

# The Problem of Surplus Population in the Eighth District

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One of the basic problems that has confronted the Eighth Federal Reserve District has to do with surplus population. The birth rate—that is, the number of births per 1,000 people—in this district traditionally has been higher than that for the nation as a whole, and yet the percentage increase in district population since 1900 has been far less than that for the United States. There have not been sufficient job opportunities in this district to support all of the people born and migrating here. As a result, net outmigration on a large scale has occurred. This action has solved the district's problem only partially for total income produced by those left in the district has not been adequate to maintain district per capita income at anything like the national average.

In general, areas tend to lose population unless they can create productive employment. The Eighth District happens to be rich in natural resources, but it has failed to fully exploit them. The district is primarily rural and agricultural in character—much of the explanation for its high birth rate may be found in this characteristic—but its agriculture has not created sufficient income to support its native farm population. Its own cities have absorbed some of the overflow from the farms but a large part has left the region. Thus, while the district's population has grown, the increase has been less than would have occurred had there been no outmigration of those in search of better economic opportunity. For example, in the 1930-39 decade the total district population rose almost 600,000, but in those same years about 350,000 district residents migrated from the area.

During World War II the district actually lost population, even when the effect of withdrawals for military service is taken into consideration. Most of these people migrated to work in war plants located in other areas. Some have returned since war's end and others are expected to return, but unless the district can keep outmigration for the next five years at a minimum the 1940-49 decade could well see only a nominal population increase, if any.

Since much of the district's surplus population problem has come from a large surplus farm population, there is every reason to believe that the future will present as extensive, if not a more extensive problem. The movement to mechanize

agriculture is still practically in its infancy and probably will grow rapidly in coming years. This will lead to even larger surpluses of labor in rural areas and probably will accentuate the trend of migration to the cities. It could lead to even larger scale migration from the district proper if the urban areas do not provide sufficient jobs for their own people plus the migrants.

From a national viewpoint there probably is no great reason for concern about where displaced farm workers migrate as long as they find productive non-agricultural employment. From a regional viewpoint, however, it seems desirable to create sufficient economic opportunities within the region so as to make outmigration unnecessary, or at least minimize it. By so doing the income-producing forces in the region should be strengthened and total income, as well as per capita income, raised.

The district's problem, then, may be stated simply—enough jobs must be created in nonagricultural pursuits to absorb the surplus population from the rural areas. A good start is being made in this direction, and many new job opportunities are being opened up in the district. Whether there will be sufficient new nonagricultural jobs here, however, is still open to question. If there are not, outmigration will continue.

The nature of the district's problem will be made more clear by a review of population growth trends and characteristics, after which future prospects may be considered in a little more detail. In general, the district offers a marked contrast to the nation with a higher birth rate but lower rate of population increase, a younger population less well-educated, a more extensive negro population, and a much smaller foreign-born population.

## POPULATION GROWTH TRENDS AND CHARACTERISTICS

**Population Increase in the United States**—In the century and a half following 1790 the population of the United States increased 33-fold, rising from 4 million in 1790 to 132 million in 1940. In 1945, it was estimated that the total population, including those in the armed forces, was about 140 million.

Very large percentage increases in population during this period occurred in the Nineteenth Century and were due mainly to large-scale immigration and a sharply declining death rate. After 1900, more strict immigration laws and a relatively

less sharp drop in death rates resulted in a declining rate of increase for the nation's population, even though the absolute gain in number of people continued to be large.

During the 1930-39 decade the annual rate of increase in the population of the United States was at an all-time low, 0.7 per cent. This low rate of gain was attributed mainly to depression which postponed marriages and kept birth rates low. Between 1940 and 1944 the annual rate of population growth was 1.2 per cent, as wartime prosperity induced marriages and led to higher birth rates. Consequently, despite war losses, the present population of the United States is larger than it would have been had the 1930-39 trend been continued.

While the total population increased from 1940 to 1945, the civilian population declined by about 5 million, as the military services drained off large numbers of men. Urban civilian population, however, increased in the five-year period largely because the heavy demand for workers by war industries induced large-scale migration from rural areas. During the previous decade rural population had increased more than urban population.

**Population Increase in the Eighth District**—The major period of population growth in the Eighth Federal Reserve District came after the great westward migration of the late 1840's. St. Louis was the gateway to the West and through it flowed emigrants on their way to California and gold. Many of them stayed in this region and their numbers were added to by the wave of German settlers who came to this country following the overthrow of the liberal movement in Germany. In 1850, this region had 2.6 million people; by 1900, it had 8 million. The percentage gain throughout this period closely paralleled that for the United States.

After 1900, however, the rate of increase in district population slowed down considerably and in the next 40 years population rose only 2.2 million or 28 per cent. The gain in the United States during those four decades was 73 per cent. The much smaller increase shown by the district was due principally to outmigration from the region to areas where economic opportunities were better.

Between 1850 and 1940, Arkansas had the largest percentage increase in population of any district state or portion of state. Eighth District Indiana registered the smallest gain in that period. The district portions of the more highly industrialized states of Indiana, Missouri, and Illinois showed population gains because they had relatively little outmigration which compensated for relatively low

birth and high death rates. The other district states had population increases because of high birth rates which outweighed heavy outmigration.

Population in the five major district cities, St. Louis, Louisville, Memphis, Little Rock and Evansville, increased from 135,000 in 1850 to 1,613,000 in 1940. Almost one-fifth of the total district population gain over the past 90 years has been in these five cities.

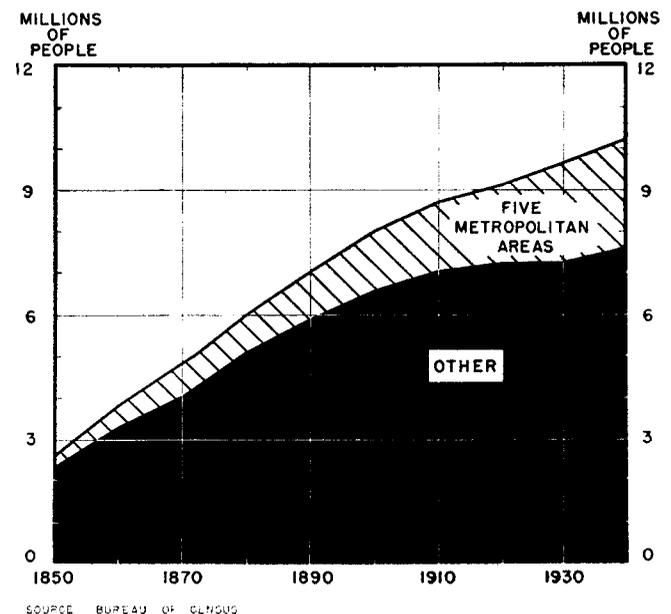
Since 1940, total district population has decreased, in contrast to national experience. From April, 1940, to November, 1943, the district's population (including those in military service) dropped 150,000. While there is little specific information covering the last two years, there are strong indications that the downward trend continued until the end of the war.

**EIGHTH DISTRICT POPULATION—1940**  
(In thousands of persons)

	Total	Per cent of Total		
		Urban	Rural Nonfarm	Rural Farm
Arkansas .....	1,949	22	21	57
Illinois .....	1,305	42	28	30
Indiana .....	639	42	25	33
Kentucky .....	1,466	36	21	43
Mississippi .....	1,110	13	14	73
Missouri .....	2,860	48	19	33
Tennessee .....	858	43	15	42
Total District .....	10,187	36	20	44
United States .....	132,669	57	20	23

**Birth and Death Rates**—The natural increase in the population of a nation or region depends upon the birth and death rates applying to that region. With immigration now greatly restricted, population trends for the future will be determined largely by these two factors.

**EIGHTH DISTRICT POPULATION, 1850-1940**



The birth rate in the United States has declined rather steadily since 1800, from 55 per 1,000 persons at that time to 18 per 1,000 persons in 1940. During the depression years of the 1930's, the birth rate declined sharply, but rose even more sharply in World War II until 1944. It probably will show little decline, if any, for the next two or three years as a large number of postwar marriages have taken, and in fact are still taking, place.

In the long run, however, the downward trend in birth rates seems likely to continue. Birth rates have tended to be higher among rural residents and foreign-born than among city dwellers of native birth.<sup>1</sup> A declining farm population probably will lead to a lower average birth rate. As noted, the number of foreign-born is declining because of immigration laws, although there may be a temporary arresting of this trend because of international marriages during and after the war.

The Eighth District birth rate has been consistently higher than the national rate. In 1943, the district rate was 24 per 1,000 persons, while the national rate was 23 per 1,000 persons. Birth rates in Arkansas, Kentucky, Mississippi, and Tennessee have run considerably higher than the national average, while those in Illinois, Indiana, and Missouri have run lower.

There is little difference between national and district death rates, although the regions within the district which have the highest birth rates average lowest in death rates. Due to improved standards of living and great advances in medical science and public health administration the annual death rate in the United States dropped from 17 per 1,000 persons in 1900 to 11 per 1,000 persons in 1944. The death rate probably will continue to decrease, but more slowly.

**Net Reproduction Rate**—A good indication of the potential population growth or decline of a region is the net reproduction rate.<sup>2</sup> A rate of 100 means that the population will just replace itself. A rate below 100 indicates a declining population. In this district, if the 1935-40 birth and death rates continued and there were no migration, the population in Indiana, Illinois, and Missouri would not replace itself in the next generation, while that in Arkansas, Kentucky, Mississippi, and Tennessee

would more than replace itself. Since birth and death rates are expected to decrease over the long run, the declining population trend noted in the first three states will probably be accentuated, but the net reproduction rates in the other states could suffer substantial decreases and still be above 100.

The net reproduction rate among urban residents of this district in the 1935-40 period was much lower than that of rural residents. For whites, the urban net reproduction rate varied from 64 per cent in Missouri to 81 per cent in Indiana, while the rural farm net reproduction rate ranged from 146 per cent in Missouri to 186 per cent in Kentucky. The rate for nonwhites generally averaged higher than that for whites.

**Age Distribution**—Declining birth and death rates lead to a larger proportion of older people in the population. Between 1900 and 1940, the proportion of the population in the United States ten years or more old increased from 76 to 84 per cent. If the birth rate continues its long-term declining trend, the proportion of older people in the population will increase further.

The Eighth District has a younger population than has the nation as a whole. In 1940, the district population ten years of age or older was 8.4 million or 82 per cent of the total. Explanation for this situation lies mainly in a birth rate higher than the national average and large outmigration. Since children constitute a smaller proportion of migrants than of total population, heavy outmigration from a region tends to result in a younger population for that region.

**Education**—Eighth District residents, according to Census figures, are less well-educated than the average individual in the United States. Apparently this results mostly from heavier migration of the better-educated people of the district rather than from lack of educational opportunities.

Only 7 per cent of the district's population 25 years of age and older had attended college, according to the 1940 Census, and only 29 per cent had attended high school or college. Corresponding proportions for the United States were 10 per cent and 40 per cent.

In this same age group, however, the proportion of district residents with no schooling at all was lower than the national average—3 per cent for the district and 4 per cent for the nation. Some portions of the district, particularly the southern areas, ran well above the district average. In Mississippi, for example, 7 per cent of the population 25 years of age or older had had no schooling in 1940.

<sup>1</sup>Birth rates also have tended to be higher among lower income groups. A National Health Survey made in 1935 showed that the fertility rate varied from 82 per 1,000 persons for the group with less than \$1,000 annual family income to 31 per 1,000 persons for the group with more than \$3,000 annual family income.

<sup>2</sup>Technically defined, the net reproduction rate represents the number of daughters a group of 100 female infants beginning life together would have during the course of their lives if the group were subject to both the birth and the death rates at each age level which prevailed at the time specified.

**Negro Population**—The Eighth District has a much higher proportion of negroes than does the nation—17.6 per cent of the total for the district as against 10 per cent for the United States. The ratio of negroes to the total population varies widely among district states or part states from more than 50 per cent in Mississippi to only 2 per cent in Indiana.

Many negroes moved out of the district during the war period and obtained higher incomes by so doing. With mechanization of farming increasing, there may well be a further outmigration in the future.

**Foreign-born Population** — The percentage of white population in the United States born in foreign countries declined from 15 per cent in 1900 to 10 per cent in 1940, mostly as a result of stricter immigration laws. The Eighth District has a much lower percentage of foreign-born than has the nation. In 1900, only 5 per cent of the district's white population were foreign-born and in 1940 only 2 per cent originally came from abroad.

**THE CHARACTER AND EXTENT OF MIGRATION**

From earliest times the population in the United States has been a migratory one. The principal movements have been from the south to the north and west, from the north to the west, and from rural to urban areas. Since 1900, the south has exported a net of about 2.8 million and the north about 1.8 million persons to other sections, while the west has gained about 4.7 million.

**ESTIMATED NET CIVILIAN MIGRATION\*  
EIGHTH FEDERAL RESERVE DISTRICT**  
(In thousands of persons)

	April, 1940 to Nov., 1943	1930 to 1940	1920 to 1930
Arkansas .....	-225	-173	-216
Illinois .....	62	+ 14	-167
Indiana .....	+ 22	1	53
Kentucky .....	78	- 79	-181
Mississippi .....	-135	- 68	- 61
Missouri .....	-121	- 14	-115
Tennessee .....	- 16	- 28	- 26
<b>Total District .....</b>	<b>-615</b>	<b>-349</b>	<b>-819</b>

Minus sign indicates outmigration; plus sign, immigration.  
\*Excludes movements of armed forces.

**Migration from the District** — Relatively high birth rates and predominantly rural characteristics have made the Eighth District a surplus population area. Increased agricultural productivity made more agricultural workers available than could be absorbed by the industrial centers in the district. Since the district has retained, but not increased, its proportion of national employment in the past forty years, both surplus rural and urban workers migrated to sections of greater opportunity. In

general, migrants from rural areas seem to have gone to urban centers within the district, while those from the cities left the district proper. In the two decades prior to 1940, this district furnished a net of more than one million people to other areas.

All district states had net outmigration between 1920 and 1940. The number of net outmigrants from the district was more than twice as large in the 1920-30 decade as in the following one. The average annual net outmigration rate in the former period was 0.9 per cent, and in the latter period only 0.4 per cent.

This district had a slightly smaller percentage of negro than white and a much higher percentage of urban than rural outmigrants in the 1920-40 period. The states with lowest per capita income (Arkansas, Mississippi, Kentucky, and Tennessee) had the highest percentages of urban population outmigrating, while the other states had the highest percentages of rural population outmigrating.

During World War II, the volume of migration, excluding movements of the armed forces, was approximately two-thirds greater than in the 1935-40 period. The direction of wartime migration, however, was not much different than that of prewar years with the same general shift to the west and to urban areas.

Many of the wartime migrants moved long distances with more than half crossing state lines. Evidently there was more family migration during the war than in the prewar period. Approximately 60 per cent of the migrants 14 years of age and over were women, with servicemen's wives accounting for a large number of female migrants.

Between April, 1940, and November, 1943, the Eighth District had a net civilian outmigration of 614,000. No figures are available on migration after November, 1943. However, if the trend between 1940 and 1943 were applied, the amount of net outmigration from this district between 1940 and August, 1945, would be approximately 900,000.

**Migration Within the District** — The rapid growth in urban population is a significant development in the history of the United States. The Bureau of the Census defines urban population as including individuals living in towns with more than 2,500 population. In 1790, only 5 per cent of the United States population was urban, as compared with 57 per cent in 1940.

The Industrial Revolution with its transition from an agricultural to an industrial economy

made necessary large concentrations of population. After 1890, the rate of urban increase declined and reached an all-time low during the 1930's. The demand for industrial workers during World War II gave renewed emphasis to the shift from rural areas.

Urban population in the Eighth District has not increased as rapidly as in the country as a whole during the last 40 years and currently comprises a much smaller proportion of the total than the national average. Urban population in the United States increased 142 per cent between 1900 and 1940 as compared with 103 per cent for the district. In 1900, urban population in the district was 1.8 million or 23 per cent of the total population. By 1940, it had increased to 3.7 million or 36 per cent. Looked at from the other side, the essentially rural character of this district may be seen from the fact that in 1940 about 64 per cent of its people lived in rural communities, two-thirds of these on farms.

Missouri is the most highly urbanized and Mississippi the most rural section of the district. The greatest percentage increase in urban population in the district between 1900 and 1940 occurred in Arkansas, where 1940 urban population was almost four times that of 1900. Urban population in district Mississippi and Tennessee tripled, and in district Illinois doubled in this period.

#### CUTLOOK

Considering the various factors relating to the district's population, there seems, on balance, reason to believe that birth rates here will continue to exceed the national average and consequently that district population growth could potentially run higher than that for the country as a whole. At the same time, this conclusion means that there must be either a continuation of outmigration on a large scale or considerably higher nonagricultural employment in the region.

As noted earlier, migration should not be considered an evil from a national viewpoint. Historically, migration has been and probably will continue to be necessary, for urban industrialized areas have lower birth rates and more job opportunities than have rural areas. Unless the distribution of job opportunities changes radically or unless current regional differences in birth rates are minimized, some migration from rural to urban regions will be both necessary and desirable.

For the district to maintain or better its population relative to that of the United States, however, it will be necessary to hold outmigration from here to a minimum. To do so means providing enough

high-income employment in the district's urban areas to keep people here.

In this connection it should be noted that the district will have to create relatively more job opportunities than the nation as a whole if it is to retain its population. For example, assuming that the district's share of national employment in 1950 were no greater than in 1940, average national employment of 55 million (about that which prevailed in 1943) would lead to employment of only 86 per cent of the district's potential labor force in that year if there were no outmigration between now and then. Assuming full employment in 1950 were about 60 million, the same relative share for the district as in 1940 would provide work for but 91 per cent of the district's potential labor force. In other words, in 1940 the district did not provide enough jobs to take care of its native labor force and consequently there was outmigration. Regardless of the increase in employment by 1950, unless the district increase is substantially larger than the national average, there will still be not enough jobs here for the native population.

Among the various portions of states located in the district, the above assumptions would indicate Indiana is the only one where 1950 job opportunities would exceed the potential labor supply without some immigration. Missouri and Illinois would provide almost enough jobs, but other states or part states would find it necessary to export people if they were to avoid unemployment.

Postwar nonagricultural employment prospects, however, seem to be more favorable for the district than for the nation as a whole. This conclusion is based mostly on surveys of future employment prospects conducted in many Eighth District cities in the latter part of the war period. The high nonagricultural employment level indicated for the district after full reconversion (2.7 million as against 2 million in 1940) was based on reasonably realistic market analyses and plans to exploit more fully the natural resources and advantages of this region and not on mere hopes.

Consequently, the outlook for holding outmigration from the district to a minimum for the next few years by providing adequate employment opportunities seem fairly good. It should be stressed, of course, that the postwar job prospects are still prospective for the most part. The prospects, however, actually are bright. If they materialize, the district will not have to face the alternatives of unemployment here or exporting its people.

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