

(The article on the last page describes how the Federal Reserve System is organized)

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, December 1, 1921

Credit Conditions

IN the past thirty days there has been a further decline in rates of interest on short-term paper, including Treasury certificates, bankers acceptances, commercial paper, and Stock Exchange call money. Lower interest rates have been reflected in turn in higher bond prices and a marked increase of activity in the bond market, for both old and new issues. Various classes of new securities have been readily sold at prices yielding smaller returns to the investor than similar classes of securities have yielded for many months past.

Evidences of the advance toward easier conditions in the money market appear in the following summary of the decline in rates on short-time investments since a year ago:

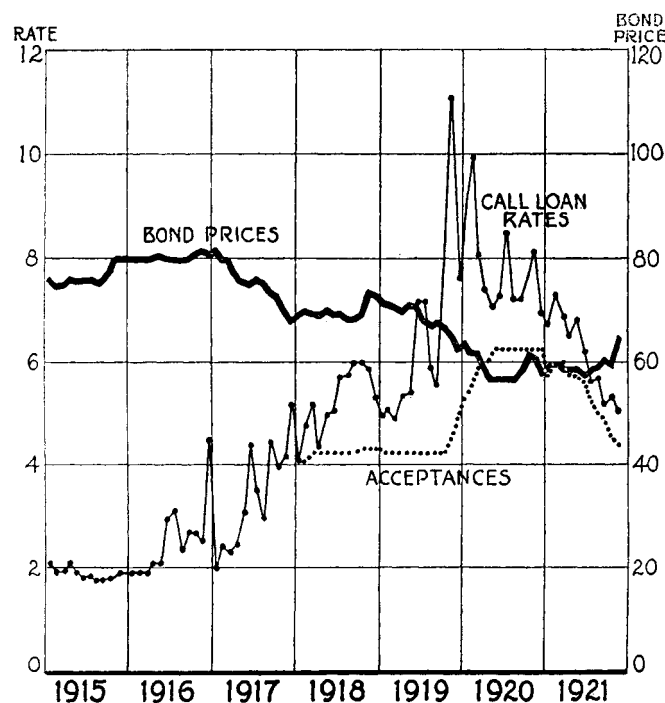
	Rate Nov., 1920	Rate Nov., 1921
Prime 60 to 90-day bankers acceptances.....	6 $\frac{1}{4}$	4 $\frac{1}{8}$
Longer-term Treasury certificates, yield at market rates.....	6	4 $\frac{1}{4}$
Commercial paper, 4 to 6 months.....	8	5 $\frac{1}{4}$
Stock Exchange call money, monthly average	8	5

The same thing has been true of long-time bonds, the prices of which ordinarily respond to changes in the market price of money, thereby causing a larger or smaller return to the investor who purchases them, according to whether the current trend of money rates is up or down. The diagram printed on this page shows that rates for Stock Exchange call money tended downward before bond prices began to rise. On the other hand, rates on bankers acceptances and the prices of bonds have moved simultaneously upward or downward, as the case may be.

The more erratic movement of rates for Stock Exchange call money arises largely from conditions which affect the rates on bankers acceptances either not at all or to a much smaller degree. The fluctuations of the rates on Stock Exchange call loans are often closely bound up with the exigencies of the stock market itself. Moreover, no such loans are eligible for rediscount at Federal Reserve Banks. Bankers acceptances, however, are eligible for discount or purchase by the Reserve Banks, and may there be con-

verted instantly into cash. What is true of acceptances in this regard is equally true of Treasury certificates and creates a much higher degree of stability in market rates for both acceptances and Treasury certificates.

During recent months there has been growing up, side by side with the Stock Exchange call loan market, another call loan market which has assumed considerable proportions. This is the market for call money, lent against the security of bankers acceptances and Treasury certificates, round amounts of which must be carried by dealers in their service of the market.



Average Monthly Bond Prices, Average Monthly Call Loan Renewal Rate, and the Market Rate on Bankers Acceptances

The amount of bankers acceptances in the hands of the dealers is frequently between \$50,000,000 and \$100,000,000, and their supplies of Treasury certificates often

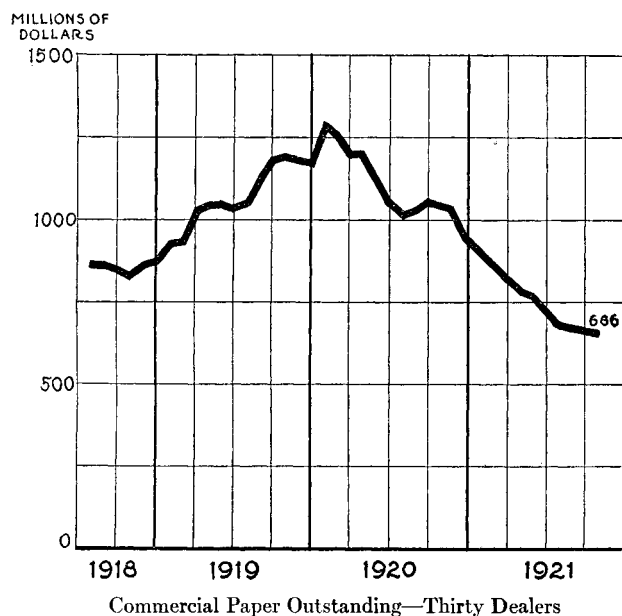
On November 4 the New York Federal Reserve Bank lowered its rate from 5 to 4½ per cent. on all classes of paper, and reductions of from ½ per cent. to 1 per cent. were made at about the same time by all other Reserve Banks. The discount rates at present are:

5½ per cent. . . . Richmond, Atlanta, Minneapolis, Dallas.

An important change in market conditions, which has been developing gradually, but which became more marked in November, was a shift to the large city banks as the principal sources of demand for commercial paper. In the previous year and a half country banks had been

the principal purchasers. The accumulation of funds in New York and other large eastern cities resulted in an active demand from an increasing number of large banks.

The bulk of paper offered continued to be sold in the East, as the market west of the Mississippi and in the South was generally reported comparatively quiet. On the Pacific Coast, however, demand lately has increased somewhat.



Stock Market Money Rates

During the period from October 20 to November 20, call money rates on the New York Stock Exchange tended as in the previous month to work down to 4 or $4\frac{1}{2}$ per cent. Rates at $5\frac{1}{2}$ or 6 per cent. ruled, however, for a few days before the first of November when first-of-the-month payments coincided with a maturity of British Government $5\frac{1}{2}$ per cent. notes, of which about \$50,000,000 were estimated to be outstanding. A tendency, thereafter, for rates to decline was checked temporarily by a considerable movement of funds to the interior during the week ended November 9, but in the following week the return movement was toward New York and rates became lower.

There was also increased activity in the time money market. Funds were offered more freely, and rates declined $\frac{1}{4}$ of one per cent. to a range of 5 to $5\frac{1}{4}$ per cent.

Stock Market

In anticipation of and following the rescinding of the railway strike order on October 27, stocks resumed the advance that started late in August. The advance has been continued in November practically without interruption and averages of industrial issues have risen approximately 8 points to the highest levels since June, and 12 to 15 points above the low point of the year reached in August. The strength of investment stocks has been noteworthy.

Railway stocks were also stronger late in October and in November, but the rise was not so rapid as in industrials, and prices, on the average, did not equal those reached around the first of October.

October trading was not heavy until the last week, when sales were the largest since the June price decline. For the entire month of October, sales were slightly over 13,000,000 shares, approximately the same as in September. In November trading was in larger volume.

United States Securities

Except for a slight reaction about the middle of the month Liberty bond prices continued during November the advance which has been going forward steadily since September 1. The $4\frac{3}{4}$ Victory notes touched par for the first time since July, 1919.

The changes in prices since October 20 and from the lowest points reached are shown in the following table.

Issue	Closing Price Nov. 19	Advance Since Oct. 20	Advance Since Low	Date of Low
Liberty $3\frac{1}{2}$ s..	\$95.20	\$3.64	\$9.20	June 2, '21
Liberty 1st 4s..	94.88	2.28	11.88	May 19, '20
Liberty 2nd 4s..	94.66	2.26	13.26	May 20, '20
Liberty 1st $4\frac{1}{4}$ s..	95.10	2.32	11.10	May 20, '20
Liberty 2d $4\frac{1}{4}$ s..	94.76	2.52	13.66	May 20, '20
Liberty 3d $4\frac{1}{4}$ s..	96.34	1.80	10.74	Dec. 20, '20
Liberty 4th $4\frac{1}{4}$ s..	94.88	2.46	12.88	May 20, '20
Victory $4\frac{3}{4}$ s..	99.92	.52	5.22	May 20, '20
Victory $3\frac{3}{4}$ s..	99.90	.52	5.26	May 20, '20

Sales of United States securities on the New York Stock Exchange during October were \$220,000,000 as compared with \$208,000,000 in September, and slightly less in October, 1920. Trading continued active in November except for some slackening towards the middle of the month.

Prices of outstanding Treasury certificates of indebtedness continued to rise. During the month the yield on some of the larger issues declined as much as $\frac{1}{4}$ of one per cent. Even the issues of November 1 which bore the low rates of $4\frac{1}{4}$ and $4\frac{1}{2}$ per cent. sold at substantial premiums by November 20.

Bond Market

During most of October, bond prices moved irregularly, but in the last ten days of the month and early in November the market gained new strength, reflecting further declines in money rates. Averages of the older high grade corporation bonds rose approximately 2 points to new high levels for the year, and approached closely the highest levels of 1920. The more recently issued high interest bearing issues were in equally strong demand.

Active buying of bonds, which has been stimulated by the rising market, has greatly reduced dealers' supplies, and has tended likewise to direct funds more freely toward less well-seasoned issues. Demand from the individual investor continues to be the largest factor in

the market, but buying by banks, institutions, and corporations has also increased. There have recently been more bank funds available for carrying bonds and New York City banks report an increase in loans secured by stocks and bonds.

Active foreign government bonds rose 2 to 3 points or more above levels of a month ago, and prices of all the new high interest bearing issues equaled or exceeded original issue prices. At present prices Queensland and Swiss bonds offer the lowest yield of this group, about $6\frac{1}{2}$ per cent. or less, while most of the new European issues yield $7\frac{1}{2}$ per cent., except French bonds, which have a somewhat higher yield. South American issues yield approximately 8 per cent.

October sales of bonds, exclusive of United States securities, on the New York Stock Exchange, totaled \$123,000,000, slightly less than were sold in September or October last year. In the first two weeks of November, trading was the most active of the year.

New Financing

Evidence of increasing breadth of demand for fixed income securities appeared in November in the heavy over-subscription of an issue of \$50,000,000 6 per cent. 20-year bonds of a public utility corporation. Of nearly 68,000 subscribers, more than 54,000 asked for bonds of \$5,000 or less to a total of more than \$126,000,000, and over 25,000 asked for bonds of \$1,000 or less to a total of over \$22,000,000. These bonds were offered on a $6\frac{1}{4}$ per cent. basis, up to that time the lowest yield this year for any issues of private concerns other than railroads. On November 21, \$20,000,000 one-year notes of another public utility corporation were sold on close to a 6 per cent. basis, compared with 8 per cent., on a similar issue of the same corporation last December. Further evidence of greater ease in the market appeared in an offering of a block of preferred stock on less than a 7 per cent. basis.

Demand for State and municipal securities exceeded the supply, despite the fact that offerings were in exceptionally heavy volume. In consequence, prices rose; so that issues of better grade were offered to yield about $4\frac{3}{4}$ per cent., compared with 5 per cent. a month ago, and $5\frac{1}{4}$ per cent. two months ago. In the case of one issue a new low on the movement of 4.20 per cent. was reached.

New South American issues brought out in November were \$10,500,000 Chilean Government 8 per cent. 25-year bonds, and \$10,000,000 State of Rio Grande de Sol, United States of Brazil, 25-year 8 per cent. bonds, both issues being sold at prices to yield a little over 8 per cent. In addition, there was offered an issue of \$22,779,300 6 per cent. bonds of the French cities of Marseilles, Lyons, and Bordeaux, on a 7.65 per cent. basis, the first European offering this year to net below 8 per cent. The bonds were the unsold balance of an issue originally offered here in 1919.

For October, the total of new corporation issues was slightly more than \$100,000,000, the smallest monthly total in more than two years, and less than a third as large as the total in October last year. In November, however, financing became more active, probably due in

part to lower rates, and several large issues were sold, in most cases bonds of public utility corporations. Up to November 23, issues of all classes reached a total nearly double that in the corresponding period of last year.

Gold Movement

Gold imports during October amounted to \$47,111,000, about \$19,000,000 less than during September and the smallest monthly total since June. The largest receipts were from France, \$18,518,000, and England, \$9,892,000. Exports amounting to \$7,576,000 were the largest of any month this year and were 36 per cent. of the total exports since January. Exports were mainly to Hong Kong. Source of imports and destination of exports were as follows:

IMPORTS (000 omitted)

Country	First Quarter	Second Quarter	Third Quarter	October	Total Jan. 1-Oct. 31
England.....	\$51,163	\$51,087	\$57,813	\$9,892	\$169,955
France.....	45,235	28,103	80,731	18,518	172,587
Sweden.....	4,679	37,941	12,252	4,258	59,130
Canada.....	20,553	4,535	5,931	1,147	32,166
China & Hong Kong.	12,508	6,804	3,648	312	23,272
British India.....	8,081	9,065	10,141	3,591	30,878
Netherlands.....	1,557	14,159	2,785	248	18,749
Germany.....	3	4	16,342	614	16,963
South America.....	6,069	6,175	5,831	2,869	20,944
All Other.....	13,687	24,534	20,611	5,662	64,494
Total Imports....	\$163,535	\$182,407	\$216,085	\$47,111	\$609,138

EXPORTS

Hong Kong.....	\$453	\$744	\$2,205	\$5,762	\$9,164
Mexico.....	3,098	920	1,287	45	5,350
Sweden.....	...	...	2,643	...	2,643
Canada.....	635	506	665	645	2,451
British India.....	...	...	55	1,124	1,179
All Other.....	285	49	1	...	335
Total Exports....	\$4,471	\$2,219	\$6,856	\$7,576	\$21,122
Excess Imports....	\$159,064	\$180,188	\$209,229	\$39,535	\$588,016

Gold imports during the first 10 days of November totaled \$17,509,000, the bulk of which came from England and France. Exports were \$242,000.

Foreign Exchange

Operations in the foreign exchange market during the past month have been limited in the main to actual commercial transactions, and rate fluctuations in general have been narrow. Continued scarcity of commercial bills at a time when sterling was in demand for the purpose of effecting substantial transfers of funds to London was a factor in an advance in the sterling rate from \$3.95 to \$4.00, the highest quotation in six months.

Continued weakness in German marks carried quotations to .33 of a cent on November 7. Heavy offerings were again reported for the account of the German government in connection with reparations payments while speculative operations continued large. Certain New York banks have restricted their dealings in currencies of Central European nations to actual commercial transactions. Trading in Roumanian lei was practically suspended due to reported governmental restrictions on exchange transactions in that country.

Rates on Argentina and Brazil were slightly higher following reports of better trade conditions. The New York price for foreign bar silver lost a portion of the advance recorded in October and exchange quotations on India and China declined in about the same proportion.

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

Country	Nov. 19 Last	Change from Oct. 20	Per Cent. Depreciation from Par
England.....	\$3.9975	+ .0500	17.9
France.....	.0722	- .0011	62.6
Italy.....	.0417	+ .0021	78.4
Germany.....	.0038	- .0029	98.4
Belgium.....	.0700	- .0022	63.7
Holland.....	.3517	+ .0125	12.5
Switzerland.....	.1870	+ .0059	3.1
Spain.....	.1370	+ .0051	29.0
Sweden (Stockholm).....	.2330	+ .0025	13.1
Argentina.....	.3264	+ .0080	23.1
Brazil.....	.1250	+ .0008	61.5
Japan (Yokohama).....	.4775	0	4.2
China (Hong Kong).....	.5488	- .0150	*
China (Shanghai).....	.7838	- .0100	*
India.....	.2694	- .0025	44.6
Canada.....	.9138	0	8.6
Bar Silver in N. Y.....	.6975	- .0175	....

*Silver Exchange Basis.

Foreign Trade

October figures of foreign commerce of the United States reported by the Department of Commerce indicated a slightly larger volume of exports and imports than in September. Exports totalled \$344,000,000, which was \$18,000,000 more than in September, but less than in August. Imports were \$188,000,000, slightly more than in September, but likewise lower than in August. The export balance of \$156,000,000 was the largest, excepting that for August, since February. Since the first of the year exports have exceeded imports by \$1,835,000,000, compared with \$2,140,000,000 during the corresponding period of 1920.

The increased export total for October was due chiefly to heavy shipments of cotton, which were 874,510 bales, 67 per cent. above September totals, and the heaviest month's shipments since late 1919 and early 1920. The movement in the early weeks of November was also large but exporters reported that there was little new buying. Mineral oils and cotton seed oil were also shipped more heavily in October than in the month previous, but a number of other important commodities, including

wheat, corn, rice, bacon, lard, and condensed milk, showed decreases.

Wheat exports of 18,360,000 bushels were 40 per cent. less than in September, and November shipments were light. Foreign buying was slow until around November 21, when there was some new demand.

The demand for manufactured and partly manufactured goods appears to be broadening slowly month by month. The buying, as a rule, is not steady, but consists of comparatively small orders for a variety of articles, largely for filling in depleted stocks. There was a fair but scattered buying in South America of cotton goods, and an increased demand for steel, which accompanied reports that German and Belgian sellers are no longer able to make early deliveries. The Japanese steel demand was less active.

Accompanying a strengthening in the domestic demand for copper, the foreign demand likewise increased and sales in October and November were the largest this year. Germany, France, Japan, and China were the chief buyers.

World Wholesale Prices

The *Statist* index number for prices in Great Britain, which is shown in the accompanying diagram in comparison with prices in three other countries, declined more rapidly in October than in any other month this year. This index is now only 13 points higher than the Department of Labor index of wholesale prices in this country and shows a greater percentage decline from the high point reached in 1920. The Department of Labor index, however, includes more quotations for finished articles, prices of which have changed less rapidly than those of raw materials. The declines of individual groups of commodities making up the *Statist* index have been as follows during the past month.

(1913 average = 100)

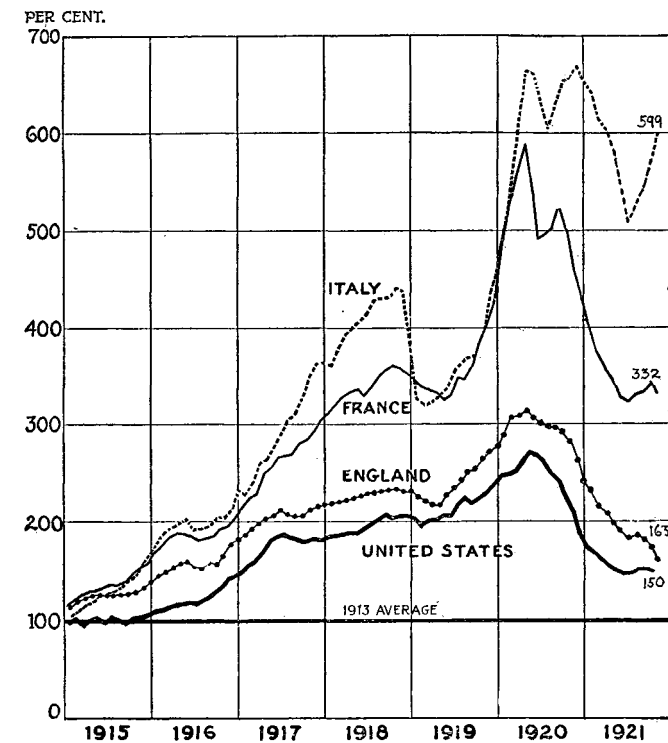
Commodity Group	Index Oct. 1	Index Nov. 1	Per Cent. Change
Vegetable Food.....	203	174	-14.3
Animal Food.....	186	170	- 8.6
Sugar, Coffee and Tea.....	153	146	- 4.6
Minerals.....	149	139	- 6.7
Textiles.....	182	178	- 2.2
Sundries.....	173	162	- 6.4
Total.....	175.5	162.6	- 7.4

The greatest decline has been in vegetable foods, a group which is heavily weighted with grains imported from abroad. The decline in British wholesale prices accompanies recent increases both in exports and imports, a slight reduction in note circulation and a recovery of the pound sterling in exchange at New York to \$4.00.

French prices have turned downward after a brief upward movement, but Italian prices continue to rise.

The German price index compiled by the *Frankfurter Zeitung* shows a 35 per cent. increase during October, accompanying a rapid expansion of Reichsbank notes and falling exchange rates.

It is no longer possible to discover any uniform tendency in the movement of world prices. As the process of adjustment goes forward the particular economic situations in different countries rather than general world-wide tendencies appear to be the influences at work.



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

Domestic Wholesale Prices

For the sixth successive month the index of wholesale prices computed by the United States Department of Labor shows little change. The index number, based on average prices for 1913 as 100 per cent., was 150 in October as compared with 152 in September. The following table shows the changes which took place in the different commodity groups making up the index.

(1913 average = 100)

Commodity Group	VALUE OF INDEX			PER CENT. CHANGE	
	Maximum 1920	Sept., 1921	Oct., 1921	Maximum to October	September to October
Farm Products.....	246	122	119	-51.6	-2.5
Metals.....	195	120	121	-37.9	+0.8
Food, etc.....	287	146	142	-50.5	-2.7
Chemicals, etc.....	222	162	162	-27.0	0.0
Cloths and Clothing..	356	187	190	-46.6	+1.6
Fuel and Lighting....	284	178	182	-35.9	+2.2
Building Materials...	341	193	192	-43.7	-0.5
House Furnishings...	371	223	218	-41.2	-2.2
Miscellaneous.....	247	146	145	-41.3	-0.7
All Groups.....	272	152	150	-44.9	-1.3

Cost of Living

The cost of living index number for the United States compiled by the National Industrial Conference Board advanced less than one-tenth of one per cent. in October.

Indices of Wholesale Prices

1913 average = 100 unless otherwise noted

Country	Latest Quotation	PER CENT. CHANGE DURING			Per Cent. Decline from High	Date of High
		August	September	October		
United States:						
12 basic commodities*	109 (Nov. 19)	+ 1.3	- 0.2	+ 2.6	55	May 17, 1920
Department of Labor.....	150 (Oct. Av.)	+ 2.7	0.0	- 1.3	45	May 1920
Dun's.....	135 (Nov. 1)	- 0.7	- 0.4	+ 1.1	38	May 1, 1920
Bradstreet's.....	123 (Nov. 1)	+ 0.3	+ 0.9	+ 1.4	46	Feb. 1, 1920
Great Britain:						
Economist.....	170 (Nov. 1)	+ 0.4	+ 2.2	- 6.8	45	Apr. 1, 1920
Statist.....	163 (Nov. 1)	- 1.7	- 3.9	- 7.4	48	May 1, 1920
20 basic commodities*	136 (Nov. 19)	- 2.4	+ 2.6	- 5.3	60	May 21, 1920
France.....	332 (Nov. 1)	+ 0.4	+ 3.8**	- 3.4	43	May 1, 1920
Italy.....	599 (Nov. 1)	+ 4.2	+ 7.1	+ 3.3	11	Dec. 1, 1920
Japan.....	207 (Sept. Av.)	+ 1.4	+ 4.0		36	Mar. 1920
Canada.....	169 (Oct. 15)	- 0.9	- 1.6	- 1.5	36	May 15, 1920
Sweden†.....	175 (Oct. 15)	- 6.2	- 8.1	- 3.8	53	Dec. 15, 1918
Australia‡.....	160 (Sept. Av.)	+ 0.6**	0.0		32	Aug. 1920
Norway.....	274 (Nov. 1)	- 2.8	- 1.8	- 2.0	37	Oct. 1, 1920
Germany¶.....	2725 (Nov. 1)	+ 3.1	+10.9	+34.8	0	Nov. 1, 1921
Denmark||.....	202 (Oct. 1)	-11.8	- 9.8		50	Nov. 1, 1920

*Computed by this bank.
to June, 1914, = 100.

† July 1, 1913 to June 30, 1914 = 100.
** Revised.

‡ July, 1914 = 100.

¶ Middle of 1914 = 100.

|| July, 1912

The index has shown only minor fluctuations since last June. The figures for different items of the index on November 1 are as follows:

Group	November 1 Level	Per Cent. Decline from High	Per Cent. Change During October
Food.....	153.0	30.1	0
Clothing.....	160.0	44.4	0
Shelter.....	169.0	1.2	0
Fuel and Light.....	180.0	10.0	+0.6
Sundries.....	180.0	6.3	0
Total.....	163.8	19.9	+0.06

Production of Basic Commodities

The available figures for October production of basic commodities show more increases than decreases. A number of the increases, however, reflect seasonal changes and hence are not necessarily evidence of more active business. The indices of production computed by this bank which make allowance for seasonal movements and also for normal year-to-year growth show about as many increases as decreases in October. The figures are shown in the following table as percentages of normal production.

(Normal production = 100)

Commodity	Av. Jan.-Mar.	June	July	Aug.	Sept.	Oct
Anthracite coal mined....	103	93	94	92	93	89
Bituminous coal mined....	64	67	61	63	63	76
Pig iron production.....	58	31	26	28	29	34
Steel ingot production....	58	31	26	36	37	47
Zinc production.....	52	50	40	38	37	38
Lead production.....	66	64	63	71	68	..
Tin deliveries.....	31	31	30	64	50	44
Copper production.....	67	15	13	16	17*	17†
Gasoline production.....	103	89	84	85	82	..
Petroleum production....	100	107	106	108	96*	93†
Cement production.....	79	84	89	89	91	91
Cotton consumption.....	62	71	64	75	79	76
Wool consumption.....	70	109	97	107	115	124
Wheat flour milled.....	89	103	148	126	119	111
Sugar meltings.....	85	81	84	106	76	114
Meat slaughtered.....	90	101	88	113	103	93

*Revised.

†Preliminary.

Commodity Stocks on Hand

On November 1 stocks of basic commodities for which figures are available, were in many cases considerably lower than on October 1. Factors in these reductions, were large Cuban holdings and active operations of sugar refining plants, a somewhat more normal movement of crops to market, and increased consumption of cement. The corn supply has risen sharply as the large crop is marketed. Corn and rye stocks are both affected by prohibition. The somewhat larger supply of flour reflects continued operation of mills at a rate above normal. Heavy shipments of tin from the Straits Settlements together with small consumption in Europe and America are increasing the world's visible supply.

The following table gives the available figures for monthly stocks as percentages of normal stocks. Normal has been computed on the assumption of a rate of growth from year to year directly continuing the growth during preceding years, and seasonal variations corresponding with those of previous years.

(Normal Stocks = 100)

Commodity	Av. Jan. 1-Mar. 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1
Sugar.....	68	64	45	52	61	40
Cotton.....	104	145	157	164	140	113
Coffee.....	95	97	95	93	72	65
Tobacco.....	113	115	..	..	121	..
Wheat.....	60	39	145	140	126	109
Oats.....	251	437	766	727	520	461
Corn.....	93	284	208	222	161	371
Barley.....	90	220	310	353	146	96
Rye.....	143	99	248	599	452	402
Flour (in chief centers)....	116	75	79	106	123	131
Paper pulp, total.....	113	158	144	126	107	..
Tin (world visible supply)...	116	131	139	133	137	168
Cement, Portland.....	91	97	98	89	88	68
Lead, bonded.....	426	185	181	207	165	..

Employment

The New York State Department of Labor reported a gain of $2\frac{1}{2}$ per cent. in factory employment in October as compared with a 4 per cent. gain in September. The outstanding gains in October occurred in industries making iron and steel products, such as railroad car building and repair shops, and railroad equipment factories. Textile manufacturing showed moderate seasonal gains but there were seasonal declines in the clothing industry.

The United States Bureau of Labor Statistics reported an increase of 1.6 per cent. during October in the number employed in 14 selected industries throughout the country. The industries showing increases corresponded closely with those in which increases were reported in New York State.

Wages

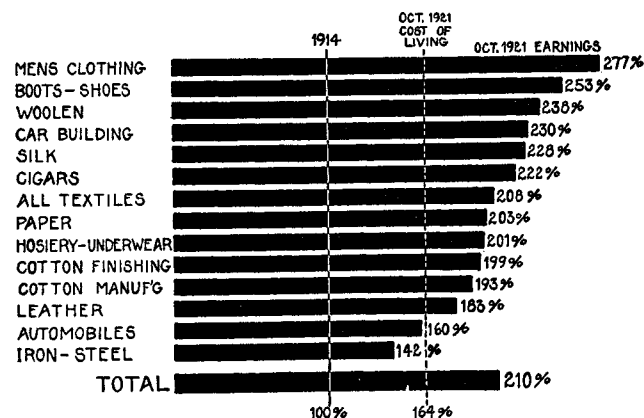
Efforts of employers to reduce the wage factor in the cost of operations resulted in two important strikes in New York City. In the milk industry 12,000 employees met a proposed wage reduction by a demand for a five dollar per week increase together with a two weeks' vacation with pay and on November 1 went on strike to enforce their demands. The employers immediately began to recruit new forces and announced their intention of placing the industry on an open-shop basis. Milk deliveries were seriously disturbed for some days, but are gradually returning to normal volume.

On November 14, about 50,000 members of the International Ladies Garment Workers Union went on strike following an announcement by the manufacturers of women's clothing that the piece work system would be re-established on that date and the working week lengthened from 44 to 48 hours. Several hundred smaller manufacturers have signed contracts with the union and are resuming operations on the previous wage basis, but most of the larger factories are shut. The strike occurs at a season of the year when manufacturing reaches its lowest point, as winter goods have been completed and work has not yet started on spring and summer clothing. Four strikes have occurred in this industry since 1916, each lasting from two to four months.

On November 16, as part of a programme to reduce freight rates 10 per cent. on agricultural products outside of New England, the railroads announced their intention to seek under the regulations of the Railroad Labor Board a further reduction of wages.

Average weekly earnings in New York State factories as reported by the New York State Department of Labor declined from \$25.07 in September to \$24.53 in October. Average earnings are now 93 per cent. higher than in 1914.

The accompanying diagram shows for selected industries throughout the United States, which report to the Department of Labor, the average weekly earnings of workers in October as compared with the 1914 average and the broken line shows the present level of the cost of living index of the National Industrial Conference Board, also compared with 1914.



Average Weekly Earnings of Workers in Representative Establishments in Different Industries Throughout the United States, and the Cost of Living. (1914 Figures = 100 per cent.)

NOTE.—This bank has prepared index numbers and diagrams showing the changes which have taken place since 1914 in wages and employment in 14 different industries in New York State and in the United States as a whole. The figures are too detailed to be presented in full in the REVIEW, but are available for any who wish them, in the form of two brief reports, one on wages and the other on employment, which may be obtained by addressing the Federal Reserve Agent.

Efficiency of Labor

It is frequently stated that workmen are now more efficient than a year ago. In order to secure definite figures this bank addressed letters to seventy-four representative employers in this district asking them for any exact information which they might have concerning the hourly output per person in their establishments in 1913, 1918, 1920 and 1921. Replies were received from thirty-seven establishments.

Two-thirds of those replying sent figures or made definite comment. The consensus of opinion supported by the figures was that the output per worker is now considerably greater than in 1920, but many reported that the present efficiency of the workman is somewhat less than before the war. The returns made it clear that output per worker has been greatly affected by such factors as the reorganization of plants, new machinery, improvements in methods and processes, percentage of capacity at which plants have been operating and changes in the type of personnel due to the retention of more efficient employees and the elimination of the less efficient.

The number of firms (7) submitting definite figures was so small and the results were so greatly affected by the factors mentioned above that the returns cannot be regarded as representative, but only as interesting examples. The figures are given in the following table. In order to place them upon a common basis they have been converted into percentages, taking 1920 figures as 100. In a number of instances the figures given for an industry represent averages of the figures for several processes, and in others they are for a single process only.

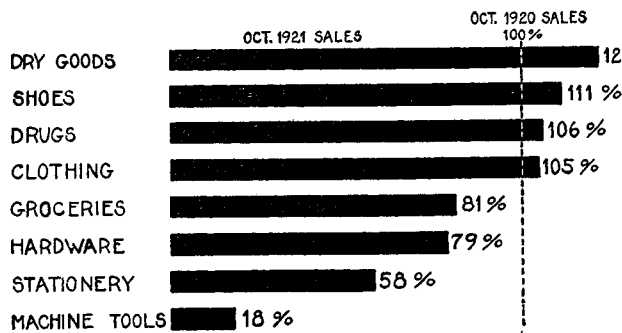
Industry	DAILY OUTPUT PER WORKER			
	Pre-War	1918-1919	1920	Oct., 1921
Automobile.....	...	90	100	110
Bricklaying.....	130	100	100	122
Cable.....	...	74	100	121
Metal products....	73	92	100	98
Shoes.....	90	82	100	119
Woolen cloth.....	109	112	100	100*
Optical.....	...	77	100	99

*Plant operating at 50 per cent. of capacity.

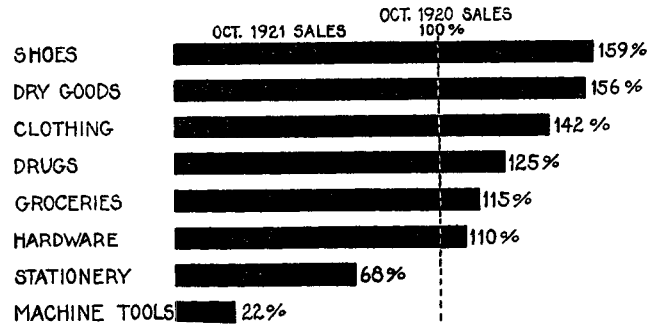
Volume of Building

October building contract awards in New York State and Northern New Jersey reported by the F. W. Dodge Co. showed a decline of about 16 per cent. from the high

DOLLAR VALUE



ESTIMATED PHYSICAL VOLUME

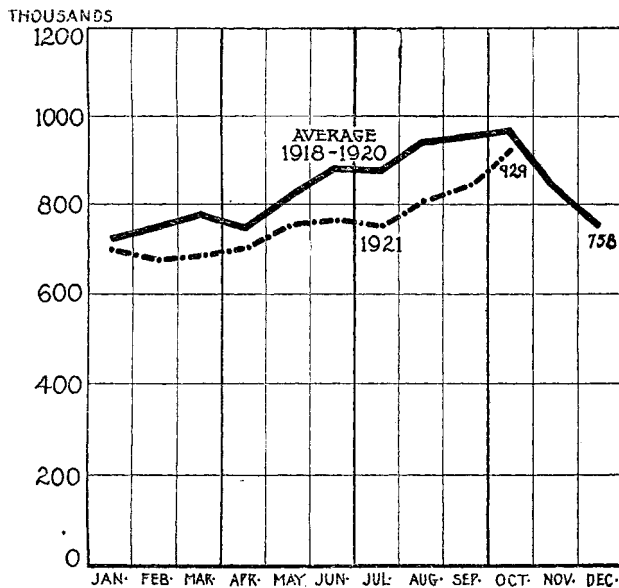


Dollar Value of Sales and Estimated Physical Volume of Sales (Making Allowance for Price Changes) of Representative Wholesale Houses in the Second District in October, 1921, Compared with Sales in October, 1920

figure reached in September, but were larger than the awards of any other month since April, 1920. They were 50 per cent. larger than in October, 1920. For the twenty-seven north-eastern States awards showed a reduction of 10 per cent. from September figures. Seasonal declines were reported from all but the New England States where October awards were 35 per cent. larger than those for September.

Railway Traffic

Car loadings in the last two weeks of October, when shippers were inclined to anticipate the effects of the threatened railway strike, were less than 5 per cent. below the high totals of the corresponding weeks of 1920 and were slightly above those for the corresponding weeks of 1919. The following diagram compares freight car loadings by months in 1921 with the monthly averages for the three years 1918 to 1920. It indicates that for some months the 1921 figures have gradually been approaching the averages for previous years.



Freight Cars Loaded Each Month in 1921 Compared with the Monthly Average 1918-1920

Wholesale Trade

Wholesale dealers in all lines, with the exception of dry goods, represented in current returns to this bank, report noteworthy increases in sales during October as compared with sales in September and the increases in most cases are greater than the normal seasonal gains. Clothing firms have submitted data that show an increase of 44 per cent. over the unusually small figures for September, an indication of a late season in that industry.

The dollar value of sales in four lines shows an actual increase over sales in October, 1920. When the decline in prices is taken into consideration the volume of sales in two other lines also appears to have been larger. The greatest increases in sales occurred in those lines in which purchases could be delayed temporarily but not for an extended period—dry goods, shoes, and clothing. Increases over last year's figures in the sales of these commodities may be ascribed to two factors: reluctance to buy a year ago in the face of falling prices and the present need of replenishing depleted stocks.

The accompanying diagrams show the dollar value of October sales compared with sales in October, 1920, and a similar comparison shows the approximate physical volume of sales after due allowance has been made for the decline in prices. Sales for October, 1920, are in each case taken as 100 per cent.

The estimated decline in prices between October, 1920, and October, 1921, and the percentage changes in sales between different months are shown in the table that follows.

Commodity	Per Cent. Change in Price Oct., 1920 to Oct., 1921	Per Cent. Change in Sales* Oct., 1920 to Oct., 1921	Per Cent. Change in Sales* Oct., 1919 to Oct., 1921	Per Cent. Change in Sales* Sept., 1921 to Oct., 1921
Dry Goods ...	22	+22.0	-22.9	- 3.7
Shoes.....	30	+11.2	-61.4	+ 1.7
Drugs.....	15	+ 6.2	- 7.7	+ 2.7
Clothing....	26	+ 5.3	+11.8	+44.3
Groceries....	30	-19.3	-24.9	+17.3
Hardware....	30	-22.7	-22.5	+ 9.2
Stationery...	15	-42.2	-31.6	+ 0.9
Machine Tools	20	-82.3	-81.9	+72.7

*Dollar value.

Retail Trade

In October, for the first month this year, the dollar value of sales of department stores reporting to this bank was larger than in the corresponding month of 1920. October sales by 48 firms operating 62 stores were 2.8 per cent. larger than in October, 1920. A gain of 4.4 per cent. in the sales of stores in New York City and Brooklyn offset small decreases reported in other cities, as shown in the accompanying table.

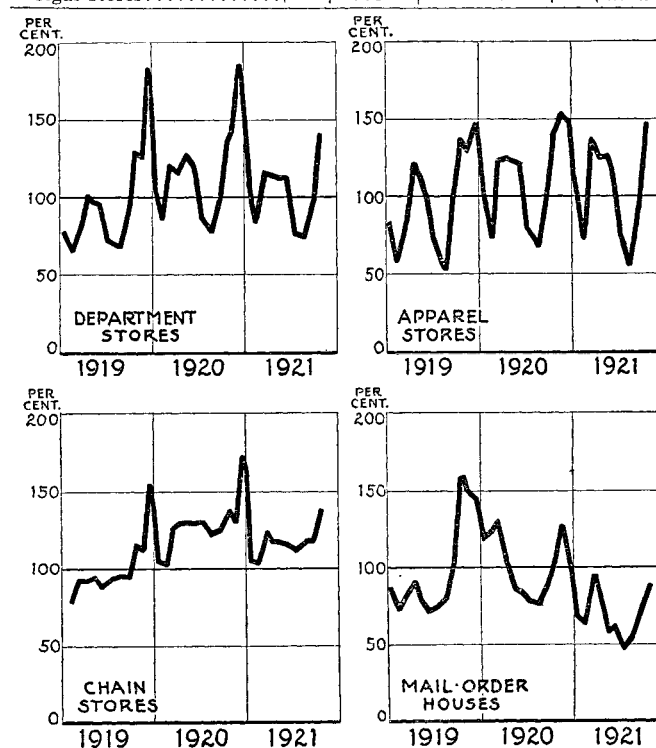
The more favorable comparison with last year's figures than in previous months is partly accounted for by the fact that year-to-year comparisons now begin to be influenced by the rapid fall in prices in the later months of 1920. Sales in October, however, were nearly 50 per cent. larger than sales in September, whereas the seasonal increase in the two previous years, the only ones for which figures are available, was in the neighborhood of 35 per cent. It is possible that exceptionally mild weather in September this year led to some postponement of purchases of fall and winter goods.

When price changes are taken into consideration, it seems probable that the volume of merchandise sold in October was between 15 and 25 per cent. larger than in October last year. The number of individual sales reported by 20 of the stores was 25 per cent. larger than last year. Some indication of price changes is given by the fact that the individual sale this October was \$3.13 against \$3.63 last October, 14 per cent. less, and that the selling value of stocks was 16 per cent. less. Both of these figures are, of course, affected by various elements, but the price change is the dominating influence.

New York City merchants inform us that during the first two weeks of November sales have been good in all departments of their stores. Large stores are preparing for a holiday business as large as last year's, when sales were larger than ever before.

The following table compares October sales of mail order houses and chain stores with those of department stores, and the accompanying diagram makes a similar comparison by months over the past three years.

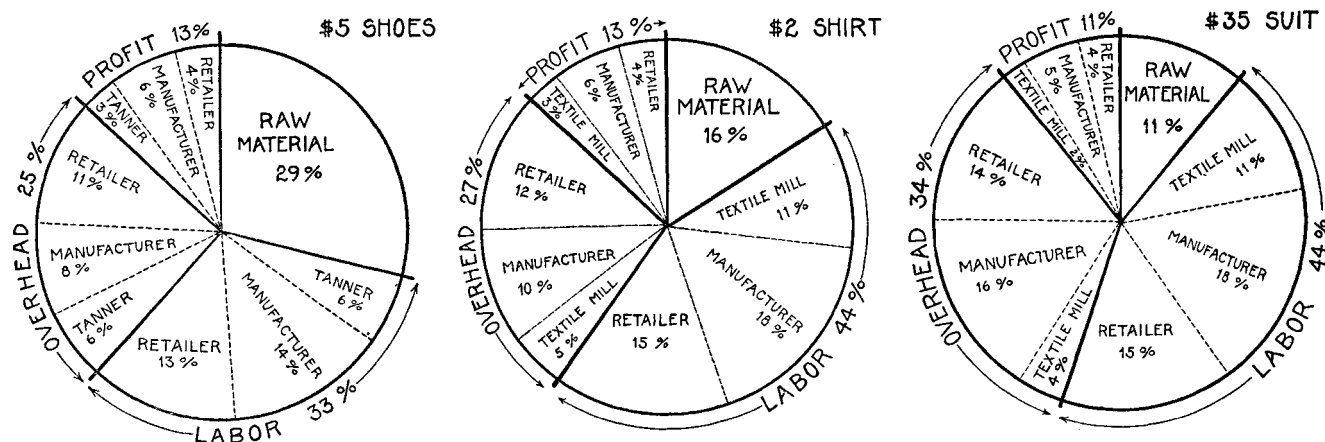
	NET SALES IN OCTOBER, 1921 COMPARED WITH		
	September 1921	October 1920	October 1919
Department stores.....	+49.5	+ 2.8	+ 7.2
Mail order houses.....	+21.9	-13.7	-43.8
Chain stores (total).....	+18.0	+ 0.5	+20.0
Ten cent stores.....	+25.0	+ 9.2	+31.5
Dry goods stores.....	+28.1	+ 0.5	+47.0
Drug stores.....	+ 3.1	- 1.0	+11.9
Grocery stores.....	+14.8	- 3.9	+ 4.4
Cigar stores.....	+ 7.8	- 8.6	+25.2



Sales of Retail Stores Each Month. (Average Sales in 1919 = 100 per cent.)

Business of Department Stores

	New York and Brooklyn	Buffalo	Newark	Rochester	Syracuse	Elsewhere in Second District	Apparel Stores	Entire Second District
Per cent. change in net sales in October, 1921, compared with net sales in October, 1920.....	+ 4.4	+ 1.3	- 2.1	- 3.8	- 6.8	+ 0.1	+ 5.7	+ 2.8
Per cent. change in number of transactions in October, 1921, compared with number of transactions in October, 1920.....	+33.5	+19.9	+ 5.3	..	..	+20.3	+19.7	+24.5
Per cent. change in net sales from July 1, 1921 to October 31, 1921, as compared with same period in 1920.....	- 4.9	- 4.5	- 4.7	- 2.4	-10.8	- 9.4	- 0.1	- 4.8
Per cent. change in stocks (retail price) at close of October, 1921, compared with stocks at close of September, 1921.....	+ 4.3	+ 4.5	+ 8.1	+ 0.1	+ 2.4	+ 4.6	+ 8.3	+ 4.8
Per cent. change in stocks (retail price) at close of October, 1921, compared with stocks at close of October, 1920.....	-15.2	-12.9	-17.2	-26.7	-33.5	- 5.6	-13.5	-15.5
Percentage of stocks (retail price) at close of July, August, September, and October, 1921, to net sales during same months.....	382.2	436.3	392.1	404.3	431.6	553.5	262.2	389.6
Percentage of outstanding orders (cost) at close of October, 1921, to total purchases during calendar year 1920.....	5.2	7.0	5.0	7.2	4.9	6.3	9.9	6.0



Analysis of the Cost to the Consumer of a \$5 Pair of Shoes, a \$2 Shirt, and a \$35 Suit of Clothes, Carried Through Three Processes: Preparing Leather or Cloth from Raw Leather, Cotton, or Wool; Manufacture of the Article of Clothing; and Selling it at Retail. Direct Sale from Manufacturer to Retailer is Assumed

Retail Prices vs. Wholesale Prices

During the past year comment has often been made that retail prices have not fallen so rapidly as wholesale prices. In view of the tremendous decline in the prices of cotton, wool, silk, hides, and other raw materials, there appears to have been an expectation that these declines would be promptly reflected in the retail prices of articles made from these materials. It is not the purpose of this article to discuss whether retailers in any particular cases may have held up prices unduly but to point out that there is an inherent reason why retail prices of manufactured articles do not come down so fast as the prices of raw materials. This reason is that the cost of the raw material is but a small element in the cost of the finished article as the consumer buys it. The retail price is made up very largely of labor, rent, interest, transportation, etc., and these cost elements change much less rapidly than prices of raw materials.

The diagrams at the top of this page give a rough analysis of the distribution of the cost to the consumer of a pair of \$5 shoes, a \$2 shirt, and a \$35 suit of clothes, with a view to showing the major elements of cost in retail prices.

The figures upon which these diagrams are based have been furnished by a number of representative retailers, manufacturers, and mills in this district as typical figures. There are wide differences between different mills, manufacturers, and retailers in the distribution of their costs; and there are also considerable variations in the distribution of costs within single establishments at different periods and with the use of different kinds of material. The percentage of the total cost of the finished article which goes into raw material fluctuates with the price of raw cotton, wool, or leather. The capacity at which the mill is operating has an important influence on the amount of cost which is chargeable to overhead. The diagrams therefore are presented simply as an approximation to average figures.

The segments representing raw materials do not represent the amount of the selling price which the farmer received, but rather the price which the mill paid for its raw material, which includes, in the case of wool for example, transportation charges, cleaning charges, and the overhead and profits of the middleman between the

farmer and the textile mill. It has not been possible to segregate all of the labor elements; some labor is included in raw material and some is included in overhead. The labor costs which are segregated are the costs directly chargeable to labor in mill operations, manufacturing operations, and retail selling.

The dollar figures upon which the percentages of the diagrams are based are given in the following table redistributed in a different manner so as to trace the clothing through three processes.

Process	\$35 Suit	\$5 Shoes	\$2 Shirt
Mill Operations or Tanning			
Raw materials.....	\$3.98	\$1.45	\$.30
Labor.....	3.68	.29	.23
Overhead.....	1.49	.28	.10
Profit.....	.79	.18	.06
Total materials.....	\$9.94	\$2.20	\$.69
Manufacturing			
Materials.....	\$9.94	\$2.20	\$.69
Labor.....	6.30	.72	.35
Overhead.....	5.38	.40	.21
Profit.....	1.88	.28	.13
Total (wholesale price)	\$23.50	\$3.60	\$1.38
Selling			
Cost of merchandise....	\$23.50	\$3.60	\$1.38
Labor (all).....	5.25	.63	.30
Overhead.....	5.03	.57	.24
Net profit.....	1.22	.20	.08
TOTAL SELLING PRICE.....	\$35.00	\$5.00	\$2.00

Business Failures

Commercial failures throughout the United States as reported by Dun's were more numerous in October than in any other month this year with the exception of January. October is normally a month of many failures but the increase this year has been somewhat greater than normal. Liabilities were also larger than for several months past. In the Second Federal Reserve District the increase in the number of failures in October was relatively less than in the country as a whole, but liabilities showed a larger relative increase.

How the Federal Reserve System is Organized

DURING the latter half of November in each year each of the twelve Federal Reserve Banks conducts an election for two of its nine directors. It seems, therefore, an appropriate time to set forth briefly the plan of organization of the Federal Reserve system, which places upon the directors of the several Reserve Banks the main responsibility for their control.

The Reserve Banks, from a legal standpoint, are private corporations, owned by the National banks of the country and by such State banks and trust companies as have become members of the Federal Reserve system. Their net earnings, however, after the payment of 6 per cent. dividends and such additions to surplus as are provided by law, pass into the Treasury of the United States for certain restricted uses. They also perform a number of operations for the Government, such as those connected with the sale and handling of Government bonds and notes, and the furnishing of an elastic currency. But otherwise the Reserve Banks have many characteristics in common with National banks. Both are chartered by the Federal Government under acts of Congress and are conducted under the direction and control of their own boards of directors. Both issue currency which is redeemable on demand at the Treasury Department in Washington. Both are under Federal supervision—National banks under the supervision of the Comptroller of the Currency and Reserve Banks under the supervision of the Federal Reserve Board. The supervision exercised by the Federal Reserve Board, however, is of a different nature from that which the Comptroller exercises over the National banks, as will appear below.

RESERVE BANK DIRECTORS

The composition of a Reserve Bank's board of nine directors recognizes the various elements of the country's population, which the Reserve Banks serve in their manifold daily operations. Six of the nine directors are elected by the member banks. Of these, three, known as Class A directors, are representative of the member banks. They may be bank stockholders, bank directors or bank officers. The other three, known as Class B directors, are representative of business in its broadest sense; they must be engaged in commerce, agriculture or some other industrial pursuit. They may be bank stockholders, but not bank directors or officers. Three other directors, making the total of nine, are known as Class C directors, and represent the Federal Reserve Board at Washington by whom they are appointed. They must be residents of the district and may not be bank stockholders, directors or officers. One of them is chairman of the board of directors. He is also Federal Reserve Agent, and as such is the representative at the Federal Reserve Bank of the Federal Reserve Board.

For voting purposes the member banks are divided into three groups, the largest banks in one group, the middle-sized banks in a second group and the smallest in a third. Each group votes for two directors, and no bank may vote out of its group. This method of election, together with the conditions of eligibility which the Federal Reserve Act imposes, makes the board of directors truly representative and also serves to prevent any one interest from controlling the policies and action of a Reserve Bank to the prejudice of any other interest. In a still broader sense, it insures that the Reserve Banks shall be responsible

to all the people of the country, in all of their capacities and all of their activities, to producers and consumers alike, subject only to the restrictions of law surrounding their operation.

RESERVE BANK SERVICES

Specifically, the services which a Reserve Bank performs for the banks and through them for the people of the country include the supply of credit to banks which in turn enlarges their power to lend to their customers, the collection of checks and notes through a nation-wide organization, and the transfer of funds throughout the country by telegraph without cost. Allied with these services and that of furnishing an elastic currency are many others which result in the safer, more economical and more rapid despatch of private business.

The conduct of these operations is in the hands of the officers of the Reserve Banks, who are appointed by the boards of directors of the respective banks. The compensation of officers and employees is fixed by the directors, subject to the approval of the Federal Reserve Board.

THE FEDERAL RESERVE BOARD

The Federal Reserve Act gives to the Federal Reserve Board at Washington a power of "general supervision" over the Reserve Banks. It does not give to the Federal Reserve Board "control" over the Reserve Banks; that term is used in the Act only to describe the duties of the directors of a Reserve Bank. Nor is the Federal Reserve Board an operating body. The relations, however, between the Reserve Banks and the Federal Reserve Board are close. As has been indicated above, three of the directors of a Reserve Bank are appointed by the Federal Reserve Board. Thus, instead of the kind of supervision exercised by the Comptroller of the Currency over National banks, which is largely critical and takes place after the fact, the Federal Reserve Board through its representatives on the boards of directors of the Reserve Banks has a share in the development of policies before they bear fruit in performance. The Federal Reserve Board, also, has the right to suspend or remove any officer or director of a Reserve Bank for cause; it has the right to review and determine rates of discount established by the directors of a Reserve Bank; it may require one Reserve Bank to lend to another Reserve Bank; it has the power of examination of Reserve Banks and to it must be reported in detail their operations. But the Reserve Board has no power to require a Reserve Bank to make or not to make loans to any particular member bank; the actual lending is left to the Reserve Banks themselves.

TWELVE RESERVE BANKS

When the Federal Reserve Act was passed one of the purposes of Congress was to establish a system which within the restrictions of the law should meet the needs both of the various sections of the country and of the country as a whole. Consequently, the framework of the system provides for twelve separate institutions, each controlled by its local board of directors, particularly qualified by local knowledge to serve a district's local needs, but all joined together through the Federal Reserve Board for the flow of credit, from one district to another, and for such purposes as require unity of policy and practice.