

# Farm Adjustments in an Expanding Economy and Their Effects on Income

Of all the changes in the District's economy during the 1950's, few were greater than those in farming. Pressed by adverse income conditions, farmers coped with their economic problems by improving management techniques and adjusting land, labor, and capital to raise productivity and increase output. They could do this partly because the region's economy was growing and provided uses for excess farm resources as well as outlets for new farm products. Whether these developments will continue during the 1960's, what form they will take, and what effect they will have on farm earnings may be important to economic growth in the Sixth Federal Reserve District—Alabama, Florida, Georgia, southern Louisiana and Mississippi, and eastern Tennessee.

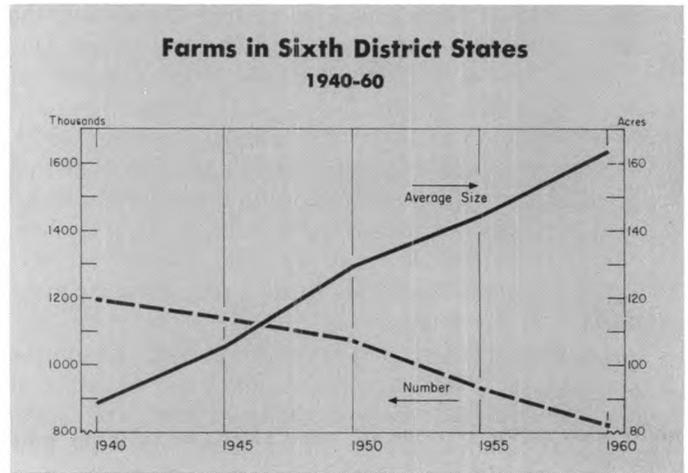
## Changes in Structure of Farming in 1950's

Paramount to all other changes in District farming during the 1950's were those in the farm labor force. Despite influences holding workers on farms, some 600,000, or 34 percent, of workers on District farms moved to jobs off the farms.

Migration from farms was greatest in Alabama, Georgia, and Mississippi. Despite this, however, and because of a tendency toward more rapid replacement of men with machines in those states, a larger underemployed farm labor force exists there than in Florida, Louisiana, and Tennessee.

more capital to use than he had in 1950. In constant 1950 dollars, farm capital per worker rose from \$6,615 in 1950 to \$11,739 in 1959, over half of which was invested in land.

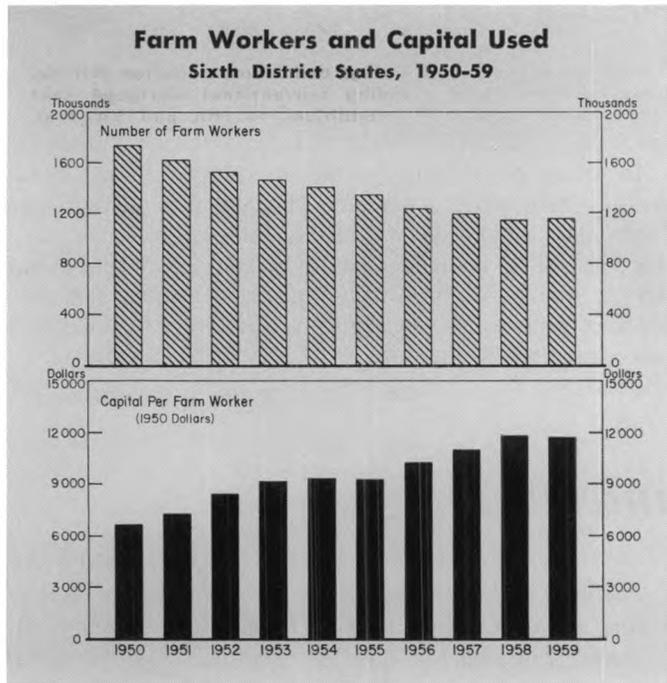
Meanwhile, in each District state farms grew in size and the number of farms declined correspondingly. Farm size in terms of acres increased 25 percent during the ten years, from 130 acres per farm in 1950 to over 160 acres in 1959. According to estimates by this Bank, there are less than 850,000 farms in District states today, compared with well over one million in 1950.



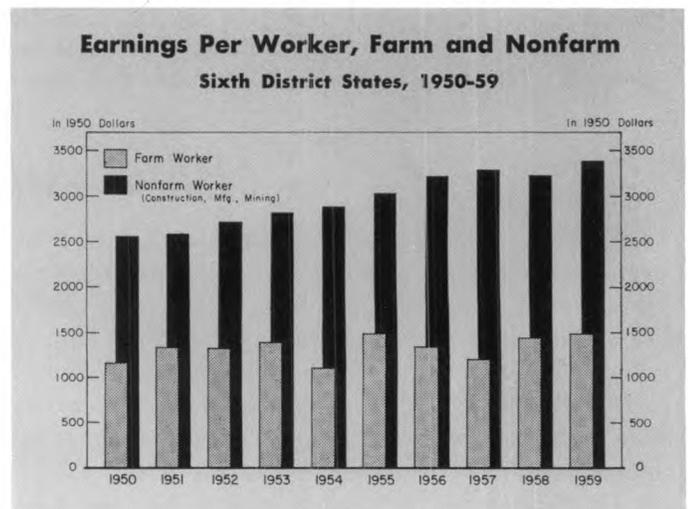
Finally, farm lands are used differently today. Between 1950 and 1955, a million farming acres in District states were diverted to sites for highways, homes, and industrial plants. Also, farmers shifted three to four million acres from crop production to pastures for livestock.

## A Closer Look at the Changes

Basic to these changes in District agriculture were the lower incomes of farm workers than those of other workers. Although exact comparisons are not possible,



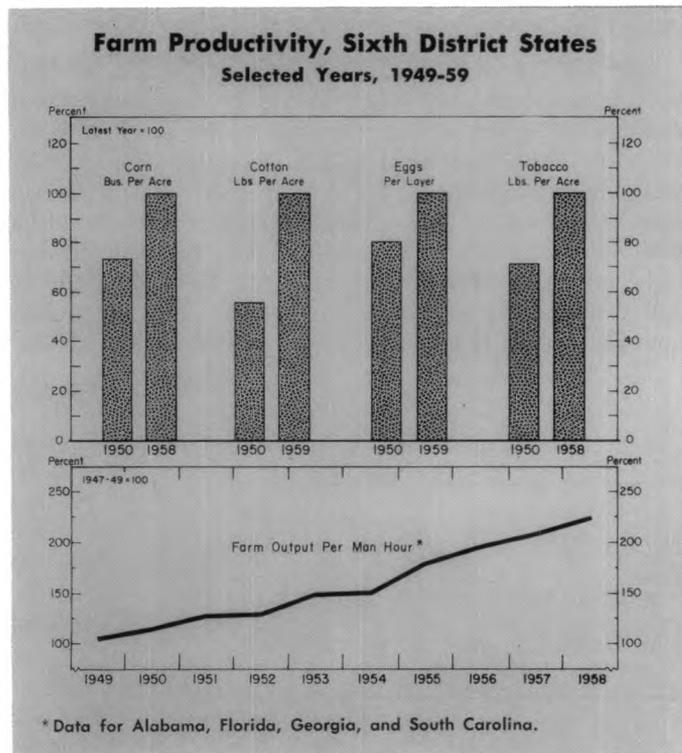
Significant adjustments were also made in farm capital investments. Almost twice as many dollars are invested in the average District farm today as ten years ago. Each farm worker in the District now has roughly 77 percent



the average income for District farm workers in 1950 was \$1,397 less than for those in construction, mining, or manufacturing. This disparity suggests that labor was excessive in relation to capital on District farms. Under these conditions, economic forces would be expected to draw labor away from agriculture and to draw capital to it. In the process, the structure of farm production would change and labor would become more productive. As already noted, this is exactly what happened in the 1950's.

Typical of the burst of productivity that resulted from the application of more capital to District farming—helped along by advancing technology—was the 21-percent increase in livestock production between 1953 and 1959. More capital meant more machines, and because of certain natural characteristics of the region, opportunities to increase production through mechanization were great. The region enjoys a long growing season and ample rainfall, for example, conditions favorable for intensive use of mechanical equipment and the adoption of modern mechanical methods of farming.

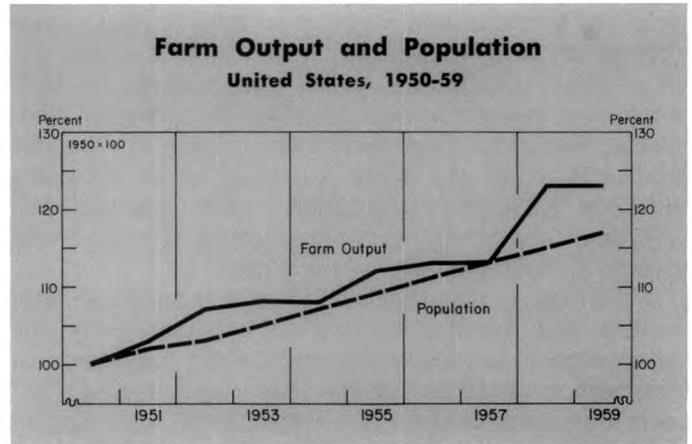
The application of more capital through mechanization increased total output in other ways. Replacing animal power with machine power freed acreage formerly used to produce feed for animals. In 1950, roughly eight billion pounds of feed were fed to slightly over a million mules in District states, whereas in 1959 less than half as much feed was needed for about 400,000 mules. Over four billion pounds of grain, hay, and pasture needed for workstock ten years ago, therefore, was available for cattle and hogs last year. Also, machines now perform many jobs formerly done by hand labor, so laborers who once followed mules and plows are available for more productive farm tasks.



Some of the increased output during the 1950's can be explained by a greater mastery of the science of farm-

ing, which also meant increased capital investment. But whatever the explanation, physical productivity increased, whether measured in terms of yields per acre or yields per manhour.

Measured in terms of physical output, the District's agriculture was certainly more productive at the end of the decade than at the beginning. If productivity is measured by the District's ability to produce higher incomes, however, the story is different. The ability of the area's farm economy to expand production was greater than its ability to market the expanded output profitably.



Demand for farm products produced in this region grew during the 1950's but not as much as did supply. True, there were more people to feed and clothe in the United States—roughly 1.7 percent more each year—but farm production increased 2.3 percent per year during the same period. Higher personal incomes afforded people a much higher level of living, but most people do not increase the amount of farm products they buy as their incomes go up; they only want better quality. Total farm sales, therefore, were not very responsive to the increases in personal incomes. Then too, foreign demand for commodities produced in this District failed to boost demand for farm products significantly. Tobacco, one of the District's leading export items, has even lost foreign markets since the 1950's began. Together, these forces held the increase in demand for farm products below the increase in supply. Consequently the increased output did not result in a corresponding increase in farm income.

### How Changes Benefited Farmers

Was the average farmer actually any better off at the end of the decade than at the start? Did the structural changes in farming lift income enough so that the fewer workers on farms at the end of the 1950's were receiving more on an average than the greater number at the beginning? The answer is Yes, but the improvement was modest.

In 1950, the average District farm worker earned \$1,153. By the end of 1959, his earnings had risen to \$1,486 after adjustments for rising prices. Aside from the small income gain, however, major improvements were made in working conditions. Technological innovations have reduced the drudgery in farming until it no longer requires what has been termed the "unbearable sweat and toil" of some years ago. Then too, some farm

workers such as those on dairy farms enjoy more leisure today than they did ten years ago—an important accomplishment. Finally, farm operators are wealthier in terms of assets owned than they were at the beginning of the 1950's.

The income benefits of the structural changes in farming, however, were by no means limited to farming. They were felt in the nonfarm sectors of the economy as well. As machines replaced men on farms, a ready pool of workers became available for new industrial plants. Those workers earned higher incomes. Farm production of food and fiber encouraged growth in District food processing, pulp and paper manufacturing, and other industries that depend on farming for their raw materials. Also, the large mechanized farms opened vast markets for farm machinery, equipment, and supplies, thus directly stimulating District business. Indeed, the stimulus to economic developments in the nonfarm sectors of the District's economy by the structural changes in farming may well have been agriculture's greatest contribution to economic growth in the region during the 1950's.

Nevertheless, the disparity between incomes of farm workers and nonfarm workers still exists. Actually, the gap widened between 1950 and 1959. Employees in construction, mining, and manufacturing earned \$1,397 more than farm workers in 1950; in 1959, according to estimates made by this Bank, they earned \$1,879 more. Effects of price increases have been removed in making the comparison.

### **Continued Changes in the 1960's?**

So long as the disparity between the incomes of farm workers and those of comparable workers in other trades continues, it is probable that maximum productive use is still not being made of all the District's labor force. Thus, the incentive for farmers to improve their relative economic position by continually reorganizing their resources still exists. In the process the economic efficiency of the region will be improved.

Farms could become larger in terms of land, capital, and production as farmers apply technology still more. By 1970, District farms may average well over 200 acres per farm, compared with 163 acres in 1959. As the level of farm management increases, there may be a rapid rise in part-owners, farmers owning some farm land but renting additional acres.

If historical trends and current economic conditions are a guide to the future, one can readily predict a further decline in the District farm population and a further change in its composition. Fewer unskilled workers will find jobs on farms; they will either find unskilled work elsewhere or they will become semi-skilled or skilled and find more profitable employment in other businesses. Part-time farming may become more attractive to low-income farmers as they seek to close the income gap with their nonfarm neighbor by getting a job in town and still hang on to a part of their farm heritage. More emphasis may be directed toward vocational education and job placement for farmers who want other jobs but find the transition difficult.

Farms will require more capital as they grow larger and more productive. As a group, District farmers may rely more heavily on borrowed capital, although their savings will likely remain their most important source of funds. A larger proportion of their total assets, however, may be used directly in production during the next ten years.

There is little doubt that changes similar to those just discussed will occur in the 1960's to some degree. How great those changes will be, however, may well depend upon the extent to which hindrances to farm adjustments in the 1950's are reduced by the present Rural Development Program or other measures. In the 1950's, changes were limited by institutional factors such as price support programs that encouraged uneconomical production and rural educational programs that did not provide skills for occupational adjustments. Another hindrance was the lack of economic opportunities for some workers who wanted to readjust. Many workers were poorly trained for off-farm work, and were unable to get training because of their age or financial obligations. Finally, some workers simply resist changes.

The 1960's may truly be an exciting decade for District farmers who are eager to accept the fundamental changes occurring in our dynamic economy. For them, the years ahead can be profitable ones indeed. They may maintain sufficient flexibility to keep their farming operations in line with changing trends. Many others who adopt new nonfarm trades will also find their rewards particularly gratifying. Progress toward the farm adjustments still needed may constitute one of the most important contributions to this area's income growth in the 1960's.

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*This is the second in a series of articles that will appear in this REVIEW from time to time on different aspects of economic growth in the Sixth District during the 1950's and implications for the 1960's.*

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