The article on the last page describes Credit Expansion Outside the Federal Reserve Banks.

MONTHLY REVIEW
of Credit and Business Conditions
Second Federal Reserve District

Federal Reserve Agent ***Federal Reserve Bank, New York*** *April 1, 1923*

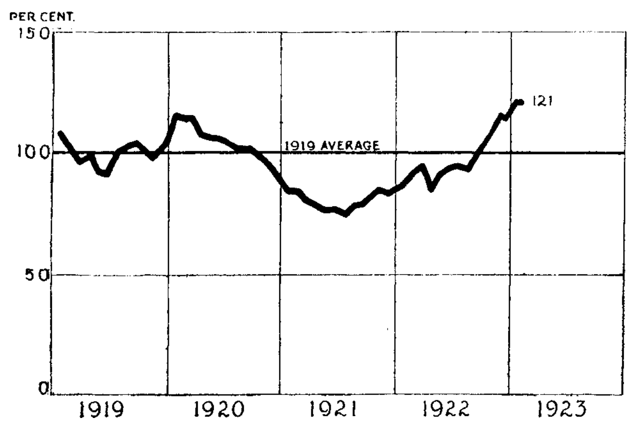
Business Conditions in the United States

CONTINUED active business is indicated by the maintenance of a high rate of industrial production, increases in freight traffic and employment, and a large volume of retail and wholesale trade.

Production

The Federal Reserve Board's index of production in basic industries for February was at the same high level as in January. The index number for these industries is now approximately equal to the highest point reached in the past. Since the low point in July 1921 there has been an increase of 61 per cent. The volume of new building projected in February was exceptionally large for the season, particularly in western districts. Railroad freight shipments have been increasing and the car shortage, which was somewhat relieved in December and January, became more marked in recent weeks.

A continued increase in industrial employment has been accompanied by further advances in wage rates in a number of industries. Many New England woolen mills announced a wage increase of 12½ per cent. effective April 30. A shortage of women workers has been reported in the textile, rubber, and garment industries, and there is a shortage of unskilled labor in many industrial centers.



Index of Production in Basic Industries—Combination of 22 Individual Series Corrected for Seasonal Variation (1919 average = 100 per cent.)

Trade

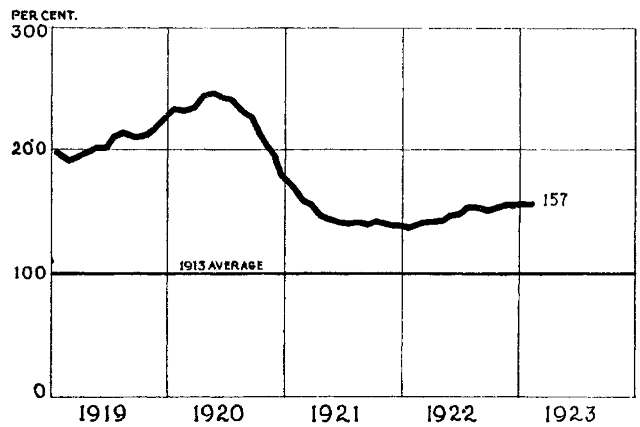
Wholesale and retail distribution of goods continued at a high level during February. Sales of both wholesale and retail concerns reporting to the Federal Reserve Banks were well above those of a year ago, but the increase was relatively more pronounced in wholesale trade. Mail order and chain store business was almost as large in February as in January despite the shorter month, and sales of five and ten cent stores were actually larger than in January.

Wholesale Prices

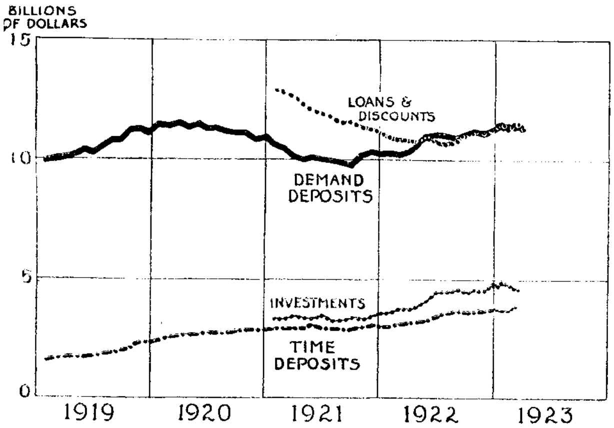
The Bureau of Labor Statistics index of wholesale prices advanced slightly during February. Prices of metals, building materials, and clothing increased, while prices of fuels and farm products declined. Building materials and metals during the past year have advanced more than any other groups of commodities and are now about 25 per cent. higher than in March 1922.

Bank Credit

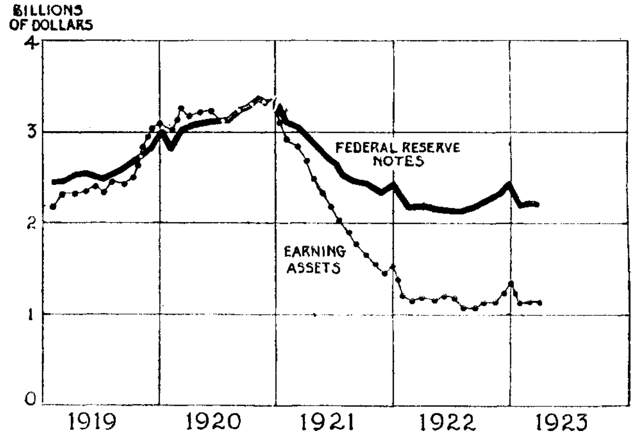
Recent increases in industrial and commercial activity have been reflected in a larger volume of loans by member banks for commercial purposes, especially in the New York, Chicago, and San Francisco districts. Loans of this character by reporting member banks are now approximately 500 million dollars larger than at the end of December. This increase has been accompanied by a



Index of Wholesale Prices, U. S. Bureau of Labor Statistics (1913 average = 100 per cent.)



Bank Credit—800 Member Banks in Leading Cities



Bank Credit—All Federal Reserve Banks

reduction in holdings of investments; so that there has been only a moderate net increase in total loans and investments.

The larger demand for funds has not led to any increase during the past month in the total volume of credit extended by the Reserve Banks. Total earning assets and loans to member banks on March 21 were approximately the same as four weeks earlier. Borrowings by member banks in the interior increased, particularly in the Chicago district, but borrowings by member banks in the New York district decreased. Since the end of February, there has been a small decline in the volume of Federal Reserve note circulation which is now at approximately the same level as six months ago. Other forms of currency in circulation, however, have recently increased.

The market rates on commercial paper advanced further to a range of 5 to 5¼ per cent., and the rate on bankers acceptances remained steady at about 4 per cent. There has been a slight increase in the yield of short-term Treasury certificates as well as of Government and other high grade bonds.

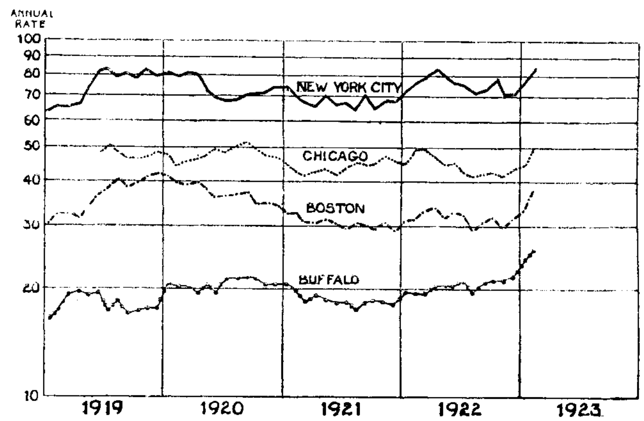
Banking Conditions

The same rising tendency as was observed in the commercial loans of reporting member banks for the country as a whole, was apparent in an increase of $117,000,000 between February 14 and March 14 in commercial borrowings at the member banks in this district. In the district, however, this increase was more than offset by declines in loans on stocks and bonds and in security investments; so that total loans and investments showed a slight decrease for the period.

Between February 14 and March 21, member bank borrowings from the Federal Reserve Bank of New York declined $124,000,000, or 42 per cent., accompanying a movement of funds into this district and Government disbursements for Liberty bond interest and certificate redemptions on March 15. Rediscounts and advances of this bank were the lowest since January, while total earnings assets fell to $217,000,000, approximately equal to the lowest figure touched last summer.

Following the quarterly tax date, collection of checks for income tax payments due March 15 resulted, as has frequently been the case, in increased borrowing at the Reserve Bank and firmer money conditions. These tendencies were more marked than usual because of the fact that income tax receipts were considerably in excess of Government disbursements, which had the effect for the time being at least of absorbing funds from the market. Between March 21 and March 26, rediscounts and advances of the Reserve Bank showed an increase of $53,000,000.

A somewhat more general discussion of present banking and credit conditions is given in the article on the last page of the Review.



Rate of turnover of bank deposits. Allowance has been made for usual seasonal changes

Rate of Turnover of Bank Deposits

Increases in the volume of trade, in prices of basic commodities, and in wages have been accompanied in the past two months by a more rapid rate of turnover of bank deposits. The computations made by this bank, with the cooperation of the Reserve Banks of Boston, Chicago, and San Francisco, show for practically all of the cities reported a rapid increase in rate of turnover, which is particularly marked when allowance is made for the usual trend at this time of the year. The fluctuations in rate of turnover in four cities during the past few years are shown in the foregoing diagram. The figures have been adjusted to eliminate the influence of usual seasonal fluctuations.

Money Market

Money continued to grow firmer in March, reflecting the increasing credit requirements of trade and industry. A larger demand upon the banks from their own customers tended to curtail the volume of their funds available for outside investment, and open market rates for commercial paper, Government short term issues, and stock market time money reached the highest points in approximately a year.

Commercial paper rates rose one-quarter of one per cent. to 5 and 5¼ per cent., and the volume of paper outstanding continued to increase, as shown by the accompanying diagram which includes dealers' reports through February. Banks' charges to their own customers also rose to 5 per cent. for the better grade of loans, compared with 4¼ to 4¾ per cent. at the low point last summer. Open market bill rates, however, remained unchanged at 4⅛ per cent. bid and 4 per cent. offered, due to heavy demand, chiefly for foreign account.

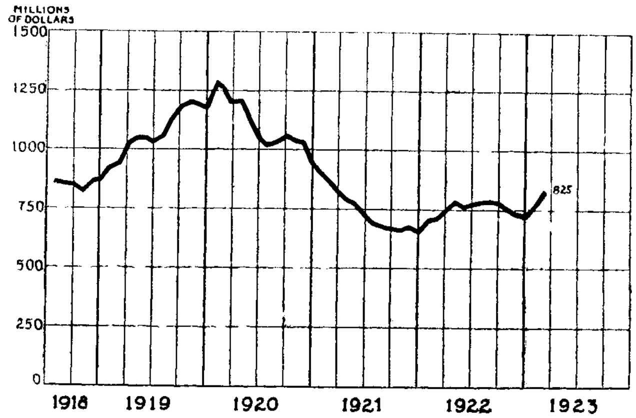
There are indications that firmer discount rates in this market as compared with London are tending to divert from New York to London credits for overseas transit of goods. According to an estimate of the London *Times* the volume of credits open in London for the financing of trade from the Far East to the United States is 50 per cent. larger than six months ago.

An advance in open market rates for Treasury certificates and notes, centering chiefly around the nearer maturities, was illustrative of a general tendency during the month for loans of short maturity to advance more rapidly than those of longer maturity. During the past year or more short loans, such as are required for ordinary commercial purposes, have been relatively low compared with rates for longer time securities. The recent advances, however, which have come with rising business activity, have tended to eliminate this difference and to bring the two types of money into closer correspondence. The following table of Government issues indicates the more marked upward tendency of near maturities.

Maturity Group	Yield Feb. 21	Yield Mar. 23	Increase
3-12 months	3.78	4.25	.47
1-2 years	4.44	4.61	.17
2-3 years	4.48	4.69	.21
3-5 years	4.49	4.67	.18

The new offering of $400,000,000 or thereabouts of Treasury certificates dated March 15 and running six months at 4¼ per cent. and one year at 4½ per cent. reflected recent advances in the rates of outstanding issues. The offering was largely oversubscribed, with demand favoring the longer maturity.

Stock market call money continued generally at 5 per cent. except for temporary fluctuations around the middle of the month and later advances to 5½ and 6 per cent., following collection of income tax checks. Time loans on stock market collateral rose to 5¼ and 5½ per cent., the highest since November 16, 1921, and approximately one-half of one per cent. higher than rates prevailing in the middle of February.



Commercial Paper Outstanding—Twenty-six Dealers

Security Markets

The opposing tendencies of stock and bond prices in recent months became clearer in March as industrial stocks rose to new high prices since early 1920 and bonds declined to the lowest prices in approximately a year. These movements were in accordance with the usual experience in periods of rising commodity prices, business expansion, and firmer money rates, when funds tend to be diverted from fixed income investments into more active commercial and industrial employment.

Extensive public participation in the stock market was indicated by a further succession of million share trading days and heavy odd lot business. Activity, however, was confined largely to industrial stocks; trading in railway issues averaged less than one-tenth of the total shares sold and prices of such issues remained considerably below the high levels of last fall. The following table compares changes during the past year in averages of both industrial and railway stocks with those of 40 corporation bonds and 3 Liberty issues.

	Average March 20	Change from 1922 high	Change from Year Ago
20 Industrial Stocks	105.38	+1.95	+17.27
20 Railway Stocks	89.60	−4.39	+ 9.53
40 Bonds	86.48	−5.64	− 0.55
3 Liberty Bond Issues	97.96	−3.24	− 0.29

New domestic financing continued in only moderate volume. Offering of $10,000,000 first mortgage and refunding bonds of a trunk line railroad at 4.70 per cent. yield, approximately the lowest for a corporation offering in recent years, was in contrast with generally firmer money tendencies, and indicated a good demand for prime bonds of legal investment status. Except for an issue of $31,500,000 equipment trust certificates and a $15,000,000 public utility preferred stock, other offerings were comparatively small.

Foreign Trade

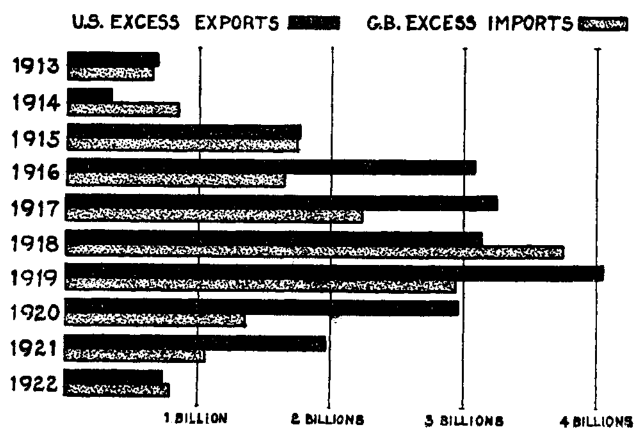
The value of February exports was $310,000,000, about $25,000,000 less than in January, but $60,000,000 more than in February 1922, an increase which may be partly explained by the rise in prices.

December imports, according to recently announced figures, totaled $297,000,000, about 25 per cent. larger than those of December 1921, and 67 per cent. larger than those of July 1921, when imports dropped to the lowest level of recent years. Total imports during 1922 were $3,116,000,000 as compared with $2,509,000,000 in 1921.

Our favorable balance of trade has been steadily reduced in the past three years in a manner corresponding closely with the reduction in the trade balance of Great Britain, with the distinction that there has been an excess of exports in this country and an excess of imports in Great Britain. The following table, in which the pound sterling has been converted into dollars at the average rates of exchange prevailing during each year, shows the annual exports, imports, and trade balances of the United States and Great Britain. The changes are further illustrated in the accompanying diagram.

(In millions of dollars)

Year	UNITED STATES			GREAT BRITAIN		
	Exports	Imports	Excess Exports	Exports	Imports	Excess Imports
1913	$2,484	$1,793	$ 691	$3,088	$3,739	$ 651
1914	2,114	1,789	325	2,592	3,431	839
1915	3,555	1,779	1,776	2,294	4,038	1,744
1916	5,483	2,392	3,091	2,873	4,513	1,640
1917	6,234	2,952	3,282	2,841	5,066	2,225
1918	6,149	3,031	3,118	2,531	6,258	3,727
1919	7,920	3,904	4,016	4,266	7,201	2,935
1920	8,228	5,278	2,950	5,692	7,064	1,372
1921	4,485	2,509	1,976	3,114	4,172	1,058
1922	3,832	3,116	716	3,647	4,442	795



Balance of Trade in the United States and Great Britain Each Year

Foreign Exchange

A sharp recovery in Belgian and French exchanges about the middle of the month was the leading feature of the exchange market during March. Belgian francs rose approximately three-quarters of a cent to 6 cents, while French francs advanced from 6 to over 6½ cents. These were the highest levels since January, when the troop movement into the Ruhr began. Marks were steady at prices not far from the highest reached in the sudden rise of February.

Sterling late in February reacted somewhat from the high point of $4.72 reached on the 21st, but thereafter held steady around $4.69 to $4.70.

Of interest in connection with the strength of sterling during the past year is an estimate in the annual number of the London *Economist* indicating a favorable British trade balance amounting to £62,000,000 when invisible as well as visible items are included. A negative balance of £63,000,000 was estimated for 1921, and a favorable balance of nearly £200,000,000 for 1913. As compared with 1913, the net income from investments abroad is estimated as about cut in half. Visible exports and imports are each about £200,000,000 larger than before the war. The complete tabulation, as given in the *Economist*, follows.

(In Million £'s)

	1913	1921	1922
Exports (including gold and silver), as returned	697	882	882
Add invisible exports—			
Net income from investments	200	100	100
Shipping earnings	94	80	94
Financial and insurance charges	30	50	40
Miscellaneous	20	20	20
Total visible and invisible exports	1,041	1,132	1,136
Imports (including gold and silver), as returned	843	1,145	1,049
Add invisible imports	5	50	25
Total visible and invisible imports	848	1,195	1,074
Final balance	+193	—63	+62

Gold Movement

February imports of gold amounted to $8,383,000, as compared with $32,820,000 in January. This is the smallest amount received in any month since February 1920, although only slightly less than in May last year. Gold exports were also small, amounting to less than $1,400,000. The gold imports during both January and February came largely from Canada, England, and France.

Commodity Prices

Recent price changes have been chiefly in those groups of commodities which have most nearly related to industrial expansion. There continues to be a strong upward tendency in the prices of many basic commodities, particularly metals, building materials, rubber, cotton, wool, and silk. But at the same time the prices of most farm products have remained stable, and the general level of prices, including prices of both finished and semi-finished products, as shown by the Department of Labor index, has remained practically unchanged for the past four months. The index number for February was only one point higher than that for January.

In these price changes is reflected the exceptional demand for certain products resulting from a heavy volume of building construction, and high rates of output in the automobile industry, and in the railroad equipment industries. In all three of these lines production was restricted during the war and post-war years and shortages apparently created. In certain other basic commodities, not particularly related to industrial production, shortages in the supply have been influential in causing price increases.

In the case of farm products there was stimulation of output during the war or post-war period, and there is in general no shortage of supply. The export demand for food products remains considerably larger than before the war, although somewhat less active now than in the year 1921.

The diverse movements of prices of different types of commodities are shown in the following table of commodity groups making up the Department of Labor index.

Commodity Groups	Latest price quotation	Per cent. change from Jan. 1923	Per cent. change from Aug. 1922
Metals	139	+4.5	+10.3
Building Materials	192	+2.1	+11.6
Miscellaneous	126	+1.6	+ 9.6
Cloths and Clothing	199	+1.5	+ 9.9
Chemicals and Drugs	132	+0.8	+ 8.2
Foods	141	0	+ 2.2
House Furnishings	184	0	+ 6.4
Farm Products	142	−0.7	+ 8.4
Fuel and Lighting	212	−2.8	−21.8
All Groups	157	+0.6	+ 1.3

The cost of living index compiled by the National Industrial Conference Board declined slightly during February. An advance in the price of clothing was offset by a slight decline in the price of food.

Wages and Employment

A compilation by the National Industrial Conference Board of wage changes in a variety of industries throughout the United States shows 37 instances of increases in wages between February 15 and March 15, and only 1 wage decrease. Later in March, New England woolen manufacturers generally announced a wage increase of 12½ per cent. effective April 30, and cotton operatives were negotiating for increases.

The New York State Department of Labor reports that the number of workers employed in the manufacturing industries of New York increased over 1 per cent. in February due mainly to seasonal increases in most of the metal working and clothing trades, and in some of the food products industries. Current reports from New York City employment agencies indicate an increased demand for skilled and unskilled workers in factories and mercantile establishments. One large agency reported a decrease of 25 per cent. in the number of registrations as compared with last year, and a 10 per cent. increase in the number of jobs open. Increased orders have been placed for clerks and bookkeepers of the type which were first released when the depression started. The Brooklyn Navy Yard has recently been able to obtain a sufficient number of skilled workers at 72 to 84 cents an hour, but has had difficulty in hiring 300 common laborers at 41 cents an hour.

Production of Basic Commodities

The high rate of production in basic industries, established in January, was maintained in February, and the production index computed by the Federal Reserve Board, which placed January output 21 per cent. above the average for 1919, remained unchanged in February.

The following table shows recent changes in the individual production indices maintained by this bank. The figures are shown as percentages of computed normal production, taking into consideration the usual year to year growth and seasonal fluctuations.

Estimated normal production = 100

	Low	1922			1923	
	1921–22	Oct.	Nov.	Dec.	Jan.	Feb.
Anthracite coal	74†	95	99	103	108	112*p*
Bituminous coal	56†	75	81	85	83	81*p*
Pig iron	30	85*r*	92*r*	102*r*	102*r*	103*r*
Zinc*	29	75	75	80	81	74
Tin deliveries	25	103	110	95	128	109
Copper, U. S. mine	15	84*r*	86*r*	85*r*	94*r*	89*p*
Wheat flour	75	112	111	93	93	109
Sugar meltings, U. S. Ports	55	108	147	136	115	121
Meat slaughtered	77	97	98	94	104	......
Wood pulp	67	92	91	93	100	......
Paper, total*	64	109	108	103	109	......
Cotton consumption	64	95	106	95	103	108
Wool consumption**e*	55	131	140	129	138	......
Tobacco consumption	77	88	94	87	96	......
Cement	86	127	137	136	157	159
Leather, sole	73	94	100	91	101*p*	......

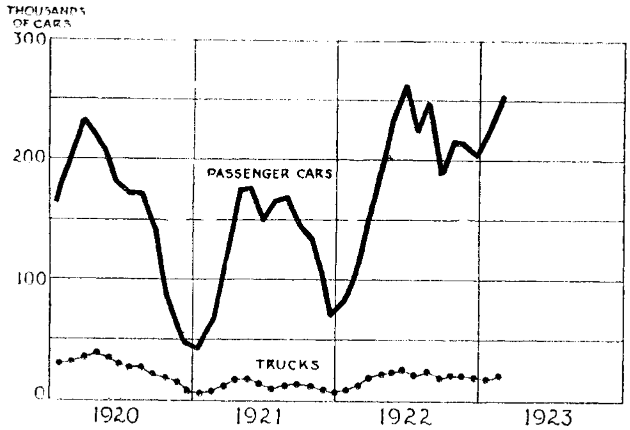
* Seasonal variation not allowed for.
† Strike period not included.
e Estimated data.
p Preliminary
r Revised.

Automobile Production

Production of automobiles in the United States during February set a new high figure of over 11,000 cars per working day, and in spite of the shortness of the month the total number of cars produced was the largest in the history of the industry, with the single exception of June 1922.

The production of passenger cars and trucks is shown on page 6 for each month since January 1920. The figures used for 1920 and the first half of 1921 are partly estimated.

A feature of the past 12 months' production is the divergence between the output of passenger cars and trucks. Over 2,600,000 passenger cars were produced in the year ended February 1923 — an average of 217,000 per month or about 40 per cent. above the 1920 monthly average. On the other hand, the output of trucks was only 21,000 per month or 20 per cent. below the 1920 monthly average.



Production of Passenger Automobiles and Trucks in the United States Each Month

Car Loadings Compared with Estimated Normal

For the purpose of discovering the relationship of the present high rate of freight car loadings on American railways to the amount of traffic which may reasonably be expected in view of the growth of population and industry, this bank has made an analysis of the railroad traffic statistics of previous years to determine the normal rate of growth from year to year and the usual seasonal fluctuations. On the basis of this analysis an estimate has been made of the volume of freight traffic which may be thought of as normal or equal to the requirements of an average volume of business each month. The results of this analysis are presented in the two diagrams at the foot of this page. The diagram at the left shows average weekly loadings of cars with revenue freight during each month since the beginning of 1918. The diagram at the right shows these same figures expressed as percentages of an estimated normal when allowance has been made for year to year growth and the usual seasonal fluctuations.

The second diagram indicates a rapid increase in freight movement since the conclusion of the coal strike last fall to a high point in February about 12 per cent. above estimated normal. The February figure is higher in relation to estimated normal than any of the monthly figures for 1920, and was exceeded only during 1918, when the movement of war supplies was at its height.

Even the heavy freight movement of recent weeks has not kept pace fully with the demand for facilities, and the total shortage of cars has increased from about 76,000 cars in the latter part of January to about 85,000 cars early in March. This increased shortage may be attributed to the spring movement of goods. There has continued to be some gain in the tons per loaded car and some continued reduction in the number of cars and locomotives awaiting repair.

Wholesale Trade

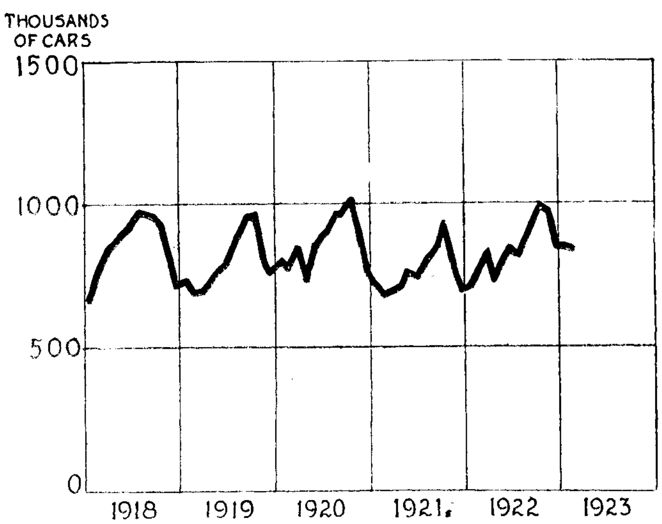
Dollar sales in February by representative wholesale dealers in this district in ten commodity lines were 23 per cent. above those of February a year ago. With the single exception of stationery, sales in all lines were well above the sales of February 1921, and in clothing and drugs sales were above those of any previous February.

Detailed figures are shown in the following table.

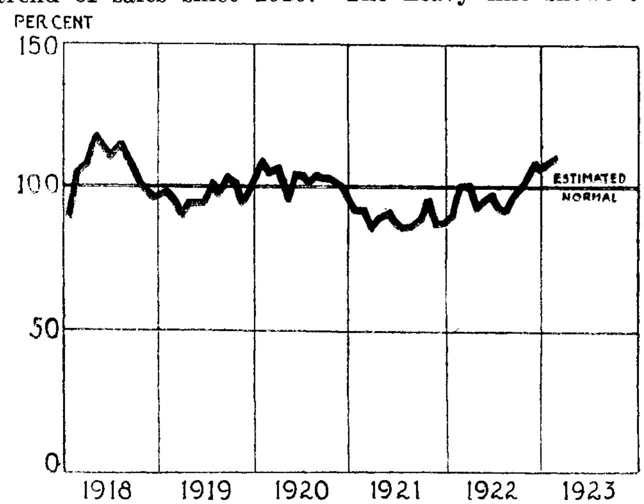
FEBRUARY SALES
(In Percentages)

Commodity	1919	1920	1921	1922	1923
Machine Tools	636	720	294	100	435
Diamonds	381	309	104	100	247
Jewelry	195	264	103	100	150
Clothing	103	124	96	100	135
(a) Men's	126	121	80	100	173
(b) Women's	89	125	106	100	110
Hardware	152	170	125	100	134
Dry Goods	71	131	99	100	118
Groceries	118	132	106	100	117
Shoes	132	243	112	100	114
Drugs	92	105	83	100	114
Stationery	104	120	110	100	108
Total (weighted)	105	136	102	100	123

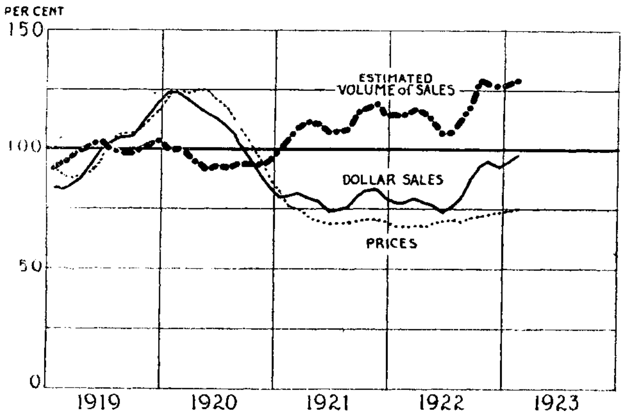
The diagram at the top of the next page shows the trend of sales since 1919. The heavy line shows the



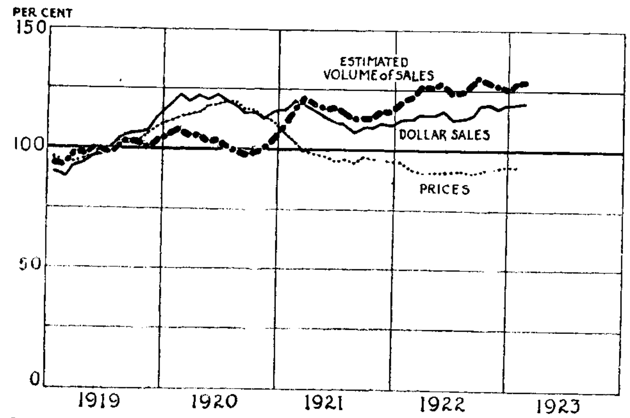
Average weekly loadings of freight cars



Car loadings as percentages of estimated normal loadings, when allowance is made for usual seasonal fluctuation and year to year growth



Sales of Representative Wholesale Dealers in the Second District, Wholesale Price changes, and the Estimated Physical Volume of Sales when allowance is made for price changes. All lines are adjusted for usual seasonal influences (1919 average = 100 per cent.)



Sales by Representative Department Stores in the Second District, Retail Price Changes, and the Estimated Physical Volume of Sales, when allowance is made for price changes. All lines are adjusted for usual seasonal influences (1919 average = 100 per cent.)

dollar sales in ten lines combined into a single index. Sales in each line of business have been weighted in accordance with their relative importance. The trend of prices in these lines computed from group price indices of the Department of Labor is also shown and the physical volume of goods sold has been estimated by dividing the dollar sales by the price index. Figures both for dollar sales and estimated volume of sales have been adjusted to eliminate the effect of usual seasonal influences.

Department Store Business

Inclement weather during the past two months retarded the growth of department store business in this district. February sales were 2.8 per cent. above those of February a year ago as compared with a gain of nearly 10 per cent. in January. Sales during the first three weeks of March were also slow.

Even with sales somewhat retarded, stocks held by department stores, computed at the selling price, were in about the same ratio to sales as in February a year ago.

Mail order sales continue to show as large advances as occurred in recent months, and February sales were 40 per cent. above those of February 1922. Detailed figures are shown in the following table.

	FEBRUARY SALES (In Percentages)					STOCK ON HAND MAR. 1 (In Percentages)				
	1919	1920	1921	1922	1923	1919	1920	1921	1922	1923
All Dept. Stores..	80	102	104	100	103	77	118	98	100	103
New York.....	80	104	103	100	103	78	118	99	100	102
Buffalo........	90	107	121	100	110	84	125	106	100	100
Newark.......	78	102	107	100	110	77	126	95	100	109
Rochester......	64	87	101	100	87	87	140	128	100	99
Syracuse.......	80	110	112	100	105	95	135	114	100	96
Bridgeport.....	85	110	111	100	97	73	116	93	100	98
Elsewhere in 2nd District........	77	89	98	100	89	76	98	85	100	99
Apparel Stores...	78	94	102	100	105	61	104	89	100	109
Mail Order Houses	120	206	108	100	140	**	**	**	**	**

A diagram at the top of this page shows the trend of department store sales in this district during the past four years, with figures adjusted to eliminate fluctuations due to seasonal causes. In addition to the dollar sales there is shown the retail price (or cost of living) index computed by the National Industrial Conference Board. This index includes rent as well as other retail prices, but experiment has indicated that it corresponds more closely with the movement of average prices of articles sold by department stores than any other available index of prices.

The physical volume of sales has been estimated by dividing the dollar sales by the prices for each month. The increase in the estimated volume of department store business corresponds closely with the increase in the estimated volume of wholesale business, though the fluctuations are smaller. In both wholesale and retail trade there is a consistent and rapid growth in sales from year to year. In the case of retail sales the growth since 1919 has averaged about 7 per cent. a year. This growth is more rapid than the rate of growth of the population in the cities represented and appears to indicate an absorption by department stores of trade formerly handled by smaller concerns or else an increase in per capita purchasing power.

Chain Store Sales

Influences retarding department stores sales in February were not reflected in sales of chain apparel stores, which were 25 per cent. larger than a year ago.

With the exception of cigar and shoe stores, February sales of all reporting chain store systems were larger than those of any previous February. Detailed figures are shown in the following table.

TYPE OF STORE	NUMBER OF STORES		FEBRUARY NET SALES (In Percentages)					Per cent. change in sales per store, Feb. 1922 to Feb. 1923
	Feb. 1922	Feb. 1923	1919	1920	1921	1922	1923	
Apparel.........	390	454	55	69	108	100	125	+ 7.3
Grocery.........	7,281	9,717	69	99	89	100	122	— 8.9
Ten Cent.......	1,728	1,783	71	84	93	100	116	+ 12.8
Drug...........	282	300	78	98	98	100	104	— 1.9
Cigar...........	2,253	2,737	71	97	107	100	100	— 17.4
Shoe...........	199	234	72	95	104	100	84	— 28.6
Total.........	12,133	15,225	70	92	94	100	116	— 7.6

Credit Expansion Outside the Federal Reserve Banks

THE loans and investments of all member banks throughout the country, which measure the current public demand for credit, are not much below what they were at the height of credit expansion in 1920. The recent statement of the Comptroller of the Currency covering all member banks, both city and country, permits the following comparisons.

Total loans and investments:	
November 15, 1920	$26,108,000,000
December 31, 1921	23,630,000,000
December 29, 1922	25,749,000,000
Demand and time deposits:	
November 15, 1920	20,924,000,000
December 31, 1921	19,627,000,000
December 29, 1922	22,460,000,000

In 1920 Reserve Bank Credit Was Largely Used

In 1920 the lending power of the Reserve Banks was used almost to the legal limit, and on November 12 of that year the reserve ratio of all twelve Federal Reserve Banks stood at 44 per cent. On December 29, 1922, when the volume of member bank credit was practically the same as in the autumn of 1920, the reserve ratio was 72 per cent. Indeed, during the whole of 1922 the reserve ratio was very high and varied little from week to week.

In 1923 Reserve Bank Credit is Little Used

It will be seen from the foregoing that the reserve ratio is not under present conditions an accurate measure of the amount of bank credit in use. Its steadiness at a high level during 1922 was mainly the result of large imports of gold. In 1920 the gold in the country was about a billion dollars less than it is at present, and in order to supply the demands for credit and currency prevailing in that period the member banks drew heavily upon the Federal Reserve Banks. The immense volume of gold which has since come here from foreign countries has enabled the banks during the past year to satisfy the increased credit demands without increasing the amount of Reserve Bank credit in use.

Present Credit Increase Based on Increased Gold

Almost all of the gold which comes in finds its way in natural course into the reserves of the Federal Reserve Banks, and thereupon becomes the basis for potential increase of bank deposits. This is because the banks are obliged by law to hold in reserve only a portion of their deposits. Member banks keep all of their reserves with the Federal Reserve Banks, on the average about one dollar of reserve to every ten dollars of deposits. When additional gold is lodged with a Reserve Bank and is not used to pay debt owing to the Reserve Bank, it becomes the potential reserve for bank deposits of several times its face amount. The banks create these additional deposits when they make loans to customers or buy securities, the proceeds of which are deposited with them or with other banks. In 1922 gold imports amounted to $238,000,000; while the loans and investments of all member banks throughout the country increased $2,100,000,000, and their deposits increased $2,800,000,000, or roughly, ten times the amount of the additional gold.

The Extent of Present Increase of Credit

The volume of bank deposits is now larger than ever before and the volume of bank loans and investments not much if any below the former maximum. The productive and distributing activity of the country is very near its capacity; it has already overtaxed our ordinary transportation facilities and in many departments of industry has caused a shortage of labor. Also, the general level of commodity prices has risen about 11 per cent. in a year.

That this activity could have developed to such an extent without placing a strain upon the credit facilities of the whole banking system is in itself an indication of the ample supply of credit available for use.

Absence of the Natural Corrective: Free Gold Movements

One of the natural regulators or correctives to a too rapid increase of bank credit is not now in operation. The United States is the only great nation of the world which is on a free gold basis. In ordinary times there is a delicate adjustment in international economic relations which causes the tide of gold to ebb and flow and so prevents an excessive accumulation in any one country. At such times a rapid increase of credit in any country, coupled with a rise in commodity prices, results in a falling off in its exports, an increase in its imports and ultimately in an outward flow of gold. Such an outward flow tends to reduce the amount of credit available for use, and is ordinarily followed by a decline in prices and ultimately by a stimulation of export trade. At this time and for many months past this corrective has been absent because of financial disorganization abroad, and on monthly balance the gold flow has been only one way, namely, to the United States, to purchase goods and pay debts, and for other purposes.

In the absence of this automatic international corrective, moderation of the volume of bank credit called into use in this country is effected largely as a result of domestic influences of which the economical use of bank credit by borrowers may be one of the most important in preventing a too rapid increase in the credit volume. In 1919-1920 the use of bank credit was not only uneconomical but excessive and was accompanied by a speculative bidding up of prices without corresponding increases in the production and consumption of goods; as well as by an increase in the cost of living without a corresponding increase in the general standard of living.

The Accommodation of Credit to Commerce and Business

It is clear that commerce and business are best accommodated as the Federal Reserve Act contemplates, by a volume of credit responsive to the changes in the physical volume of production and trade. It is also clear that nothing accommodates commerce and business less than a volume of credit fluctuating without reference to the needs of industry and agriculture. The more nearly the volume of credit, by economical use, remains commensurate with the legitimate needs of business, the better are accommodated not only commerce and business, but the welfare of every citizen.