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(The article on the last page describes the sources of the demand for loans and currency under the Federal Reserve system)

MONTHLY REVIEW

Of Credit and Business Conditions

In the Second Federal Reserve District

By the Federal Reserve Agent, Federal Reserve Bank, New York

New York, January 1, 1922

Money Markets in 1921

IN reviewing the course of rates during 1921 in the various money markets of this district, it will be well first to consider certain influences which have operated more or less uniformly to affect all of them—the bill market, the market for Treasury certificates, the commercial paper, and Stock Exchange call money markets, as well as the markets for longer term investment securities. Some of these influences were absent in previous periods of falling interest rates, and others were present but produced somewhat different results.

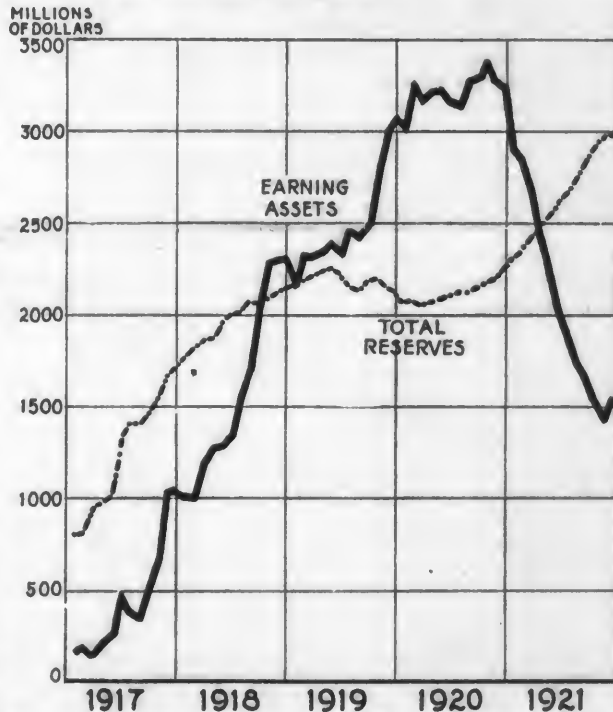
The principal factor absent heretofore was the Federal Reserve system, and while it had been in operation for two full years of peace prior to 1921, yet its powers of expansion alone had been tested. A year ago bankers and others sometimes expressed doubts as to whether a state of expansion was not inherent in the Reserve system, and as to its ability to adapt itself to the conditions which a reduction in the volume of credit might bring.

REPAYMENT OF RESERVE BANK LOANS

It will be recalled that the high point of expansion in the Reserve system, as registered in its loans to member banks, occurred in the late autumn of 1920, at the close of the crop-moving season. The high point of expansion took place some five months after prices in the United States, in common with prices in most of the other countries of the world, had begun to decline; and the period during which Reserve Bank loans were largest spread over those months when the fall in prices in this country was most severe. This reflected heavy borrowing by banks to meet demands not only of their business customers, to many of whom the first effect of declining values and the ensuing cancellations of orders was a necessity for even larger accommodation, but also of their agricultural customers for the harvesting and disposal on falling and demoralized markets of crops produced at high cost.

At the beginning of 1921 the volume of loans of all sorts at the Reserve Banks still remained very high, standing at \$3,130,014,000 as against \$3,421,976,000 at maximum. These loans measured the use to which the Reserve system had been put as the new agency for the supply of credit for emergency and seasonal require-

ments. They also measured the maximum drain of war and post-war financing on the country's reservoir of credit which, when the tide of credit turned, one might expect to see gradually replenished.



Earning Assets and Total Reserves of all Federal Reserve Banks on the Last Reported Date Each Month

The foregoing diagram indicates clearly the fall in loans and the rise in the level of the credit reservoir which occurred in 1921.

EFFECT OF LOWER PRICES AND GOLD IMPORTS

There were two compelling factors which accelerated the replenishment of the reservoir.

The first was the extent of the fall in prices, which, coupled with the diminishing volume of business, re-

quired a constantly smaller amount of credit to finance current transactions. Consequently, as the loans made at times of high prices were paid off, the new loans made for current needs left a margin of credit with which the banks could repay debt at the Reserve Banks.

The second was the great movement of gold to this country. During 1921 about \$700,000,000 was added to our stock of gold through importation. Much of this gold served either directly or indirectly to pay debts owed by foreigners in the United States, and practically all of it found its way into the Federal Reserve Banks. The reason why the gold passed into the possession of the Reserve Banks was mainly because neither gold nor any other form of money can earn interest while it remains in the vaults of a member bank, inasmuch as the latter can count nothing as reserve against its deposits except a balance at a Federal Reserve Bank. Consequently, when a bank turns gold into the Reserve Bank, it immediately becomes a source of income equivalent to the amount of interest it had been paying on a corresponding amount of its debt to the Reserve Bank, or equivalent to the rate of interest it may earn on fresh loans which it is thereby enabled to make.

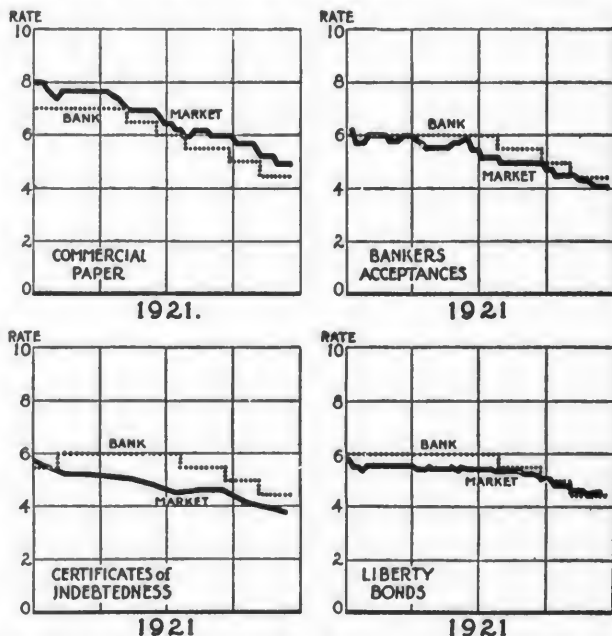
Furthermore, during 1921, owing to lower prices and less business activity than in 1920, a smaller amount of Federal Reserve notes was required for pocket and till money. In similar periods prior to 1914 excess of currency only served to increase bank reserves in the larger cities and sometimes stimulated unhealthy extensions of credit in an effort to find profitable use for such reserves. Federal Reserve notes, however, are an "elastic" form of currency and the excess supply of them, as well as the incoming gold, as fast as it found its way to the banks was sent by them to the Federal Reserve Banks to pay their debts or to build up reserve balances.

Thus as the diagram has shown, during 1921 the Federal Reserve Banks took in the gold and retired their excessive notes, with the result that the level in the system's credit reservoir rose from 45.4 per cent. at the beginning of the year to 70.7 per cent. at the close. It should be understood, however, that just as the Federal Reserve Bank puts out Federal Reserve notes not on its own initiative, but only on the initiative of the member banks which require them for the use of their customers, so also it cannot call in Federal Reserve notes on its own initiative. Once issued, they stay in circulation until the customers find their supply excessive and deposit them with the member banks, which then deposit them with the Federal Reserve Bank, where they go out of circulation.

As a result of the lessened demand for credit and notes and the imports of gold, member banks reduced their borrowings at the Federal Reserve Banks from \$2,719,134,000 on December 30, 1920, to \$1,224,703,000 on December 31, 1921, a reduction of 55 per cent. During the year a considerable number of the banks in New York City and other financial centers paid off their entire borrowings at the Reserve Bank while others reduced them materially. As this liquidation continued, and banks went out of debt, their surplus funds became available for investment, and competition between banks as lenders was gradually reestablished, resulting in general easing of interest rates.

REDUCTIONS OF RESERVE BANK RATES

Concurrently with these developments, maximum discount rates of the New York Reserve Bank were reduced by successive steps during the year from 7 to 4½ per cent. In each case these reductions were preceded by declines in the market rates of interest; they were often followed as well by further declines in such market rates. The relation between the discount rates of the Federal Reserve Bank of New York on different types of paper and open market rates for the same or similar types is illustrated in the accompanying diagram.



Open Market Interest Rates at New York Compared with the Discount Rates of the Federal Reserve Bank of New York. Open Market Rates Shown are for Prime 4 to 6 Months Commercial Paper, Prime 90-Day Bankers Acceptances, Certificates Maturing in 4 to 6 Months, and an Average of the Yields of 4 Issues of Liberty Bonds and Victory Notes most frequently offered as Security for Advances

The diagram shows that the discount rates of the New York Reserve Bank during 1921 were generally above the market rates for bills and Treasury certificates, but below those on commercial paper. During the year there has been some discussion of the relation of the Reserve Bank rates to the rates prevailing in these three markets, and the feeling is becoming more general that the Reserve Bank rates by the very nature of the several markets are more closely related to the market rates on bills and certificates than they are to the market rates on commercial paper. Furthermore, the commercial paper of the open market is largely single name paper, whereas commercial paper discounted with a Reserve Bank necessarily bears in addition a banking endorsement, which adds to its security, however good the commercial name may be.

When the system was first established there was no open market rate upon any class of paper having access to the Federal Reserve Bank except that upon commercial

paper sold by brokers. Distribution of commercial paper through brokers served and still serves a most valuable end in financing current business transactions. This market differs, however, from the other two markets, in that there is no general open market to absorb such paper if the banks investing in it wish to sell it. The market is what might be called a one-way market. The bill and certificate markets on the other hand, which have developed during the past two years, have for their public not only the banks, but also business and investment corporations, trustees, individuals and others who wish to purchase an investment where the element of commercial risk is eliminated and which can be resold as readily as it can be purchased.

The effect of the influences just discussed upon the various money markets may be summarized as follows:

BILL MARKET

A considerable decline in the foreign trade of the United States during 1921 in addition to the fall in prices resulted in a reduction in the amount of bankers bills in the New York market. There was, however, a steadily broadening market. Dealers reported considerable numbers of new customers, not only among savings banks, commercial banks, and trust companies, but also among industrial corporations, and private investors wishing to place funds in an investment affording satisfactory rate, minimum risk, and instant convertibility. While purchases by New York City banks were relatively restricted during the year, the demand from country banks was good and the list of country member banks for which bills were purchased by the Federal Reserve Bank of New York increased from 217 to 250 and purchases for foreign banks considerably more than doubled. On a number of occasions dealers were unable to secure sufficient bills to meet the demand.

In consequence of the smaller volume of bill offerings and the strengthening market, rates moved consistently downward during the year. By December all maturities were offered at $4\frac{1}{8}$ per cent. as compared with a range of 6 to $6\frac{1}{2}$ per cent. in December, 1920. Rates at which dealers purchased bills were generally $\frac{1}{8}$ of one per cent. above the offering rate.

The continued increase not only in the number of dealers handling acceptances, but in the amount of capital which they are able to command has been an important factor in the steadiness of rates. The dealers provide a two-way market; that is, they not only sell bills to customers, but they repurchase bills from them. The maintenance of such facilities is essential to the development of the American market for bills, which in turn is a highly important factor in financing American foreign trade.

The same dealers who handle bills commonly deal in Treasury certificates, which, like bills bearing banking endorsement, are available for purchase by a Federal Reserve Bank or as collateral for loans at the Reserve Banks. As in previous years, the Federal Reserve Banks stood ready to purchase such bankers acceptances and Treasury certificates as the market could not readily absorb. In consequence, however, of the broadening market, the decreased volume of bills, and easier money conditions, the market was less dependent upon the

Reserve Banks than at any other time since its inception in 1916. On December 22 the Federal Reserve Bank of New York held \$59,000,000 of purchased bills, as compared with \$114,000,000 on December 31, 1920, and \$203,000,000 on December 31, 1919. There was a corresponding decrease in the bill holdings of the entire Reserve system.

A highly important development in 1921 was the growth of a market for call money lent against the security of bankers acceptances and Treasury certificates, large amounts of which are ordinarily carried in portfolio by the dealers. By far the largest part of their portfolios is carried on borrowed money. In order that their business may offer a reasonable prospect of profit, the rates for such loans should be related to the rates which their securities earn, rather than be subject to conditions peculiar to the other market for call money, that on the Stock Exchange. With the easing of credit conditions during the year such funds in considerable volume have become available at rates $\frac{1}{2}$ to 1 per cent. below those prevailing on the Stock Exchange.

TREASURY CERTIFICATE MARKET

The volume of Treasury certificates of indebtedness outstanding on December 15, 1921, was \$2,100,000,000, compared with \$2,300,000,000 on January 1, 1921, and \$2,400,000,000 eighteen months ago. While figures are not available to show exactly the proportion of certificates held on these dates by all the banks of the country, the statistics supplied by the 808 member banks which report weekly to the Federal Reserve Board and which include most of the large purchasers of certificates, provide some indication of the widening distribution of these issues among investors. On November 30 these banks held 8.7 per cent. of the certificates outstanding, compared with 11.8 per cent. on January 1, 1921, and 17.8 per cent. on July 31, 1920.

Progress in the development of an active open market, indicated by the foregoing figures, was due both to the increase in the amount of unemployed funds and to more widespread recognition of the combined advantages of unquestioned safety and high degree of liquidity of certificates as a form of temporary investment. Like bills, their immediate convertibility into cash at all times is assured through the existence of the open market and the assurance that the Reserve Banks are empowered to purchase certificates or lend upon them as collateral.

The increasing demand for certificates resulted in the heavy oversubscription of new issues, and the quoting of all outstanding issues at substantial premiums. In February, 1921, the Federal Reserve Bank of New York discontinued its preferential discount rate on advances secured by certificates, and the rate was raised from $5\frac{1}{2}$ to 6 per cent., the rate already in effect for Liberty bonds and Victory notes. This action had no effect on open market quotations. Early in the year current bid and asked prices began to be reported currently in the daily newspapers.

Rates of interest borne by new issues paralleled the decline shown by rates on other forms of short investment. The December 15, 1920, issues bore interest at the rate of $5\frac{3}{4}$ per cent. for 6 months and 6 per cent. for 12 months. On December 15, 1921, two issues of similar

maturities were offered, bearing interest at $4\frac{1}{4}$ per cent. for 6 months and $4\frac{1}{2}$ per cent. for 12 months. These issues were immediately quoted in the open market at prices to yield about 4 per cent. and 4.30 per cent., respectively.

On June 15 and September 15, 1921, the Treasury offered for public subscription three-year Treasury notes as part of the Secretary of the Treasury's program, announced on June 8, "to spread the \$7,500,000,000 of short-dated debt, which is now concentrated in relatively few maturities, into a progressively smaller aggregate amount of better diversified maturities extending over the period from 1923 to 1928." The first of these bore interest at $5\frac{3}{4}$ per cent., and the second at $5\frac{1}{2}$ per cent. By December both of these issues were quoted at a yield of less than $4\frac{3}{4}$ per cent.

COMMERCIAL PAPER MARKET

The volume of commercial paper outstanding declined continuously during 1921 up to October 31, when the outstanding paper of thirty distributors showed the lowest total since regular reports to this bank began in 1918. The decline began in February, 1920, about nine months before bank loans began to show any material reduction and in its early stages was caused chiefly by the withdrawal from the market of banks which were experiencing an increasingly heavy demand from their own customers.



This factor began to give way early in 1921 to other causes, namely, lower prices, less active business, a smaller volume of paper offering, particularly of the better grades, and an increasing number of banks buying paper again as the needs of their customers decreased and as they extinguished their debts at the Reserve Banks.

These changes in market conditions found reflection in the selling rates for commercial paper. Rates rose steadily through 1920 to a range of 8 to $8\frac{1}{2}$ per cent. in the late summer. There was some slight easing before

the close of the year, but in 1921 the decline became rapid and by December the market was on a 5 per cent. basis for prime paper.

Additional evidence of a return towards more normal distributing conditions in recent months has appeared in the tendency for large city banks to supplant country banks as the principal sources of demand for paper. Whereas, during the greater part of the past two years there was little demand in New York and other large cities, buying in a number of the centers, and particularly in New York City, has now become considerably more active. Some dealers now report that a larger proportion of their sales are in New York City than in any other locality. These conditions, coupled with a revival of business in some lines and some transfer of borrowings from bank loans to the paper market, resulted in an increase of \$18,000,000 in the volume of commercial paper outstanding on November 30, as reported monthly by thirty dealers to this bank; the first increase in volume since September, 1920.

STOCK EXCHANGE CALL MONEY MARKET

Lessened activity on the New York Stock Exchange resulted in a diminishing volume of call loans required to finance its transactions during the first eight months of 1921. Thereafter, however, demands increased until in November and December the call loans placed by New York City banks for themselves and their correspondents reached a point somewhat above the total of a year before.

Prior to the establishment of the Federal Reserve system and the development of a call loan market based on bankers acceptances and Treasury certificates, the Stock Exchange call money market was the most readily convertible money market in the United States. It continues to be by far the largest and best known call money market. Just as it facilitates the exchange, distribution, and marketing of the securities of governments and of corporations operating in all parts of the United States, so also the funds it uses are derived at present in about equal proportions from New York City banks and from banks in other parts of the country which place them through their New York correspondents. In addition, funds in substantial amounts are provided by individuals, corporations, private bankers, and brokerage houses. While loans on Stock Exchange securities cannot, like loans on bills and Treasury certificates, be converted into cash at the Reserve Bank, nevertheless the practical elimination of money panics by the existence of the Reserve Bank has not been without its favorable effect on the convertibility of Stock Exchange call loans.

The rates on call loans secured by Stock Exchange collateral reached their high point simultaneously with the largest volume of loans, in 1919, and gradually worked downward from that point. The typical rate in 1920 was 7 and in 1921 it was 6 per cent. The average call loan renewal fell from 7 per cent. in December, 1920, to 5 per cent. in December, 1921.

Time money rates on Stock Exchange collateral decreased from a range of $7\frac{1}{4}$ to $7\frac{1}{2}$ per cent. in January to a range of 5 to $5\frac{1}{4}$ per cent. in December. A few loans have been made lately for short periods at $4\frac{3}{4}$ per cent. An increasing volume of funds has become available to this market, but demand for loans was com-

paratively light, and the market in consequence was quiet.

SECURITY MARKETS

The security markets of 1921 may be divided roughly into two distinct periods. During the first half of the year both stock and bond markets were dull and generally depressed as a result of the scarcity of funds, falling commodity prices, and uncertainty regarding business conditions. In the second half of the year both markets responded with vigor to easier money conditions, a somewhat more stable price level, and improving business activity in certain lines.

The reaction of the stock and bond markets to credit and business conditions was governed in considerable degree by a marked tendency for funds to flow into investment rather than into speculative issues. During the early part of the year this tendency had the effect of preventing bond prices from showing the weakness which the stock market evidenced. Whereas stocks broke sharply in May and June to new low levels for the year, bonds on the average held substantially above the low points which had been reached in May and December of 1920. The effect in the fall of the year was to cause a demand for bonds which in late October and November resulted in the heaviest trading since 1904, and a rapid rise in price that brought corporation bond averages to the highest levels since 1919 and most of the Liberty issues to the highest since 1918. Victory notes sold over par for the first time, with the exception of a few transactions shortly after their issue in 1919. The rise in stocks, on the other hand, was accompanied by a much smaller volume of trading than in the active periods of recent years, and average prices in December were slightly under the previous high quotation for 1921 and substantially lower than prevailing prices in 1920.

The accompanying diagram brings into comparison the movement of stock and bond prices in 1920 and 1921. The indices are those of the *Annalist* for forty representa-

tive corporation bonds, and for fifty stocks, half industrials and half railroads.

The market for new security issues responded even more vigorously than the stock and bond markets to changing credit conditions. In the early months of the year sales were limited by the capacity of the market to absorb new offerings, and the market was frequently congested. Towards the middle of the year the volume of offerings decreased as borrowers satisfied their most pressing requirements, but with the advent of lower interest rates in the later months those who had been able to postpone financing came into the market. Although the resulting volume of financing was large, practically all issues were readily absorbed and the most desirable were heavily oversubscribed. An unusually broad market was indicated by large numbers of small subscribers to many of the issues of well known companies.

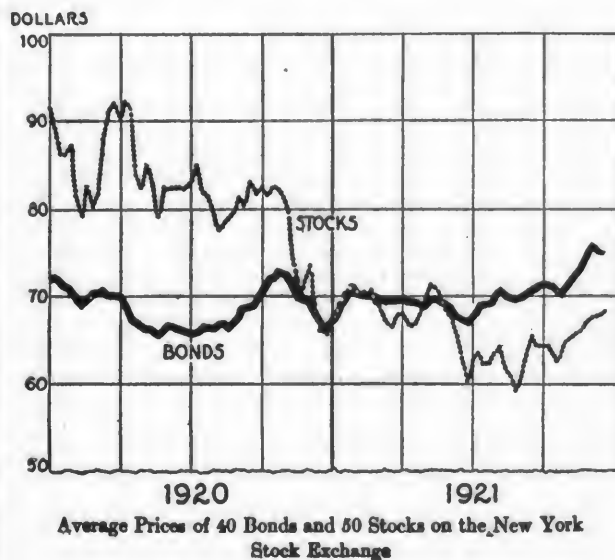
The total volume of issues of all classes for the first eleven months of the year was somewhat larger than in 1920. A reduced amount of corporation securities was offset by a larger volume of State and municipal bonds issued to pay for soldiers' bonuses or construction projects; and farm loan bonds and foreign issues.

The yield basis upon which new securities were offered declined rapidly in the later months. In December, prime long term railroad bonds were being sold on a 5 to 5½ per cent. basis compared with 7 per cent. in 1920, and public utility and industrial bonds of the better grade were offered at about 6 per cent., compared with 7 to 7½ per cent. a year ago. In the State and municipal market, where yields reached their highest level about August and September of 1921, the decline was particularly rapid; so that in December, New York City could dispose of \$55,000,000 fifty-year 4½ per cent. corporate stock on about a 4.35 per cent. basis. This was reoffered to investors to yield about 4¼ per cent., and some other municipals were offered at even lower yields. An offering of \$30,000,000 Danish Government bonds at 6½ per cent., compared with an 8 per cent. yield on an offering of the same government in October, 1920, was indicative of the change in the market for foreign issues.

The growth of the market in this country for foreign government bonds has been a notable development in recent years. At the close of the year there were 47 separate foreign government or municipal issues quoted actively on the New York Stock Exchange, representing over \$2,000,000,000 of original issues, compared with 11 in 1914 of an original issue value of somewhat less than \$900,000,000.

Savings Bank Deposits

Deposits in representative savings banks in the Second Federal Reserve District showed a moderate upward trend between November 10 and December 10, as compared with a slight decrease in the month previous. An increase is normal for the time of year. Nine of eleven reporting banks in New York City showed slight gains in aggregate deposits during the period, while five of ten reporting banks in cities outside New York reported increases and five showed slight declines. The increases, however, were sufficiently large to cause an increase in the aggregate figure.



Gold Movement

Imports of gold during November amounted to \$51,859,000, an increase of \$4,729,000 over October, but about \$14,000,000 less than during September. Nearly two-thirds of the receipts were from France and England. Exports of \$608,000 were the smallest since April. The excess of imports over exports for the first eleven months of this year has been \$638,435,000 as compared with \$67,374,000 for the same period last year.

IMPORTS
(000 omitted)

| Country | First Quarter | Second Quarter | Third Quarter | October | November | Total Jan. 1-Nov. 30 |
|------------------------|------------------|------------------|------------------|-----------------|-----------------|----------------------|
| England..... | \$51,163 | \$51,087 | \$57,813 | \$9,892 | \$18,407 | \$188,362 |
| France..... | 45,235 | 28,103 | 79,972 | 18,597 | 15,051 | 186,958 |
| Sweden..... | 4,679 | 37,941 | 12,252 | 4,205 | 5,916 | 64,993 |
| Canada..... | 20,553 | 4,535 | 5,931 | 1,147 | 2,375 | 34,541 |
| China & Hong Kong..... | 12,508 | 6,804 | 3,648 | 312 | 202 | 23,474 |
| British India..... | 8,081 | 9,065 | 10,049 | 3,591 | 1,029 | 31,815 |
| Netherlands..... | 1,557 | 14,159 | 2,785 | 243 | 471 | 19,220 |
| Germany..... | 3 | 4 | 16,342 | 614 | 3,000 | 19,963 |
| So. America.. | 6,069 | 6,175 | 5,831 | 2,869 | 1,486 | 22,450 |
| All Other.... | 13,087 | 24,534 | 20,611 | 5,655 | 3,922 | 68,409 |
| Total Impts. | \$163,535 | \$182,407 | \$215,234 | \$47,130 | \$51,859 | \$660,165 |

EXPORTS

| | | | | | | |
|---------------------|------------------|------------------|------------------|-----------------|-----------------|------------------|
| Hong Kong.. | \$453 | \$744 | \$2,205 | \$5,762 | \$246 | \$9,410 |
| Mexico..... | 3,098 | 920 | 1,287 | 45 | 55 | 5,405 |
| Sweden..... | ..... | ..... | 2,643 | ..... | ..... | 2,643 |
| Canada..... | 655 | 506 | 665 | 645 | 257 | 2,708 |
| British India..... | ..... | ..... | 55 | 1,124 | ..... | 1,179 |
| All Other.... | 285 | 49 | 1 | ..... | 50 | 385 |
| Total Expts. | \$4,471 | \$2,219 | \$6,856 | \$7,576 | \$608 | \$21,730 |
| Net Imports. | \$159,064 | \$180,188 | \$208,378 | \$39,554 | \$51,251 | \$638,435 |

During the first ten days of December, imports amounted to \$11,137,000, and exports to \$200,000.

Foreign Exchange

Exchange rates on all important European financial centers advanced substantially in the early part of December. The advance in sterling continued a movement which has been practically continuous since the latter part of July, and reflects not only developments in the international situation which have had their effect on all the more important European exchanges, but a decline in prices which has been much greater in England in recent months than in the United States. On December 12, sterling reached \$4.24, the highest quotation since September, 1919. Other European rates moved to higher levels during the month and Swiss francs were quoted at a slight premium, the first European exchange to exceed par value in practically two years. German marks rallied slightly from the low point touched in November.

Rates on Argentina, Brazil, and other South American countries made further slight advances. Of the Far Eastern rates those on India advanced slightly while rates on Japan and Shanghai were lower.

The following table shows the changes that occurred in the principal exchanges during the month.

| Country | December 20 Last | Change from November 19 | Per Cent. Depreciation from Par |
|-----------------------------|------------------|-------------------------|---------------------------------|
| England..... | \$4.2100 | +.2125 | 13.5 |
| France..... | .0810 | +.0088 | 58.0 |
| Italy..... | .0458 | +.0041 | 76.3 |
| Germany..... | .0059 | +.0021 | 97.5 |
| Belgium..... | .0777 | +.0077 | 59.7 |
| Holland..... | .3682 | +.0165 | 8.4 |
| Switzerland..... | .1945 | +.0075 | + 0.8 |
| Spain..... | .1497 | +.0127 | 22.4 |
| Sweden (Stockholm)..... | .2495 | +.0165 | 6.9 |
| Argentina..... | .3346 | +.0082 | 21.2 |
| Brazil..... | .1266 | +.0016 | 61.0 |
| Japan (Yokohama)..... | .4670 | -.0105 | 6.3 |
| China (Hong Kong)..... | .5488 | 0 | • |
| China (Shanghai)..... | .7663 | -.0175 | • |
| India..... | .2788 | +.0094 | 42.7 |
| Canada..... | .9350 | +.0212 | 6.5 |
| Bar Silver in New York..... | .6675 | -.0300 | .... |

*Silver Exchange Basis.

Foreign Trade

The preliminary statement of the Department of Commerce for foreign trade during November reported the value of exports to be \$295,500,000, the smallest for any month this year, and the value of imports as \$211,300,000, the highest since last April. The export balance of \$84,200,000 was slightly under that for April, and the smallest since August, 1920.

The following table gives the figures for the monthly value of exports and imports for the first eleven months of 1921.

(000 omitted)

| Month | Exports | Imports | Excess Exports |
|----------------|-----------|-----------|----------------|
| January..... | \$654,271 | \$208,797 | \$445,474 |
| February..... | 486,454 | 214,530 | 271,924 |
| March..... | 386,680 | 251,969 | 134,711 |
| April..... | 340,334 | 254,579 | 85,755 |
| May..... | 329,710 | 204,911 | 124,799 |
| June..... | 336,899 | 185,756 | 151,143 |
| July..... | 325,181 | 178,159 | 147,022 |
| August..... | 366,888 | 194,769 | 172,119 |
| September..... | 325,747 | 179,292 | 146,455 |
| October..... | 343,552 | 188,008 | 155,544 |
| November..... | 295,500 | 211,300 | 84,200 |

Reductions in cotton and wheat shipments were important factors in smaller exports in November. Cotton shipments decreased nearly 226,000 bales to 648,695. This figure was the largest for any month this year with the exception of October, but was less than the total for

November last year. Since April monthly shipments had been running much above those of last year. The cotton movement continued less heavy in December. November exports of wheat dropped to 13,846,000 bushels, from 18,360,000 bushels in October, and 30,800,000 bushels in September. In this market, also, new buying remained light. Other important articles of export, which showed declines in volume, were condensed milk, corn, flour, rice, lard, some of the meats, and mineral oils.

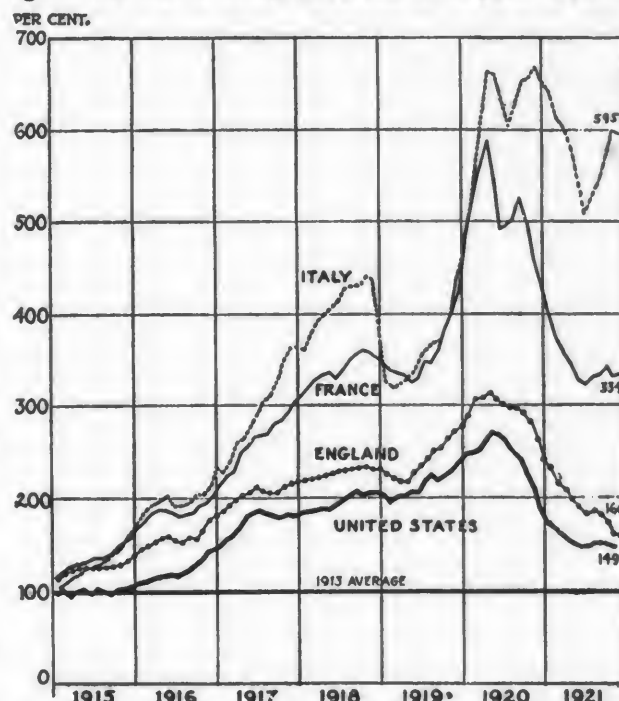
Shippers of copper reported an active foreign demand during November, and sales close to the largest since 1919. The demand remained good in December, though slightly less active than in November. Germany was the largest buyer, followed by the Far East, France, England, and Austria.

There was little change as regards current buying of manufactured and partly manufactured materials. Some exporters reported a quieter market towards the year end, but on the whole it appeared that gains of recent months were maintained. Individual orders usually continued to be for comparatively small quantities of immediate necessities, and came from widely distributed sources. In steel, Canada was the largest purchaser, and there was a somewhat more active demand from Japan than a month ago, and a scattering of business from South America. One leading export corporation reported an increase in business from Cuba as a new development.

World Wholesale Prices

With the single exception of Germany, the available figures for wholesale prices in foreign countries in November, show comparatively minor changes. The decline in British prices was less abrupt than for several months previous. While the Statist price index for Great Britain

is now only 11 points higher than the Department of Labor index of wholesales prices in the United States, the index for the cost of living in England is 103 points above the 1914 level, while that for the United States is 64 points above it. The spread between wholesale price figures and cost of living quotations in England is partly



Wholesale Commodity Prices in Four Countries (Average Prices in 1913 = 100 per cent.)

Indices of Wholesale Prices

1913 average = 100 unless otherwise noted

| Country | Latest Quotation | PER CENT. CHANGE DURING | | | Per Cent. Decline from High | Date of High |
|-----------------------|------------------|-------------------------|---------|----------|-----------------------------|---------------|
| | | September | October | November | | |
| United States: | | | | | | |
| 12 basic commodities* | 110 (Dec. 24) | - 0.2 | + 2.6 | + 1.9 | 55 | May 17, 1920 |
| Department of Labor | 149 (Nov. Av.) | 0.0 | - 1.3 | - 0.7 | 45 | May 1, 1920 |
| Dun's | 136 (Dec. 1) | - 0.4 | + 1.1 | + 0.5 | 38 | May 1, 1920 |
| Bradstreet's | 123 (Dec. 1) | + 0.9 | + 1.4 | - 0.3 | 46 | Feb. 1, 1920 |
| Great Britain: | | | | | | |
| Economist | 166 (Dec. 1) | + 2.2 | - 6.3 | - 2.3 | 47 | Apr. 1, 1920 |
| Statist | 160 (Dec. 1) | - 3.9 | - 7.4 | - 1.2 | 49 | May 1, 1920 |
| 20 basic commodities* | 130 (Dec. 24) | + 2.6 | - 5.3 | - 7.0 | 62 | May 21, 1920 |
| France | 334 (Dec. 1) | + 3.8 | - 3.4 | + 0.4 | 43 | May 1, 1920 |
| Italy | 595 (Dec. 1) | + 7.1 | + 3.3 | - 0.7 | 11 | Dec. 1, 1920 |
| Japan | 214 (Nov. Av.) | + 3.8** | + 6.0 | - 2.2 | 33 | Mar. 1920 |
| Canada | 169 (Oct. 15) | - 1.6 | - 1.5 | | 36 | May 15, 1920 |
| Sweden† | 174 (Nov. 15) | - 8.1 | - 3.3 | - 0.6 | 53 | Dec. 15, 1918 |
| Australia‡ | 156 (Oct. Av.) | 0.0 | - 2.4 | | 34 | Aug. 1920 |
| Norway | 274 (Nov. 1) | - 1.8 | - 2.0 | | 37 | Oct. 1, 1920 |
| Germany¶ | 3330 (Dec. 1) | +10.9 | +34.3 | +22.2 | 0 | Dec. 1, 1921 |
| Denmark\|\| | 186 (Nov. 1) | - 9.8 | - 7.9 | | 54 | Nov. 1, 1920 |
| Holland | 169 (Nov. 1) | 0.0 | - 6.1 | | 57 | Year 1918 |

*Computed by this bank. †July 1, 1913 to June 30, 1914 = 100. ‡July, 1914 = 100. ¶Middle of 1914 = 100. ||July, 1912 to June, 1914 = 100. **Revised.

due to the fact that the Statist index is heavily weighted with raw materials.

An inspection of the price changes in the countries of the world since June makes it clear that the United States has been the first country in which relative stabilization of the general price level has taken place. The index number of the Department of Labor has moved within a range of 4 points since June. In every other country the fluctuations have been larger and in many even the general trend of prices has been uncertain. Such changes may be accounted for by unsettled financial conditions in many of the important European countries which have found further expression in unstable exchanges.

Domestic Wholesale Prices

The Department of Labor index of wholesale prices fell .7 of one per cent. between October and November. Prices of farm products, metals, and cloths and clothing were slightly lower and prices of fuel and lighting, and building materials slightly higher. There was no change in other groups. The month's changes served to increase rather than decrease the spread between the prices of different groups of commodities. The following table shows the movement of different elements of the index:

(1913 average = 100)

| Commodity Group | VALUE OF INDEX | | | PER CENT CHANGE | |
|------------------------|----------------|-----------|-----------|-----------------|--------------|
| | Maximum 1920 | Oct. 1921 | Nov. 1921 | Maximum to Nov. | Oct. to Nov. |
| Farm products..... | 246 | 119 | 114 | -53.7 | -4.2 |
| Metals..... | 195 | 121 | 119 | -39.0 | -1.7 |
| Foods, etc..... | 237 | 142 | 142 | -50.5 | 0.0 |
| Chemicals, etc..... | 222 | 162 | 162 | -27.0 | 0.0 |
| Cloths and clothing... | 356 | 190 | 186 | -47.8 | -2.1 |
| Fuel and lighting..... | 234 | 182 | 186 | -34.5 | +2.2 |
| Building materials.... | 341 | 192 | 197 | -42.2 | +2.6 |
| House furnishings.... | 371 | 218 | 218 | -41.2 | 0.0 |
| Miscellaneous..... | 247 | 145 | 145 | -41.3 | 0.0 |
| All Groups..... | 272 | 150 | 149 | -45.2 | -0.7 |

Cost of Living

The cost of living declined .7 of one per cent. between November 1 and December 1, according to figures prepared by the National Industrial Conference Board. The changes in different elements of the index are shown in the following table:

| Items | Dec. 1 Level | Per Cent. Change During November | Decline from High | Per Cent. Change Since Dec. 1, 1920 |
|-----------------|--------------|----------------------------------|-------------------|-------------------------------------|
| Food..... | 152 | -.07 | 30.6 | -21.2 |
| Clothing..... | 157 | -1.9 | 45.5 | -23.4 |
| Shelter..... | 160 | 0 | 1.2 | +1.8 |
| Fuel and light. | 179 | -0.6 | 10.5 | -10.5 |
| Sundries..... | 178 | -1.1 | 7.3 | -7.3 |
| Total.... | 162.7 | -.7 | 20.4 | -14.4 |

For six months the cost of living index has been practically unchanged. The figure for June 1 was 161.9 compared with 162.7 on December 1. Individual elements making up the index have fluctuated somewhat in both directions but within a much narrower range than the various elements making up the Department of Labor index of wholesale prices.

Production of Basic Commodities

In six of nine important industries in the United States, for which figures are available, indices of production for November computed by this bank, are higher than those for October, and in only one industry was there considerable reduction in output. Flour milling has been greatly in excess of normal during the past six months, and November figures show a natural reaction.

Partly as a consequence of the recently increased demand for structural steel, there was a continued increase in output in the iron and steel industry. Other metal industries were also more active. Continued demand for amalgamated sheets, mainly for export, brought a slight increase in zinc production. A more active demand for tin resulted in increased shipments, a substantial advance in prices, and smaller available stocks. Sales of copper also increased substantially in November, but production was maintained at about one-fifth of normal and sales were made from accumulated stocks.

The figures of the following table show current production as percentages of normal production. In computing "normal" allowance has been made for seasonal variations and the year-to-year growth of industry.

(Normal production = 100)

| Commodity | 1920 Sept. to Dec. | 1921 | | | | |
|----------------------------|--------------------|---------------|---------------|---------------|---------|----------|
| | | Jan. to March | April to June | July to Sept. | October | November |
| Anthracite coal mined... | 96 | 103 | 95 | 93 | 89 | 87 |
| Bituminous coal mined... | 99 | 64 | 66 | 63 | 76 | 67 |
| Pig iron production..... | 86 | 58 | 53 | 27 | 34 | 40 |
| Steel ingot production.... | 85 | 58 | 55 | 33 | 47 | 50 |
| Zinc production..... | 87 | 52 | 47 | 38 | 38 | 55 |
| Tin deliveries..... | 63 | 31 | 28 | 48 | 44 | 63 |
| Copper production..... | 86 | 67 | 25 | 16 | 20* | 18† |
| Petroleum production.... | 111 | 100 | 108 | 104 | 94† | 93† |
| Cement production..... | 96 | 79 | 85 | 90 | 91 | .. |
| Cotton consumption..... | 56 | 62 | 67 | 73 | 76 | 85 |
| Wheat flour milled..... | 76 | 89 | 107 | 131 | 111 | 78 |
| Sugar meltings..... | 61 | 85 | 86 | 89 | 114 | 125 |
| Meat slaughtered..... | 83 | 90 | 99 | 101 | 93 | .. |
| Wool consumption..... | 56 | 70 | 104 | 106 | 124 | .. |

*Revised.

†Preliminary.

Commodity Stocks on Hand

Stocks of basic commodities for which figures are thus far available show in general moderate declines during November comparable for the most part with similar declines in the month previous. An increased rate of manufacture and construction is principally responsible

for reduced holdings of raw cotton, and of tin. Lower index figures on stocks of wheat, oats, barley, and rye reflect mainly the beginning of the absorption of the recently harvested crops. Actual stocks of corn decreased but the index is higher because the decrease was less than that which normally takes place at this season of the year. The following table gives the available figures for December 1.

(Normal stocks = 100)

| Commodity | 1920 Oct. to Dec. | 1921 | | | | |
|---------------------------------|----------------------------|--------------------|--------------------|---------------------|--------|--------|
| | | Jan. to Mar. | Apr. to June | July to Sept. | Nov. 1 | Dec. 1 |
| Sugar..... | 49 | 68 | 66 | 54 | 40 | 66 |
| Cotton..... | 96 | 104 | 126 | 155 | 113 | 104 |
| Coffee..... | 106 | 96 | 114 | 95 | 65 | 72 |
| Wheat..... | 72 | 60 | 35 | 108 | 109 | 88 |
| Oats..... | 224 | 251 | 234 | 643 | 461 | 458 |
| Corn..... | 149 | 93 | 108 | 238 | 371 | 440 |
| Barley..... | 93 | 90 | 121 | 295 | 96 | 74 |
| Rye..... | 278 | 143 | 133 | 315 | 402 | 364 |
| Flour (in chief centers)..... | 118 | 116 | 87 | 87 | 131 | ... |
| Tin (world visible supply)..... | 131 | 116 | 115 | 134 | 168 | 147 |
| Cement, Portland..... | 43 | 91 | 99 | 95 | 68 | ... |
| Lead, bonded..... | 413 | 426 | 169 | 191 | ... | ... |
| Dairy products and eggs..... | 99 | 95 | 178 | 104 | 98 | ... |
| Poultry, frozen..... | 86 | 90 | 100 | 82 | 100 | ... |
| Meats, cured and frozen..... | 93 | 88 | 93 | 94 | 65 | ... |
| Paper..... | 87 | 120 | 143 | 138 | 120 | ... |

Employment

Increases in the number of persons employed in certain industries during November and December, notably in iron and steel plants, have been offset by normal seasonal declines in the number employed in others, with the result that there has been practically no change in the total number of workers in industrial establishments, either in this district or in the country as a whole. The number of persons employed normally declines in the late fall and winter months, and the absence of any decrease as yet indicates somewhat more active industrial operations.

Reports of the New York State Department of Labor from 1,575 manufacturing firms show an increase of 3 per cent. in November in the number of persons employed in the metal industries and a somewhat smaller gain in wood-working factories. These increases were offset by reductions in forces in the clothing industry, due partly to the strike in New York City and partly to seasonal dulness. In the food products industries there were also seasonal reductions. Reports for 14 selected industries throughout the United States, made to the Department of Labor, showed increases in the number employed in seven industries, including a gain of 7 per cent. in paper making, and 4 per cent. in iron and steel plants. There were decreases in the number of employees in automobile plants and in clothing and textile factories.

The Municipal Employment Bureau of New York City reports that the number of applicants for positions was less in November and December than in October.

The bureau has been able to place a larger percentage of those applying for work, partly because of the increased demand for workers incident to the Christmas season. Charitable organizations report that they have received recently somewhat fewer appeals for assistance.

Changes in Wage Rates

Reports to this bank indicate that the prevailing hiring-rate for unskilled male labor in this district has declined from 40 cents an hour in September to 35 cents in December. A majority of the employers continue to pay old employees 40 cents, but are taking on new men at the lower rate. In the iron and steel industry, 30 cents is the ruling rate.

Per capita weekly earnings in New York State factories, reported by the New York State Department of Labor, and in 13 selected industries throughout the United States, reported by the United States Department of Labor, continued to decline fractionally. Average earnings in New York State factories are 16 per cent. below the high point of 1920 and those reported for the United States are 24 per cent. below.

On December 31 the working agreement between building trades unions and employers in New York City, entered into on May 1, 1920, expires and negotiations with a view of fixing new rates of pay are now under way. About 115,000 workers are members of the various unions and will be affected by any wage changes. The rates of pay under the expiring agreement are on the average 80 per cent. above the 1914 level.

Arbitration of a dispute between the New York Employing Printers' Association and printers' unions, has resulted in a reduction of \$1 per week in the wages of 2,800 press feeders and assistants in the New York book and job printing industry, setting the new wage scale at \$36.50 per week. Employers had asked a reduction of \$2.50 per week.

Volume of Building

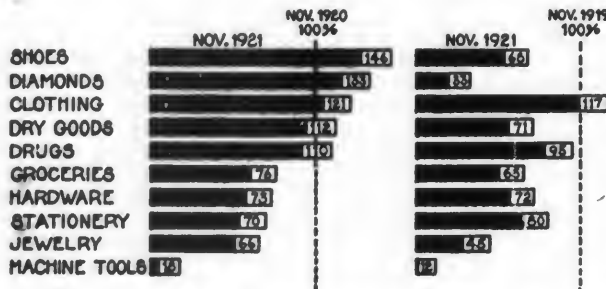
Building contract awards in New York State and Northern New Jersey during November as reported by the F. W. Dodge Company, showed a seasonal decrease of about 22 per cent. from October. For the twenty-seven northeastern States the reports showed a decline of about 15 per cent., slightly less than the normal seasonal decline. Both in this district and throughout the country, residential construction was maintained at the high rate prevailing in September and October, but contracts for business, industrial, and educational buildings were in smaller volume. November contract awards were 45 per cent. larger than in November, 1920, in the twenty-seven northeastern States, and 76 per cent. larger in New York and Northern New Jersey.

Wholesale Trade

Wholesale dealers in five lines reported to this bank that sales were larger in dollar amount in November, 1921, than in November, 1920, while dealers in five other lines reported smaller sales. Sales in all lines except clothing were smaller than in November, 1919.

The accompanying diagram compares the dollar sales in November, 1921, with those of both November, 1920, and November, 1919.

In view of the decline in prices which has taken place in the last year, it is probable that the physical volume of groceries and hardware sold in November, 1921, was larger than in November, 1920, thereby indicating increased physical volume of goods sold in seven of the ten lines shown. As compared with sales in November, 1919, the physical volume last month was apparently greater in six lines, namely, clothing, dry goods, drugs, hardware, shoes, and stationery.



Dollar Amount of Sales of Wholesale Dealers in November, 1921, Compared with Sales in November, 1920, and in November, 1919

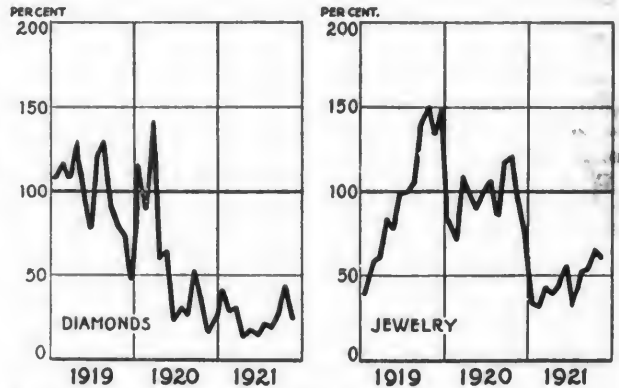
The dollar amount of sales in November, 1921, was lower than in October, 1921, in eight lines. The decreases ranged from 45 per cent. in diamonds to 1 per cent. in groceries, whereas sales of shoes increased 3 per cent. and sales of stationery increased 10 per cent. These changes were largely seasonal.

The fluctuations in sales in all lines are shown in the following table. Sales in November, 1920, are taken as 100 and sales during November, 1919, and November, 1921, are expressed in percentages of the November, 1920, figures. Price changes are estimated.

| Commodity | DOLLAR VALUE OF SALES (November, 1920 Sales = 100) | | | Per Cent. Change in Price, Nov., 1920 to Nov., 1921 |
|--------------------|---|---------------|---------------|--|
| | Nov., 1919 | Nov., 1920 | Nov., 1921 | |
| Shoes..... | 215 | 100 | 146 | -30 |
| Diamonds..... | 400 | 100 | 133 | -35 |
| Clothing..... | 103 | 100 | 121 | -20 |
| Dry goods..... | 157 | 100 | 112 | -10 |
| Drugs..... | 116 | 100 | 110 | -15 |
| Groceries..... | 116 | 100 | 76 | -25 |
| Hardware..... | 102 | 100 | 73 | -30 |
| Stationery..... | 88 | 100 | 70 | -15 |
| Jewelry..... | 147 | 100 | 66 | -10 |
| Machine tools..... | 155 | 100 | 18 | -20 |

Sales reports from representative diamond cutters and jewelry manufacturers are published this month for the first time. These figures have been added to the tabulations because sales in these lines are peculiarly sensitive to changes in the purchasing power of the consumer.

Fluctuations in these sales during the years 1919, 1920, and thus far in 1921, are shown in the following diagrams.



Sales (dollar amount) of Representative Diamond Cutters and Jewelry Manufacturers in the Second District (1919 Average = 100 per cent.)

Retail Trade

Christmas sales by department stores in New York City and vicinity from December 1 to December 20 were about 3 per cent. larger in dollar value than sales during the corresponding period in 1920 and 5 per cent. larger than sales during the first three weeks of December, 1919, according to preliminary reports received from 16 representative concerns. Sales of these stores have been the largest ever reported.

As prices are lower than those prevailing last December it is evident that a greater volume of merchandise has been sold. Merchants report that there have been many more customers in the stores and that business has been well distributed, with increased sales in those departments that handle practical and useful articles such as house furnishings, furniture, rugs, carpets, and articles of wearing apparel. A majority of the stores report increased sales by their toy departments. Sales of jewelry and other strictly holiday goods were about the same as last year. Medium-priced merchandise was in general in greater demand than the most expensive, or the cheapest grades. The average size of each purchase was somewhat smaller than last year.

Complete reports for November from 47 firms or corporations operating 61 representative stores in this district show that sales in that month were 8.2 per cent. below the sales of November, 1920. This decline, which compares with an increase of 2.8 per cent. in October, over October, 1920, is attributed by merchants in part to the closing of the stores on Armistice Day this year and to the unfavorable weather toward the latter part of the month. Stores in all cities reported smaller sales. When allowance is made for price changes, however, the total amount of goods sold during November was probably larger than that sold during November, 1920. The number of individual sales as reported by 20 stores that keep such records was 7.3 per cent. greater. The average amount of the individual sale declined 12 per cent. from \$3.55 in November, 1920, to \$3.13 in November, 1921.

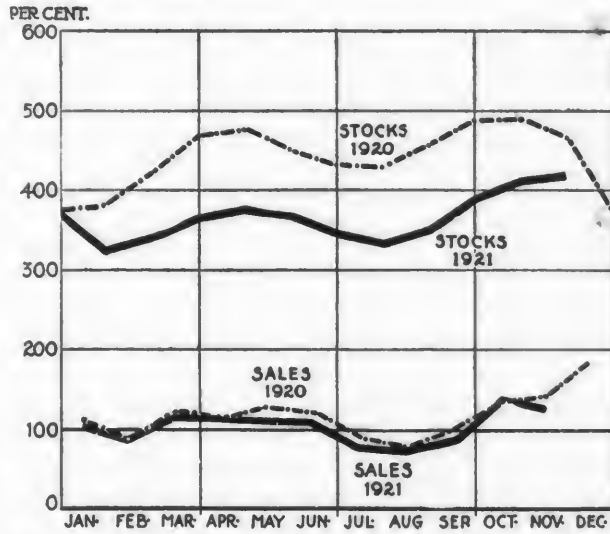
Department store sales in November compare much more favorably with those of last year than do sales by mail order houses but less favorably than sales by chain store systems in 5 lines, for which figures have been received. The chain store sales, however, are affected by the increase in the number of stores. The following table shows the changes.

| | Sales Nov., 1921 | Sales Nov., 1920 | Per Cent. Change |
|----------------------|---------------------|---------------------|---------------------|
| Chain Stores..... | \$61,055,000 | \$60,802,000 | + 0.4 |
| Department Stores... | 33,606,000 | 36,627,000 | - 8.2 |
| Mail Order Houses... | 23,541,000 | 43,637,000 | -34.6 |

Mail order sales have been adversely affected by the reduced demand from the agricultural population. Of the chain systems, the five and ten cent stores report an increase of 4.4 per cent. over sales last November, and cigar stores a decrease of 6.8 per cent. Sales of dry goods, drug, and grocery stores were about the same as last year.

Stocks held by department stores, computed at the selling price, on December 1, 1921, were nearly 10 per cent. below the stocks on December 1, 1920. This decline was attributable to the fall in prices and the physical volume of stocks was probably somewhat larger this year than last. Between November 1 and December 1, there was an increase of about 2 per cent. in stocks, a seasonal change due to the receipt of holiday goods.

The accompanying diagram compares the stocks and sales of department stores during 1921 with those of 1920. The sales lines run closely together throughout the year. The stock lines follow the same trend but 1921 figures have been 10 to 20 per cent. below those of 1920, owing chiefly to the fall in prices. The diagram indicates that merchants have been able to maintain sales at the 1920 level and at the same time carry stocks of less value thus increasing the rate of turnover.



Sales (dollar amount) of Representative Department Stores in the Second District each month and Stocks (selling value) at the end of each month (Average Sales in 1919 = 100 per cent.)

Business Failures

The number of commercial failures in the United States reported by Dun's was larger in November than in any previous month since January, 1916, but the large total was the result of failures among smaller grocery, dry goods, clothing, and general stores and textile manufacturers operating on small capital. The average liability per failure was distinctly less than the 1921 monthly average up to this time. Failures have recently been more numerous among trading than among manufacturing concerns.

Business of Department Stores

| | New York and Brooklyn | Buffalo | Newark | Rochester | Syracuse | Elsewhere in Second District | Apparel Stores | Entire Second District |
|--|-----------------------------|---------|--------|-----------|----------|------------------------------------|-------------------|------------------------------|
| Per cent. change in net sales in November, 1921, compared with net sales in November, 1920..... | - 6.9 | - 7.6 | - 8.4 | - 7.7 | -11.4 | -10.4 | -14.1 | - 8.2 |
| Per cent. change in number of transactions in November, 1921, compared with number of transactions in November, 1920..... | +10.3 | +14.1 | - 0.5 | ..... | ..... | - 1.0 | + 2.7 | + 7.3 |
| Per cent. change in net sales from July 1, 1921 to November 30, 1921, as compared with same period in 1920..... | - 5.4 | - 5.2 | - 5.7 | - 3.6 | -11.0 | - 9.7 | - 4.2 | - 5.7 |
| Per cent. change in stocks (retail price) at close of November, 1921, compared with stocks at close of October, 1921..... | + 3.0 | - 0.2 | + 1.1 | + 2.1 | + 3.5 | + 0.4 | + 0.2 | + 2.1 |
| Per cent. change in stocks (retail price) at close of November, 1921, compared with stocks at close of November, 1920..... | - 7.9 | - 6.7 | -12.9 | -24.2 | -29.5 | - 2.7 | - 6.0 | - 9.4 |
| Percentage of stocks (retail price) at close of July, August, September, October, and November, 1921, to net sales during same months..... | 362.9 | 428.7 | 371.0 | 392.7 | 414.2 | 549.5 | 251.7 | 372.3 |
| Percentage of outstanding orders (cost) at close of November, 1921, to total purchases during calendar year 1920..... | 5.4 | 5.8 | 5.6 | 4.7 | 3.5 | 4.6 | 7.1 | 5.8 |

Sources of the Demand for Loans and Currency

THE following is an extract from an address by W. P. G. Harding, Governor of the Federal Reserve Board, delivered before the Washington, D. C., Chamber of Commerce on December 13, on the subject, "The Federal Reserve System as Related to American Business." The full text of the address may be had from this bank on request.

Although more than seven years have elapsed since the establishment of the Federal Reserve Banks, there is still a surprising lack of knowledge of what they really are and of what their proper functions are, not only on the part of the public at large, but among business men and bankers as well.

INITIATIVE TO LEND NOT WITH A RESERVE BANK

A Federal Reserve Bank can not lend directly to the customers of a member bank, nor does it, in fact, take the initiative in making loans to a member bank for the purpose of enabling the member bank to distribute the funds so advanced to its customers. The Federal Reserve Bank lends to the member bank against transactions already made, for the purpose of enabling the member bank to restore its reserve to the legal requirement, after the reserve has been impaired or is about to be impaired because of increased loans and deposits.

WHAT REGULATES THE ISSUANCE OF NOTES

There is, perhaps, even greater confusion in the public mind regarding the issue of Federal Reserve notes than there is regarding the rediscounting functions of the Federal Reserve Banks. There are some who appear to have an impression that the Federal Reserve Board has power to expand or contract the currency of the country at will and that it has exercised this power in a reckless and arbitrary manner. While the law prescribes that the Federal Reserve Board shall have the right, acting through the Federal Reserve Agent, to grant in whole or in part or to reject entirely the application of any Federal Reserve Bank for Federal Reserve notes, it has never exercised this right. On the contrary, it has always approved promptly every application which has been made for the issue of Federal Reserve notes. One of the purposes of the Federal Reserve Act, as stated in its caption, is to furnish an elastic currency, but there are many whose idea of elasticity is continuous stretching.

Currency to be really elastic must be susceptible of expansion or the reverse, as the needs of industry and commerce may require. Many believe that there was a preordained contraction of the currency during the year 1920, determined upon in order to reduce prices. The expansion of nearly \$600,000,000 in Federal Reserve note circulation which actually took place during that year shows that the impression is absolutely unwarranted.

An increase or decrease in the volume of Federal Reserve notes outstanding is not the result of any preordained policy or premeditated design, for the volume of Federal Reserve notes in circulation depends entirely upon the activity of business or upon the kind of activity which calls for currency rather than book credits.

NOTES ISSUED AGAINST COLLATERAL

Federal Reserve notes can be issued only against collateral in an amount equal to the sum of the Federal Reserve notes applied for, which collateral security must be notes and bills discounted or acquired by the banks

or gold or gold certificates. The law requires each Federal Reserve Bank to maintain a reserve of 40 per cent. in gold against its Federal Reserve notes in actual circulation.

During the present year the loans of the Federal Reserve Banks to their member banks have decreased by about \$1,550,000,000 and as the notes discounted with Federal Reserve Banks have been paid off Federal Reserve note currency has come back to the Banks and in the absence of a demand for it, has not been reissued. Upon payment of commercial paper which has been deposited to secure Federal Reserve notes, there necessarily results either an immediate return of an equivalent amount of notes to the Bank or an automatic increase in the percentage of gold reserves available for their redemption.

CIRCULATION CONFORMS TO THE PUBLIC NEED

Federal Reserve notes are not legal tender, nor do they count as reserve money for member banks. They are issued only as a need for them develops and as they become redundant in any locality they are returned for credit or for redemption to the Federal Reserve Banks or to the Treasury at Washington. Thus, there can not be at any time more Federal Reserve notes in circulation than the needs of the country at the prevailing level of prices and wages require, and as the demand abates the volume of notes outstanding will be correspondingly reduced through redemption. The increased volume of Federal Reserve notes in circulation from 1917 to the end of the year 1920 was, in so far as it was not the result of direct exchanges for gold and gold certificates, the effect of advancing wages and prices, and not their cause, just as the reduction which has taken place during the present year is the result of lower prices and smaller volume of business, rather than their cause.

Under the Federal Reserve system, as business expands, as labor is more fully employed and as production increases and distribution becomes more active, there follows a demand for greater discount accommodations and a need for more currency, and the increased volume of discounts furnishes a means of providing the increased volume of currency required.

The Federal Reserve Banks hold today a gold reserve of about \$2,850,000,000 and a combined reserve against member banks' deposits and note issues of slightly more than 73 per cent. Or if the legal minimum reserve of 35 per cent. be set up against deposits, there would remain a gold reserve of slightly more than 100 per cent. against Federal Reserve notes outstanding.

FREEDOM FROM MONEY PANICS

But the Federal Reserve system should not be expected to accomplish the impossible. It is not a panacea for all economic and financial ills and it cannot, however skilful its administration may be, prevent periods of depression in the future, although it can do much to modify them. Other nations, such as Great Britain and France, with their great central banking institutions, have always had their years of prosperity and their periods of depression, although they have been free from the money panics which we formerly had in this country as a result of our inadequate banking system and which we would, no doubt, have had in the most aggravated degree a year or so ago, but for the efficiency and stabilizing influence of the Federal Reserve system.