(The article on the last page deals with the Constancy of Reserve Bank Credit)

# MONTHLY REVIEW

# of Credit and Business Conditions

Second Federal Reserve District

Federal Reserve Agent

Federal Reserve Bank, New York

January 1, 1924

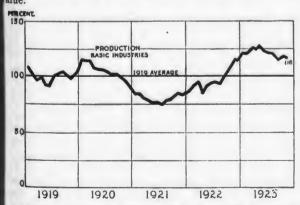
#### Business Conditions in the United States

PRODUCTION of basic commodities and factory employment decreased in November. Distribution of merelandise by wholesalers and retailers was somewhat less active and wholesale prices showed a slight further recession.

#### PRODUCTION

Production in basic industries decreased about 2 per cent. in November. The decline was due chiefly to reduced production of iron and steel and smaller sugar meltings. The Federal Reserve Board's new index of factory employment, which is shown by the accompanying chart, also declined due to lessened activity at iron and steel plants and large seasonal reductions at clothing stablishments. The volume of employment is now 2 per cent. smaller than in the spring but 3 per cent. larger han a year ago. Contract awards for new building were smaller in November than in October in all reporting districts except New York but were 20 per cent. larger than a year ago.

Final estimates by the Department of Agriculture how larger yields of corn, oats, tobacco, and cotton than n 1922, and smaller yields of wheat, hay, and potatocs. The total value of agricultural production at December 1 prices was 12 per cent. larger than in 1922. Each of the en principal crops except wheat showed an increase in alue.



Production in Basic Industries—Combination of 22 Individual Series Corrected for Seasonal Variation (1919 Average = 100 Per Cent.)

#### TRADE

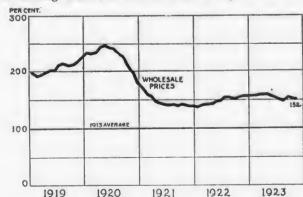
Railroad freight shipments in November showed about the usual seasonal decline from October but were in heavier volume as compared with previous years. Wholesale trade was 13 per cent. less in November than in October, which is more than the usual decrease at this season, but sales continued to be slightly larger than a year ago. Sales of hardware, drugs, and meat were larger than in November 1922, while sales of shoes were smaller. Retail business was smaller than in October in most lines. Sales of mail order houses declined more than sales of department stores but were 11 per cent. larger than a year ago.

#### PRICES

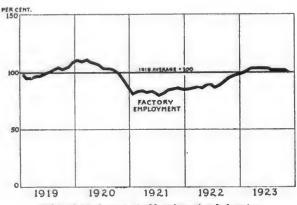
The Bureau of Labor Statistics index of wholesale prices declined in November to a point 4 per cent. lower than last spring and about 3 per cent. lower than a year ago. The chief reductions occurred in prices of animal products, fuel, and house furnishings. Prices of clothing and crops, on the other hand, increased and the latter group averaged higher than in any month since 1920. During the first half of December, prices of sheep, beef, sugar, cotton, silk, and rubber declined while quotations on crude oil, wheat, and wool were slightly higher.

#### BANK CREDIT

The total volume of eredit extended by member banks in leading eities showed but little ehange between the



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



Index of Employment in Manufacturing Industries (1919 Average = 100 Per Cent.)

middle of November and the middle of December. A seasonal reduction in commercial and agricultural loans in most districts was accompanied by increased loans on securities with the result that total loans remained practically constant.

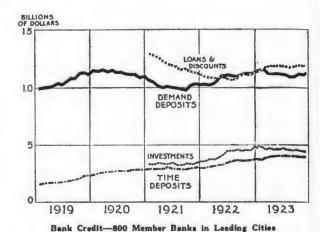
During the same period borrowings at the Federal Reserve Banks were also practically unchanged. Holdings of acceptances increased somewhat partly in connection with the financing of cotton exports. The increased demand for currency for holiday trade was reflected in both a moderate expansion in Federal Reserve note circulation and a reduction in gold certificates held by the Reserve Banks.

Rates of commercial paper sold in the open market continued to show an easier tendency as indicated by increased sales at 43/4 per cent. particularly in interior districts. The December issues of one year 41/4 per cent. and six months 4 per cent. Treasury Certificates compared with 41/4 per cent. on a six months issue sold in September were largely oversubscribed.

# Banking Conditions, Second District

The chief financial operations of the first three weeks of December centered about the collection of income taxes and payments by the Government on December 15 of maturing certificates and interest on outstanding issues. On the same date, the British Government also paid in Liberty bonds to the Federal Reserve Bank for account of the Treasury \$92,000,000, covering the second instalment of interest and amortization on its debt to this Government.

Prior to the 15th there was a substantial increase in the total earning assets of the Federal Reserve Bank of New York. In the following week, however, this increase was canceled, although, due partly to rapid handling of income tax checks and to the demands of holiday trade, earning assets failed to show as marked a decline as is usual at quarterly tax periods. A decline in the gold reserves of the New York Reserve Bank during the month, notwithstanding large gold imports, reflected loss of funds to other districts and withdrawals



of gold and gold certificates within the district for use as

currency.

Total loans and investments of the reporting member banks in this district showed comparatively little change in the latter part of November and first part of December. Loans on stocks and bonds increased slightly, accompanying considerable activity and higher prices in the security markets.

# Money Rates

Seasonal factors such as loss of funds to the interior and year end adjustments contributed to a slightly firmer tone in the money market during the first three weeks of December. This was reflected in somewhat firmer rates for Government short term securities.

Commercial paper rates, on the other hand, continued to display a slightly easier tendency and, while 5 per eent. was the prevailing rate in New York City, a considerable volume of paper was reported sold in the interior at 43/4 per cent., and in a few exceptional cases transactions were reported at 41/2 per cent. Following a small increase in October the outstanding paper of 26 dealers declined slightly in November to \$797,000,000.

Demand for bills was somewhat less active, due in part to decrease in foreign money employed in the discount market. As the supply of bills continued large, owing chiefly to continued heavy drawings on cotton exports, dealers' portfolios remained comparatively large. Rates for maturities up to 120 days were firm at 41/8 to 41/4 per cent. on purchases by the dealers, and 4 to 41/8 per cent. on sales by them.

The new offerings of approximately \$300,000,000 Treasury certificates, dated December 15, and bearing 4 per cent. interest for six months and 4½ per cent for one year, compared with a six months issue sold in September at 4½ per cent., were heavily oversubscribed with the longer maturity in greater demand.

Stock Exchange time money held unchanged at 5 to 5½ per cent. Call money ranged close to 4¾ per cent, except for a brief period early in the month, when seasonal loss of funds to the interior was reflected by a rise to 5 per cent.

### Security Markets

The stock market was active during December and by the latter part of the month prices of active industrial issues had recovered about half the decline that took place during the spring and summer. The advance in railroad issues was cheeked early in the month following a dividend reduction by a leading railroad.

Liberty and high grade corporation bonds continued generally steady at about the levels reached during the recovery of October and early November. Mexican issues declined accompanying reports of revolutionary activities in that country and French issues reacted somewhat with declines in exchange, but other foreign issues in most cases showed little change.

The volume of new issues offered in the market decreased in the first part of December but increased towards the end of the month in anticipation of the January reinvestment demand. A proposed offering to stockholders of between \$26,000,000 and \$31,500,000 common stock by a leading eastern railway is the first notable instance of railway common stock financing in recent years.

#### Foreign Exchange

Sterling exchange was steadier during the first three weeks of December than in November, despite continued heavy exports of cotton from the United States, and on December 20 was quoted at \$4.36, or 10 cents above the November low point. French francs declined from 5.42 on December 1 to 5.02 cents on December 22, the lowest point ever reached. Italian exchange showed little change, but Belgian rates were somewhat lower.

Dutch, Swiss, and Scandinavian exchanges retained the greater part of their recoveries from the early November declines. Polish marks continued to reach new low points, but German marks were steadier. Austrian erowns remained at about the levels maintained since the beginning of the stabilization program.

Chief changes in other rates included a further decline in Japanese exchange to nearly two cents under the levels prevailing at the first of November, possibly reflecting purchases of reconstruction materials. Canadian exchange at 97.38 cents reached the lowest point since July. Argentine and Brazilian rates, on the other hand, were firmer.

# Gold Movement

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Imports of gold in November were \$39,757,000, or about \$10,000,000 more than in October and the largest for any month this year except May. Of the total amount \$33,600,000 eame from England. Exports amounted to \$747,000 and were chiefly to Mexico, British India, and Canada. For the eleven months since January net gold imports totaled \$262,206,000, compared with \$214,565,000 in the corresponding period of 1922.

During the first part of December the gold import movement continued heavy.

# Foreign Trade

Exports of merchandise from the United States increased \$3,000,000 in November to \$404,000,000, and were the largest since February 1921, while imports decreased \$16,000,000 to \$292,000,000. In consequence, the export balance rose to \$112,000,000 and with the exception of September, was the largest since October 1921.

Cotton exports continued heavy during November and the first part of December. Total shipments from August 1, the beginning of the cotton marketing year, to December 20, were 16 per cent. larger in quantity than last year and about 40 per cent. larger in value, reflecting substantially higher cotton prices.

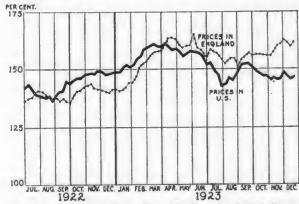
The reduction in imports during November was due in part to decreased receipts of raw silk, rubber, and coffee, following increases in October.

#### **Prices**

There was a further recession from 153 to 152 during November in the Department of Labor's monthly average of wholesale prices, due mainly to declines in house furnishings, fuel and lighting, and miscellaneous articles, and to a smaller extent to declines in metals and building materials. Farm products, cloths and clothing, and chemicals showed small advances.

After a rise over the first of December that was due largely to advances in cotton and pig iron, this bank's index of 20 basic commodities tended downward and by the middle of the month stood at approximately the November average. Crude oil was advanced in some fields for the first time since February, and there was a further rise in pig iron, lead, coal, and wool, but these increases were more than offset by a reaction of over 2 cents in cotton and continued declines in corn, lumber, and rubber. Cement prices remained generally unchanged at the lower levels established in November.

The following diagram shows the course of this bank's American 20 basic commodity index and compares with it the movement of an index of 20 basic British commodities which rose rapidly in November, reflecting lower exchange rates and higher cotton prices. Similar tendencies were indicated by a rise of 5 per cent. in November in the Economist's index to the highest point in two years.



Price Indexee of 20 Basic Commodities in the United States and England (1913 = 100 Per Cent.)

#### Factory Employment

Decreased employment in the clothing industry, and smaller declines in the food products, railway equipment, and iron and steel industries eaused a decline of more than 1 per cent. in total factory employment in New York State during the month ended November 15. For the United States as a whole there was a decline of about 1 per cent., according to a new employment index prepared by the Federal Reserve Board.

Because of the diversity of industries in New York State, the monthly employment statistics of this State have been commonly regarded as a fairly reliable index of factory employment throughout the country. Comparison of the New York figures with the Federal Reserve Board's employment index seems to substantiate fully this theory, as indicated by the diagrams in the lower half of this page which show an extraordinary degree of correlation in most of the industrial groups. Data for New York State are obtained from the State Department of Labor, while the index of the Federal Reserve Board is computed, as explained in detail in the December 1923, issue of the Federal Reserve Bulletin, from material collected by various State Bureaus and by the United States Department of Labor.

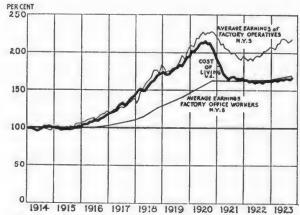
In general the diagrams show also the tendency for employment to vary least in industries most directly related to the consumer, such as foods and food products, and to fluctuate most in industries which supply materials for further use in industry, such as metals and metal products. In the lumber and lumber products industries, which supply the building industry, employment throughout the country has risen above 1920 levels, but for all industries combined the number of workers has generally remained below 1920 notwithstanding the

large increase in production since that time.

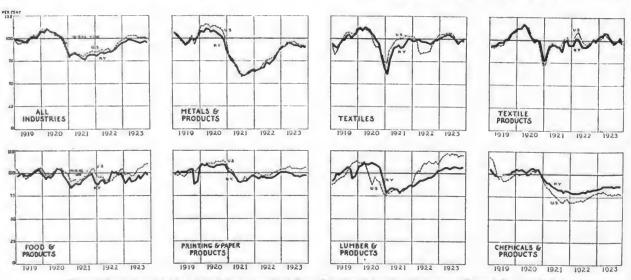
# Wages

The average hiring rate for unskilled male labor in the Second District, computed quarterly by this bank from reports from representative employers, continued in December at about the high level reached in June, following a continuous advance since 1922 which brought the rate to within 8 per cent. of the maximum level of 1920.

Average weekly earnings of office workers in New York State factories, reported once a year by the State Department of Labor, increased 4.4 per cent. during the year ended October to \$32.56, a wage slightly higher than any previously reached. Earnings of factory operatives rose 8 per cent. during the same period to \$27.73 but remained slightly under the maximum levels of 1920.



Changes in Average Weekly Earnings of Factory Operatives and Factory Office Workers in New York State and the Cost of Living in the U. S. (1914 = 100 Per Cent.)



Factory Employment in the United States and New York State hy Industries. Indexes of Federal Reserve Board and of New York State Department of Labor (1919 = 100 Per Cent.)

The foregoing diagram shows the relative advances since 1914 in earnings of the two types of workers and compares these with an index of the cost of living in the United States, prepared from figures published by the United States Department of Labor and the Massachusetts Commission on the Necessaries of Life. While office workers' earnings increased more slowly than the cost of living, this disparity was largely eliminated by the decline of living eosts since 1920. The real wage of factory operatives in terms of purchasing power was considerably increased.

#### Production

Decreases in the production of pig iron, steel ingots, wheat flour, and in the mining of both anthraeite and bituminous coal caused a decline of about 2 per cent. during November in the weighted index of production maintained by the Federal Reserve Board.

Production of pig iron declined 8 per cent. and steel ingots 12 per cent. to the lowest totals since the fall of last year, while unfilled orders on the books of the United States Steel Corporation at the end of November showed a further deeline of 304,000 tons. There has been a decrease in the average daily production of crude oil, beginning in October and continuing through the first two weeks of December.

Production of automobiles continued large for this season of the year. Cotton consumption was also relatively heavy in November, as shown by a total of 531,631 bales, or only 10,000 bales less than in October.

Following are this Bank's available indexes of production for November, expressed as percentages of the computed trend of past years, with allowance made for seasonal variation.

(Computed trend of past years = 100 Per cent.)

	1922	1923											
	Nov	July	Aug.	Sept.	Oct.	Nov.							
roducers' Goods													
Pig iron	92	121	110	102	98	90							
Steel ingots	102	105	107	99	101	90							
Bituminous coal	100	106	105	99	99	94							
Copper, U. S. mine	86	102	111	102	106	107							
Leather, sole	. 100	105	106	90	91	927							
Tin deliveries	110	84	99	80	98	150							
Petroleum	116	142	146	144	142								
Cotton consumption	106	83	89	88	94	96							
Woolen mill activity*	105	104	98	100	102								
Zinc*	75	75	73	68	73	77							
Cement	136	135	130	136	135	148							
Consumera' Goods													
Anthracite coal	99	100	104	35	95	90							
Wheat flour	111	122	116	109	104	95							
Cattle slaughtered		105	109	98	100								
Calvos slaughtered		123	145	118	146								
Sheep slaughtered		86	79	76	77								
Hoge slaughtered	108	135	149	146	139								
Sugar meltings, U. S. ports		70	74	102	137	116							
Paper, total.	114	84	93	85	90 v								
Tobacco consumption	93	88	89	89	93								
Geedine	107	110	108	107	107								
Gasoline.		151	145	140	159	161							
Automobile, all		162	157	149	171	170							
Automobile, passenger		109	98	104	113	124							
Automobile, truck		95	121	107	126								
Automobile, tires		89	90	90	97	891							

<sup>\*</sup> Seasonal variation not allowed for. p Preliminary.

# Indexes of Business Activity

This Bank's indexes of distribution and general business activity for November showed more decreases than increases as compared with October. Among the more notable decreases were those in wholesale trade and retail trade. Building permits and railway loadings of merehandise and miseellaneous freight showed relatively small losses. In most groups, notwithstanding declines, the volume of trade was shown to remain relatively large, as compared with the computed trend of past years. The following shows this Bank's available indexes for November in percentages of the computed trend, allowanee being made for seasonal variation.

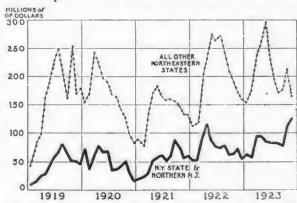
(Computed trend of past years = 100 Per cent.)

		1923			
	Average for	G1 A	10-4		
	Mar. Apr. May	- Sept.	Oct.	Nov.	
Primary Distribution					
Car loadings, mdse. and misc	110	103	107	105	
Car loadings, other		106	101	108	
Wholesale trade, Second District	106	100	116	103	
Exports	83	95	85	841	
Imports		94	106	1011	
Cereal exports	119	86	58	42	
Distribution to Consumer					
Department store sales, Second District	98	97	100	96	
Chain store sales	100	96	97	97	
Mail order sales	102	91	100	85	
New life insurance written	103	112	113	113	
A musement receipts		84	104		
Magazine advertising		96	98	98	
Newspaper advertising		90	92	93	
General Business Activity					
Bank debits, N. Y. City	106	93	92	100	
Electric power		108	112		
Postal receipts		97	101	102	
Building permits		127	159	153	
Business failures		88	111	113	
Employment, N.Y. State factories	104	101	103	101	

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# Building

Contracts for building construction awarded in 27 northeastern States were smaller in November than in October but were 19 per cent. higher than in November last year, according to the F. W. Dodge Corporation. Decreases from the October figures occurred in all distriets except New York State and northern New Jersey,



Value of Building Contracts Awarded in New York State and Northern New Jeraey and in all other Northeastern States, in first 11 months of the years 1919 to 1923

where there was an increase of 13 per cent. to the largest amount ever reported.

The diagram on page 5 comparing by months the value of contract awards in the New York area with awards in the remaining northeastern States shows that the decline in building permits recorded in this district after March found little reflection in the contract figures. For the eleven months of this year, total contracts for this district show an increase of 15 per cent. over the corresponding period of last year, whereas for all other reporting districts there was a decrease of less than 1 per cent.

Residential building continued to account for a large part of the total awards. The following table shows the particularly high percentage of residential construction to total building in this district in the first eleven months of this year.

Per cent. Residential to Total Building-First Eleven Months of Year

	1920	1921	1922	1923
New York State and Northern New Jersey. All other reporting districts	22	56	51	60
	22	20	34	38

The prices of building materials declined slightly in November, but building wages averaged somewhat higher. As a result, the eost of construction index computed by this bank remained unchanged at 193 per cent. of the 1913 cost and about 4 per cent. below the May high point for the year.

#### Advertising

Statistics for the greater part of the year as to advertising in newspapers and leading magazines indicate a volume fairly close to the computed trend (or normal), as shown by the following diagram. Advertising in newspapers tended to decrease somewhat during the latter part of the year, partly due to the pressmen's strike in September, whereas advertising in magazines tended



Advertising in Newspapers and Magazines Compared with the Computed Trend. Seasonal Variation Allowed For

slightly upward in continuation of the recovery of the previous year. In general the fluctuations in newspaper advertising since 1919 have been less than those of advertising in magazines. The figures for newspaper advertising are based upon the amount of advertising lineage in 109 newspapers published in 23 cities and reported by the Editor and Publisher and the New York Evening Post, while the figures for advertising in magazines are those compiled by Printers Ink. The figures are corrected by this bank for seasonal variation and the trend of year to year growth.

#### Wholesale Trade

Smaller sales of women's elothing, shoes, and silk and eotton goods, eaused a deeline during November in sales of 164 wholesale dealers in eleven principal lines in this district, and the weighted index of wholesale trade for the month, computed by this bank, was 2 per cent. below that of November last year. This is the first time since July 1922 that the index has shown a decline compared with the same month of the previous year.

The decrease of 2 per cent. in sales shown in November may be compared with an increase of 11 per cent. in October, and of 6 per cent. in September. In the cases of women's apparel and cotton goods, the decreases in sales followed unusually large sales in October.

The chief increases in sales during November as compared with sales in November 1922 occurred in stationery and in hardware, which continued to reflect active building operations. Jewelry and machine tools showed smaller increases and groceries, drugs, and men's clothing were little changed.

As compared with October, November sales showed decreases in all lines except stationery. These losses were partly seasonal in character, but were larger than usual, and the weighted index of this bank declined 24 per cent. between the two months, whereas the usual decline at this period of the year is 18 per cent. Detailed figures are shown in the following table.

Commodity		Dollar Value of November Sales (November 1922 = 100 Per cent.)											
	1919	1920	1921	1922	1923	1923							
Statlonery	119	135	95	100	115	+ 6.4							
Hardware	113	111	82	100	112	- 8.3							
Jewelry	176	126	84	100	109	- 4.0							
Machine tools	272	190	38	100	105	- 12.7							
Groceries	126	109	86	100	102	- 4.6							
Drugs	92	79	88	100	101	- 26.1							
Shoes	168	77	112	100	96	- 17.7							
Clothing	88	74	82	100	96	- 44.8							
(a) Men's	111	73	100	100	100	- 41.8							
(b) Women's dresses (c) Women's coats and	09	74	60	100	91	- 46.0							
sults	77	76	79	100	94	- 47.4							
Dry goods	125	66	83	100	91	- 21.5							
(a) Cotton goods	108	73	88	100	96	- 25 3							
(b) Silk goods	143	58	77	100	87	- 17.6							
Diamonds	166	45	53	100	87	<b>— 19.1</b>							
Total (weighted)	116	90	85	100	98	- 23.9							

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#### Department Store Business

December sales by department stores in the Second District, estimated on a basis of the business done prior to December 20, by 17 of the largest stores in New York and adjacent eities, were about 6 per cent. larger than those of December last year. This is a smaller increase than was shown by October and November sales.

Merehants reported particularly heavy sales of toys, radio equipment, jewelry, talking machines, and holiday gift articles, while sales of pianos and household furnishings were also large. Sales of apparel, furs, and shoes, however, were retarded by unusually mild weather.

Total sales for the year 1923, with December sales partly estimated, exceeded those of 1922 by 7.7 per cent., or not far from the normal rate of growth from year to year, which is computed to be about 8 per cent. The sales were 10.2 per cent. larger than in 1921 and 5.6 per cent. above those of 1920, a year of exceptionally high prices and heretofore the year of largest department store sales.

During the early part of 1923 sales increased somewhat more rapidly than stocks of goods on hand, whereas during the latter part of the year the reverse was true. The average increase in stocks for the entire year was about 7 per cent., due in part to higher prices and in part to extensive additions to some of the stores. In 1923 stocks turned 3.9 times as compared with 3.8 times in 1922, the same rate in 1921, and 3.3 in 1920.

The following diagram shows the fluctuations in sales and stocks held by department stores during the past 5 years. The light lines show the actual figures and the heavy lines the same figures adjusted for normal seasonal changes. December 31 stocks are not given, but December sales have been estimated.

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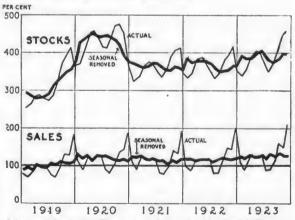
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Sales and Stocks of Department Stores in the Second District,
December Sales Estimated. (Average Sales in 1919

= 100 Per Cent.)

Final reports on department store sales for November indicated an increase of 7 per cent. over the previous November as compared with a gain of 10 per cent. shown

in October. The following table shows the percentage change in the major departments.

Men's and boys' we	ar.																								 	+15.
losiery			٠.																 ì		ï				 	+ 6.
Cotton goods																										+ 6
Vomen's and misse	t'z	es	di	7-1	to	- 98	re	a	Р.																	+ 6
Voolen goods																									 	+ 5.
urniture																									 	+ 4.
louse furnishings																										+ 3
Vomen's and misse	5 E	ea	dy	7-1	0.3	- 10	re	81	1	3 0	CE	284	30	ri	es	١.									 	+ 2.
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Detailed figures of November sales and stocks as of December 1 for department stores in the different cities of this district, as compared with figures of previous years, are shown in the following table.

				Nove Per oc			fand I 22 = 10			
	1919	1920	1921	1922	1923	1919	1920	1921	1922	1923
All dept. stores New York	90 92	101 101	93 93	100 100	107 109	98 98	109 107	99	100 100	110 110
Buffalo Newark	84 82	104 96	96 88	100	98 108	98 101	110 108	103 94	100	102
Rochester	89	105	97	100	112	122	134	102	100	115
Syracuse Bridgeport	101 105	110	97 91	100 100	102	100	105	97	100	100
Elsewhers Apparel stores	92 84	101	94 89	100	102 103	96 83	110	109 96	100 100	111 114
Mailorder houses	133	113	74	100	110					

#### Chain Store Sales

Sales by all types of chain stores were larger in November than in November a year ago, due in some eases to increases in the number of stores, though candy and soda, ten eent, and tobaeco stores also showed increases in sales per store.

Prices, as reported by shoe stores, showed little change. The average price per pair in November this year was \$3.84, compared with \$3.86 in November 1922.

Detailed figures on sales are shown in the following

Type of Store	Numb	Do (Nove	Per cent. Change in Sales, per Store					
2,700 01 2000	Nov. 1922	Nov. 1923	1919	1920	1921	1922	1923	Nov. 1922 to Nov. 1923
Apparel	435	546	56	81	81	100	125	- 0.2
Candy and sods Ten cent	1.779	1.867	78 75	94 84	89 86	100	120 116	$+1.1 \\ +10.7$
Grocery	14.905	18.270	70	87	84	100	113	7.6
Drug	281	324	91	96	95	100	108	- 6.6
Shoe	284	324	106	112	96	100	107	- 6.1
Tobacco	2,742	2,698	91	105	98	100	105	+ 7.1
Total	20,526	24,148	73	88	86	100	114	- 3.0

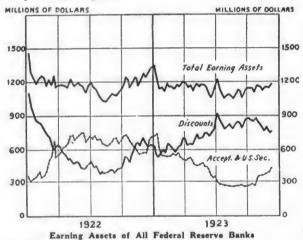
# Index of the Monthly Review

For the convenience of readers of the Review, an index of contents for 1923 has been prepared and may be received by addressing the Federal Reserve Agent. Federal Reserve Bank, New York.

# Constancy of Reserve Bank Credit

(Excerpt from an editorial in The Federal Reserve Bulletin, January 1924)

T the Federal Reserve Banks discounts increased rapidly during the year, but there was a corresponding decline in open market holdings, with the result that total earning assets remained relatively stable. In fact, as shown by the chart, relative stability in the total volume, with changes in the composition, has been the principal characteristic of Federal Reserve Bank assets during the past two years. During these two years the country steadily used from \$1,000,000,000 to \$1,200,000,000 of Reserve Bank credit. In view of this relatively constant demand, the years 1922 and 1923 afford an opportunity of observing the effect of changes in the volume of open market holdings upon the volume of member bank discounts. This changing relationship was commented on in the May and July issues of the Bulletin, and it now seems appropriate, at the close of the year, to make a more complete review of the relation between the two elements of Federal Reserve eredit policy-rediscount operations and open market operations.



In the early part of 1922 the Reserve Banks purchased a considerable volume of short term Government securities in the open market, partly for the purpose of obtaining earnings, while in 1923 they greatly reduced their holdings of these securities. In the absence of change in the aggregate demand for Reserve Bank credit, the increases in open market purchases during 1922 were offset by a corresponding decline in the volume of discounts, and in 1923 the reduction in securities was accompanied by a substantially equivalent increase in discounts.

In 1922 when the Reserve Banks bought securities the funds which they paid to the sellers found their way into member banks and permitted these banks to repay an equal amount of their rediscounts. The aggregate amount of Reserve Bank credit in use was not increased or even materially changed; a certain amount of member bank "rediscounts" were merely thus converted into "securities." But the effect on the member hanks, particularly in the large centers, was to add to their loanable funds or to enable them to reduce their indehtedness at the Reserve Banks. Under such conditions banks are likely to lend more fully to their customers and others.

In 1923, on the other hand, when the Reserve Banks reduced their security holdings, they withdrew from the market an equivalent amount of funds. Following the withdrawal, the market borrowed substantially the same amount from the banks; and the banks, in turn, rediscounted substantially the same amount at the Reserve Banks, so that there was no material change in the total volume of Federal Reserve Bank credit in use.

#### OPEN MARKET POLICY

The volume of open market holdings with which the Reserve Banks entered the year 1923 put them in possession of an admirable instrument for testing the degree of dependence of the credit structure upon Federal Reserve Bank accommodation and for placing the initiative upon member banks to determine the volume of Reserve Bank credit required to meet the needs of business and industry. For in rediscount operations the initiative is taken by the member banks, which borrow from the Reserve Banks at the established discount rate, while in open market operations the initiative may be taken by the Reserve Banks, which buy or sell short term securities in the market largely at their own volition and at market rates. The fact that the reduction of open market holdings during 1923 was accompanied by an amount of discounting by member banks approximately equal to the volume of funds withdrawn from the market by Federal Reserve Banks indicated that the total volume of Reserve Bank credit outstanding was not in excess of requirements.

Federal Reserve eredit policy during the year has been reflected chiefly in open market operations. As the aggregate demand of the country for Reserve Bank credit may be met either through rediscount or open market operations, the Federal Reserve Board felt that these two methods of extending credit should be brought into harmony. The Board, therefore, in April 1923, appointed a committee of officers of Reserve Banks to act in conjunction with the Board in effecting a more complete co-ordination of all open market operations of the Reserve Banks, both on their own account and in the execution of orders in Government securities for the Treasury as fiscal agents of the Government.

At the time the committee was appointed, the Federal

Reserve Board adopted the principle:

"That the time, manner, character, and volume of open market investments purchased by the Federal Reserve Banks be governed with primary regard to the accommodation of commerce and business and to the effect of such purchases or sales on the general credit situation."

As the Act provides that discount rates shall be fixed "with a view of accommodating commerce and business," the adoption of this principle definitely established open market policies on the same hasis as discount policies. Open market operations provide a cushion of credit between the direct operations provide a cushion of credit between the direct facilitated the flow of credit into and out of the Reserve Banks, in such a way as to exercise a steadying influence in the market and to reduce the tendency toward periodical tightness of money formerly felt by business in the spring and by agriculture in the autumn. Indeed, open market operations, particularly sales of securities, have proved to be a valuable adjunct to discount policy. The minor influence which sales of securities by Reserve Banks exert may, at times, avoid the necessity for resorting to the major influence of a change in discount rates.

Discount rate changes in 1923 were fewer than in any other year in the history of the System. Advances in discount rates from 4 per cent. to 41/2 per cent. at the Federal Reserve Banks of Boston, New York and San Francisco were made early in the year, and since that time the level of rates has been the same at all the Reserve Banks. With the growth of discounts. however, which accompanied the reduction in the holdings of Government securities, the influence of existing discount rates was extended to a larger proportion of the total Federal Reserve Bank credit in use, and the cost of obtaining Reserve Bank eredit was horne more directly by memher banks. Changes in discount rates made with a view of influencing the demand for rediscount accommodation from Federal Reserve Banks are better understood by the general public than open market operations. The experience of the past year, however, shows that changes in the volume of securities held by the Reserve Banks, when such changes are well timed, are capable of exerting an important and useful influence on credit conditions. The weekly statement of condition of the Federal Reserve Banks shows the amount and composition of open market holdings and makes it possible for the public to follow these changes from week to week.