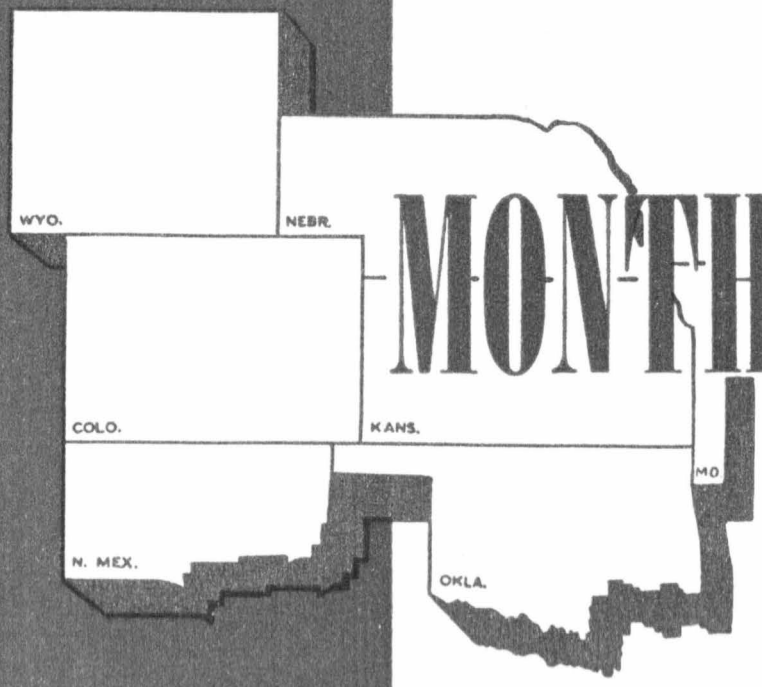
April 1954



MONTHLY REVIEW

In This Issue

FEDERAL RESERVE BANK
OF KANSAS CITY

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Irrigating Agricultural Land

In the arid sections of the West, irrigation has long been used in agricultural production. Recently, it has become more important in the semiarid and subhumid sections. Although not used for a large percentage of agricultural production, it has become increasingly important in the Tenth Federal Reserve District.

Table 1 shows the state-by-state change in irrigated acreage in the Tenth District between 1939 and 1949. Oklahoma had the sharpest increase in irrigated acreage during the 10-year period. Missouri also showed a considerable increase. Both Oklahoma and Missouri, however, started from a relatively small base, and, although the percentage increase was considerable, the absolute increase was not large. Colorado experienced the greatest absolute increase in irrigated acreage, although her percentage increase was only 16.4 per cent. Nebraska also had a substantial increase in irrigated acreage during the period.

Table 1. Trends In Irrigated Acreage

Area	1939	1944	1949*	Per Cent Change 1939-49
Colorado	2,467,548	2,698,579	2,872,348	16.4
Kansas	82,872	96,248	138,686	67.3
Missouri	960	1,113	2,089	117.6
Nebraska	473,775	631,762	876,259	85.0
New Mexico	436,402	534,640	655,287	50.2
Oklahoma	4,437	2,237	34,071	667.9
Wyoming	1,284,027	1,353,873	1,431,767	11.5
Tenth District	4,750,021	5,318,452	6,010,507	26.5
United States	17,982,830	20,539,470	25,787,455	43.4

*The 1949 irrigated acreage does not check with that of Table 2 because the data in Table 2 were compiled on a county basis and there is duplication. The acreage of inter-county enterprises is reported for all counties the enterprise serves.
SOURCE: *Census of Agriculture*, Volume III, 1950.

Additional information relating to irrigation in the Tenth District is presented in Table 2. This table indicates the distribution of irrigation enterprises and acreage by states. As used here, an irrigation enterprise is any operation that supplies water for irrigation purposes. As such, irrigation enterprises range all the way from single-farm operations, which provide water for the individual farm and are operated by the individual farm operator, to city, state, and federally operated projects, which may provide irrigation services for hundreds of farmers.

Almost 50 per cent of the irrigation enterprises in the Tenth District and slightly more than 50 per cent of the irrigated acreage are located in Colorado. Nebraska ranks second in number of enterprises but is replaced by Wyoming in total acres irrigated. This indicates that the vast majority of enterprises in Nebraska are one-farm operations, while in Wyoming the tendency is toward the larger type of irrigation enterprise.

Table 2. Irrigation Enterprises and Acreage, 1949

State	Number of Enterprises	Per Cent of Enterprises in District	Acreage Irrigated	Per Cent of Irrigated Acreage in District
Colorado	9,158	46.3	2,943,895	51.6
Kansas	962	4.8	140,992	2.5
Nebraska	5,583	28.2	887,239	15.5
New Mexico*	825	4.2	218,049	3.8
Oklahoma*	163	0.8	44,141	0.8
Wyoming	3,104	15.7	1,474,835	25.8
10th Dist. (excluding Mo.)*	19,795	100.0	5,709,151	100.0

*Missouri is not included in this and subsequent tables, since data for those counties in the Tenth District are not available. Only Tenth District parts of New Mexico and Oklahoma have been included.

SOURCE: *Census of Agriculture*, Volume III, 1950.

These conclusions are confirmed by examining the prevalence of various types of irrigation enterprises. In Nebraska and Kansas, approximately 99 per cent of the enterprises are single-farm operations, while Wyoming has only 78 per cent of this type. In terms of acreage irrigated, single-farm enterprises account for 44 per cent of Nebraska's and 45 per cent of Wyoming's irrigated lands.

These data illustrate the fact that, although most of the land in the Tenth District is not irrigated, the practice is growing in importance. Some of the characteristics of this technique, which is new to many communities and individuals, are discussed in the material that follows.

Table 3. Sources of Irrigation Water, 1949

State	Enterprises Reporting			Irrigated Acreage		
	Surface Water	Ground Water	Comb. Surface and Ground Water	Surface Water	Ground Water	Comb. Surface and Ground Water
	Per Cent			*Per Cent*		
Colorado	64.0	31.7	4.3	90.2	7.4	2.4
Kansas	12.0	80.6	7.4	32.9	59.6	7.5
Nebraska	12.0	83.5	4.5	60.4	37.1	2.5
New Mexico*	90.1	8.5	1.4	97.5	1.5	1.0
Oklahoma*	31.5	63.5	5.0	78.8	19.9	1.3
Wyoming	95.2	3.5	1.3	98.7	0.6	0.7
10th Dist. (excluding Mo.)	52.4	43.6	4.0	86.7	11.2	2.1

*Tenth District portion only.

SOURCE: *Census of Agriculture*, Volume III, 1950.

Sources of Irrigation Water

Sources of irrigation water are grouped into two classifications—surface water, such as lakes, rivers, streams, and flowing wells, and ground water obtained from pumped wells. In the Tenth District, 52.4 per cent of the enterprises reporting in the 1950 census listed surface waters as their only source of irrigation water. Ground water was utilized by 43.6 per cent, and 4 per cent used some combination of ground and surface water.

Surface waters were used on 86.7 per cent of the irrigated land in the Tenth District, while ground water irrigated 11.2 per cent. The remaining 2.1 per cent, or 128,655 acres, used a combination of the two classes of water. Kansas was the only state where ground water was used to irrigate more acreage than surface water. The importance of combinations of surface and ground water, both for enterprises reporting and for acreage irrigated, was not great in any of the states.

This suggests the conclusion that ground water is used predominantly by single-farm enterprises, while surface waters probably are used by most multi-farm operations. This is particularly true in Nebraska, where 83.5 per cent of the enterprises used ground water, but represented only 37.1 per cent of the total acreage. This also is the case in Oklahoma and, to a lesser degree, in all District states.

Origin of Surface Water

As previously indicated, surface waters supply more than half of the irrigation enterprises in the Tenth District and better than 80 per cent of the irrigated acreage. The most important single source of irrigation water is the lakes and streams of the region. Of the

Table 4. Origins of Surface Water For Irrigation, 1949

State	Per Cent of Enterprises Reporting				
	Lakes & Streams	Springs	Flowing Wells	Drainage Water	Sewage
Colorado	84.2	5.6	3.5	6.6	0.1
Kansas	94.3	2.6	1.6	1.0	0.5
Nebraska	86.8	2.0	6.4	4.5	0.2
New Mexico*	91.0	7.5	0.8	0.6	0.1
Oklahoma*	89.7	1.7	—	8.6	—
Wyoming	90.9	5.3	1.7	2.0	0.1
10th Dist. (excluding Mo.)	86.8	5.3	3.0	4.7	0.1
	Per Cent of Acres Irrigated				
State	Lakes & Streams	Springs	Flowing Wells	Drainage Water	Sewage
Colorado	84.4	1.6	2.3	11.7	**
Kansas	95.4	0.5	0.8	3.2	0.1
Nebraska	96.3	0.2	0.8	2.7	**
New Mexico*	96.7	2.9	0.1	0.3	0.1
Oklahoma*	99.6	0.2	—	0.1	—
Wyoming	93.0	3.6	1.2	2.1	0.1
10th Dist. (excluding Mo.)	88.5	2.0	1.8	7.7	**

*Tenth District portion only.
**Less than .05%.
SOURCE: *Census of Agriculture*, Volume III, 1950.

enterprises reporting surface water as the primary water source in their operations, 86.8 per cent drew their supply from lakes and streams. In all states of the District, the importance of this source was paramount. In Colorado, where fewer enterprises relied upon this source than in other states, 84.2 per cent reported lakes and streams as their main source of water.

If importance is measured by the number of acres irrigated from each surface source, lakes and streams again predominate, ranging from 99.6 per cent of the irrigated acreage in Oklahoma to 84.4 per cent in Colorado and averaging 88.5 per cent for the District as a whole. In Colorado, the only state where irrigation from lakes and streams accounted for less than 90 per cent of the irrigated acreage, drainage water ranked second with 11.7 per cent. This source supplied 7.7 per cent of the irrigated land for the District as a whole.

Ground Water

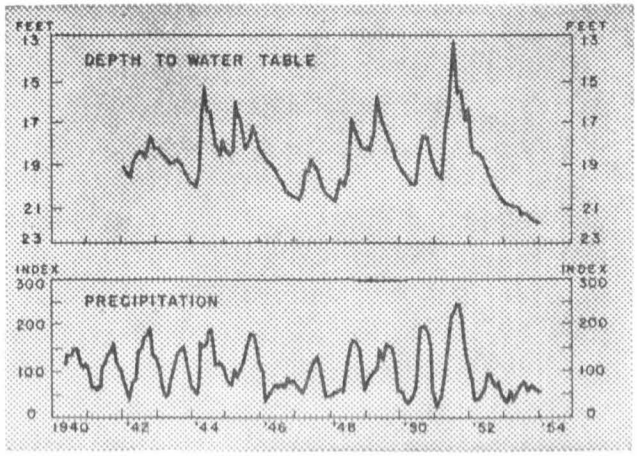
The ultimate determinant of water resources, both ground and surface, is precipitation. Man's control over precipitation is necessarily limited both as to quantity available and time of availability. In order to insure an adequate supply of water at all times, he must resort to measures which will afford him the greatest opportunity of full utilization, including storage of water which does become available. This is accomplished to varying degrees by attempting to decrease the amount of run-off and regulating the rapidity with which run-off moves beyond control. These efforts are more discernable as they affect sources of surface water through flood-water impoundment, channel stabilization, and various soil conservation practices such as terracing and strip-cropping.

Large areas of the Tenth District will benefit only indirectly by such surface water control methods, since they are wholly lacking or are inadequately provided with suitable surface waters for future irrigation development. The future of irrigation in these areas lies in developing ground water economically and wisely.

Ground water, contrary to what many people believe, is not an exhaustible resource in the sense that coal or oil are exhaustible. Ground water is water in storage during its journey through the hydrological cycle. It is being replenished constantly through precipitation and, although there are periods—particularly during droughts—when withdrawals from ground water exceed additions, such decreases usually are temporary and are recovered during periods of above normal rainfall.

Figures 1 and 2 illustrate the effect that variation in precipitation has had on two wells in Kansas during the last 12 years. The relationship between water levels and precipita-

Figure 1. Depth to Water Table, Valley Center, Kansas, Well and Index of Precipitation, Wichita, Kansas



Index=5-month moving average.
SOURCE: U. S. Weather Bureau and U. S. Geological Survey.

tion is noticeably greater in Figure 1 than it is in Figure 2. This is due to the relative shallowness of the Valley Center well, which varies from 13 to 22 feet during the period measured, compared with 84 to 89 feet in the Grant County well.

In addition to precipitation, other factors influence the development of irrigation from ground water. One is the depth of the water table below ground level. This varies from one locality to another because of differences in geological formations underlying the areas. In some areas, ground water is lacking entirely or is insufficient to carry on irrigation. Also, the soils and terrain are not suitable for irrigation in some areas.

In general, within the above limitations, the outlook for increasing irrigation with ground water in the Tenth District is favorable. An overdevelopment of ground water resources during periods of above normal precipitation may lead to shortages during an extended period of subnormal precipitation. However, irrigation development in the District generally has not progressed to the stage where concern on this point is justified.

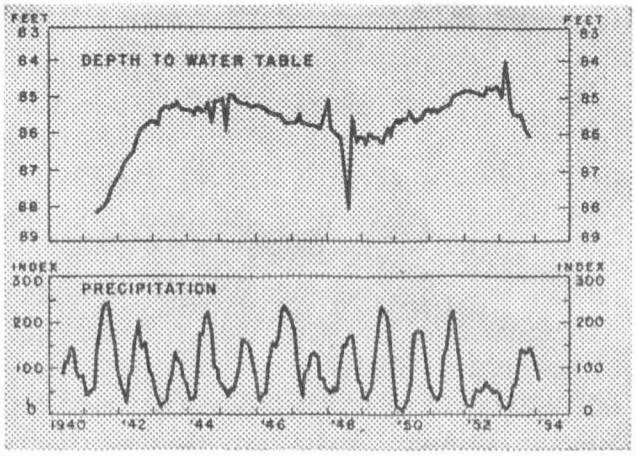
Capital Requirements

The capital requirements of an irrigation system for a particular farm will depend upon the kind of irrigation system (sprinkler or gravity), the source of water, the acreage to be irrigated, and the topography. Consequently, it will not be possible in this article to present capital requirements data that will apply to all farms in the Tenth District with an irrigation potential. Instead, an effort will be made to present the items necessary for successful operation of any type of irrigation system and irrigation investment data for certain locations in the District.

In Table 5, the items necessary for both sprinkler- and gravity-type irrigation are presented. The original cost of these items varies from community to community and farm to farm, while the quantity depends on the acreage to be irrigated. A suggested depreciation schedule for various items of different irrigation systems is presented in Table 6. Some modifications are necessary to fit local conditions.

The question of whether surface or sprinkler irrigation is superior depends on the farm to

Figure 2. Depth to Water Table, Grant County, Kansas, Well and Index of Precipitation, Ulysses, Kansas



Index=5-month moving average.
SOURCE: U. S. Weather Bureau and U. S. Geological Survey.

Table 5. Items Included In Initial Investment for an Irrigation System

Gravity	Sprinkler
Water Supply	Water Supply
Land Preparation	
Conveyance Systems:	Conveyance Systems (mains):
Open ditches	Open ditches
Closed conduits	Closed conduits
Drops, division boxes	
Distribution Systems:	Distribution Systems:
Checks	Sprinkler laterals — complete
Spiles, siphons or both	
Gated pipe	Pump
Machinery:	Machinery:
Floats	For moving pipe
Ditches	

SOURCE: "Sprinkler versus Gravity Irrigation" by Fred B. Hamilton and John F. Schrunk, *Agricultural Engineering*, April, 1953.

be irrigated. For irregular topography, where surface ditches cannot be provided, or where deep-percolation losses from surface irrigation are great, sprinkler irrigation probably is the only practical type. On the other hand, surface irrigation usually requires less investment and, in those areas where it can be used, may be more profitable. However, the system that is best for any farm can be determined only by analysis or experience. This means that the returns from the two systems must be compared and balanced against the operator's personal preferences regarding the type of supervision and labor for each.

Table 6. Suggested Depreciation Period for Components of an Irrigation System

Gravity	Sprinkler	Depreciation Period
		years
Well	Well	25
Pumping Equipment	Pumping Equipment	15
Farm Ditches (permanent)	Farm Ditches (permanent)	20
Concrete Structures		20
Pipe	Pipe	15
Misc. Control Equip.	Sprinkler Laterals	15
Power Units:	Power Units:	
Combustion	Combustion	10
Electric	Electric	25
Land Grading		none

SOURCE: "Sprinkler versus Gravity Irrigation" by Fred B. Hamilton and John F. Schrunk, *Agricultural Engineering*, April, 1953.

Table 7 shows an example of the investment required for well irrigation in Box Butte County, Nebraska. It indicates the less than proportional increase in investment associated with increased depth of irrigation wells. Power costs increase quite rapidly with depth of well. The depth from which it is economically feasible to pump water will vary with the cost of power and the price of agricultural products being produced. For example, in southwest Kansas, where cheap power from the Hugoton Gas Fields is available, it may be economical to lift water much farther than in an area where power is more expensive. It will be noted that the data in Table 7 were collected for 1949 operations. Comparable investment data probably would be different at present. These data also would vary with the volume of water pumped and the acreage irrigated.

Table 7. Investment for Irrigation Wells In Box Butte County, Nebraska, 1949

	Depth of Water After Drawdown			
Items	Under 100 Ft. 27 Wells	101 to 150 Ft. 20 Wells	Over 150 Ft. 8 Wells	Average 55 Wells
Power	$1,001	$1,946	$2,856	$1,615
Pump	1,456	1,628	2,797	1,713
Well	2,454	3,989	2,957	3,085
Equipment	272	404	485	355
Total	$5,183	$7,967	$9,095	$6,768

SOURCE: *Original Cost and Annual Cost for Irrigation Wells*, Box Butte County, Nebraska, 1949. University of Nebraska and U. S. Department of Agriculture, Lincoln, Nebraska.

Yield Response

Information is inadequate regarding the income that can be expected from irrigation development. This is explained by the fact that conditions are not the same in various parts of the District. In general, therefore,

little can be said about this important problem. Also, the determination of the amount of income that irrigation contributes to farm business is extremely complex. It is understandable that there is a lack of information on the subject.

The contribution that irrigation makes to farm income is expressed largely through greater crop yields. Table 8 illustrates the effect of irrigation in 1952 on crop yields at one location in the Tenth District. These yield differences may not apply in other locations or under different water-supply conditions, but they serve as an example of the response of crops to irrigation. Because of the increased yields on irrigated land, more nutrients are removed from the soil. Therefore, a more complete soil nutrient replenishment program is necessary on irrigated land if crop yields are to be maintained.

It may be seen in Table 8 that the greatest increases in crop yields were experienced by cotton and alfalfa. Grain sorghum also responded quite well to added water. However, oats and wheat did not show a significant response to irrigation in 1952. Crop responses to irrigation vary considerably from year to year. In addition, differences in yields on irrigated and dryland are greater in dry years.

Farmers in southwestern Oklahoma could increase dryland yields moderately through widespread use of improved practices, and it is believed that substantially greater increases in irrigated yields are possible if irrigation is accompanied by improved crop rotations, increased use of fertilizer, better insect control programs, proper land development, and proper water application. Therefore, subsequent increases in yield would not be due to irrigation alone but to a combination of practices.

Table 8. Yields On Dry and Irrigated Land*

Crop	Dry	Irrigated
Cotton lint (pounds)	190.0**	390.0†
Alfalfa hay (tons)	1.0	1.9
Grain sorghum (100 pounds)	9.6	15.6
Oats (bushels)	15.6	18.3
Wheat (bushels)	15.0	17.1

*W. C. Austin Project, Altus, Oklahoma, 1952.
** Wt. of cotton seed = 1.7 wt. of lint.
† Wt. of seed = 1.8 wt. of lint.

SOURCE: *Income Possibilities and Development Problems of Irrigated Farms in a Subhumid Cotton Area.* Unpublished manuscript of the U. S. Department of Agriculture and Oklahoma Agricultural and Mechanical College.

Stability Implications of Irrigation

Irrigation in the Great Plains can be used to increase the stability as well as the amount of agricultural production. Since instability of production in this area frequently is caused by an unreliable supply of moisture, it would appear that irrigation is an excellent means of removing some of this variability. There are, however, numerous problems associated with the adoption of irrigation.

Many farmers would like to combine a small irrigated acreage with a larger dryland acreage. Such a farm organization would produce a stable feed or cash grain crop on the irrigated acreage and also would permit large crops on the dryland in good years. In other words, a degree of stability would be attained without reducing income possibilities in years of high rainfall. Some farmers may be able to develop their water resources to attain such an ideal arrangement, but the number of farms on which this can be done is small. On many farms, water is not available or the terrain is such that the land cannot be irrigated. In such cases, development of irrigation in the community could have indirect benefits. For example, an irrigation development might produce either forage or grain crops or both, so that a livestock farmer on a dryland farm would have a dependable feed supply by purchasing the feed from a farmer with considerable irrigated land. This is a loose type of integration and may not permit

an exact balancing of livestock numbers and feed supplies between the nonirrigated and irrigated farms.

On some farms, irrigation may be used on a stand-by basis. That is, in years of average or better precipitation, the irrigation system may not be used. Only when precipitation is inadequate, is the irrigation system put into operation. Such an organization would have a considerable amount of flexibility, but it also involves problems, since there would be considerable expense in maintaining the system during the years it is not used. This is less of a problem with pump irrigation than with an extensive system of reservoirs and canals.

Another factor which must be recognized when the adoption of irrigation is being considered is the level of management involved. Such an innovation carries with it a considerable number of problems which are new to most dryland farmers. Not only will many of the crops be new, but there also will be problems associated with the time and amount of water application. Soil management also becomes quite important as water is applied to agricultural crops. A farmer contemplating the adoption of irrigation would do well to secure technical advice from his extension service or other sources.

Finally, it should be recognized that the supply of irrigation water also is subject to fluctuation. If the irrigating is being carried on from wells, it is possible that a long period of dry weather, combined with extensive irrigation development, may cause a lowering of the water table. If this occurs, it is obvious that the farmer may have to curtail his use of water. This also may occur if the water is supplied from a surface source. For example, in the unpublished study made by the U. S. Department of Agriculture and Oklahoma A and M College dealing with the economics of irrigation development on the W. C. Austin Project in Oklahoma, it was estimated that water shortages would have affected crop yields in 16 of the 39 years from 1914 through 1952. It was noted that the years of water shortage tended to be bunched, being most severe during the 1930's. It is during such a period that the need for added stability from irrigation would be greatest. The W. C. Austin Project does not have a supply of water adequate for all years. Even with a fully adequate supply, irrigation should not be viewed as a perfect stabilizer. Irrigation may prevent income from falling to disastrous levels during a period of extended drought. One of its stabilizing effects is to permit the maintenance of livestock numbers during periods of drought. This permits quicker recovery in more favorable years, while under dryland farming conditions it may be necessary to liquidate livestock herds. Consequently, it is probable that irrigation has a stabilizing influence on the farm organization, but it also is likely that considerable fluctuation in physical production and income still will exist even though irrigation is used.

Rolling Adjustment In Bank Credit

Loan Volume Reflects Altered Needs of Business and Consumers

THE SWING from hyperactivity in the first half of 1953 to a slower rate of output in recent months reduced national industrial production. The reduction and reallocation of military spending, reduced farm income, and a turn from inventory accumulation were prominent factors in this change of pace. As could have been expected, these events have impinged more sharply upon certain industries and regions than upon others. Aircraft companies whose contracts were increased probably have not expanded production, since higher delivery schedules were not established; on the other hand, some firms whose contracts were terminated have experienced a contraction of output not compensated by rising markets for other products. Companies whose products were overstocked have cut operations to allow sales to absorb the surplus. Lower farm income has exercised a pervasive influence on the tempo of business in many parts of the country and has particularly affected concerns producing goods for sale to farmers.

The impact of these developments upon various types of industries and in the several sections of the country is registered, in part, in the loans and deposits of commercial banks. In most lines of business, the demand for bank loans in the first quarter of 1954 was below that of last year. Particularly striking was the reduction in bank credit needs of firms in the metals, petroleum, coal, chemicals, and rubber industries, and of wholesale and retail trade firms. Much of the expansion of business loans since 1950 has been to finance additions to inventory, and the change to a policy of liquidation probably accounts for a large part of the difference in the two years. In addition to lower business credit needs, banks in leading cities report a slackening in demand for both long- and short-term consumer loans following the significant increases which accompanied heavy purchases of houses, automobiles, and household durables last year.

The National Situation

The first eleven weeks of the new year witnessed a sharp contraction of total loan volume at all weekly reporting banks in the United States. Excluding loans to banks, the decline amounted to 1,054 million dollars up to March 17. The recorded drop in loan volume undoubtedly would have been greater in the absence of purchase by reporting banks of an estimated 130 million dollars of Commodity Credit Corporation Certificates of Interest in the week ended February 3. The reduction began immediately after the turn of the year, with the week ended January 6 registering a net decline of 608 million dollars. An important, though uncertain, amount of this reduction probably represented repayment of loans taken to minimize excess profits tax liability. However, business and agricultural loans continued to decline through February, as inventories were further reduced, and "all other" loans—chiefly consumer— recorded the second successive monthly decrease. Temporary borrowing to meet income tax payments appears to have been the principal cause of an increase of 532 million dollars in business loans during the two statement weeks ended March 17. As a result, total loans, apart from loans to

banks, increased 724 million dollars between February 24 and March 17. Nevertheless, the decline measured from the year end was approximately eight times as great as in the corresponding period of 1953.

An important part of total repayments since the beginning of the year originated with seasonally lower credit requirements of certain borrowers, such as food, liquor, and tobacco manufacturers and commodity dealers. These firms liquidated 314 million dollars of loans at a selected group of larger banks which report loans by industry, and have accounted for about one third of the total contraction in business borrowing thus far this year. This amount of repayment is not out of line with seasonal reduction in borrowings by these firms in other recent years. Wholesale and retail trade firms, which also normally reduce bank borrowing after the first of the year, appear to have made larger repayments this year—130 million up to March 3, compared with an increase of 1 million in the same period last year. There also has been diminution in borrowing by the petroleum and chemical industries. These firms, which had continued to increase bank borrowings through the close of 1953, repaid approximately 100 million dollars of loans, on balance, in the month of January. Metal and metal products firms began making substantial repayments during the last half of 1953, after steadily increasing their use of bank credit in the preceding three years, and between December 30, 1953, and March 3, 1954, repaid 148 million dollars. With respect to the more recent period, it may be of interest to note that metals firms reduced loans 152 million in the first week of the new year but made no net reduction of indebtedness in the succeeding eight-week period.

Sales finance company repayments are the final major factor in the decline of commercial and industrial loans at reporting banks in the country. These firms decreased their use of bank credit 229 million dollars from December 30 to March 3 following a reduction of 138 million in the preceding six months. In part, this latest reduction represents a seasonal decline in demand for credit by consumers. However, there appear to be other influences. Sales finance companies funded an important amount of bank debt through sale of securities on the market during the latter months of 1953. Beyond this, recent figures show a more than seasonal decline in the amount of consumer debt outstanding following the slower increase in the last half of 1953.

Changes by Federal Reserve Districts

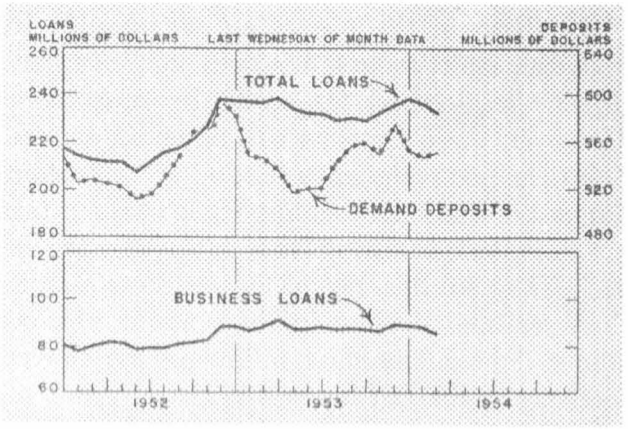
The reductions in business loans described for the aggregate of reporting banks in the United States were not distributed evenly but were concentrated in certain areas. Developments in some districts were contrary to the trend for the Nation, showing either increases or smaller decreases in business and agricultural loans, compared with last year.

In terms of dollars, the greatest change occurred among banks in the New York Federal Reserve District, where reductions in business and agricultural loans up to March 3 this year amounted to 564 million dollars, compared with 180 million last year. Percentagewise, however, declines at reporting banks in the Boston, Philadelphia, Cleveland, and St. Louis districts also represented notable changes from the corresponding months of 1953. On the other hand, changes in business and agricultural loan volume in the Richmond, Atlanta, Kansas City, and Minneapolis districts, predominantly agricultural regions, were approximately the same magnitude as in the first two months of last year.

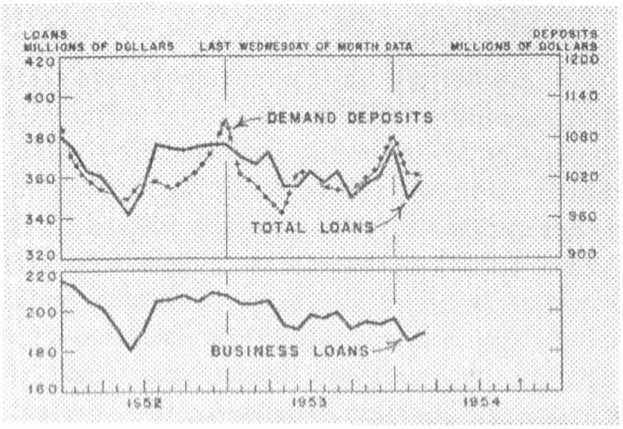
Consumer loan demand, as revealed by changes in "all other" loans at reporting banks, showed signs of slackening in all districts.

BUSINESS LOANS, TOTAL LOANS, AND TOTAL DEMAND DEPOSITS

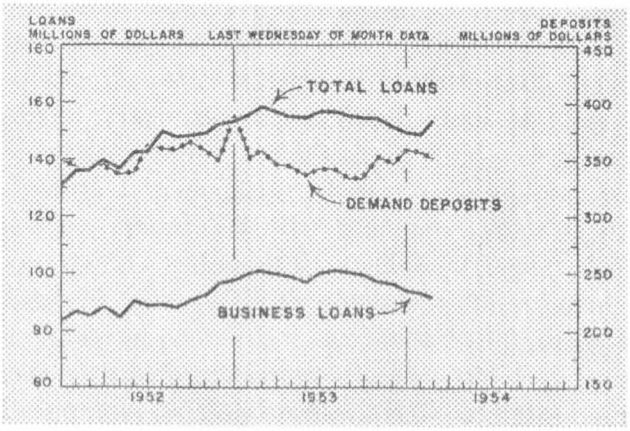
Denver



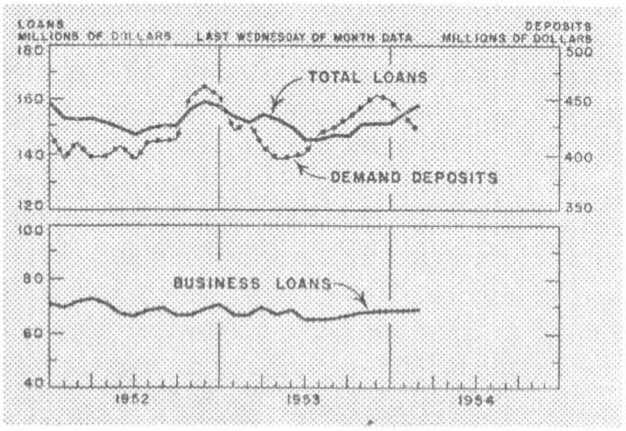
Kansas City



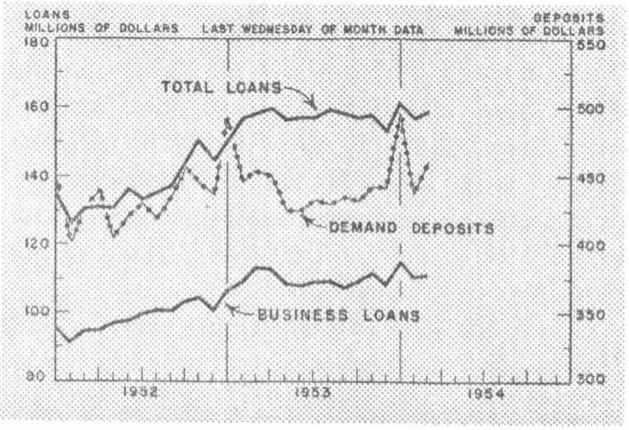
Oklahoma City



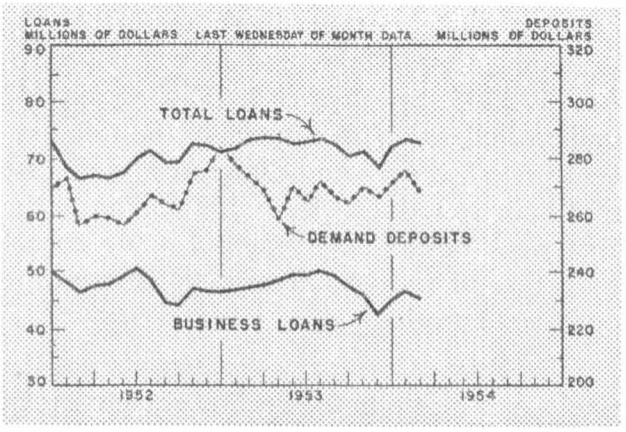
Omaha



Tulsa



Wichita



Dollar declines were registered in all but one district – ranging from less than 1 per cent in the Kansas City District to more than 5 per cent in the St. Louis District. There was an increase among reporting banks in the Cleveland District, but of decidedly smaller proportion than the rise during the first two months last year.

Tenth District

The combined volume of business and agricultural loans at Tenth District weekly reporting banks has been rather stable thus far this year. Apart from the increase during the statement week of March 17, when income tax borrowing was an important factor, business credit alone contracted 5.5 million dollars up to mid-March. The offsetting gain in agricultural loans represents an increase in Commodity Credit Corporation guaranteed loans and appears to be associated in important measure with purchases of Commodity Credit Corporation Certificates of Interest issued in February. In the same period last year, commercial and industrial loans increased 5 million dollars. The trend of business loans, total loans, and deposits is recorded for six principal District cities in the accompanying charts.

Among District business borrowers, the major loan repayments thus far in 1954 have been made by food manufacturers, commodity dealers, sales finance companies, and retail trade firms. Food manufacturers and commodity dealers normally experience lower credit needs at this period of the year, and recent liquidations have been within expected limits. These liquidations have been a particularly important factor in the decreased business loan volume at Kansas City banks, although banks in Denver and Omaha also have felt the contraction. The reduction of bank indebtedness by sales finance companies appears to have been more widespread, with the volume at reporting banks in all but one of the six District cities showing reduction. In the corresponding months of 1953, such loans were on the increase. Distributors, particularly retailers, have reduced their borrowing generally since the first of the year – in contrast to increases in January and February last year.

There also have been some notable increases in credit requirements at District banks since the beginning of the year by certain industries, which, though submerged by the overall downtrend, have furnished significant support to loan volume. Loans classified as "Petroleum, coal, chemicals, and rubber" have expanded in each of the six principal District cities, although city banks in Oklahoma have experienced the largest gains. The bulk of these loans probably is associated with the petroleum industry and may reflect increasing stocks of gasoline. There also has been growth in loans to metals and metal products manufacturers and to textile and apparel firms, principally in Kansas City. In addition, public utilities and construction firms have shown net increases in bank borrowing up to mid-March this year, compared with decreases in the like period last year.

The decline in total deposits this year has been less than last year among District reporting banks as a whole. However, the build-up during the preceding six-month seasonal expansion also was considerably smaller. The greatest decline in dollar volume was in Kansas City, where interbank deposits accounted for much of the contraction. Similarly, the decline at reporting banks in Omaha was influenced by withdrawal of bankers' balances. Except for Tulsa banks, private deposits (deposits of individuals and businesses) in principal District cities have contracted decidedly less in the first two months of 1954 than in the preceding year.

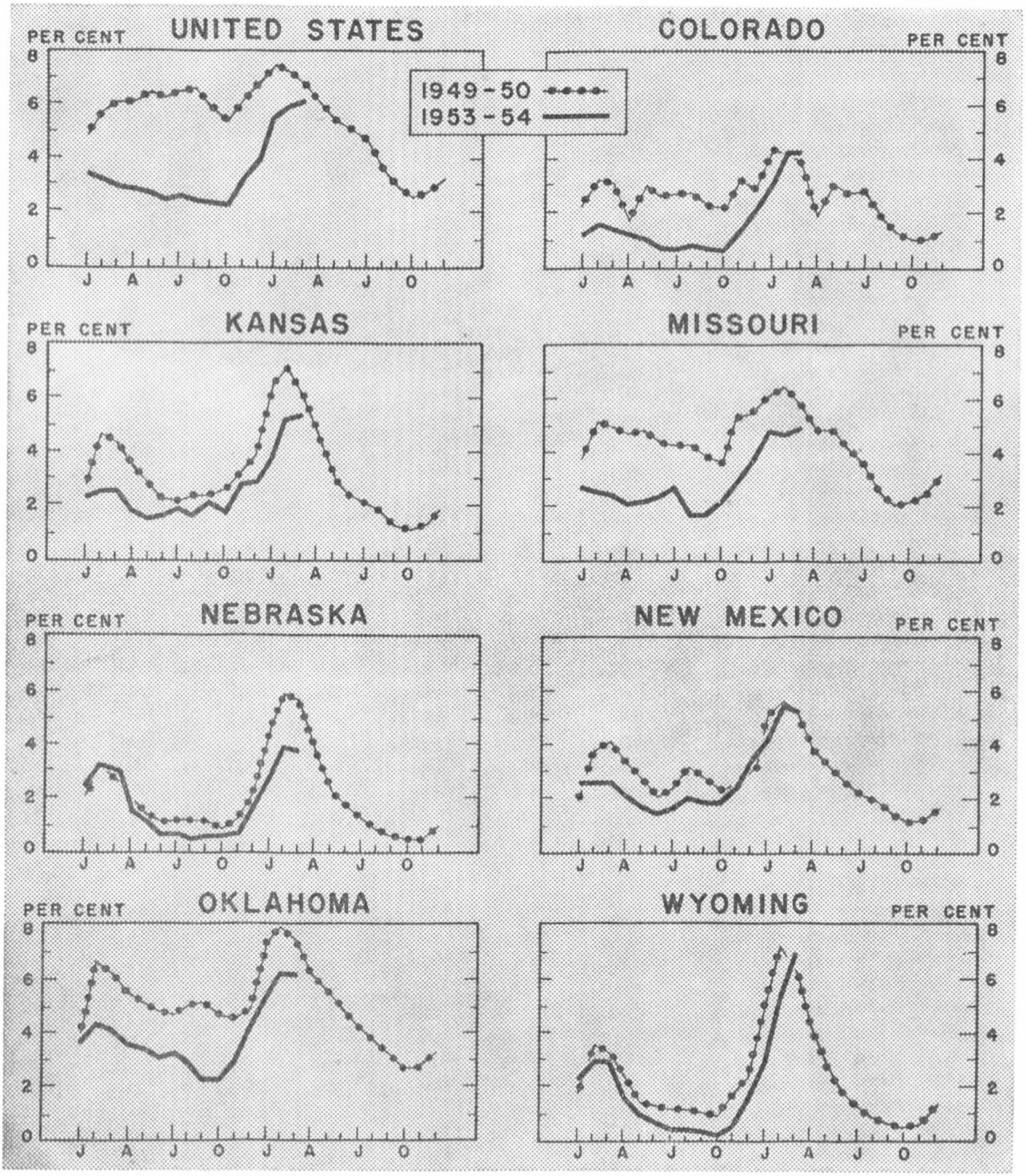
UNEMPLOYMENT RISE GENERAL

Unemployment in the United States has risen substantially during the last several months. In October, 1953, the U. S. Bureau of Census reported that only 1.2 million persons were unemployed – a postwar low. By February of this year, the total was up to around 3.5 million, the highest point since the spring of 1950. While greater publicity has been given to the rapid rise of unemployment in some of the more heavily industrialized areas, unemployment in Tenth District states also has increased rapidly since the fall of 1953. However, the rate of increase has slowed down recently in most District states. In Nebraska, New Mexico, and Oklahoma, unemployment declined slightly in March. These developments are revealed by figures from the state unemployment insurance programs shown in the accompanying charts. Even though only 36 million of the 60 million workers in the Nation are in the insurance programs, state information on joblessness among insured workers is broadly indicative of unemployment conditions.

Seasonal factors account for part of the increase in unemployment since the first of the year; however, joblessness generally drops in March as outdoor work picks up. For the week ended March 6, 1954, the 6.1 per cent of the insured workers unemployed in the U. S. was more than double the level a year earlier and equaled the March, 1949, percentage. In attaining this level, the rise in unemployment from the seasonal low of last October to March of this year represented a greater increase than during the comparable 1948-49 period. The proportion of insured workers unemployed in the seven District states also was double that of a year ago, except in Nebraska and Oklahoma. The per cent unemployed in New Mexico in March approximated the previous postwar peak there, while in Colorado and Wyoming, the ratio was higher than in the comparable period of 1950. Except for Oklahoma and Wyoming, the proportion of workers unemployed in District states was below the national average.

Important factors in the lower rate of activity in the national economy during recent months were the reduction of business inventories, which accumulated at a rapid rate through the third quarter of 1953, and the reduced volume of spending for national defense. For District states, it appears that reduced defense spending was especially important in lowering the level of activity. Cutbacks at ordnance and military aircraft factories augmented the seasonal increase in unemployment in Kansas City. Military aircraft employment in Wichita increased slightly during the past several months, but remains considerably below the peak reached in December, 1952. Defense cutbacks at an aircraft overhaul base in Oklahoma City and at an aircraft factory in Tulsa have contributed to the slack in those two areas. In Nebraska and eastern Kansas, employment at several ordnance plants has dropped substantially since mid-1953. While there were reductions in defense-connected activities in Colorado and New Mexico, a lower level of activity in other sectors of their economies also contributed to the growth of unemployment. Increases in unemployment in Wyoming were caused mainly by reduced employment in coal mines and on interstate railroads as a result of dieselization.

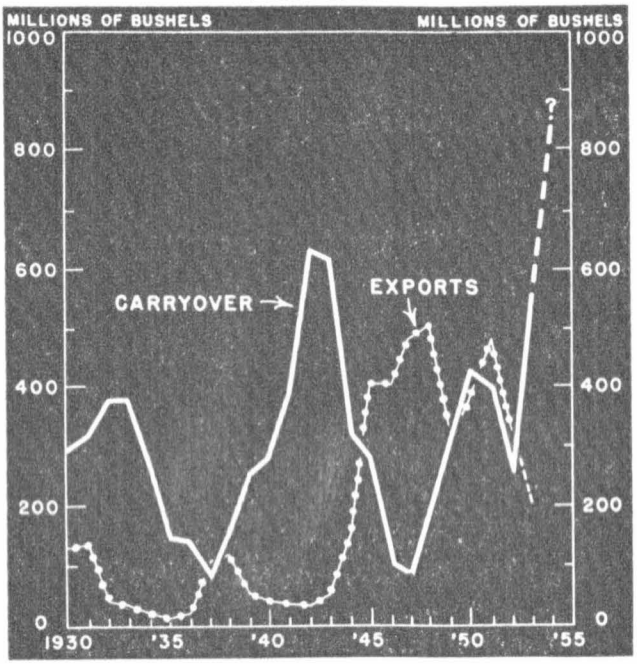
UNEMPLOYMENT AMONG INSURED WORKERS



NOTE: Based on sample week containing 8th day of month, except for February and March, 1954, when first week of month was used.
SOURCE: U. S. Bureau of Employment Security.

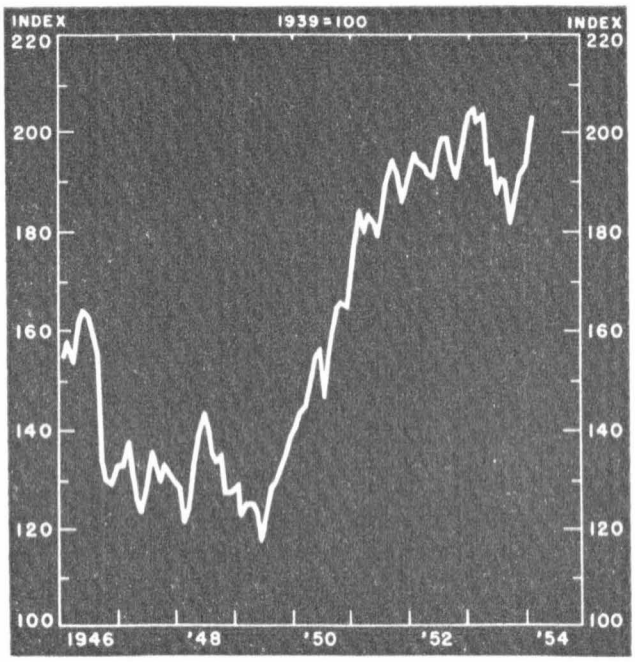
WHEAT EXPORTS AND CARRYOVER

United States



COMMON STOCK PRICES

SEC Index of 265 Stocks



BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	Feb. 1954 Percentage Change From							
	Jan. 1954	Feb. 1953	Jan. 1954	Feb. 1953	Jan. 1954	Feb. 1953	Jan. 1954	Feb. 1953
Tenth F. R. Dist.	+1	−1	+1	+2	0	+1	−1	+2
Colorado	−1	−1	+1	0	+1	+3	−1	+4
Kansas	0	0	0	−5	−1	0	−2	−2
Missouri*	+3	−2	+1	+6	−1	+1	0	+3
Nebraska	+2	+3	+2	+3	−3	0	−2	+3
New Mexico*	**	**	+1	+5	**	**	0	+3
Oklahoma*	+2	−1	+1	+7	+2	+2	+1	+2
Wyoming	**	**	+2	+3	**	**	−1	+2

*Tenth District portion only. **No reserve city banks in this state.

PRICE INDEXES, UNITED STATES

Index		Feb. 1954	Jan. 1954	Feb. 1953
Consumer Price Index	(1947-49=100)	115.0	115.2	113.4
Wholesale Price Index	(1947-49=100)	110.5	110.9r	109.6
Prices Rec'd by Farmers	(1910-14=100)	258	259	264
Prices Paid by Farmers	(1910-14=100)	282	282	281

r Revised.

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales		*Value of Residential Building Permits	
	Percentage change—1954 from 1953					
	Feb.	Year to date	Feb.	Year to date	Feb.	Year to date
Tenth F. R. Dist.	+2	0	−6	−7	+34	+2
Denver	+1	−2	−2	−4	0	−4
Wichita	+2	0	−11	−12	+47	+27
Kansas City	0	−2	−8†	−6†	+45‡	+15‡
Omaha	+9	+8	+3	+2	+41	+30
Okla. City	+11	+5	−9	−12	+128	+40
Tulsa	−2	−1	−3	−7	+62	−8

*City only. †Kansas City, Mo., only. ‡Kansas City, Mo., and Kans.