## MONTHLY REVIEW

OF

# AGRICULTURAL AND BUSINESS CONDITIONS

### NINTH FEDERAL RESERVE DISTRICT

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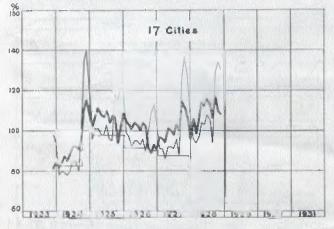
Minneapolis, Minnesota

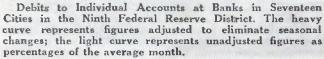
December 28, 1928

#### DISTRICT SUMMARY OF BUSINESS

The volume of business in the Ninth Federal Reserve District in November and the first half of December exceeded the volume in the same period last year. In the larger cities, debits to individual accounts in November increased 2 per cent over November last year. In the rural portion of the district, the country check clearings index increased 11 per cent. Rural Minnesota, and the portions of Wisconsin and Michigan lying within this district, experienced greater increases in check clearings than were shown in the western states of the district. Increases in November, as compared with the same month last year, were shown by carloadings of grains and grain products, coke, forest products, ore and miscellaneous commodities, building permits and contracts, country lumber sales, linseed product shipments and postal receipts. Decreases occurred in carloadings of livestock and coal, department store sales, wholesale trade and flour shipments. Business failures in the district were fewer in November, 1928 than in November, 1927.

In the first two weeks of December, debits to individual accounts at reporting cities increased 8 per cent over the corresponding weeks last year. Country check clearings in the first thirteen business days of December were 27 per cent larger than in the



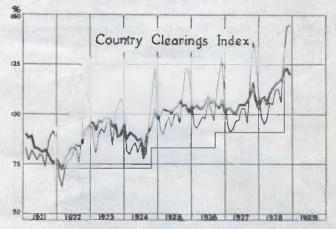




Business Failures in the Ninth Federal Reserve District, as reported by R. G. Dun and Company. The heavy curve is the twelve-month moving average of the monthly data.

same period last year. As in November, rural Minnesota experienced a larger increase in check clearings than the other sections of the district.

Farm income from cash crops and hogs was 17 per cent smaller in November, 1928 than in November, 1927. The income from dairy products during October exceeded the income from this source in October last year by 12 per cent. The prices of



Country Check Clearings Index for the Ninth Federal Reserve District. The light curve represents figures without seasonal adjustments. The heavy curve represents figures with seasonal adjustments. flax, butter, hens, butcher cows and steers, feeder steers, veal calves and hogs exceeded prices in November last year. Prices of all other important farm products in this district were the same as last year, or lower than a year ago.

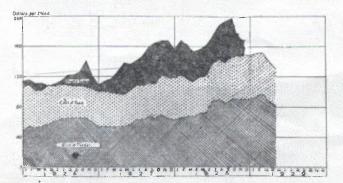
Although the wheat crop moved to market slowly in the early part of the marketing season, the movement was brought up to normal by receipts during November. The table below shows the size of the last six crops in Minnesota, Montana, North Dakota and South Dakota and the proportions of these crops which were marketed, from August to November, and during the whole crop year. A reasoned estimate is included for the probable total 1928 crop marketings. It will be seen that the marketings from August to November have varied from 57.9 per cent to 69.5 per cent of total marketings from these crops. The 1927 crop moved at an exceptionally rapid rate during these months. It may be that with the increasing use of combine harvesters, the crops may be marketed even earlier in future.

Relation of August-November Wheat Marketings From Minnesota, Montana, North Dakota and South Dakota to Total Crop in Those States and to Total Shipped Out of County Where Grown, 1923-1928

	M			% AugNov.	
	Total Wheat Shipped out of County		Marketings of Total Aug-Nov. Shipped out		
Year	4 States Crop	where grown	Marketings	of County	
1923	170,018	113,259	76,900	67.9	
1924	258,269	216,154	137,293	63.5	
1925	209,503	182,517	105,716	57.9	
1926	158,247	114,558	71,970	62.8	
1927	272,768	232,479	161,469	69.5	
1928	276,171	235,000*	151,211	64.4	
*Estin	ated				

\*Estimated

An important factor in the farm income of the corn raising sections of the district is the operation of fattening steers. There are no reliable statistics of the volume of such operations, but it is interesting to follow this industry from the standpoint of its profitableness to the individual operator. The accompanying chart shows the developments over the past three years. It will be seen that in 1926 the profit from feeding steers was very small, and perhaps a minus quantity, if all factors are considered.



Steer Feeding Costs and Profits in the Northwest.

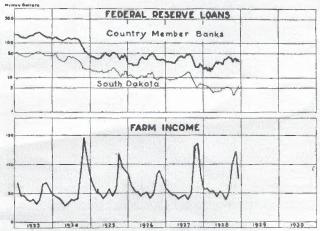
In other words, the sale price of a prime fat steer yielded little more than the cost of the feeder steer, together with the cost of feed at the time of the steer's purchase. During 1927 profits from feeding steers increased rapidly, due to a more rapid increase in the price of fat steers than in the price of feeder steers and feed. In 1928 in spite of well maintained prices of fat steers, profits diminished on account of increased costs of feeder steers and of feed. During the last two months, the cost of both feeder steers and feed has declined sharply, although not to the level of last year.

#### DISTRICT SUMMARY OF BANKING

As the year draws to a close, it becomes interesting to discuss the Federal Reserve Bank's volume of loans to country banks, in relation to the known facts about farm income. Many factors affect the amount of borrowing from this bank but farm income changes are generally most important. Taking the district as a whole, country member banks borrowed less this fall at the peak in August than they borrowed in any other year since the war. On the other hand, the reduction in country bank borrowings from the Federal Reserve Bank has not been as sharp this fall as in other recent fall periods.

To understand the significance of the trends in country bank borrowings from this bank, it is necessary to analyze the situation in the district in two parts; namely, the situation in the mixed farming region, consisting of the eastern half of the district, and the situation in the small grain territory, which constitutes the western half of the district.

In Montana and North Dakota, the major force controlling seasonal movements in banking is the grain crop. While the crop is growing, country bank deposits fall and country bank loans increase on account of large farm expenses and the seasonal shrinkage in farm cash receipts. When the crop be-

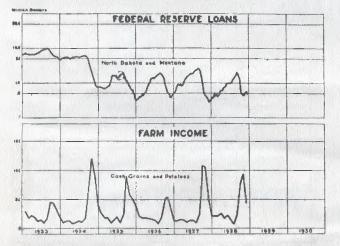


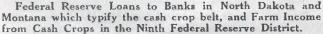
Federal Reserve Loans to Country Banks in the Ninth Federal Reserve District and in South Dakota and Farm Income from Cash Crops, Hogs and Dairy Products.

gins to move to market, country bank deposits rise and loans decrease. Until the latter part of August, there is, therefore, a period of growing strain upon the banks in these states, which is evidenced in the case of member banks by increased borrowing from the Federal Reserve Bank. This strain reaches a peak in the final days of August. From that time until near the close of the year, there is a sharp reduction in borrowings from the Federal Reserve Bank. The amount of reduction and the rapidity with which it occurs are very good tests of the financial outturn of the crops and the speed with which they are marketed.

Looking back over the past six years, which are shown in the accompanying chart, the correlation between crop returns and reduction of Federal Reserve loans is striking. It is evident that the 1924 and 1927 crops provided greater ability to reduce indebtedness at the Federal Reserve Bank (in proportion to the total outstanding at the peak of each year) than was provided by the other crops. In 1923 and 1926 crops were poor and the liquidation of indebtedness of Montana and North Dakota banks was less pronounced. In the early days of the 1928 marketing season, it appeared that the 1928 crop would furnish as substantial liquidation as did the 1927 crop, judging from the rapidity of the decrease in Federal reserve loans. During the last few weeks, however, no further decline in total loans to banks in the small grain area has occurred, and a slight increase has taken place. Up to the present time, the reduction of Federal reserve loans in these states combined during 1928 has been about as small as the reduction following the 1926 crop and the amount of loans to banks in the small grain area is larger than on the same date in any year since 1924.

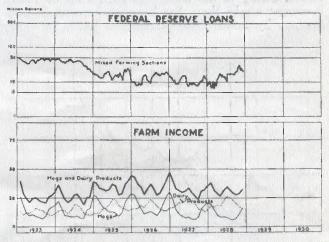
According to the curve shown in the lower half of the chart of North Dakota and Montana borrowings, it is apparent that the smaller amount of liquidation is not entirely due to the small return





from the crops. The cash value of grains and potatoes marketed in the first four months of the present marketing season was smaller than returns from marketings in the same period a year ago, but was considerably larger than returns from marketings in the fall of 1926. Of course, this picture of farm income in the western part of the district is incomplete because there are no adequate figures showing farm income from cattle and sheep, which are major items of farm income in this territory. However, since these unknown items are apparently as large or larger than a year ago, that would not account for the smaller liquidation which has occurred. Rather, it seems evident from various indexes of country business conditions that the volume of transactions in Montana and North Dakota has been running ahead of the volume in the fall months of 1927, in spite of a somewhat smaller farm income, and this has undoubtedly made impossible a more extensive reduction of debt to the Federal Reserve Bank.

Surveying the eastern half of the district, where the major farm activities are more varied, the most striking facts in the 1928 record of Federal Reserve Bank loans, are that the seasonal reduction of indebtedness this summer was very slight and the increase in indebtedness this fall was more rapid than in other recent years, bringing the total volume of loans to banks in the mixed farming section of the district in November up to a higher level than at any time since 1924. Some seasonal decrease has occurred since the peak was reached, but the total at present remains comparatively high. One reason for the borrowing situation in the mixed farming states is the small returns from the potato crop. Another reason for the increased borrowings goes back a year to the poor corn crop of 1927 in certain parts of the hog raising territory. It was necessary in some cases to ship in corn from outside of the state.



Federal Reserve Loans to Country Banks in Minnesota and the Parts of Wisconsin and Michigan which are in the Ninth Federal Reserve District, typifying the mixed farming region, and Farm Income from Hogs and Dairy Products in this District.

South Dakota, with a large corn crop, benefited by the shortage elsewhere. This inter-state demand for corn was strong enough so that 27 per cent of the South Dakota corn crop in 1927 was shipped out of the county where grown, presumably for sale outside of the state.

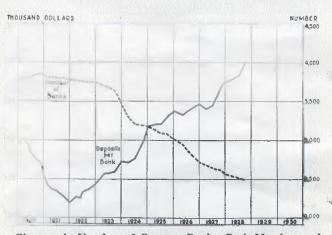
This fall there is a small crop of hogs being fed for market and with a satisfactory corn crop well distributed through the hog raising territory, it seems probable that hog marketings will be later than usual. However, since hog prices are close to the average, the usual seasonal reduction in borrowings by mixed farming region banks may be expected during the winter months.

A favorable feature in the mixed farming region of this district is the fact that dairy income continues to increase. During 1928 a new high record in dairy income will be set. The 1928 dairy income will exceed the income from hogs in any of the past six years for which records are available. A most encouraging feature of the outlook for dairy products is that in spite of increased production in this district, the total production in the United States does not appear to outstrip demands. In fact, the amount of creamery butter in storage on December 1, 1928 was smaller than the amount in storage on the same date last year, or on the five-year average for that date.

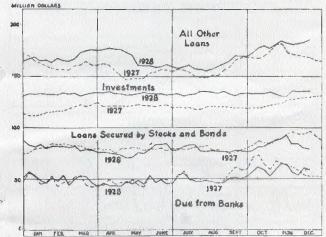
The South Dakota member bank borrowings from the Federal Reserve Bank are shown on the same chart with the borrowings of all country member banks. In South Dakota mixed farming operations and small grain operations are both important and, consequently, loans to South Dakota banks generally have some of the same seasonal characteristics which appear in the curve for the whole district. In 1928, however, there has been a noticeable lack of increase in borrowings by South Dakota member banks, owing to the profitable corn crop of 1927. In recent weeks there has been an increase in borrowings by South Dakota member banks bringing the total back to the level of midsummer. The increase in loans was necessary to finance heavy purchases of feeder steers.

A change in country banking which is worthy of note is the trend towards fewer and larger banking units. Owing to bank suspensions, voluntary liquidations and consolidations, the number of country banks in the district declined from 3,853 on November 15, 1920 to 2,503 on October 3, 1928, the date of the most recent call. Average deposits per country bank on October 3, 1928 amounted to 502 thousand dollars, the largest amount on record. This compares with 401 thousand dollars on February 28, 1920, which was the peak of the post-war increase. In 1913 the average deposits per country bank were about 200 thousand dollars.

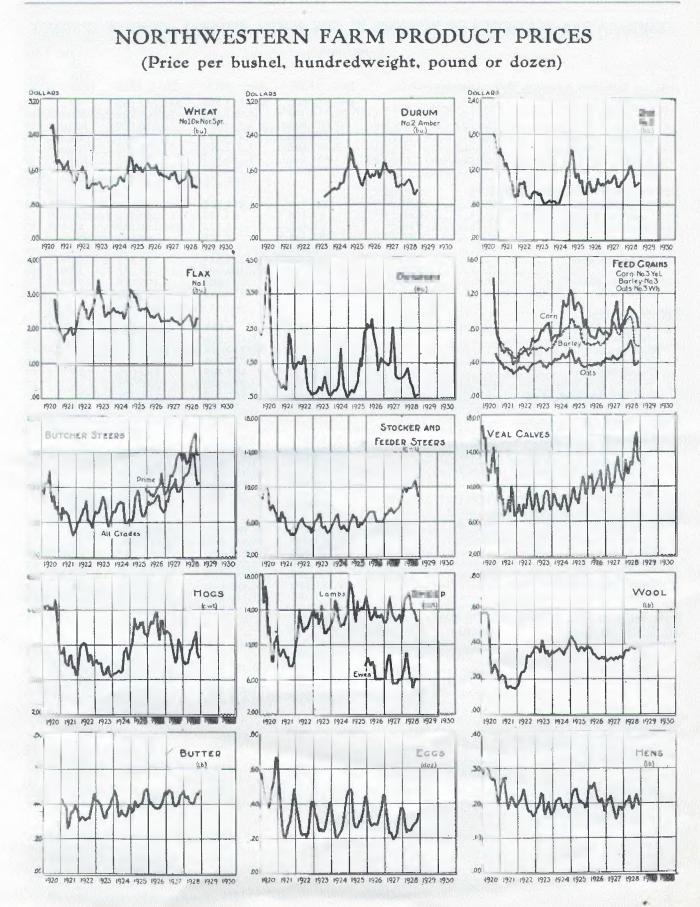
Surveying current developments in city banking, the most significant fact is that city member banks have experienced a sustained demand for loans from commercial customers. This is evidenced by the fact that "all other" loans have remained at the high level of the year for six weeks and were higher on December 19 than on the corresponding date in any year since 1924. Loans secured by stocks and bonds have been reduced sharply during the five weeks ending December 19, and have almost returned to the level of midsummer. Investment holdings have remained almost unchanged. On the liability side of the city bank reports, individual and commercial demand deposits declined sharply between November 14 and November 28, but recovered part of the loss in the succeeding two weeks, and on December 12 were higher than on the same date in the two preceding years for which records are available. Time deposits continue to be slightly larger than a year ago, but deposits "due to banks" were smaller than a year ago and in the last reported week fell slightly under the level of two years ago. These banks were able to reduce their borrowings at the Federal Reserve Bank by more than one-half during the last five weeks.



Changes in Number of Country Banks, Both Member and Non-member, and Changes in Average Deposits per Country Bank on Call Dates, 1920-1928.



Principal Assets of Selected City Member Banks in the Ninth Federal Reserve District, Weekly 1927 and 1928.



#### AGRICULTURAL AND BUSINESS CONDITIONS December 28, 1928

COMPARATIVE STATISTICS OF BUSINESS		III FEDERA	L REJERVE	%Nov.	%Nov.
The second second second second				1928 of	1928 of
Debits to Individual Accounts, Daily Averages-Unit	Nov., 1928	Oct., 1928	Nov., 1927	Oct. 1928	Nov. 1927
17 Cities	\$40,935,000	\$42,163,000	\$40,162,000	97	102
Minneapolis St. Paul	20,314,000 7,995,000	20,907,000 7,544,000	18,865,000 8,396,000	97 106	108
Duluth-Superior	5,479,000	6,489,000	6,121,000	84	90
8 Wheat Belt Cities 4 Mixed Farming Cities	3,447,000 1,851,000	3,757,000	3,009,000	92 105	119
South St. Paul	1,849,000	1,700,000	2,176,000	109	85
arloadings—Northwestern District—					
Total-Excluding L. C. L Cars	439,970	634,133	393,654	69	112
Grains and Grain ProductsCars Livestock	65,795 37,432	84,131 43,911	59,357 40,146	78 85	11
CoalCars	38,275	40,580	44,977	94	8
CokeCars	5,474	5,823	50,083	94	100
Forest Products	67,662 60,871	71,515 165,370	65,333 23,738	95 37	104
MiscellaneousCars	164,461	222,803	155,020	74	10
Merchandise—L. C. LCars	137,463	151,515	144,002	91	9
uilding Permits-	and the second				
Number—18 Cities Value—18 Cities	1,233 \$4,006,200	1,839 \$5,687,000	1,358 \$2,928,900	67 70	91
Minneapolis	1,715,200	3,217,000	1,132,300	53	15
St. Paul	995,000	1,076,700	722,700	92	138
Duluth-Superior 4 Wheat Belt Cities	340,000 255,700	437,400 471,900	300,900 206,900	78 54	11.
6 Mixed Farming Cities	683,800	424,600	373,900	161	18
4 Mining Cities	16,500	59,400	192,200	28	1
uilding Contracts Awarded—					
Total Residential	5,764,000 2,119,300	9,555,800 4,474,700	4,976,700 2,474,000	60 47	110
Commercial and Industrial	2,173,500	1,264,800	613,300	172	35.
Public Works and Utilities	743,900	3,171,200	1,695,300	23	4
Educational All Other	275,300 452,000	360,500 284,600	63,000 131,100	76	43.
ash Value of Farm Products Sold—					
Bread Wheat	23,240,000	41,683,000	28,312,000	56	82
Durum Wheat	8,916,000	25,962,000	7,924,000	34	10
Rye Flax	1,555,000 5,828,000	3,627,000 15,008,000	3,158,000 8,451,000	43 39	49
Potatoes	2,076,000	6,312,000	3,132,000	33	6
Dairy Products-See Note	17,305,000	20,448,000	15,497,000	85	113
Hogs	16,513,000	11,720,000	19,184,000	141	8
rain Stocks at End of Month at Minneapolis ad Duluth-Superior—					
Wheat	50,776,608	52,966,163	34,144,369	96	14
CornBu.	115,690	1,081	1,704,821	10702	
Oats Bu. Barley Bu.	2,517,615 3,034,047	3,082,738 2,824,255	8,747,236 1,046,880	82 107	29
RyeBu.	2,187,534	1,854,068	978,502	118	22
FlaxBu.	1,632,946	2,628,159	4,794,315	45	3.
ledian Cash Grain Prices-			and the second second	1111.11	in the second
Wheat—No. 1 Dark NorthernBu. Durum—No. 2 AmberBu.	\$1.235/8 1.12	\$1.23 1.091/2	\$1.317/8	101	9. 81
Durum—No. 2 Amber Corn—No. 3 YellowBu.	.82	.93	1.25 3/4	87	10
Oats-No. 3 WhiteBu.	.411/2	.391/4	.461/2	106	89
Barley—No. 3 Rye—No. 2 Bu.	.59	.59	.78	100	7
$Flax - No. 1 \qquad Bu.$	2.323/4	2.281/2	2.131/4	103	10
holesale Produce Prices-					
Butter Lb.	.48	.451/2	.46	105	10
Milk Cwt. Hens—4½ Pounds Lb.	2.60	2.64	2.63	98 91	99
Eggs Doz.	.35	.311/2	.371/2	111	93
Potatoes	.60	.60	1.05	100	57

Note: October, 1928; September, 1928; October, 1927.

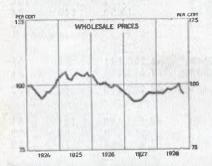
## NINTH FEDERAL RESERVE DISTRICT

## COMPARATIVE STATISTICS OF BUSINESS IN THE NINTH FEDERAL RESERVE DISTRICT (Continued)

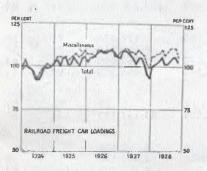
				%Nov. 1928	1928
	and high the			of Oct.	of Nov.
Livestock Receipts at South St. Paul- Unit	Nov., 1928	Oct., 1928	Nov., 1927	1928	1927
Cattle Head Calves Head	90,060 47,346	139,760 49,397	132,887 54,886	64 96	68 86
HogsHead	305,248	261,299	424,007	117	72
SheepHead	158,842	283,978	136,098	56	117
Median Livestock Prices at South St. Paul-	*0.25	40.00	A7.00	107	110
Butcher Cows	\$8.25 10.75	\$8.00 10.50	\$7.00 10,00	103	118
Prime Butcher Steers Cwt.	14.00	14.00	14.00	100	100
Stocker and Feeder Steers	9.00 13.00	9.75 13.50	8.00 11.00	92 96	113
Hogs Calves Cwt.	8.65	9.25	8.50	94	102
Heavy HogsCwt.	8.25 12.75	8.75 12.75	7.75	94 100	106
Lambs	6.00	6.00	6.00	100	100
Flour-					
Production-Twin Cities and Duluth-		1 2 5 5 2 4 0	1 000 141	0.0	0.5
Superior	1,083,767 900,374	1,357,348	1,250,141	80 75	87 81
Linseed Products Shipments from Minneapolis-Lbs.	45,090,101	45,507,465	44,109,810	99	102
Retail Sales-					
Department Stores	\$2,220,420	\$2,199,450	\$2,392,630	101	93
Furniture Stores	517,820	590,720	524,420	88	99
Country Lumber Yards	14,134,000	18,242,000	12,990,000	78	110
Retail Merchandise Stocks— Department Stores	\$6,124,670	\$6,206,380	\$6,669,650	99	92
Furniture Stores	2,845,230	2,773,000	2,972,730	103	96
Country Lumber YardsBd. Ft.	75,810,000	81,035,000	75,271,000	94	101
Life Insurance Sales—(4 States)	\$22,924,000	\$25,106,000	\$23,255,000	91	99
Wholesale Trade-					
Farm Implements	107,340 2,114,950	152,180 2,509,390	126,820 2,179,160	71 84	85 97
Hardware Shoes	509,630	671,370	562,690	76	91
Groceries	5,201,490	5,387,340	5,468,360	97	95
Business Failures-					
Numbe <del>r</del> Liabilities	55 \$710,546	74 \$677,804	68 \$1,153,335	74	81 62
Securities Sold—	\$710,540	φ <b>077,00</b> 4	φ1,12,222	105	02
To Banks	1,702,700	2,418,500	4,199,600	70	41
To Insurance Companies	1,101,100	1,524,800	1,414,100	72	78
To General Public	7,669,300	7,683,000	9,122,400	100	84
Real Estate Activity in					
Hennepin and Ramsey Counties— Warranty Deeds Recorded	2,005	2,115	2,240	95	90
Mortgages Recorded	1,552	2,076	1,736	75	89
			The second second	%Dec.	%Dec.
				1928 of	1928 of
				Nov	
Member Bank Deposits-	Dec. 12, 1928		Dec. 7, 1927	1928	1927
In Cities under 15,000 Population	\$470,301,000 478,948,000	\$478,867,000 494,704,000	\$456,005,000 473,272,000	98 97	103
In Cities over 15,000 Population 24 City Member Banks	Dec. 19, 1928	Nov. 14, 1928	Dec. 21, 1927	71	101
Loans Secured by Stocks and Bonds	\$77,764,000	\$92,276,000	\$91,338,000	84	85
All Other Loans	186,092,000	182,421,000	165,508,000	102	112
Securities Net Demand Deposits Subject to Reserve	133,210,000 229,947,000	130,296,000 239,505,000	130,348,000 236,657,000	102	102 97
Time Deposits	137,398,000	137,465,000	135,554,000	100	101
Borrowings at Federal Reserve Bank	2,809,000	14,142,000	1,300,000	20	216
Minneapolis Federal Reserve Bank— Bills Discounted	7 2 4 8 1 6 1	19 240 255	3 6 70 4 77	40	201
Federal Reserve Notes in Circulation	7,348,151 65,093,830	18,260,355	3,570,677 62,072,415	40	206



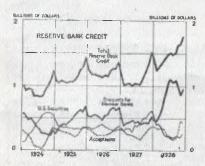
Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-25 average=100). Latest figures, November, manufactures 111, minerals 114.



<sup>10</sup> Index of United States Bureau of Labor Statistics (1926=100, base adopted by Bureau), Latest figure, November, 96.7.



Cars of Revenue Freight Loaded, as reported by the American Railway Association. Index number adjusted for seasonal variations (1923-25 average=100). Latest figures, November total 103, miscellaneous 106.



Monthly averages of daily figures for 12 Federal reserve banks. Latest figures are averages of first 21 days in December.

### Summary of National Business Conditions (Compiled December 27 by Federal Reserve Board)

Industrial activity declined somewhat in November, but continued above the level of a year ago. Wholesale commodity prices declined further, reflecting principally a continued decrease in the prices of farm products. Security loans of member banks declined sharply after the first week of December, while other loans increased.

**PRODUCTION:** Total output of manufactures was somewhat lower in November, reflecting primarily a larger decrease than is usual at this season in the production of automobiles and steel, but total output continued larger than a year ago. Production of pig iron and copper continued to increase in November and textile mills remained active. Meat packing increased while sugar refining declined seasonally during the month and the production of building materials was smaller. Factory employment and payrolls were seasonably reduced but were larger than in 1927. Mineral production was in about the same volume as in October, according to the Federal Reserve Board's index which makes allowance for seasonal variations. Increases occurred in the daily average production of copper, zinc, tin and bituminous coal, while anthracite coal decreased and the output of petroleum was smaller. The value of building contracts awarded in November and the early part of December receded sharply from the record figures of the two preceding months. The November total was slightly larger than in the corresponding month in 1927, but the volume of contracts for the first two weeks of December was smaller than a year ago.

The December forecast of the Department of Agriculture increased the 1928 estimated production of cotton by 240,000 bales to a total of 14,373,000 bales which is nearly 11 per cent larger than a year ago. The total value of crops, based on December 1 farm prices, is estimated at \$8,456,052,000 as compared with \$8,522,-563,000 in 1927.

**TRADE:** Department store sales showed a seasonal increase in November when allowance is made for the number of business days, and approximated those of a year ago, while inventories continued smaller than in 1927. Sales at wholesale declined seasonally, but were larger than in the same month of last year. Railroad freight shipments decreased in volume during November and the early part of December, but continued larger than in 1927. The decrease from October was especially marked in loadings of miscellaneous freight.

**PRICES:** Wholesale commodity prices decreased further in November and the first two weeks of December. The largest price declines during the six week period were in farm and food products and leather, while several groups of industrial products, notably iron and steel, nonferrous metal and cotton goods, were generally higher. Wholesale prices of gasoline and automobile tires declined. Among the agricultural products, prices of raw silk, corn, live stock, and meats were lower during November, while raw cotton, wool, wheat and oats increased somewhat. During the first two weeks of December, however, prices of all these products with the exception of raw silk, declined. Building materials were generally higher in November, but declined somewhat in the middle of December.

BANK CREDIT: Loans and investments of member banks in leading cities increased \$329,000,000 during the four week period ending December 19. The advance during the first two weeks reflected chiefly a rapid increase in security loans, which include loans to brokers and dealers in securities. Subsequently, a sharp decline in loans on securities was more than offset by a rapid increase in all other loans and in holdings of investments. The increase in all other loans, which include loans for commercial purposes, was contrary to the usual movement at this season and carried the total to the highest figure in eight years. Seasonal growth in the demand for currency in November and December, together with increases in member bank reserve requirements, consequent upon an increase in their deposits have been reflected in larger borrowings by the member banks from the reserve banks. This recent growth, following upon demand caused by the loss of gold in earlier months, has carried the total volume of reserve bank credit to the highest level in seven years. The rates on call and time loans on security collateral increased during the last week in November and the first part of December, while rates for commercial paper were generally steady. Rates on certain maturities of bankers' bills increased somewhat.