banks accommodated.		Percentage accommodated.	
	Nov. 30.	Oct. 31.	Nov.	Oct.	Nov.	Oct.
Boston	434	434	219	217	50.5	50.0
New York	781	780	316	306	40.5	39.2
Philadelphia	700	697	325	310	46.4	44.5
Cleveland	871	869	239	248	27.4	28.5
Richmond	612	610	343	340	56.0	55.7
Atlanta	453	449	335	323	74.0	71.9
Chicago	1,409	1,404	1,026	848	72.8	60.4
St. Louis	571	569	299	310	52.5	54.5
Minneapolis	999	997	587	508	58.8	51.0
Kansas City	1,086	1,084	658	614	60.6	56.6
Dallas	846	844	524	542	61.9	64.2
San Francisco	829	821	404	386	48.7	47.0
Total	9,591	9,558	5,275	4,952	55.0	51.8

Federal Reserve Bank holdings of discounted and purchased paper, by classes, at the end of November and of October, 1920 and 1919, are shown in detail on page 112 and are summarized for the system as a whole in the table following.

Among the principal changes between the end of October and November in holdings of discounted paper the following are to be noted: A further decrease of 12 millions in paper secured by Government war obligations, as well as a decrease of 54 millions in other discounts held. Of the different classes of the latter, all except bankers' acceptances and agricultural paper show smaller totals for the most recent month. The total for commercial paper not otherwise specified declined by 55 millions; that for agricultural paper increased by 5 millions; that for live-stock paper declined a little more than 3 millions; that of discounted trade acceptances, by 2 millions; while the holdings of discounted bankers' acceptances increased by more than a million.

Holdings of bills purchased in open market totaled 241 millions at the end of November, compared with 299 millions at the end of October of this year and 502 millions at the end of November, 1919. Bankers' acceptances on hand totaled 239 millions, compared with 296 millions the month before. Of the most recent total 64.3 per cent were acceptances of member banks, 14 per cent of nonmember State banks and trust companies, 10.9 per cent of private banks, and 10.8 per cent of foreign bank branches and agencies. Of the total of 2 millions of trade acceptances held at the end of November, comparable with 3 millions held the month before, about three-fourths were acceptances in the foreign trade and one-fourth acceptances in the domestic trade.

Summary of discounted and purchased paper held by the Federal Reserve Banks at the end of November and of October, 1920 and 1919.[1]

[In thousands of dollars.]

	1920, end of—		1919, end of—	
	November.	October.	November.	October.
Discounted paper, total	2,735,400	2.801.297	2,214,139	2,128,547
Secured by Government war obligations	1,192,425	1,203,905	1,736,145	1,681,082
Otherwise, secured and unsecured, total	1,542,975	1,597,392	477,994	447,465
Commercial paper, n. e. s	1,267,625	1,322,049	395,701	374,758
Agricultural paper	136,315	131,528	27,023	28,447
Live-stock paper	105,246	109,121	25,527	27,028
Trade acceptances	20,961	23,155	27,694	16,261
Bankers' acceptances	12,828	11,539	2,049	971
Purchased paper, total	240,622	299,487	501,910	394,355
Bankers' acceptances, total	238,516	296,070	495,330	387,617
Member banks	153,302	194,908	347,852	271,701
Nonmember trust companies	1,167	1,869	6,446	8,021
Nonmember State banks	32,335	37,767	48,798	36,707
Private bankers	26,010	33,662	55,876	42,677
Foreign bank branches and agencies	25,702	27,864	36,358	28,511
Trade acceptances, total	2,106	3,417	6,580	6,738
Domestic	515	644	1,646	1,740
Foreign	1,591	2,773	4,934	4,998

[1] For discounted paper the figures are for the last Friday of each month; or purchased paper for the last day of each month.

Total discount and open-market operations of each Federal Reserve Bank during November, 1920.

Federal Reserve Bank.	Bills discounted for member banks.	Bills bought in open market.	United States securities purchased.		Total.	
			Bonds and Victory notes.	Certificates of indebtedness.	November, 1920.	November, 1919.
Boston	$456,159,667	$27,199,822	....	$70,310,500	$553,669,989	$492,416,062
New York	5,088,376,344	142,999,511	....	153,006,500	5,384,382,355	4,654,764,138
Philadelphia	354,670,887	2,742,493	....	145,051,500	502,464,880	689,812,281
Cleveland	232,352,576	13,625,149	....	90,000,000	335,977,725	314,402,869
Richmond	241,258,989	3,387,676	....	8,000,000	252,646,665	268,086,174
Atlanta	239,295,849	1,710,730	....	....	241,006,579	179,499,782
Chicago	517,863,068	14,136,438	....	60,147,500	592,147,006	484,729,360
St. Louis	178,178,627	572,563	....	1,165,000	179,916,190	186,711,100
Minneapolis	82,688,430	537,923	....	105,500	83,331,853	99,631,532
Kansas City	140,572,768	969,742	....	107,500	141,650,010	147,934,891
Dallas	124,051,664	295,000	....	....	124,346,664	77,093,833
San Francisco	227,463,741	23,663,349	....	71,242,000	322,369,090	216,999,208
Total, November, 1920	7,882,932,610	231,840,396	....	599,136,000	8,713,909,006	....
Total, November, 1919	7,414,498,375	340,695,505	$350	56,887,000	....	7,812,081,230
Total, 11 months ending Nov. 30, 1920	75,859,213,779	2,964,536,202	288,600	7,038,579,000	85,862,617,581	....
Total, 11 months ending Nov. 30, 1919	71,883,097,139	2,424,468,909	1,752,375	3,977,801,500	....	[1] 78,287,120,923

[1] Includes $1,000 of municipal warrants.

Average daily amount of earning assets held by each Federal Reserve Bank during November, 1920, earnings from each class of earning assets, and annual rates of earnings on basis of November, 1920, returns.

Federal Reserve Bank.	Average daily holdings of—			
	Discounted bills.	Purchased bills.	United States securities.	Total.
Boston	$174,366,000	$27,604,681	$25,852,702	$227,823,383
New York	938,687,471	88,756,828	73,838,433	1,101,282,732
Philadelphia	171,018,186	20,889,652	38,450,166	230,358,004
Cleveland	209,429,088	36,992,045	27,642,650	274,063,783
Richmond	114,444,206	5,542,336	13,761,467	133,748,009
Atlanta	138,553,713	2,203,723	15,782,942	156,540,378
Chicago	466,218,818	35,540,301	46,385,550	548,144,669
St. Louis	118,932,832	1,596,326	18,518,667	139,047,825
Minneapolis	84,373,000	1,431,000	8,604,000	94,408,000
Kansas City	114,200,227	2,179,038	21,692,517	138,071,782
Dallas	77,466,071	556,833	12,312,583	90,335,487
San Francisco	164,148,995	55,155,140	17,049,567	236,353,702
Total, November, 1920	2,771,838,607	278,447,903	319,891,244	3,370,177,754
Total, November, 1919	2,145,630,641	455,056,830	307,115,136	2,907,802,607

Federal Reserve Bank.	Earnings from—				Annual rates of earnings on—			
	Discounted bills.	Purchased bills.	United States securities.	Total.	Discounted bills.	Purchased bills.	United States securities.	Total.
					Per cent.	Per cent.	Per cent.	Per cent.
Boston	$946,231	$138,658	$45,837	$1,130,726	6.62	6.13	2.16	6.06
New York	4,953,787	438,865	146,852	5,539,504	6.44	6.03	2.43	6.14
Philadelphia	812,009	104,677	66,950	983,636	5.79	6.11	2.12	5.20
Cleveland	1,119,903	176,826	46,490	1,343,219	6.51	5.82	2.05	5.93
Richmond	553,469	27,573	22,679	603,721	5.90	6.07	2.01	5.51
Atlanta	722,229	11,855	26,915	760,999	6.15	6.35	2.01	5.74
Chicago	2,548,916	175,414	79,654	2,803,984	6.67	6.02	2.10	6.24
St. Louis	662,466	8,023	32,015	702,504	6.79	6.12	2.11	6.15
Minneapolis	457,370	7,137	14,230	478,737	6.60	6.07	2.01	6.17
Kansas City	591,104	11,083	37,656	639,843	6.31	6.21	2.12	5.65
Dallas	388,190	2,971	21,199	412,360	6.11	6.40	2.09	5.57
San Francisco	804,971	274,006	29,415	1,108,392	5.98	6.06	2.11	5.72
Total, November, 1920	14,560,645	1,377,088	569,892	16,507,625	6.41	6.03	2.17	5.98
Total, November, 1919	7,755,942	1,621,165	561,215	9,938,322	4.40	4.33	2.22	4.16

Bills discounted during the month of November, 1920, 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.	Commercial, n. e. s., agricultural and live-stock paper.	Total.	Average maturity in days.	Average rate (365-day basis).
		Secured by Government war obligations.	Otherwise secured.						
									Per cent.
Boston	$16,611,300	$334,372,760		$173,987		$105,001,620	$456,159,667	12.18	6.52
New York	82,697,393	2,371,229,964		[1] 2,792,486	[2] $6,018,828	2,625,637,673	5,088,376,344	6.30	6.41
Philadelphia	14,144.714	227,857,782		88,114	200,000	112,380,277	354,670,887	12.92	5.61
Cleveland	5,306,560	173,526,760	$261,540	1,671,354	4,186,655	47,399,707	232,352,576	14.57	5.87
Richmond	3,370,759	198,828,845	1,448,600	1,071,301		36,539,484	241,258,989	15.25	5.98
Atlanta	6,927,471	149,091,865	1,410,147	1,055,587	261,737	80,549,042	239,295,849	22.97	6.65
Chicago	14,307,168	270,520,893	1,444,913	3,474,989	932,284	227,182,821	517,863,068	36.78	6.71
St. Louis	5.927,286	103,818,408	715,500	913,120	346,011	66,458,302	178,178,627	25.29	6.60
Minneapolis	1,980,592	22,482,790	8.474.864	211,089		39,539,095	82,688,430	36.47	6.78
Kansas City	4,671,365	84,869,300	436,000	1,049,863	10,507	49,535,733	140,572,768	37.67	7.41
Dallas	1,945,436	90,271,826	1,991,557	758,335		29,084,510	124,051,664	28.94	5.98
San Francisco	4,033,274	150,957,239	1,740,179	1,939,261	[3] 1,322,020	67,471,768	227,463,741	25.26	5.98
Total, November, 1920	161,923,318	4,187,828,432	17,923,300	15,199,486	13,278,042	3,486,780,032	7,882,932,610	12.17	6.45
Total, November, 1919	327,559,642	6,433,982,115	15,674,637	21,923,920	2,052,898	613,305,163	7,414,498,375	11.36	4.53

[1] Includes $12,647 in the foreign trade. [2] Includes $80,000 in dollar exchange bills. [3] Includes $7,954 in dollar exchange bills.

Bankers' and trade acceptances in the foreign and domestic trade and dollar exchange bills purchased during November, 1920 also average rates and maturities of total bills purchased by each Federal Reserve Bank.

Federal Reserve Bank.	Bankers' acceptances.			Trade acceptances.			Dollar exchange bills.	Total bills purchased.	Average maturity in days.	Average rate (365-day basis).
	Domestic.	Foreign.	Total.	Domestic.	Foreign.	Total.				
										Per cent.
Boston	$8,843,865	$17,937,021	$26,780,886				$418,936	$27,199,822	31.15	6.11
New York	30,983,988	103,679,533	134,663,521	$250,000	$705,805	$955,805	7,380,185	142,999,511	27.67	5.41
Philadelphia	288,997	2,053,496	2,342,493				400,000	2,742,493	65.25	6.09
Cleveland	2,860,845	10,233,738	13,094,583				530,566	13,625,149	49.47	6.02
Richmond	470,953	2,916,723	3,387,676					3,387,676	41.82	6.08
Altanta	1,170,401	540,329	1,710,730					1,710,730	57.76	7.10
Chicago	2,977,666	11,131,692	14,109,358				27,080	14,136,438	67.18	6.23
St. Louis	333,198	239,365	572,563					572,563	48.02	6.16
Minneapolis	287,923	250,000	537,923					537,923	78.15	6.08
Kansas City		969,742	969,742					969,742	51.85	6.91
Dallas	295,000		295,000					295,000	44.81	6.08
San Francisco	4,415,674	18,790,485	23,206,159		52,000	52,000	405,189	23,663,348	49.03	6.02
Total, November, 1920.	52,928,510	168,742,124	221,670,634	250,000	757,805	1,007,805	9,161,956	231,840,395	35.11	6.05
Total, November, 1919.	82,849,782	252,695,143	335,544,925	789,594	2,897,336	3,686,930	1,463,650	340,695,505	55.55	4.47

Bills discounted during three months ending Nov. 30, 1920, distributed by rates; also average rates and maturities of bills discounted by each Federal Reserve Bank.

Federal Reserve Bank.	5 per cent.		$5\frac{1}{4}$ per cent.		$5\frac{1}{2}$ per cent.		$5\frac{3}{4}$ per cent.		6 per cent.	
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.
Boston					$304,409,720	$307,096			$621,549,675	$723,743
New York					3,911,397,671	1,698,237			3,363,659,309	6,261,527
Philadelphia	$82,016,700	$147,255	$2,341,500	$4,465	655,719,453	1,516,353	$13,966,000	$24,376	394,012,932	618,349
Cleveland					73,484,220	99,693	359,595,686	603,490	134,186,688	792,997
Richmond					41,537,500	72,381	9,522,000	8,410	712,081,938	1,833,983
Atlanta	36,324,103	73,557	736,500	1,456	375,457,000	838,880	3,849,500	9,505	167,036,492	1,166,535
Chicago					208,917,000	474,495	58,655,500	143,515	606,879,293	1,774,338
St. Louis	37,410,500	59,466	255,011	518	312,404,809	633,784			243,564,045	1,821,044
Minneapolis					32,635,000	71,341			68,371,412	205,107
Kansas City	21,849,500	42,823	397,000	792	79,976,659	194,481	14,418,600	32,946	346,004,567	2,522,566
Dallas	30,491,511	61,962	823,000	1,596	223,230,648	520,674	6,153,000	13,887	100,546,460	1,044,590
San Francisco					57,080,265	108,980	44,239,500	52,969	598,570,970	2,691,207
Total	208,092,314	385,063	4,553,011	8,827	6,276,249,945	6,536,395	510,399,786	889,098	7,356,463,781	21,455,986

Bills discounted during three months ending Nov. 30, 1920, distributed by rates; also average rates and maturities of bills discounted by each Federal Reserve Bank—Continued.

Federal Reserve Bank.	$6\frac{1}{2}$ per cent.		7 per cent.		Super-rate, discount.	Total.		Average maturity in days.	Average rate (365-day basis).
	Amount.	Discount.	Amount.	Discount.		Amount.	Discount.		Per cent.
Boston			$252,750,575	$1,576,296		$1,178,709,970	$2,607,135	12.44	6.49
New York			7,139,998,613	9,684,322		14,415,055,593	17,644,086	6.93	6.45
Philadelphia						1,148,056,585	2,310,798	13.14	5.59
Cleveland						567,266,594	1,496,180	16.42	5.86
Richmond						763,141,438	1,914,774	15.32	5.98
Atlanta			90,510,517	649,448	$137,198	673,914,112	2,876,579	24.72	6.30
Chicago			752,523,107	9,092,233		1,626,974,900	11,484,581	38.27	6.73
St. Louis					168,495	593,634,365	2,683,307	26.48	6.23
Minneapolis	$925,576	$6,304	137,491,851	1,578,357		239,423,839	1,861,109	41.71	6.80
Kansas City					546,638	462,646,326	3,340,246	37.10	7.10
Dallas					39,142	361,244,619	1,681,851	28.68	5.93
San Francisco						699,890,735	2,853,156	24.91	5.97
Total	925,576	6,304	8,373,274,663	22,580,656	891,473	22,729,959,076	52,753,802	13.21	6.41

Acceptances purchased by each Federal Reserve Bank during the three months ending Nov. 30, 1920, distributed by rates of discount; also average rates and maturities of acceptances purchased by each Federal Reserve Bank.

Federal Reserve Bank.	$5\frac{1}{2}$ per cent.		$5\frac{5}{8}$ per cent.		$5\frac{3}{4}$ per cent.		$5\frac{13}{16}$ per cent.		$5\frac{7}{8}$ per cent.	
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.
Boston			$2,413,503	$9,097	$7,270,604	$22,685			$14,308,872	$105,317
New York					283,011,442	728,770			57,921,760	446,353
Philadelphia					505,951	716	$200,000	$904	877,685	4,031
Cleveland					4,123,414	16,551			27,494,587	231,015
Chicago					7,948,165	32,780			38,770,127	364,573
St. Louis	$54,365	$362			43,906	159			339,000	2,836
San Francisco					14,798,251	55,168			37,960,785	299,645
Total	54,365	362	2,413,503	9,097	317,701,733	856,829	200,000	904	177,672,816	1,453,770

Federal Reserve Bank.	$5\frac{15}{16}$ per cent.		6 per cent.		$6\frac{1}{8}$ per cent.		$6\frac{3}{16}$ per cent.		$6\frac{1}{4}$ per cent.	
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.
Boston			$14,621,239	$94,452	$7,610,571	$62,360			$11,779,860	$78,065
New York			39,656,230	401,342	11,026,107	124,182			3,035,282	32,554
Philadelphia	$220,000	$1,028	9,689,733	114,840	1,267,248	17,245			149,855	2,263
Cleveland			21,840,482	224,853	4,059,749	34,167			1,193,620	3,515
Richmond			11,020,930	85,156						
Atlanta			4,999,188	36,556						
Chicago			9,426,405	111,140	2,032,751	15,064	$10,000	$81	1,767,400	16,819
St. Louis			1,090,000	14,513	138,198	1,901				
Minneapolis			1,573,236	19,850						
Kansas City			2,687,439	23,272						
Dallas			2,222,500	14,031						
San Francisco			39,598,378	382,716	8,727,787	112,776			1,509,337	18,144
Total	220,000	1,028	158,425,760	1,522,721	34,862,411	367,695	10,000	81	19,435,354	151,360

Federal Reserve Bank.	$6\frac{5}{16}$ per cent.		$6\frac{3}{8}$ per cent.		$6\frac{1}{2}$ per cent.		$6\frac{5}{8}$ per cent.		$6\frac{3}{4}$ per cent.	
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.
Boston			$27,222,075	$68,631	$2,233,931	$7,639	$565,752	$3,230	$232,158	$1,790
New York			897,542	9,805	677,878	10,044	100,000	1,601		
Philadelphia			100,000	1,487						
Cleveland			2,478,869	6,836	902,689	2,472	20,000	55	93,321	260
Chicago	$50,000	$740	11,462,330	177,088	2,337,225	36,769				
St. Louis			458,906	1,219	1,195,000	3,236	250,126	691	450,000	1,266
Kansas City					2,549,112	27,766				
San Francisco			287,316	3,822	34,875	502				
Total	50,000	740	42,907,038	268,888	9,930,710	88,428	935,878	5,577	775,479	3,316

Acceptances purchased by each Federal Reserve Bank during the three months ending Nov. 30, 1920, distributed by rates of discount; also average rates and maturities of acceptances purchased by each Federal Reserve Bank—Continued.

Federal Reserve Bank.	7 per cent.		7½ per cent.		Total.		Average maturity in days.	Average rate (365-day basis).
	Amount.	Discount.	Amount.	Discount.	Amount.	Discount.		
								Per cent.
Boston					$88,258,565	$453,266	30.43	6.16
New York	$3,663,802	$33,930	$22,500	$305	400,012,543	1,788,886	27.30	5.98
Philadelphia					13,010,472	142,514	65.55	6.10
Cleveland					62,206,731	519,724	50.53	6.03
Richmond					11,020,930	85,156	46.36	6.08
Atlanta	1,710,730	19,213			6,709,918	55,769	47.41	6.40
Chicago					73,804,403	755,054	60.97	6.12
St. Louis					4,019,501	26,183	38.39	6.19
Minneapolis					1,573,236	19,850	75.70	6.08
Kansas City	668,782	6,173			5,905,333	57,211	55.06	6.42
Dallas					2,222,500	14,031	37.88	6.08
San Francisco					102,916,729	872,773	51.20	6.05
Total	6,043,314	59,316	22,500	305	771,660,861	4,790,417	37.13	6.05

Discounted bills, including member banks' collateral notes, held by each Federal Reserve Bank on the last Friday in November, 1920, distributed by classes.

[In thousands of dollars.]

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 (commercial paper n. e. s.).	Total.
				Secured by Government war obligations.	Otherwise secured.				
Boston		119	21,264	57,024		190	23	93,545	172,165
New York	103		133,651	331,376		2,840	7,831	425,986	901,787
Philadelphia	292	5	38,423	83,190		271	150	49,290	171,621
Cleveland	621	156	9,216	86,351	131	1,544	648	109,205	207,872
Richmond	8,369	112	6,158	44,884	645	1,890		53,441	115,499
Atlanta	17,844	1,126	14,163	55,332	191	1,953	373	46,044	137,026
Chicago	41,430		21,265	128,216	555	4,896	895	281,200	478,457
St. Louis	3,250	2,615	10,102	39,723	145	1,215	991	62,128	120,169
Minneapolis	18,657	45,137	5,657	6,055	4,132	203		721	80,562
Kansas City	13,364	30,593	10,180	16,389	67	1,771	29	41,271	113,664
Dallas	13,931	14,715	2,958	18,028	739	604	59	26,106	77,140
San Francisco	18,454	10,668	5,909	46,911	694	3,584	1,829	71,389	159,438
Total, 1920	136,315	105,246	278,946	913,479	7,299	20,961	12,828	1,260,326	2,735,400
Total, 1919	27,023	25,527	356,519	1,379,626	5,717	27,694	2,049	389,984	2,214,139

Acceptances purchased by each Federal Reserve Bank and held on Nov. 30, 1920, distributed by classes of accepting institutions.

[In thousands of dollars.]

Federal Reserve Bank.	Bankers' acceptances.						Trade acceptances.			Grand total.
	Member banks.	Nonmember trust companies.	Nonmember State banks.	Private banks.	Foreign bank branches and agencies.	Total.	Domestic.	Foreign.	Total.	
Boston	18,659	150	2,360	669	1,032	22,870				22,870
New York	44,336	575	11,223	11,330	9,986	77,450	510	1,123	1,633	79,083
Philadelphia	8,211	200	2,888	2,252	1,487	15,038				15,038
Cleveland	16,457	88	4,675	3,925	4,233	29,378				29,378
Richmond	5,651					5,651				5,651
Atlanta	2,467					2,467				2,467
Chicago	21,204		3,323	1,616	293	26,436				26,436
St. Louis	1,045		310	62		1,417				1,417
Minneapolis	1,483					1,483				1,483
Kansas City	1,732					1,732				1,732
Dallas	215					215				215
San Francisco	31,842	154	7,556	6,156	8,671	54,379	5	468	473	54,852
Total:										
Nov. 30, 1920	153,302	1,167	[1] 32,335	26,010	25,702	238,516	515	1,591	2,106	240,622
Oct. 31, 1920	194,908	1,869	[2] 37,767	33,662	27,864	296,070	644	2,773	3,417	299,487
Nov. 30, 1919	347,852	6,446	48,798	55,876	36,358	495,330	1,646	4,934	6,580	501,910
Nov. 30, 1918	310,069	2,028	10,703	27,871	19,818	370,489	4,016	5,019	9,035	379,524

[1] Includes $2,134,000 acceptances of corporations organized under Edge Act.
[2] Includes $2,174,000 acceptances of corporations organized under Edge Act.

OPERATIONS OF THE FEDERAL RESERVE CLEARING SYSTEM FROM NOV. 16 TO DEC. 15, 1920.

[Amounts in thousands of dollars.]

Federal Reserve Bank or branch.	Items drawn on banks in own district. Located in Federal Reserve Bank and branch cities.		Items drawn on banks in own district. Located outside Federal Reserve Bank and branch cities.		Items drawn on Treasurer of United States.		Total.		Items forwarded to other Federal Reserve Banks and branches.		Items forwarded to parent bank or to branch in same district.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
Boston	628,133	597,400	2,938,675	424,580	148,726	27,175	3,715,534	1,049,155	156,826	58,809	....	....
New York	1,066,367	1,955,307	4,194,247	1,2[illegible]2,381	1,137,110	103,349	6,397,724	3,261,037	1,037,190	582,860	23,047	9,024
Buffalo	171,745	106,492	374,268	54,287	10,903	5,972	556,916	166,751	137,931	29,856	30,124	23,696
Philadelphia	1,509,086	837,542	1,936,025	262,880	176,626	32,542	3,621,737	1,132,964	828,870	214,081	....	....
Cleveland	303,077	251,793	1,108,393	181,282	59,719	7,241	1,471,189	440,316	46,171	33,670	34,060	12,676
Cincinnati	155,270	146,427	767,666	89,641	49,851	4,712	972,787	240,780	17,803	17,874	11,984	5,468
Pittsburgh	315,512	345,333	814,617	127,480	34,087	5,405	1,164,216	478,218	63,799	43,160	30,976	7,774
Richmond	98,330	168,557	2,120,248	346,803	43,866	6,196	2,262,444	521,556	137,074	78,408	49,411	15,225
Baltimore	201,782	179,404	650,341	89,679	55,350	8,969	907,473	278,052	169,605	101,920	89,852	17,413
Atlanta	89,785	68,889	282,994	54,603	25,742	9,078	398,521	132,570	26,161	19,985	44,703	8,784
Birmingham	41,587	20,836	130,411	11,676	11,962	1,001	183,960	33,513	17,082	13,456	25,149	43,664
Jacksonville	27,070	22,006	130,965	16,785	8,981	928	167,016	39,719	25,176	10,000	5,705	1,994
Nashville	41,508	34,517	210,684	24,839	11,448	1,299	263,640	60,655	30,875	7,316	11,625	2,266
New Orleans	56,671	56,913	103,212	15,844	15,970	2,545	175,853	75,302	41,429	10,995	6,547	1,040
Chicago	751,025	672,059	3,331,477	364 128	297,421	30,644	4,379,923	1,066,831	344,193	39,002	8,403	4,836
Detroit	220,341	169,270	370,046	45,312	35,750	4,975	626,137	219,557	10,589	10,976	6,392	2,336
St. Louis	245,575	256,465	1,301,678	99,855	90,217	9,709	1,637,470	366,029	25,623	6,755	9,484	1,756
Little Rock	41,439	26,062	282,461	20,014	6,577	2,107	330,477	48,183	7,123	1,952	27,466	3,994
Louisville	84,691	60,726	359,085	26,205	23,966	4,464	467,742	91,395	8,941	2,331	4,200	417
Memphis	68,430	39,098	161,457	14,096	7,763	2,072	237,650	55,266	1,963	619	2,871	823
Minneapolis	283,855	159,776	1,718,951	125,141	38,486	3,402	2,041,292	288,319	103 919	36,171	....	....
Kansas City	228,228	297,360	2,087,984	130,173	79,674	7,062	2,395,886	434,595	310,563	67,063	115,705	19,843
Denver	78,750	71,364	372,614	34,999	18,298	2,061	469,662	108,424	80,987	22,274	41,719	18,152
Oklahoma City	57,501	63,296	889,495	96,242	....	....	946,996	159,538	48,538	11,358	21,966	13,176
Omaha	85,511	59,093	514,070	40,181	30,966	2,444	630,547	101,718	38,662	7,761	18,268	7,639
Dallas	93,559	80,048	1,641,462	269,422	26,989	3,262	1,762,010	352,732	86,491	37,083	47,824	7,938
El Paso	30,337	11,990	127,989	13,343	13,786	2,959	172,112	28,292	18,101	7,680	12,356	2,500
Houston	68,091	44,867	343,688	47,954	60,858	1,334	472,637	94,155	22,669	17,860	9,447	2,134
San Francisco	129,704	123,138	386,114	35,801	56,268	156,998	572,086	315,937	26,498	3,933	42,933	7,037
Los Angeles	211,435	108,203	847,568	69,962	26,812	12,160	1,085,815	190,325	76,265	10,763	35,431	7,394
Portland	55,600	39,825	192,925	13,235	18,550	10,599	267,075	63,659	3,025	2,537	29,450	4,725
Salt Lake City	59,836	39,645	407,341	50,344	14,524	3,553	481,701	93,542	12,183	22,359	9,976	11,098
Seattle	59,686	39,780	221,337	17,026	27,484	8,568	308,507	65,374	16,413	4,930	33,012	7,333
Spokane	31,266	20,606	171,034	14,656	10,562	1,258	212,862	36,520	8,894	3,112	18,247	6,470
Total:												
Nov. 16 to Dec. 15, 1920	7,590,783	7,174,087	31,491,522	4,430,849	2,675,292	486,043	41,757,597	12,090,979	[1] 3,987,632	[1] 1,538,909	858,333	278,625
Oct. 16 to Nov. 15, 1920	7,614,184	7,923,690	30,788,266	4,750,101	2,989,658	414,296	41,392,108	13,088,087	[2] 3,806,923	[2] 1,666,552	764,278	297,128
Nov. 16 to Dec. 15, 1919	5,973,224	7,305,298	21,913,951	4,753,645	2,113,845	876,169	30,001,020	12,935,112	[3] 3,062,589	[3] 1,605,891	656,507	288,462

Federal Reserve district.	Number of member banks in district Dec. 15.		Number of nonmember banks on par list Dec. 15.		Number of incorporated banks other than mutual savings banks not on par list Dec. 15.	
	1920	1919	1920	1919	1920	1919
Boston	436	431	258	245	....	....
New York	780	751	328	319	....	....
Philadelphia	698	677	439	414	....	....
Cleveland	871	842	1,080	1,079	....	8
Richmond	611	584	1,267	466	334	1,014
Atlanta	460	426	414	348	1,212	1,227
Chicago	1,417	1,374	4,270	3,700	....	489
St. Louis	571	535	2,526	2,222	186	443
Minneapolis	1,000	920	2,895	1,874	....	1,030
Kansas City	1,088	1,037	3,402	3,138	....	186
Dallas	848	756	1,265	1,105	....	98
San Francisco	832	713	1,028	941	....	114
Total	9,612	9,046	19,172	15,851	1,732	4,609

[1] Includes 7,344 items, amounting to $2,100,000, forwarded direct to member banks in other Federal Reserve districts.
[2] Includes 7,100 items, amounting to $2,206,000, forwarded direct to member banks in other Federal Reserve districts.
[3] Includes 5,493 items, amounting to $4,145,000, forwarded direct to member banks in other Federal Reserve districts.

NOTE.—The number of business days in period was 25 in all Federal Reserve Bank and branch cities except New Orleans, where the number was 24.

CHANGES IN CONDITION OF FEDERAL RESERVE BANKS.

Loan operations of the Federal Reserve Banks during the last five weeks of the year, as measured by the amounts of discounted bills held at the close of each week, show a slight reduction, the December 30 total of 2,719.1 millions being 16.3 millions below the November 26 total. The large reduction in the holdings of discounted bills shown in the December 17 statement reflects largely the week's heavy fiscal operations, including redemption of the principal and semiannual interest coupons of about 700 millions of tax certificates issued at the beginning of the year, payment of semiannual interest on first Liberty bonds and Victory notes, issuance of two new series of tax certificates aggregating about 590 millions and the handling of the last quarterly installment of income and excess profits taxes due on the 15th of the month.

Redemption of large amounts of tax certificates enabled member banks to reduce temporarily their indebtedness to the Federal Reserve Banks, with the consequence that Federal Reserve Bank holdings of bills secured by Government war obligations show a decrease for the week of 10.3 millions and those of other discounted bills a decrease of 109.8 millions. Payment by the banks for newly issued certificates was made chiefly in the customary manner, i. e., by crediting the Government account. Borrowings on a large scale were resumed, however, soon afterwards, as the members' deposit accounts came to be debited with large amounts of checks and drafts issued in payment of taxes and as the Government began to call for funds placed to its credit by member banks to which allotments of the last certificate issues had been made. As a consequence, the amount of discounted bills held by Federal Reserve Banks shows an increase of about 135 millions for the week ending December 23, followed by a reduction of 12.6 millions in these holdings during the last week of the year. As against a reduction for the five weeks of 16.3 millions in total discounts held, the amount of paper secured by Government war obligations shows a reduction for the period of 51.4 millions, with the result that the proportion of war paper to total discounts shows a further decline for the period from nearly 44 to 42 per cent.

In the following exhibit is given a summary of the weekly changes of the principal asset and liability items of the Federal Reserve Banks for the five weeks under review:

Principal asset and liability items of the 12 Federal Reserve Banks combined on Fridays, Nov. 26 to Dec. 17, and on Thursdays, Dec. 23 and 30, 1920.

[In millions of dollars.]

	Nov. 26.	Dec. 3.	Dec. 10.	Dec. 17.	Dec. 23.	Dec. 30.
Reserves:						
Total	2,195	2,198	2,212	2,222	2,237	2,249
Gold	2,024	2,023	2,035	2,042	2,056	2,059
Bills discounted:						
Total	2,735	2,777	2,717	2,597	2,732	2,719
Secured by Government war obligations	1,192	1,161	1,169	1,159	1,177	1,141
All other	1,543	1,616	1,548	1,438	1,555	1,578
Bills bought in open market	248	243	245	235	241	256
Certificates of indebtedness	294	287	328	366	281	261
Total earning assets	3,304	3,334	3,317	3,224	3,281	3,263
Government deposits	16	61	28	53	26	28
Members' reserve deposits	1,712	1,764	1,759	1,739	1,721	1,749
Net deposits	1,624	1,667	1,662	1,543	1,549	1,604
Federal Reserve notes in circulation	3,326	3,312	3,312	3,344	3,405	3,345
Federal Reserve Bank notes in circulation	215	215	215	217	219	217
Reserve percentages	44.4	44.1	44.5	45.5	45.1	45.4

Of the total holdings of paper secured by Government war obligations an increasing share, viz, 56.8 per cent on December 30 as against 52.8 per cent on November 26, was composed of paper secured by Liberty bonds, the end-of-year holdings of this class of paper, 648.3 millions, being about 18 millions in excess of the total reported five weeks earlier. Paper secured by Victory notes constituted between 25.5 and 26.7 per cent of the total of war paper held, the December 30 holdings, 304.7 millions, being 13.5 millions below the November 26 total. Holdings of paper secured by Treasury certificates show continuous reduction during the five weeks from 243.9 to 188 millions, or from 20.5 to 16.5 per cent of the entire amount of war paper held.

Notwithstanding the considerable fluctuations in the holdings of 15-day paper—between a high of 1,694.5 millions on December 3 and a low of 1,504.2 millions two weeks later—the proportion of the shortest term paper to discounts of all maturities remained fairly constant at about 60 per cent. Holdings of 30-day and 60-day paper show a moderate decline, nearly offset by an increase of 90-day paper, while holdings of six-month agricultural and live stock paper increased from 51 to 63.5 millions.

Holdings of acceptances purchased in open market fluctuated between 234.6 millions on December 17 and 255.7 millions at the close of the year. Changes in the amounts of Treasury certificates held are due to purchases early in December of about 40 millions of tax certificates from New York member banks in anticipation of their maturity on December 15, also to variations in the amounts of special certificates held by the Federal Reserve Banks to cover advances to the Government pending collection of funds from depository institutions. On December 17 the banks held 93 millions of such certificates, while on the following Thursday the amount had been reduced to 18 millions, all held by the New York Reserve Bank.

Continued reduction in the volume of rediscounting is noted, the December 30 holdings of paper under discount for other Federal Reserve Banks by the Boston, Philadelphia, and Cleveland banks, 115.3 millions, being 38.8 millions below the total shown five weeks before. The latter bank reports on December 30 a total of 81.6 millions of paper held under discount for other Federal Reserve Banks, as against 117.8 millions held for its own members, compared with 112.1 and 95.8 millions, respectively, five weeks earlier. Discounts held by the Boston bank for other Federal Reserve Banks declined during the same period from 27.2 to 16.6 millions, while discounts for its own members increased in the meantime from 144.9 to about 162 millions. The list of accommodated banks included at the close of the year besides the three southern banks also the Federal Reserve Banks of Minneapolis and Kansas City, the New York and St. Louis banks no longer figuring in this list. Holdings of acceptances purchased from other Federal Reserve Banks declined from 14.4 to 6.9 millions, this total being composed of bank acceptances purchased by the San Francisco bank from the New York bank. The contingent liability of the Federal Reserve Banks on account of bank acceptances held for account of foreign correspondents remained unchanged at 16.2 millions.

Changes in the several classes of deposits were within moderate limits, while the "float" carried by the Federal Reserve Banks shows much larger fluctuations between about 127 millions on November 26 and 287.9 millions on December 17, the Friday following the date of the last income-tax installment. Net deposits, in consequence, show wider variations from week to week than reserve deposits, the low figure of 1,542.6 millions of net deposits on December 17 being 124.7 millions below the high figure of two weeks before. Federal Reserve note circulation declined by about 13.7 millions during the first two weeks but shows the usual upward course during the two weeks preceding Christmas, though the increase during these two weeks, 93.1 millions, falls far below the corresponding increase of 150.2 millions in 1919. Federal Reserve Bank note circulation shows an increase for the period of 2.4 millions.

All of the earmarked gold formerly held by the Bank of England for account of the Federal Reserve Banks has been received in this country and the account "Gold with foreign agencies" includes at present only 3.3 millions, the amount of gold held earmarked for Federal Reserve account by the Bank of France. Total gold reserves, in consequence of further net gold imports, chiefly from Great Britain, show a gain from 2,023.9 to 2,059.3 millions, while total cash reserves show an even larger increase from 2,195.3 to 2,249.2 millions.

The banks' reserve ratio after some slight variation during the first two weeks rose from 44.5 per cent on December 10 to 45.5 per cent on the following Friday, this being the highest percentage for the year. On December 23, mainly because of the large increase in note circulation, the ratio declined to 45.1 per cent, while on the Thursday following, because of the reduction in note liabilities, the ratio went up to 45.4 per cent, or only slightly below the high point shown two weeks previous.

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Dec. 3 to 17, and on Thursdays, Dec. 23 and 30, 1920.

RESOURCES.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Gold and gold certificates:													
Dec. 3	7,630	109,556	1,222	19,632	2,445	6,630	21,993	2,875	7,292	806	6,398	14,652	201,131
Dec. 10	7,677	118,419	1,042	5,434	2,447	6,587	21,818	2,875	7,299	881	6,444	13,946	194,869
Dec. 17	7,445	111,078	971	5,510	2,493	6,781	21,700	2,879	7,344	904	7,831	25,558	200,494
Dec. 23	11,849	144,304	6,040	10,869	5,679	8,686	29,225	5,873	9,095	4,007	9,648	28,474	273,749
Dec. 30	11,780	135,046	6,082	10,907	5,701	8,729	29,035	5,120	9,125	4,016	9,903	28,508	263,952
Gold settlement Fund—Federal Reserve Board:													
Dec. 3	24,275	30,128	63,012	85,135	24,579	6,725	51,857	15,424	13,937	26,303	3,657	43,711	388,743
Dec. 10	30,399	42,792	62,862	89,953	27,035	6,027	51,847	15,921	13,085	24,492	3,880	42,624	410,917
Dec. 17	32,735	24,557	47,916	79,715	28,502	6,012	40,785	20,590	11,378	26,522	3,149	32,005	353,866
Dec. 23	36,951	53,976	51,124	96,540	19,810	5,953	26,110	18,686	11,234	18,527	3,733	21,079	363,723
Dec. 30	41,206	36,435	53,119	81,726	21,767	4,195	33,155	21,853	10,249	21,686	2,361	28,492	356,244
Gold with foreign agencies:													
Dec. 3	4,980	24,677	5,458	5,595	3,343	2,456	8,119	3,207	1,842	3,275	1,774	3,138	67,864
Dec. 10	4,945	24,862	5,420	5,555	3,320	2,439	8,062	3,184	1,829	3,252	1,761	3,116	67,745
Dec. 17	4,945	24,862	5,420	5,555	3,320	2,439	8,062	3,184	1,829	3,252	1,761	3,116	67,745
Dec. 23	241	1,211	264	270	162	119	393	155	89	158	86	152	3,300
Dec. 30	241	1,211	264	270	162	119	393	155	89	158	86	152	3,300
Gold with Federal Reserve agents:													
Dec. 3	128,243	248,236	132,797	151,715	44,866	60,482	183,027	48,400	25,377	38,678	27,215	105,168	1,194,204
Dec. 10	133,385	237,200	130,494	162,174	51,938	62,507	191,484	47,883	25,428	39,643	25,795	102,632	1,210,563
Dec. 17	141,216	245,765	132,063	178,176	49,273	61,005	211,576	47,270	25,629	39,637	23,675	114,440	1,269,725
Dec. 23	138,416	235,127	129,944	177,730	47,758	62,579	208,129	49,647	25,980	40,399	22,662	115,121	1,253,492
Dec. 30	135,357	254,575	132,916	177,694	53,917	60,836	198,554	49,668	25,905	41,248	26,484	119,060	1,276,214
Gold redemption fund:													
Dec. 3	23,909	38,000	10,794	12,472	9,841	9,128	34,315	6,103	4,071	5,194	5,875	11,031	170,733
Dec. 10	17,846	38,000	11,543	11,583	6,117	7,104	25,186	5,548	3,807	4,738	6,961	12,744	151,177
Dec. 17	13,333	38,000	13,081	12,511	7,665	8,652	22,517	6,142	3,617	5,201	7,730	12,089	150,538
Dec. 23	15,738	39,000	14,059	13,700	8,419	8,935	24,815	6,014	3,026	6,027	8,498	13,307	161,538
Dec. 30	18,252	39,000	8,851	14,603	6,617	10,213	33,252	6,087	3,079	4,853	4,447	10,369	159,623
Total gold reserves:													
Dec. 3	189,037	450,597	213,283	274,549	85,074	85,421	299,311	76,009	52,519	74,256	44,919	177,700	2,022,675
Dec. 10	194,252	461,273	211,361	274,699	90,857	84,664	298,397	75,411	51,448	73,006	44,841	175,062	2,035,271
Dec. 17	199,674	444,262	199,451	281,467	91,253	84,889	304,640	80,065	49,797	75,516	44,146	187,208	2,042,368
Dec. 23	203,195	473,618	201,431	299,109	81,828	86,272	288,672	80,375	49,424	69,118	44,627	178,133	2,055,802
Dec. 30	206,836	466,267	201,232	285,200	88,164	84,092	294,389	82,883	48,447	71,961	43,281	186,581	2,059,333
Legal-tender notes, silver, etc.:													
Dec. 3	9,843	135,291	655	2,117	893	2,073	11,594	6,219	196	2,225	3,972	442	175,520
Dec. 10	10,268	136,763	777	2,176	786	2,068	11,991	5,542	116	2,273	3,940	436	177,136
Dec. 17	10,888	138,261	690	2,043	904	2,348	12,075	5,450	127	2,309	4,255	750	180,100
Dec. 23	11,160	139,322	780	1,968	409	1,847	12,637	5,169	248	2,377	4,088	947	180,952
Dec. 30	12,322	143,975	1,025	2,126	361	1,999	13,944	6,021	257	2,313	4,351	1,136	189,830
Total reserves:													
Dec. 3	198,880	585,888	213,938	276,666	85,967	87,494	310,905	82,228	52,715	76,481	48,891	178,142	2,198,195
Dec. 10	204,520	598,036	212,138	276,875	91,643	86,732	310,388	80,953	51,564	75,279	48,781	175,498	2,212,407
Dec. 17	210,562	582,523	200,141	283,510	92,157	87,237	316,715	85,515	49,924	77,825	48,401	187,958	2,222,468
Dec. 23	214,355	612,940	202,211	301,077	82,237	88,119	301,309	85,544	49,672	71,495	48,715	179,080	2,236,754
Dec. 30	219,158	610,242	202,257	287,326	88,525	86,091	308,333	88,904	48,704	74,274	47,632	187,717	2,249,163
Bills discounted:[1]													
Secured by Government war obligations—													
Dec. 3	78,097	441,623	122,627	91,221	47,920	68,609	147,505	50,768	13,451	26,256	17,248	55,360	1,160,685
Dec. 10	78,622	424,658	132,622	90,242	47,903	68,718	153,792	49,996	17,137	26,157	19,940	59,457	1,169,244
Dec. 17	77,244	464,249	125,197	73,180	46,152	66,333	134,876	48,405	22,643	30,749	16,253	53,693	1,158,974
Dec. 23	83,469	461,011	124,911	93,381	45,853	60,837	140,645	49,308	15,570	27,707	19,318	55,253	1,177,263
Dec. 30	78,741	445,926	115,677	95,424	43,288	61,972	142,623	44,707	18,006	30,012	15,037	49,623	1,141,036
All other—													
Dec. 3	94,199	522,473	41,160	112,125	65,084	66,719	319,073	70,715	66,453	86,342	55,849	115,924	1,616,116
Dec. 10	86,606	495,043	32,929	100,003	62,075	68,507	307,789	70,499	63,559	87,661	55,509	117,415	1,547,595
Dec. 17	81,270	388,997	41,877	101,727	65,662	68,326	311,279	68,806	60,584	84,786	53,988	110,473	1,437,775
Dec. 23	98,459	446,196	49,157	98,364	69,429	74,098	337,232	66,645	62,593	86,727	54,945	110,583	1,554,428
Dec. 30	99,802	458,313	57,886	103,909	69,598	72,177	333,246	69,511	63,663	81,082	53,848	115,063	1,578,098
Bills bought in open market.[2]													
Dec. 3	21,391	89,924	13,795	27,511	5,376	2,565	24,986	1,612	1,483	1,651	215	52,546	243,055
Dec. 10	20,899	92,899	14,301	27,070	5,609	2,634	23,435	973	1,535	1,935	215	53,185	244,690
Dec. 17	19,282	89,357	13,620	26,074	5,737	2,637	24,505	1,908	1,303	1,741	215	48,230	234,609
Dec. 23	19,229	96,829	13,892	26,229	5,197	3,112	24,395	1,769	1,203	1,904	195	47,213	241,167
Dec. 30	19,532	109,902	12,893	26,581	5,252	3,492	25,961	1,146	1,413	2,017	247	47,266	255,702
United States Government bonds.													
Dec. 3	538	1,467	1,434	834	1,233	114	4,490	1,153	116	8,867	3,979	2,632	26,857
Dec. 10	539	1,467	1,434	833	1,233	114	4,490	1,153	116	8,867	3,979	2,632	26,857
Dec. 17	539	1,468	1,434	834	1,233	114	4,490	1,153	116	8,867	3,979	2,632	26,859
Dec. 23	539	1,468	1,434	834	1,233	114	4,490	1,153	116	8,867	3,979	2,632	26,859
Dec. 30	539	1,468	1,434	834	1,233	114	4,490	1,153	116	8,867	3,979	2,632	26,859
United States Victory notes:													
Dec. 3	5	50	....	10	....	3	....	....	....	1	....	....	69
Dec. 10	5	50	....	10	....	3	....	....	....	1	....	....	69
Dec. 17	5	50	....	10	....	3	....	....	....	1	....	....	69
Dec. 23	5	50	....	10	....	3	....	....	....	1	....	....	69
Dec. 30	5	50	....	10	....	3	....	....	....	1	....	....	69
United States certificates of indebtedness:													
Dec. 3	44,626	61,657	31,288	23,299	12,262	15,667	39,612	17,696	8,481	12,821	8,300	11,301	287,010
Dec. 10	45,131	72,121	31,447	43,799	12,262	16,168	49,612	16,851	8,481	12,821	8,300	11,301	328,294
Dec. 17	32,571	120,481	31,501	55,799	12,262	16,172	39,685	16,542	8,480	12,881	8,300	10,881	365,555
Dec. 23	21,574	78,666	31,311	23,799	12,262	16,672	39,896	16,108	8,480	12,820	8,300	11,365	281,253
Dec. 30	21,705	59,692	30,747	23,799	12,262	16,672	39,612	16,082	8,480	12,820	8,300	11,092	261,263

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Dec. 3 to 17, and on Thursdays, Dec. 23 and 30, 1920—Continued.

RESOURCES—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Total earning assets:													
Dec. 3	238,856	1,117,194	210,304	255,000	131,875	153,677	535,666	141,944	89,984	135,938	85,591	237,763	3,333,792
Dec. 10	231,802	1,086,238	212,733	261,957	129,082	156,144	539,118	139,472	90,828	137,442	87,943	243,990	3,316,749
Dec. 17	210,911	1,064,602	213,629	257,624	131,046	153,585	514,835	136,814	93,126	139,025	82,735	225,909	3,223,841
Dec. 23	223,275	1,084,220	220,705	242,617	133,974	154,836	546,658	134,983	87,962	138,026	86,737	227,046	3,281,039
Dec. 30	220,324	1,075,351	218,637	250,557	131,633	154,430	545,932	132,599	91,678	134,799	81,411	225,676	3,263,027
Bank premises:													
Dec. 3	2,456	4,211	680	1,583	1,334	625	2,345	891	631	915	1,554	231	17,456
Dec. 10	2,551	4,211	681	1,586	1,421	625	2,345	891	646	916	1,554	231	17,658
Dec. 17	2,595	4,216	681	1,624	1,421	629	2,379	891	646	1,018	1,621	231	17,952
Dec. 23	2,652	4,345	681	1,642	1,421	629	2,379	891	648	1,021	1,628	231	18,168
Dec. 30	2,697	4,377	681	1,649	1,447	629	2,379	891	658	1,041	1,639	362	18,450
Uncollected items and other deductions from gross deposits:													
Dec. 3	52,892	152,651	61,167	72,492	64,767	28,344	93,469	39,816	23,943	56,600	45,423	42,959	734,523
Dec. 10	48,635	126,827	56,372	63,433	58,196	27,749	83,354	38,859	22,663	53,408	43,513	43,496	666,505
Dec. 17	78,285	188,520	74,076	88,857	76,522	36,678	121,196	43,854	24,533	58,425	47,008	64,088	902,042
Dec. 23	58,362	159,126	63,271	72,772	62,198	31,691	102,840	42,442	22,507	58,085	42,169	45,542	761,005
Dec. 30	57,596	139,020	66,789	73,367	58,487	34,597	90,431	40,000	20,359	53,618	40,355	42,608	717,227
5 per cent redemption fund against Federal Reserve Bank notes:													
Dec. 3	1,072	2,649	1,300	1,139	451	527	1,782	623	487	916	586	665	12,197
Dec. 10	1,072	2,665	1,300	1,140	451	476	949	623	544	916	586	665	11,387
Dec. 17	1,072	2,684	1,300	1,139	451	616	2,092	623	386	916	586	665	12,530
Dec. 23	1,072	2,727	1,300	1,239	601	588	1,897	623	438	916	586	665	12,652
Dec. 30	1,072	2,766	1,300	1,239	601	614	1,820	623	550	916	586	665	12,752
All other resources:													
Dec. 3	998	942	918	344	678	222	756	489	177	297	1,370	525	7,716
Dec. 10	936	1,546	938	787	377	207	1,023	498	231	306	916	567	8,332
Dec. 17	448	1,341	982	327	759	202	1,051	824	171	387	1,294	644	8,430
Dec. 23	436	1,620	1,042	310	821	238	846	661	225	393	1,202	623	8,417
Dec. 30	521	1,584	1,055	318	1,177	304	939	623	298	374	1,061	644	8,898
Total resources:													
Dec. 3	495,154	1,863,535	488,307	607,224	285,072	270,889	944,923	265,991	167,937	271,147	183,415	460,285	6,303,879
Dec. 10	489,516	1,819,523	484,162	605,778	281,170	271,933	937,177	261,296	166,476	268,267	183,293	464,447	6,233,038
Dec. 17	503,873	1,843,886	490,809	633,081	302,356	278,947	958,268	268,521	168,786	277,596	181,645	479,495	6,387,263
Dec. 23	500,152	1,864,978	489,210	619,657	281,252	276,101	955,929	265,144	161,452	269,936	181,037	453,187	6,318,035
Dec. 30	501,368	1,833,340	490,719	614,456	281,870	276,665	949,834	263,640	162,247	265,022	172,684	457,672	6,269,517
[1] Includes bills discounted for other Federal Reserve Banks:													
Dec. 3	24,749	....	16,184	111,757	....	....	....	....	....	....	....	....	152,690
Dec. 10	17,796	....	18,666	88,920	....	....	....	....	....	....	....	....	125,382
Dec. 17	15,298	....	19,796	75,860	....	....	....	....	....	....	....	....	110,954
Dec. 23	19,926	....	21,779	78,489	....	....	....	....	....	....	....	....	120,194
Dec. 30	16,575	....	17,109	81,573	....	....	....	....	....	....	....	....	115,257
[2] Includes bankers' acceptances bought from other Federal Reserve Banks without their indorsement:													
Dec. 3	....	....	2,421	....	....	....	....	....	....	....	....	6,917	9,338
Dec. 10	....	....	1,006	....	....	....	....	....	....	....	....	6,917	7,923
Dec. 17	....	....	....	....	....	....	....	....	....	....	....	6,917	6,917
Dec. 23	....	....	....	....	....	....	....	....	....	....	....	6,917	6,917
Dec. 30	....	....	....	....	....	....	....	....	....	....	....	6,917	6,917

LIABILITIES.

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Capital paid in:													
Dec. 3	7,669	26,245	8,493	10,352	5,277	4,015	13,894	4,360	3,398	4,457	4,085	6,895	99,140
Dec. 10	7,718	26,185	8,493	10,352	5,285	4,023	13,901	4,364	3,398	4,460	4,091	6,904	99,174
Dec. 17	7,718	26,261	8,485	10,352	5,285	4,033	13,907	4,364	3,400	4,456	4,091	6,923	99,275
Dec. 23	7,718	26,376	8,485	10,354	5,283	4,049	13,911	4,364	3,437	4,456	4,098	6,927	99,458
Dec. 30	7,718	26,376	8,485	10,654	5,269	4,053	13,913	4,364	3,457	4,456	4,098	6,927	99,770
Surplus fund:													
Dec. 3	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Dec. 10	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Dec. 17	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Dec. 23	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Dec. 30	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Government deposits:													
Dec. 3	3,228	22,143	7,090	2,635	2,793	902	7,248	3,321	2,663	3,412	1,990	3,263	60,688
Dec. 10	1,137	8,981	1,482	1,709	2,150	1,312	1,702	1,880	1,205	2,478	1,599	2,759	28,394
Dec. 17	608	723	3,053	169	18,234	4,644	773	2,580	4,472	9,810	1,709	6,398	53,173
Dec. 23	1,898	941	836	1,899	2,365	1,731	4,496	1,716	865	2,116	2,510	4,676	26,049
Dec. 30	2,453	2,260	2,271	4,305	365	795	3,816	2,154	1,878	1,155	1,798	4,389	27,639
Due to members—reserve account:													
Dec. 3	113,993	696,393	109,218	147,258	57,964	45,749	240,163	65,643	42,499	78,777	47,419	118,746	1,763,822
Dec. 10	115,328	683,805	109,089	147,637	59,428	47,674	239,815	64,075	44,723	77,901	49,176	120,316	1,758,967
Dec. 17	117,120	683,866	103,116	152,346	58,828	45,635	230,634	63,293	44,710	76,067	48,285	114,926	1,738,826
Dec. 23	109,505	696,124	103,650	136,354	54,919	46,830	236,104	64,692	42,483	77,653	47,112	105,965	1,721,391
Dec. 30	116,600	693,474	106,675	145,617	56,710	48,345	240,241	65,660	43,882	74,521	44,593	112,661	1,748,979

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Dec. 3 to 17, and on Thursdays, Dec. 23 and 30, 1920—Continued.

LIABILITIES—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Deferred availability items:													
Dec. 3	41,796	96,546	49,122	61,159	49,699	22,307	59,106	36,138	21,225	48,597	31,770	34,064	551,529
Dec. 10	37,443	86,177	46,298	52,484	43,598	21,427	58,561	36,347	19,663	46,707	32,823	35,406	516,934
Dec. 17	45,358	110,830	53,931	76,821	46,266	25,832	80,934	41,512	18,063	48,134	31,654	34,831	614,166
Dec. 23	44,959	106,947	49,499	60,399	41,897	20,145	57,098	34,521	16,812	43,964	30,767	32,253	539,261
Dec. 30	42,720	94,273	49,191	58,313	40,948	21,446	59,610	35,003	16,291	45,056	28,308	31,479	522,638
Other deposits, including foreign Government credits:													
Dec. 3	680	13,036	1,364	445	244	234	2,402	638	297	457	260	5,685	25,742
Dec. 10	521	15,001	1,279	409	240	226	1,700	669	283	465	242	3,476	24,511
Dec. 17	828	13,068	1,792	998	323	262	2,870	781	722	965	427	15,435	38,471
Dec. 23	1,015	12,256	1,223	565	250	224	2,249	699	263	659	278	3,971	23,652
Dec. 30	716	11,284	1,202	413	270	251	1,946	542	512	469	268	4,288	22,161
Total gross deposits:													
Dec. 3	159,697	828,118	166,794	211,497	110,700	69,192	308,919	105,740	66,684	131,243	81,439	161,758	2,401,781
Dec. 10	154,429	793,964	158,148	202,239	105,416	70,639	301,778	102,971	65,874	127,551	83,840	161,957	2,328,806
Dec. 17	163,914	808,487	161,892	230,334	123,651	76,373	315,211	108,166	67,967	134,976	82,075	171,590	2,444,636
Dec. 23	157,377	816,268	155,208	199,217	99,431	68,930	299,947	101,628	60,423	124,392	80,667	146,865	2,310,353
Dec. 30	162,489	801,291	159,339	208,648	98,293	70,837	305,613	103,359	62,563	121,201	74,967	152,817	2,321,417
Federal Reserve notes in circulation:													
Dec. 3	290,251	873,360	272,128	341,873	146,184	172,230	543,176	136,081	82,036	108,002	83,780	262,938	3,312,039
Dec. 10	289,134	863,560	276,146	349,311	147,500	171,693	541,967	134,279	81,404	108,856	81,181	266,811	3,311,842
Dec. 17	293,067	871,522	278,821	348,232	150,399	172,551	547,950	136,374	81,501	110,768	81,296	271,851	3,344,332
Dec. 23	295,140	880,870	283,740	365,707	153,552	176,931	559,683	139,721	81,493	113,553	81,993	272,548	3,404,931
Dec. 30	291,196	864,516	280,960	350,725	155,162	175,166	548,191	136,610	80,067	111,874	79,474	270,745	3,344,686
Federal Reserve Bank notes in circulation—net liability:													
Dec. 3	18,893	36,990	22,162	22,553	11,619	14,538	37,848	10,328	7,681	14,563	7,325	10,439	214,939
Dec. 10	19,430	36,040	22,506	22,675	11,574	14,580	37,967	10,106	7,628	14,400	7,327	10,290	214,523
Dec. 17	20,232	36,754	22,527	22,802	11,562	14,929	38,911	9,918	7,648	14,357	7,314	10,480	217,434
Dec. 23	20,588	39,807	22,591	22,900	11,426	15,012	39,359	9,741	7,713	14,364	7,321	8,010	218,832
Dec. 30	20,441	38,741	22,581	22,715	11,489	15,271	38,984	9,524	7,713	14,241	7,124	8,136	216,960
All other liabilities:													
Dec. 3	6,293	47,514	5,661	7,237	3,225	3,864	17,169	3,598	2,960	4,487	2,634	6,593	111,235
Dec. 10	6,454	48,466	5,800	7,489	3,328	3,948	17,647	3,692	2,994	4,605	2,702	6,823	113,948
Dec. 17	6,591	49,554	6,015	7,649	3,392	4,011	18,372	3,815	3,092	4,644	2,717	6,989	116,841
Dec. 23	6,978	50,349	6,117	7,767	3,493	4,129	19,112	3,806	3,208	4,776	2,806	7,175	119,716
Dec. 30	7,173	51,108	6,285	8,002	3,590	4,288	19,216	3,899	3,269	4,855	2,869	7,385	121,939
Total liabilities:													
Dec. 3	495,154	1,863,535	488,307	607,224	285,072	270,889	944,923	265,991	167,937	271,147	183,415	460,285	6,303,879
Dec. 10	489,516	1,819,523	484,162	605,778	281,170	271,933	937,177	261,296	166,476	268,267	183,293	464,447	6,233,038
Dec. 17	503,873	1,843,886	490,809	633,081	302,356	278,947	958,268	268,521	168,786	277,596	181,645	479,495	6,387,263
Dec. 23	500,152	1,864,978	489,210	619,657	281,252	276,101	955,929	265,144	161,452	269,936	181,037	453,187	6,318,035
Dec. 30	501,368	1,833,340	490,719	614,456	281,870	276,665	949,834	263,640	162,247	265,022	172,684	457,672	6,269,517
MEMORANDA.													
Ratio of total reserves to net deposit and Federal Reserve note liabilties combined—per cent.													
Dec. 3	50.1	37.8	56.6	57.5	44.7	41.1	41.0	40.7	42.2	41.9	40.8	46.7	44.1
Dec. 10	51.8	39.1	56.1	56.7	47.1	40.4	40.8	40.8	41.4	41.1	40.1	45.6	44.5
Dec. 17	55.6	39.1	54.6	57.9	46.1	41.1	42.7	42.6	40.4	41.5	41.6	49.5	45.5
Dec. 23	54.4	39.9	53.8	61.2	43.1	41.1	39.8	43.0	41.6	39.8	40.4	47.9	45.1
Dec. 30	55.3	40.0	54.2	59.1	45.4	40.7	40.4	44.5	39.8	41.4	41.8	49.3	45.4
Contingent liability as indorser on discounted paper rediscounted with other Federal Reserve Banks:													
Dec. 3	....	6,700	....	....	10,000	41,419	....	7,937	24,041	32,030	30,563	....	152,690
Dec. 10	....	6,400	....	....	9,831	35,912	....	....	15,166	28,265	29,808	....	125,382
Dec. 17	....	....	....	....	9,873	35,018	....	....	11,684	27,764	26,615	....	110,954
Dec. 23	....	....	....	....	10,000	36,757	....	....	19,299	31,000	23,138	....	120,194
Dec. 30	....	....	....	....	10,000	33,659	....	....	14,801	29,086	27,711	....	115,257
Bankers' acceptances sold to other Federal Reserve Banks without indorsement:													
Dec. 3	....	9,338	....	....	....	....	....	....	....	....	....	....	9,338
Dec. 10	....	7,923	....	....	....	....	....	....	....	....	....	....	7,923
Dec. 17	....	6,917	....	....	....	....	....	....	....	....	....	....	6,917
Dec. 23	....	6,917	....	....	....	....	....	....	....	....	....	....	6,917
Dec. 30	....	6,917	....	....	....	....	....	....	....	....	....	....	6,917
Contingent liability on bills purchased for foreign correspondents:													
Dec. 3	1,168	6,075	1,280	1,312	784	576	1,904	752	432	768	416	736	16,203
Dec. 10	1,168	6,073	1,280	1,312	784	576	1,904	752	432	768	416	736	16,201
Dec. 17	1,168	6,077	1,280	1,312	784	576	1,904	752	432	768	416	736	16,205
Dec. 23	1,168	6,077	1,280	1,312	784	576	1,904	752	432	768	416	736	16,205
Dec. 30	1,168	6,076	1,280	1,312	784	576	1,904	752	432	768	416	736	16,204

Maturities of bills discounted and bought, also of Treasury certificates of indebtedness held by the 12 Federal Reserve Banks combined.

[In thousands of dollars.]

	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.	Total.
Bills discounted:						
Dec. 3	1,694,523	262,847	498,665	269,328	51,438	2,776,801
Dec. 10	1,644,746	264,308	483,727	268,111	55,947	2,716,839
Dec. 17	1,504,172	291,146	461,966	278,583	60,882	2,596,749
Dec. 23	1,608,042	320,421	405,606	328,397	69,225	2,731,691
Dec. 30	1,632,885	280,406	430,676	311,619	63,548	2,719,134
Bills bought:						
Dec. 3	78,942	57,390	89,841	16,882	....	243,055
Dec. 10	82,072	60,706	86,765	15,147	....	244,690
Dec. 17	70,370	61,770	85,226	17,243	....	234,609
Dec. 23	80,304	63,995	75,119	21,749	....	241,167
Dec. 30	87,030	64,745	76,805	27,122	....	255,702
United States certificates of indebtedness:						
Dec. 3	41,417	8,859	7,166	4,999	224,569	287,010
Dec. 10	60,382	10,216	14,398	11,499	231,799	328,294
Dec. 17	117,908	3,133	4,500	8,886	231,128	365,555
Dec. 23	30,910	3,120	41,950	8,953	196,320	281,253
Dec. 30	10,924	3,446	4,499	9,492	232,902	261,263

FEDERAL RESERVE NOTES.

Federal Reserve agents' accounts at close of business on Fridays, Dec. 3 to Dec. 17, and on Thursdays, Dec. 23 and 30, 1920

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
RESOURCES.													
Federal Reserve notes on hand:													
Dec. 3	101,500	162,500	35,680	32,200	24,429	63,070	128,360	17,620	10,650	6,290	14,690	....	596,989
Dec. 10	113,640	163,500	37,680	31,900	26,149	62,735	121,320	17,620	10,290	6,130	15,280	....	606,244
Dec. 17	113,440	157,200	32,180	29,960	24,469	62,595	128,360	25,980	9,840	5,530	15,000	6,000	610,554
Dec. 23	113,640	145,500	27,180	20,420	22,069	59,055	119,840	23,980	8,650	2,820	12,871	33,880	589,905
Dec. 30	118,840	168,000	23,380	31,080	25,579	60,390	123,360	23,780	9,440	3,820	14,170	36,540	638,379
Federal Reserve notes outstanding:													
Dec. 3	307,829	1,000,046	286,204	367,953	151,771	177,092	633,302	154,834	83,698	113,584	88,124	300,512	3,664,949
Dec. 10	305,632	1,002,794	287,902	365,712	154,083	176,532	640,839	155,898	83,509	114,770	86,115	303,776	3,677,562
Dec. 17	304,163	1,005,464	288,970	370,134	157,478	176,410	635,931	154,484	83,160	117,364	85,274	303,923	3,682,755
Dec. 23	307,163	1,031,177	291,852	383,788	160,842	181,164	641,004	157,502	83,701	119,756	86,392	310,905	3,755,246
Dec. 30	305,503	1,030,354	293,624	379,751	161,252	179,946	634,429	155,722	81,836	118,605	84,714	313,144	3,738,880
Collateral security for Federal Reserve notes outstanding:													
Gold and gold certificates—													
Dec. 3	5,900	209,608	....	22,775	....	3,500	....	7,560	13,052	....	5,331	....	267,726
Dec. 10	5,600	209,608	....	22,775	....	3,500	....	7,560	13,052	....	5,331	....	267,426
Dec. 17	5,600	209,608	....	22,775	....	3,500	....	7,560	13,052	....	4,331	....	266,426
Dec. 23	5,600	209,608	....	22,775	....	3,500	....	7,560	13,052	....	4,331	....	266,426
Dec. 30	5,600	209,608	....	22,775	....	3,500	....	6,060	13,052	....	4,331	....	264,926
Gold redemption fund—													
Dec. 3	27,343	13,628	18,408	18,940	2,366	2,482	8,882	4,209	1,125	2,318	4,650	19,533	123,884
Dec. 10	22,785	12,592	16,105	19,399	2,938	3,207	8,340	4,292	1,176	3,283	5,230	17,474	116,821
Dec. 17	25,616	11,157	16,674	20,401	3,273	3,705	8,432	3,679	1,377	2,277	6,110	15,374	118,075
Dec. 23	22,816	10,519	14,555	19,955	1,758	2,979	8,985	4,056	1,728	3,039	5,097	13,869	109,356
Dec. 30	19,757	9,967	17,527	19,919	2,917	3,336	10,410	4,077	1,653	3,888	5,919	19,226	118,596
Gold settlement fund—Federal Reserve Board—													
Dec. 3	95,000	25,000	114,389	110,000	42,500	54,500	174,145	36,631	11,200	36,360	17,234	85,635	802,594
Dec. 10	105,000	15,000	114,389	120,000	49,000	55,800	183,144	36,031	11,200	36,360	15,234	85,158	826,316
Dec. 17	110,000	25,000	115,389	135,000	46,000	53,800	203,144	36,031	11,200	37,360	13,234	99,066	885,224
Dec. 23	110,000	15,000	115,389	135,000	46,000	56,100	199,144	38,031	11,200	37,360	13,234	101,252	877,710
Dec. 30	110,000	35,000	115,389	135,000	51,000	54,000	188,144	39,531	11,200	37,360	16,234	99,834	892,692
Eligible paper—													
Amount required—													
Dec. 3	179,586	751,810	153,407	216,238	106,905	116,610	450,275	106,434	58,321	74,906	60,909	195,344	2,470,745
Dec. 10	172,247	765,594	157,408	203,538	102,145	114,025	449,355	108,015	58,081	75,127	60.320	201,144	2,466,999
Dec. 17	162,947	759,699	156,907	191,958	108,205	115,405	424,355	107,214	57,531	77,727	61,599	189,483	2,413,030
Dec. 23	168,747	796,050	161,908	206,058	113,084	118,585	432,875	107,855	57,721	79,357	63,730	195.784	2,501,754
Dec. 30	170,146	775,779	160,708	202,057	107,335	119,110	435,875	106,054	55,931	77,357	58,230	194,084	2,462,666
Excess amount held—													
Dec. 3	14,101	266,113	5,085	13,765	6,723	21,237	40,997	16.650	8,255	39,175	12,403	14,593	459,097
Dec. 10	13,880	214,299	13,428	12,295	11,994	25,820	35,653	13,443	15,453	40,526	15,344	19,470	431,605
Dec. 17	14,849	149,278	6,095	8,150	4,565	21,847	45,785	11,830	13,314	39,443	8,857	9,623	333,636
Dec. 23	32,410	176,671	7,708	10,759	4,966	17,180	68,970	9,784	8,225	36,816	10,728	6,037	390,254
Dec. 30	27,929	207,707	7,661	22,493	9,840	16,263	65,544	9,152	13,302	35,574	10,902	3,972	430,339
Total resources:													
Dec. 3	731,259	2,428,705	613,173	781 871	334 694	438 491	1,435,961	343,938	186,301	272,633	203,341	615,617	8,385,984
Dec. 10	738,784	2,383,387	626,912	775,619	346,309	441,619	1,438,651	342,859	192,761	276,196	202,854	627,022	8,392,973
Dec. 17	736,615	2,317,406	616,215	778,378	343,990	437,262	1,446,007	346,778	189,474	279,701	194,405	623,469	8,309,700
Dec. 23	760,376	2,384,525	618,592	798,755	348 719	438,563	1 470,818	348,768	184,277	279,148	196,383	661,727	8,490,651
Dec. 30	757,775	2,436,415	618,289	813,075	357,923	436,545	1,457,762	344,376	186,414	276,604	194,500	666,800	8,546,478

Federal Reserve agents' accounts at close of business on Fridays, Dec. 3 to 17, and on Thursdays, Dec. 23 and 30, 1920—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
LIABILITIES.													
Federal Reserve notes received from Comptroller of the Currency—gross:													
Dec. 3	728,400	2,365,100	674,580	703,520	391,600	411,960	1,252,860	389,820	187,720	262,520	196,160	543,640	8,107,880
Dec. 10	742,900	2,371,640	680,580	703,520	398,060	412,840	1,259,900	392,800	188,120	264,580	196,160	549,440	8,160,540
Dec. 17	748,400	2,378,640	680,580	711,000	402,440	414,880	1,271,940	402,360	188,120	267,580	196,160	558,780	8,220,880
Dec. 23	754,400	2,396,480	680,580	717,560	404,920	416,820	1,271,940	405,000	188,120	268,500	196,161	595,460	8,295,941
Dec. 30	761,000	2,420,080	680,580	728,220	410,680	418,680	1,278,460	405,000	188,120	269,500	196,960	602,920	8,360,200
Less amounts returned for destruction:													
Dec. 3	319,071	1,202,554	352,696	303,367	215,400	171,798	491,198	217,366	93,372	142,646	93,346	243,128	3,845,942
Dec. 10	323,628	1,205,346	354,998	305,908	217,828	173,573	497,741	219,282	94,321	143,680	94,765	245,664	3,876,734
Dec. 17	330,797	1,215,976	359,430	310,906	220,493	175,875	507,649	221,896	95,120	144,686	95,886	248,857	3,927,571
Dec. 23	333,597	1,219,803	361,548	313,352	222,009	176,601	511,096	223,518	95,769	145,924	96,898	250,675	3,950,790
Dec. 30	336,657	1,221,726	363,576	317,389	223,849	178,344	520,671	225,498	96,844	147,075	98,076	253,236	3,982,941
Net amount of Federal Reserve notes received from Comptroller of the Currency:													
Dec. 3	409,329	1,162,546	321,884	400,153	176,200	240,162	761,662	172,454	94,348	119,874	102,814	300,512	4,261,938
Dec. 10	419,272	1,166,294	325,582	397,612	180,232	239,267	762,159	173,518	93,799	120,900	101,395	303,776	4,283,806
Dec. 17	417,603	1,162,664	321,150	400,094	181,947	239,005	764,291	180,464	93,000	122,894	100,274	309,923	4,293,309
Dec. 23	420,803	1,176,677	319,032	404,208	182,911	240,219	760,844	181,482	92,351	122,576	99,263	344,785	4,345,151
Dec. 30	424,343	1,198,354	317,004	410,831	186,831	240,336	757,789	179,502	91,276	122,425	98,884	349,684	4,377,259
Collateral received from Federal Reserve Bank:													
Gold—													
Dec. 3	128,243	248,236	132,797	151,715	44,866	60,482	183,027	48,400	25,377	38,678	27,215	105,168	1,194,204
Dec. 10	133,385	237,200	130,494	162,174	51,938	62,507	191,484	47,883	25,428	39,643	25,795	102,632	1,210,563
Dec. 17	141,216	245,765	132,063	178,176	49,273	61,005	211,576	47,270	25,629	39,637	23,675	114,440	1,269,725
Dec. 23	138,416	235,127	129,944	177,730	47,758	62,579	208,129	49,647	25,980	40,399	22,662	115,121	1,253,492
Dec. 30	135,357	254,575	132,916	177,694	53,917	60,836	198,554	49,668	25,905	41,248	26,484	119,060	1,276,214
Eligible paper—													
Dec. 3	193,687	1,017,923	158,492	230,003	113,628	137,847	491,272	123,084	66,576	114,081	73,312	209,937	2,929,842
Dec. 10	186,127	979,893	170,836	215,833	114,139	139,845	485,008	121,458	73,534	115,653	75,664	220,614	2,898,604
Dec. 17	177,796	908,977	163,002	200,108	112,770	137,252	470,140	119,044	70,845	117,170	70,456	199,106	2,746,666
Dec. 23	201,157	972,721	169,616	216,817	118,050	135,765	501,845	117,639	65,946	116,173	74,458	201,821	2,892,008
Dec. 30	198,075	983,486	168,369	224,550	117,175	135,373	501,419	115,206	69,233	112,931	69,132	198,056	2,893,005
Total liabilities:													
Dec. 3	731,259	2,428,705	613,173	781,871	334,694	438,491	1,435,961	343,938	186,301	272,633	203,341	615,617	8,385,984
Dec. 10	738,784	2,383,387	626,912	775,619	346,309	441,619	1,438,651	342,859	192,761	276,196	202,854	627,022	8,392,973
Dec. 17	736,615	2,317,406	616,215	778,378	343,990	437,262	1,446,007	346,778	189,474	279,701	194,405	623,469	8,309,700
Dec. 23	760,376	2,384,525	618,592	798,755	348,719	438,563	1,470,818	348,768	184,277	279,148	196,383	661,727	8,490,651
Dec. 30	757,775	2,436,415	618,289	813,075	357,923	436,545	1,457,762	344,376	186,414	276,604	194,500	666,800	8,546,478

CONDITION OF MEMBER BANKS IN LEADING CITIES.

Changes in condition of reporting member banks for the five-week period from November 19 to December 24 were so much influenced by fiscal operations of the Treasury on December 15 that the developments of the first three weeks must be considered separately from those of the last two weeks. For the three weeks ending December 10 the banks show liquidation of 91 millions of Treasury certificates and of 147 millions of "all other loans and investments," composed largely of commercial loans and discounts, accompanied by a decline of 126 millions in net demand deposits. December 15 was the day when the last installment of the income and excess profits tax fell due and when the Treasury redeemed about 700 millions and issued about 590 millions of tax certificates. These occurrences are reflected in the next bank statement in aggregate increases of 125 millions in United States security holdings and of 96 millions in the other classes of loans and investments, accompanied by a decline of 52 millions in net demand deposits and of 112 millions in borrowings from Federal Reserve Banks. The last week of the period saw considerable liquidation of United States security holdings and of loans, together with a reduction in demand deposits and the resumption of borrowings from Federal Reserve Banks on a large scale.

Principal resources and liabilities of the reporting banks on each Friday from November 19 to December 24 are shown in the following table:

Resources and liabilities of member banks in leading cities on Fridays from Nov. 19 to Dec. 24, 1920.

[In millions of dollars.]

	Nov. 19.	Nov. 26.	Dec. 3.	Dec. 10.	Dec. 17.	Dec. 24.
Number of banks	824	824	823	823	824	824
United States bonds	885	884	883	886	892	903
United States Victory notes	195	194	196	198	198	202
United States certificates of indebtedness	345	313	276	254	373	311
Total United States securities owned	1,425	1,391	1,355	1,338	1,463	1,416
Loans secured by Government war obligations, including rediscounts with Federal Reserve Bank	894	906	901	897	901	889
Loans secured by corporate stocks and bonds	3,044	3,055	3,050	3,064	3,104	3,127
All other loans investments, including rediscounts with Federal Reserve Bank	11,430	11,380	11,324	11,283	11,335	11,260
Total loans and investments, including rediscounts with Federal Reserve Bank	16,793	16,732	16,630	16,582	16,803	16,692
Reserve balance with Federal Reserve Bank	1,344	1,287	1,332	1,330	1,297	1,334
Cash in vault	378	388	376	376	381	356
Net demand deposits	10,992	10,892	10,837	10,866	10,814	10,654
Time deposits	2,786	2,811	2,822	2,809	2,790	2,789
Government deposits	173	88	18	17	400	344
Bills discounted and rediscounted with Federal Reserve Bank, total	2,119	2,174	2,210	2,144	2,032	2,174
Secured by Government war obligations	884	914	877	883	888	899
All other	1,235	1,260	1,333	1,261	1,144	1,275

For the entire five-week period ending December 24 reporting member banks show increases of 19 millions in holdings of United States bonds, including circulation and Liberty bonds, and of 7 millions in holdings of Victory notes. Treasury certificates held showed a continuous decline for three weeks, followed by an increase for the week ending December 17 and a reduction for the following week, at the end of which they stood at 311 millions, as against 345 millions five weeks earlier. Loans secured by Government war obligations show moderate fluctuations from week to week, the total on the latest Friday, 889 millions, being 5 millions below the November 19 amount. Loans secured by corporate stocks and bonds, on the other hand, show an almost uninterrupted expansion amounting to 83 millions for the five weeks, the expansion for the New York City members alone being even larger than this total. All other loans and investments, including commercial loans and discounts, followed a course described in the opening paragraph and stood on December 24 at 11,261 millions, or 169 millions below the figure shown five weeks earlier. As a consequence of these changes, total loans and investments of reporting banks show a reduction of 102 millions for the period under review.

Government deposits dropped from 173 millions on November 19 to but 17 millions on December 10, but rose to 400 millions on the following Friday, declining again to 344 millions on December 24. Other demand deposits (net) show a continuous decline, except for the week of December 10, and stood at the end of the five weeks at 10,654 millions, 338 millions below the amount at the beginning of the period. Time deposits grew from 2,786 millions on November 19 to 2,822 millions on December 3; then, largely as the result of withdrawals of Christmas savings accounts, they declined to 2,789 millions on December 24.

Member-bank borrowings from the Federal Reserve Banks show a rise from 2,119 millions on November 19 to 2,210 millions on December 3, followed by a decline of 178 millions for the following two weeks, the aggregate on December 17, the Friday after the income tax payments by the public and the issue and redemption of large volumes of Treasury certificates, being 2,032 millions. The last week of the review period saw a resumption of borrowings from the Federal Reserve Banks, the amount on December 24, 2,174 millions, being 55 millions larger than the figure shown five weeks earlier. This increase in borrowings, together with the reduction of 102 millions in total loans and investments, accounts for the rise in the ratio of accommodation to total loans and investments from 12.6 to 13 per cent.

Reserve balances of reporting members with the Federal Reserve Banks show considerable variations from week to week, but stood at the end of the five-week period only about 10 millions below the figure at its beginning. Cash in vault, after minor fluctuations for the first three weeks of the period, shows the effect of the Christmas demand by a drop of 25 millions for the week ending December 24, a week for which the Federal Reserve Banks show an increase of 60 millions in Federal Reserve note circulation. The amount of cash in vault on December 24 was 356 millions, compared with 378 millions five weeks earlier.

Principal resource and liability items of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities, as at close of business on Fridays from Nov. 26 to Dec. 17, 1920.

1. ALL REPORTING MEMBER BANKS.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Number of reporting banks:													
Nov. 26	48	115	59	93	80	46	108	35	38	83	51	68	824
Dec. 3	48	114	59	93	80	46	108	35	38	83	51	68	823
Dec. 10	48	114	59	93	80	46	108	35	38	83	51	68	823
Dec. 17	48	114	59	93	80	46	108	35	38	83	51	69	824
Dec. 24	48	114	59	93	80	46	108	35	38	83	51	69	824
United States bonds to secure circulation:													
Nov. 26	12,610	47,459	11,347	42,440	28,958	14,580	21,548	16,222	7,571	14,751	19,573	32,648	269,707
Dec. 3	12,610	46,729	11,347	42,464	29,008	14,630	21,548	16,222	7,571	14,751	19,573	32,648	269,101
Dec. 10	12,711	46,791	11,347	42,464	29,008	14,630	21,548	16,221	7,571	14,751	19,573	32,649	269,264
Dec. 17	12,711	46,966	11,347	42,513	29,008	14,670	21,547	16,121	7,571	14,751	19,581	32,648	269,434
Dec. 24	12,711	46,791	11,347	42,515	29,118	14,630	21,548	15,921	7,571	14,751	19,581	32,648	269,132
Other United States bonds, including Liberty bonds:													
Nov. 26	19,677	251,455	30,280	61,813	33,463	27,950	53,624	13,670	10,106	23,446	22,490	66,479	614,453
Dec. 3	20,375	252,879	30,460	61,873	33,916	27,986	53,691	13,810	9,942	23,206	22,650	63,145	613,933
Dec. 10	20,235	250,746	30,538	62,152	33,623	27,909	56,201	14,030	10,005	23,523	22,761	65,482	617,205
Dec. 17	20,603	249,535	32,671	61,786	33,595	27,921	60,288	14,576	9,971	23,078	22,156	65,891	622,071
Dec. 24	20,922	253,730	32,355	62,665	33,644	27,975	65,163	14,168	9,887	24,808	21,812	67,213	634,342
United States Victory notes:													
Nov. 26	5,750	84,429	9,411	19,488	6,713	3,959	37,307	2,741	1,006	5,204	3,167	14,906	194,081
Dec. 3	5,866	85,999	9,637	20,158	6,775	3,949	36,454	2,723	1,020	5,388	3,174	15,136	196,279
Dec. 10	5,843	87,498	9,469	20,165	6,728	4,125	36,451	2,706	1,021	5,203	3,156	15,204	197,569
Dec. 17	5,861	89,316	11,177	20,310	6,905	4,174	33,069	2,816	1,018	5,326	2,785	15,096	197,853
Dec. 24	5,850	90,614	12,140	20,363	6,884	4,161	31,799	2,836	1,021	5,538	2,725	18,162	202,093
United States certificates of indebtedness:													
Nov. 26	18,369	152,744	16,250	15,523	7,896	6,733	50,331	4,439	1,688	6,937	5,434	26,835	313,179
Dec. 3	14,975	127,310	15,452	13,882	7,175	6,771	47,176	3,652	1,683	6,828	5,431	25,810	276,145
Dec. 10	14,718	105,030	14,252	13,256	7,277	6,727	49,034	3,631	1,682	6,862	5,252	25,856	253,577
Dec. 17	27,020	197,449	20,224	27,918	8,496	3,173	39,229	6,214	3,207	8,378	4,058	28,120	373,486
Dec. 24	19,931	160,799	15,101	24,138	7,699	3,333	35,863	4,452	2,022	7,472	3,748	26,263	310,821
Total United States securities owned:													
Nov. 26	56,406	536,087	67,288	139,264	77,030	53,222	162,810	37,072	20,371	50,338	50,664	140,868	1,391,420
Dec. 3	53,826	512,917	66,896	138,377	76,874	53,336	158,869	36,407	20,216	50,173	50,828	136,739	1,355,458
Dec. 10	53,507	490,065	65,606	138,037	76,636	53,391	163,234	36,588	20,279	50,339	50,742	139,191	1,337,615
Dec. 17	66,195	583,266	75,419	152,527	78,004	49,938	154,133	39,727	21,767	51,533	48,580	141,755	1,462,844
Dec. 24	59,414	551,934	70,943	149,681	77,345	50,099	154,373	37,377	20,501	52,569	47,866	144,286	1,416,388
Loans secured by Government war obligations, including rediscounts with Federal Reserve Bank:													
Nov. 26	47,090	425,081	75,184	70,859	30,665	30,989	101,104	32,646	16,504	31,165	10,427	33,963	905,677
Dec. 3	47,037	427,243	74,205	69,051	28,994	30,886	100,359	32,034	16,461	30,199	10,318	34,091	900,878
Dec. 10	48,179	428,733	75,203	69,335	28,589	30,548	93,354	32,399	15,761	29,832	10,231	34,401	896,565
Dec. 17	47,756	427,797	75,649	70,395	28,695	29,722	96,938	32,708	15,664	30,127	10,433	35,333	901,217
Dec. 24	50,105	420,514	77,368	69,593	28,424	30,708	92,272	29,318	15,628	29,736	10,298	34,684	888,648
Loans secured by stocks and bonds other than United States securities:													
Nov. 26	194,219	1,275,116	211,233	324,489	112,434	63,245	446,290	128,900	32,560	79,491	37,985	148,827	3,054,789
Dec. 3	193,980	1,283,742	202,294	328,906	111,460	61,943	439,652	128,045	34,514	79,000	38,510	148,036	3,050,082
Dec. 10	193,890	1,286,104	201,499	332,317	115,690	60,820	446,461	127,530	35,135	78,226	38,598	147,996	3,064,266
Dec. 17	196,029	1,313,960	205,268	332,954	113,310	61,419	448,163	125,558	36,456	79,633	38,712	152,138	3,103,600
Dec. 24	200,216	1,330,510	207,115	330,905	113,479	59,801	452,530	126,775	36,388	80,330	38,505	150,018	3,126,572
All other loans and investments, including rediscounts with Federal Reserve Bank:													
Nov. 26	804,550	4,018,781	581,186	977,810	388,023	410,536	1,757,693	386,120	297,431	507,677	258,508	991,811	11,380,126
Dec. 3	799,918	3,991,070	572,847	977,886	387,776	411,284	1,740,578	384,362	292,733	506,752	256,244	1,002,317	11,323,767
Dec. 10	798,563	3,996,104	566,711	966,070	384,932	399,974	1,737,925	381,993	287,986	501,355	253,902	1,007,584	11,283,099
Dec. 17	806,027	4,001,031	569,156	981,122	388,592	413,347	1,751,164	386,136	282,341	499,756	254,744	1,002,149	11,335,565
Dec. 24	802,958	3,968,055	565,042	985,150	391,445	404,777	1,755,137	383,284	281,074	492,488	251,507	979,627	11,260,544
Total loans and investments, including rediscounts with Federal Reserve Bank:													
Nov. 26	1,102,265	6,255,065	934,891	1,512,422	608,152	557,992	2,467,897	584,738	366,866	668,671	357,584	1,315,469	16,732,012
Dec. 3	1,094,761	6,214,972	916,242	1,514,220	605,104	557,449	2,439,458	580,848	363,924	666,124	355,900	1,321,183	16,630,185
Dec. 10	1,094,139	6,201,006	909,019	1,505,759	605,847	544,733	2,440,974	578,510	359,161	659,752	353,473	1,329,172	16,581,545
Dec. 17	1,116,007	6,326,054	925,492	1,536,998	608,601	554,426	2,450,398	584,129	356,228	661,049	352,469	1,331,375	16,803,226
Dec. 24	1,112,693	6,271,013	920,468	1,535,329	610,693	545,385	2,454,312	576,754	353,591	655,123	348,176	1,308,615	16,692,152
Reserve balances with Federal Reserve Bank:													
Nov. 26	77,686	603,187	66,412	97,974	34,222	30,126	177,201	38,934	20,179	39,419	21,993	79,613	1,286,946
Dec. 3	78,398	635,798	67,211	99,715	35,099	28,246	178,695	41,376	18,519	45,629	23,443	79,952	1,332,081
Dec. 10	79,633	624,911	67,900	100,159	35,752	32,372	179,675	40,923	20,163	43,760	23,999	81,020	1,330,267
Dec. 17	79,750	621,055	61,324	102,282	35,724	28,095	168,037	37,918	20,305	42,366	22,880	77,495	1,297,231
Dec. 24	76,866	636,255	67,317	97,684	34,877	28,538	177,104	42,911	20,973	49,554	23,600	78,129	1,333,808
Cash in vault:													
Nov. 26	26,170	132,913	20,110	34,403	19,294	13,842	66,867	9,581	9,763	15,153	12,250	27,759	388,105
Dec. 3	27,011	125,817	20,580	37,279	17,970	13,113	65,689	9,345	8,243	13,963	11,066	25,811	375,887
Dec. 10	26,280	126,150	21,390	33,810	18,313	16,335	62,914	9,459	8,910	14,844	12,205	25,586	376,196
Dec. 17	27,840	123,000	22,442	39,177	18,145	14,529	64,069	11,328	8,218	14,798	11,088	26,557	381,191
Dec. 24	26,278	122,296	19,196	31,819	16,919	12,841	61,089	8,229	8,245	13,728	11,301	24,169	356,110

Principal resource and liability items of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities, as at close of business on Fridays from Nov. 26 to Dec. 17, 1920—Contd.

1. ALL REPORTING MEMBER BANKS—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Net demand deposits on which reserve is computed:													
Nov. 26	782,234	4,883,600	679,899	921,620	330,956	240,582	1,309,283	303,632	194,807	394,911	217,448	633,150	10,892,122
Dec. 3	775,521	4,836,695	675,626	939,869	332,729	240,275	1,301,712	303,560	192,796	394,868	215,975	627,852	10,837,478
Dec. 10	774,810	4,859,728	674,531	927,626	335,696	239,511	1,309,830	309,110	198,106	395,757	214,555	626,322	10,865,582
Dec. 17	780,564	4,887,166	654,250	914,296	328,667	232,442	1,287,119	306,216	188,954	387,976	215,277	631,527	10,814,454
Dec. 24	748,775	4,824,946	652,179	881,283	323,293	234,538	1,267,642	306,595	185,564	393,146	213,958	621,639	10,653,558
Time deposits:													
Nov. 26	159,661	449,474	39,755	381,544	107,963	150,133	640,078	130,781	68,542	99,066	57,693	526,433	2,811,123
Dec. 3	158,630	444,210	39,360	389,371	108,317	150,539	643,865	131,165	70,456	99,645	58,017	528,665	2,822,240
Dec. 10	158,535	431,152	38,728	387,469	108,193	152,088	644,536	130,777	70,364	100,037	58,108	529,487	2,809,474
Dec. 17	158,474	420,200	37,239	385,399	106,710	149,140	644,790	130,554	71,118	99,475	57,940	529,158	2,790,197
Dec. 24	156,284	422,771	36,516	383,291	109,377	148,197	643,114	130,239	70,411	99,597	57,776	531,076	2,788,649
Government deposits:													
Nov. 26	6,763	38,208	5,769	12,630	1,564	871	9,516	3,247	1,411	1,084	873	5,863	87,799
Dec. 3	1,346	7,604	1,151	2,479	394	229	1,832	698	280	218	157	1,115	17,503
Dec. 10	1,346	7,559	1,151	2,479	412	104	1,832	649	267	218	155	1,126	17,298
Dec. 17	33,108	202,671	32,000	47,555	9,551	3,534	33,993	10,365	5,379	6,427	2,112	13,273	399,968
Dec. 24	28,050	171,957	27,195	44,949	8,137	3,220	28,034	8,802	4,567	5,184	1,794	12,124	344,013
Bills payable with Federal Reserve Bank:													
Secured by United States war obligations—													
Nov. 26	30,360	304,588	50,113	32,611	32,178	32,992	83,445	22,478	5,513	19,450	17,192	28,850	659,770
Dec. 3	29,568	283,427	46,977	24,090	30,841	32,662	79,243	22,747	5,911	20,171	17,741	29,640	623,018
Dec. 10	30,882	269,483	47,609	36,341	30,348	33,383	84,135	21,950	6,186	19,595	17,582	32,909	630,403
Dec. 17	31,130	309,971	44,756	31,100	29,560	31,288	66,110	21,973	7,984	19,925	13,177	28,511	635,485
Dec. 24	32,716	302,349	46,682	39,760	30,561	30,562	69,738	23,557	5,319	21,161	12,992	30,053	645,450
All other—													
Nov. 26	....	....	....	36	250	999	....	....	674	25	....	85	2,069
Dec. 3	....	....	....	36	....	1,105	200	....	774	25	....	315	2,455
Dec. 10	....	....	....	36	400	937	850	....	767	185	....	744	3,919
Dec. 17	....	....	....	36	....	42	3,165	....	847	25	....	174	4,289
Dec. 24	....	....	....	36	....	57	4,560	....	1,243	670	....	130	6,696
Bills rediscounted with Federal Reserve Bank:													
Secured by United States war obligations—													
Nov. 26	16,373	132,104	36,833	8,298	5,225	10,784	17,487	8,700	2,447	9,108	2,146	4,635	254,140
Dec. 3	18,018	131,154	37,370	7,925	4,085	10,662	17,004	8,795	2,685	8,394	2,162	5,657	253,911
Dec. 10	18,120	127,383	37,890	10,254	3,421	9,998	18,287	9,119	2,127	8,140	2,180	5,493	252,412
Dec. 17	17,377	125,558	35,999	11,252	3,622	10,399	20,117	8,427	2,469	8,141	2,323	6,600	252,284
Dec. 24	18,820	123,176	38,578	11,572	3,489	10,365	21,435	7,635	2,230	7,725	2,075	6,454	253,554
All other—													
Nov. 26	74,173	437,640	34,649	40,331	39,524	71,911	266,876	62,672	61,063	71,376	25,523	72,309	1,258,047
Dec. 3	77,137	519,855	28,460	42,280	39,817	71,718	255,651	60,158	57,902	72,055	25,959	79,463	1,330,455
Dec. 10	74,977	491,728	25,493	38,500	36,028	67,784	241,127	53,044	48,497	70,065	26,441	83,747	1,257,431
Dec. 17	69,748	379,278	32,112	41,725	40,004	67,739	241,780	50,212	45,250	71,244	25,756	75,073	1,139,921
Dec. 24	88,181	450,506	32,114	53,161	43,589	68,821	264,754	47,291	48,231	71,119	25,037	75,819	1,268,623

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Number of reporting banks:													
Nov. 26	24	72	44	13	9	8	51	13	11	19	8	15	287
Dec. 3	24	72	44	13	9	8	51	13	11	19	8	15	287
Dec. 10	24	72	44	13	9	8	51	13	11	19	8	15	287
Dec. 17	24	72	44	13	9	8	51	13	11	19	8	15	287
Dec. 24	24	72	44	13	9	8	51	13	11	19	8	15	287
United States bonds to secure circulation:													
Nov. 26	2,281	37,862	7,337	3,671	2,776	3,100	1,439	9,592	2,791	4,276	4,560	16,650	96,335
Dec. 3	2,281	37,862	7,337	3,671	2,776	3,100	1,439	9,592	2,791	4,276	4,560	16,650	96,335
Dec. 10	2,382	37,924	7,337	3,671	2,776	3,100	1,438	9,592	2,791	4,276	4,560	16,650	96,497
Dec. 17	2,382	38,099	7,337	3,671	2,776	3,100	1,438	9,492	2,791	4,276	4,560	16,650	96,572
Dec. 24	2,382	38,099	7,337	3,671	2,776	3,100	1,438	9,292	2,791	4,276	4,560	16,650	96,372
Other United States bonds, including Liberty bonds:													
Nov. 26	6,640	218,358	23,159	7,777	4,685	1,506	17,707	5,403	1,977	8,095	6,438	40,951	342,696
Dec. 3	6,716	219,653	23,377	7,658	4,686	1,506	17,687	5,494	1,866	8,095	6,643	37,371	340,752
Dec. 10	6,713	217,871	23,454	7,433	4,557	1,506	17,415	5,678	1,930	8,260	6,647	39,736	341,200
Dec. 17	6,749	216,256	25,596	7,468	4,457	1,503	18,291	6,373	1,907	8,123	6,702	39,579	343,004
Dec. 24	6,772	219,700	24,870	6,406	4,356	1,504	20,214	5,824	1,933	9,858	6,722	41,319	349,478
United States Victory notes:													
Nov. 26	372	74,806	6,772	2,338	153	165	12,039	532	221	2,578	859	6,159	106,994
Dec. 3	392	76,401	6,995	2,337	153	162	12,110	523	216	2,676	869	6,111	108,945
Dec. 10	370	77,871	6,825	2,320	153	162	12,127	536	216	2,598	869	6,223	110,270
Dec. 17	387	79,587	7,843	2,334	153	162	12,910	645	216	2,760	869	6,116	113,982
Dec. 24	366	81,305	9,023	1,626	153	162	12,999	680	216	3,068	869	8,886	119,353

Principal resource and liability items of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities, as at close of business on Fridays from Nov. 26 to Dec. 17, 1920—Contd.

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Boston.	New York.	Phila-del-phia.	Cleve-land.	Rich-mond.	At-lanta.	Chicago.	St. Louis.	Minne-apolis.	Kansas City.	Dallas.	San Fran-cisco.	Total.
United States certificates of indebtedness:													
Nov. 26	8,834	137,221	14,548	1,701	466	502	18,059	3,228	312	1,677	1,587	16,360	204,495
Dec. 3	6,822	112,368	13,798	1,726	462	502	16,165	2,628	325	1,628	1,579	15,363	173,366
Dec. 10	6,944	94,073	12,611	1,747	442	502	16,053	2,609	344	1,641	1,413	15,415	153,794
Dec. 17	14,953	184,554	18,341	4,597	497	415	11,721	5,473	1,966	3,764	2,259	17,325	265,865
Dec. 24	8,456	148,900	13,697	2,649	381	415	11,095	3,864	780	2,920	2,045	15,988	211,190
Total United States securities owned:													
Nov. 26	18,127	468,247	51,816	15,487	8,080	5,273	49,244	18,755	5,301	16,626	13,444	80,120	750,520
Dec. 3	16,211	446,284	51,507	15,392	8,077	5,270	47,401	18,237	5,198	16,675	13,651	75,495	719,398
Dec. 10	16,409	427,739	50,227	15,171	7,928	5,270	47,033	18,415	5,281	16,775	13,489	78,024	701,761
Dec. 17	24,471	518,496	59,117	18,070	7,883	5,180	44,360	21,983	6,880	18,923	14,390	79,670	819,423
Dec. 24	17,976	488,004	54,927	14,352	7,666	5,181	45,746	19,660	5,720	20,122	14,196	82,843	776,393
Loans secured by Government war obligations, including rediscounts with Federal Reserve Bank:													
Nov. 26	39,368	397,678	72,175	18,926	7,806	6,170	69,244	19,323	9,836	12,429	1,991	16,130	671,076
Dec. 3	39,263	399,572	71,162	18,757	7,463	6,059	69,927	18,526	10,025	11,762	1,937	16,400	670,853
Dec. 10	40,371	400,782	72,211	19,092	7,427	6,167	62,954	18,988	9,756	11,207	2,076	16,046	667,077
Dec. 17	40,086	400,334	72,735	19,658	7,287	6,015	65,595	17,728	9,677	11,420	2,122	17,909	670,566
Dec. 24	42,247	393,187	74,550	18,887	7,312	5,624	61,814	16,807	9,851	11,183	2,235	17,788	661,485
Loans secured by stocks and bonds other than United States securities:													
Nov. 26	149,783	1,123,224	191,338	114,845	14,996	8,831	334,531	88,422	17,559	32,928	9,620	69,675	2,155,752
Dec. 3	149,484	1,134,291	182,617	114,936	14,928	7,184	327,911	88,252	18,420	32,632	9,609	68,635	2,148,899
Dec. 10	149,399	1,134,602	182,081	117,665	15,066	7,223	334,673	87,833	18,695	32,000	9,611	68,212	2,157,060
Dec. 17	151,493	1,160,352	186,026	118,596	15,014	7,311	336,284	88,885	19,542	33,315	9,856	69,996	2,196,670
Dec. 24	155,083	1,177,291	187,748	118,754	15,057	7,119	338,987	88,744	20,120	34,726	9,364	69,157	2,222,150
All other loans and investments, including rediscounts with Federal Reserve Bank:													
Nov. 26	581,115	3,539,739	510,627	309,002	73,605	71,698	1,037,274	255,028	143,513	177,847	66,939	484,937	7,251,324
Dec. 3	577,563	3,515,362	502,389	310,104	74,255	72,659	1,021,271	255,744	140,113	177,219	66,061	493,532	7,206,272
Dec. 10	576,878	3,522,374	496,213	309,517	73,273	72,019	1,021,229	253,599	137,064	175,651	66,085	496,701	7,200,603
Dec. 17	584,603	3,528,957	500,607	313,029	72,840	71,366	1,032,208	257,089	134,710	173,397	66,940	496,950	7,232,702
Dec. 24	582,958	3,499,478	494,870	315,460	74,996	70,883	1,043,887	254,847	132,950	169,640	66,557	482,692	7,189,218
Total loans and investments, including rediscounts with Federal Reserve Bank:													
Nov. 26	788,393	5,528,888	825,956	458,260	104,487	91,972	1,490,293	381,528	176,209	239,830	91,994	650,862	10,828,672
Dec. 3	782,521	5,495,509	807,675	459,189	104,723	91,172	1,466,510	380,759	173,756	238,288	91,258	654,062	10,745,422
Dec. 10	783,057	5,485,497	800,732	461,445	103,694	90,679	1,465,889	378,835	170,796	235,633	91,261	658,983	10,726,501
Dec. 17	800,659	5,608,139	818,485	469,353	103,024	89,872	1,478,447	385,685	170,809	237,055	93,308	664,525	10,919,361
Dec. 24	798,264	5,557,960	812,095	467,453	105,031	88,807	1,490,434	380,058	168,641	235,671	92,352	652,480	10,849,246
Reserve balances with Federal Reserve Bank:													
Nov. 26	61,666	561,804	59,729	27,438	4,739	5,610	127,106	29,034	9,218	12,458	5,441	36,827	941,070
Dec. 3	61,940	591,941	60,884	27,610	5,771	4,555	128,464	30,419	7,338	17,018	6,132	35,943	978,015
Dec. 10	64,087	586,096	61,988	26,784	5,574	4,703	126,533	29,637	9,550	15,634	6,881	37,262	974,729
Dec. 17	64,013	581,400	55,193	27,378	6,812	3,983	119,309	27,733	9,568	13,349	6,390	35,488	950,616
Dec. 24	61,430	596,035	59,939	24,944	6,383	4,663	125,750	31,946	10,815	17,907	6,350	34,800	980,962
Cash in vault:													
Nov. 26	16,290	116,409	16,658	9,617	2,007	2,379	39,109	5,002	2,814	3,791	2,035	10,874	226,985
Dec. 3	16,850	110,402	16,715	9,252	1,620	2,158	37,716	4,779	2,642	3,590	1,845	9,919	217,488
Dec. 10	16,475	111,549	17,831	8,733	1,787	2,238	36,466	4,735	2,892	3,913	2,135	9,881	218,635
Dec. 17	17,756	108,767	18,342	9,240	1,745	2,817	37,231	6,479	2,629	3,920	2,041	10,749	221,716
Dec. 24	16,348	108,869	15,886	8,298	1,846	2,038	36,753	4,590	2,532	3,476	1,836	9,354	211,826
Net demand deposits on which reserve is computed:													
Nov. 26	600,297	4,399,615	593,214	229,442	52,480	37,709	909,917	214,508	83,408	134,764	61,757	304,030	7,621,141
Dec. 3	594,320	4,356,109	588,252	233,337	54,024	37,334	905,160	214,200	82,910	139,463	61,384	298,820	7,565,313
Dec. 10	596,960	4,383,062	587,960	233,030	55,030	37,549	912,125	217,150	87,667	140,528	60,699	293,999	7,605,759
Dec. 17	604,072	4,404,852	568,410	225,472	53,538	37,121	895,199	215,733	87,801	136,651	61,531	299,668	7,590,048
Dec. 24	577,076	4,352,152	566,742	218,606	51,049	35,793	886,160	218,212	84,381	138,952	59,175	293,044	7,481,342
Time deposits:													
Nov. 26	57,717	310,181	28,962	184,718	22,387	21,687	298,592	78,699	26,335	11,174	6,451	243,505	1,290,408
Dec. 3	56,936	305,116	28,551	188,101	22,546	21,864	300,899	78,946	28,503	11,291	6,540	245,080	1,294,373
Dec. 10	56,777	291,785	27,878	187,575	22,591	21,966	302,603	78,950	28,483	11,394	6,677	246,082	1,282,701
Dec. 17	56,666	279,913	26,357	188,442	21,584	22,324	303,931	78,750	28,573	11,301	6,650	246,775	1,271,266
Dec. 24	55,115	282,652	25,738	187,422	21,731	21,688	304,036	78,441	28,531	11,068	6,523	247,608	1,270,553
Government deposits:													
Nov. 26	5,348	36,526	5,294	3,342	157	37	5,382	2,793	639	812	809	5,344	66,483
Dec. 3	1,070	7,270	1,056	627	36	8	1,016	608	122	164	149	1,028	13,154
Dec. 10	1,070	7,270	1,056	627	36	8	1,016	559	122	164	149	1,028	13,105
Dec. 17	22,733	197,641	30,795	13,756	1,286	75	17,566	8,978	4,177	4,887	1,960	11,111	314,965
Dec. 24	19,298	167,575	26,172	12,287	1,146	70	14,081	7,625	3,551	3,876	1,666	10,188	267,535
Bills payable with Federal Reserve Bank:													
Secured by United States war obligations—													
Nov. 26	25,184	265,205	45,852	2,530	7,777	1,460	25,682	13,119	383	10,008	2,776	18,518	418,494
Dec. 3	23,953	248,621	43,995	1,530	6,655	1,250	22,687	13,335	455	10,871	3,877	19,014	396,243
Dec. 10	24,866	238,136	43,950	2,730	6,693	1,250	23,064	12,640	545	8,846	4,127	23,551	390,398
Dec. 17	27,843	279,473	41,310	3,080	7,112	1,221	16,174	13,164	1,186	10,662	2,909	20,476	424,610
Dec. 24	27,674	270,837	42,166	930	7,101	1,221	16,546	14,686	856	11,307	3,658	21,542	418,524

Principal resource and liability items of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities, as at close of business on Fridays from Nov. 26 to Dec. 17, 1920—Contd.

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Bills payable with Federal Reserve Bank—Contd.													
All other—													
Nov. 26	....	....	....	....	....	....	....	....	....	....	....	....	....
Dec. 3	....	....	....	....	....	....	....	....	....	....	....	....	....
Dec. 10	....	....	....	....	....	....	500	....	....	....	....	....	500
Dec. 17	....	....	....	....	....	....	2,815	....	....	....	....	....	2,815
Dec. 24	....	....	....	....	....	....	4,210	....	....	....	....	....	4,210
Bills rediscounted with Federal Reserve Bank:													
Secured by United States war obligations—													
Nov. 26	15,951	129,322	36,689	2,430	....	1,319	9,694	4,266	1,526	4,528	181	2,733	208,649
Dec. 3	17,526	128,353	37,227	1,973	....	1,468	9,257	4,348	1,883	4,287	163	3,952	210,537
Dec. 10	17,608	124,410	37,747	2,271	....	1,619	10,094	4,605	1,711	4,044	305	3,500	207,934
Dec. 17	16,954	122,873	35,881	1,898	....	1,505	11,043	4,075	1,811	4,147	289	4,712	205,128
Dec. 24	18,332	120,551	38,460	1,270	....	1,199	12,612	3,345	1,837	3,812	261	4,586	206,265
All other—													
Nov. 26	72,277	408,739	33,086	31,420	6,134	14,541	183,195	40,849	45,644	34,258	8,820	39,193	918,156
Dec. 3	75,428	487,805	26,674	32,414	6,754	14,245	170,670	39,726	41,216	35,221	8,770	47,477	986,400
Dec. 10	73,242	460,366	23,257	30,540	4,894	12,282	160,210	33,978	34,932	33,827	9,243	51,006	927,877
Dec. 17	67,824	350,571	29,779	34,816	6,488	11,855	165,097	32,955	30,225	32,882	10,188	43,762	816,442
Dec. 24	86,080	419,277	29,373	44,202	8,451	11,814	186,254	30,276	32,912	33,629	9,311	42,691	934,270

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES.

[In thousands of dollars.]

	New York district.[1]	Cleveland district.[2]	Richmond district.[3]	Atlanta district.[4]	Chicago district.[5]	St. Louis district.[6]	Kansas City district.[7]	Dallas district.[8]	San Francisco district.[9]	Total.
Number of reporting banks:										
Nov. 26	11	40	18	23	12	18	29	13	44	208
Dec. 3	11	40	18	23	12	18	29	13	44	208
Dec. 10	11	40	18	23	12	18	29	13	44	208
Dec. 17	11	40	18	23	12	18	29	13	45	209
Dec. 24	11	40	18	23	12	18	29	13	45	209
United States bonds to secure circulation:										
Nov. 26	1,599	25,249	5,608	7,030	1,905	5,280	5,398	7,108	13,185	72,362
Dec. 3	1,599	25,273	5,608	7,030	1,905	5,280	5,398	7,108	13,185	72,386
Dec. 10	1,599	25,273	5,608	7,030	1,905	5,279	5,398	7,108	13,185	72,385
Dec. 17	1,599	25,273	5,608	7,070	1,905	5,279	5,398	7,116	13,185	72,433
Dec. 24	1,599	25,275	5,608	7,030	1,905	5,279	5,398	7,116	13,185	72,395
Other United States bonds, including Liberty bonds:										
Nov. 26	12,038	42,619	9,088	22,333	18,812	7,766	9,062	7,251	22,081	151,050
Dec. 3	12,103	42,595	9,214	22,364	18,993	7,777	8,885	7,263	22,361	151,555
Dec. 10	12,047	43,146	9,105	22,266	21,062	7,852	8,962	7,278	22,328	154,056
Dec. 17	12,218	43,209	9,172	22,290	24,075	7,724	8,676	6,701	22,834	156,899
Dec. 24	12,860	44,390	9,369	22,292	27,070	7,844	8,921	6,138	22,485	161,369
United States Victory notes:										
Nov. 26	2,262	14,001	2,680	2,595	18,606	2,110	1,201	1,176	8,299	52,930
Dec. 3	2,265	14,458	2,688	2,588	18,604	2,101	1,289	1,176	8,577	53,746
Dec. 10	2,282	14,287	2,689	2,775	18,605	2,071	1,215	1,177	8,518	53,719
Dec. 17	2,351	14,694	2,685	2,816	14,462	2,063	1,204	826	8,516	49,617
Dec. 24	1,882	15,364	2,668	2,807	13,015	2,048	1,102	773	8,771	48,430
United States certificates of indebtedness:										
Nov. 26	9,026	10,291	1,083	5,909	24,102	1,043	3,387	2,064	9,106	66,011
Dec. 3	8,945	8,833	777	5,947	23,053	867	3,396	2,049	9,060	62,927
Dec. 10	6,165	8,228	777	5,903	24,653	867	3,406	2,031	9,070	61,110
Dec. 17	6,875	19,089	2,795	2,385	19,796	578	2,551	1,370	9,459	64,898
Dec. 24	6,858	16,593	2,700	2,416	17,755	427	2,557	1,311	9,207	59,824
Total United States securities owned:										
Nov. 26	24,925	92,160	18,459	37,867	63,425	16,199	19,048	17,599	52,671	342,353
Dec. 3	24,912	91,159	18,287	37,929	62,555	16,025	18,968	17,596	53,183	340,614
Dec. 10	22,093	91,044	18,179	37,974	66,225	16,069	18,981	17,594	53,111	341,270
Dec. 17	23,043	102,265	20,260	34,561	60,238	15,644	17,829	16,013	53,994	343,847
Dec. 24	23,199	101,622	20,345	34,545	59,745	15,598	17,978	15,338	53,648	342,018
Loans secured by Government war obligations, including rediscounts with Federal Reserve Bank:										
Nov. 26	10,916	38,805	9,400	18,533	15,758	11,886	12,057	3,039	16,854	137,248
Dec. 3	11,052	38,956	8,193	18,709	14,505	12,056	11,602	3,168	16,427	134,668
Dec. 10	11,200	38,656	8,004	18,265	14,643	12,066	11,587	3,060	17,093	134,574
Dec. 17	11,112	38,938	8,137	17,689	15,382	13,631	11,754	3,041	16,213	135,897
Dec. 24	10,967	38,853	8,277	18,364	14,759	11,225	11,478	3,057	15,719	132,699

[For footnotes see page 126.]

Principal resource and liability items of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities, as at close of business on Fridays from Nov. 26 to Dec. 17, 1920—Contd.

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES—Continued.

[In thousands of dollars.]

	New York district.[1]	Cleveland district.[2]	Richmond district.[3]	Atlanta district.[4]	Chicago district.[5]	St. Louis district.[6]	Kansas City district.[7]	Dallas district.[8]	San Francisco district.[9]	Total.
Loans secured by stocks and bonds, other than United States securities:										
Nov. 26	55,961	151,230	31,932	41,192	56,787	37,555	28,027	15,808	71,172	489,664
Dec. 3	55,584	154,333	32,517	41,349	56,560	36,866	27,759	15,837	71,382	492,187
Dec. 10	55,621	154,842	32,759	40,286	56,690	36,787	27,553	15,996	71,680	492,214
Dec. 17	54,941	154,422	32,885	41,036	56,941	33,781	27,749	16,042	73,860	491,657
Dec. 24	55,720	153,555	32,871	40,363	57,776	35,136	27,233	16,051	72,515	491,220
All other loans and investments, including rediscounts with Federal Reserve Bank:										
Nov. 26	190,780	495,006	116,949	252,606	345,504	115,521	195,833	79,142	470,917	2,262,258
Dec. 3	190,374	491,547	116,149	252,843	346,825	113,077	196,635	78,150	472,899	2,258,499
Dec. 10	189,689	481,302	116,343	245,005	344,409	112,712	192,696	77,044	474,921	2,234,121
Dec. 17	190,082	494,497	118,134	254,664	347,925	113,480	194,916	76,937	469,167	2,259,802
Dec. 24	187,852	493,160	116,924	247,010	342,220	112,498	191,808	76,700	461,214	2,229,386
Total loans and investments, including rediscounts with Federal Reserve Bank:										
Nov. 26	282,582	777,201	176,740	350,198	481,474	181,161	254,965	115,588	611,614	3,231,523
Dec. 3	281,922	775,995	175,146	350,830	480,445	178,024	254,964	114,751	613,891	3,225,968
Dec. 10	278,603	765,844	175,285	341,530	481,967	177,634	250,817	113,694	616,805	3,202,179
Dec. 17	279,178	790,122	179,416	347,950	480,486	176,536	252,248	112,033	613,234	3,231,203
Dec. 24	277,738	787,190	178,417	340,282	474,500	174,457	248,497	111,146	603,096	3,195,323
Reserve balances with Federal Reserve Banks:										
Nov. 26	14,983	52,658	12,006	18,052	24,406	8,744	15,375	7,483	39,230	192,937
Dec. 3	15,878	53,998	12,085	17,786	24,789	10,144	16,519	7,994	40,213	199,406
Dec. 10	15,987	55,501	12,320	18,997	26,647	10,501	16,115	7,846	40,377	204,291
Dec. 17	15,006	56,707	11,701	18,028	23,158	9,317	16,698	7,954	38,603	197,172
Dec. 24	17,223	54,932	11,907	18,508	25,924	9,898	18,732	8,077	39,749	204,950
Cash in vault:										
Nov. 26	3,829	15,178	6,183	7,455	12,446	3,788	6,600	3,539	14,944	73,962
Dec. 3	3,381	17,020	5,965	7,210	12,190	3,639	6,084	3,151	13,839	72,479
Dec. 10	3,447	15,194	5,614	7,562	11,057	3,909	6,358	3,545	13,831	70,517
Dec. 17	3,952	18,510	5,985	8,011	11,475	3,878	6,747	3,058	14,046	75,662
Dec. 24	3,517	14,249	5,380	7,158	10,185	3,121	6,288	2,715	13,240	65,853
Net demand deposits on which reserve is computed:										
Nov. 26	163,082	514,520	107,114	155,548	178,093	78,096	148,289	65,366	297,057	1,707,165
Dec. 3	163,323	527,126	109,141	155,835	178,392	78,859	146,293	63,935	296,630	1,719,534
Dec. 10	163,625	518,256	110,000	155,309	178,301	81,676	144,843	64,792	299,908	1,716,710
Dec. 17	158,870	510,936	106,921	154,805	175,400	79,650	143,856	61,488	298,800	1,693,726
Dec. 24	160,970	492,912	107,176	154,985	169,576	78,363	144,526	65,523	296,594	1,670,625
Time deposits:										
Nov. 26	69,819	115,851	18,934	89,535	221,449	42,546	60,436	23,419	268,527	910,516
Dec. 3	69,256	120,265	18,990	89,683	221,610	42,649	61,074	23,561	268,989	916,077
Dec. 10	69,365	119,358	18,502	89,987	220,412	42,304	61,459	23,459	268,790	913,636
Dec. 17	69,522	117,253	18,414	87,674	219,138	42,425	61,531	23,367	267,693	907,017
Dec. 24	69,480	116,282	18,328	87,938	217,782	42,398	61,869	23,412	269,255	906,744
Government deposits:										
Nov. 26	1,205	8,191	917	680	3,200	454	254	50	169	15,120
Dec. 3	242	1,638	278	195	640	90	51	5	18	3,157
Dec. 10	197	1,638	278	83	640	90	51	5	28	3,010
Dec. 17	1,571	30,124	3,810	2,959	9,900	1,340	93	138	2,060	51,995
Dec. 24	1,394	28,190	3,252	2,725	8,415	1,138	80	117	1,836	47,147
Bills payable with Federal Reserve Bank:										
Secured by United States war obligations—										
Nov. 26	21,350	27,877	8,531	26,989	35,979	8,907	5,317	7,253	9,387	151,590
Dec. 3	18,898	19,739	8,153	26,874	35,547	8,985	6,275	6,423	9,641	140,535
Dec. 10	16,692	30,642	7,487	27,490	39,299	8,833	6,823	5,918	8,390	151,574
Dec. 17	17,248	26,113	9,689	25,609	31,344	8,372	5,723	4,481	7,067	135,646
Dec. 24	17,068	36,544	9,548	21,883	34,608	8,349	6,318	3,652	7,168	148,138
All other—										
Nov. 26	...	...	...	999	...	...	25	...	85	1,109
Dec. 3	...	...	...	1,105	...	...	25	...	315	1,445
Dec 10	...	...	...	937	...	...	185	...	685	1,807
Dec. 17	...	...	...	42	...	...	25	...	115	182
Dec. 24	...	...	...	57	...	...	670	...	130	857
Bills rediscounted with Federal Reserve Bank:										
Secured by United States war obligations—										
Nov. 26	1,877	5,245	3,399	7,502	4,818	4,434	2,309	663	1,733	31,980
Dec. 3	1,751	5,228	2,350	7,259	4,421	4,447	1,732	734	1,572	29,494
Dec. 10	1,776	7,102	2,035	6,625	5,173	4,514	1,767	715	1,860	31,567
Dec. 17	1,622	8,542	2,174	7,146	6,146	4,352	1,856	676	1,810	34,324
Dec. 24	1,617	9,477	2,334	7,122	6,184	4,290	1,810	700	1,796	35,330
All other—										
Nov. 26	13,416	5,106	13,731	44,735	21,893	21,256	21,434	7,376	28,421	177,368
Dec. 3	14,949	5,924	13,310	44,935	23,539	19,974	20,994	8,078	27,237	178,940
Dec. 10	13,747	3,899	12,203	42,554	18,463	18,667	20,096	7,983	28,243	165,855
Dec. 17	15,050	3,134	14,339	42,804	18,889	16,853	22,960	7,051	27,278	168,358
Dec. 24	14,462	3,624	11,057	42,455	19,797	16,286	22,217	7,377	28,943	169,218

[1] Buffalo.
[2] Pittsburgh and Cincinnati.
[3] Baltimore.
[4] New Orleans, Birmingham, Jacksonville, and Nashville.
[5] Detroit.
[6] Louisville, Memphis, and Little Rock.
[7] Omaha, Denver, and Oklahoma City.
[8] El Paso and Houston.
[9] Spokane, Portland, Seattle, Salt Lake City, and Los Angeles.

GOLD AND SILVER IMPORTS AND EXPORTS.

Gold imports into and exports from the United States, distributed by countries.

Countries.	Imports.						Exports.					
	During 10 days ending Nov. 20, 1920.	During 10 days ending Nov. 30, 1920.	**During month of November, 1920.**	During 10 days ending Dec. 10, 1920.	**From Jan. 1 to Dec. 10, 1920.**	From Jan. 1 to Dec. 10, 1919.	During 10 days ending Nov. 20, 1920.	During 10 days ending Nov. 30, 1920.	**During month of November, 1920.**	During 10 days ending Dec. 10, 1920.	**From Jan. 1 to Dec. 10, 1920.**	From Jan. 1 to Dec. 10, 1919.
Belgium			$1,900		$352,861	$831,002						$31,900
Denmark					199,551							2,002,666
France	$366	$694,914	3,186, 20	$3,976,411	26,830,475							4,152,533
Germany				1,188	7,703						$10,000	
Greece		125,000	125,000		253,700	95,000						
Iceland											912	
Italy					40,107						241,263	312,141
Netherlands	182,000	162,209	344,209	161,735	1,669,065							15,000
Norway					3,321							
Portugal					25,364							
Russia in Europe					1,268,631							
Spain	55,168		97,753		293,490							29,270,000
Sweden			358,627		714,610							661
Switzerland					4,937						2,601	67,570
United Kingdom:												
England	16,474,179	17,130,623	46,684,350	6,945,358	258,932,403	3,555,739					13,235	2,088,974
Scotland					45							
Total, Europe	16,711,7[illegible]3	18,112,776	50,797,859	11,084,692	290,596,269	4,481,741					268,014	37,911,445
British Honduras					2[illegible]							12,000
Canada	584,250	77,108	1,006,222	24,018	31,084,307	36,565,908	$258,786	$79,458	$476,831	$114,012	5,477,472	5,456,866
Costa Rica	1,419		37,326	31,651	608,094	616,583						
Guatemala					14,872	8,267						
Honduras	18,014	8,473	26,517		256,014	258,255					19,000	21,300
Nicaragua	36,289	38,596	76,230	2,185	1,157,405	1,373,276						16,500
Panama	13,389	1,417	32,676		513,118	3,401						1,390,000
Salvador	105,480	342	257,724	137,520	1,301,280	686,285					20,000	3,098,020
Mexico	166,963	135,984	481,109	101,828	4,561,050	4,290,181	188,691	103,053	449,075	87,595	17,985,137	9,054,305
Newfoundland					221	61						
Cuba		244	244		15,334	9,096	50,000	50,000	100,000	50,000	650,000	
British West Indies		928	35,366	4,934	266,209	18,838						7,940
Virgin Islands of United States						525					10,000	
Dominican Republic					4,800		3,000		3,000		47,000	25,000
Dutch West Indies	180,870	70,238	276,603	93,647	884,40[illegible]	5,200						
Haiti					23							
Total, North America	1,106,704	333,330	2,230,017	398,813	43,617,151	43,835,876	510,477	232,511	1,028,906	251,607	21,208,609	19,081,931
Argentina			44,578		1,707,682	102,158					89,995,000	51,010,000
Bolivia					7,374	1,039						2,500,000
Brazil			10,959		43,765	26,200				24,250	304,250	525,000
Chile	1,127	35,805	38,872	422	418,018	226,575					400,000	100,000
Colombia	1,246,274	769,821	2,793,124	249,857	8,811,206	556,180					700,000	5,028,620
Ecuador					523,893	379,911			30,000		236,000	
British Guiana	1,970		25,612	41,336	189,483	120,551						5,005
Dutch Guiana			15,454	1,329	24,728	20,144					6,300	19,795
Peru	24,502	2,677	41,503	28,417	1,098,905	717,983					3,653,376	3,383,369
Uruguay											12,850,000	7,605,000
Venezuela	43,317	550	52,421	36,486	575,185	381,486					184,000	11,252,220
Total, South America	1,317,190	808,856	3,022,556	357,847	13,400,239	2,532,260			30,000	24,250	108,328,926	84,429,009
China					1,260						28,286,750	34,643,361
Chosen (Korea)						1,714						
British India											6,512,371	31,583,913
Straits Settlements											6,683,454	2,439,667
Dutch East Indies		105,946	105,946		2,955,513	3,416,333		20,000	20,000		12,085,105	7,136,000
French East Indies											2,290,000	
Hongkong					30,191,910	10,017,550	67,950	1,200	278,000	316,200	29,629,212	36,067,461
Japan							5,000,000	2,000,000	18,512,851	11,006,385	98,299,476	92,614,189
Russia in Asia												23,000
Total, Asia		105,946	105,946		33,148,683	13,435,597	5,067,950	[illegible],021,200	18,810,851	11,322,585	183,786,368	201,507,591
Australia			486,650		486,65							
New Zealand	85,660		149,008		1,819,887	1,351,578						
Philippine Islands	38,471	12,321	96,578		869,477	581,924						102,500
British East Africa												240
British South Africa			423		423	8,150						
British West Africa											39,446	
Canary Islands				7,000	7,000							
Portuguese Africa					280,358	499,321						
Total, all countries	19,259,738	19,373,229	56,889,037	11,848,352	[1]384,256,137	66,729,450	5,578,427	2,253,711	19,869,757	11,598,442	[2]316,631,363	346,062,716
Excess of imports or exports	13,681,311	17,119,518	37,019,280	249,910	67,621,774							279,333,266

Excess of gold imports over exports since Aug. 1, 1914, $847,380,000. Excess of gold exports over imports since June 10, 1919, $253,639,000.

[1] Includes: Ore and base bullion, $16,058,000; U. S. Mint or Assay Office bars, $3,846,000; other refined bullion, $294,513,000; U. S. coin, $17,270,000; foreign coin, $52,569,000.

[2] Includes: Domestic exports—Ore and base bullion, $11,000; U. S. Mint or Assay Office bars, $37,177,000; other refined bullion, $1,066,000; coin, $277,262,000. Foreign exports—Refined bullion, $198,000; coin, $617,000.

Silver imports into and exports from the United States, distributed by countries.

Countries.	Imports.						Exports.					
	During 10 days ending Nov. 20, 1920.	During 10 days ending Nov. 30, 1920.	**During month of November, 1920.**	During 10 days ending Dec. 10, 1920.	**From Jan. 1 to Dec. 10, 1920.**	From Jan. 1 to Dec. 10, 1919.	During 10 days ending Nov. 20, 1920.	During 10 days ending Nov. 30, 1920.	**During month of November, 1920.**	During 10 days ending Dec. 10, 1920.	**From Jan. 1 to Dec. 10, 1920.**	From Jan. 1 to Dec. 10, 1919.
Belgium					$32,428	$1,797						
Denmark												$684,713
Finland												17,438
France	$1,271	$500	$5,274	$3,286	117,210	63,396					$32,920	6,588,197
Gibraltar						2,400						
Germany				116	116							
Greece					42,240							
Italy					24,026							
Netherlands					54,861							2,014,084
Norway					14,453							1,219,430
Portugal					7,978							1,950
Spain	24,845		24,845		94,527							228
Sweden					31,395						54,960	194,526
Switzerland												172,203
United Kingdom—England	1,928	18,000	21,653	1,132	838,010	61,746			$2,500		4,821,678	15,592,627
Total, Europe	28,044	18,500	51,772	4,534	1,257,244	129,339			2,500		4,909,558	26,565,396
British Honduras					69,097	269,276						
Canada	51,599	22,430	113,970	51,485	3,480,932	6,757,232	$421,785	$46,151	519,575	$40,934	7,017,820	7,637,181
Costa Rica	20		2,034	2,164	64,986	154,434						
Guatemala					24,534	8					4,500	5,900
Honduras	186,746	86,825	273,571		2,554,181	2,589,709	58,200		58,205		449,710	181,550
Nicaragua	35,030	1,309	36,364	2,473	668,785	764,119					3,000	
Panama			6,938		148,199	89,273					542,000	348,250
Salvador		1,016	10,916		3,726,781	901,183						1,500
Mexico	1,028,614	1,051,723	2,888,404	1,316,428	51,624,660	58,869,274	32,890	48,810	107,750	49,910	3,178,684	1,602,458
Newfoundland						11						
British West Indies				5	7,022	6,225		952	952	17,900	46,208	12,628
Cuba		3,846	3,846		75,484	69,709		1,695	4,695		1,252,599	161
Virgin Islands of United States						1,105					25,000	
Dominican Republic					120,800						316,000	150,000
Dutch West Indies	150		150	70	2,317	300						
French West Indies					20							
Haiti					77						9,000	
Total, North America	1,302,189	1,167,149	3,336,193	1,372,625	62,567,875	70,471,858	512,875	97,608	691,177	108,744	12,844,521	9,939,628
Argentina	1,832		9,261		37,324	61,446					12,723	3,005
Bolivia	18,400		31,400	87,867	1,367,079	108,487						
Brazil			388		1,621	2,155					2,333	1,638
Chile	34,292	389,391	428,005	71,224	3,634,433	1,837,044						
Colombia	32,264	14,193	47,083	3,533	744,253	202,163						2,000
Ecuador					65,753	13,670						
British Guiana					42	121						3,193
Dutch Guiana					6,390	265					1,402	5,063
Peru	247,988	60,893	851,733	450,500	11,605,433	7,733,546						
Venezuela	105		105	65	355	1,178					10,000	850,000
Total, South America	334,881	464,477	1,367,975	613,189	17,462,683	9,960,075					26,458	864,899
China			5,343		1,295,317		858,222		858,222	457,002	60,556,237	66,622,230
Chosen (Korea)						3,328						
British India										419,197	642,408	109,180,718
Dutch East Indies		262,665	262,665		2,671,555	1,543,116						
French East Indies											4,058,373	
Hongkong					1,650	20,000	1,011,232		1,175,972	1,918,049	23,539,640	9,923,555
Japan									416,005	321,420	4,169,671	3,946,453
Russia in Asia											970	52,759
Turkey in Asia					38,511							
Total, Asia		262,665	268,008		4,007,033	1,566,444	1,869,454		2,450,199	3,115,668	92,967,299	189,725,715
New Zealand	41		269		12,033	1,566						
Philippine Islands	501	183	1,203		18,461	12,327						
British South Africa					6,097	76,822						
British West Africa											11,880	17,777
Portuguese Africa					93,321	52,252						
Total, all countries	1,665,656	1,912,974	5,025,420	1,990,348	[1]85,424,747	82,270,683	2,382,329	97,608	3,143,876	3,224,412	[2]110,759,716	227,113,415
Excess of imports or exports		1,815,366	1,881,544				716,673			1,234,064	25,334,969	144,842,732

Excess of silver exports over imports since August 1, 1914, $454,707,000.

[1] Includes: Ore and base bullion, $67,875,000; U. S. Mint or Assay Office bars, $3,000; other refined bullion, $7,529,000; U. S. coin, $2,000,000; foreign coin, $8,017,000.

[2] Includes: Domestic exports—Ore and base bullion, $16,000; U. S. Mint or Assay Office bars, $4,351,000; other refined bullion, $63,986,000; coin, $14,704,000. Foreign exports—Ore and base bullion, $1,000; refined bullion, $23,256,000; coin, $4,445,000.

General stock of money in the United States, money held by the Treasury and the Federal Reserve System, and all other money in the United States Dec. 1, 1920.

	General stock.	Held in the 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 (including bullion in Treasury)	$2,761,338,519	$430,286,732	[2] $1,363,952,538	$414,417,913	....
Gold certificates	....	....	315,439,770	237,141,566	....
Standard silver dollars	269,857,494	15,857,417	[3] 26,990,623	70,104,672	....
Silver certificates	....	....	78,995,522	76,293,888	....
Subsidiary silver	266,609,065	3,691,931	....	262,917,134	....
Treasury notes of 1890	....	....	....	1,615,362	....
United States notes	346,681,016	6,962,414	[4] 67,241,430	272,477,172	....
Federal Reserve notes	3,663,522,795	18,203,857	325,431,828	3,319,887,110	....
Federal Reserve Bank notes	239,569,800	4,094,172	24,842,950	210,632,678	....
National-bank notes	734,010,797	13,130,555	2,363,475	718,516,767	....
Total:					
Dec. 1, 1920	8,281,589,486	492,327,078	2,205,258,146	5,584,004,262	$52.13
Nov. 1, 1920	8,254,949,120	503,605,555	2,133,993,646	5,617,349,919	52.26
Oct. 1, 1920	8,136,332,855	472,464,953	2,110,500,713	5,553,367,189	51.70
Sept. 1, 1920	7,997,080,820	485,884,277	2,031,514,938	5,479,681,605	51.06
Aug. 1, 1920	7,927,844,377	483,824,265	2,059,010,192	5,185,009,920	50.22
July 1, 1920	7,887,181,586	485,057,472	2,021,271,614	5,380,852,500	50.19
Jan. 1, 1920	7,961,320,139	604,888,833	2,044,422,303	5,312,009,003	49.81
July 1, 1919	7,588,473,771	578,848,043	2,167,280,313	4,842,345,415	45.00
Jan. 1, 1919	7,780,793,606	454,948,160	2,220,705,767	5,105,139,679	47.83
July 1, 1918	6,742,225,784	356,124,750	2,018,361,825	4,367,739,209	41.31
Jan. 1, 1918	6,256,198,271	277,043,258	1,723,570,391	4,255,584,622	40.53
July 1, 1917	5,480,009,884	253,671,614	1,280,880,714	3,945,457,556	37.88

[1] Includes reserve funds held 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, but excludes gold and silver coin and bullion held in trust for the redemption of outstanding gold and silver certificates and Treasury notes of 1890.
[2] Exclusive of amounts held with United States Treasurer in gold redemption fund against Federal Reserve notes, and of gold held with foreign agencies but inclusive of balances in gold settlement fund standing to the credit of the Federal Reserve Banks and agents.
[3] Includes subsidiary silver.
[4] Includes Treasury notes of 1890.

FEDERAL RESERVE BANK DISCOUNT RATES.

Rates on paper discounted for member banks approved by the Federal Reserve Board up to Jan. 1, 1921.

Federal Reserve Bank.	Paper maturing within 90 days.				Bankers' acceptances maturing within 3 months.	Agricultural and live-stock paper maturing after 90 days, but within 6 months.
	Secured by—		Trade acceptances.	Commercial paper n. e. s.		
	Treasury certificates of indebtedness.	Liberty bonds and Victory notes.				
Boston	5½	6	7	7	....	7
New York	5½	6	7	7	6	7
Philadelphia	[1] 6	5½	6	6	5½	6
Cleveland	[1] 6	5¾	5¾	6	5¾	6
Richmond	[1] 6	6	6	6	6	6
Atlanta	[1] 6	5½	7	7	6	7
Chicago	[1] 6	6	7	7	6	7
St. Louis	[2] 5½	5½	6	6	5½	6
Minneapolis	5½	6	6½	7	6	7
Kansas City	[1] 6	6	6	6	5½	6
Dallas	[1] 6	5½	6	6	5½	6
San Francisco	[1] 6	6	6	6	6	6

[1] Discount rate corresponds to interest rate borne by certificates pledged as collateral, with minimum of 5 per cent in the case of Philadelphia, Atlanta, Kansas City, and Dallas, and 5½ per cent in the case of Cleveland, Richmond, Chicago, and San Francisco.
[2] 5½ per cent on paper secured by 5½ per cent certificates and 5 per cent on paper secured by 4¾ and 5 per cent certificates.

NOTE.—Rates shown for St. Louis, Kansas City, and Dallas are normal rates, applying to discounts not in excess of a basic line fixed for each member bank by the Federal Reserve Bank. Rates on discounts in excess of the basic line are subject to a ½ per cent progressive increase for each 25 per cent by which the amount of accommodation extended exceeds the basic line.

FOREIGN EXCHANGE RATES.

Monthly ranges of exchange rates on leading foreign centers, quoted in New York during the three months ending December, 1920.

	Dollars for—	Exchange at par.	October.		November.		December.	
			Low.	High.	Low.	High.	Low.	High.
London:								
Demand bills	£1	4.8665	3.4225	3.5075	3.3325	3.5275	3.43875	3.5275
Cable transfers	do	4.8665	3.43	3.515	3.34	3.535	3.44625	3.535
Paris:								
Demand bills	100 francs	19.30	6.31	6.75	5.705	6.32	5.81	6.065
Cable transfers	do	19.30	6.32	6.76	5.715	6.33	5.82	6.075
Berlin	100 marks	23.82	1.29	1.65	1.10	1.54	1.26	1.445
Milan:								
Demand bills	100 lire	19.30	3.70	4.18	3.38	3.88	3.34	3.68
Cable transfers	do	19.30	3.71	4.19	3.39	3.89	3.35	3.69
Prague	100 kronen [1]	20.26	1.13	1.36	1.00	1.33	1.13	1.25
Vienna	do	20.26	.32	.45	.29	.36	.22	.32
Jugo-Slavia	do	20.26	.77	.85	.70	.85	.67	.79
Warsaw	100 marks [1]	23.82	.34	.40	.12	.39	.15	.16
Brussels	100 francs	19.30	6.725	7.09	6.065	6.70	6.12	6.425
Madrid	100 pesetas	19.30	13.71	14.66	11.80	13.85	12.71	13.81
Helsingfors	100 markka [1]	19.30	2.15	2.75	2.00	2.35	2.10	3.20
Athens	100 drachma	19.30	9.60	10.30	8.45	9.45	7.10	8.45
Sofia	100 lev [1]	19.30	1.20	1.46	1.02	1.40	1.13	1.30
Bucharest	100 lei [1]	19.30	1.60	1.96	1.38	1.60	1.07	1.48
Belgrade	100 dinar [1]	19.30	3.00	3.40	2.75	3.40	2.70	3.20
Amsterdam	100 florins	40.20	30.38	31.9375	29.25	30.65	30.375	31.40
Stockholm	100 kronor	26.80	19.30	19.90	18.55	19.45	19.20	19.90
Copenhagen	100 kroner	26.80	13.52	14.05	13.05	13.75	13.70	15.75
Christiania	do	26.80	13.37	14.05	13.05	13.70	13.70	15.75
Zurich	100 francs	19.30	15.65	16.07	15.03	15.75	15.07	15.67
Canada	100 Canadian dollars [2]	100.00	90.25	92.00	88.00	90.75	84.125	88.00
Mexico City	100 pesos [1]	49.85	49.4375	49.875	49.375	50.00	49.125	49.75
Bogota	100 Colombian dollars [1]	97.33	81.63	82.98	81.63	84.74	80.64	86.95
Montevideo	100 pesos [1]	103.42	118.00	133.82	124.00	133.00	124.00	135.00
Buenos Aires	100 gold pesos	96.48	78.973	82.954	74.725	79.50	74.15	80.97
Rio de Janeiro	100 paper milreis	[3] 54.62	16.75	18.375	15.375	17.50	13.875	16.25
Valparaiso	100 paper pesos	[4] 36.50	15.125	16.00	13.50	14.50	13.50	14.50
Yokohama	100 yen	49.85	50.875	51.25	50.25	50.875	49.50	50.375
Hongkong	100 Hongkong dollars		68.50	75.00	64.00	71.00	53.50	62.00
Shanghai	100 Shanghai taels		93.00	105.00	85.00	94.00	73.00	85.00
Singapore	100 Singapore dollars	56.78	43.50	43.75	40.50	43.75	40.50	40.50
Calcutta	100 rupees	[5] 48.665	28.75	32.50	28.50	30.25	26.00	28.50
London average price of silver per fine ounce.	Converted at par (£=$4.8665)		1.18706		1.11878		0.91818	
	Converted at average rate of exchange.		[6] .84734		[7] .78762		[8] .65490	
New York average price of silver per fine ounce (actual).	Dollars		.84187		.7849		.65503	
Do (official)	do		.83080		.77734		.64788	

[1] Cable rates.
[2] Checks (demand).
[3] Rate for a gold milreis.
[4] Rate for a gold peso.
[5] Equivalent to 10 gold sovereigns, the official rate since Oct. 1, 1920, established by the India Council in lieu of $32.44, the rate in force before that date.
[6] Average rate of exchange for October, $3.46915.
[7] Average rate of exchange for November, $3.42833.
[8] Average rate of exchange for December, $3.48485.

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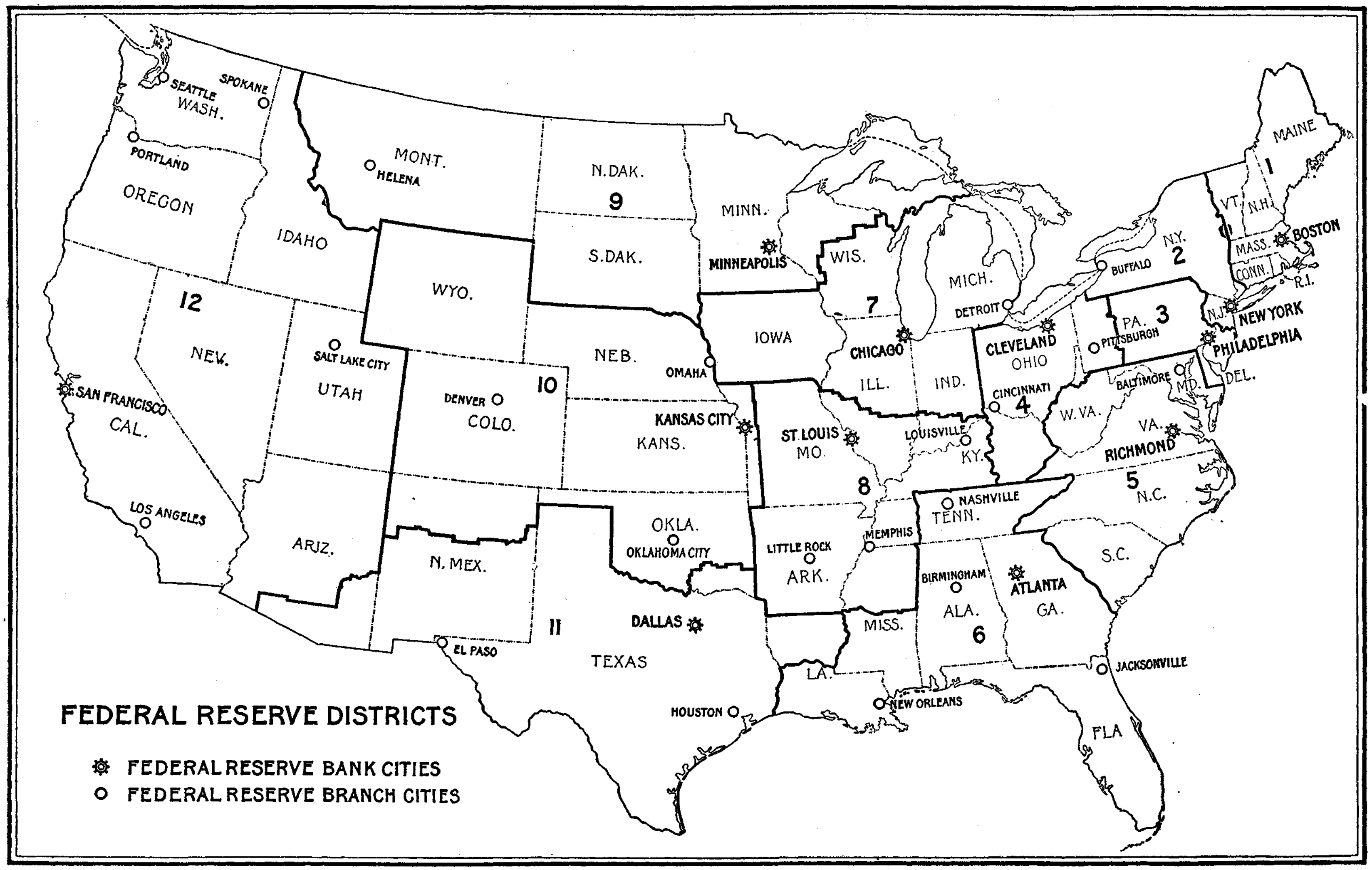

The branch at Helena, Mont., has been authorized by the Federal Reserve Board but is not yet open for business.