

(The article on the last page relates to membership in 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, November 1, 1922

Credit Conditions

THE change in the direction of movement of various indices of credit conditions, referred to in the last issue of the REVIEW, has resulted during the past month in an additional rise in interest rates, and in a further increase in the commercial loans of banks and the loans and note issues of the Federal Reserve Banks. The accompanying table shows the amounts of these increases.

In four of the essentials of business activity—credit, raw materials, labor, and transportation—indices of the relationship between supply and demand have turned upward during the past year. For credit, raw materials, and labor, the best indices of the relation of supply and demand are found in prices in the open market, and in the case of transportation, a measure is available in the shortage or surplus of freight cars. Typical figures for all four are presented in the diagrams at the foot of this page and the top of the following page.

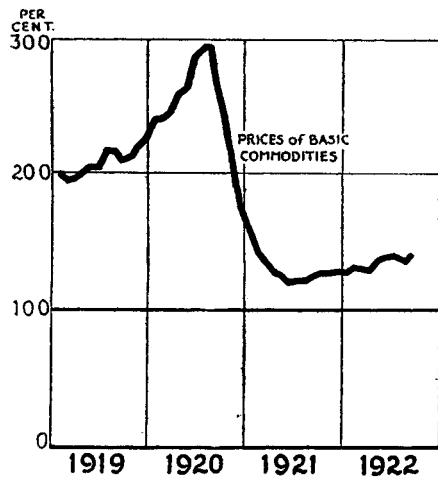
A year ago the prices of raw materials began to be af-

ected by increasing business activity while wages and money rates were still moving downward. Advances in

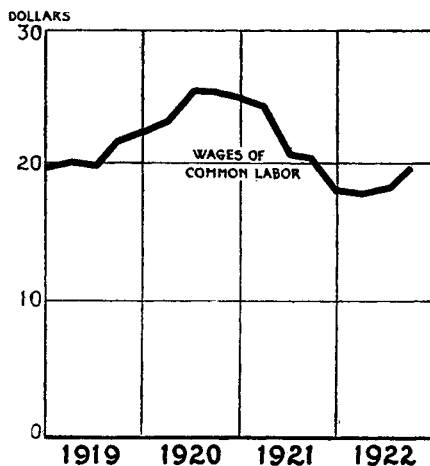
(Dollar figures in millions)

	July 26	Change from July 26		
		Aug. 30	Sept. 27	Oct. 25
Member Banks' Commercial Loans				
New York City.....	1,997	+ 11	+ 20	+ 32
All Reporting Cities.....	7,279	0	+119	+264*
All Federal Reserve Banks				
Notes in Circulation.....	2,127	+ 26	+116	+172
Loans to Member Banks.....	380	+ 24	+ 40	+ 89
Purchased Bills and Securities held.....	625	- 18	+ 14	0
Interest Rates:				
Commercial Paper (prime 4-6 mos.).....	4	0	+ ½	+ ½ to ¾
Bankers Bills (prime 90 day)...	3	0	+ ¼	+ ¼
Yield on U. S. Certificates of Indebtedness (4-6 mos.)....	3.14	+ .11	+ .16	+ .91
Yield on Liberty Bonds.....	3.89	+ .31	+ .35	+ .68

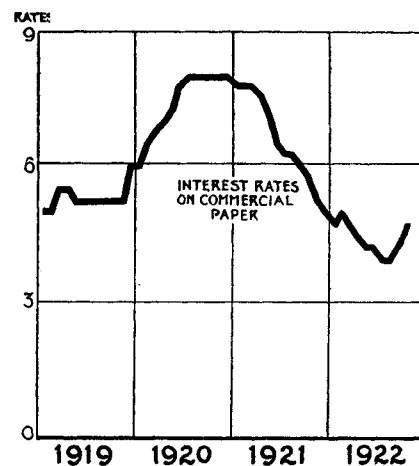
*October 18



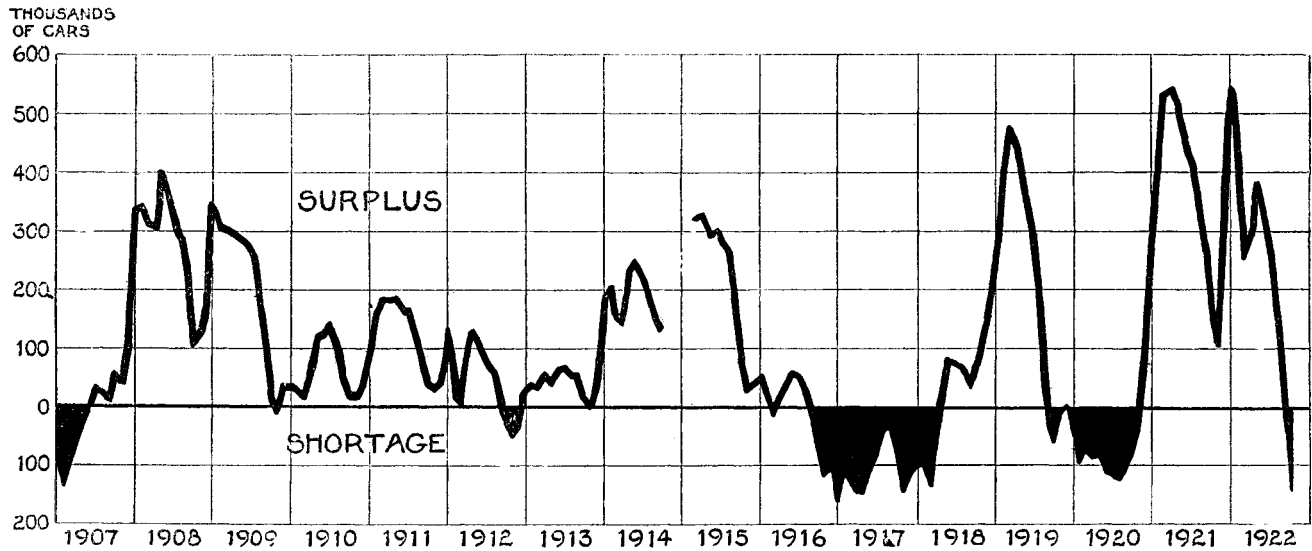
Average Monthly Prices of 20 Basic Commodities



Weekly Hiring Rate of Wages for Unskilled Labor in the 2nd District



Open Market Interest Rate on Prime 4 to 6 Months Commercial Paper



Net Surplus or Shortage of Freight Cars the First Week of Each Month. (Figures not reported November, 1914-January, 1915.)

recent weeks, however, have been strikingly rapid. An index kept by this bank shows that prices of 20 basic commodities are now 14 per cent. higher than a year ago. The increases bring prices of raw materials more nearly in line with prices of other commodities at wholesale than has been the case for a year and a half.

An index compiled by this bank of the hiring rate of wages for unskilled labor in this district, which represents open market labor conditions, has risen 9 per cent. since July. This increase accompanies a gain of over 4 per cent. in the number of persons employed in factories of New York State, which brings employment figures above the 1914 level for the first time in many months.

The latest evidence of a heavier volume of business is found in a freight movement so heavy as to result for the time being, at least, in a shortage of freight cars. The total freight movement has now reached a point practically equal to the record figures of 1920, due to the coincidence of exceptionally heavy shipments of merchandise and miscellaneous freight, the resumption of coal mining on a large scale, and a heavy seasonal movement of ore, grain, and other commodities. The roads are hampered in supplying the necessary cars and locomotives for this movement owing to restricted buying of equipment for some years past, and to an accumulation of bad order equipment in the past 18 months. In judging the seriousness of the shortage it should be borne in mind that freight movement usually diminishes somewhat after the early weeks of October, and that experience of previous periods of shortage in the fall of 1919 and during 1920 indicates that shortage conditions

may be materially alleviated by a more economical loading and routing of cars.

Government Financial Operations

The offering by the Government on October 9 of \$500,000,000, or thereabouts, of 4 $\frac{1}{4}$ per cent. 25-30 year bonds marked a new stage in the Treasury's program for dealing with the early maturing debt. Like the recent issues of Treasury notes, the new issue was solely of a refunding character and for the purpose of redistributing maturing obligations into more distant and manageable maturities, but unlike them was for a long term. It constitutes the first long time bond issue since the Liberty loans. The new bonds were in heavy demand, and cash subscriptions were in the neighborhood of \$1,400,000,000, with exchange subscriptions of Victory notes and certificates of indebtedness of about \$252,000,000, making a total of over \$1,650,000,000.

Subscriptions on the cash offering for amounts in excess of \$10,000 were scaled in order to permit the maximum percentage of allotments to the smaller purchasers. The following table, showing the allotments classified according to size, indicates a large participation in the loan by comparatively small buyers.

CLASSIFICATION	ALLOTMENTS
\$10,000 and under	\$327,554,600
\$10,100 to \$50,000	29,718,200
\$50,100 to \$100,000	23,714,500
\$100,100 to \$500,000	52,648,600
\$500,100 to \$1,000,000	30,301,500
Over \$1,000,000	47,447,600
Total	\$511,385,000

Accepted allotments of exchange subscriptions, amounting to \$252,000,000, raised the total of all allotments to over \$763,000,000.

Bill Market

Dealers' offering rates for prime unindorsed bills were advanced successively from $3\frac{1}{4}$ per cent. early in October to 4 per cent. toward the end of the month. Bid rates were advanced proportionately to $4\frac{1}{8}$ and $4\frac{1}{4}$ per cent. Accompanying these advances a broader market was found among investors than for some months previous.

The volume of bills offered in the market was somewhat larger than in recent months, reflecting the increased use of credit in the seasonal movement of crops and commodities. Bills in the market during October continued to cover a wide range of commodities, while those drawn to finance the importation of raw silk and sugar and the exportation of cotton and foodstuffs were most numerous, and constituted a large proportion of the whole volume.

Commercial Paper

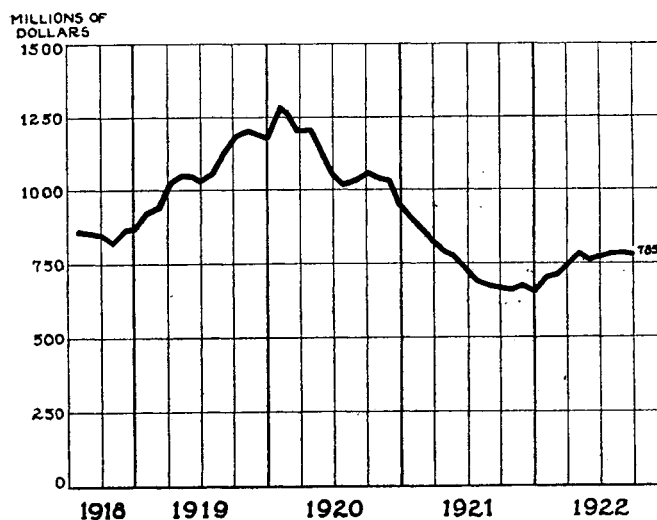
The rise in commercial paper rates, which began in September, was continued in October with an advance of $\frac{1}{4}$ of one per cent. in the rate for prime paper to a range of $4\frac{1}{2}$ to $4\frac{3}{4}$ per cent. In some cases, paper of less high grade was sold at 5 per cent.

Firmer money conditions were not the result of any increase in supplies of paper, but reflected decreased demand from buyers. Dealers continued to report scarcity of offerings, and lists of paper for sale were reduced in some cases to the lowest point in recent years. Apparently, the higher commercial paper rates and consequent narrowing or disappearance of the advantage of financing through the open market has had the effect of diverting increased commercial demand directly to the banks.

These conditions are reflected in a slight decline during September in the outstanding commercial paper of the twenty-seven dealers who report to this bank and whose monthly figures are plotted in the accompanying diagram.

Stock Market Money Rates

The firmness in the Stock Exchange money market noted during September became more marked in Octo-



Commercial Paper Outstanding—Twenty-seven Dealers

ber. During the first three weeks of the month the average daily rate on new call money loans was $4\frac{3}{4}$ per cent., the highest since February, and on four days the maximum rates for some loans reached 6 per cent. The generally higher average reflected an increased demand upon lenders from both stock market and commercial sources, while the extreme advances were due in large measure to the coincidence of Columbus Day currency requirements and heavy mid-month transactions.

Time money rates likewise advanced and were quoted at $4\frac{3}{4}$ to 5 per cent., compared with $4\frac{1}{2}$ to $4\frac{3}{4}$ per cent. the preceding month and $3\frac{3}{4}$ to $4\frac{1}{4}$ per cent. at the recent low point.

Stock Market

Following a reaction in September similar to that which took place in June, industrial stocks rallied strongly early in October and representative averages again reached new high levels for the year. This movement on the part of the averages was accompanied by an unusual amount of irregularity in individual issues. Trading in railroad stocks was relatively light and while prices strengthened somewhat in sympathy with industrials, they did not completely recover previous losses.

Total stock transactions on the New York Stock Exchange during September were 22,000,000 shares, the largest since June. Trading was still heavier during the first three weeks of October, when daily transactions were frequently more than a million shares.

Bond Market

The firmer money conditions of October were accompanied by a further reaction in bond prices. On October 20, the Wall Street Journal's average of 40 corporation issues showed a loss of slightly more than 2 points from the high levels reached about the middle of September. The decline among prime railroad issues was particularly marked.

The following table shows the average decline from the high points in four representative groups of corporation issues, according to the Wall Street Journal's figures.

	High	October 20	Change
10 Highest grade rails.....	92.05	87.97	-4.08
10 Second grade rails.....	89.27	86.51	-2.76
10 Public utilities.....	91.00	89.77	-1.23
10 Industrials.....	96.96	95.89	-1.07
Combined average.....	92.12	90.03	-2.09

Prime State and municipal securities also fell somewhat below their highest levels. Declines were largest in the case of the highest priced issues. Foreign bonds, on the other hand, became firmer early in the month as the situation in the Near East became more settled. Later in the month reactions again accompanied weakness in foreign exchange.

September trading on the Stock Exchange totaled \$217,000,000, less than the figures for the most active months of the year, but 70 per cent. over the September total last year.

United States Government Securities

Reflecting the same conditions affecting the general bond market, Liberty bond prices declined in October and by the latter part of the month the 4 $\frac{1}{4}$ per cent. issues showed losses of about a point from par. The tax exempt 3 $\frac{1}{2}$ s were an exception to the general trend and rose to 103, the highest point at which they ever sold. There was later a reaction to about 101.

Transactions in Government issues on the Stock Exchange during September were only \$88,000,000, the smallest since the war with the single exception of August, 1921. The reduction partly reflects the refunding of Victory notes into Treasury notes which are not quoted on the Exchange. The volume of trading was larger in October, due both to the listing of the new refunding 4 $\frac{1}{4}$ s and to increased activity in the older issues.

Offering rates on outstanding issues of certificates and notes showed advances conforming with changes in other money rates. Yields on 4 to 6 months' issues rose approximately $\frac{1}{2}$ of one per cent. from the yields prevail-

ing in the middle of September, while yields on the 3 to 4 year Treasury notes increased approximately $\frac{1}{4}$ of one per cent.

New Financing

After rising to about \$125,000,000 a week or higher for a period in September, offerings of new securities decreased during the first part of October to approximately \$50,000,000 weekly. This total, however, included several large issues for which there proved to be an excellent demand. Following the sale of the Treasury's new long term refunding issue, private and foreign government financing during the third week again rose above \$100,000,000.

In general, there was little change in the yield basis of offerings, though in cases of certain slow moving issues of the State and municipal group some new concessions were granted to buyers. Among the corporation issues, public utility financing was especially prominent.

A feature of the market was increased offerings of foreign issues after several months of unusually low totals. Offerings of this group during the first three weeks of October aggregated \$68,000,000, and included \$20,000,000 Province of Ontario 20-year 5s, \$18,000,000 Kingdom of Norway 30-year 6s, and \$16,000,000 Republic of Haiti 6s. These were reported to have been well distributed.

Foreign Exchange

After declining to \$4.38 at the end of September, sterling recovered during the first three weeks of October to \$4.48, which was 3 cents below the high point for the year. There was later a moderate reaction. Exchange on France and Belgium tended downward throughout the month, and reichsmarks declined practically 60 per cent. to a new low price of $\frac{1}{40}$ of a cent. The German floating debt increased more than 48 per cent. in September, from 356,000,000,000 marks to 528,000,000,000 marks and the Reichsbank note circulation expanded from 238,000,000,000 marks on August 31 to 375,000,000,000 marks on October 14, an increase of nearly 58 per cent. in six weeks. Exchange on Norway and Sweden advanced substantially, accompanying the flotation of a Norwegian Government loan in this market.

The price of bar silver at New York declined slightly, coinciding with slight weakness in rates on several Far Eastern centers. South American rates have been without important change except for a decline in Brazilian milreis from 12 cents to 11 cents.

The following table compares changes in the principal rates from a month ago and a year ago.

Country	Oct. 20 Last	Change from Sept. 20 1922	Change from Oct. 20 1921	Per cent. depreciation from par
England	4.4638	+ .0325	+ .5163	8.3
France	.0738	- .0028	+ .0005	61.8
Italy	.0420	- .0004	+ .0024	78.2
Germany	.0003	- .0004	- .0064	99.9
Belgium	.0683	- .0031	- .0039	64.6
Holland	.3907	+ .0037	+ .0515	2.8
Switzerland	.1824	- .0045	+ .0013	5.5
Spain	.1536	+ .0023	+ .0217	20.4
Sweden (Stockholm)	.2666	+ .0015	+ .0361	0.5
Argentina	.3607	+ .0079	+ .0423	15.0
Brazil	.1107	- .0099	- .0135	65.9
Japan (Yokohama)	.4800	- .0013	+ .0025	3.7
China (Hong Kong)	.5563	- .0150	- .0075	*
China (Shanghai)	.7338	- .0375	- .0600	*
India	.2913	+ .0050	+ .0194	40.1
Canada	1.0014	+ .0017	+ .0876	+0.1
Bar Silver in New York	.6675	- .0288	- .0485

*Silver exchange basis.

Gold Movement

Imports of gold into the United States during September amounted to \$29,316,000, of which \$8,442,000 came from England, and over \$2,000,000 from France. Total exports were \$1,398,607.

(000 omitted)

Country	Monthly Av.		July 1922	Aug. 1922	Sept. 1922	Total 1922
	Jan.-Mar. 1922	Apr.-June 1922				
England	\$6,266	\$1,954	\$38,066	\$13,270	\$8,442	\$84,441
Sweden	9,345	1,174	246	583	114	32,502
Canada	1,765	816	580	393	232	8,946
China and Hong Kong	170	1,040	342	870	971	5,812
France	3,317	791	1,688	890	2,070	16,970
Denmark	3,437	2,115	1,115	469	18,998
Mexico	497	520	467	333	674	4,524
Colombia	772	476	619	642	651	5,655
All other	4,018	2,516	979	996	15,688	27,373
Total	\$29,587	\$11,402	\$42,987	\$19,093	\$20,316	\$214,361

Foreign Trade

Imports into the United States during the first three weeks of September, as reported by the Department of Commerce, were \$232,000,000, or \$49,000,000 less than in the whole month of August and \$53,000,000 more than in September last year. Figures up to September 21 alone were published for the reason that a change in the method of computing valuations to conform to the new tariff law placed later figures on a different basis.

The Department's report showed unusually heavy imports of silk, and an increase in coffee receipts to the largest total since May.

Exports for the whole month of September rose \$17,000,000 to \$317,000,000, and were the largest since the June high point of this year, when the total was \$335,000,000. In part at least, this advance was due to an increase of more than 96,000 bales in cotton shipments, which in the preceding month had fallen to the lowest in about two years.

Reports as to current orders indicated in general little variation from conditions prevalent a month ago. Orders from most South American countries and Australasia apparently continued to increase slowly in number and variety, but any general increase on export trade was retarded by continued dulness in steel demand, a falling off in buying of copper, and slow buying of grains. Call for American wheat continued to be affected by lower prices of the Canadian crop, and transportation delays.

World Prices

The general level of world prices tended to be lower during September, continuing the August declines. In Great Britain, Canada, Norway, Sweden, Denmark, and the Netherlands, average prices stand at a lower level than at any time since the fall in prices began in 1920. The principal groups of commodities contributing to price declines were farm products and foods. Prices of potatoes, a staple food in most countries, are particularly low due to large crops.

(1913 average = 100 per cent. unless otherwise noted)

Country	Latest Quotation	PER CENT. CHANGE DURING		
		July	Aug.	Sept.
United States:				
20 basic commodities	146 (Oct. 21)	+ 0.1	- 2.3	+ 3.1
Dept. of Labor	153 (Sept. av.)	+ 3.3	0.0	- 1.3
Dun's	145 (Oct. 1)	- 0.1	- 0.6	+ 1.8
Bradstreet's	136 (Oct. 1)	- 0.3	+ 0.1	+ 3.5
Great Britain:				
Economist	156 (Oct. 1)	+ 0.1	- 3.1	- 1.6
Statist.	143 (Sept. 1)	- 1.7	- 8.6	
20 basic commodities	141 (Oct. 21)	+ 2.8	+ 0.2	- 1.6
France	329 (Oct. 1)	0.0	+ 1.9 ^r	- 0.6
Italy	571 (Sept. 1)	+ 3.8	+ 2.5	
Japan	193 (Sept. av.)	+ 1.9	- 2.9	- 1.2
Canada	163 (Sept. 15)	+ 0.5	- 1.1 ^r	- 1.0
Australia	155 (Aug. av.)	+ 0.6	- 1.3	
Norway	225 (Oct. 1)	+ 0.9	- 2.2	- 0.9
Sweden	158 (Sept. 15)	+ 0.6	- 1.2	- 3.1
Denmark	176 (Oct. 1)	0.0	- 1.1	- 1.1
Netherlands	155 (Sept. 1)	- 4.2	- 2.5	
Belgium	364 (Sept. 15-30)	+ 1.1	0.0	+ 1.1
Germany	44,089 (Oct. 1)	+52.5	+107.5	+52.5
Shanghai	106 (Sept. 1)	- 0.1 ^r	- 2.0	

^rComputed by this bank. ¹July 1914 = 100. ²Dec. 31, 1913-June 30, 1914 = 100. ³July 1, 1913-June 30, 1914 = 100. ⁴July 1912-June 1914 = 100. ⁵Apr. 1914 = 100. ⁶Sept. 1919 = 100.
r-Revised.

Domestic Prices

The September level of wholesale prices, according to the Department of Labor index number, was slightly below that for August, due entirely to a decrease of 10 per cent. in fuel prices. There were substantial gains in the prices of metals and building materials, due largely to higher quotations for iron and steel. The following table gives the September change by groups and the upward movement from recent low points.

Commodity Group	Value of Index		Per Cent. change August to Sept.	Per Cent. Increase from Low	Date of Low
	August 1922	Sept. 1922			
Farm products.....	131	133	+ 1.5	16.7	June 1921
Foods.....	138	138	0.0	5.3	Jan. 1922
Cloths and clothing..	181	183	+ 1.1	7.0	Apr. 1922
Fuel and lighting....	271	244	-10.0	34.8	Sept. 1921
Metals.....	126	134	+ 6.3	22.9	Mar. 1922
Building materials..	172	180	+ 4.7	16.1	Mar. 1922
Chemicals and drugs	122	124	+ 1.6	2.5	July 1922
House furnishing goods	173	173	0.0	0	
Miscellaneous.....	115	116	+ 0.9	1.8	June 1922
All groups.....	155	153	- 1.3	10.9	Jan. 1922

This bank's index of prices of twenty basic commodities rose 1.7 per cent. in the first three weeks of October. Reactions in the prices of iron and steel and fuel were offset by general gains in other commodities.

Cost of Living

An increase in September of seven-tenths of one per cent. in the cost of living among wage earners' families in the United States, as computed by the National Industrial Conference Board, exactly offset a similar decrease which took place a month ago, and brought the final index number for September 15 to the same point as on July 15. The principal change during the past month was an increase of 3.3 per cent. in the cost of fuel and light. The following table shows the latest figures of this index number together with the recent changes:

Item	August 1922	September 1922	Per Cent. change
Food.....	139	140	+0.7
Shelter.....	165	165	-
Clothing.....	153	155	+1.3
Fuel and Light.....	181	187	+3.3
Sundries.....	172	172	-
Weighted average all items	154.5	155.6	+0.7

Wages

The average hiring rate of pay for representative types of unskilled workers in this district advanced 9 per cent. from 36.9 cents an hour in July to 40 cents in October, according to an index computed by this

bank from reports of employers. The index is now 23 per cent. below the high level of the autumn of 1920 and 81 per cent. above the 1914 level. Many firms reported difficulty in obtaining labor at existing rates, and a large labor turnover. In some localities the shortage of common labor was described as acute.

Recent wage advances have not been confined to common labor. Average weekly earnings of New York State factory workers, reported by the State Department of Labor, advanced 2.4 per cent. from \$25.10 in August to \$25.71 in September, and are now 3.8 per cent. higher than in July. A compilation by the National Industrial Conference Board shows that between September 16 and October 15 there were reports of 69 changes in wage rates of which 65 were increases and 4 decreases.

Numerous advances have recently been reported in the clothing and textile industries due largely to the restoration in New England cotton mills of the wage scale prevailing prior to the recent strike. The metal and machinery trades also show a large number of increases. The Railroad Labor Board has fixed a higher scale of wages for maintenance of way employees, some shop workers, and yardmasters. Some of the individual roads are paying shopmen and other classes of skilled labor wages in excess of the scale fixed by the Board.

Savings Bank Deposits

Aggregate deposits of the fifteen reporting savings banks in New York City increased slightly more than 1 per cent. between September 10 and October 10. This is the largest net increase for any month since the figures have been available, with the exception of the months of January and July of each year when interest is credited. The increase is due in part to a change by several banks to a system of crediting interest quarterly instead of semi-annually but probably reflects also increased employment and higher wage scales in a number of industries. An increase of 0.3 per cent. in the aggregate deposits of fifteen reporting banks in other cities of the district was, with the exception of January and July, the first net gain since December 1921.

Employment

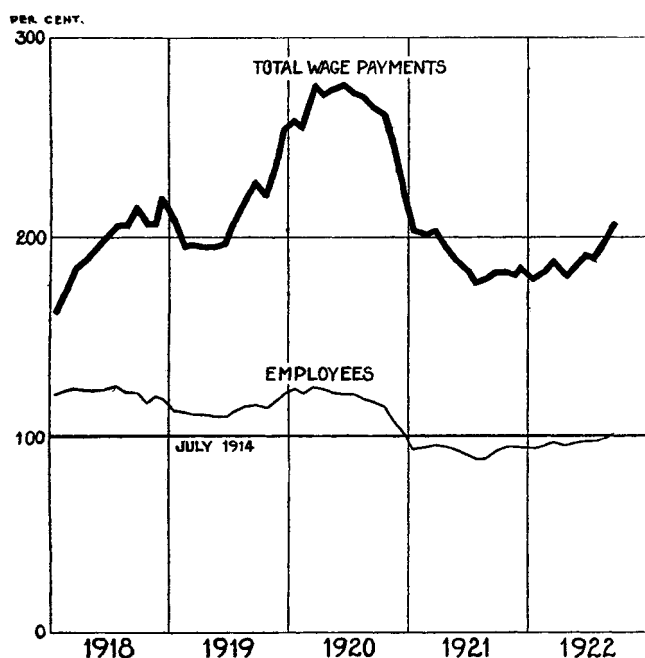
Increased activity in principal industries resulted in recent weeks in another large increase in the number of persons employed, both in this district and the country at large.

The New York State Department of Labor reports that between August 15 and September 15 there was an increase of 2 per cent. in the number employed in factories in the State, following an increase of 2.4 per cent. the previous month. There are now about 160,000 or about 15 per cent. more persons employed in New York State factories than there were a year ago. For the first time since 1920 the number of employees is larger than in 1914.

Increases in employment have been notable in iron and steel plants, whose forces had been reduced because of the recent fuel shortage. Miscellaneous metal and machinery factories likewise report marked gains.

There is a shortage of common labor, and of building artisans and certain other types of skilled workers. Employment agencies report less difficulty in placing clerical workers than was the case several months ago, but the supply still exceeds the demand.

The following diagram illustrates the trend of employment in New York State factories from 1918 to the present time. It also shows the total wages paid to these workers. The decline in total wage payments during the latter part of 1920 and early in 1921 was more distinct than the decline in the number of workers because of reductions in wages and hours of labor; and the recent increase in total wage payments has also been greater than the increase in the number employed because of higher wage rates and longer hours of operation in many factories.



Changes in Total Wage Payments in Representative New York State Factories compared with Changes in the Number of Workers employed by these Factories (July, 1914 figures=100 per cent.)

Results of a special inquiry have recently been given out by the New York State Department of Labor showing the percentages of employees in factories of the State who were working full time, part time, and overtime in June 1922, as compared with December 1921. The largest change has taken place in industrial centers up-State, where the number of part time workers has

been diminished from about 30 per cent. of the total to about 25 per cent. The number working overtime has been increased from 8.5 per cent. to nearly 11 per cent. of the total. There has been practically no change in these percentages in New York City. Both in December 1921, and June 1922, the proportion of workers on part time was much smaller than in up-State centers, only about 14 per cent. of the total. The number working overtime was also smaller at both periods.

Coal Mining

Bituminous coal production increased during October but average weekly production was only slightly more than 10,000,000 tons as compared with a normal production of about 12,000,000 tons. Mine operators reported that failure of production to reach capacity during both September and October was the result chiefly of an insufficient supply of empty cars and some congestion of loaded cars. Total production in the first nine months of 1922 was 10 per cent. less than production for the same period of 1921 and 33 per cent. less than in 1920. Total production in the first nine months of the past four years is shown in the following table together with the average weekly rate of output in October.

(In thousands of short tons)

	Nine Months	October Weekly Average
1919	346,520	12,094
1920	400,839	11,949
1921	296,285	10,213
1922	267,247	10,025*

* Partly estimated.

Production in Basic Industries

As a result of a more adequate supply of fuel and the receipt of large additional orders for rails and other railroad equipment, the iron and steel industries during September resumed more active operations. The number of pig iron furnaces in blast increased from 144 on September 1 to 190 on October 1, and the rate of output of both iron and steel early in October was not far behind the output of the early summer before production had been interrupted by the coal strike. Unfilled orders on the books of the United States Steel Corporation increased during the month to the extent of 741,000 tons. Towards the end of the month, demand became somewhat less active and the rise in iron and steel prices which had been going forward since late in March has been checked.

An increase in tin consumption to 92 per cent. of normal in September is reported to be due to a heavy foreign demand for can oil. Prices have recently been distinctly upward.

Indices of production in other basic industries show, in general, moderate amounts of change with increases and decreases about evenly divided. Sugar meltings, while still above normal, are down somewhat from August as a result of less active foreign and domestic demand.

The following table shows for successive months the production in a number of basic industries in terms of estimated normal, allowances being made for year to year growth and seasonal variations.

(Normal production = 100 per cent.)

Commodity	1922					
	Apr.	May	June	July	Aug.	Sept.
Anthracite coal mined ^p	0.3	0.4	1.0	1.4	1.9	61
Bituminous coal mined ^p	34	41	43	32	39	71
Pig iron production.....	67	73	79	82	61	68
Steel ingot production.....	74	81	82	79	70	74
Copper production, mine.....	59	70	75	75	86	79 ^p
Tin deliveries.....	100	92	90	75	77	92
Zinc production*.....	48	51	53	60	59	62
Crude petroleum production	109	111	110	110	111 ^p	...
Portland cement production	111	119	120	128	121	123
Wheat flour production.....	95	100	104	142	117	123
Meat slaughtered.....	96	108	112	99	109	...
Sugar meltings, at U. S. Ports	124	146	135	131	144	110
Cotton consumption.....	80	88	92	84	97	92
Lumber production.....	75	96	82	76	98	84
Wood pulp production.....	92	108	110	105	105	...
Tobacco consumption.....	79	91	97	90	103	...
Paper (total) production*.....	89	100	100	93	107	...
Gasoline production.....	95	96	101	109	103	...
Wool consumption*.....	95	116 ^e	116 ^e	103 ^e	126 ^e	...

^e—Estimated.

^p—Preliminary.

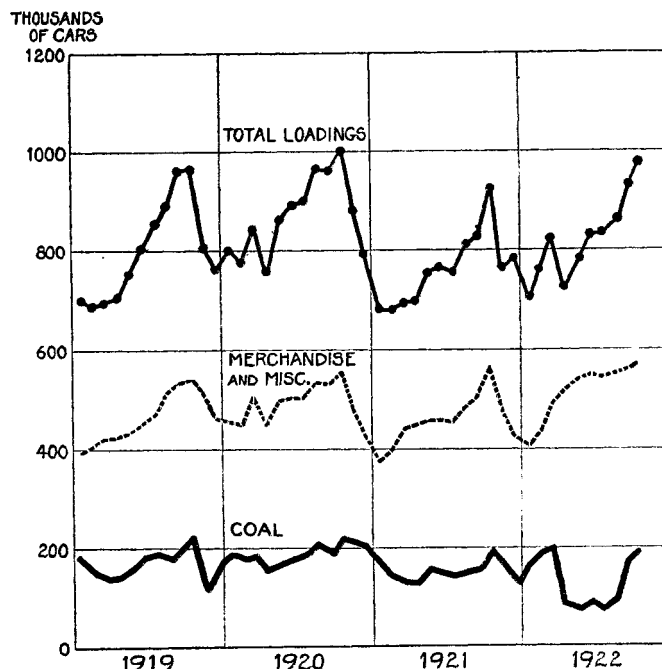
*—Seasonal variation not allowed for.

Railway Traffic

In the week ended September 30 freight car loadings of all commodities except coal exceeded those of any previous week in railroad history, and total car loadings were within three per cent. of the record figures in October 1920. Heavy loadings at this time were due to a further increase to new high levels in the movement of merchandise and miscellaneous freight and to an increase in coal loadings to almost normal figures.

The following diagram shows average weekly loadings of revenue freight by months since January 1919 and shows also loadings of merchandise and miscellaneous freight and of coal.

As a result of heavy traffic and of some congestion of loaded cars at various terminals a shortage of freight cars developed early in October. Coal shipments have been retarded by an insufficient supply of empty cars at the mines. Shipments of fruit from California have



Average Weekly Car Loadings of Revenue Freight on the Railroads of the United States

been hampered by shortage of refrigerator cars and the movement of grain and of such basic building materials as cement and brick has been below requirements.

The car shortage has been influenced by a variety of conditions most important of which have been the large number of bad order cars and the lack of new equipment. Previous to 1921 the number of unserviceable freight cars averaged each month about 6 per cent. of the total number of cars but during the past eighteen months from 10 to 15 per cent. of the total have been unserviceable. From 1901 to 1916 the railroads purchased an average of 169,000 new freight cars per year but since 1917 average annual purchases have been only 65,000 cars and in 1921 orders were placed for only 23,000 cars. While purchases have been relatively heavier in 1922, totaling about 123,000 cars thus far, they have not materially offset the shortage of the past six years.

A surplus of over 500,000 cars existed early this year but as traffic increased this surplus was gradually eliminated and by October 8 a daily shortage of 143,000 cars existed. Freight traffic is normally heaviest in September and October and small shortages have often occurred at this season, as in 1909, 1912, and 1916. But on only two occasions previously have as serious shortages developed, in 1917-18 and 1919-20. Both these shortages were gradually eliminated when active measures were taken to increase the average length of each day's freight haul and to increase the load of each car.

The normal average freight car haul is about 25 miles per day but in 1918 under war conditions and in 1920 under stress of effort to relieve freight congestion the average haul was increased to 27 miles in several months. In the latter part of 1920 the average haul was over 28 miles. For the first seven months of 1922 the average haul was only 22 miles.

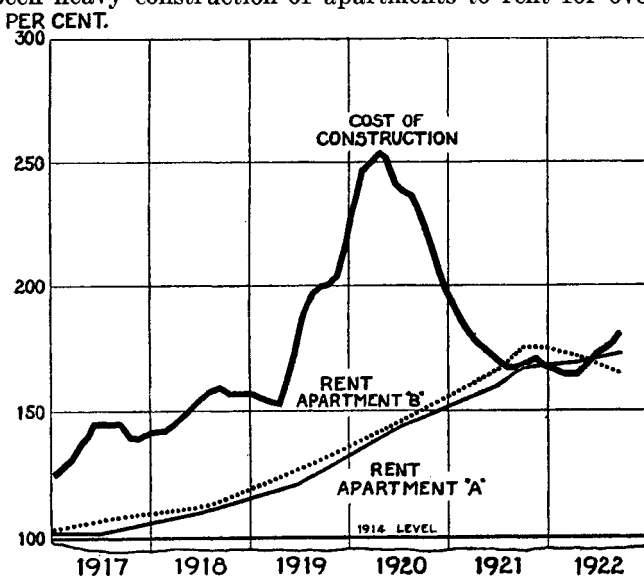
Each car normally carries about 27 tons of freight but in 1918 and 1920 car loads were increased to an average of over 29 tons. For seven months of 1922 the average load was only about 26 tons.

Volume of Building

September building contract awards in twenty-seven northeastern States were 16 per cent. under those of August mainly as a result of a decline in the volume of new construction in the New York and Pittsburgh districts. Awards in New York State and Northern New Jersey were nearly 22 per cent. less than in August. Industrial construction declined abruptly in this district but residential building showed a moderate increase, a reversal of the trends of these types of construction in recent months.

Apartment Rents

This bank's indices of apartment rents show an increase of 2 per cent. since May in rents of low priced apartments but a decline of 3 per cent. in rents of somewhat more expensive apartments. These changes continue the tendencies of previous months and reflect the building operations of the past two years. There has been heavy construction of apartments to rent for over



Rents of Apartments in New York City compared with changes in the cost of Building Construction. Apartment A is the Typical Apartment renting for less than \$15 per room in 1920. Apartment B is the Typical Apartment renting for between \$15 and \$30 per room in 1920.

\$15 monthly per room, while there has been little construction of the least expensive types.

The foregoing diagram compares the two indices of apartment rents computed from reports of sixteen representative apartment house owners and operators with an index of building costs also maintained by this bank. The sharp rise in the building cost index in 1922 is due chiefly to an increase in building material prices in the past six months.

Wholesale Trade

The volume of wholesale trade in this district, as shown by reports from 122 dealers in ten chief commodities, was larger in September than in any month since September 1920. The weighted index maintained by this bank shows an advance of ten per cent. over the figure for September 1921.

The diagrams at the top of page 10 compare the September sales during the past four years. In each case sales in September 1919 were taken as 100 per cent. and sales in September of other years are expressed as percentages of this base.

The largest increase in sales as compared with last year was reported by dealers in machine tools, reflecting large purchases by railroads and equipment companies.

Sales of clothing advanced nearly 30 per cent. There is an excellent demand for both men's and women's ready-to-wear apparel and manufacturers report larger orders from the South and Southwest than at any time during the past two years.

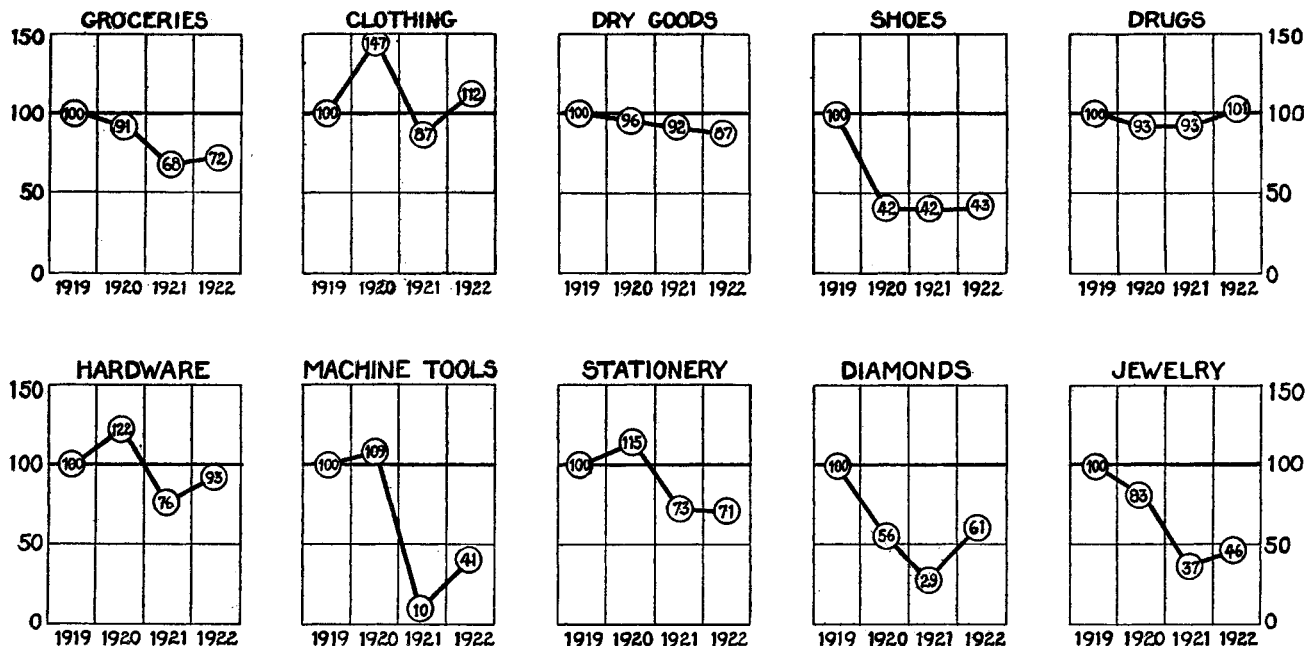
Sales of diamonds and jewelry, which were very low last year, are tending upward but remain considerably below those of 1919.

Hardware sales, reflecting increased building activity, advanced 22 per cent. Sales by wholesale druggists gained 8 per cent. and those by grocers 6 per cent.

The only commodities which showed smaller sales were dry goods and stationery and the declines in those cases were small.

Detailed figures are shown in the following table.

Commodity	TOTAL NET SALES (In percentages)				Per Cent. Change Sept. 1921 to Sept. 1922
	Sept. 1919	Sept. 1920	Sept. 1921	Sept. 1922	
Clothing	100	147	87	112	+ 28.6
(A) Men's	100	201	106	142	+ 34.2
(B) Women's	100	88	67	79	+ 18.8
Drugs	100	93	93	101	+ 8.0
Hardware	100	122	76	93	+ 21.6
Dry Goods	100	96	92	87	- 5.5
Groceries	100	91	68	72	+ 5.9
Stationery	100	115	73	71	- 2.4
Diamonds	100	56	29	61	+108.2
Jewelry	100	83	37	46	+ 22.8
Shoes	100	42	42	43	+ 2.2
Machine Tools	100	109	10	41	+313.1
Weighted Average	100	100	74	82	+ 10.3



September Sales in Different Years by Representative Wholesale Dealers in the Second District. Sales in September 1919=100 per cent.

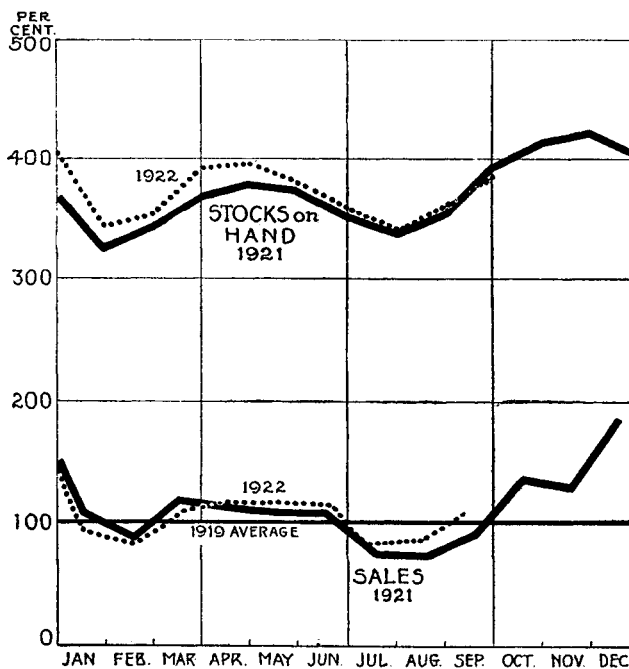
Department Store Trade

September sales by 64 department stores in this district were larger than in September 1919, 1920, or 1921. The gain over September last year was 16.1 per cent., the largest increase over the corresponding month in the previous year since July 1920, when an increase in prices was a factor in the advance. In the past three years September sales were about 30 per cent. greater than those of August. This year the month-to-month gain was 37 per cent.

The following diagram compares the sales of this year with those of last year and shows that during the first quarter of 1922 sales were below those of 1921; during the second quarter sales were about the same, and the first marked gains occurred in August and September. A similar comparison is made of the stocks on hand.

Stores in all parts of the district reported substantial increases in sales, but the gain was greatest in New York City, amounting to 18.4 per cent. Merchants assert that sales have been good in all departments and especially large in ready-to-wear clothing and house furnishing goods. There appeared during the month an increasing demand for so-called "luxury" articles, the large sale of which characterized department store business in the fall of 1919 and spring of 1920. Merchants also report that purchasers are buying a somewhat better quality of

merchandise this year than last and are giving greater consideration to the quality of goods purchased. Evidence of this tendency is found in an increase of 5.1 per cent. in the average sales check from \$2.77 in September last year to \$2.91 this year.



Sales and Stocks on Hand of Representative Department Stores in the Second District (Average Sales in 1919=100 per cent.)

Sales by mail order houses, which deal largely with rural districts, gained 4 per cent. in September but continue much below the levels of 1919 and 1920.

Detailed figures are shown in the following table.

	TOTAL NET SALES (In percentages)				STOCK ON HAND RETAIL PRICE (In percentages)			
	Sept. 1919	Sept. 1920	Sept. 1921	Sept. 1922	Oct.1, 1919	Oct.1, 1920	Oct.1, 1921	Oct.1, 1922
All Dept. Stores	103	111	100	116	96	122	100	98
New York.....	109	115	100	118	95	122	100	99
Buffalo.....	92	106	100	109	97	121	100	93
Newark.....	89	98	100	112	100	132	100	101
Rochester.....	98	114	100	112	108	133	100	90
Syracuse.....	99	115	100	112	118	154	100	99
Bridgeport.....	109	119	100	115	102	123	100	99
Elsewhere.....	94	109	100	107	85	105	100	89
Apparel Stores...	101	105	100	118	88	108	100	104
Mail Ord. Houses	141	121	100	104	**	**	**	**

Chain Store Sales

September sales by the chain store systems that report currently increased over those of last September in about the same proportion as did the sales of department stores in this district. Chain store sales are influenced, however, by the opening of new stores, and are nationwide in their scope.

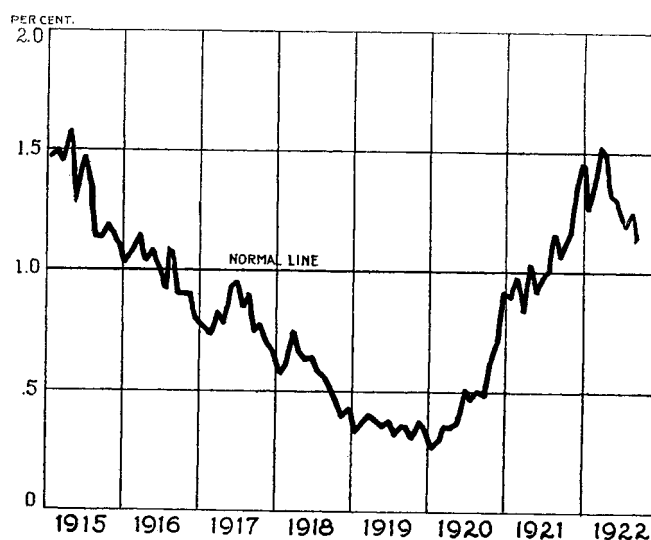
The largest gain in sales, amounting to 20 per cent., was reported by five and ten cent stores. Grocery systems reported an increase of 18 per cent. in total sales, but this was due in a large measure to the opening of about 2,200 new stores. Sales of shoes and apparel gained about 15 per cent. and sales of cigars and drugs increased about 5 per cent.

Type of Store	Number of Stores		TOTAL NET SALES (In percentages)				Per cent. change in sales per Store, Sept. 1921 to Sept. 1922
	Sept. 1921	Sept. 1922	Sept. 1919	Sept. 1920	Sept. 1921	Sept. 1922	
Ten Cent..	1,598	1,666	82	98	100	120	+15.1
Grocery...	6,078	8,286	84	113	100	118	-13.4
Apparel...	370	431	69	105	100	116	- 0.8
Shoe.....	185	216	104	107	100	114	- 2.7
Cigar.....	2,228	2,639	75	107	100	106	-10.7
Drug.....	283	280	85	101	100	104	+ 5.4
Total...	10,742	13,518	82	106	100	116	- 7.8

The average price of shoes sold by reporting shoe stores declined 3.6 per cent. from \$3.87 per pair in September last year to \$3.73 this year and the number of pairs of shoes sold increased 17.6 per cent.

Business Failures

Fewer business failures were reported in the United States during September than in any month since September 1921. This bank's index which is based on the proportion of failures to the number of firms in business and makes allowance for seasonal variations was also lower than for any month since last September. Average liabilities were slightly above August figures but under the average for the first eight months of 1922.



Percentage of Firms Failing to the Number in Business, in Terms of Annual Rate. Seasonal Variation Allowed For.

Crop Conditions

Crop reports for New York State for October 1 indicate that the total yield of all crops this year taken as a whole is about 10 per cent. better than the average yield during the past ten years. The yield of winter wheat, oats, barley and rye is somewhat under the ten-year average, but that of practically all other crops is exceptionally good.

For the United States as a whole, the estimated yield for October 1 was in general slightly under the September figures. The estimated yield of cotton declined 4 per cent. The estimates for spring wheat, and corn were also slightly lower.

Membership in the Federal Reserve System

THE members of the Federal Reserve system comprise about 10,000 National and State banks and trust companies—approximately one-third of all the banks in the country. This proportion of about one-third does not hold uniformly in all the States, but varies from about ten per cent. in some States, to upward of seventy per cent. in others. In point of resources, the member banks represent about two-thirds of the banking strength of the country.

WHAT BANKS ARE MEMBERS

Under the Federal Reserve Act all National banks are members of the Federal Reserve system; and State banks and trust companies may apply for admission. State institutions may also withdraw from the system. The following table shows the number of member banks, both National and State, and their resources on June 30 of each year since 1915.

Year as of June 30	NUMBER OF BANKS			RESOURCES (In millions)		
	National	State	Total	National	State	Total
1915	7,598	17	7,615	11,790	97	11,887
1916	7,572	34	7,606	13,920	307	14,227
1917	7,600	53	7,653	16,282	756	17,038
1918	7,700	513	8,213	18,347	6,104	24,451
1919	7,780	1,042	8,822	21,228	8,628	29,856
1920	8,025	1,374	9,399	23,402	10,351	33,753
1921	8,150	1,595	9,745	20,510	10,426	30,936
1922	8,244	1,648	9,892	20,698	11,026	31,724

State institutions applying for membership are required to have at least the minimum paid-up capital required of newly established National banks. For example, the minimum capital required of a National bank established in a rural community is \$25,000, and State banks having a capital of less than that are not now eligible for membership. In many agricultural States a very large number of rural banks having small capital are ineligible for membership and so are without direct access to the Federal Reserve Banks. The number of ineligible State banks is about 10,000.

In all cases State institutions applying for membership are subject to examination by the Federal Reserve Bank before admission, so that their condition and banking policies may be ascertained.

WHAT MEMBERSHIP MEANS

A member bank must subscribe for stock in its Federal Reserve Bank in the amount of 6 per cent. of its own capital and surplus; and as a member bank's capital and surplus increase, it must increase its ownership of stock in the Federal Reserve Bank. The member banks are the sole owners of Reserve Bank stock. This stock is not transferable and so cannot be sold, thus preventing a concentration of control of the Federal Reserve Banks. If a bank liquidates or retires from the system, the shares held by it are canceled, and the bank receives back what it paid in. Thus far the member banks have been called upon to pay in only 50 per cent. of the amount of stock subscribed for. Dividends have

been paid at the rate of 6 per cent. annually upon the amount paid in.

A member bank keeps all of its reserves with the Reserve Bank. These reserves form almost the entire volume of deposits which Reserve Banks have. They are in a fixed proportion to the amount of deposits which the member banks have, on the average, ten per cent.

To all member banks are available the various services provided by the Federal Reserve Banks. These services, which have been described individually from time to time in the REVIEW, include the making of loans, the supply of currency, the collection of checks, the transfer of funds by wire, and other services.

MEMBERSHIP IN VARIOUS STATES

The variation among the different States in the proportion that member banks bear to the total number of banks, appears in the following table. It shows also the proportion that the resources of member banks bear to the total banking resources of each State. For convenience, the sum of the deposits, capital, surplus and undivided profits is taken to reflect the resources of banks. The percentages are based upon figures taken from the report of the Comptroller of the Currency, and show the condition as of June 30, 1921.

State	Per cent. of member banks to total	Per cent. of member resources to total	State	Per cent. of member banks to total	Per cent. of member resources to total
Maine.....	55	54	Ohio.....	46	72
New Hampshire..	69	60	Indiana.....	30	47
Vermont.....	56	41	Illinois.....	30	65
Massachusetts...	71	82	Michigan.....	40	77
Rhode Island....	61	82	Wisconsin.....	19	52
Connecticut.....	51	60	Minnesota.....	24	56
Total—New England States	62	74	Iowa.....	27	40
New York.....	72	86	Missouri.....	10	56
New Jersey.....	70	69	Total—Middle Western States	27	62
Pennsylvania....	62	68	North Dakota...	22	41
Delaware.....	42	60	South Dakota...	22	37
Maryland.....	36	52	Nebraska.....	17	41
Washington, D. C.	34	50	Kansas.....	20	38
Total—Eastern States..	63	78	Montana.....	49	71
Virginia.....	37	68	Wyoming.....	33	67
West Virginia...	38	50	Colorado.....	37	71
North Carolina...	16	49	New Mexico....	45	64
South Carolina...	22	47	Oklahoma.....	39	64
Georgia.....	23	59	Total—Western States	27	51
Florida.....	25	57	Washington.....	38	69
Alabama.....	35	70	Oregon.....	45	72
Mississippi.....	10	27	California.....	49	67
Louisiana.....	19	64	Idaho.....	60	73
Texas.....	47	77	Utah.....	50	69
Arkansas.....	24	60	Nevada.....	31	38
Kentucky.....	24	55	Arizona.....	30	40
Tennessee.....	20	57	Total—Pacific States..	46	67
Total—Southern States	29	60	Grand Total...	33	68

It will be seen that in general the highest proportion of membership and of member bank resources is in the northeastern States.