

MONTHLY REVIEW

Agricultural and Business Conditions

TENTH FEDERAL RESERVE DISTRICT

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FEDERAL RESERVE BANK OF KANSAS CITY

DECEMBER 31, 1949

RAINFALL

Precipitation No aspect of climate has greater economic significance than the comparatively long-term trends in precipitation. This is a very influential factor in the Tenth Federal Reserve District economy through its effect on farm income and is a direct determinant in the economic stability of the District.

Moisture falls from the clouds, either in liquid or solid form, as rain, snow, hail, or sleet. "Precipitation" is the general term used to embrace any and all of these forms of falling moisture.

than that recorded in most other States of the nation. This lack of precipitation coupled with low agricultural prices had a devastating effect on the economy of the District because of the area's principal dependence upon agriculture.

Table 1 shows that the average precipitation for the Tenth District, excluding that portion of the District which is in Missouri, was 5 per cent below normal during the 1930's. Despite the lower total for the period, precipitation for most States averaged above normal in four out of the ten years. During most of

TABLE 1
PRECIPITATION AS A PERCENTAGE OF NORMAL
(1880-1948=100)

Year	Nebraska	Kansas	Oklahoma	Wyoming	Colorado	New Mexico	Average Six States*
1929.....	102	105	111	108	110	114	109
1930.....	116	101	96	106	105	102	104
1931.....	86	97	99	83	85	127	98
1932.....	92	89	106	96	86	112	97
1933.....	91	83	96	87	92	89	89
1934.....	64	75	86	78	66	70	73
1935.....	102	107	115	88	96	103	101
1936.....	65	69	71	94	97	94	78
1937.....	79	79	88	111	88	104	93
1938.....	95	103	104	110	117	101	105
Average 1929-1938..	89	91	97	96	94	102	95
1939.....	73	76	84	74	65	92	78
1940.....	78	97	106	104	102	104	99
1941.....	110	139	147	129	136	196	146
1942.....	68	125	125	111	136	109	113
1943.....	77	93	90	89	113	80	91
1944.....	123	141	114	112	87	101	111
1945.....	102	114	131	125	100	69	104
1946.....	110	106	111	111	102	93	104
1947.....	105	103	99	120	102	76	100
1948.....	97	111	100	99	110	89	101
Average 1939-1948..	94	110	111	107	105	101	105

*Individual State indexes weighted by gross land area included in District.

In the broad area from the Mississippi River to the Rocky Mountains, during the decade 1929 through 1938, the average amount of precipitation was less than the amount in any 10-year period since 1886. Although this condition occurred generally throughout the United States, the precipitation received by the Midwestern and Great Plains States was even less

than any other State in the District for the period the years in the two 10-year periods, 1929-1938 and 1939-1948, the District precipitation was close to the national average. However, slight deviations from normal have a greater effect on the economy of the Tenth District than for most other areas in the United States. Nebraska had more subnormal precipitation

1929-1938. New Mexico was the only State in the District that averaged above normal in this period and a large part of this precipitation occurred in that section of the State not located in the Tenth District. If the amount for the State of New Mexico had not been included, the average for the District would have been 93 per cent of normal.

Heavy precipitation was received in the District during 1929 and 1930. For the year 1934, the District average was only 73 per cent of normal, which was the lowest year in that 10-year period. None of the six States in the District had above normal precipitation in 1933 or 1934. Another extremely subnormal year was 1936, especially in Nebraska, Kansas, and Oklahoma. Only North Dakota and South Dakota received a lower percentage of normal precipitation that year.

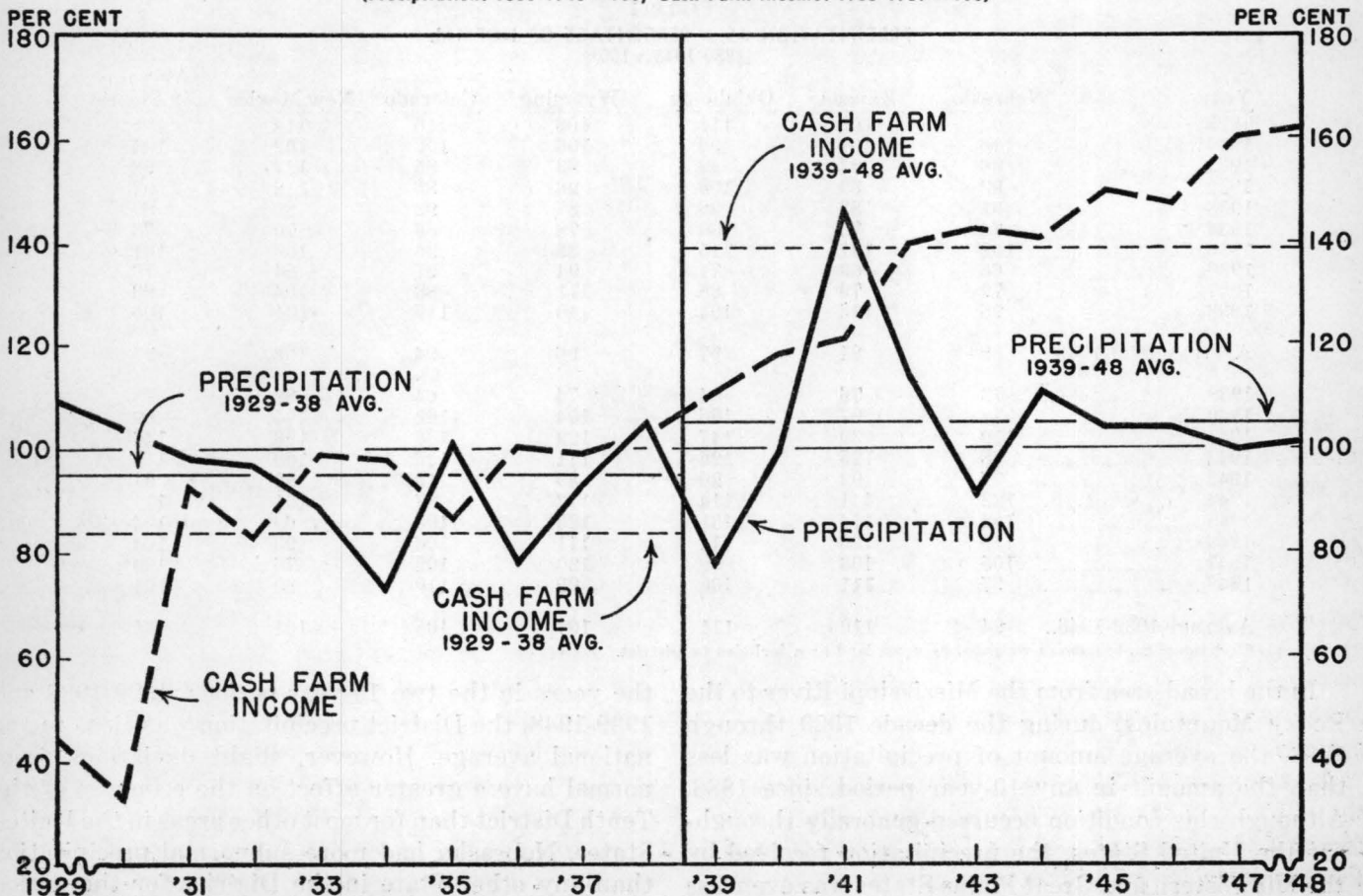
During the second 10-year period, 1939-1948, precipitation exceeded the national average; in contrast with the first period, when the national figures exceeded those of the District, only Nebraska was an exception and did not receive greater than normal moisture in the second period. In 1939, precipitation in Nebraska was 27 per cent below normal and in 1942

it was 32 per cent below. The deficiency of moisture in 1939, when the District average was below normal, was more than balanced by the heavy precipitation in 1941, when the average was 46 per cent above the normal amount. In 1941, New Mexico had almost twice the normal amount of precipitation. Oklahoma also had unusually heavy precipitation in 1941, with 47 per cent above the normal supply.

Annual rainfall figures do not tell the whole story. In the matter of crop production and flood potential the seasonal distribution must be known. The intensity of the rainfall is a factor which determines whether the precipitation will be absorbed largely by the soil or is turned to run off into streams and rivers, possibly producing floods. The frequency and duration of droughts and many other aspects of precipitation cannot be determined from annual or even monthly totals. However, they are a general indicator and are important in determining the quantity of subsoil moisture.

Precipitation and Cash Farm Income The precipitation pattern within any year may follow either one of two courses. The distribution

CHART 1
INDEXES OF PRECIPITATION AND CASH FARM INCOME*, TENTH DISTRICT
(Precipitation: 1880-1948=100; Cash Farm Income: 1935-1939=100)



*Adjusted by U. S. Department of Agriculture Index of Prices Received by Farmers.

of rainfall throughout the country may be fairly uniform, producing either favorable or unfavorable conditions for the production of crops. On the other hand, within the general precipitation framework localized areas may experience either unusually favorable or unusually unfavorable precipitation conditions.

Under a normal free market economy, the market tends to react to the first of these situations. In years of an extremely favorable precipitation pattern, the market price tends to drop as supplies increase and, in converse manner, during years of an unfavorable precipitation pattern the market price of agricultural products rises in response to smaller supplies. It has been felt generally that, in the absence of excessive supplies carried over from the previous crop year, a short crop often brings a greater gross income than does a bumper crop.

percussions on the farm families, they did operate to reduce the burdensome surplus of cereal grains, feed grains, and livestock which had accumulated. The more favorable rainfall pattern of the last decade increased agricultural production during a period when there was a strong and sustained demand for agricultural products not only in the United States but in the world as well. Thus, instead of depressing the price of agricultural products, the increased production due to a more favorable precipitation pattern actually resulted in increased well-being, both for farmers as a class and for the nation and the world as a whole.

Accompanying the unfavorable precipitation pattern of the 1930's there occurred a shift in the District's agricultural production which seems to have had a profound and permanent effect upon the agricultural economy. In the northern part of the Dis-

TABLE 2
CASH FARM INCOME*
Percentage of 1935-39 Average

Year	Nebraska	Kansas	Oklahoma	Wyoming	Colorado	New Mexico	Average Six States	United States
1929.....	38.1	40.1	65.0	21.4	45.8	38.1	44.2	95.4
1930.....	31.2	30.4	35.1	22.9	49.6	21.2	33.3	88.7
1931.....	111.7	96.7	78.4	76.3	81.8	70.7	92.5	89.1
1932.....	96.9	81.2	84.1	71.3	71.7	67.2	83.3	87.8
1933.....	106.3	90.3	127.1	83.2	78.9	80.2	99.2	95.2
1934.....	114.9	97.9	83.5	105.6	79.7	107.6	97.9	94.8
1935.....	92.1	87.6	91.7	84.7	73.1	71.7	86.6	88.4
1936.....	115.7	102.4	81.5	91.9	99.6	92.1	100.3	95.5
1937.....	97.7	101.6	96.1	94.3	103.7	97.9	99.3	95.1
1938.....	100.6	97.3	109.3	105.3	104.8	113.0	102.8	106.0
Average 1929-1938..	90.5	82.6	85.2	75.7	78.9	76.0	83.9	93.6
1939.....	93.7	111.2	121.3	124.0	118.8	122.3	111.0	115.0
1940.....	120.5	107.4	125.9	123.3	117.3	132.4	118.0	114.9
1941.....	108.6	127.2	133.9	122.7	112.9	124.8	121.4	119.5
1942.....	142.2	147.7	141.4	118.8	127.7	131.7	140.0	127.3
1943.....	160.7	148.9	122.2	122.3	141.7	122.9	142.5	131.9
1944.....	150.3	144.5	138.6	113.2	138.6	123.5	141.4	136.6
1945.....	166.6	152.1	138.8	115.4	147.3	132.0	149.7	138.8
1946.....	165.8	147.3	133.1	128.4	144.9	135.6	147.4	136.7
1947.....	177.1	170.1	139.1	125.7	159.0	139.6	160.5	138.1
1948.....	172.4	160.3	148.9	141.3	174.1	153.4	161.8	144.6
Average 1939-1948..	145.8	141.7	134.3	123.5	138.2	131.8	139.4	130.3

*Adjusted by U. S. Department of Agriculture Index of Prices Received by Farmers.

When the precipitation pattern in a local area is either favorable or unfavorable, its effect is felt less in terms of the over-all price pattern of agricultural products. Thus, local droughts may prove extremely disastrous to individual producers, while in the case of favorable precipitation the results may prove to be extremely profitable. One of the principal problems of certain areas of the District is that of adopting measures to meet irregular income of farming arising from recurring local deviations in the precipitation pattern.

As a matter of fact, the precipitation pattern of the 1930's and the 1940's has in some respects been favorable to the farmers of the Tenth District. While the droughts of the 1930's had serious economic re-

strict, there has been a marked shift from corn to grain sorghums as a principal source of feed grain. In the southern part of the District, the shift has been away from cotton toward a greater production of wheat, grain sorghums, and feed crops. These changes have strengthened the livestock economy of the District and seem to be well established as we move into the period ahead.

Chart 1 shows a Tenth District comparison of precipitation and cash farm income, including Government payments, for the two decades, 1929-1938 and 1939-1948. In order to eliminate the wide fluctuations of the price level the cash farm income was adjusted by the Department of Agriculture's Index of Prices Received by Farmers and shown as a percentage of a

base period. In this manner it was felt that a more realistic picture of production would be obtained. The period 1935 through 1939 was taken as the base period for cash farm income.

Just as farm income and precipitation were both below the base during the first decade, 1929-1938, the converse was true during the next 10-year period. During the first period, precipitation in the District for 1929 and 1930 was above normal. For the same two years, cash farm income was about 60 per cent below the average of the base period. Although during the second decade precipitation in the District fluctuated only slightly above normal with the exception of the years 1941, 1942, and 1944, cash farm income increased consistently to a high of 161.8 per cent of the 1935-1939 level. The national cash farm income average, which reflected heavily increased demand for food and fibers, reached a high of 144.6 per cent of the base during this period. The Tenth District increase over the base period has exceeded that of the nation since 1939.

Table 2 shows cash farm income as a percentage of the 1935-1939 average for each State in the District, the District average, and the national average for each year and for each of the two decades. At the end of the 1939-1948 period, for the two years 1947 and 1948 the District average exceeded the national average by a considerable margin.

In general, cash farm income during the first decade was much more closely related annually to precipitation than during the second decade. There was a difference of only 11.1 per cent between the averages of the indexes of precipitation and cash farm income during the first period, as shown by Chart 1. During the second period, there was a difference of 34.4 per cent between the averages. Government payments to farmers in the District, adjusted for price change, averaged about 87 million dollars per year from 1933 until 1939. During the second decade, when farm income was above the base period, Government payments dropped to about 59 million dollars annually, but heavy Government and civilian purchases outran the earlier period.

Precipitation and Flood Damage Greater amounts of precipitation may tend to increase cash farm income but at the same time excessive precipitation increases the probability of losses due to flood damage. Flood damage is affected less by the yearly amount of precipitation than by its intensity and seasonal distribution. During the period of record, 1933-1946, the United States Department of Commerce estimates that losses due to floods cost the Tenth Federal Reserve District over 144 million dollars, plus lives lost. Table 3 shows that about one

TABLE 3
ESTIMATED FLOOD DAMAGE

Year	Percentage of 5-state total					Total Losses Five States (000 dollars)
	Nebr.	Kans.	Okla.	Colo.	N. M.	
1933.....	—	7.3	26.5	66.2	—	1,437
1934.....	—	0.8	99.1	0.1	—	567
1935.....	43.1	22.6	7.0	27.3	—	28,688
1936.....	—	1.4	98.6	—	—	38
1937.....	—	15.3	71.4	12.9	0.4	1,478
1938.....	—	62.0	14.3	20.5	3.2	3,581
1939.....	—	61.7	37.2	1.1	—	239
1940.....	55.8	4.1	33.0	4.2	2.9	2,928
1941.....	6.5	54.4	39.1	—	—	17,697
1942.....	4.3	27.5	55.5	12.7	—	8,651
1943.....	0.1	63.7	32.6	3.6	—	37,404
1944.....	62.9	33.1	3.6	0.4	—	18,341
1945.....	6.1	55.4	36.2	2.3	—	21,125
1946.....	26.2	50.0	23.5	0.3	—	2,433

fourth of this occurred during the year 1943 when over 37 million dollars in damage occurred to crops and property or arose out of the suspension of business. Other years of unusually heavy losses were 1935, 1945, 1944, and 1941. Damage was reported for New Mexico in only three of the seventeen years. Flood damage estimates were not available for Wyoming, nor were estimates available for that portion of Missouri which lies within the District.

Table 4 shows the amount and type of damage for each State for the 14-year period. Damage to tangible property was the greatest type of loss in all States except Kansas, where damage to prospective crops was about three times the amount to tangible property. Since the losses in Kansas were much greater than those for any other State, this caused the total losses from prospective crops for the five States to be larger than the losses from tangible property, even though damages in other States were greater to tangible property than to prospective crops.

Table 5 shows the major rivers and streams in the District where flood damage occurred and the total amount of damage for each, by type of damage, during the 14-year period. Two major rivers, the Missouri and the Red, were omitted because the extent of damage within the District could not be readily ascertained. The Arkansas caused more damage than any other river in the District during the period, and extensive damage occurred along the Kansas and Re-

TABLE 4
ESTIMATED FLOOD DAMAGE, 1933-1946

Type of Loss	Percentage of total losses					Five States
	Nebr.	Kans.	Okla.	Colo.	N. Mex.	
Tangible property.....	64.6	20.8	44.2	72.5	67.2	40.5
Matured crops.....	3.5	12.3	7.1	10.5	5.2	9.0
Prospective crops.....	29.2	60.3	41.0	12.1	4.1	44.5
Livestock and other movable farm property	2.4	3.9	5.3	2.4	—	3.8
Suspension of business (Including loss of wages).....	0.3	2.7	2.4	2.5	23.5	2.2
(Thousands of dollars)						
Total losses.....	29,013	64,139	38,372	12,879	204	144,607

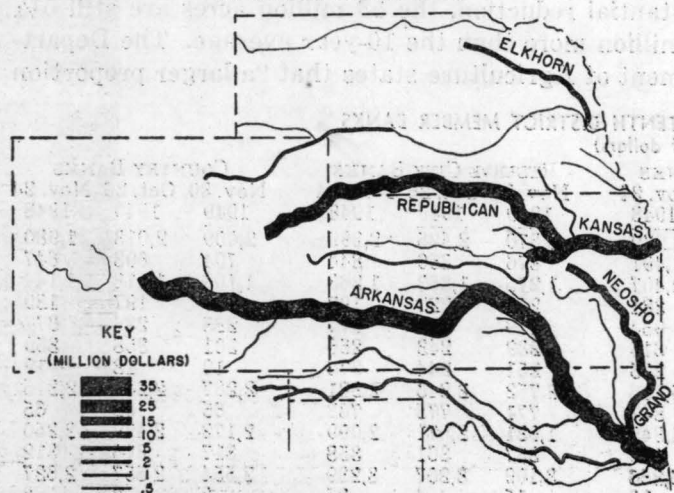
TABLE 5
ESTIMATED FLOOD DAMAGE, 1933-1946

River or Creek	Tangible Property	Matured Crops	Prospective Crops	Livestock and Other	Suspension of Business	Total Losses All Types
	(Percentage of total of all types of losses)					(Thousand dollars)
Arkansas River.....	45.3	6.4	42.3	0.6	5.4	30,658
Big Blue River.....	37.4	17.3	41.6	2.4	1.3	3,890
Canadian River.....	67.0	8.2	21.1	0.8	2.8	1,215
Cherry Creek.....	100.0	—	—	—	—	954
Chisholm Creek.....	100.0	—	—	—	—	4
Cimarron River.....	64.5	5.6	28.7	0.6	0.6	1,066
Cottonwood River.....	16.1	38.3	43.4	1.5	0.7	1,402
Elkhorn River.....	52.1	—	40.9	6.9	0.1	9,160
Gunnison River.....	54.0	0.4	44.2	1.1	0.3	228
Kansas (Kaw) River.....	17.0	5.9	69.4	6.4	1.3	24,054
Little Arkansas River.....	22.8	57.6	5.5	—	14.1	9
Little Nemaha River.....	1.3	—	98.7	—	—	96
Marmaton River.....	22.4	—	23.9	44.7	9.0	7
Nemaha River.....	11.8	—	86.9	0.9	0.4	583
Neosho River.....	28.7	23.0	40.8	3.2	4.3	11,291
Ninnescah River.....	76.9	2.6	20.4	0.1	—	229
Niobrara River.....	97.6	—	1.2	1.2	—	42
North Canadian River.....	43.3	7.6	45.5	1.7	1.9	6,216
Platte River.....	27.4	2.8	69.8	—	—	726
Poteau River.....	3.2	37.5	11.9	47.4	—	57
Purgatoire River.....	80.3	—	3.8	12.5	3.4	520
Republican River.....	70.5	9.3	17.4	2.1	0.6	22,239
Smoky Hill River.....	20.3	20.4	54.3	4.0	1.0	4,920
Solomon River.....	26.9	10.7	54.0	7.7	0.7	2,836
South Canadian River.....	42.8	13.0	44.1	0.1	—	148
South Platte River.....	73.9	18.3	3.2	4.1	0.3	5,830
Verdigris River.....	26.5	4.5	64.0	3.2	1.8	2,637
Walnut River.....	18.6	41.8	38.2	1.3	0.1	628
Small streams and unidentified rivers.....	15.6	2.2	71.6	9.6	1.0	12,962

publican Rivers. Most of the damage by these three rivers occurred in Kansas, which accounted for over 66 million dollars of the total damage of 144 million dollars.

Chart 2 shows most of the rivers and streams cited in Table 5. The width of rivers and streams as shown in Chart 2 indicates the amount of damage which occurred along their courses during the 14-year period. This does not necessarily imply that this damage occurred uniformly in the States which the river passes through, nor that it occurred all along the river throughout its course.

CHART 2
ESTIMATED FLOOD DAMAGE, 1933-1946
BY MAJOR WATERSHEDS



Source: U. S. Department of Agriculture, "Monthly Weather Review."

Table 6 shows the percentage of the total amount of flood damage in the District which occurred along the rivers and streams of the three major drainage basins in the District. Half of the losses due to flood damage during the 1933-1946 period took place in the Arkansas River Basin. In 1943, when flood losses reached 37 million dollars, over three fourths of the total occurred in the Arkansas River Basin. In various other years, the Missouri River Basin has had most of the damage which occurred in the District. Notable among these were 1935 and 1944. The Colorado River Basin does not drain a large proportion of the District nor does it drain an area particularly susceptible to a large amount of flood damage. Consequently, relatively small losses have occurred there.

The yearly average of flood damage in the five

TABLE 6
ESTIMATED FLOOD DAMAGE, 1933-1946*

Year	Ark. R. Basin	Mo. R. Basin	Colo. R. Basin	Total Losses Three Basins
	(% of total losses of 3 basins)			(000 dollars)
1933.....	96.0	4.0	—	1,437
1934.....	99.2	0.8	—	567
1935.....	18.9	81.1	—	28,688
1936.....	98.6	1.4	—	38
1937.....	91.2	1.0	7.8	1,478
1938.....	57.1	42.6	0.3	3,581
1939.....	62.1	37.9	—	239
1940.....	43.1	56.9	—	2,928
1941.....	55.8	44.2	—	17,697
1942.....	76.2	23.7	0.3	8,651
1943.....	77.3	22.7	—	37,404
1944.....	21.2	78.8	—	18,341
1945.....	49.8	50.2	—	21,125
1946.....	34.9	65.1	—	2,433

*Losses for Nebraska, Kansas, Oklahoma, Colorado, and New Mexico only.

States of Nebraska, Kansas, Oklahoma, Colorado, and New Mexico from 1933 through 1938 was over 6 million dollars. From 1939 through 1946 the yearly average was almost 14 million dollars.

Precipitation was subnormal during the period 1929-1938. Cash farm income was below normal, and the

amount of flood damage was lower than during the period 1939-1946 when precipitation and cash farm income were high. Thus, although increased precipitation may increase farm income through its effect on crops, it may also take money out of the farmers' pockets through increased losses from floods.

BUSINESS AND AGRICULTURAL CONDITIONS

MEMBER BANK CREDIT

During the five-week period ended November 30, 1949, only minor net changes occurred in total loans, investments, reserves, and deposits of all District country member banks combined. On the other hand, there were large changes in the condition of District reserve city member banks. These arose from the intangibles tax assessment date in the State of Oklahoma on December 1, which led to a large decrease in deposits in the leading cities of that State near the end of November, as depositors reduced their balances both through shifting funds elsewhere and through investing funds temporarily in United States Government securities. Accordingly, the volume of bank deposits among the reserve city member banks of this District declined by 98 million dollars, despite an increase of 15 million dollars in deposits of District reserve city member banks outside of Oklahoma.

The impact of the tax assessment date in Oklahoma also dominated the changes in the Government security holdings and the reserve position of the combined reserve city member banks in this District. Government security holdings declined by 78 million dollars, which was only slightly larger than the reduction in the holdings of the reserve city member banks in Oklahoma. Most of the decrease was in Treasury bills and certificates of indebtedness, while note holdings showed a small decrease and bond holdings increased slightly. Among Oklahoma reserve city member banks, holdings of all classes of Government securities decreased, but the bulk of the decrease was in bills and certificates. Among District reserve city member

banks, reserves with the Federal Reserve bank were 31 million dollars lower on November 30 than five weeks earlier, as reserves decreased by that amount for the Oklahoma banks and showed no net change for all other reserve city banks combined. The decrease in reserves of the Oklahoma banks reflected the outward movement of funds at the end of the month.

Loan volume expanded significantly during the five-week period ended November 30 among District reserve city member banks. Total loans expanded by 26 million dollars, or 3 per cent, with most of the increase occurring in the broad category of "commercial, industrial, and agricultural" loans. Real estate loans and consumer loans also expanded.

AGRICULTURE

Crops Late in December the Department of Agriculture issued its first estimates of the acreage sown to winter wheat last fall. Particular interest attaches to these estimates since the Department had requested a reduction averaging about one sixth because of the large carry-over and indications that wheat exports in the next crop year may be down as much as 100 million bushels.

According to this initial estimate, about 53 million acres were planted to winter wheat last fall as compared with over 62 million planted in 1948. This is a reduction of nearly 15 per cent. While this is a substantial reduction, the 53 million acres are still 5¼ million more than the 10-year average. The Department of Agriculture states that "a larger proportion

SELECTED ITEMS OF CONDITION OF TENTH DISTRICT MEMBER BANKS
(In millions of dollars)

	ALL MEMBER BANKS			RESERVE CITY BANKS			COUNTRY BANKS		
	Nov. 30 1949	Oct. 26 1949	Nov. 24 1948	Nov. 30 1949	Oct. 26 1949	Nov. 24 1948	Nov. 30 1949	Oct. 26 1949	Nov. 24 1948
Loans and investments.....	4,379	4,438	4,279	2,370	2,425	2,299	2,009	2,013	1,980
Loans and discounts.....	1,580	1,548	1,491	876	850	844	704	698	647
U. S. Government obligations.....	2,383	2,471	2,407	1,275	1,353	1,263	1,108	1,118	1,144
Other securities.....	416	419	381	219	222	192	197	197	189
Reserve with F. R. Bank.....	702	736	954	419	450	577	283	286	377
Balances with banks in U. S.....	600	601	615	239	243	256	361	358	359
Cash items in process of collection.....	270	262	295	251	244	276	19	18	19
Gross demand deposits.....	4,989	5,087	5,196	2,752	2,846	2,881	2,237	2,241	2,315
Deposits of banks.....	836	837	847	771	775	782	65	62	65
Other demand deposits.....	4,153	4,250	4,349	1,981	2,071	2,099	2,172	2,179	2,250
Time deposits.....	674	677	670	357	361	358	317	316	312
Total deposits.....	5,663	5,764	5,866	3,109	3,207	3,239	2,554	2,557	2,627
Borrowings.....	18	6	28	15	4	25	3	2	3

of the crop is being grown on summer fallow land and on land best suited to wheat." This fact, together with the unusually good condition of the crop at this time, is the basis of the Department's December estimate of a winter wheat crop of 885 million bushels from 53 million acres as compared with 902 million from a record planting of over 62 million acres last year. Below are the estimates for important wheat-producing States of the Tenth District.

	Acres Seeded		Percentage Change 1948-1949
	1948	1949	
Kansas.....	16,244,000	13,807,000	-15
Oklahoma.....	7,552,000	6,117,000	-19
Nebraska.....	4,596,000	3,999,000	-13
Colorado.....	3,402,000	2,892,000	-15
Missouri.....	2,125,000	1,700,000	-20

County figures are available for Kansas which give some indication of where the reductions took place. In ten counties with the largest acreage in the fall of 1948, the reduction in plantings this year was 14 per cent. In the ten counties with the smallest acreage in 1948, the reduction this year was 25 per cent. This showing is what would be expected and what is un-

doubtedly desirable. The big wheat counties of Kansas are in areas where the land and climate are best suited to wheat and where the large investment in machinery requires large-scale operations for efficient production. The counties with the small wheat acreage tend to be in the eastern part of the State where the soil and climatic conditions are well adapted to other crops. In the eastern part of the State, also, fields are small and an arbitrary reduction in acreage renders wheat production often impracticable.

The condition of the crop is excellent. The following quotation is from the Kansas winter wheat report of the agricultural statistician of that State. Since it was written, moderate moisture in the form of rain, snow, and sleet has been received over virtually all of the winter wheat belt.

Abundant precipitation during August and early September resulted in ideal conditions for seeding over most of the State except for limited areas in central and southeastern counties. Soil moisture tests taken in mid-October over the western two thirds of the State showed an average depth of 45.9 inches of moisture, compared with 42.5 inches in the fall of 1948. With very favorable topsoil and subsoil moisture early in the fall, plant development was rapid, and many fields made a rank growth; even late planted wheat has stooled and formed secondary roots. However, there has been little effective moisture in the western one half of the State for more than two months. As a result of the lack of precipitation, mild temperatures, and rapidly growing wheat, topsoil moisture has been largely depleted. The dry weather, however, has encouraged a deep root development, which is considered favorable. Some fields show the effects of dry weather and nitrate deficiencies in plant yellowing and tip burning. Some wheat is not up and stands are spotted in several central and north-central counties where the August-November moisture deficiency has been about 5 inches. A good general rain or snow would be beneficial over the entire State as the crop goes into the dormant stage. Mild weather has permitted heavy infestation of aphids. Hessian Fly, wire worms, and orange leaf rust are also much in evidence.

	BANK DEBITS		Change from '48	
	Nov. 1949	11 Mos. 1949	Nov. 1948	11 Mos. 1948
	(Thousand dollars)		(Per cent)	
COLORADO				
Colo. Springs....	46,221	438,010	+6	-1
Denver.....	534,267	5,372,135	+2	-1
Gr. Junction....	14,548	147,019	+4	+5
Greeley.....	22,359	209,399	0	-12
Pueblo.....	41,723	441,335	+7	+2
KANSAS				
Atchison.....	9,952	133,289	-37	-22
Emporia.....	10,663	108,134	-3	-3
Hutchinson....	32,402	416,634	-13	-15
Independence...	6,286	70,564	-7	-4
Kansas City....	62,954	704,965	-1	+1
Lawrence.....	10,195	109,399	+4	-3
Parsons.....	7,394	79,320	-5	-10
Pittsburg.....	10,961	119,583	-4	-5
Salina.....	29,485	364,273	-13	-15
Topeka.....	97,071	991,123	+19	+5
Wichita.....	196,405	2,333,103	-7	-4
MISSOURI				
Joplin.....	24,484	277,138	-11	-5
Kansas City....	985,975	10,943,772	-8	-7
St. Joseph....	98,209	996,296	-9	-8
NEBRASKA				
Fremont.....	14,097	168,887	-4	-6
Grand Island...	20,723	230,807	+4	-3
Hastings.....	11,374	137,204	-12	-14
Lincoln.....	76,985	829,934	+2	-2
Omaha.....	466,929	5,028,483	-4	-4
NEW MEXICO				
Albuquerque....	88,375	917,545	+10	+14
OKLAHOMA				
Bartlesville....	130,661	1,424,989	-1	+20
Enid.....	37,785	375,243	+7	-16
Guthrie.....	4,229	45,736	+7	-3
Muskogee.....	29,512	257,476	+12	-1
Okla. City....	366,235	3,360,393	+11	+1
Okmulgee.....	9,008	70,327	+1	-5
Ponca City....	19,572	197,099	+4	-6
Tulsa.....	528,007	5,257,123	-21	-7
WYOMING				
Casper.....	28,275	304,456	-3	+5
Cheyenne.....	27,467	316,511	-8	+3
District, 35 cities.	4,100,788	43,177,704	-5	-4
U. S., 333 cities....	99,491,000	1,112,553,000	-3	-1

Livestock During the month of November, cattle and sheep prices maintained a strong tone while hog prices declined. December saw a slight weakening in both cattle and lambs, while hog prices stabilized slightly above the announced Government support levels.

The price pattern clearly reflects the marketing pattern of the past several months. Figures on livestock receipts at six principal markets in the District reveal that the number of cattle and calves marketed in November, 1949, was 12 per cent below November of 1948, while the number of sheep marketed was 43 per cent below the previous year. Hog marketings, on the other hand, were up 7 per cent in November, 1949, over November, 1948. When related to the 10-year average, 1939-1948, the hog marketings of November, 1949, were found to be 26 per cent above the average.

Reports of excellent grazing in the wheat belt continued throughout December until the first heavy

snowfall. Reports from livestock feeding areas indicate rather heavy marketings of both cattle and hogs after the first of the year. This market movement will be somewhat earlier than normal and is reflected in the more uncertain market price trend at the major livestock centers.

Top carlot livestock prices at Kansas City:

	Dec. 20 1949	Nov. 1949	Oct. 1949	Nov. 1948	Nov. 1947	Nov. 1946
	(In dollars per hundredweight)					
Beef steers.....	37.50	38.00	36.00	35.00	32.00	32.00
Stocker cattle.....	25.50	25.00	25.25	28.00	24.50	19.00
Feeder cattle.....	25.00	25.00	24.35	28.50	26.25	20.25
Calves.....	25.00	25.00	25.00	28.00	24.00	14.50
Hogs.....	16.00	17.00	19.50	25.50	26.25	26.00
Lambs.....	22.00	24.50	24.50	26.50	24.25	24.75
Slaughter ewes.....	11.50	10.00	9.50	9.10	9.50	8.75

INDUSTRIAL PRODUCTION

Petroleum As the year end approaches, it appears that 1949 may go down in history as one of the few years in which total demand for petroleum products failed to show an increase over the preceding year. Gasoline consumption at record levels has not offset a lowered demand for the fuel oils. The recent demand outlook has been uncertain. Crude oil stocks have been rising contrary to seasonal expectations, and domestic production has fallen off sharply since late November. On the other hand, imports have continued to rise and exploratory drilling activity is at a high level.

In the Tenth District, a number of new fields have been opened in recent weeks, and in Wyoming drilling activity for the year is running ahead of 1948. A well flowing 3,000 barrels a day of 40-degree gravity oil has been opened on the outskirts of Glenrock, Wyoming, and oil operators have stated that the discovery strongly indicates a new production horizon for the area. Most drilling activity has been concentrated in the northeastern corner of the State where the Fiddler Creek, Hay Creek, Mush Creek, and Skull Creek fields are located. Present output of the area is 8,000 to 10,000 barrels a day, while it is reported that this could be raised to 20,000 barrels if a large enough market could be found.

After several months of promising but unspectacular development, the Sidney, Nebraska, oil field now appears to be a major natural gas field. The new discovery has tested at a rate of 5,280,000 cubic feet of gas a day. There are to date five producing oil wells in the field. In New Mexico, a multimillion dollar pipeline from the natural gas fields of the San Juan basin to the Pacific Coast has been proposed and is under consideration by the Federal Power Commission. Proven reserves of the field exceed 2 trillion cubic feet and potential reserves are estimated at 9 trillion cubic feet. It has been predicted that approval of the

pipeline would set off a 3½ million dollar drilling program in northwestern New Mexico.

DEPARTMENT STORE TRADE

Dollar volume of sales at reporting department stores in this District in the first half of December was about 4 per cent larger than a year earlier, in contrast with a decline of 7 per cent for November and for the first eleven months of the year. During November, sales of some items, especially apparel, had been affected adversely by unseasonably warm weather, but there was a noticeable improvement in sales after Thanksgiving as Christmas buying got under way. The aggregate physical volume of department store sales in 1949 is probably as large as that in 1948; the over-all decline in dollar volume is due chiefly to lower prices, reflecting not only reductions in the regular list prices of many items and sharply reduced prices in connection with clearance sales and other special promotions but also a shift in consumer buying to lower-priced lines of merchandise that have become increasingly available. Sales increased slightly less than is usual from October to November, and the seasonally adjusted index of daily average sales declined from 301 per cent of the 1935-1939 average in October to 300 per cent in November. This compares with an average of 305 per cent for 1949 to date and the record level of 327 per cent for the entire year 1948.

Department store inventories increased somewhat more than is usual during November, and the seasonally adjusted index of stocks rose from 278 per cent of the 1935-39 average at the end of October to 282 per cent at the end of November. The general level of inventories currently is above the average of 276 per cent for 1949 to date but is below the record high of 301 per cent for the year 1948. Stocks of merchandise on hand November 30 were 5 per cent less in value than a year earlier and the volume of outstanding orders was 16 per cent smaller.

Department store sales and stocks in leading cities:

	SALES		STOCKS	
	Nov. '49 comp. to Nov. '48	11 Mos. '49 comp. to 11 Mos. '48	Nov. 30, '49 comp. to Nov. 30, '48	Nov. 30, '48 comp. to Nov. 30, '48
	(Per cent increase or decrease)			
Denver.....	-9	-7	-6	
Pueblo.....	-19	-13	-10	
Hutchinson.....	-10	-6	0	
Topeka.....	-8	-5	+1	
Wichita.....	-8	-2	+4	
Joplin.....	-7	-9	-5	
Kansas City.....	-9	-10	0	
St. Joseph.....	-3	-7	*	
Lincoln.....	-9	-10	*	
Omaha.....	+2	+2	0	
Oklahoma City.....	-4	-7	-6	
Tulsa.....	-12	-9	*	
Other cities.....	-5	-6	-12	
District.....	-7	-7	-5	

*Not shown separately but included in District total.