Economic Changes in Oklahoma

by

Charles H. Little

Department of Agricultural Economics

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The economic and social changes in Oklahoma since 1950 have not been uniform throughout the state. Some counties have grown considerably faster than others. This study was made to determine differences in growth rates in Oklahoma in order to plan for economic development. To get a better perspective of the changes that have occurred over time, the counties have been separated into ditsricts. A comparison of the districts indicated where the greatest emphasis should be placed to initiate further economic growth and development.

Three Economic Districts in Oklahoma

An examination of the median family incomes by counties in Oklahoma suggests three distinct districts. The counties are arranged by districts and median family incomes for 1960 are listed in Table 1. The districts have been delineated in Figure 1, which also shows the major trade centers.

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*Assistant Professor

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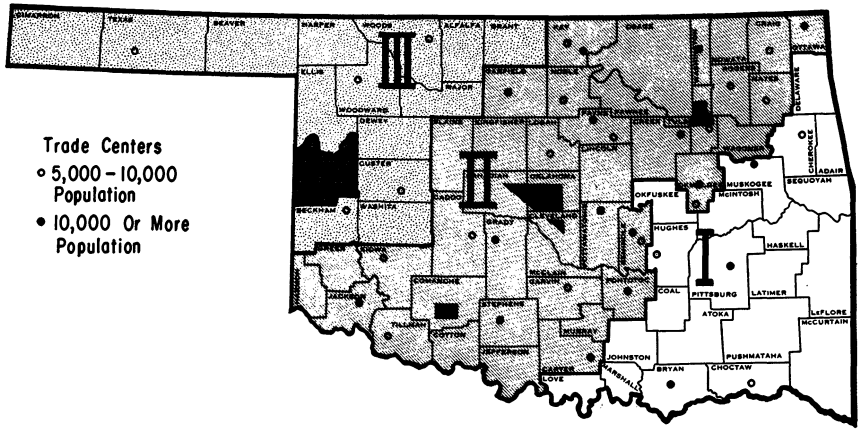

Figure 1: General Economic Districts in Oklahoma.

Table 1. Median Family Income, 1960 and Rate of Unemployment 1963-64 by Counties for Oklahoma

District I			District II			District III		
County	Median Income	Unemployment Rate	County	Median Income	Unemployment Rate	County	Median Income	Unemployment Rate
Adair	1,919	20.0	Blaine	3,527	3.8	Alfalfa	4,406	3.2
Atoka	2,217	11.2	Caddo	3,325	6.8	Beaver	4,861	2.1
Bryan	2,802	3.8	Canadian	4,515	[1]	Beckham	3,821	6.3
Cherokee	2,657	9.8	Carter	4,387	6.1	Cimarron	5,832	2.7
Choctaw	2,239	9.4	Cleveland	5,067	[1]	Custer	4,464	6.6
Coal	2,349	12.0	Comanche	4,624	3.5	Dewey	3,615	3.3
Delaware	2,352	7.7	Cotton	3,130	5.1	Ellis	4,164	2.9
Haskell	2,247	18.7	Craig	3,691	4.3	Grant	4,237	3.7
Hughes	2,700	13.1	Creek	4,265	[2]	Harper	5,113	2.3
Johnston	2,439	8.9	Garfield	4,893	3.2	Major	3,681	5.9
Latimer	2,618	13.4	Garvin	4,327	4.5	Texas	5,246	1.0
LeFlore	2,648	13.1	Grady	3,895	6.5	Washita	3,882	5.2
Love	2,876	5.7	Greer	3,358	5.2	Woods	4,413	2.1
Marshall	3,202	7.6	Harmon	3,693	8.0	Woodward	4,814	3.1
McCurtain	2,455	7.3	Jackson	4,120	9.6	Mean	4,468	3.9
McIntosh	2,066	8.8	Jefferson	3,137	8.4			
Muskogee	3,933	8.6	Kay	5,396	3.0			
Okfuskee	2,396	8.9	Kingfisher	4,053	2.2			
Pittsburg	3,212	9.7	Kiowa	3,658	7.0			
Pushmataha	1,987	8.7	Lincoln	3,506	6.4			
Sequoyah	2,492	9.9	Logan	3,710	6.0			
Mean	2,562	10.0	Mayes	3,468	9.5			
Roger Mills (District IA)	2,976	12.9	McClain	3,599	9.3			
			Murray	3,348	9.2			
			Noble	4,042	2.6			
			Nowata	4,290	7.0			
			Oklahoma	5,708	3.6			
			Okmulgee	4,048	6.1			
			Osage	4,918	[2]			
			Ottawa	4,120	7.1			
			Pawnee	3,580	4.1			
			Payne	4,376	6.2			
			Pontotoc	3,874	7.3			
			Pottowatomie	4,219	7.2			
			Rogers	3,855	9.9			
			Seminole	3,815	8.0			
			Stephens	5,039	5.0			
			Tillman	3,330	8.8			
			Tulsa	5,995	3.9			
			Wagoner	3,271	15.6			
			Washington	6,279	3.7			
			Mean	4,133	4.5			

[1]Combined with Oklahoma County.

[2]Combined with Tulsa County.

Source: Median Family Income—U. S. Bureau of the Census, *Country and City Data Book*, 1962, U. S. Government Printing Office, Washington 25, D.C., Table 2.
Employment Data—Oklahoma Employment Security Commission, Prepared by Dean E. Barrett, Rural Areas Development Specialist, Extension Service, Oklahoma State University.

District I consists mainly of counties with median family income below $3,000, which is generally considered the poverty level.[1] Except for Roger Mills county, the counties in District I form a triangular area along the east and southeast boundaries of the state. For distinction, Roger Mills county is labeled District IA.[2] There are 22 counties in Districts I and IA.

The average median family income in 1960 for the district was $2,562. Only Marshall, Muskogee and Pittsburg counties had a median family income above $3,000. Several large trade centers in Texas are close enough to provide employment for the people in Marshall county. There is a large trade center located in each of the other two counties. Muskogee in Muskogee County had a population of 38,059 in 1960, and McAlester in Pittsburg County had a population of 17,419 in 1960.[3]

The other trade centers in the district are Durant with about 10,000 population and Holdenville, Tahlequah and Hugo with roughly 6,000 population each in 1960. Fort Smith on the Arkansas-Oklahoma border has a large impact on the economy of the district. As of 1960, it had a population of 66,685. From these trade centers will come the impetus for economic growth and expansion in the district. This being the case, the extreme southeast corner of the state may be handicapped, since there are no large trade centers in this immediate area.

The boundary between the other two districts is not as clear cut as that between District I and II. District III includes the northwest and the Panhandle counties of the state. There are 14 counties in the district, and these are characterized by a sparse settlement pattern. The average median family income was $4,468 in 1960. The county incomes for this district are considerably above those for District I.

Due to the settlement pattern, there are no large metropolitan centers in the district. The largest trade centers are Alva with a population of 6,258, Guymon with 5,768, Woodward with 7,747, Clinton with 9,617 and Elk City with 8,196 population. Future adjustments will be largely in the agricultural sector, resulting in still larger farms and a decline in the demand for farm labor. The cities are not expected to experience rapid growth, barring any windfall gain such as a military base.

District II includes the remaining counties and covers the entire center of the state on a northeast to southwest diagonal from Bartlesville

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[1]For example, see Bird, Alan R., "Poverty in Rural Areas of the United States," Agricultural Economics Report No. 63, Resource Development Economics Division, ERS, USDA, Washington D. C., November 1964.

[2]In the remainder of this paper, the statistics for Roger Mills county are not included in the data for District 1.

[3]Statistics are from U. S. Census of Population, 1960, Oklahoma.

to Lawton. This district consists of 41 counties and is not as homogeneous as the other two districts. The average median family income is $4,133. District II includes most of the trade centers of 5,000 or more population in the state as shown in Figure 1. It also includes the three SMSA's in the state.[4] The predominance of trade centers is the major reason the district is considered as a unit. The large number of trade centers will provide an economic base sufficient to sustain economic expansion. All the counties in District II contain a large trade center or are close enough to benefit from the growth of the large metropolitan areas.

Certain subdistricts within District II may be distinguished. The extreme southern counties, namely Tillman, Cotton and Jefferson, are the lowest income counties in the district. Another subdistrict might include the counties in the southwest corner of the state, since these counties have characteristics similar to those in District III. All these counties are included in District II, because they fall under the influence of two large metropolitan centers in the district, namely Lawton and Altus.

Conditions in the Districts

District II was in a better income situation than was District I, but there was considerable variation within the district. District III had the highest median family income. Variability among the counties in this district was less than in District II. Population characteristics and environmental conditions are closely related to the income situation.

Age Distribution

If depressed conditions have existed for some time in an area, selective migration has occurred. Out-migration has been greater in the younger adult group than in the upper age groups for Oklahoma. The percentage change from 1950 to 1960 for selected age groups are shown in Figure 2. All the districts in the state experienced a loss in the age group 15 to 39 years. This age group is considered to have the most development potential, since they can adapt more readily to changing technological conditions. Losses in this age group greatly deplete the potential manpower supply of the district. The loss is amplified when after educating these people they move elsewhere to seek employment. This drain on the economy of a depressed area continues over time, because of a lack of economic opportunities in the area and the failure of

[4]SMSA stands for Standard Metropolitan Statistical Area. These are defined by the U. S. Bureau of the Census as a county with a metropolitan area of 50,000 or more inhabitants with contiguous counties which are metropolitan in character. See U. S. Census of Population, 1960, Oklahoma, "Detailed Characteristics."

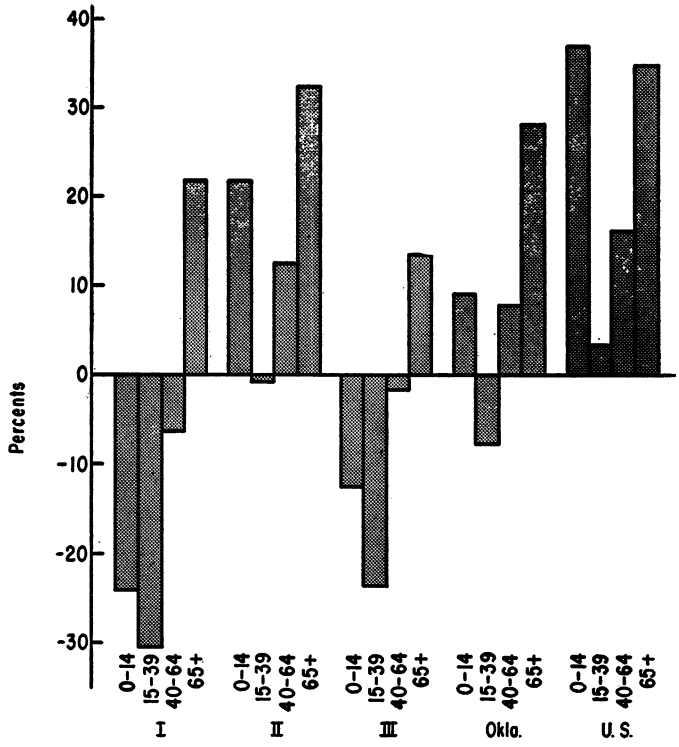


Figure 2: Percent Changes in Distribution of Population by Selected Age Groups from 1950 to 1960.

the area to attract opportunities. The greatest rates of loss in this age group occurred in District I and III; the percentage loss in District II was relatively small. The state as a whole lost population in this age group compared to a gain for the whole United States.

Changes in the age group from birth to 14 years roughly paralleled those in the 15 to 39 age group. The most interesting observation is the large increase in District II. The increase in this district compared to a decline in the others was due to the much smaller loss in the 15 to 39 years age group. In the age group from 40 to 64 years, all the districts lost population but District II. This group is generally more productive than the 15 to 39 year group but less adaptable to changing conditions. The gain in II was most likely due to migration into the large cities from the other districts. The percentage increase in this age group for the state was approximately one-half the United States average. Population in the 65 years or older group increased in all the districts. The percent-

age increase for the state was less than the United States average for this group. This large increase in the two upper age brackets is both a liability and an asset to the state. A large concentration of population in the upper age groups does not provide the labor supply necessary to attract and expand industries. However, as people reach retirement age, they require additional services that in turn provides employment in the service industries. It would be a tremendous loss to the state for the retired people to move out and deprive the state's economy of their retirement incomes.

The average median age for the districts are shown in Figure 3 for 1950 and 1960. The median increased in all the districts from 1950 to 1960, while the median for the United States as a whole decreased. The districts are losing the younger people while retaining the older people. In District I, this has added to the depressed economic conditions, mainly due to the loss of an effective labor supply. In District III, it is due to persons retiring from farming but remaining in the district.

Level of Education

There is a positive correlation between the level of education and the level of income in an area. The median school years by districts are graphed in Figure 4. The median level of education was lowest in District I and highest in District III. The figure for the state is nearly the same as the average for the United States. The high level of education in District III is a reflection of the type of management and labor required in agriculture in the district. District II had a lower median than III but there was more variability in this district. Several of the counties in II had a median of 12 or more years of schooling.

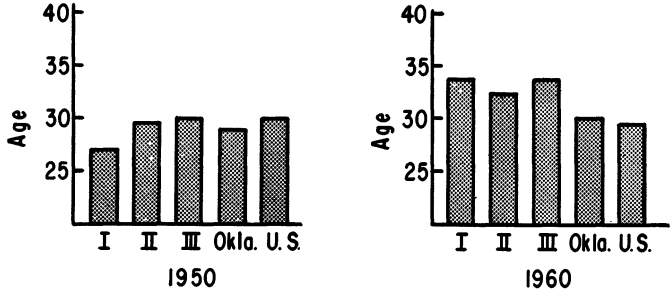


Figure 3: Median Age for 1950 and 1960.

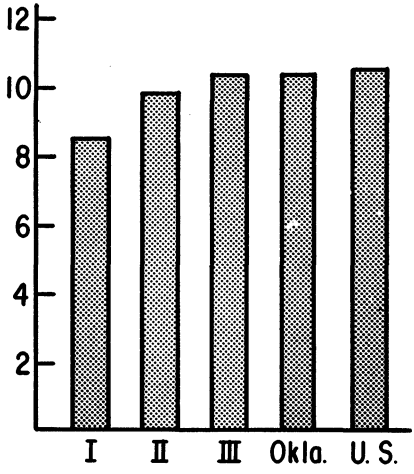


Figure 4: Median School Years Completed for 1960.

The distributions by various levels of education for those 25 years and older in 1960 are graphed in Figure 5. The percent with no years of formal schooling is much greater for District I than for II and III. The same is true for the group with less than eight years of schooling. Looking at the category with four years of high school, District I has the lowest rate and II and III are the same. District II has the greatest percent of persons with four or more years of college. District III was second and I was last with roughly one-half the percentage in II. These figures illustrate the low level of education of the labor force in District I relative to II and III.

Welfare Receipts

A depressed area would be expected to have a large number of welfare recipients in the area. The district mean for recipients of four sources of welfare in 1963 are shown in Figure 6. The means for District II have been computed both with and without Comanche, Oklahoma and Tulsa counties. The average for these three counties is shown separately on the graph. This breakdown provides a better comparison among the districts because of the tendency for welfare recipients to congregate in the large cities.

Excluding the three metropolitan counties, District I had the highest mean number of recipients in all four sources. District II had the second

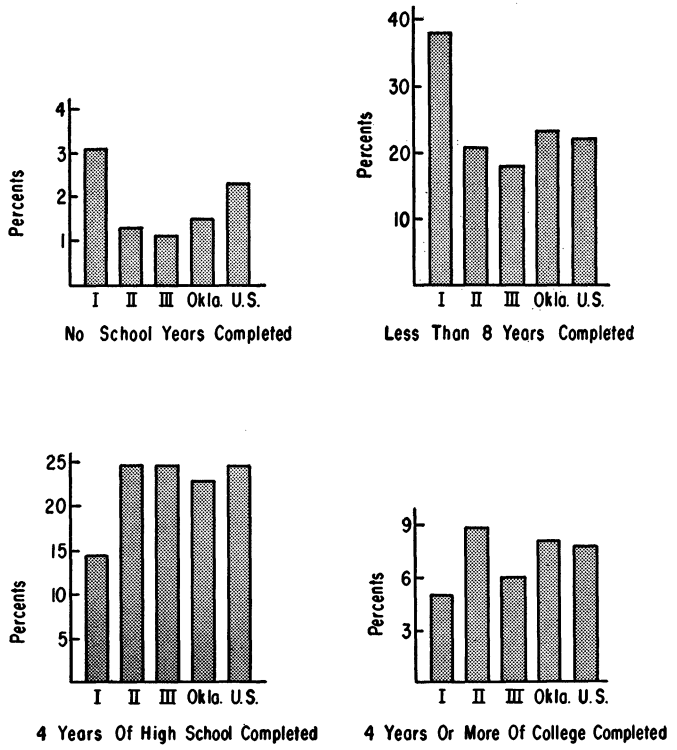


Figure 5: Percent Distributions of Several Levels of Education for 1960.

highest means in all categories. District III had means far below those in I and II in all four categories. The means for the metropolitan counties are considerably larger than those in District I. The situation in District I appears even worse considering the lack of large metropolitan centers in the district where welfare recipients might migrate. The low incomes plus the concentration of older people in I account for the high welfare payments in the district.

The mean number of recipients of retirement and disability payments are shown in Figure 7. Now District II has the highest means, indicating the migration to urban areas of those retiring from farms in the other districts due to age or infirmities. District I has means nearly as high as those in II without the concentration in urban areas. Again, this reflects the poor quality of the labor force in the district. District III had the lowest means, which is due to the sparse settlement pattern in the district.

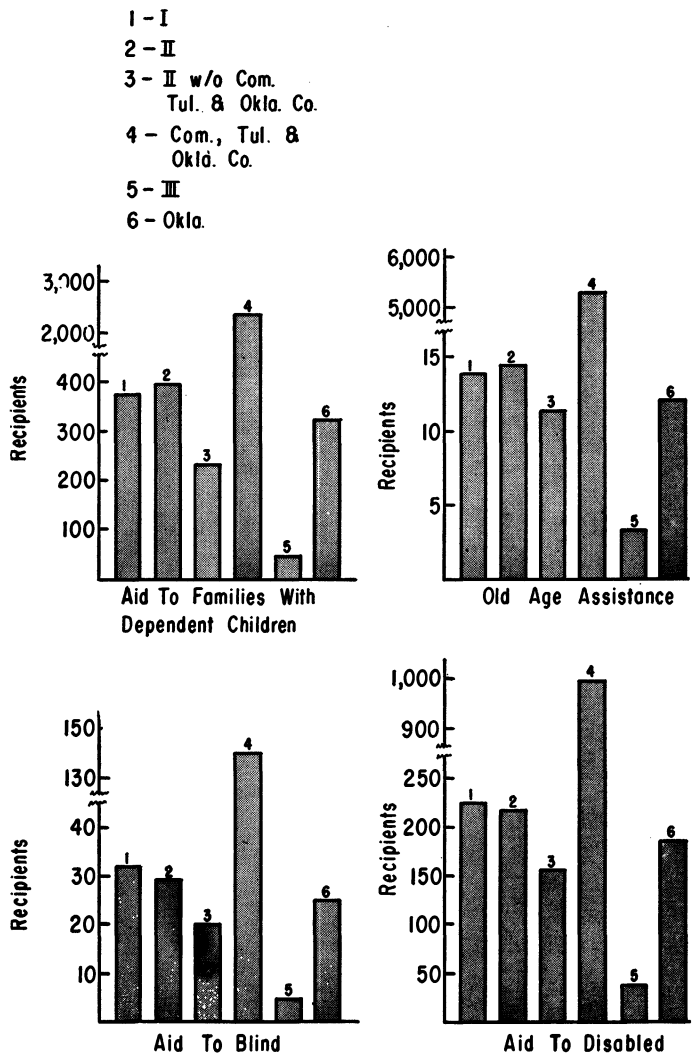


Figure 6: District Mean for Recipients of Four Sources of Welfare Payments in 1963.

Housing

Housing conditions in District I are, on the average, less desirable than in the rest of the state. Some figures on selected housing conditions for 1960 are shown in Figure 8. District I had the highest percent of total dilapidated and deteriorating housing, with an average of 40 per-

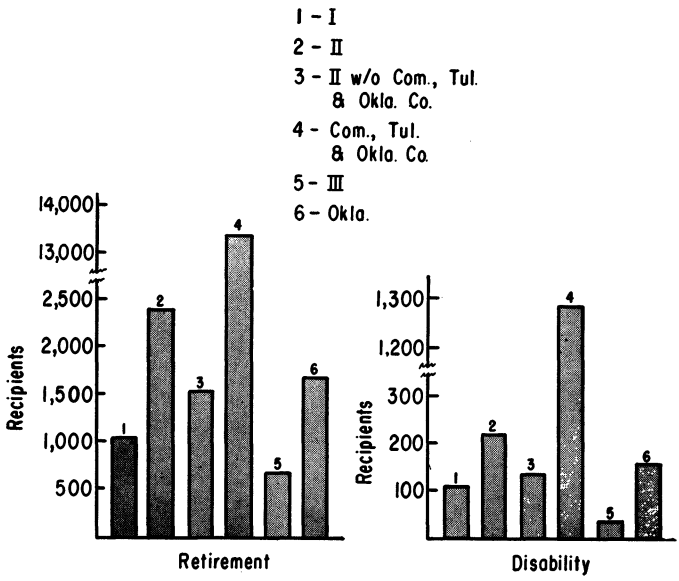


Figure 7: District Mean of Recipients of Retirement and Disability Payments in 1963.

cent. It also had the highest percent with no indoor plumbing or complete toilet facilities. These conditions would be expected due to low levels of income that have persisted for some time in the past. Though below the average in I, both Districts II and III had fairly high percentage of dilapidated and deteriorating housing. A lot of this type of housing in II was found in the urban counties, which were probably in the slums of the large cities. The rate in III was probably due to the migration from this district in earlier times where houses are no longer used and are left to deteriorate. The means for the state were considerably above the United States average for all four categories shown.

Means of Communication and Travel

There is a large percentage of families with radios, televisions and automobiles in District I. The percents of households with one or more of each of these items are graphed in Figure 9. The percents for all three items are only slightly less in District I than in the rest of the state and also slightly below the United States average. In District I, 73 percent of the households had one or more televisions, 83 percent had one or more radios and 71 percent had one or more automobiles. These percents are sufficiently high to warrant the conclusion that the district is

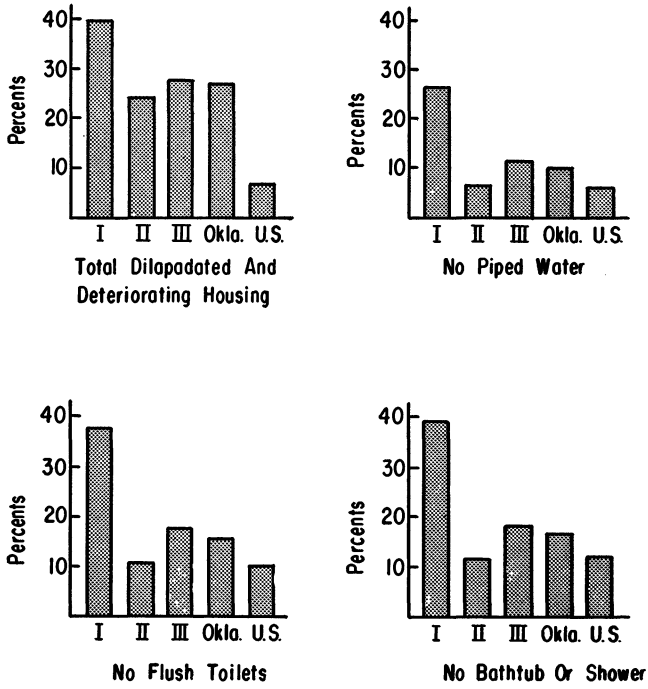


Figure 8: Percent Distributions of Selected Housing Conditions in 1960.

not isolated information-wise. Since there is little difference among the districts, II and III have no distinct advantage over I in terms of access to public information.

Average Family Size

If an area is characterized by low family income and large families, it is worse off than an area with low family incomes and small families. So, the family income figures alone will not provide a true picture of the income situation. Average family size in 1960 is plotted in Figure 10.

On the average, the family size was the same in I and II yet the average family income for I was much less than for II. This again indicates the disparity among the two districts. The significantly smaller family size and larger family income in III again indicates it is relatively better off than the other two districts. These general conclusions have been substantiated by all the data presented in this section.

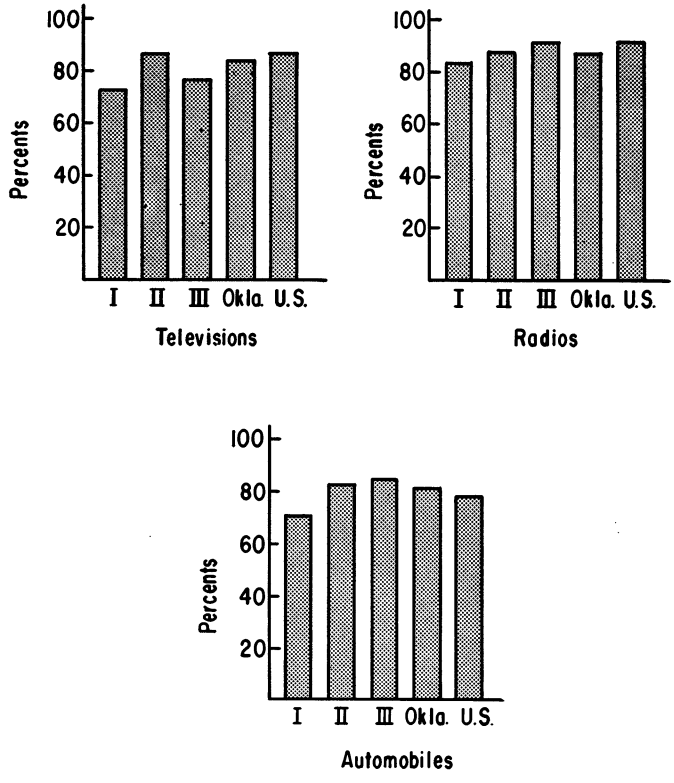


Figure 9: Percent of Households with One or More Radios, Televisions and Automobiles in 1960.

Relation Among Growth Indicators

There are several economic variables which may be used as indicators of economic growth. The three economic growth indicators used in this study are (1) change in population, (2) change in employment and (3) change in income. One difficulty in using these variables arises from differences over time in adjustment to changing economic conditions.

Before these growth indicators for the districts were analyzed, the relations among them were examined. The period of time considered was 1950 to 1960. The correlations among the changes in total population, total personal income and total employment were computed from data for the 77 counties in Oklahoma. These are shown in Table 2. The correlation coefficients are all positive and have nearly the same value.

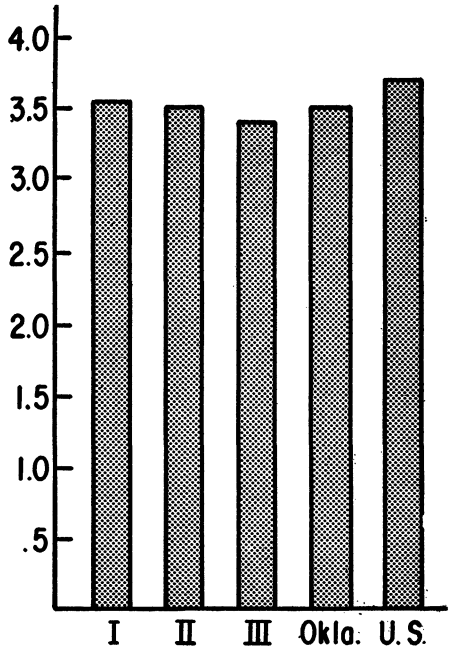


Figure 10: Average Family Size in 1960.

The positive correlation would be expected. The coefficients are all approximately one, indicating that over time these variables have changed in roughly a one to one correspondence. The period of time considered was sufficiently long so that lags were not evident. There were no sudden or drastic changes in the late 1950's that would cause sizeable differences among the growth indicators. The conclusion suggested by the data is that these indicators are essentially measures of the same phenomenon.

Table 2. Correlations Among the Growth Indicators

Changes from 1950 to 1960 in	Changes from 1950 to 1960 in		
	Total Population	Total Income	Total Employment
Total Population	1.00	0.98	0.99
Total Income		1.00	0.99
Total Employment			1.00

Source: U. S. Bureau of the Census, *County and City Data Book,* USDC, Washington, D.C., 1956 and 1962.
Peach, Nelson W., et. al., *County Building Block Data For Regional Analysis: Oklahoma,* Research Foundation, Oklahoma State University, Stillwater, Oklahoma, March 1965.

Changes in Population

Changes in Total Population

Changes in total population for Oklahoma from 1950 to 1962 are given in Table 3. Two time periods are compared, one from 1950 to 1960 and the other from 1960 to 1962.

Districts I and III lost population while District II gained population from 1950 to 1960. The gain in II was sufficient to offset the losses in the other two districts, and the state as a whole had an increase in population. The annual rate of increase for the state is considerably below the average for the whole United States. The average annual rates of change vary considerably among the districts. The growth in II was due to the growth in the urban centers located in the district. The losses in I and III resulted mostly from adjustments in the agricultural sector of the economy in these districts. The economies of these two dis-

Table 3. Total Population for 1950, 1960 and 1962, Changes in Total Population and Total Migration, 1950 to 1960, 1960 to 1962.

	Districts				
	I	II	III	Okla.	U.S.[1]
Total Population (1000)					
1950	431	1,626	169	2,233	151,326
1960	356	1,817	150	2,328	179,323
1962	358	1,919	154	2,435	185,890
Period 1950 to 1960:					
Net Change (1000)	— 75	191	— 19	95	27,997
Average Annual Rate (percent)[2]	— 1.9	1.1	— 1.2	0.4	1.7
Natural Increase					
Net Change (1000)	41	258	15	314	25,337
Rate (percent)[3]	9.4	15.8	8.7	14.0	16.7
Total Migration					
Net Change (1000)	— 115	— 67	— 34	— 219	2,660
Rate (percent)[3]	—26.8	— 4.1	—19.8	— 9.8	1.8
Period 1960 to 1962:					
Net Change (1000)	2	102	4	107	6,567
Average Annual Rate (percent)[2]	0.3	2.7	1.3	2.3	1.9

[1]Includes Alaska and Hawaii. In succeeding tables, figures for the United States will include Alaska and Hawaii unless otherwise noted.

[2]$P_{t+k} = P_t e^{kr}$ where r is the average annual rate of change for k years beginning with year t and P denotes population.

[3]Net change as a percent of population at beginning of period.

Source: Peach, Nelson W., et. al., *County Building Block Data for Regional Analysiss Oklahoma*. Research Foundation, Oklahoma State University, Stillwater, Oklahoma, March, 1965.
U. S. Bureau of the Census, "Components of Population Change 1950 to 1960, for Counties, Standard Metropolitan Statistical Areas, State Economic Areas, and Economic Subregions." Current Population Reports, Series P-23, No. 7, Nov. 1962, pp. 45-46, 83.

tricts were heavily dependent on agriculture, and they experienced the general decline in agricultural employment felt throughout the United States. The loss in employment has resulted in an out-migration of people from predominantly rural areas.

The figures on net migration present a somewhat different picture of the adjustment by districts. From 1950 to 1960, all the districts had a net out-migration. As a result, the state experienced a decline in population due to out-migration. The rate of decline was much larger in Districts I and III than in II. The higher rates in I and III indicate that many of the migrants, who are in the lower age brackets, are moving to the large cities in II. The metropolitan centers in II provided some deterrence to the loss in population. The much higher rate of natural increase in II plus the in-migration into the cities from the other districts offset the out-migration to give II an increase in population for the period.

There is a considerable difference in the rates of natural increase among the districts. District II has the highest rate which is fairly close to the national average. The higher rate is due to the larger percentage of the population in the lower age brackets in this district. This itself is indicative of the potential for change in II.

All the districts experienced an increase in population from 1960 to 1962. The average annual rates vary among the districts. District II had a rate larger than the state average. The out-migration in I and III must be leveling off due to the heavy drain of younger people in years past.

Rural to Urban Movement

Most of the growth in the state occurred in the strictly urban areas. The correlation between the change in county population between 1950 and 1960 and the change in the population for the largest city in the county was 0.99, which is very close to one. Only five counties out of 77 in the state had a positive migration from 1950 to 1960. The counties and the largest city in the county are given in Table 4. The counties are all in District II and each has at least one large city located within its boundaries. Three of the counties are the centers for the state SMSA's.

Table 5 gives the change in population by place of residence from 1950 to 1960. The rural population decreased in all districts during this period. The rates of decline were roughly the same for all the districts. The rate of decline for the state was higher than the average for the United States. This was due to the higher percentage of rural population

in Oklahoma in 1950 compared to the United States average. Dividing the rural population into farm and non-farm sectors, it can be seen that the greatest changes occurred in the farm sector. All districts declined at a rapid rate, with the greatest rate in District I. There was a high per-

Table 4. Counties with Positive Net Total Migration from 1950 to 1960 and Net Total Migration for Largest City in County.

County	Net Total Migration	City	Net Total Migration
Comanche[1]	20,364	Lawton	22,074
Jackson	4,570	Altus	10,127
Oklahoma[1]	42,012	Oklahoma City	46,658
Tulsa[1]	42,194	Tulsa	53,361
Washington	3,111	Bartlesville	5,973

[1]Counties included in SMSA's of the state.
Source: U. S. Bureau of the Census, "Components of Population Change 1950 to 1960, for Counties, Standard Metropolitan Statistical Areas, State Economic Areas, and Economic Subregions," Current Population Reports, Series P-23, No. 7, Nov. 1962, pp. 45-46.

Table 5. Total Population for 1950 and 1960 and Changes in Population from 1950 to 1960 by Place of Residence.

	Districts				
	I	II	III	Okla.	U.S.[1]
1950					
Rural Population (1000)	317	645	124	1,094	54,230
Farm	180	298	70	553	23,048
Nonfarm	137	347	54	541	31,182
Urban Population (1000)	113	981	45	1,139	96,468
1960					
Rural Population (1000)	246	511	102	864	53,766
Farm	68	145	44	259	13,445
Nonfarm	178	366	58	605	40,321
Urban Population (1000)	110	1,306	49	1,465	124,714
Period from 1950 to 1960					
Rural Population					
Total Rural					
Net Change (1000)	— 71	— 135	— 22	— 230	— 464
Rate (percent)	—22.5	—20.8	—18.0	—21.1	— 0.9
Farm					
Net Change (1000)	— 113	— 153	— 27	— 294	—9,603
Rate (percent)	—62.5	—51.4	—37.9	—53.2	— 41.7
Nonfarm					
Net Change (1000)	41	19	4	63	9,139
Rate (percent)	30.1	5.4	8.0	11.6	29.3
Urban Population					
Net Change (1000)	— 3	325	4	325	28,246
Rate (percent)	— 3.0	33.2	7.7	28.5	29.3

[1]Does not include Alaska and Hawaii.
Source: U.S. Census of Population, 1950, Oklahoma, "General Characteristics," pp. 36-111—36-115 and 36-121—36-125.
U. S. Cenus of Population, 1960, Oklahoma, "General Social and Economic Characteristics," pp. 38-254—38-259.

centage of farm population in this district at the beginning of the period. The rural nonfarm population increased in all the districts. Again, District I has the highest rate of increase. Much of the increase in this sector is due to the movement of farmers from the rural farm sector to the rural nonfarm sector. The rates of increase in the nonfarm sector are less than the absolute rates of decline in the farm sector. So the nonfarm sector is not absorbing all the farm migrants; some are moving to urban areas.

District I is the only district that had a decline in its urban population from 1950 to 1960. There are no large cities in this district comparable to those in II. The loss of both rural and urban population indicates the lack of economic opportunities in the district that have prevented past growth. District II had the highest rate of increase, which is above the average for the United States. A high rate of growth would be expected in this district due to the size of the large cities here at the beginning of the period. District III had a much smaller rate due to the sparse settlement pattern and lack of any very large trade centers.

These figures verify the general rural to urban movement that is being experienced throughout the United States. The cities in District II and III have grown to the extent of absorbing some of the population moving from the farms. On the average, the cities in District I have not grown in the past decade. Much of the decline has been in small rural towns that catered almost solely to the rural population.

Implications for Future Adjustments in Population

The rural to urban trend will likely continue in the future. A look at the percent distributions between the urban and rural sectors will indicate the magnitude of the change to be expected in Oklahoma. The percents are plotted in Figure 11. Comparing the changes from 1950 to 1960, the distribution for the state and District II is becoming more like the average for the United States. The distributions have not changed much for I and III.

The percent of the rural population was high in both I and III in 1960. District I had a very high percent in the rural nonfarm sector. Considerable adjustment can be expected in I in the future. The rural farm population will continue to decline as it has in the past. The rural nonfarm population probably will also decline. As the number of jobs on the farm declines, the rural nonfarm population must seek employment in the cities. Since the cities in the ditsrict are not growing sufficiently to absorb all this labor, the rural nonfarm population must

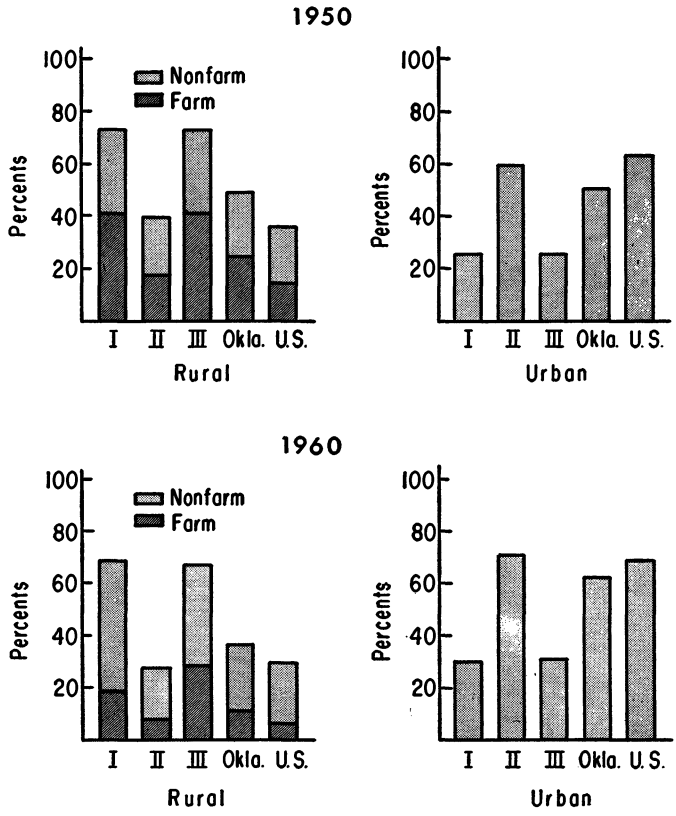


Figure 11: Percent Distribution of Population by Place of Residence for 1950 and 1960.

migrate from the district to find employment. This sector will probably be the source of many of the migrants from this district in the future. Increased employment opportunities in the district might prevent their movement from the district but not from the rural nonfarm sector. The increased opportunities will be in the cities, so they will transfer to the urban sector.

The percent of rural population was also high in District III in 1960. The economy of the district is almost solely dependent on agriculture, which consists mainly of large scale ranches and farms. There will be some movement out of the rural sector, but it will not be of the magnitude of that in I. Agriculture in this district is highly mechanized, and there is not a large demand for hired labor. Due to past adjustments, the future decline in farm jobs will not be large. There is still some

excess labor in this district. The cities probably will not grow fast enough to provide employment for the excess labor. The result will be a decline in rural nonfarm population and perhaps even in urban population.

Changes in Employment

Changes in Total Employment

Total employment figures for the districts are given in Table 6. From 1950 to 1960, total employment decreased in Districts I and III and increased in II. The increase in District II was sufficient to overcome the losses in the other districts, and the state had an increase in employment for the period. The annual rate of increase for the state was considerably below the average rate for the United States. The rate for II was much closer to the national average.

The average annual rates of decline in employment from 1950 to 1960 for I and III were greater than the annual rates of decline in population. These districts are losing jobs faster than they are losing people and as a result the unemployment rate has increased over time. The average annual rate of increase in population and employment were the same in District II. Considering the fact that whole families are moving into the district, it is gaining in employment opportunities relative to the in-migration of workers.

Table 6. Total Employment for 1950, 1960 and 1964 and Changes in Total Employment, 1950 to 1960 and 1960 to 1964.

	Districts				
	I	II	III	Okla.	U.S.
Total Employment (1000)					
1950	122	568	61	754	56,449
1960	98	632	54	786	64,639
1963-64	94	678	53	827	70,357
Period 1950 to 1960:					
Net Change (1000	— 24	64	— 7	32	8,190
Average Annual Rate (percent)	—2.2	1.1	—1.3	0.4	1.4
Period 1960 to 1964:					
Net Change (1000)	— 4	46	— 1	41	5,718
Average Annual Rate (percent)	—1.0	1.8	—0.3	1.3	2.2

Source: U. S. Census of Population, 1950 and 1960, Oklahoma and U. S. Summary.
U. S. Bureau of Labor Statistics, "Employment and Earnings," Vol 12, No. 5, November 1965, p. 1.
Oklahoma Employment Security Commission, Prepared by Dean E. Barrett, Extension Service, Oklahoma State University, Stillwater, Oklahoma, October 1964.

The figures for 1960 to 1964 reveal much the same picture. Districts I and III had a decline in employment. District II had an annual rate of increase slightly below the United States average. Due to the increase in II, the state had an increase in total employment but at a lower rate than the United States average. The indication is that Oklahoma as a whole is not growing as rapidly as some other states.

Comparing the rates for the two time periods, the average annual rates for I and III have declined in absolute value. There has been a slowing down of the loss in employment, as a result of past adjustment and the general expansion in the national economy. Future percentage losses probably will continue to decline. The average annual rate of increase was larger in II in the latter period. District II is growing at a somewhat faster rate but still at a rate below the United States average. The state as a whole had a much higher average annual rate of increase in the latter period, because of the changes in II. In conclusion, District II appears to be experiencing some growth while I and III seem to be leveling off in terms of loss of employment.

Changes in Unemployment

A persistent high level of unemployment has a depressing effect on a district as has been the case in District I. The rates of unemployment increased from 1950 for all the districts in the state as shown in Table 7. The rate in District I was approximately the same as the national average in 1950 but was nearly twice the national average in 1964. The increase in both II and III was much less than that in I, and both had rates below the national average in 1964. District I has become worse off relative to the other districts in the state and relative to other areas throughout the United States.

The ranges in unemployment rates for the counties in the districts are also given in Table 7 for three years. Except for 1950, District I had the largest range and the range increased over time. The highest county rate was 20 percent. In 1964 the range for II was also large. Employment in this district has not grown at the same rate for all counties, which indicates a lack of homogeneity of the economic base in the counties. This is an important consideration for development of districts consisting of several counties.

The annual rates of change in unemployment were approximately the same for Districts I and II from 1950 to 1960. District III had approximately no change during the period. District I and District III had large relative increases in the latter period, but the absolute change in

Table 7. Unemployment for 1950, 1960, 1964 and Changes in Unemployment, 1950 to 1960 and 1960 to 1964.

	Districts				
	I	II	III	Okla.	U.S.
Unemployment (1000)					
1950	6	22	2	30	2,854
1960	7	27	2	36	3,505
1963-64	10	32	3	45	3,876
Average Rate (percent)[1]					
1950	4.6	3.7	2.4	3.8	4.8
1960	6.8	4.1	2.7	4.4	5.1
1963-64	10.0	4.5	3.9	5.2	5.2
Range in Rates by County					
1950 high	6.3	8.8	3.9		
low	2.7	1.9	1.0		
1960 high	11.1	6.5	4.1		
low	4.3	1.9	1.0		
1963-64 high	20.0	15.6	6.6		
low	3.8	2.2	1.0		
Period 1950 to 1960:					
Net Change (1000)	1	5	[3]	6	651
Average Annual Rate (percent)[2]	1.8	2.1	[4]	2.0	2.1
Period 1960 to 1964:					
Net Change (1000)	3	5	1	9	371
Average Annual Rate (percent)[2]	9.7	4.2	9.2	5.7	2.5

[1]Unemployment as percent of total civilian labor force.

[2]$U_{t+k} = U_t e^{kr}$ where r is the average annual rate of change for k years beginning with year t and U denotes unemployment.

[3]Less than 1.

[4]Less than 0.1

Source: Same as for Table 6.

III was small. The annual rate of increase in II was less than the rates in I and III in the latter period. The increase in III was due mainly to a reorganization within agriculture. Farm consolidation and the replacement of labor by capital reduced greatly the number of agricultural related jobs in the district. The changes in employment in I were due in part to these same adjustments. However, much of the decline was due to adjustments in the agricultural sector that did not involve reorganization. As economic conditions declined, hired labor was dispensed with entirely or replaced by family labor. Much of the increase in II was probably due to the migration into this district from the other two. Many of the migrants lacked the training and skills to find jobs. If they found employment at all, it undoubtedly took a long time, during which they were on the unemployment list.

Changes in Employment by Place of Residence

Changes in employment by place of residence are given in Table 8. Except for District II, the rates of adjustment were greater in the rural than the urban sector. Employment declined in both sectors in I and declined in the rural sector but increased in the urban sector in II and III. The rate of increase in the urban sector of II was above the rate for the United States. The rates of decline in the rural sector for all the districts were much larger than the rate for the United States. Adjustment in the rural sector in Oklahoma has proceeded at a slower rate in the past than some other areas in the country. Within the rural sector, the greatest adjustment was among the rural farm residence. The rural farm sector had a large decline in employment, while the rural nonfarm sector had a small increase.

Growth Due to Cities

Most of the growth in employment in the state has occurred in those counties with large urban centers as shown in Table 9. Oklahoma, Tulsa, Comanche, Washington and Jackson counties also had a positive migration for the period. The change in Cleveland county was due to its proximity to the Oklahoma City complex. Rogers county has gained in employment because of its proximity to Tulsa. Pauls Valley and Ardmore are on the major route from Oklahoma City to Dallas, Texas. Altus owes

Table 8. Changes in Employment by Place of Residence from 1950 to 1960

	Districts				
	I	II	III	Okla.	U.S.[1]
Rural Population					
Total Rural					
Net Change (1000)	— 22	— 42	— 9	— 72	— 654
Rate (percent)	—26.3	—21.4	—19.3	—22.3	— 3.7
Rural Farm					
Net Change (1000)	— 31	— 47	— 10	— 86	—3,306
Rate (percent)	—59.8	—47.6	—36.9	—49.3	— 37.7
Rural Nonfarm					
Net Change (1000)	9	5	1	14	2,652
Rate (percent)	25.9	4.6	5.6	9.3	26.9
Urban Population					
Net Change (1000)	— 2	105	1	105	8,786
Rate (percent)	— 4.6	28.1	7.4	24.4	22.9

[1]Does not include Alaska and Hawaii.
Source: U.S. Census of Population, 1950 and 1960, Oklahoma and U.S. Summary.

Table 9. Counties with Positive Change in Employment from 1950 to 1960 with Largest City in County and 1950 Population of City.

County	District	Change in Employment	Largest City Name	Largest City 1950 Pop.
Oklahoma	II	40,148	Oklahoma City	243,504
Tulsa	II	32,579	Tulsa	182,740
Comanche	II	5,416	Lawton	34,757
Cleveland	II	4,077	Norman	27,006
Washington	II	2,826	Bartlesville	19,228
Stephens	II	1,407	Duncan	15,325
Jackson	II	818	Altus	9,735
Carter	II	750	Ardmore	17,890
Rogers	II	390	Claremore	5,494
Kay	II	251	Ponca City	20,180
Garvin	II	94	Pauls Valley	6,896
Total		88,756		
Custer	III	430	Clinton	7,555
Texas	III	135	Guymon	4,718
Harper	III	110	Buffalo	1,544
Woodward	III	27	Woodward	5,915
Total		702		

Source: U.S. Bureau of the Census, *County and City Data Book*, USDC, Washington, D.C., 1956 and 1962.
Peach, Nelson W., Richard W. Poole. James D. Tarver, *County Building Block Data for Regional Analysis: Oklahoma*, Research Foundation, Oklahoma State University, Stillwater, Oklahoma, March 1965.

much of its change to the military base located there. The other two cities, Duncan and Ponca City, had a population in excess of 15,000 in 1950. The implication is that the growth in employment is directly related to the size of the urban centers in the counties. The expansion in District III has been much less than in II due to the smaller cities in the district.

Changes in Agricultural vs. Nonagricultural Employment

Agricultural employment declined in all the districts from 1950 to 1960 as shown in Table 10. The rates of decline are above the national average, which indicates the lack of adjustment in the state prior to 1950 relative to other areas in the United States. The rate of decline was greatest in District I as would be expected. The farms are small, and the terrain prevents large scale consolidation. District III had the smallest rate of decline, again due to the farming situation which is the opposite of that in I.

Nonagricultural employment increased in all the districts. District II had the highest rate of increase which was very nearly the same as the

Table 10. Changes in Agricultural and Nonagricultural Employment from 1950 to 1960.

	Districts				
	I	II	III	Okla.	U.S.
Agricultural Employment:					
1950 (1000)	45	83	25	155	6,916
1960 (1000)	16	41	15	74	4,257
Net Change (1000)	— 29	— 42	— 10	— 81	—2,659
Rate (percent)	—65.2	—50.0	—40.5	—52.5	— 38.5
Nonagricultural Employment:					
1950 (1000)	77	485	35	599	49,534
1960 (1000)	82	591	38	713	60,383
Net Change (1000)	5	106	3	114	10,849
Rate (percent)	6.7	21.8	8.6	19.0	21.9

Source: U.S. Census of Population, 1950 and 1960, Oklahoma, Possessions and Territories, U.S. Summary.

United States average. The rates in both I and III were far below the national average. As noted earlier, little growth in nonagricultural employment would be expected in III due to the settlement pattern. The small rate in I is due to the lack of large urban bases to provide the impetus for growth.

The absoltue rates of decline in agriculture were much larger than the rates of increase in nonagricultural employment. In general, the districts are losing agricultural jobs faster than they are gaining nonagricultural jobs. This accounts for the out-migration in many of the counties in Oklahoma.

The percent distributions for agricultural employment are shown in Figure 12. The decline in agricultural employment as a percent of total

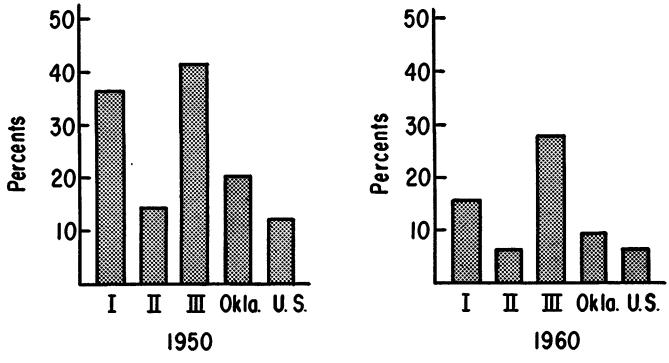


Figure 12: Percent of Agricultural Employment for 1950 and 1960.

employment has been substantial in all the districts. The percents for both I and III in 1960 were considerably above the United States average. Declines in both these districts will continue in the future. District I will probably have the greatest rate of decline. District III is almost solely dependent on agriculture, so the rate can be expected to begin to level off somewhat in the near future. District II will also experience a decline in agricultural employment in the future.

Employment by Industry Group

Employment figures by industry group for 1960 are given in Table 11. The average annual rates of change are plotted in Figure 13. Employment in agriculture declined in all the districts with the greatest rate of decline in I and the lowest rate in III. Mining employment decreased in all the districts except III. The absolute change for III was small because mining activities are a relatively small portion of the total economy of the district. These two groups make up what are called the primary industries. The trends for 1950 to 1960 can be expected to continue.

Manufacturing employment increased in all the districts. The rate of increase was about the same in I and II but the absolute increase in II

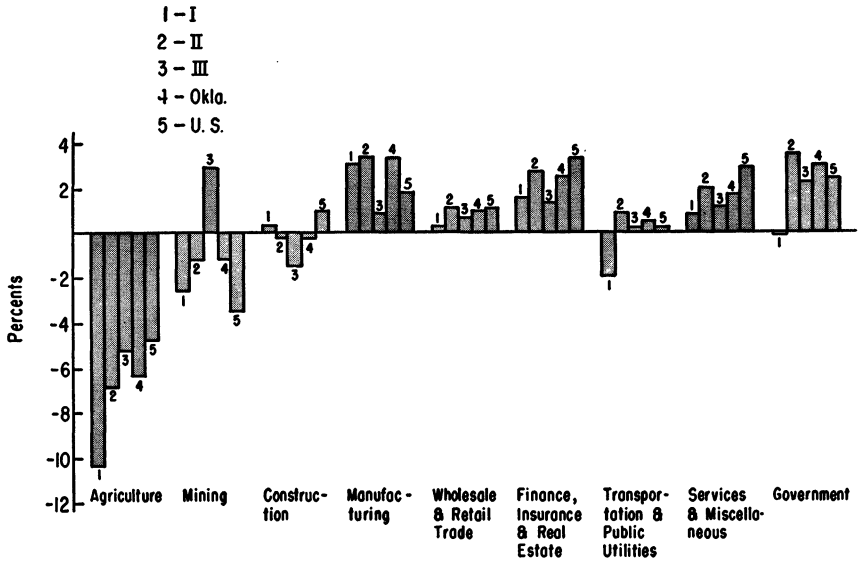


Figure 13: Average Annual Rates of Change in Employment by Industrial Source from 1950 to 1960.

Table 11. Industrial Sources of Income for 1960

	Districts				
	I	II	III	Okla.	U.S.
	(1000)	(1000)	(1000)	(1000)	(1000)
Agriculture[1]	16	42	15	74	4,350
Mining	2	31	2	35	654
Contract Construction	8	45	4	57	3,816
Manufacturing	13	89	2	104	17,513
Wholesale and Retail Trade	20	134	11	165	11,793
Finance, Insurance and Real Estate	2	26	1	29	2,695
Transportation and Public Utilities	6	47	3	56	4,458
Services	22	141	11	175	13,550
Government	6	47	2	55	3,203

[1]Includes Forestry and Fisheries.
Source: U.S. Census of Population, 1960, Oklahoma and U.S. Summary.

was about seven times as large as the increase in I. The relatively high rate in I was due to the low industrial base of the district at the beginning of the period.

The other industry groups may be classed together as service industries. Changes in these industries are dependent on the changes in primary and manufacturing employment. Construction employment decreased in all the districts except I, and the absolute increase in I was small. Employment increased in all three districts in the Wholesale and Retail Trade, Finance, Insurance and Real Estate and Service and Miscellaneous sectors. It decreased in I and increased in II and III for the Transportation and Public Utilities and Government sectors. The absolute changes were small in all these sectors for District I. The changes in III in both absolute and relative terms are small in the service industries. The changes are heavily dependent on the changes in agriculture.

Employment increased in II in all the service sectors except construction. This district had both the greatest absolute and percent change. This result would be expected since this is the district that has sustained the greatest growth as previously shown. The implication is that this district will continue to sustain the growth in the future. The multiplier effect is greater due to the broader industrial and service base.

When compared to the United States averages, agricultural employment decreased more in Oklahoma than in the United States as a whole. The average annual rate of increase in Manufacturing employment was above the United States average. Employment in the service sectors increased at about the same or slightly below the average United States rates. So Oklahoma has about held its own in these industries relative to other states.

Prospects for Future Adjustments

The distributions for 1960 are plotted in Figure 14. The percent of employment in agriculture is still relatively high in both I and III. A decline can be expected in both districts. Mining employment is a relatively small proportion of total employment in all the districts and will have a minor influence. Employment in the crude petroleum and natural gas, which is included in Mining, may increase slightly. Except for a lack of manufacturing in III, the three districts have roughly the same percentages in the other sectors. However, the absolute employment in these sectors is much greater in II than in the other sectors. Because of this larger base in II, the growth will be greater in this district. The relative high percentage in manufacturing in I indicates that there is a possible potential here that could be cultivated for development purposes. Since III is most likely to remain predominantly agriculture, little rapid growth in the manufacturing sector can be expected. There will be an increase in service employment associated with agriculture. Service employment will likely increase in all districts due to increased demand.

Changes in Income

Changes in Total Personal Income

Changes in income follow much the same patterns as the changes in population and employment. Changes in total personal income and per capita income from 1950 to 1962 in terms of constant 1962 dollars are shown in Table 12. All the districts had an increase in total personal

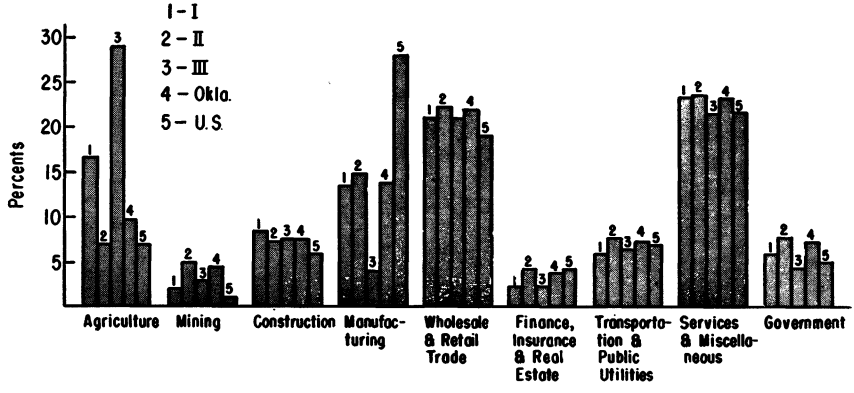


Figure 14: Percent Distributions of Employment by Industrial Source for 1960.

income during the period. The greatest absolute change and annual rate of change occurred in District II. The annual rate for District II and for the state as a whole was approximately the same as the average for the United States. District III had the smallest annual rate of increase.

Per capita income increased in all the districts from 1950 to 1962. The greatest annual rate of change occurred in District I, but the per capita figure for the district is still considerably less than for the other two districts. The greater adjustment in I was due in large part to the loss of population during the period. District III also lost population during the period, but the absolute decline was less than in I. Ditsrict II had both an increase in population and per capita income during the period. So total income has increased at a faster rate than population in II.

Table 12. Total Personal Income for 1950 and 1962 and Changes in Total Personal Income from 1950 to 1962.[1]

	Districts				
	I	II	III	Okla.	U.S.[2]
Total Personal Income:[3]					
1950					
Current Dollars (million)	223	2,112	173	2,514	225,473
Constant Dollars (million)	281	2,661	218	3,168	284,096
1962 (million)	382	4,016	259	4,664	437,412
Net Change (million)	101	1,355	41	1,496	153,316
Average Annual Rate (percent)[4]	2.6	3.4	1.4	3.2	3.6
Per Capita Income:					
1950					
Current Dollars	519	1,299	1,026	1,126	1,496
Constant Dollars	653	1,636	1,293	1,419	1,885
1962	1,068	2,094	1,683	1,915	2,365
Net Change	415	458	390	496	480
Average Annual Rate (percent)[5]	4.2	2.1	2.2	2.5	1.9
Per Capita Income for 1962 as Percent of U S. Average	45.2	88.5	71.2	81.0	

[1]Total personal income for 1950 is given in current 1950 dollars and constant 1962 dollars. The net change and annual rate of change were computed for constant 1962 dollars.

[2]Does not include Alaska and Hawaii.

[3]Total personal income equals (wages, sa'aries and other labor income) plus (proprietor income) plus (property income) plus (transfer payments) less (personal contributions for social insurance).

[4]$Y_{t+k} = Y_t e^{kr}$ where r is the average annual rate of change for k years beginning with year t and Y denotes total income.

[5]Same equation as in footnote 4, except Y denotes per capita income.

Source: Peach, Nelson W., Richard W. Poole, James D. Tarver, *County Building Block Data for Regional Analysis: Oklahoma,* Oklahoma State University, Stillwater, Oklahoma, March 1963. Office of Business Economics, *Survey of Current Business,* USDC, Vol. 43, No. 8, August 1963, p. 15.

The annual rates for all the districts were above the average for the United States. However, the per capita figures for all three districts were below the United States average. The state has gained relative to other states, but it still had a per capita income of $450 below the United States average. The state figure is only 81 percent of the figure for the United States. The figure for District I is less than half the United States average. Although District I has improved in terms of per capita income, it has not improved its position relative to II or III.

Broad Sources of Personal Income

Changes in personal income by broad industrial categories are shown in Table 13. Farm income decreased in all three sectors with the smallest decrease in I. The average rate for the state is slightly

Table 13. Personal Income by Broad Industrial Sources for 1950 and 1962 and Changes in Income from 1950 to 1962.[1]

	Districts				
	I	II	III	Okla.	U.S.[2]
Farm Income:[3]					
1950					
Current Dollars (million)	34	156	79	273	16,020
Constant Dollars (million)	43	197	100	344	20,185
1962 (million)	39	138	70	250	16,006
Net Change (million)	— 4	— 59	— 30	— 94	— 4,179
Rate (percent)	—9.2	—29.9	—30.1	—27.3	— 20.7
Government Income:[4]					
1950					
Current Dollars (million)	81	396	23	501	36,311
Constant Dollars (million)	102	499	29	631	45,752
1962 (million)	146	937	65	1,150	85,183
Net Change (million)	44	438	36	519	39,431
Rate (percent)	43.7	87.8	120.2	82.3	86.2
Private Nonfarm Income:[5]					
1950					
Current Dollars (million)	111	1,584	72	1,770	173,142
Constant Dollars (million)	139	1,995	91	2,230	218,159
1962 (million)	204	3,046	129	3,380	336,223
Net Change (million)	65	1,051	38	1,150	118,064
Rate (percent)	46.6	52.6	42.5	51.6	54.1

[1]Personal income for 1950 is given in current 1950 dollars and constant 1962 dollars. The net change and rate of change were computed for constant 1962 dollars.

[2]Does not include Alaska and Hawaii. U.S. data is not strictly comparable to the state data. For difference in definition see *Survey of Current Business*, Vol. 43, No. 8, August 1963, p. 15.

[3]Farm income equals farm proprietor income plus farm wages and salaries.

[4]Government consists of wages and salaries and transfer payments disbursed directly to persons by federal, state, and local governments.

[5]Private nonfarm income equals (total personal income plus personal contributions for social insurance) less (farm income plus government). It includes other labor income and government interest payments to persons.

Source: Same as for Table 12.

above the average for the United States. Government income increased in all districts, again with the smallest rate of increase in I. Districts II and III had substantial increases with III more than doubling its income from this source. Private nonfarm income increased in all the districts, and the differences among the district rates were small. The greatest difference among rates for the districts was in the agricultural and government sectors. Of course, the greatest absolute changes in all three sectors occurred in II.

Changes in Family Income

Median family income figures are shown in Table 14. The obvious point is the low level of income in I relative to the remainder of the state. The absolute changes in median family income were larger in II and III than in I, but the rate of change was larger in I. The percent of the United States average is about the same in 1950 and 1960 for all three districts. The percent in I is nearly half that in II and III for both years.

The skewness of the distribution of family income is illustrated in Figure 15. Families with incomes less than $3000 are divided into three income groups: less than $1,000, $1,000 to $1,999 and $2,000 to $2,999. District I has a larger percentage in all three groups than either II or III.

Table 14. Median Family Income for 1950 and 1960 and Changes in Median Family Income from 1950 to 1960.[1]

	Districts				
	I	II	III	Okla.	U.S.
Median Family Income:					
1950					
Current Dolalrs	1,332	2,245	2,579	2,387	3,073
Constant Dollars	1,638	2,762	3,173	2,936	3,780
1960	2,562	4,133	4,468	4,620	5,660
Net Change	924	1,371	1,295	1,684	1,880
Rate (percent)	56.4	49.6	40.8	57.4	49.7
Percent of U. S. Average:					
1950	43.3	73.1	83.9	77.7	
1960	45.3	73.0	78.9	81.6	

[1]Median family income for 1950 is given in current 1950 dollars and constant 1960 dollars. The net changes and percents were computed for constant 1960 dollars.
Source: U. S. Bureau of the Census, *County and City Data Book*, USDC. Washington, D.C., 1956 and 1962.

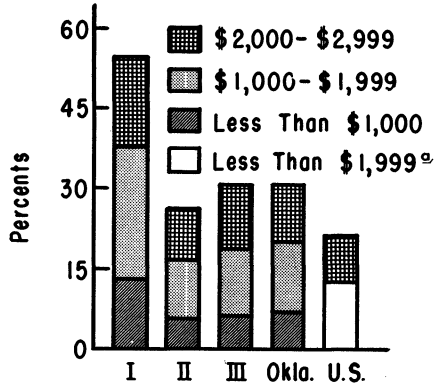


Figure 15: Percent Distributions of Families with Family Income Less than $3,000 in 1960.

Wages and Salaries by Industrial Source

The percent distributions for the industrial sources of wages and salaries for 1962 have been plotted in Figure 16. Comparing Figure 16 with Figure 14, the most obvious point is the low percentage of income

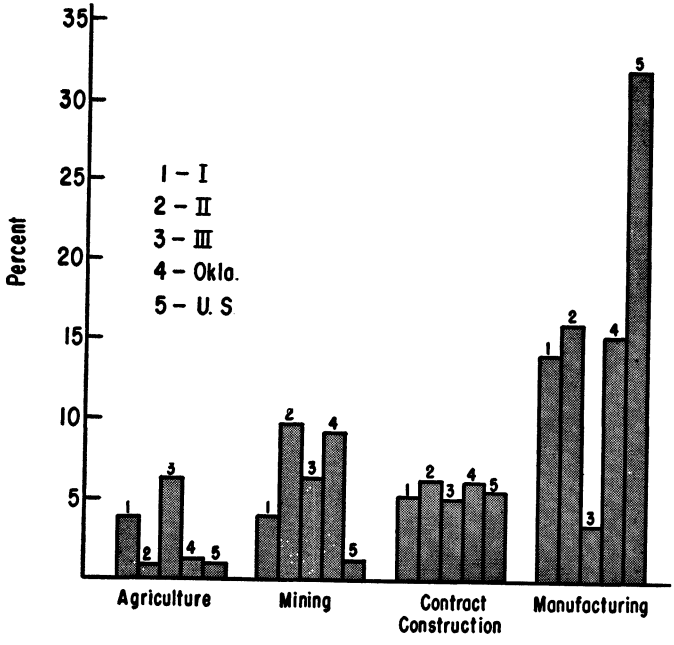


Figure 16A: Percent Distributions of Wages and Salaries by Industrial Source for 1962.

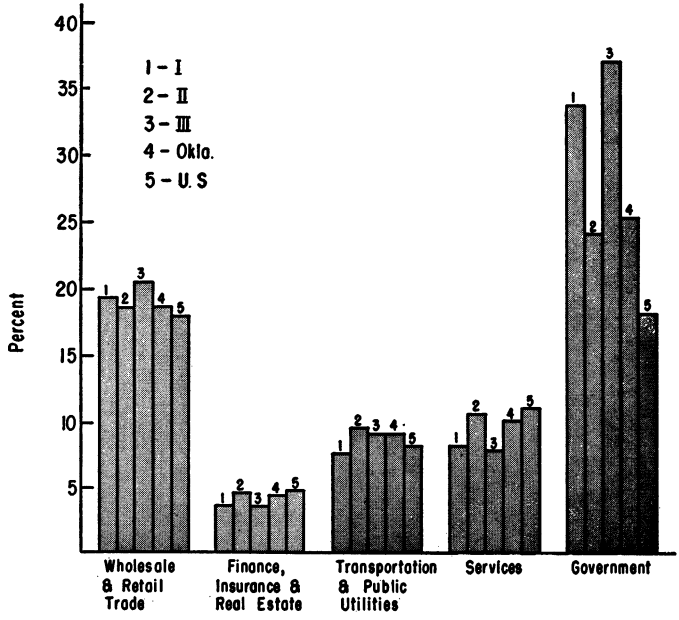


Figure 16B: Continuation of Figure 16A.

from agriculture compared to the high percentage of employment. The greatest disparity is in District I. The United States average percentage employment in manufacturing is greater than in any of the districts in the state. This has tremendous implications for growth in that there is a smaller base compared to other areas of the country, and changes in service employment is tied closely to changes in manufacturing employment. Another major difference is the much higher percentage of income from the government sector in the districts compared to the United States average. This would be a powerful tool for manipulating economic development.

Changes in Agriculture

Income Situation

Since agriculture is a major part of the economy of Oklahoma, adjustments in this sector have had a tremendous impact on the economy of the state. As noted in Table 15, 9.4 percent of total employment was in agriculture but only 7.0 percent of income came from agriculture in the state. District III has the highest percent of agriculture employment

Table 15. Agricultural Income and Employment as Percent of Total Income and Employment and Income per Farm Worker in 1960

	Districts				
	I	II	III	Okla.	U.S
Percent Agriculture Employment	15.8	6.6	28.2	9.4	6.6
Percent Income from Agriculture	13.1	4.5	33.8	7.0	3.7
Farm Income per Agriculture Worker	3,030	4,050	5,712	4,161	3,462

Source: Peach, Nelson W., Richard W. Poole and James D. Tarver, *County Building Block Data for Regional Analysis: Oklahoma,* Research Foundation, Oklahoma State University, Stillwater, Oklahoma, March 1965.
Office of Business Economics, *Survey of Current Business,* USDC, Vol. 41, No. 8, August 1961, p. 19.

as well as the highest percent of agriculture income. The percent of income is substantially above the percent employment, indicating that farm workers are relatively well off in this district. District I had the next highest percent of employment with the percent of income from agriculture slightly less than the percent of employment. District II had the smallest percents for both employment and income. The differences in these figures are reflected in the differences in income per farm worker. The figure for District I is considerably below the figures for District II and III. The average income for I is below the average for the United States, but both II and III are substantially above it, District III by over $2,000.

Farm Adjustment

Some of the changes that have occurred in agriculture since 1950 are recorded in Table 16. Total farm acreage in the state has decreased slightly from 1950 to 1959. The rate of change was small in all the districts. There was a decline in I and II and an increase in III. The greatest absolute change was in II. Though total acreage changed very little, the number of farms and average acreage per farm changed rapidly from 1950 to 1959. The number of farms declined in all the districts. The rate of change for the state as a whole was more than double the average for the United States. District I had the highest rate of decline in total farm numbers followed in order by II and III. The change in average parallels the change in total number of farms. District I had the greatest rate of increase followed in order by II and III. The value of land and buildings per acre in terms of 1959 constant dollars increased

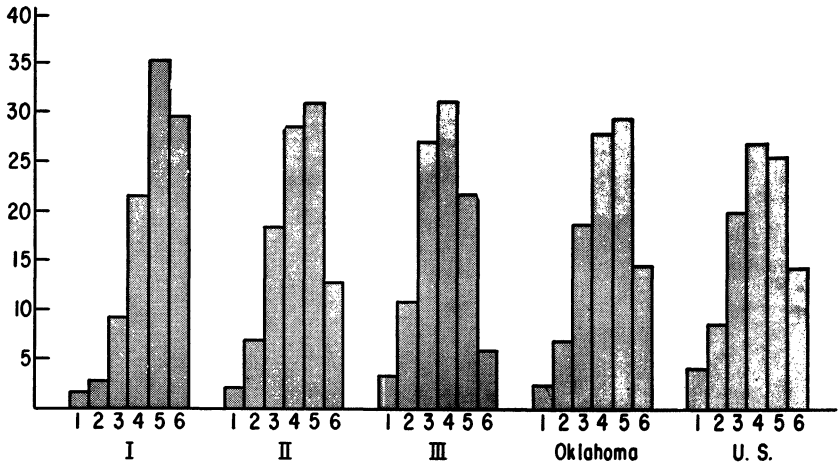
Table 16. Some Changes in Agriculture from 1950 to 1959.

	Districts				
	I	II	III	Okla.	U.S.[1]
Total Farm Acreage:					
1950 (1000)	6,914	18,012	10,362	36,007	1,120,158
1959 (1000)	6,908	17,821	10,394	35,801	1,158,566
Net Change (1000)	— 6	—191	32	—206	—38,408
Rate (percent)	— 0.1	— 1.1	0.3	— 0.6	— 3.2
Number of Farms:					
1950 (1000)	41	79	21	142	5,382
1959 (1000)	25	53	16	95	3,704
Definition Change[2]	3	3	[3]	6	232
Net Change (1000)	— 14	— 22	— 5	— 41	— 1,446
Rate (percent)	—33.2	—28.3	—22.7	28.9	— 11.1
Average Acreage:					
1950	167	229	491	253	215
1959	279	337	646	378	302
Net Change	112	108	155	125	87
Rate (percent)	67.1	47.2	31.6	49.4	40.5
Value of Land and Buildings Per Acre:					
1950					
Current Dollars	29.2	58.9	56.9	51.4	65.0
Constant Dollars[4]	35.3	71.3	68.8	62.2	78.6
1959	53.2	99.9	87.3	84.7	115.2
Net Change	1.8	28.6	18.5	22.4	36.6
Rate (percent)	5.1	40.1	26.9	36.1	46.5
Value of Products Sold:					
1950					
Current Dollars (million)	58	261	146	471	22,051
Constant Dollars (million)[4]	70	316	176	570	26,682
1959 (million)	85	318	171	581	30,337
Net Change (million)	15	2	— 5	11	3,655
Rate (percent)	21.2	0.4	— 3.1	1.9	13.7

[1]Does not include Alaska and Hawaii.
[2]Decline in number of farms due to the change in definition for the 1959 Census of Agriculture.
[3]Less than 1.
[4]Constant 1959 dollars. Net changes and rates were computed in terms of constant 1959 dollars.
Source: U. S. Census of Agriculture, 1954 and 1959, Vol. 1, Oklahoma.
U. S. Census of Agriculture, 1959, Vol. 2, Chapter 1, "Farms and Land in Farms," and Chapter 9, "Value of Farm Products."
U. S. Department of Agriculture, "Number of Farms 1910-1959, Land in Farms 1950-1959 by States," Crop Reporting Board, SRS, Washington, D.C., June 1962, p. 2.

for all the districts. The average for the state was less than the United States average. District I had the smallest rate of increase, even though it experienced a substantial increase in farm size. District III had the second lowest rate, and District II was substantially above the other two. The value of products sold increased at a rapid rate in I compared to the other districts. Again, this was due to the consolidation into more efficient units. District II showed a slight increase and III had a decline.

The distribution of commercial farms for 1959 is plotted in Figure 17. The obvious observation is the skewness of the distribution in Dis-



Fibure 17: Percent Distribution of Commercial Farms in 1959.

trict I, indicating the particularly large number of farms in Class 5 and 6. Class 6 had sales less than $2,500, and Class 5 had sales from $2,500 to $4,999. There are relatively few farms in the higher income classes. District II has a more normal distribution, but still has a high percent in Class 5. Some of this may be due to part-time farms around the urban centers. District III has a more normal distribution with a shift to Class 4 and Class 3 farms, which have incomes of $5,000 to $9,999 and $10,000 to $19,999 respectively. This district was considerably better off in terms of agricultural income than was I and II. District I has a badly skewed distribution and thus can expect more declines, particularly in the lower income classes.

Conclusion

Past changes in the economy of Oklahoma have been reviewed and some prosective changes suggested. The division of the state into the districts described here provides a useful framework for analyzing the prospects for economic growth in the state. As noted, there are substantial differences in the economies of the three districts and the rates of change among the districts.

The economy of District III is heavily dependent on agriculture. Growth in this district will depend on the adjustment in the agricultural sector and the effects of this adjustment on the service sectors that cater

to the agricultural industry. District II has the economic base to provide the impetus for economic growth because of the large urban centers in the district. This is the district that has experienced the greatest growth in recent years. The statistics indicate the depressed economic conditions in District I, and this is the district that is the major concern of present area development research in the state.

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