(The article on the last page describes the relation of gold movements to the Reserve Banks)

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, October 1, 1922

Credit Conditions

THERE has been a change recently in the direction of the movement of several important indices of credit conditions. Interest rates have grown firmer and have risen fractionally. The commercial loans of banks, which had been diminishing in volume for nearly two years, have increased in New York City and in all reporting cities. Federal Reserve Bank loans to member banks have increased nearly $50,000,000 in a few weeks, and note circulation nearly $100.000,000. The amounts of these changes from the low point are shown in the following table and they are illustrated graphically in the diagrams at the foot of the page.

(Dollar figures in millions)

	Low 1922	Latest report	Increase
Interest rate on commercial paper	4%	4¼%	¼%
Interest rate on Bankers' bills	3%	3¼%	¼%
Commercial loans of banks:			
New York City	$1,997	$2,018	$21
All reporting cities	7,279	7,367	88
Discounts and advances of Federal Reserve Banks to member banks	380	424	44
Note issues of Federal Reserve Banks	2,123	2,219	96

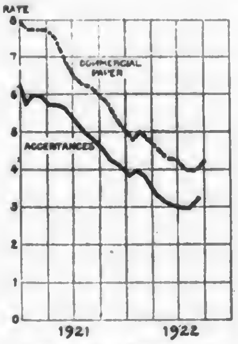
These changes all indicate an increase in the demand for funds which, while it coincides in time with the seasonal needs of agriculture is more probably a reflection of more fundamental activity in the business and industrial life of the country.

As long ago as the summer of 1921, forces were set in motion in business and industry, which have gained impetus slowly but steadily, and at last have begun to make themselves felt in the increasing use of bank credit for commercial purposes.

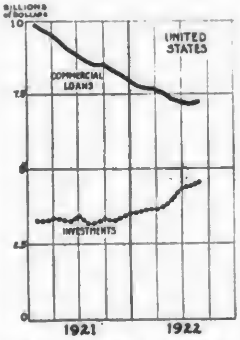
Evidences of this business recovery are presented in the set of four diagrams, and in the single diagram on the following page. In practically every one of the basic industries the current rate of production is far in excess of the rate a year ago. In most of them the improvement in the past few months has been steady.

A general increase in factory operations in this district is shown by the records of the number of workers employed in factories. These may be taken as typical of the changes which have taken place in factory employment throughout the country.

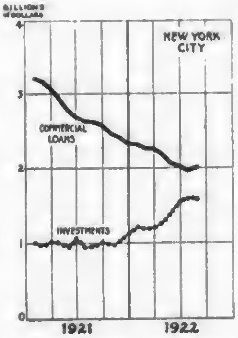
The total movement of freight by rail has been largely affected by the coal strike, as coal constitutes normally



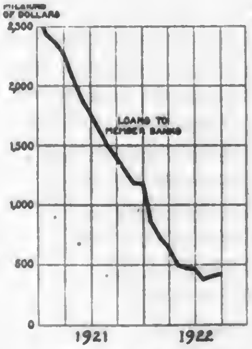
Interest Rates on Prime 4-6 Months Commercial Paper and Prime 90 Day Banker's Acceptances



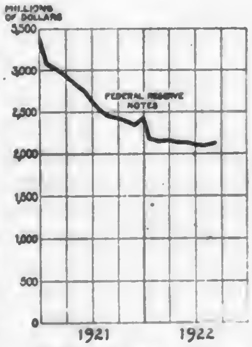
Commercial Loans and Total Investments of Reporting Member Banks in the United States



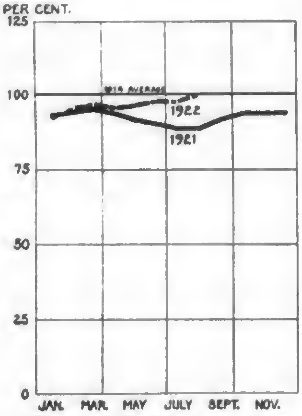
Commercial Loans and Total Investments of Reporting Member Banks in New York City



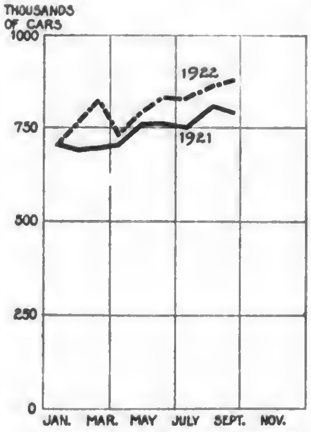
Loans by Federal Reserve Banks to Member Banks



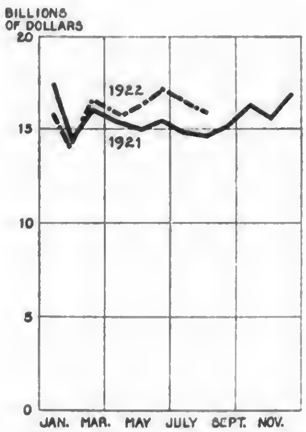
Federal Reserve Notes in Circulation



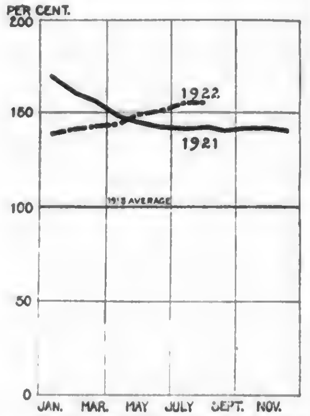
Workers Employed in New York State Factories



Average Weekly Loadings of Freight Cars



Bank Checks Drawn in 140 Centers Outside New York



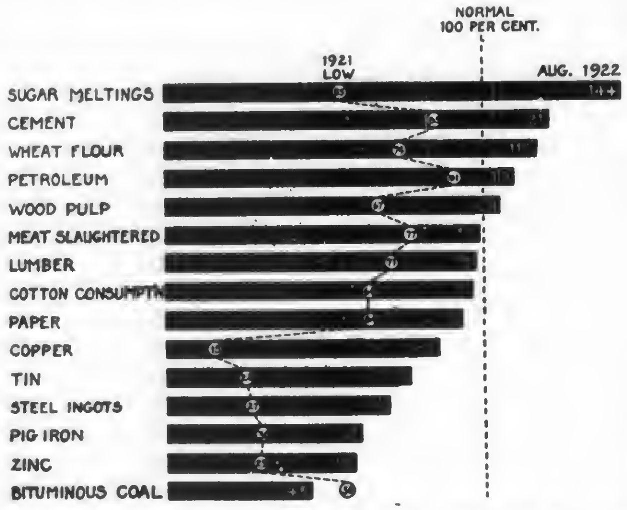
Wholesale Commodity Prices (Dept. of Labor Index)

about 35 per cent. of the total rail movement, but so great has been the increase in the movement of merchandise and miscellaneous goods this year, that the decrease in coal loadings has been largely offset.

The total volume of checks drawn, as reflected in figures collected by the Federal Reserve banks showing the debits to individual accounts, are a good index of the activity of trade and industry.

Along with greater activity in business, has gone an increase in prices as illustrated above.

In the light of the increases shown by these various indices of business activity, it now seems probable that the recent rise in interest rates and in the commercial loans of banks, has a deeper origin than the usual temporary demands of the autumn.



Production of Basic Commodities in August, 1922, and the Low Point in 1921 Compared with Normal Production

Rate of Turnover of Bank Deposits

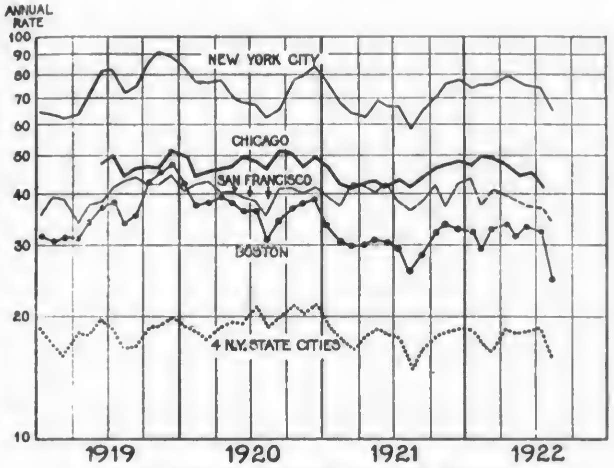
In the April 1 Monthly Review, there were published computations showing for a group of cities the velocity, or rate of turnover, of bank deposits. The accompanying table and diagrams bring this study up to date.

Although the available evidence from other sources is clearly to the effect that in the past year there has been a distinct increase in business activity, that increase in activity has not yet been reflected to any large degree in a greater rapidity in the turnover of bank deposits, owing partly to the much increased volume of deposits now reported by the banks.

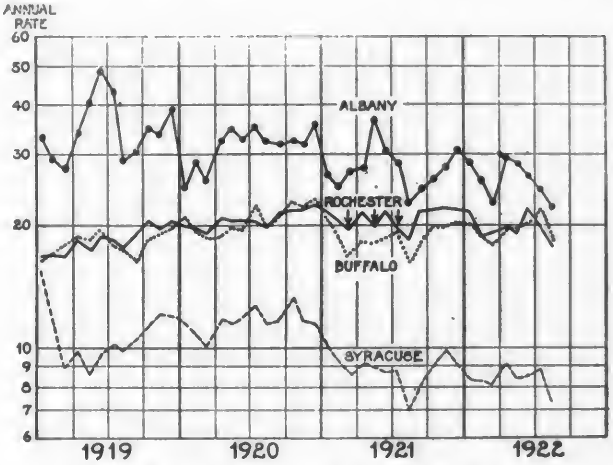
The figures for New York City are sharply upward, probably largely a result of activity in the security markets. The only other center, however, which shows any marked increase between August 1921 and August 1922 is Buffalo, an industrial center, in which manufacturing activity was at an unusually low point a year ago. In San Francisco, Boston, and Albany the most recent figures are all somewhat lower than for the corresponding month a year ago, and markedly lower than in 1919 and 1920. The figures for August in successive years are as follows:

	Velocity in August			
	1919	1920	1921	1922
New York	72.6	62.7	58.7	65.2
Albany	28.9	32.1	22.5	22.1
Buffalo	17.5	19.9	16.1	18.3
Rochester	17.7	19.8	18.3	17.8
Syracuse	9.9	11.4	7.0	7.3
Boston	33.8	30.8	25.9	24.8
Chicago*	50.2	48.2	43.6	41.7
San Francisco	43.1	35.4	36.7	34.4

*July Figures.



Annual Rate of Turnover of Bank Deposits



Annual Rate of Turnover of Bank Deposits

The available data for past years indicate that great business activity is usually accompanied by a rapid turnover of bank deposits, as credit resources are kept constantly occupied. The recent increase in the volume of business has not yet been sufficient to call for the fullest employment of credit facilities available in the form of bank deposits.

Bill Market

After three weeks of slack sales dealers advanced offering rates for prime unindorsed bills from 3 per cent. to 3¼ per cent. in the latter part of September. Prevailing firmer money conditions and the relatively low yield on bills as compared with the rates of return on other short term investments, particularly certificates of indebtedness, were mainly responsible for the advance. Bid rates were increased proportionately from 3⅛ per cent. to 3⅜ per cent.

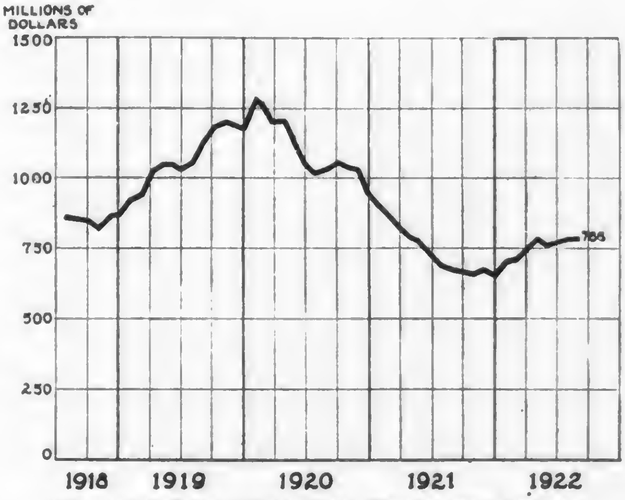
A fair supply of new bills was available to the dealers throughout the month. Of new bills coming into the market, those drawn against exports of cotton and grain, and against imports of silk and sugar, were most numerous. The range of commodities covered by bills now in the market is indicated by the fact that bills recently purchased by the Federal Reserve Bank of New York, were drawn against about 250 different commodities.

Commercial Paper

Commercial paper dealers in September advanced their selling rate for prime paper from 4 per cent. to a range of 4¼ to 4½ per cent. The advance was initiated in the New York market, but was followed by corresponding increases in the Middle West and on the Pacific Coast.

Higher rates appeared to be due more to falling off in demand at the lower levels than to increase in the supply of paper ,as most dealers reported little or no increase in offerings. Buying increased only slightly in result of the rate increases. New York banks continued to be only occasional purchasers, and country bank demand was still relatively restricted. During the early part of the month, a good demand was reported from Chicago and St. Louis at rates in many cases ¼ of one per cent. lower than in New York, but later slackening in buying in those markets was reflected in a rise in rates to the levels prevailing in New York.

The following diagram shows a further slight rise during August in the outstanding commercial paper of the twenty-seven dealers which report regularly to this bank.



Commercial Paper Outstanding—Twenty-seven Dealers

Stock Market Money Rates

The stock exchange money market became distinctly firmer in September, and call loans were generally 4 per cent. or higher, compared with 3 to 3¾ per cent. frequently quoted during August. Only on one occasion did the rate drop below 4 per cent., and that was following September 15, when heavy Government payments in meeting maturing certificates and other obligations temporarily exceeded receipts. Accompanying the collection of the quarterly tax checks and other receipts, and heavy private transfers of funds to the interior, rates rose quickly to 6 per cent., for the first time since February.

Time money rates likewise rose in September, and by the third week were quoted at 4½ to 4¾ per cent., the highest since last March.

Stock Market

The conclusion of the coal strike and the partial settlement of railway labor difficulties were accompanied in early September by a further rise in stock prices, to new high levels and more active trading. Daily transactions frequently exceeded a million shares for the first time since early summer. The advance was followed after the middle of the month by a period of reaction, arising partly from developments in the Near East.

Bond Market

Despite higher money rates in September and some reduction in the investment holdings of reporting member banks, the corporation bond market maintained its firm tone until the latter part of the month when there was some weakness. The broad character of the demand early in the month was reflected in further advances in public utility, industrial, and high-grade railroad groups of the Wall Street Journal's index of forty bonds.

Prime State and municipal issues shared in the strength of corporation bonds, and prices in some instances were the highest since the war. Foreign bonds were generally steady, except French and Belgian issues which were sensitive to developments with respect to reparations. A feature of the market was the return to par of Canadian Government 5s of 1952, after having fallen below 98 upon dissolution of the distributing syndicate this spring. Brazilian issues also strengthened after recent weakness.

Trading on the New York Stock Exchange during August in bonds other than United States Government securities totaled $226,000,000, an increase over both July and June, and approximately five times the low total of August last year. Trading continued active in September.

United States Government Securities

After losing from a half to nearly 2 points during August, Liberty bond prices steadied somewhat early in September. Renewed declines later in the month, however, carried three of the 4¼ issues below par for the first time since June.

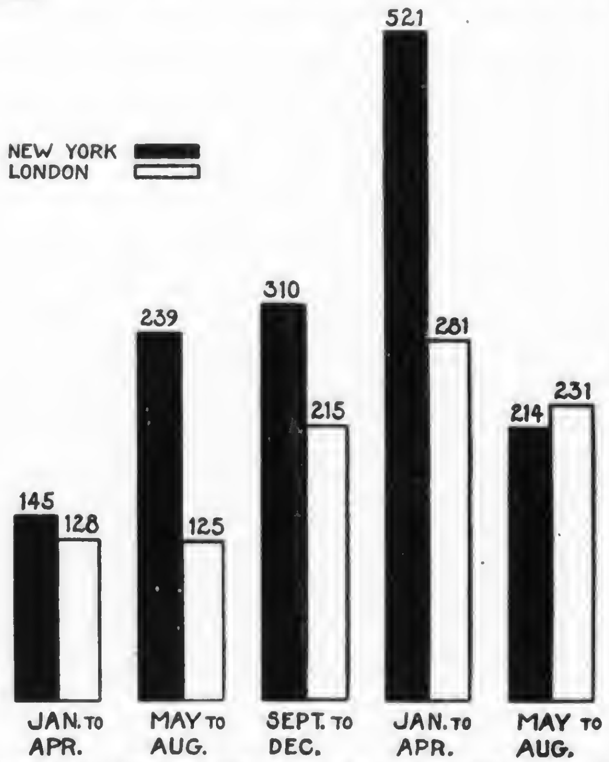
Total transactions in Liberty and Victory issues on the New York Stock Exchange during August were $93,000,000, the smallest in a year and trading continued light in September.

Offering rates for outstanding issues of Treasury certificates and notes were slightly higher in September in sympathy with generally firmer money rates. A new offering, however, of one-year certificates dated September 15, and bearing 3¾ per cent. interest, the same rate as that of a one-year issue sold in June was heavily oversubscribed. Of total subscriptions amounting to $570,476,500, allotments were $227,000,000, of which $94,840,000, or 41.8 per cent. was alloted in this district. The issue was quoted immediately in the open market at a slight premium.

New Financing

After falling to the lowest point of the year in August, new financing showed the customary seasonal increase in September, and during the second and third weeks reached $256,786,000, the largest amount for a two weeks' period since spring. Corporation offerings, which were widely varied and included several large industrial and public utility issues, were in good demand. Rates on the better grade of notes and bonds remained 5½ per cent., or somewhat lower. New issues for the purpose of enlarging capital stock, rather than for refunding purposes, continue to appear with greater frequency than earlier in the year.

State and municipal issues were also numerous and particularly well bought, even though prices in some instances reached new high levels. Prime issues of this class are now offered generally around 4 per cent., with some issues quoted as low as 3.80 per cent. Prospective scarcity of new offerings, together with reduced yield in other bond groups, have been factors contributory to this strength. On September 25, an issue of $75,000,000, Federal Land Bank 4½ per cent. 10-20 year bonds, were offered and quickly sold on a 4.30 to 4.50 basis.



Volume of Foreign Financing in the United States and in the United Kingdom, in Millions of Dollars in 1921 and 1922 (Pounds Converted at Current Rates of Exchange)

In contrast with activity in other groups, foreign financing in this market continued light, reflecting the unsettlement in outstanding foreign issues. Total offerings during the first three weeks of September were $19,163,000.

A comparison of foreign capital issues in New York and London by four month periods since the beginning of 1921, illustrated in the accompanying diagram, shows that foreign financing has fallen off recently in both markets, but that the decrease has been most marked at New York. Since previous presentation in this Review, figures for Great Britain have been revised to cover par values of securities offered, in order to make them more comparable with figures for this country. British figures are converted into dollars at current rates of exchange.

Foreign Exchange

Sterling declined about five cents in September, due in large part to somewhat heavier offerings of commercial bills in New York, combined with increased buying of dollars in London, both incident to seasonal purchases of American cotton and foodstuffs. Discontinuance of purchases of British coal after the settlement of strikes here and a reduction in the volume of gold imports from England also tended to cause a reaction in sterling. Late in the month sterling declined to around $4.40, following political developments in the Near East.

Rates on most other European countries also reflected seasonal buying of cotton and foodstuffs, but showed somewhat smaller losses than sterling. German marks which had declined to 5 cents per hundred in the latter part of August advanced to 7 cents per hundred. The Greek drachma declined from 3 cents to 2 cents following the defeat of the Greek army in Asia Minor. Far Eastern and South American exchanges also closed the month slightly lower, with the exception of Japanese exchange which showed a small increase.

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

Country	Sept. 20 Last	Change from Aug. 19	Change from Sept. 20, 1921	Per Cent. depreciation from par
England	$4.4313	−.0462	+.7188	8.9
France	.0766	−.0030	+.0064	60.3
Italy	.0424	−.0029	+.0006	78.0
Germany	.0007	−.0001	−.0086	99.7
Belgium	.0714	−.0042	+.0012	63.0
Holland	.3870	−.0020	+.0724	3.7
Switzerland	.1869	−.0038	+.0149	3.2
Spain	.1513	−.0049	+.0213	21.6
Sweden (Stockholm)	.2651	+.0004	+.0489	1.1
Argentina	.3528	−.0091	+.0535	16.9
Brazil	.1206	−.0120	−.0042	62.8
Japan (Yokohama)	.4813	+.0033	0	3.5
China (Hong Kong)	.5713	−.0100	+.0475	*
China (Shanghai)	.7713	−.0050	+.0400	*
India	.2863	−.0062	+.0238	41.2
Canada	.9997	+.0009	+.1028	.03
Bar Silver in New York	.6963	+.0013	+.0400	.....

* Silver exchange basis.

Gold Movement

Gold imports during August amounted to about $19,000,000, of which over $13,000,000 came from England. Exports were approximately $956,000. The following table shows the sources of imports.

(000 Omitted)

Country	June 1922	July 1922	August 1922	Total 1922
England	$4,009	$38,066	$13,270	$75,999
Sweden	16	246	583	32,388
Canada	389	580	393	8,714
China and Hong Kong	337	342	870	4,841
France	667	1,688	890	14,900
Denmark	4,090	....	1,115	17,769
Mexico	594	467	333	3,850
Colombia	423	619	642	5,004
All other	2,444	979	996	21,580
Total	$12,969	$42,987	$19,092	$185,045

Foreign Trade

Imports into the United States rose $19,000,000 during August to $271,000,000, the largest total in nearly two years, reflecting in part withdrawal of goods from bond, and a rush of new shipments in anticipation of the new tariff. As exports increased only slightly, the excess of exports fell to the lowest for any month since September 1914.

The heavy imports during August included an increase over July of 14,000 bales of raw silk, to the largest amount since January. For the year ended last June, raw silk imports were 48,179,000 pounds, valued at $300,000,000, the largest quantity ever imported in a similar period.

The following table shows by months the totals of exports and imports and the excess of exports since January. Imports during the period have shown a distinct upward tendency, while exports have risen only slightly.

(Millions of Dollars)

1922	Exports	Imports	Excess Exports
January	279	217	62
February	251	216	35
March	330	256	74
April	318	217	101
May	308	253	55
June	335	260	75
July	301	252	49
August	302	271	31

Reports from exporters as to current orders vary considerably according to commodities handled and markets served, but in general appear to indicate some falling off in buying. The steel market continues to suffer from dulness in the Far East, and the latest figures, show that July shipments were 26 per cent. below those of June. Cotton exports in August were the smallest in about two years, but increased in September. Buying of American wheat has been slow, affected somewhat by competition of Canadian wheat.

Firms doing business with South America, on the other hand, report somewhat increased demand, particularly for cotton goods, foodstuffs, jobbers' supplies, and some construction materials. Australia is reported a good market, and there is a scattering of new business from South Africa, the West Indies, and the Philippines. Copper is again in somewhat larger demand, chiefly from England, Germany, and France.

World Prices

The prospect of good yields of the world's principal crops this year was reflected in some lowering of the general level of world prices during August. The Statist index of British prices fell 8.6 per cent., the sharpest drop since the peak of prices in 1920, due in considerable part to a decline in vegetable foods. In Japan, reappearance of a sharp price decline was caused by a conspicuous fall in rice, accompanying prospects of a large crop. While the French price index rose slightly, the movement was despite a lower average of food prices.

Germany was again the exception to the general tendency. An advance in the price index to a level more than double the August 1 figure accompanied heavy increases in note circulation. The following table shows recent price changes for the various countries.

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

Country	Latest Quotation	Per Cent. Change During		
		June	July	August
United States:				
20 basic commodities[1]	145 (Sept. 23)	+ 1.8	+ 0.1	− 2.3
Dept. of Labor	155 (Aug.av.)	+ 1.4	+ 3.3	0.0
Dun's	143 (Sept. 1)	+ 2.2	− 0.1	− 0.6
Bradstreet's	131 (Sept. 1)	+ 1.7	− 0.3	+ 0.1
Great Britian:				
Economist	158 (Sept. 1)	+ 0.4	+ 0.1	− 3.1
Statist	143 (Sept. 1)	+ 0.1	− 1.7	− 8.6
20 basic commodities[1]	136 Sept. 23)	+ 1.4	+ 2.8	+ 0.2
France	331 (Sept. 1)	+ 2.6	0.0	+ 1.7
Japan	195 (Aug.av.)	+ 1.5	+ 1.9	− 2.9
Canada	164*p*(Aug. 15)	− 0.8	+ 0.5	− 1.2*p*
Australia[2]	157 (July av.)	+ 0.6	+ 0.6	......
Norway[3]	227 (Sept. 1)	− 0.4	+ 0.9	− 2.2
Sweden[4]	165 (July 15)	0.0	+ 0.6	......
Denmark[5]	178 (Sept. 1)	+ 0.6	0.0	− 1.1
Netherlands	159 (Aug. 1)	+ 0.6	− 4.2	......
Germany.[6]	28,919 (Sept. 1)	+16.6	+52.5	+107.5
Calcutta.[7]	178 (Sept. 1)	− 2.1	− 1.1	− 1.7
Shanghai[8]	108 (Aug. 1)	− 1.2	− 0.6	......

[1]Computed by this bank. [2]July 1914 = 100. [3]Dec. 31, 1913—June 30, 1914 = 100. [4]July 1, 1913—June 30, 1914 = 100. [5]July 1912—June 1914 = 100. [6]July 1914 = 100. [7]End of July 1914 = 100. [8]September 1919 = 100. *p*—Preliminary.

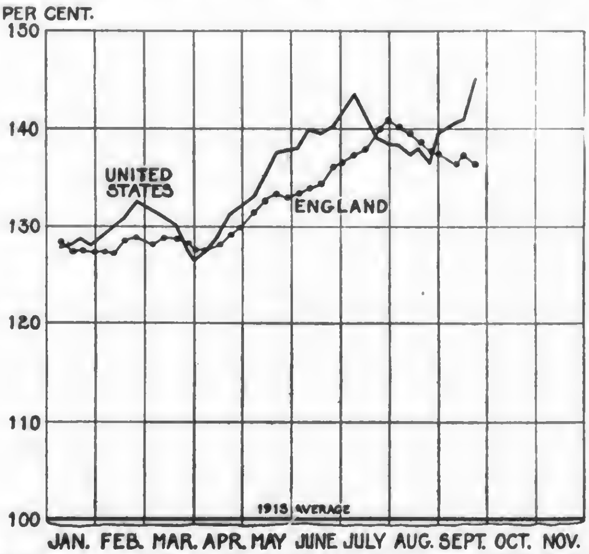
Domestic Prices

After rising 12 per cent. since January, the Department of Labor index number of wholesale prices for August was identical with that for July. Declines in farm products and other foods offset advances in other groups, including fuel and metals, which continued to advance sharply. The following table shows the detailed changes in the index between July and August.

(1913 average = 100 per cent.)

Commodity Group	Value of Index			Per Cent. Change During	
	June 1922	July 1922	August 1922	July	August
Farm products	131	135	131	+ 3.1	− 3.0
Foods	140	142	138	+ 1.4	− 2.8
Cloths and clothing	179	180	181	+ 0.6	+ 0.6
Fuel and lighting	225	254	271	+12.9	+ 6.7
Metals	120	121	126	+ 0.8	+ 4.1
Building materials	167	170	172	+ 1.8	+ 1.2
Chemicals and drugs	122	121	122	− 0.8	+ 0.8
House furnishing goods	176	173	173	− 1.7	0.0
Miscellaneous	114	114	115	0.0	+ 0.9
All groups	150	155	155	+ 3.3	0.0

An index more immediately sensitive to price tendencies, composed of 20 basic commodities and computed weekly by this bank, reacted rather abruptly late in July and in August, after an advance since the first of the year approximating that of the Department of Labor index. Losses were caused chiefly by cuts in oil prices, weakness in farm products, and some reaction in cotton from highest prices touched following publication of reduced crop estimates. By the middle of September, however, a substantial recovery brought the index to the highest level for the year. Pig iron, lumber, hides, and cattle were particular points of strength and sold at highest prices for the year.



Weekly Changes in the Prices of Basic Commodities in the United States and England (1913 Average=100 per cent.)

The course of this bank's 20 basic commodity index since the first of the year, in comparison with a similar index of British prices, is indicated in the accompanying diagram. The two lines show much the same trend, but that for England has fluctuated less widely, and has lagged somewhat behind the American index.

Cost of Living

The cost of living index compiled by the National Industrial Conference Board declined less than 1 per cent. during August. An increase of 4 per cent. in the cost of fuel and light was offset by a decrease of 2 per cent. in the price of food and of .6 per cent. in the price of clothing. The index number which is based on the cost of maintaining a workingman's family in 1914 has remained practically stationary for the past 6 months and is now 154.5.

The decline in the index for the retail price of food was due to a general decrease in the price of meats and vegetables. Sugar was somewhat higher.

The August levels of the different elements making up the cost of living index were as follows compared with the figures for August, 1921:

(July 1914 = 100 Per cent.)

Element	August 1921	August 1922	Per Cent. Change
Food	148	139	−6.1
Clothing	159	153	−3.8
Shelter	169	165	−2.4
Fuel and Light	179	181	+1.1
Sundries	183	172	−6.0
Total	162	154.5	−4.6

Wages

The past month has been marked by probably the largest number of advances in wage rates since the beginning of the period of downward readjustment in the autumn of 1920. A compilation by the National Industrial Conference Board shows that between August 15 and September 15, out of 123 concerns reported, 119 showed some increase in wage rates and 4 showed some reduction. A summary of the changes since April 15 follows.

Date	Concerns Reporting Reductions	Concerns Reporting Increases	Total Changes
April 15 to May 15	54	9	63
May 16 to June 15	23	26	49
June 16 to July 15	25	21	46
July 16 to August 15	7	8	15
August 16 to September 15	4	119	123

The largest number of increases during the past month occurred in iron, steel, and miscellaneous metal manufacturing plants, and on the average these amounted to 20 per cent., the amount of increase put into effect by the United States Steel Corporation in its upward revision announced on August 22.

Many New England cotton mills in which wage reductions in February of 20 per cent. were followed by general strikes, have restored the scale prevailing prior to that reduction. The coal miners' strike was also settled on a basis of the restoration of the wage scale existing before the shut down of the mines in the spring.

Wage advances have been most numerous in the case of common labor. A large employment agency in New York informs us that it is now placing unskilled laborers at 45 to 50 cents an hour as compared with 35 to 40 cents an hour a few weeks ago. Unskilled building laborers have likewise been advanced in certain localities from 8 to 10 per cent. in recent weeks.

The New York State Department of Labor reported an increase of 1.3 per cent. from $24.77 in July to $25.09 in August, in average weekly earnings of factory workers in New York State. These earnings are now 1.3 per cent. below those of August a year ago.

Employment

Settlement of the coal and textile strikes and partial settlement of the railroad strike during the past month, coupled with a larger demand for manufactured goods and a continuation of activity in building and other construction have resulted in a large gain in employment. While a relatively small number of the workers who had been out on strike and who returned to their jobs during the month are employed in this district, the assurance of an adequate supply of fuel and improved railway service has caused manufacturers to proceed with plans for larger production and their working forces have been correspondingly increased.

The New York State Department of Labor, in its monthly survey of employment in factories, found that between July 15 and August 15 there was an increase of 2.4 per cent. in the number of workers, the largest increase in a single month since early in 1920. On August 15 there were about 13 per cent. more workers employed in the State's factories than there were one year ago. The gains in the number employed in railroad repair shops and equipment factories, which followed the partial strike settlement, are not reflected in this survey, as the data were collected before the settlement. The principal gains occurred in the miscellaneous metal manufacturing and clothing industries.

Employment agencies in this city report a larger demand for workers of all types, but to date the supply has been ample to meet the demand, with the exception of common labor and certain types of clerical help.

Production of Basic Commodities

Crippling effects of the coal and railroad strikes continued to be visible in coal and steel production figures during August, although partial resumption in the bituminous industry late in August, brought the month's total production above the low point of production which was reached in July. In September, however, final settlement of the strike in both the soft and hard coal fields, and mitigation of railroad strike difficulties, brought bituminous output back to about 9,600,000 tons weekly, while anthracite mining expanded from practically zero to about 1,850,000 tons weekly. These figures are close to normal production.

Since the first of January anthracite production has been slightly over 23,000,000 tons, about 70,000,000 tons less than the annual rate of consumption during the preceding five years. Bituminous production since the first of the year is 100,000,000 tons behind the average output for the same period in recent years.

In the steel industry, reopening during September of many blast furnaces that had been forced to close during August, accompanied improvement in the fuel supply. Continued drift of cotton mill workers back to work during August was reflected in a rise in this bank's index of cotton consumption to the highest point since November 1921. The revision of wage rates in September to the basis prevailing before the cut this spring has enabled the mills to complete their recovery to full time operation.

Active operation of the lumber and cement industries continues to reflect the large volume of building throughout the country, and copper production keeps up its steady gain. The following table shows for successive months the production of a number of basic commodities in terms of estimated normal, allowance being made for year to year growth and seasonal variation.

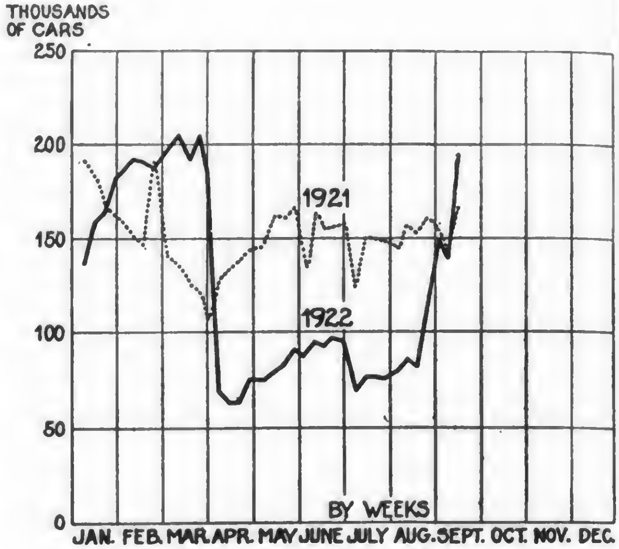
(Normal Production = 100 Per Cent.)

Commodity	1922					
	Mar.	Apr.	May	June	July	Aug.
Anthracite coal mined *p*	105	0.3	0.4	1.0	1.4	1.9
Bituminous coal mined *p*	89	34	41	43	32	45
Pig iron production	65	67	73	79	82	61
Steel ingot production	71	74	81	82	79	70
Copper production, mine	47*r*	59	71*r*	75*r*	75*r*	86*p*
Tin deliveries	103	100	92	90	75	77
Zinc production*	50	48	51	53	60	59
Crude petroleum production	111	109	111	110	110*p*	...
Portland cement production	104	111	119	120	128	121
Wheat flour production	114	95	100	104	142	117
Meat slaughtered	112	96	108	112	99	...
Sugar meltings	142	124	146	135	131	144
Cotton consumption	91	80	88	92	84	97
Lumber production	93	75	96	82	76	98
Wood pulp production	100	92	108	110	105	...
Tobacco consumption	83	79	91	97	90	...
Paper (total) production*	100	89	100	100	93	...
Gasoline production	97	95	96	101	...	...

r—Revised.
p—Preliminary.
* Seasonal variation not allowed for.

Coal Shipments

The rapid resumption of coal mining in September is illustrated in the diagram above, showing coal loadings by weeks from January to the middle of September, in 1921 and 1922. Total loadings in 1922 through the middle of September were about equal to the total up to August 1 last year.



Freight Cars Loaded with Coal Each Week

Commodity Stocks on Hand

Increased industrial activity and increased consumption are indicated by recent figures for stocks on hand of principal basic commodities. Stocks of raw sugar diminished as a result of heavy meltings and smaller imports. Coffee was affected by somewhat restricted imports, especially from Brazil. Portland cement stocks were lower in spite of very heavy production.

The following table shows index figures for stocks on hand on the first day of the month expressed as percentages of normal. In the calculation of the normal stocks, allowance has been made for year to year growth and for seasonal variation.

(Normal Stocks = 100 Per Cent.)

Commodity	1922					
	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1
Sugar, raw cane, Atlantic ports	124	89	70	63	88	79
Coffee, visible supply in U. S.*	66	58	64	60	62	50
Flour, in chief centers	85	89	96	103	136	132
Cotton	94	91	87	85	86	93
Portland cement	109	116	105	93	79	62*p*
Wood pulp*	112	122	133	141	137	..
Paper, total*	142	140	140	144	138	..
Leaf tobacco	109	..	..	109	..	..

*Seasonal variation not allowed for.
p—Preliminary.

Wholesale Trade

Wholesale trade in this district during August, although retarded somewhat by the coal and railroad strikes, showed a distinct increase in a number of lines.

Compared with figures for August last year, sales were larger in eight of the ten groups of commodities. Grocery sales showed a loss of 7 per cent. but although groceries are the most heavily weighted commodity in our index, this loss was not sufficient to prevent an increase of 2.4 per cent. in the total weighted average of sales. Shoe sales were 18 per cent. lower than last August mainly on account of labor troubles in Rochester.

The largest increases in sales were reported by dealers in machine tools and diamonds. Sales in these lines were exceptionally small last August and the gain this year has not been sufficient to bring them up to what is considered a normal volume. A marked increase was shown in sales of hardware, and when allowances are made for price changes, it is evident that these sales were fully as large as during August 1919 or 1920. Sales of jewelry, stationery, and drugs, showed moderate gains, and sales of dry goods were the same as last August. Sales of clothing were irregular; manufacturers of men's suits and overcoats reported sharp advances, while sales of women's apparel were smaller.

Detailed figures are shown in the table that follows.

Commodity	Number of Firms Reporting	Total Net Sales (in percentages)				
		Aug. 1919	Aug. 1920	Aug. 1921	Aug. 1922	July 1922*
Machine Tools	4	565	620	100	202	127
Diamonds	7	559	151	100	156	143
Hardware	11	143	179	100	123	114
Clothing	22	103	130	100	121	105
(a) Men's	8	92	155	100	140	107
(b) Women's	14	117	99	100	96	103
Jewelry	6	227	179	100	111	123
Stationery	6	122	158	100	104	101
Drugs	6	96	99	100	103	106
Dry Goods	8	127	128	100	100	97
Groceries	42	124	117	100	93	105
Shoes	10	161	123	100	82	79
Total (weighted)	122	128	130	100	102	102

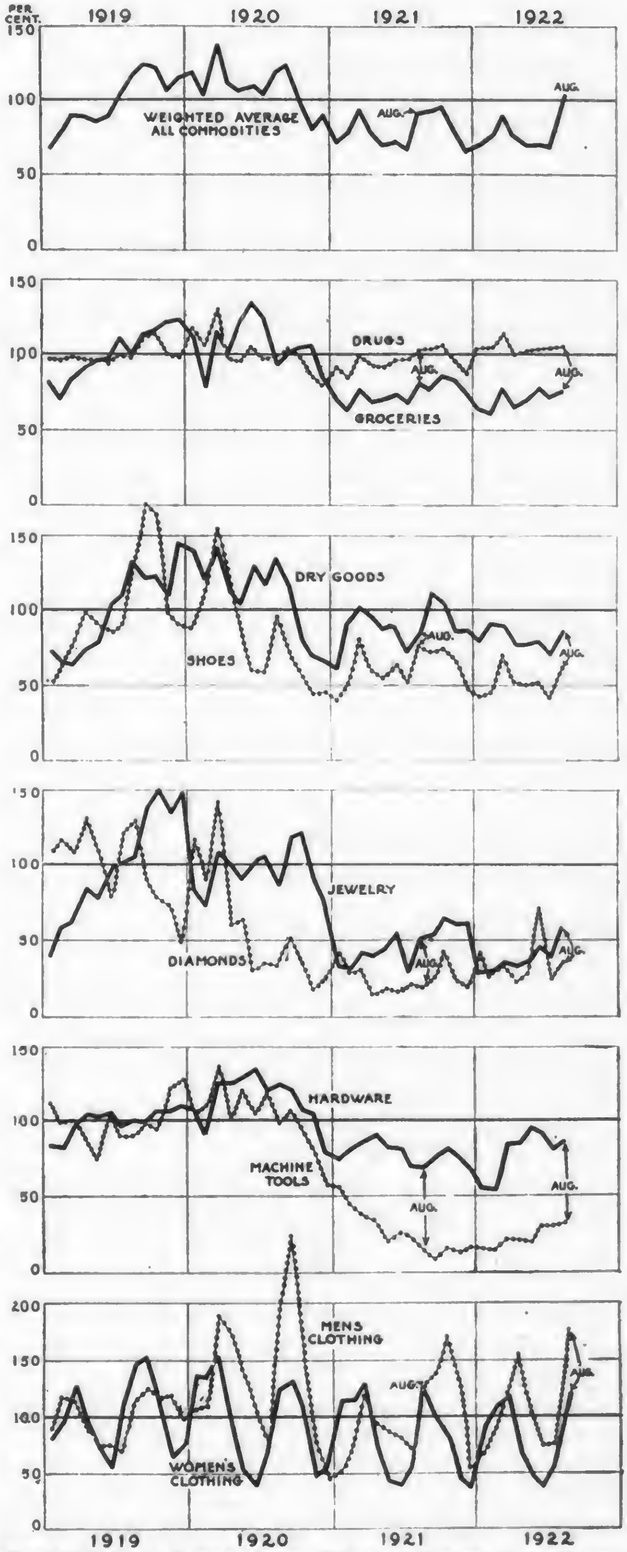
* Expressed in percentages of sales in July 1921.

Department Store Trade

An increase in August of 5.3 per cent. in the sales of 64 department stores in this district compared with sales in August 1921, was the largest year-to-year increase reported since November 1920. In each of the past three years sales in August were below those of July, but this year they were larger.

This gain has been due mainly to larger sales of house furnishing goods and ready-to-wear clothing. Almost without exception merchants reported that furniture sales during August were well above those of last year, a reflection of the completion of large numbers of new homes in all parts of the district. A majority of merchants reported better sales of ready-to-wear clothing and stores that sell apparel and accessories exclusively showed a gain in sales of 6 per cent.

As average prices of commodities sold by department stores are now about the same as a year ago the increase in the dollar amount of sales probably reflects accurately



Monthly Sales of Representative Wholesale Dealers in the Second Federal Reserve District (Average Sales in 1919=100 per cent.)

the increase in the amount of goods sold. For the first month since late in 1920 the average amount of individual transactions shows an advance, from $2.43 in August last year to $2.45 this year.

The following diagram compares the sales of department stores last year with those of the present year to date. It shows that during the first three months of 1922 sales were behind those of last year and that during the next three months they were slightly larger. The first marked increase was recorded in August.

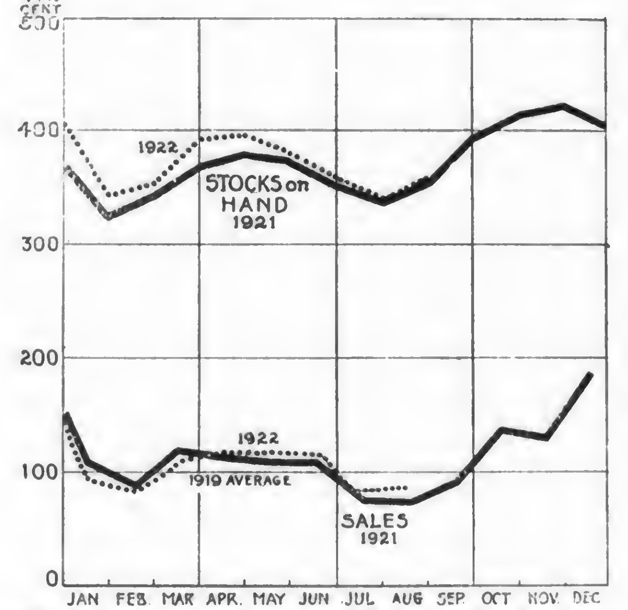
Stocks of department stores are practically the same as a year ago, both in physical volume and dollar value. There was an increase of 4 per cent. between August 1 and September 1, a normal change at this season of the year because of the receipt of fall and winter merchandise. However, as sales are larger than last year the turnover of stock is somewhat more rapid.

Sales by mail order houses increased 1 per cent. during the month, but continue much below the high levels reached in 1919 and 1920.

Detailed figures are shown in the following table.

	Total Net Sales (in percentages)				Stock on Hand Retail Price (in percentages)			
	Aug. 1919	Aug. 1920	Aug. 1921	Aug. 1922	Sept. 1, 1919	Sept. 1, 1920	Sept. 1, 1921	Sept. 1, 1922
All Dept. Stores..	94	106	100	105	93	125	100	99
New York....	98	105	100	108	95	128	100	100
Buffalo.......	88	107	100	102	98	128	100	97
Newark......	84	107	100	99	89	125	100	93
Rochester.....	77	103	100	107	85	134	100	87
Syracuse......	93	110	100	92	96	133	100	83
Bridgeport....	102	120	100	96	101	116	100	98
Elsewhere in 2nd District	96	109	100	108	85	108	100	96
Apparel Stores...	89	105	100	106	86	111	100	107
Mail Ord. Houses	144	139	100	101	**	**	**	**

Merchants still hesitate to order for future needs any further ahead than necessary. In those markets where prompt deliveries are assured the tendency remains to buy for immediate shipment; but in others, where delay in shipments has been frequent, advance orders are being placed more freely. Outstanding orders on September 1, amounted to 7.3 per cent. of the total purchases last year, compared with a corresponding figure of 8.3 per cent. on September 1, 1921. Apparel stores, whose outstanding orders amounted to 11.5 per cent. of last year's purchases, have been the largest buyers of fall and winter merchandise.



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

Chain Store Sales

An increase in the number of chain stores during the past year caused a gain of 11 per cent. in August sales by the systems that report to this bank. Average sales per store declined 11 per cent.

Grocery concerns, which have opened more than 2,000 new stores during the past twelve months, reported a gain of 16 per cent. in total sales, but individual store sales showed a loss. Five and ten cent stores reported increases in sales per store as well as in total sales. Smaller gains were recorded by apparel and drug stores.

A loss of 3 per cent. in total sales by shoe stores appears to have been due solely to lower prices. The number of pairs of shoes sold increased more than 12 per cent. and the average price per pair declined 13.6 per cent. from $3.59 in August, 1921 to $3.10 in August of this year.

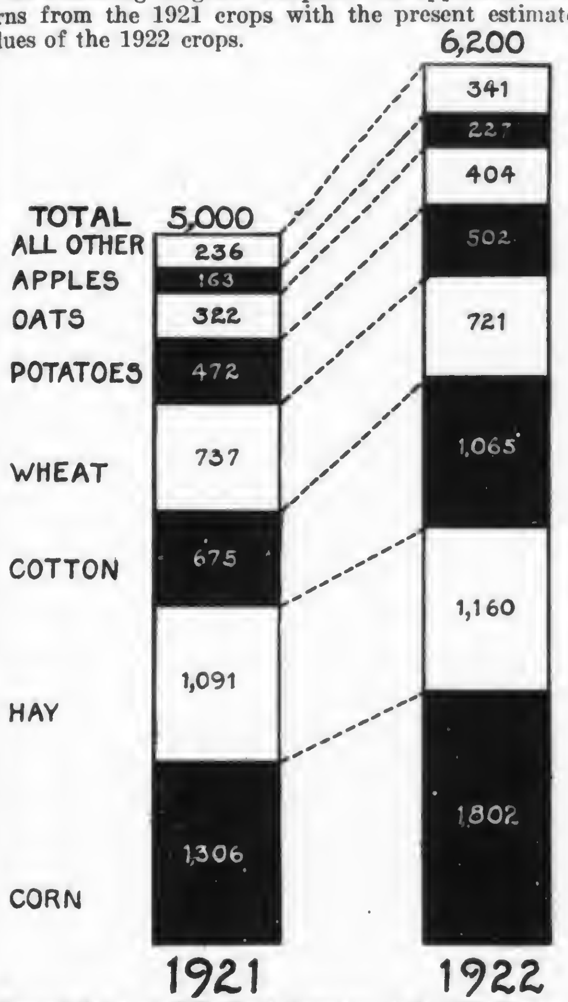
Detailed figures are shown in the following table.

Type of Store	Number of Stores		Total Net Sales (In Percentages)				Per cent. Change in Sales per Store from Aug. 1921 to Aug. 1922
	Aug. 1921	Aug. 1922	Aug. 1919	Aug. 1920	Aug. 1921	Aug. 1922	
Grocery...	6,073	8,161	82	114	100	116	−13.6
Ten Cent..	1,600	1,664	82	96	100	112	+ 8.1
Drug.....	254	255	91	103	100	104	+ 3.6
Apparel...	369	373	69	99	100	104	+ 2.8
Cigar.....	2,123	2,591	78	101	100	99	−18.5
Shoe......	184	213	119	105	100	97	−15.9
Total...	10,603	13,257	82	104	100	111	−11.4

Crop Conditions

The farm value of principal crops this year, calculated by the Department of Agriculture on the basis of September 1 prices and crop estimates, will be approximately $6,200,000,000, about $1,200,000,000 more than the amount realized by producers from 1921 crops. With the exception of wheat the aggregate value of each important crop is estimated above 1921 figures.

The following diagram compares the approximate returns from the 1921 crops with the present estimated values of the 1922 crops.



Estimated Value of 1922 Crops Compared with 1921 Crops. In Millions of Dollars

The increased value of the total crop is due in part to an increase in the general level of prices over last year, of about 2.8 per cent., but more largely to heavier production. Probable yields of all important crops with the exception of corn are above the 1921 figures. The following table compares the September 1 estimate of the Department of Agriculture of yields this year, with the final figures for the 1921 crops, and with a five-year average.

(000 Omitted)

Crop	Unit	Estimated Crop 1922	Final Estimate 1921	Average 1916-20
Corn	bushel	2,875,000	3,081,000	2,831,000
Wheat	bushel	818,000	795,000	799,000
Cotton	bale	10,575	7,954	11,862
Potatoes	bushel	546,000	446,000	462,000
Tobacco	pound	1,353,000	1,075,000	1,378,000
Apples	bushel	207,000	98,000	179,000
Barley	bushel	194,000	151,000	197,000

The average condition of all crops on September 1 was about 1 per cent. under the ten-year average and about 2½ per cent. under August 1 estimates. The estimated cotton crop declined during the month of August from 11,400,000 bales to 10,600,000 bales, while the probable corn yield declined from 3,017,000,000 bushels to 2,875,000,000 bushels.

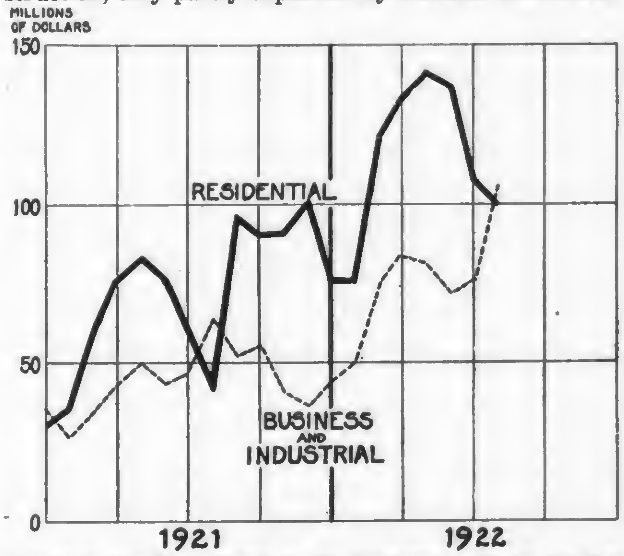
In connection with its estimates of the 1922 crops the Department of Agriculture has calculated the probable world production of wheat exclusive of Russia and Mexico for which data are not available. The total yield is expected to be moderately above the average for the pre-war years, 1909-1913, but slightly under that of last year. The data are given by continents in the table below. Favorable crop conditions are reported in Russia, which, according to reports from various sources, will be able to subsist on its own crops this year.

(Millions of Bushels)

Continent	1922	1921	Average 1909-13
North America	1,126	1,096	884
Europe	1,101	1,238	1,275
Asia	393	282	376
Africa	66	89	78
South America	191	203	185
Australia and New Zealand	143	151	93
Total	3,020	3,059	2,891

Building

August building awards in twenty-seven northeastern States, as reported by the F. W. Dodge Company, were about 8 per cent. under those of July. A decline of nearly one-third in the value of awards in the Chicago district offset slight increases in most other districts, including New York and Northern New Jersey. In recent months there has been a gain in industrial construction, only partly explained by seasonal tendencies.



Contracts Let Each Month in 27 Northeastern States for Residential, Business and Industrial Construction

The Relation of Gold Movements to the Reserve Banks.

THE inflow of over a billion dollars of gold in the past two years, and the receipt of a similar amount in the two years just preceding America's entry into the war, are the two greatest gold movements in history. Just how such additions to our gold supply act upon the volume of credit, now that the Federal Reserve system is in existence, is not clearly understood. It may be made clearer if we review briefly four periods.

I. Before the Reserve System.

Before the Federal Reserve system, when gold flowed into the United States, it found its way into banks, increased the proportion of gold to deposits, and as the banks kept as legal reserve only a certain portion of their deposits in gold, permitted them to increase their deposits by an amount several times the amount of the gold imported. This increase in deposits was mainly brought about by increasing loans. Large amounts of gold usually stimulated business activity and a rise in commodity prices. Conversely, an outflow of gold usually produced the opposite result, and reduced loans and deposits several times the amount of the gold exported.

II. The Gold Inflow of January 1915 to April 1917.

The Federal Reserve system was established in November 1914, and until June 1917, member banks, while keeping a substantial part of their gold with the Reserve Banks, were required by law to carry considerable gold in their vaults. Furthermore, but few of the State institutions, which represent about one-half the banking resources of the country, were at that time members of the system and they were carrying gold reserves just as before the system began. From January 1915, to April 1917, when America entered the war, more than a billion dollars of gold flowed in, representing payment for urgent purchases by belligerent nations which were unable either to ship goods in payment for ours, or to obtain credits here in sufficient amounts. These purchases introduced the element of competitive bidding for the goods required. Part of the gold went into circulation and the rest went into the vaults of the banks, where it increased their reserves, enabled them greatly to increase their deposits and loans, and created just such a situation as under similar conditions it would have created before the Federal Reserve system; that is, credit volume rising, prices rising, and intense business activity. But there was not a large or in any degree corresponding increase in the volume of goods produced.

The Federal Reserve system, only recently established, and having but a small volume of loans and investments through the repayment of which the effect of the imported gold might have been offset, was in no position to exert any influence upon these conditions.

III. The War Period: April 1917—August 1920.

Promptly upon America's entry into the war gold ceased to flow in, as our credit became available to our allies. And an embargo was placed on the outflow of gold. Immediately the credit needs of our own Government began greatly to exceed the current savings of the people. Between April 1917 and August 1920, without any increase in our gold supply, exactly the same economic phenomena occurred as in the two preceding years of heavy gold inflow. The Federal Reserve system, whose credit power, owing to the inflow of gold, had hitherto lain dormant, was called upon to provide the additional bank reserves and the hand to hand currency required by the credit and price expansion of the war period. The use of Federal Reserve credit for this purpose culminated in October and November 1920, after several months of credit strain during which the Federal Reserve reservoir was drawn down almost to the legal limit,—a strain which was accentuated by a net outflow of about $400,000,000 of gold between June 1919, and August 1920.

A comparison of these two periods of credit and price expansion under war pressure, one based on gold imports, and the other on the use of Federal Reserve credit, shows that the additional credit or lending power derived from the two sources was practically identical in its effect on the general credit and price structure. In both instances the banks were provided with the additional reserves and hand to hand currency required for a general expansion of bank deposits and loans; and it is well known that if such expansion is not paralleled by a corresponding expansion in the production of goods, a rise in commodity prices usually results.

IV. The Second Gold Inflow: Since August 1920.

In the period from August 1920 to the present, another great movement of gold, nearly equal to that of 1915-1917, has occurred, but under very different industrial conditions. Imperative buying and borrowing by governments had ceased; and in the early part of the period prices were falling, business was depressed. Three and a half billions of Federal Reserve credit had been extended, and the banks were heavily in debt to the Reserve Banks. In the past two years, accordingly, the billion of gold which came in was deposited as usual with the member banks, and turned over by them to the Reserve Banks. But instead of using the fresh reserves thus created as a basis for further expansion, the member banks took advantage of them, after the strain of 1920 was over, to pay off their indebtedness to the Federal Reserve system. Thus, broadly speaking, when this second inflow of gold occurred, conditions were unfavorable to its use in further expansion, and it actually helped liquidate the expansion of the preceding period.

It will be seen from the analysis of these four periods that whether or not the Federal Reserve system is able to absorb an inflow of gold of such dimensions as those of the second and fourth periods depends largely upon whether, at the time, it has a large volume of loans and investments which, if conditions are favorable to such a course, will be repaid with the new gold so received. The less loans and investments of the system are in a period of gold inflow the less its influence will be upon the conditions produced by the added gold.

It should also be understood that the expansion of credit from the inflow of gold, as above discussed, is that primary and somewhat automatic expansion resulting from the direct increase of member and other bank reserves which the gold creates, in an amount several times as great as the amount of the gold itself. The discussion has not touched upon the further expansion which the same gold may support after it reaches the Reserve banks, should member banks have occasion, as in the third period, to borrow heavily from Reserve banks.