

(The article on the last page describes retiring excess credit under the Federal Reserve system.)

# MONTHLY REVIEW

## Of Credit and Business Conditions

In the Second Federal Reserve District

By the Federal Reserve Agent, Federal Reserve Bank, New York

New York, October 1, 1921

### Credit Conditions

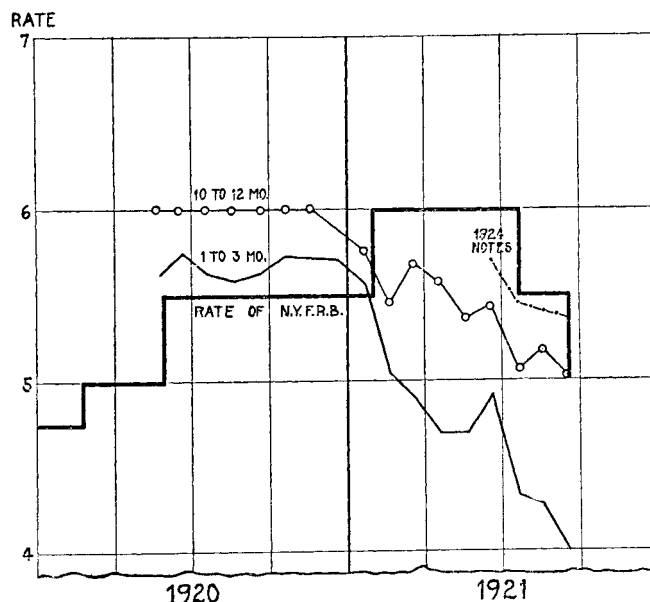
THE reduction of discount rates of the New York Reserve Bank on September 22 was a reflection of existing credit conditions in this Federal Reserve district. More particularly, it was a reflection of easier conditions in the money market. Evidences of the tendency toward lower rates for money, which have been gradually extending since last winter, included the sale on September 15 of \$698,000,000 of Treasury certificates and notes at rates lower, for corresponding maturities, than at any time since March, 1920; the immediate quotation of these certificates and notes in the open market at a premium; the decline from 5 to  $4\frac{3}{4}$  per cent. in the rate at which dealers offer bankers acceptances; and a rise in the market prices of Liberty bonds and Victory notes.

These lower rates of return on investments of complete security and the readiest sale are the best indices at this time of market rates for money. They imply an increased volume of funds seeking the safest investment. The banks have found it advantageous to utilize funds not required by their customers to reduce and ultimately to extinguish their debts at the New York Reserve Bank, and the discounts and advances of the latter have fallen from \$847,000,000 a year ago to \$202,450,000 on September 21, 1921, the lowest point in more than three years. As such debts have been paid off, more and more funds have become available for investment in the money market.

A second factor of importance but with possibly a more transient bearing on the situation, was the Government redemption of \$535,000,000 of Treasury certificates on September 15, of which \$280,000,000 were redeemed at the New York Reserve Bank. It has become customary for Government operations on the quarterly tax days to affect favorably the position of this bank. Ordinarily the certificates redeemed in this district are in excess of the taxes paid here, requiring the transfer to New York of Treasury funds accumulated elsewhere. A new issue of certificates put out at such times usually has no effect on money conditions then prevailing, because the proceeds remain on deposit at the banks until the Government has occasion to withdraw them.

The diagram printed on this page compares the New York Reserve Bank discount rate on advances secured by certificates of indebtedness with the rates at which

they have been quoted since the establishment of the open market in the early part of 1920. During the whole of 1920 the New York Reserve Bank maintained a preferential rate on loans secured by certificates of indebtedness. Early in 1921 this preferential was withdrawn to the extent that all loans secured by Government collateral bore the same rate. It was not until June 15 that the New York Reserve Bank established a uniform rate on all loans, whether on Government collateral or commercial paper. In spite of the withdrawal of the preferential the market value of certificates of indebtedness continued to rise, as shown by the lower yields at which they sell in the open market.



Open Market Selling Rates of Certificates of Indebtedness of Different Maturities, Compared with the Rate of the Federal Reserve Bank of New York on Advances Secured by Certificates of Indebtedness

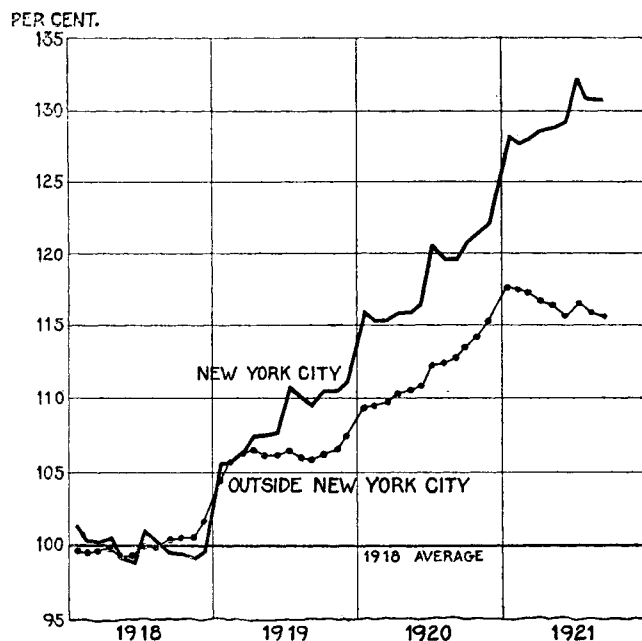
The active demand for certificates in the open market, where for many months they have been quoted at a premium, has enabled the Treasury to reduce gradually since last December the rates of interest borne by new issues. The successive changes in issuing rates since early in 1918 are summarized in the following table.

Month of Issue	About 6 Months Maturity	About 1 Year Maturity	3-Year Notes
January, 1918.....	4	...	...
January, 1919.....	4½	...	...
January, 1920.....	4½*	4¾	...
March, 1920.....	...	4¾	...
April, 1920.....	5¼	...	...
June, 1920.....	5¾	6	...
December, 1920.....	5¾	6	...
March, 1921.....	5½	5¾	...
June, 1921.....	...	5½	5¾
August, 1921.....	5¼	5½	...
September, 1921.....	5	5¼	5½

\*Issued December 15, 1919.

On September 22, Governor Harding of the Federal Reserve Board, speaking at Charlotte, N. C., made the following comment upon the situation in the country as a whole: "The process of readjustment has not yet been completed, but evidences are multiplying that the corner has been turned and that we have passed the most acute stage of the readjustment period."

Subsequently in the same address Governor Harding said, "All history shows that periods of prosperity and depression come in cycles, the rotation being about as follows: (1) Prosperity, (2) Liquidation, (3) Stagnation, and (4) Revival. At the present time the process of liquidation is well advanced and the end of stagnation and the beginning of the period of revival seem now to depend upon certain things which are susceptible of accomplishment in the near future, among which may be enumerated the financial rehabilitation of our great transportation systems and the determination of the policy of the Government with respect to revenues and the tariff."



Deposits of 11 Savings Banks in New York City and 10 Savings Banks in the Second District Outside New York City (Average Deposits in 1918 = 100 per cent.)

## Savings Bank Deposits

During August as during July, the general trend of deposits in representative savings banks in the Second Federal Reserve District was downward. Eight of ten reporting banks in cities in the district outside New York City reported slight reductions in aggregate deposits between August 10 and September 10. Of eleven reporting banks in New York City, nine showed declines for August. Such reductions in deposits are normal for this time of year.

## Bill Market

During the first two weeks of September, some offerings of prime bills were made at 4⅞ per cent., ⅛ of one per cent. below the rate previously prevailing. By the latter part of September, prime bills of 30 to 120 day's maturities were freely offered at 4¾ per cent. Dealers' buying rates for bills of these maturities generally ranged ⅛ of one per cent. higher. There was a small amount of 6 months bills in the market, drawn against transactions in overseas trade, which were dealt in at rates slightly in excess of those for the shorter maturities.

The lower bill rates were the reflection of generally easier money conditions rather than of an active demand for bills. Dealers reported that buying of bills was slow, but that the supply of bills was so light that their portfolios were substantially decreased. Dealers continued to find a steadier market with the country banks than with the banks in this city, and they continued to get new customers outside the city.

Of bills purchased by the dealers, sugar, grain, cotton, and dollar exchange bills preponderated. Offerings of grain bills continued comparatively heavy, as in August and July, but there was some decrease in offerings of sugar and cotton bills, and a further decline in the volume of dollar exchange bills. Silk bills were also much less frequently offered.

## Commercial Paper

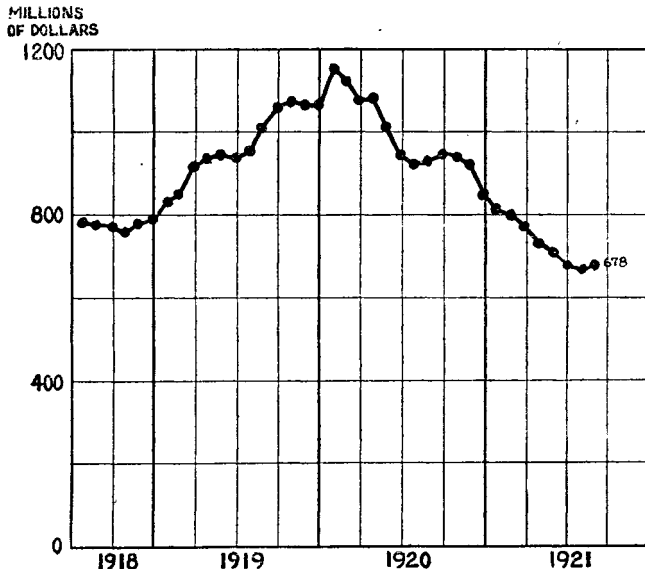
In the early weeks of September, a few sales of very choice commercial paper were reported at 5¾ per cent., or ¼ of one per cent. below the usual selling rate then prevailing for prime paper. Following the reduction in the rediscount rates at the Federal Reserve Bank on September 22, the number of sales at 5¾ per cent. increased, and some offerings of highest grade paper were made at 5½ per cent. Most of the dealers reported difficulty, however, in selling any but the highest type of paper under 6 per cent.

The lowering of the bank rate has been a factor in a somewhat larger movement of paper, particularly in New York City, where a number of the larger of the banks have recently been in the market for small amounts. There are reports, also, of increased buying in other large cities, including Chicago, Boston, and Philadelphia. As in past months, however, the country market has absorbed the larger proportion of offerings.

Reports to this bank from commercial paper distributors showed that in spite of light demand during August the volume of paper outstanding on August 31 was

somewhat larger than that outstanding on July 31 and a number of dealers reported rather substantial individual gains.

Practically all dealers reported that the smallness of their supply of paper is an important factor in restricting business. Most commercial paper borrowers are not now in need of money, on account of the quiet conditions of their business.



Commercial Paper Outstanding—Eleven Dealers

### Stock Market Money Rates

Call money rates on the New York Stock Exchange between August 20 and September 20 were chiefly 5 to 5½ per cent., although on several days closing rates declined to 4½ per cent., and on September 20, renewal rates touched that figure. This period of thirty days was the first since 1919 during which the maximum call loan rate was under 6 per cent. Excepting for a few days near the first of the month, and prior to the tax payment date, money was in ample supply, and considerable sums frequently went unlent at the close of the day.

Time money was offered in moderate volume, but dealings were light as borrowers as a rule were supplying their needs in the call money market. Rates ruled 5½ to 5¾ per cent. on September 20, or ¼ of one per cent. lower than on August 20.

### Stock Market

Representative averages of industrial stocks in September advanced 7 to 12 points from the low levels reached in August after the prolonged decline of the summer. This was the most vigorous recovery since early in the year, and accompanied reports of increased activity in some basic industries, a halt in the general decline in commodity prices and a sharp rise in cotton and wheat prices.

Railroad stocks also advanced in September, though less rapidly than the industrial shares, and are back at

about the level maintained for the first two months of 1921.

Total stock sales during August were the smallest reported for any month this year, excepting February. Somewhat more active trading accompanied the higher prices in September.

### Bond Market

In September, bond prices resumed the advance which had been interrupted during August. Trading was more active, and by September 20 representative averages rose 1 to 1½ points above the levels of August 20 and 4 points or more above the average in the middle of June. A number of issues reached new high levels for the year. These gains were apparently based chiefly on continued evidence of an easier tendency in money, and the same industrial developments which affected the stock market.

Advances were distributed with fair uniformity through railroad, industrial, public utility, and foreign government groups. The continued strength of foreign issues was noteworthy, indicating that the American investment market, though comparatively unaccustomed to foreign investment, has absorbed the large amount of foreign financing done here in the past two years.

Japanese bonds continued active, and in late August reached new high prices for the year, from which, however, there was some reaction. The Japanese Government announced that it had purchased in the open market and retired £6,352,240 of its 4½ per cent. sterling bonds, which, together with previous retirements, leaves £36,323,280 outstanding of the two series of £30,000,000 each originally issued. Toward the close of September Mexican bonds made rapid advances in price.

August sales of corporation and miscellaneous bonds on the New York Stock Exchange were the smallest reported for any month this year, and 40 per cent. less than sales in August last year.

### United States Securities

Beginning about the second week of September, trading in Liberty bonds became active, and prices rose 1 to 1½ points to the highest levels reached this year. Victory notes were heavily traded in, and likewise established higher prices. The tax exempt 3½s, on the other hand, declined. The following table shows the changes in prices since the first of July.

Issue	Closing Price July 1	Closing Price September 20	Advance
Liberty 3½s.....	86.30	87.86	1.56
Liberty 1st 4s.....	87.30	89.20	1.90
Liberty 2nd 4s.....	86.80	89.30	2.50
Liberty 1st 4¼s.....	87.40	89.28	1.88
Liberty 2nd 4¼s.....	86.90	89.34	2.44
Liberty 3rd 4¼s.....	91.00	92.94	1.94
Liberty 4th 4¼s.....	87.24	89.54	2.30
Victory 4¾s.....	98.40	99.12	.82
Victory 3¾s.....	98.40	99.12	.72

August sales of Government bonds on the New York Stock Exchange were \$71,000,000, the smallest total reported for any month this year, and a little more than half as large as sales in August last year. By the second week of September, however, weekly sales were almost double the August weekly average.

The September 15 offerings of Treasury certificates and three-year notes, offered on a basis  $\frac{1}{4}$  of one per cent. lower than preceding issues, were heavily oversubscribed, as shown in the following table. The longer term issues were in the greatest demand.

(Figures in millions of dollars)

Issue	Rate	NEW YORK DISTRICT		ALL DISTRICTS	
		Subscriptions	Allotments	Subscriptions	Allotments
3-yr. Treasury Notes.....	5½	\$361	\$147	\$785	\$391
1-yr. Treasury Cfts.....	5¼	190	80	463	183
6-mo. Treasury Cfts.....	5	132	48	340	124
Total.....		\$683	\$275	\$1,588	\$698

These issues, in common with other Government short term issues, are selling in the open market at a premium. On September 20, the six-months 5 per cent. certificates were quoted at an offering price to yield 4.60 per cent., the one-year 5¼s to yield 5.02 per cent., and the three-year 5½ per cent. notes to yield 5.37 per cent.

### New Financing

The market for new financing was dull during August, when the total of new issues amounted to only \$139,000,000. In September, however, there were larger offerings, some of which were made at rates distinctly lower than those of preceding months. On September 22, a syndicate of bankers offered, at a 5.75 to 5.80 per cent. yield, issues of equipment trust 6 per cent. certificates totaling \$12,038,800, purchased from the United States Railroad Administration under the plan for making cash available for payment of claims of the railways against the Government, and for funding their debts to the Government for improvements made during the period of Government control. These yield rates were the lowest offered this year on new securities with the exception of Government issues, and were the first break below 6 per cent. on the current downward movement. Up to and including September 22, total purchases by bankers and others of equipment trust certificates from the Railroad Administration amounted to \$63,482,600. The purchase rate in all cases was 6 per cent.

One of the larger individual offerings in September was an issue of \$25,000,000 Canadian National Railways 6 per cent. 15-year non-callable gold debenture bonds, offered at a price to yield 6½ per cent. to the investor. This was  $\frac{1}{2}$  of one per cent. lower than the rate on similar offerings during the early months of the year, and slightly the lowest rate offered on any railroad issue this year, excepting the equipment trust certificates. Canadian

provincial and municipal financing in this market was active, and there were several fair-sized offerings of domestic railroad, industrial, and public utility issues, though the aggregate of the latter was considerably less than in former active periods. The demand for bonds was large, particularly for the longer non-callable maturities.

Late in August, a banking syndicate distributed \$25,000,000 20-year non-callable 8 per cent. bonds of the Brazilian Government, upon a basis to yield 8.15 per cent. to the investor, a slightly lower yield than was offered on a similar issue in May.

### Gold Movement

August imports of gold totaled \$86,202,000, the largest amount received in any month this year except March. Exports were only \$672,000. The heaviest shipments were from France and England. From these two countries has come more than 56 per cent. of the gold imported thus far in 1921. Sources of imports are shown in the following table.

(000 omitted)

Country	First Quarter	Second Quarter	July	August	Total Jan. 1-Aug. 31, 1921
England.....	\$51,163	\$51,078	\$21,656	\$19,202	\$143,108
France.....	45,235	28,013	27,974	34,999	136,311
Sweden.....	4,679	37,991	42	12,110	54,822
Canada.....	20,553	4,535	195	2,654	27,937
China and Hong Kong.	12,508	6,804	1,205	1,607	22,124
British India.....	8,018	9,065	2,094	4,563	23,803
Netherlands.....	1,557	14,159	1,086	879	17,681
All Other.....	19,759	30,713	9,996	10,188	70,656
Total Imports.....	\$163,535	\$182,457	\$64,248	\$86,202	\$496,442
Total Exports.....	4,471	2,219	3,735	672	11,097
Excess Imports.....	\$159,064	\$180,238	\$60,513	\$85,530	\$485,345

### Foreign Exchange

The market for sterling exchange during the past month has been dull and inactive, with an undertone of strength which is probably accounted for mainly by the steady flow of gold imports and by the absence of large offerings of cotton and grain bills which are customary at this time of year.

The continental exchanges have been irregular with rates in general on a lower level than at the beginning of September. This has been particularly true in the case of reichsmarks which have declined from 1.15 cents to .815 cent on September 27. The weakness in marks is reported to emanate from abroad and is generally attributed to operations of the German Government incident to reparations payments, speculation in marks both in Germany and the principal financial centers, and the internal financial situation in Germany, in particular the rapid increase in her paper currency. Exchange on the central European countries has also continued to fall.

The principal development in the South American exchanges has been the rise in Argentine pesos which advanced from 30 cents to 33 cents for checks as a result of the successful arrangement for the \$50,000,000 loan to the Argentine. Brazilian exchange has also shown improvement. The Far Eastern exchanges, Hong Kong dollars and Shanghai taels, have also advanced.

Gold is reported to be selling at a slight premium in Bombay, and India has again become a buyer in the London gold market.

The following table shows the changes that have occurred in the principal exchanges during the past month, and likewise the changes since the first of May before the formulation of the plan for reparations payments.

Country	Sept. 20 Last	Change from Aug. 20	Per Cent. Depreciation from Par	Per Cent. Change May 2- Sept. 20
England.....	3.7125	+ .0525	23.7	- 6.3
France.....	.0702	- .0073	63.6	-10.1
Italy.....	.0418	- .0011	78.3	-13.3
Germany.....	.0093	- .0024	96.1	-10.4
Belgium.....	.0702	- .0058	63.6	-10.1
Holland.....	.3146	+ .0053	21.7	-10.4
Switzerland.....	.1720	+ .0029	10.9	- 2.3
Spain.....	.1300	+ .0010	32.6	- 6.9
Sweden (Stockholm).....	.2162	+ .0027	19.3	- 8.2
Argentina.....	.2993	+ .0048	29.5	- 3.9
Brazil.....	.1248	+ .0084	77.2	- 2.7
Japan (Yokohama).....	.4813	- .0025	3.5	- 0.2
China (Hong Kong).....	.5238	+ .0200	*	+ 2.9
China (Shanghai).....	.7313	+ .0400	*	+ 8.9
India.....	.2625	+ .0037	19.1	+ 1.4
Canada.....	.8969	- .0031	10.3	+ 0.3
Bar Silver in N. Y.....	.6363	+ .0375	....	+ 6.9

## Foreign Trade

For some commodities, notably cotton and steel, there has been a more active export demand in the past month, but for certain other important export commodities, such as wheat, copper, and cotton goods, the market has become quieter. Exporters doing business with Australia and South Africa state that orders have increased gradually, while those concerned chiefly with South America have little change to report.

There has been a heavy export movement of cotton, accompanied by active new buying, particularly by Germany, Italy, Japan, and China. Though weekly shipments fell off compared with the average for July, the total from August 1 to September 23 was over 723,000 bales, nearly two and a half times larger than in the corresponding period of last year, and somewhat above the total for the same period in 1919. The demand for cotton goods, which had become active in preceding months, was largely diminished as a result of the sharp rise in prices.

Foreign steel buying became larger, particularly in the Far East, where large orders of sheets, tin plate, and rails were sold. Some broadening in the market

was indicated in the receipt of business from Australia, lately a quiet quarter. American producers have lowered prices nearer to a competitive basis with those of foreign companies, and there are reports that in certain cases deliveries of foreign producers have not been satisfactory.

Export demand for American wheat became much quieter after the first week of September, following active buying up to that time. Exports from July 1 to September 17 were 87,700,000 bushels, compared with 88,800,000 bushels in the corresponding period last year.

During August the value of both exports and imports was greater than during July, according to the monthly summary of foreign trade issued by the Department of Commerce. The downward movement that has continued since December, 1920, is thus arrested. The pause in the decline is in part due to a greater stabilization of prices, and in part to heavy shipments of wheat during August and a larger movement of other foodstuffs, oils, and oil products.

The following table gives the figures for the value of exports and imports reported by the Department of Commerce.

(Thousands of dollars)

Month	Exports	Imports	Excess Exports
January.....	\$654,271	\$208,797	\$445,474
February.....	486,454	214,530	271,924
March.....	386,680	251,969	134,711
April.....	340,364	254,579	85,785
May.....	329,710	204,911	124,799
June.....	336,899	185,781	151,118
July.....	320,709	178,637	142,072
August.....	375,000	194,000	181,000

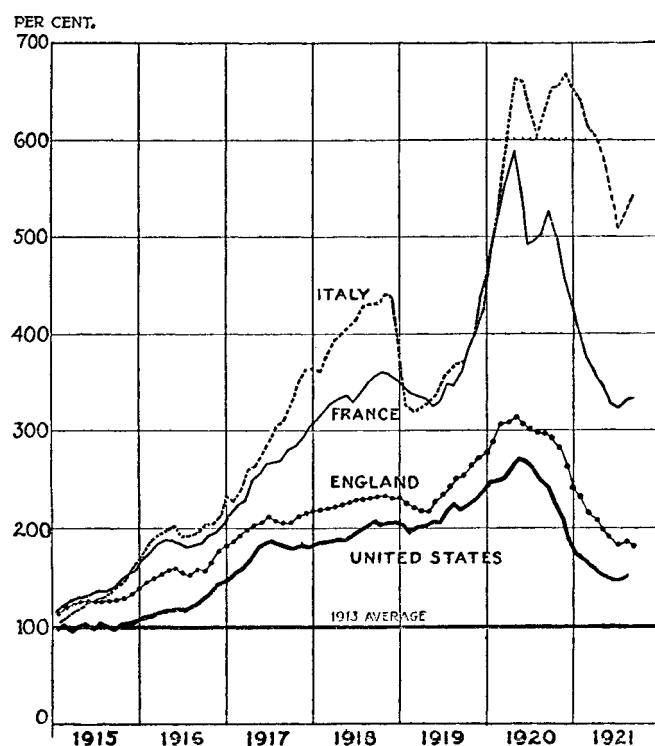
A comparison of monthly price averages, as shown by the Department of Labor's index, with the monthly foreign trade figures, provides some measure of the extent to which the decline in the value of exports has been due to lower prices, or to actual reduction in shipments. During the three months ended with August, the value of exports averaged about 50 per cent. lower than the monthly averages during 1920, while the average of commodity prices, according to the Department of Labor's index, was about 39 per cent. lower.

## World Commodity Prices

There were comparatively minor changes in wholesale price averages throughout the world during August. The indices continued to give evidence that the downward movement had been stayed in most countries, but there was little evidence of a general upward tendency.

The most notable changes were in the nature of readjustments between the prices of different groups of commodities. In general, those groups in which prices have receded to points nearest to the 1913 level have shown some recovery. Textiles, farm products, and foods are examples of groups in which prices have risen. As a result the range between the prices of different groups has been diminished.

The price index in Germany continued to rise during August, accompanying a reduction of gold holdings of the Reichsbank and the continued depreciation of the mark in exchange.



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

## Domestic Commodity Prices

For the first time since May, 1920, the index of wholesale prices compiled by the United States Department of Labor shows an increase over the figure for the preceding month. The index of average prices in August was 152, as compared with 148 for July. Of the 327 commodities included in the list from which the index is obtained, 99 increased in price, 123 decreased, and 105 remained stationary, but the principal increases were in the important farm products and food groups, which are more heavily weighted than other groups in making up the index number.

The August changes tend still further to bring different groups of the index nearer to a common level although there is still a wide range between the highest and the lowest groups.

(1913 average = 100.)

Commodity Group	1920 Maximum Level	1921 July Level	1921 August Level	PERCENTAGE CHANGE	
				Maximum to August	July to August
Farm Products.....	246	115	118	-52.0	+ 2.6
Metals.....	195	125	120	-38.5	- 4.0
Food, etc.....	287	134	152	-47.0	+13.4
Chemicals, etc.....	222	163	161	-27.5	- 1.2
Cloths and Clothing	356	179	179	-49.7	0.0
Fuel and Lighting..	284	184	182	-35.9	- 1.1
Building Materials..	341	200	198	-41.9	- 1.0
House Furnishings..	371	235	230	-38.0	- 2.1
Miscellaneous.....	247	149	147	-40.5	- 1.3
All Items.....	272	148	152	-44.1	+ 2.7

## Indices of Wholesale Prices

Base of 1913 = 100 unless otherwise noted

Country	Latest Quotation	Per Cent. Change During			Per Cent. Decline from High	Date of High
		June	July	August		
United States:						
12 basic commodities*	105 (Sept. 24)	-7.6	- 0.3	+1.3	57	May 17, 1920
Department of Labor.....	152 (Aug. Av.)	-2.0	0.0	+2.7	44	May, 1920
Dun's.....	135 (Sept. 1)	-3.7	+ 2.4	-0.7	38	May 1, 1920
Bradstreet's.....	120 (Sept. 1)	+1.0	+ 3.0	+0.3	47	Feb. 1, 1920
Great Britain:						
Economist.....	179 (Sept. 1)	-2.1	- 0.2	+0.4	42	Apr. 1, 1920
Statist.....	183 (Sept. 1)	-3.9	+ 1.5	-1.7	42	May 1, 1920
20 basic commodities*	158 (Sept. 24)	-1.7	- 1.3	-2.4	54	May 21, 1920
France.....	333 (Sept. 1)	-1.3	+ 1.6**	+0.9	43	May 1, 1920
Italy.....	542 (Sept. 1)	-7.0	+ 2.2	+4.2	19	Dec. 1, 1920
Japan.....	196 (July Av.)	+0.6	+ 2.3		39	March, 1920
Canada.....	174 (Aug. 15)	-1.9	- 1.6	-0.9	34	May 15, 1920
Sweden†.....	198 (Aug. 15)	0.0	- 3.2	-6.2	47	Dec. 15, 1918
Australia‡.....	159 (July Av.)	-2.4	- 1.9		33	August, 1920
Calcutta§.....	183 (Aug. 1)	-3.3	+ 2.8		16	Feb. 1, 1920
Norway.....	284 (Sept. 1)	-0.6	+ 6.8	-2.8	34	Oct. 1, 1920
Germany  .....	1802 (Sept. 1)	+6.6	+17.4**	+3.1	0	Sept. 1, 1921
Denmark¶.....	256 (Aug. 1)	-0.4	+ 1.2		36	Nov. 1, 1920

\*Computed by this bank. †July 1, 1913, to June 30, 1914 = 100. ‡July, 1914 = 100. §End of July, 1914 = 100. ||Middle of 1914 = 100. ¶July, 1912, to June, 1914 = 100. \*\* Revised.

The outstanding price development of the early weeks of September was a striking rise in the price of cotton from 13 cents a pound in the latter part of August to 21 cents on September 10. The rise followed the announcement by the Bureau of the Census that the condition of the cotton crop indicated a yield of 127 pounds an acre, the smallest yield per acre since 1870. The estimates placed the total crop at 7,035,000 bales, slightly more than half as large as the 1920 crop and the smallest since 1892. Higher cotton prices were followed by an advance of about 30 per cent. in the prices of manufactured cotton goods and trading in these products was checked.

Other recent important changes in the prices of basic commodities were a rise in wheat prices from \$1.16 on August 23 to \$1.34 on September 10, followed by a reaction to \$1.24; and an advance in the prices of pig iron and several steel products. The composite price of seven important finished steel products continued to decline, however.

### Civil War and World War Price Changes

The following diagram brings into comparison the monthly fluctuations in the wholesale prices of fourteen important basic commodities during the Civil War and World War periods. For both periods the prices of exactly the same commodities were used and in many cases, of exactly the same specifications. Price quotations for the Civil War period were obtained from a large number of sources, including the Annual Reports of the Secretary of the Treasury, the American Iron and Steel Institute, the report of the Senate Committee on Finance, (1893), and a considerable number of private

sources. For the Civil War index, average prices in the year 1860 were taken as a base of 100 per cent., and for the World War period, the average prices in 1913.

The upward movement of the prices of these commodities was almost identical until the year before the termination of hostilities. In the Civil War period prices began to drop before peace had been signed in 1865, probably in anticipation of the early conclusion of the war; while in the more recent war period there was no decline until the actual signing of the Armistice.

The major difference between the price fluctuations in the two periods occurred, however, after the close of the war. After the Civil War there was no recurrence of war prices, but in 1919 prices began a steady climb which lasted for a full year. The difference at this point is probably due in part to the fact that the price increases of the Civil War period were in the main peculiar to the United States and with the resumption of normal international relations, prices settled back to the world price level. At the conclusion of the World War, however, this country found itself on a lower price level in relation to prewar figures than most of the other countries of the world whether prices were computed on a gold or on a currency basis, and at the same time the country was subject to influences which were world-wide.

In the Civil War period the peak of prices for these fourteen identical commodities was 136 per cent. higher than the prewar level, while prices in 1920 reached a point 182 per cent. above the prewar level. The maximum decline in 1864-1865 was 39 per cent. in a period of 10 months, while in 1920-1921, the decline was 57 per cent. and lasted for 12 months.

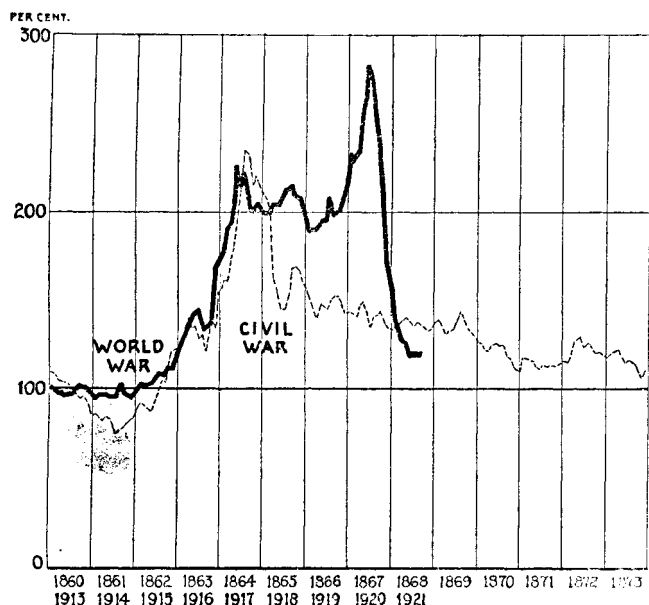
The fourteen commodities, prices of which were used in making up the index, are wheat, corn, hogs, steers, sugar, hides, wool, pig iron, copper, lead, coal, petroleum, sulphuric acid, and tobacco.

### Cost of Living

The National Industrial Conference Board has reported an increase of 1.7 per cent. in the cost of living for a wage earner's family during August, the first notable increase since the downward trend began in July, 1920. Of the various groups which go to make up the cost of living index number, food advanced in price 4.7 per cent.; clothing declined in price 1.3 per cent.; all other items remained unchanged. Living costs are now 64.8 per cent. higher than in July, 1914.

Items	September 1 Index	Per Cent. Decline from High	Per Cent. Change During August
Food.....	155	29.2	+4.7
Clothing.....	157	45.5	-1.3
Shelter.....	169	1.2	0.0
Fuel and Light.....	179	10.5	0.0
Sundries.....	183	4.7	0.0
All Items.....	164.8	19.4	+1.7

The increase of 4.7 per cent. in food prices is accounted for by an increase of from 8 to 13 per cent. for dairy products and smaller increases in meat and canned goods. In



Monthly Price Index of 14 Basic Commodities During Two War Periods. Prewar Year in Each Case is Taken as the Base of 100 per cent. Prices of the Same Commodities are Included for Each Period

general, the largest increases occurred in the industrial centers east of the Mississippi and north of the Ohio. In Rochester the increase was 8 per cent., in Buffalo, 7 per cent., and in New York, 6 per cent.

In the United Kingdom the cost of living declined 1 per cent. during August. It is still 120 per cent. above the prewar figures.

### Production of Basic Commodities

Available figures indicate that the production of basic commodities during August was larger than during July. Of thirteen production indices given for August in the following table, nine show increases, one is the same as last month, and three show slight decreases.

Iron and steel production shows, for the first time in many months, a distinct improvement. The consumption of cotton during August was the greatest in any month since August, 1920, reflecting an increased demand for cotton goods. The woolen mills are reported to have sufficient orders on their books to insure full time operations until next spring. The production of silk goods, for which there is no available index for the United States as a whole, has continued to decline somewhat. Mills in this district were operating at about 30 per cent. of capacity in September as compared with 40 per cent. in August and nearly 60 per cent. in the spring. Retailers have thus far placed only small orders for silk goods for fall. Mills manufacturing silk hosiery are, however, operating at capacity and the demand for their product is exceptionally large.

The following table gives the available figures for monthly production as percentages of normal production. Allowance has been made for the normal increase in production from year to year and the normal seasonal variation from month to month.

(Normal production = 100)

Commodity	Av. Jan.- March	April	May	June	July	Aug.
Anthracite coal mined...	103	102	90	93	94	92
Bituminous coal mined...	64	63	69	67	61	63
Pig iron production...	58	33	34	31	26	28
Steel ingot production...	58	36	38	31	26	36
Zinc production...	52	43	47	50	40	38
Lead production...	66	59	63	64	63	..
Tin deliveries...	31	31	24	31	30	64
Copper production...	67	40	19	15	13	16
Gasoline production...	103	95	92	89	84	..
Cement production...	79	88	83	84	89	89
Cotton consumption...	62	63	67	71	64	75
Wool consumption...	70	98	104	109	97*	96
Wheat flour milled...	89	114	105	103	148	174
Sugar meltings...	85	96	82	81	84	106
Meat slaughtered...	90	100	96	101	88	113

\*Revised

### Commodity Stocks on Hand

The continued rapid movement of grain to primary markets has resulted in a piling up of stocks on September 1 far larger than those normally held at primary markets

at that time. In the case of corn, barley, and rye, September 1 figures show a considerable increase over stocks for August 1. Stocks of wheat are lower than those of most other grains, largely because of the heavy export movement. For the first seven months of this year exports of wheat have been twice as heavy as for the first seven months of 1920.

Figures showing stocks on hand compiled by this bank for September 1 show no other striking changes. Sugar stocks are up a little from the low point reached on August 1, and zinc and tin stocks, which have been considerably above normal, have decreased somewhat. Paper stocks continue above normal, although production has been low. The high stock figures reflect in part a decreased volume of advertising.

There are added to this month's table figures for the stocks of frozen poultry, frozen and cured meat, dairy products and eggs, flour, paper, paper pulp, and bonded lead. The figures of this table show actual stocks as percentages of normal stocks, allowance having been made for normal changes from year to year and from month to month.

(Normal stocks = 100)

	Av. Jan. 1- Mar. 1	May 1	June 1	July 1	Aug. 1	Sept. 1
Sugar.....	68	74	76	64	45	52
Cotton.....	104	125	134	145	157	164†
Coffee.....	95	114	113	97	95	93
Tobacco.....	113	...	...	115	...	...
Wheat.....	60	30	37	39	145	140
Oats.....	251	262	324	437	766	727
Corn.....	93	183	224	284	208	222
Barley.....	90	114	151	220	310	353
Rye.....	143	124	142	99	248	599
Flour (in Chief Centers)...	116	87	86	75	79	106
Frozen Poultry.....	90	106	105	92	78	75
Frozen and Cured Meat..	88	92	96	100	94	87
Dairy Products and Eggs..	95	171	127	111	101	100
Total Paper.....	120	144	143	142	137	...
Total Paper Pulp.....	113	157	164	158	146	...
Zinc.....	263	279	293	315	324	303
Nitrate (at Chile Ports)...	152	143	131	116	108	104
Gasoline.....	100	106	119	118	125	...
Tin (World Visible Supply).	116	118	123	131	139	133
Fuel Oil.....	129	149	164	176	179	...
Petroleum.....	86	97	102	108	113	...
Portland Cement.....	91	101	102	97	98*	89
Bonded Lead.....	426	168	188	185	181	...

\*Revised

†Preliminary

### Employment

During the past month there probably has been a slight increase in the number of persons employed in this district, due principally to somewhat greater activity in a number of industries. The approach of cold weather, however, and the cumulative effect of unemployment in the reduction of savings and in the reduction of the number of vacant positions have brought the subject more forcefully to public attention.

A large shipbuilding establishment in this district has prepared figures showing what part of the monthly

turnover of its force has been due to resignations and what part to dismissals. A year ago, out of about 3,000 who left the employ of the plant each month considerably more than two-thirds resigned. Last month, out of 2,600 terminations of employment there were 324 resignations. Further indication of the difficulty in securing work at the present time is found in the percentage of orders for workers to applications for work received at New York State employment offices. The latest reported percentage (69) is slightly the lowest since March of this year.

That the effects of unemployment have not as yet been as severe as in 1914-1915 is indicated by the following figures for the number of families under the care of the Charity Organization Society of New York each month.

Year	June	July	August	September
1914.....	2,789	2,797	2,749	2,668
1915.....	3,289	2,966	2,675	2,410
1921.....	2,110	2,044	1,951	.....

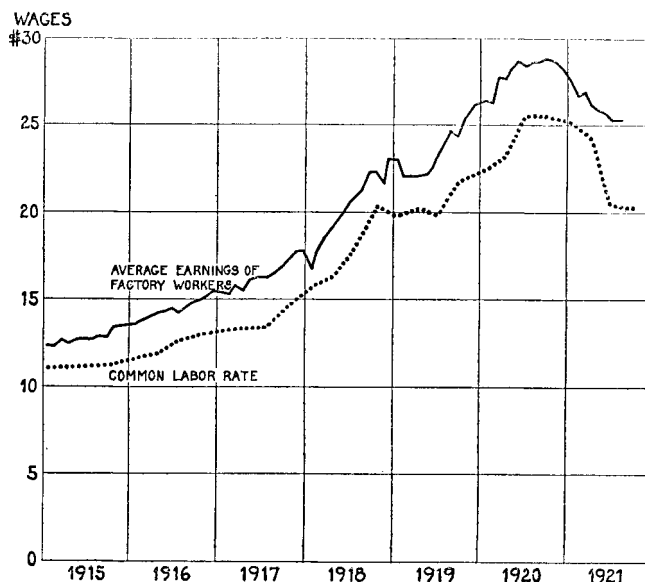
The absence of any widespread need for assistance following large reductions in the working forces of many industries may be accounted for in a number of ways. During the war years and in 1920 an unusually large proportion of the population was drawn into industry, and agriculture and domestic and personal service were left correspondingly undermanned. This fact is demonstrated by the preliminary figures of the 1920 census of occupations. The proportion of the population which was gainfully employed in 1920 was not extraordinarily large. Industry took its extra workers not so much from the school and the home as from other occupations. In the past few months many workers released from industry have gone back to their previous occupations. Then again war wages made possible large savings, and at present continued high wage rates and a reduced cost of living make possible a reduction in the number of wage earners to a family without serious consequences. An extraordinarily large school enrollment this year indicates that a not inconsiderable part of the reduction in the number of industrial workers has been absorbed by the schools.

A national conference on unemployment, called by President Harding and including in its membership representatives from industry, commerce, finance, and agriculture, has begun its sessions in Washington.

## Wages

In order to secure a current index of changes in wage rates, as distinguished from average earnings, this bank has gathered from representative employers in this district figures showing by quarters since 1913 the average hourly wages of male common or unskilled labor, together with figures showing the average number of hours in the working day. The returns cover building laborers, railroad laborers, and laborers in a variety of industries.

The following diagram compares the average weekly rate of pay of male common labor as shown by the figures



Average Weekly Earnings of Factory Workers in New York State and the Average Weekly Wage Rate for Male Common Labor in the Second Federal Reserve District

reported to this bank, with the average weekly earnings of workers in New York State factories as reported to the New York State Department of Labor. The average weekly earnings figures include data for women as well as for men and for skilled as well as unskilled operatives. They also reflect part time employment and changes in the type of person employed rather than rates of pay alone. In spite of these differences, the two lines have run remarkably close together. Both indices in 1920 reached a point about 130 per cent. higher than in 1914. The rate of pay for common labor has declined to a point 84 per cent. higher than in 1914, while average weekly earnings are still about twice as high as in 1914. The lesser decline in average earnings is due partly to the fact that the less efficient and less highly paid workers in factories have been discharged first and partly to the fact that the pay of skilled workers changes less rapidly than the pay of the unskilled. The most frequent wage for unskilled labor is now 40 cents an hour, or a little over three dollars for an eight-hour day. A recent slight increase in the average weekly earnings in New York State factories is due to the seasonal inauguration of a longer working week in several industries.

A reduction in rates of pay continues in various occupations. A new agreement between the steamship companies and the longshoremen's unions provides for a reduction of 20 per cent. in rates of pay. The Secretary of the Navy has announced reductions ranging from 13 to 30 per cent. in the wages of 70,000 civilian employees of the Navy. The arbiter in a controversy over building trade wages in the Chicago district has rendered a decision ordering reductions ranging from 10 to 33 per cent. with an average in the neighborhood of 20 per cent. The award makes a complete realignment of building wages on the basis of the relative skill required by different types of work.

## Volume of Building

Building construction increased substantially in volume in August due partly to the settlement of wage disputes in a number of moderate sized cities in New York and other eastern States. In New York and Northern New Jersey the value of contract awards in August reported by the F. W. Dodge Company was 11 per cent. greater than the July totals, while construction activity in the twenty-seven northeastern States increased about 4 per cent. More than half the construction in New York and Northern New Jersey thus far in 1921 has been residential, and for August this type of building constituted nearly three-fifths of the total.

## Railway Traffic

The movement of railway freight traffic in both August and September showed a normal seasonal gain and was at a higher rate than in any previous month since December, 1920. Railroads centering upon the port of New York report particularly heavy traffic in recent weeks due to a temporary freight blockade at Montreal as a result of the large export grain movement. Several leading systems have also reported an increased westward movement of goods during September, mainly small shipments of miscellaneous goods and manufactured articles. Freight traffic is still about 15 per cent. less than in corresponding weeks in 1920.

## Retail Trade

The dollar value of sales of department stores in this district during August was 4.2 per cent. less than during July, a normal seasonal decrease. But as compared with August, 1920, there was a decrease of 5.2 per cent. whereas the year-to-year decline shown in July was 11.5 per cent. This difference may be accounted for by the fact that the volume of sales had begun to decline in August, 1920.

The number of individual sales in August was 18.2 per cent. greater than in August, 1920. This substan-

tiates previous evidence that the volume of merchandise sold by department stores is greater than that sold last year. The average individual sale was \$2.59 compared with \$3.11 in August, 1920, a decrease of about 17 per cent.

Sales in the larger cities of this district compare more favorably with those of last year than the sales in the smaller cities. New York, Brooklyn, Buffalo, Newark, and Rochester stores report declines in sales ranging from 3 to 7 per cent. while those elsewhere in the district show declines of 10 to 12 per cent. This reverses a previous tendency; for up to July sales outside of the larger cities tended to be in better volume as compared with last year. Stores that sell wearing apparel exclusively show a smaller decrease than stores that handle both apparel and house furnishing goods.

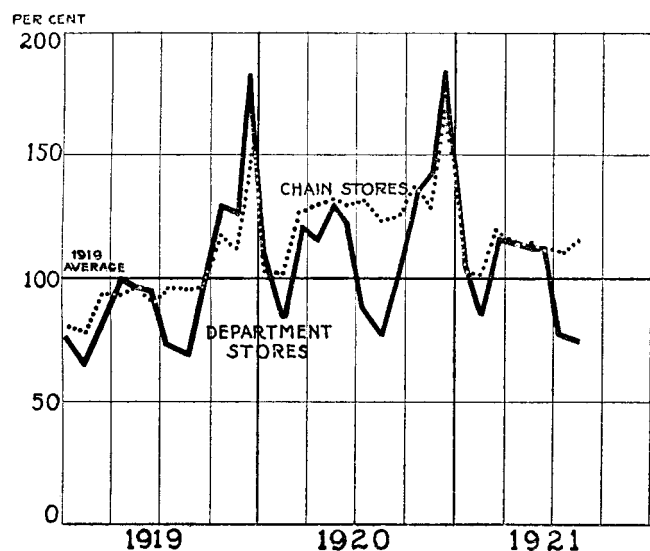
A distinct advance during August is shown by the sales of 8 leading chain store systems. Mail order sales also show an improvement in August, but the improvement is in this case largely seasonal as fall sales begin early for mail order houses. The following table shows the changes in net sales of the leading chain store systems and mail order houses as compared with those of department stores:

	NET SALES IN AUGUST, 1921 COMPARED WITH		
	July 1921	August 1920	August 1919
Department Stores.....	- 4.2	- 5.2	+ 6.8
Chain Stores.....	+ 5.1	- 5.6	+21.6
Mail Order Houses.....	+14.9	-28.1	-30.6

The following diagram compares the fluctuations in sales by 8 nation-wide chain store systems, and by department stores in this district during 1919, 1920, and thus far in 1921. The chain store figures are affected by the occasional addition of new stores although this has not recently been a large factor.

## 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 August, 1921, compared with net sales in August, 1920.....	- 4.1	- 6.2	- 6.4	- 3.1	- 9.4	-11.2	- 3.3	- 5.2
Per cent. change in number of transactions in August, 1921, compared with number of transactions in August, 1920.....	+24.9	+ 8.9	+ 7.9	..	....	+ 8.2	+16.5	+18.2
Per cent. change in net sales from July 1, 1921, to August 31, 1921, as compared with same period in 1920.....	- 8.2	- 7.6	-10.2	- 4.5	-12.0	-14.3	- 4.2	- 8.6
Per cent. change in stocks at close of August, 1921, compared with stocks at close of July, 1921....	+ 4.0	+ 4.8	+ 7.0	+ 5.4	+ 4.9	+ 1.0	+24.1	+ 5.2
Per cent. change in stocks at close of August, 1921, compared with stocks at close of August, 1920...	-23.1	-21.6	-19.8	-25.1	-24.6	- 9.1	-15.9	-21.2
Percentage of stocks at close of July and August, 1921, to net sales during same months.....	455.6	462.0	459.1	445.2	498.1	557.4	313.7	453.7
Percentage of outstanding orders (cost) at close of August, 1921, to total purchases during calendar year 1920.....	7.5	10.0	5.7	11.7	....	8.3	14.2	8.3



Sales of 57 Department Stores in the Second District and 8 Leading Chain Stores Doing a Country-Wide Business (Average Monthly Sales in 1919 = 100 per cent.)

Stocks of department stores increased 5.2 per cent. between August 1 and September 1, a normal change due to initial shipments of fall and winter merchandise. The value of stocks at the selling price is now 21 per cent. below the value of those held last year, a decline largely due to price changes.

Merchants are placing orders for their fall and winter requirements with greater confidence. Orders outstanding on September 1 were 8.3 per cent. of the total purchases in 1920. Merchants who have delayed placing large forward orders report that they have not recently been deterred by the prevailing wholesale price levels or the expectation of lower prices later on, but by uncertainty as to the ability of the public to continue buying at the present rate, in view of the large number of unemployed.

## Wholesale Trade

In most lines August sales by representative wholesale houses that have submitted reports to this bank show sharp increases over sales during July. While in several of the lines increases are normal for the season, and in several others, sales figures are slightly larger because of price increases, the upward movement is sufficiently marked to indicate a genuine increase in the volume of goods sold.

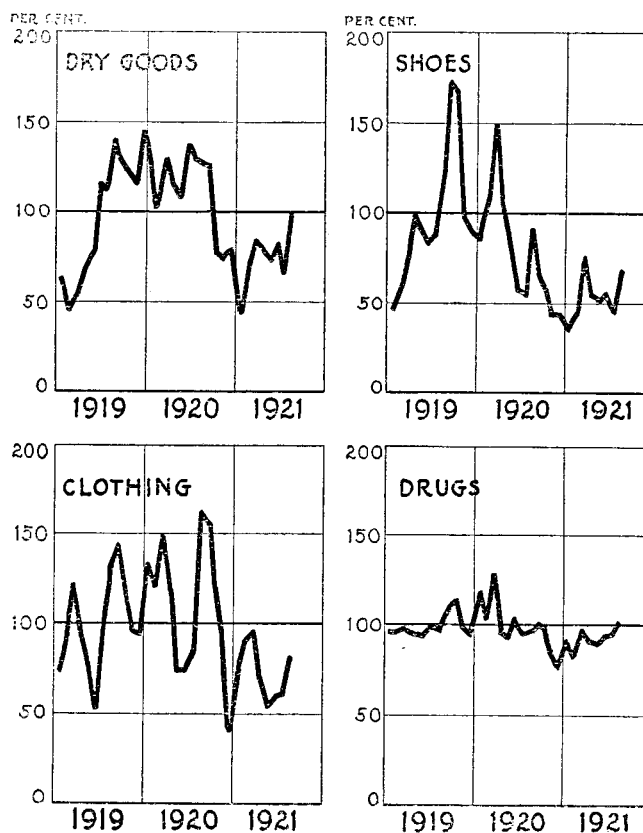
With the exception of drugs, dealers in all lines report a decrease in sales as compared with sales during the corresponding month in 1920. The decrease in the value of sales, however, in a number of cases has not been as large as the decline in prices, and in these cases the volume of merchandise sold is as large as that sold last year.

Changes in the dollar value of sales in August as compared with sales in July and with sales in August of the

two previous years are shown in the following table together with an estimate of the price changes since last year.

Commodity	Estimated Per Cent. Decline in Prices August, 1920 to August, 1921	Per Cent. Change in Sales August, 1920 to August, 1921	Per Cent. Change in Sales August, 1919 to August, 1921	Per Cent. Change in Sales July, 1921 to August, 1921
Drugs.....	25	+ 3.0	+ 2.7	+ 7.5
Groceries.....	35	-13.4	-20.5	+24.7
Dry Goods....	45	-22.4	-28.7	+51.4
Shoes.....	35	-25.4	-44.3	+44.4
Stationery....	33	-34.3	-16.2	+ 3.7
Hardware.....	38	-45.1	-31.1	+ 1.2
Clothing.....	40	-57.4	-44.9	+32.7
Machine Tools	38	-83.9	-82.3	-33.0

The following diagrams show the fluctuations in sales by wholesale dealers in clothing, shoes, dry goods, and drugs during 1919, 1920, and thus far in 1921. They represent the dollar value of sales and are expressed in percentages of the average monthly sales for the year 1919. The general trend of the lines follows the course of prices during the past three years.



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

## Retiring Excess Credit Under the Federal Reserve System

**I**N last month's REVIEW the mechanism of expansion under the Federal Reserve system was described. A description of the reverse process by which excess credit is retired will be of interest at this time.

Just as the increasing demands of a bank's customers for funds cause an increase of the loans and deposits of a bank and in turn of the loans, deposits and circulation of a Federal Reserve Bank, so the decreasing demands of a bank's customers for funds cause a decrease of a bank's loans and deposits and in turn of the loans, deposits and circulation of a Federal Reserve Bank. In other words, the first step in a reduction in the volume of credit, as in its expansion, is taken by a bank's customers; the second step is taken by the banks themselves, and the third step is registered on the books of the Reserve Bank.

While an inspection of what has already taken place will give the clearest idea of the processes by which excess credit is retired, it should be understood, however, that our recent experience is probably not typical of what might be anticipated under normal conditions. The loans of the Federal Reserve Banks reached their highest point on October 15, 1920, the same date on which the loans of member banks in the principal cities throughout the country reached their maximum. A comparison of the principal items is as follows:

### RESOURCES (In millions of dollars)

	October 15, 1920	Sept. 21, 1921	Increase or Decrease
Gold reserves.....	\$1,992	\$2,711	+ 719
Other reserves.....	163	152	- 11
Total earning assets.....	3,422	1,652	-1,770
Uncollected items.....	998	592	- 406
All other resources.....	35	54	+ 19
<b>Total Resources.....</b>	<b>\$6,610</b>	<b>\$5,161</b>	<b>-1,449</b>

### LIABILITIES (In millions of dollars)

	October 15, 1920	Sept. 21, 1921	Increase or Decrease
Member bank reserve deposits	\$1,868	\$1,588	- 280
Other deposits.....	48	103	+ 55
Deferred availability items....	777	503	- 274
Federal Reserve notes in actual circulation.....	3,353	2,475	- 878
Federal Reserve bank notes in actual circulation.....	214	103	- 111
All other liabilities.....	350	359	+ 39
<b>Total Liabilities.....</b>	<b>\$6,610</b>	<b>\$5,161</b>	<b>-1,449</b>

In the following summary, the Reserve Bank credits which were retired have been grouped so as to include earning assets—that is, the loans made by Reserve Banks to member banks, the bankers acceptances held by the Reserve Banks and the Government securities held by them—collection items, such as checks in process of collection, Federal Reserve notes and bank notes held by Reserve Banks other than those which issued them, together with national bank notes held by Federal Reserve Banks; and a small amount of miscellaneous assets. The means by which the retirement of Reserve Bank credits was accomplished have been grouped to

include the increase of reserves, the decrease of deposits, and the decrease in Federal Reserve note and bank note circulation. The period covered is from October 15, 1920, to September 21, 1921.

### Retirement of Reserve Bank Credits:

<b>1. DECREASED EARNING ASSETS</b>	
Member banks reduced their discounts and advances at the Reserve Banks .....	\$1,387,000,000
The Reserve Banks held less acceptances.....	286,000,000
The Reserve Banks held less Government securities.....	97,000,000
<b>2. DECREASED COLLECTION ITEMS</b>	
The Reserve Banks had a smaller net amount of items in process of collection.....	132,000,000
<b>3. DECREASED MISCELLANEOUS ASSETS</b>	
The Reserve Banks had a smaller net amount of miscellaneous assets.....	20,000,000
<b>Total.....</b>	<b>\$1,922,000,000</b>

### The Means of Retirement:

<b>1. INCREASED RESERVES</b>	
The Reserve Banks received from member banks and other sources additional gold which caused a net increase in reserves.....	\$708,000,000
<b>2. DECREASED CIRCULATION</b>	
The member banks in paying loans at the Reserve Banks used \$878,000,000 surplus Federal Reserve notes and \$111,000,000 Federal Reserve bank notes .....	989,000,000
<b>3. DECREASED DEPOSITS</b>	
The member banks, in paying loans, used excess deposits at the Reserve Banks of \$280,000,000, which, with an increase in other deposits, caused a net reduction of.....	225,000,000
<b>Total.....</b>	<b>\$1,922,000,000</b>

The element which distinguishes the present period from others in the experience of this country, and possibly from corresponding periods in the future, is the increase in gold reserves. Since October 15, 1920, gold importations have amounted to \$696,000,000, of which all but \$4,000,000 has been incorporated in the reserves of the Federal Reserve Banks. The effect of this large increase in gold reserves has been to increase rapidly the reserve ratio of the Federal Reserve system. Inasmuch as the retirement of Federal Reserve notes releases as free gold only 40 per cent. of the amount retired, and inasmuch as the decline in deposits at the Reserve Banks releases only 35 per cent. of their amount in gold, the introduction of gold directly into the reserves of the Federal Reserve Banks is more than twice as effective as the retirement of notes or deposits. If there had been no gold accessions since October, 1920, the reserve percentage of the Federal Reserve system would now be 52 per cent. instead of 68.7 per cent.

Member banks were able to reduce their deposits at the Reserve Banks \$280,000,000 because their own deposits were reduced. That reduction served to improve the position of the Reserve Banks to the same extent as importing \$98,000,000 of gold—not much more than was received in the single month of August. But inasmuch as member banks keep on the average about 10 per cent. of their deposits with the Reserve Banks, that reduction implies a decline of about \$2,800,000,000 in their own deposits, and a corresponding decline of about \$2,800,000,000 in their loans to customers.

Had the increase registered in the reserve position of the Federal Reserve Banks been based entirely upon liquidation by customers of member banks, it would have presupposed a contraction in the business of the country of the most serious and far-reaching consequences.