

The nation's farm sector has experienced substantial distress with rising liquidations throughout the early eighties. Current problems stem largely from the reaction to economic conditions that emerged in the early 1970s. Accelerating inflation coincided with a worldwide shortfall in agricultural production to trigger sharp price increases for grains, oilseeds, and related products. A decline in the value of the dollar against foreign currencies reduced effective prices of U.S. agricultural exports. Farmers were able to enlarge sales and their share of the world market. Upward pressures on production costs lagged, since a fairly high proportion is fixed rather than variable. In this environment, farm income rose quickly.

U.S. farmers responded by increasing acreage and, at the margin, financed landholdings with substantial borrowing. Investors also added to holdings and land prices began to rise rapidly. (Average values for the U.S. doubled in the five years from 1976 to 1981.) Toward the end of the 1970s, farmers, lenders, and most of the agribusiness complex believed that the markets for agricultural products were virtually limitless and that high incomes for agriculture would continue for the foreseeable future.

But variable costs soon began to rise and the market for farm output failed to live up to expectations. Fuel costs jumped in late 1978, following the original OPEC increase five years earlier, and accelerating U.S. inflation placed pressure

The authors are members of the Atlanta Fed's Research Department.

A Crucial Year for Southeastern Farmers

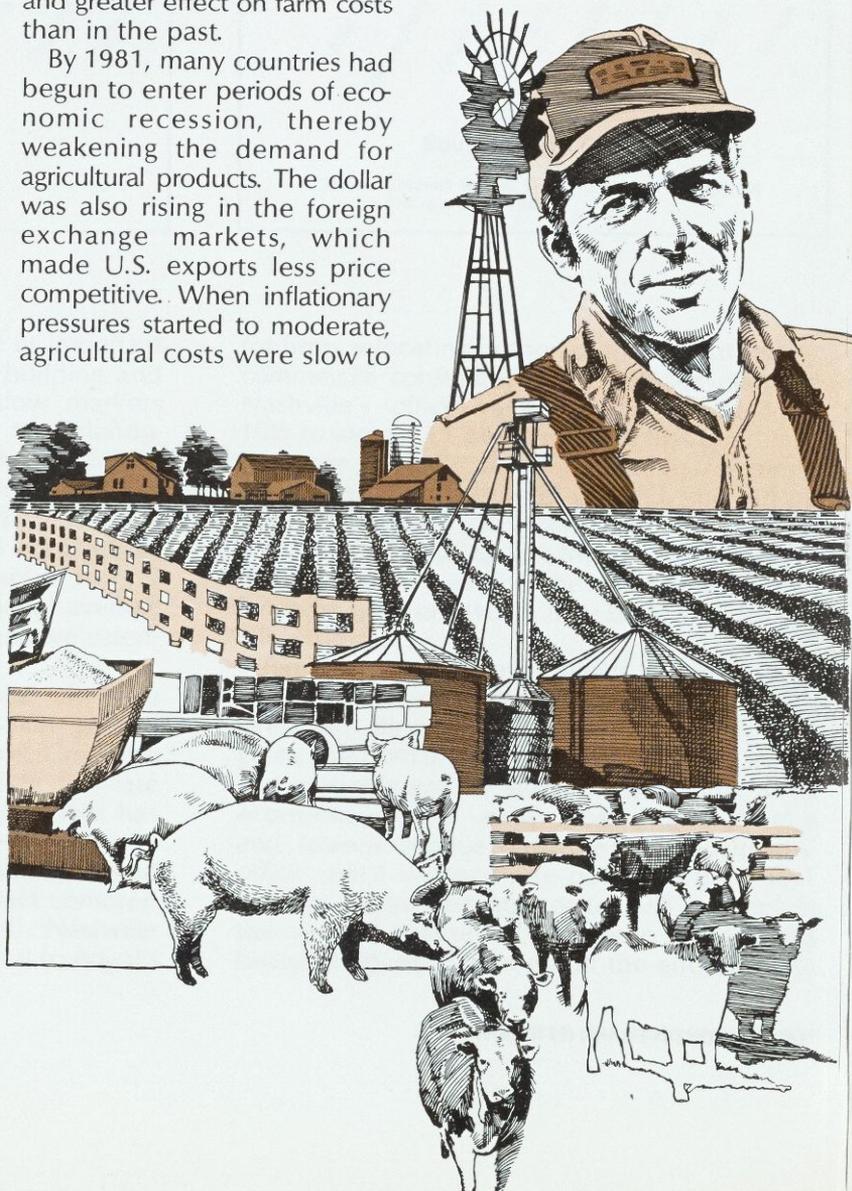
Gene Wilson and Gene Sullivan

Droughts, faltering profitability, decreasing asset values, and current interest rates have confronted some southeastern farmers with almost insurmountable difficulties. But even though lenders expect that additional liquidations lie in the near future, most farmers seem likely to begin a recovery this year.

on costs of other equipment and supplies. Interest rates also rose sharply, particularly toward the end of the decade. Because so many more farmers were highly leveraged, the rise in financing costs had a quicker and greater effect on farm costs than in the past.

By 1981, many countries had begun to enter periods of economic recession, thereby weakening the demand for agricultural products. The dollar was also rising in the foreign exchange markets, which made U.S. exports less price competitive. When inflationary pressures started to moderate, agricultural costs were slow to

respond, paralleling the pattern on the upside. The resulting declines in farm income were aggravated by drought in many areas. As a result, the rise in land prices halted and since



then declines have occurred in some of the most prominent farming areas. In Iowa and Ohio, for instance, average prices have fallen 28 percent since 1981.

The U.S. economy has expanded vigorously in the last year and a half, with a notable lack of inflationary pressures to date. But the farm sector has not participated widely in the recovery. While interest rates declined during the recession, they began rising as the economy gained momentum, in large part because of the need to finance massive government deficits. The dollar has continued to rise and since 1980 has gained 54 percent against the currencies of major trading partners. This has constrained demand for U.S. exports of agricultural products.

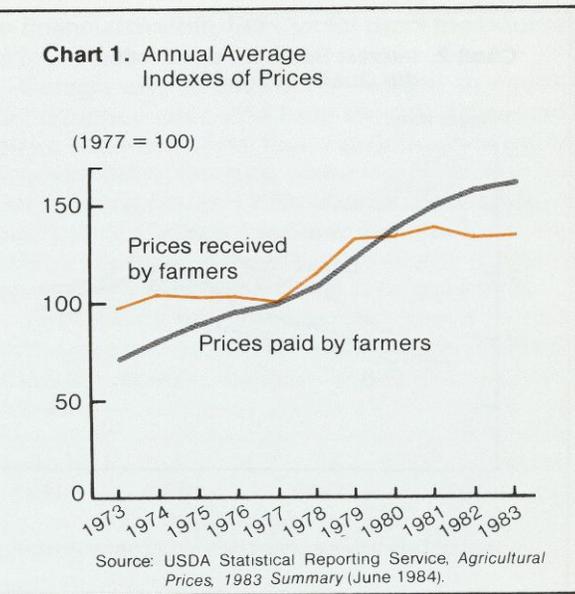
With prices of land and equipment weak, the capacity of highly leveraged farmers to borrow has contracted. In fact, some lenders have found themselves with inadequate collateral to secure loans that were made when land prices were higher. Farm foreclosures and liquidations have increased significantly.

Fortunately, the majority of farmers, even in the most troubled areas, are not heavily indebted and do not face imminent failure. The severity of problems does vary from region to region, however, and the Southeast is one area where difficulties began to emerge earlier. The particular features of the problems in this region are examined below.

Ingredients for Farm Distress

Weather. Since 1977 drought has caused wide fluctuations in yields of major southeastern crops. The average yield of soybeans, for instance, has varied from a low of 15 bushels an acre to a high of 28. The impact has been equally severe on cotton, with the average regional yield ranging from 420 pounds an acre to 718 pounds. Georgia farmers have experienced the greatest crop damage. For example, the state's corn yield has varied from 42 to 85 bushels an acre over the past seven years. Such production volatility, in combination with other factors, created considerable income instability for farmers in this region. Since many farmers were unable to repay operating loans, debts accumulated rapidly.

Prices and Costs. Paradoxically, the favorable prices and high returns that prevailed during the early 1970s set the stage for the serious financial problems of southeastern farmers today. In 1972, for example, the cost of producing soybeans

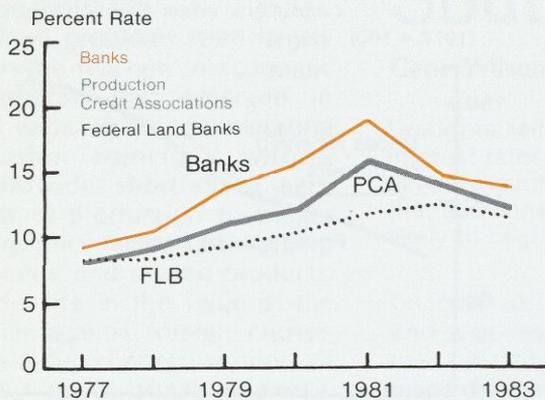


(excluding land) was \$1.40 a bushel while the total return was near \$4.40 a bushel. The net return of \$3 a bushel typified the high profit opportunities that stimulated farmers to expand output rapidly and to bid up farmland prices in an effort to enlarge their operations. Speculative demand for land also was a factor in price increases.

Profit margins narrowed yet remained strongly positive in subsequent years until 1980. That year's severe drought cut production sharply and pushed the cost of production per bushel well above the return. Since then costs have hovered much closer to selling prices, so that profit opportunities have been limited for all farmers, especially those with above-average costs. Instead of returns at double or triple production costs as in the early 1970s, the margin between cost and return has often been insufficient to pay the opportunity cost for money invested in land.

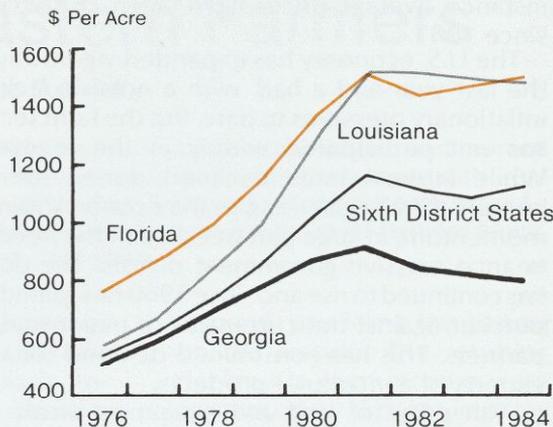
Large numbers of below-average producers have been unable to cover expenses. Chart 1 shows that, since 1980, increases in prices paid by farmers have outrun prices received. Many farmers could not make principal or even interest payments on previous indebtedness. With declining land prices restricting borrowing capacity, those producers soon exhausted the collateral basis for securing additional loans. The result has been an unusually large number of farmers facing foreclosure and liquidation.

Chart 2. Interest Rates of Farm Lenders
4th Quarter, 1977-1983



Source: Federal Reserve Board, *Agricultural Finance Databook*

Chart 3. Average Farm Real Estate Values



Source: U. S. Department of Agriculture, *Farm Real Estate* (May 23, 1984).

Interest Rates. For those farmers with significant amounts of borrowed capital, the rising cost of money has been a major additional problem. Not until near the end of the seventies did farmers find the cost of borrowing money advancing significantly. Non-real estate farm loans at banks cost borrowers almost 3 percent more at the end of 1979 than at the beginning and fully 5 percent more than two years earlier. By the fourth quarter of 1982, the cost of money on farm loans had doubled (see Chart 2). Present interest rates, although lower than two years ago, remain above the average of the 1970s. Considering that many commercial farmers borrow at least some of their operating expenses, interest rates had a strong bearing on net farm income.

Farm Assets. Clearly, the value of farm assets has fallen over the past three years. Reports from auction sales indicate that market values of used farm equipment decreased sharply as more farmers sold out and others reduced the size of their operations. But it is the decline in value of farm real estate that is of most importance. In many areas, the market for farmland was so weak in 1982 and 1983 that market values were difficult to determine. According to estimates from the U.S. Department of Agriculture provided on April 1 of each year, total farm real estate values in the region fell during 1982 and 1983 but have turned up slightly in 1984. The behavior

of average farm land values in the United States was similar, except that large declines in Iowa and Nebraska caused the U.S. average to fall slightly (-1%) in 1984 as well. Chart 3 shows the average values for the Sixth District since 1976, along with the District states in highest and lowest positions.

The sharpest declines occurred in Georgia, Mississippi, and Tennessee. In Georgia, total farm real estate values fell nearly 10 percent from 1981 to 1982, another 3 percent from 1982 to 1983, and an additional 2 percent from 1983 to 1984. Mississippi land values fell 13 percent before gaining 5 percent from 1983 to 1984. For the combined area of the Sixth District states, value declined 7 percent from 1981 to 1983 and then increased 4 percent from 1983 to 1984, reflecting similar increases in Mississippi, Tennessee, and Florida. Over the past year farm real estate values either continued to fall slightly or held steady in Alabama, Georgia, and Louisiana. The decline in land prices indicates that the 79.1 million acres in the region lost \$6.2 billion in value from April 1, 1981 to April 1, 1983. Even though reported values in some locations have increased in 1984, farmland markets remain weak. Land prices almost certainly would plummet if all of the land from seriously troubled farming operations were suddenly placed on the market.

Adapted from the February 21, 1983 issue of *Fortune* with the magazine's permission and that of the artist.

Resulting Debt

A combination of the inflationary 1970s environment and a series of unfavorable crop years caused an acute rise in the region's farm debt. Debt rose at annual rates of 10 percent or more, with a 1980 increase of nearly 20 percent. From approximately \$5 billion in 1970, southeastern farm debt climbed to nearly \$20 billion in 1983. Interest payments surged from 8 percent of the region's farm cash receipts in 1977 to 14 percent in 1982. These trends greatly heightened the importance of a stable cash flow for farmers to service the large amount of debt.

Reduced income, rising costs, and declining asset values together have left highly leveraged farmers in a precarious financial condition. Most of those farmers turned to the Farmers Home Administration (FmHA) for financing when commercial lenders were unwilling to extend additional credit or when attractive disaster credit from the FmHA became available. The FmHA's standing policy is to lend to those farm operators who are unable to obtain credit elsewhere at reasonable terms and rates. Thus, the FmHA has the overwhelming majority of southeastern farm borrowers who are delinquent in loan payments, who have exhausted their borrowing capacity, and who face dim prospects of generating sufficient future income to repay their accumulated indebtedness.

Precise numbers are unavailable, but estimates based on reports from various lenders indicate that around 8 percent, or 25,000 of the region's 320,000 farms, are in these dire financial straits. About 21,000 of those farmers or 85 percent are borrowers from the FmHA. Agency spokesmen say these 21,000 delinquent borrowers represent 42 percent of the FmHA's total farm customers in the Sixth District states, up from 40 percent at the end of 1983. Farmers in Georgia and Mississippi, with the most severe financial problems, account for 10,000, or nearly half of the total delinquencies.

A breakdown by state illustrates the problems Sixth District farmers have encountered in repaying past debt.

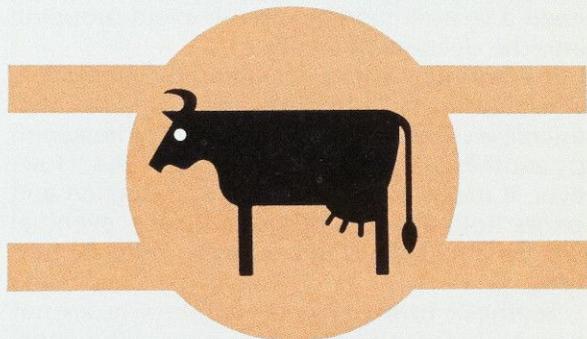
Florida has one of the highest FmHA delinquency rates in the nation, with 61 percent of borrowers delinquent on payments. The good news is that FmHA borrowers account for only a small portion of the state's total farm debt and an even smaller segment of its farmers. This implies that only a small portion of Florida's farmers are

in financial trouble, but that for them the trouble is indeed serious.

Georgia also is among the leaders in FmHA delinquency rates, and here there is little good news. The worst of the financial difficulty is in the southern half of the state, where much of Georgia's crop farming occurs. Unlike Florida's, a substantial number of Georgia's farmers borrow from the FmHA and approximately 60 percent of these borrowers are delinquent on loan payments.

Tennessee's farmers have the lowest FmHA delinquency rate in the District (33 percent) although adverse weather could intensify the problem. In past years, the financial condition of Tennessee's farmers has been among the best in the six-state region. Indeed, less than 10 percent of the state's farmers even borrow from the FmHA, which reflects higher overall credit quality among Tennessee's farmers than in other southeastern states.

The FmHA delinquency rate of Mississippi's borrowers is much lower than Georgia's, but the number of delinquencies is similar. Whereas only 9,600 Georgians are customers of the FmHA,



over 12,000 Mississippians use this source for credit. Of these, 40 percent are delinquent.

Alabama's farmers, enduring the same drought as others experienced last year, saw their FmHA delinquency rate rise to 37 percent, slightly above 1983's level. Only 12 percent of Alabama's farmers are FmHA customers. The majority of farmers in the state have continued to look to commercial banks and the Farm Credit System for their needs.

A growing sector of Louisiana's farm community also is experiencing financial difficulty. By 1984, nearly 10 percent of the state's farmers were delinquent on FmHA loans, and the delinquency rate increased from 43 percent in 1983 to 46 percent near mid-1984.

Table 1. Ratios of Debts to Assets of Farmers in Sixth District States
(January 1 of each year)

	1979	1980	1981	1982	1983
Alabama	17.5	16.5	16.8	18.5	19.1
Florida	16.0	16.2	15.8	18.8	19.0
Georgia	21.4	22.8	24.7	28.8	28.9
Louisiana	15.3	15.5	15.1	17.8	18.9
Mississippi	18.7	19.1	18.6	22.8	25.0
Tennessee	16.5	16.9	17.6	19.1	19.2

Source: U.S. Department of Agriculture, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics*, 1982.

In addition to the group of farmers who have failed to make loan payments on time, there are also a number of producers carrying heavy debt loads who have managed to keep their loans current so far. Some have avoided delinquency by refinancing and extending loan terms, but the decline in asset values has limited the continued use of this technique. These farmers seriously need a year of good income to avoid dropping into the delinquent status.

It is estimated that, including the borrowers who are already delinquent, about 20 percent of the region's farmers would be gravely threatened by another poor cropping season in 1984. However, if major crops yield good production and prices hold at planting season levels, eventual failures are likely to remain well under 10 percent.

For the 75 to 80 percent of farmers who are not heavily indebted, prospects are considerably brighter. Many of these farmers, particularly those with small farms, use little or no farm credit and the others are customers of commercial banks or the Farm Credit System. Optimistic lenders believe that, provided 1984 is a profitable year, these borrowers may already have seen the worst of their financial troubles and may be back on the road to financial health. An American Bankers Association survey conducted last fall supports this view, for it indicates that fewer farming customers quit in fiscal year 1983 than in the previous year. This group's liquidations and delinquencies thus may have decreased slightly for the calendar year 1983.

The Payment-in-Kind (PIK) program for 1983 was beneficial in that it enabled participants to

avoid costs, thereby enhancing their net income and the opportunity to reduce their debt burden. Although the participating farmers' incomes have also suffered, their high equity positions have so far ensured their survival.

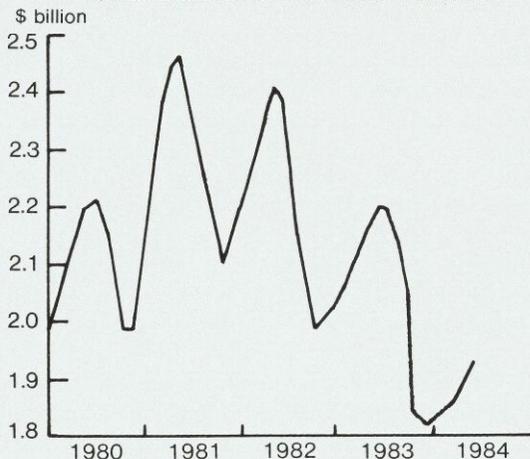
The overall financial condition of the region's farmers is depicted in Table 1, which shows average debt-to-asset ratios of farmers and landlords in six southeastern states. In spite of the heavy indebtedness of those farmers in serious financial difficulty, in no state does average debt equal more than 30 percent of total assets. In fact, except for the two states where problems are most severe, Georgia and Mississippi, the average ratios were below 20 percent in 1983. The ratio advanced forcefully from 1981 to 1982, however, in conjunction with the downturn in land prices. On the whole, the majority of farmers across the Southeast remain in a strong financial position and most will continue to operate even if 1984 profits are poor or nonexistent.

Sources of Farm Credit

Commercial banks are not the major source of farm credit in the Southeast, as they are nationwide. Farmers have turned to the farm credit agencies for a major share of their borrowing needs as operations have grown larger and more specialized. The FmHA also has inherited a great number of troubled borrowers from commercial banks and cooperative credit institutions as unfavorable events increased the risk of lending to heavily indebted farmers.

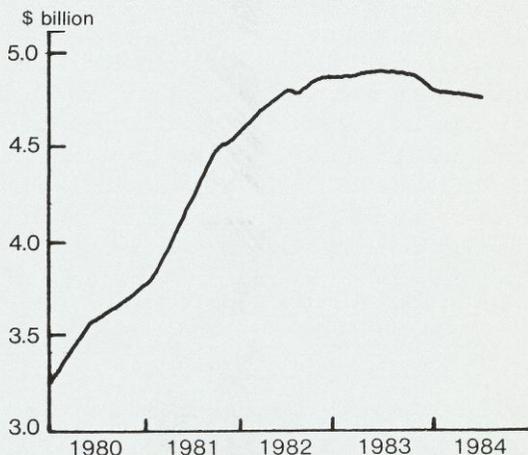
Farm credit extended by principal lenders began to slow in 1982 (Charts 4-6). Total loans

**Chart 4. Farm Loans Outstanding
Columbia Production Credit Association**



Source: Farm Credit Administration, Management Information Division, *Loan Operations*; and Federal Reserve Bank of Atlanta.

**Chart 5. Farm Loans Outstanding
Columbia Federal Land Bank**



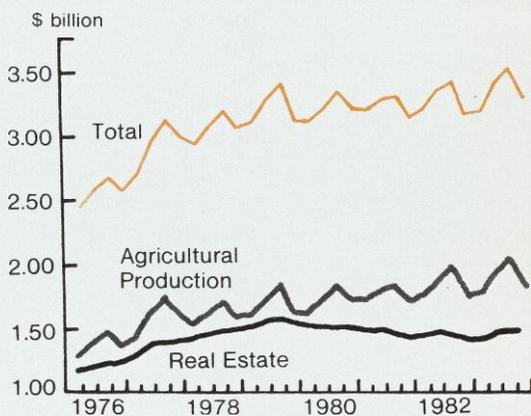
Source: Farm Credit Administration, Management Information Division, *Loan Operations*; and Federal Reserve Bank of Atlanta.

actually declined markedly at Production Credit Associations in the region; total loans outstanding fell by around one-fourth from 1980 to the spring of 1984. New loans at Federal Land Banks, the major source of long-term credit, also dropped in 1982, but the downturn in total loans outstanding did not occur until 1984.

Farm credit growth at commercial banks essentially ceased in 1980. Bank credit remained mostly flat until 1983 when an expansion in both production and real estate credit accompanied the PIK program and the swift contraction in loans from other credit sources. Also, interest rates on bank loans became more competitive with rates at PCAs and FLBs. Despite the recent increase for commercial banks, however, the share of farm credit extended is less than 20 percent of the total for four major lenders.¹

Loans to southeastern farmers are unlikely to grow briskly again until farm production becomes more profitable. This is especially true for lenders such as southeastern commercial banks, insurance companies, and individuals who have a variety of alternative uses for their funds. The farm credit agencies, on the other hand, are in business for the sole purpose of lending to agriculture. Whereas they have curtailed loans when losses increased, they will not reduce agricultural lending just because loans to other sectors of the economy reap higher returns.

**Chart 6. Sixth District Bank Farm Loans
for Real Estate and Agricultural
Production, and Total Outstanding**



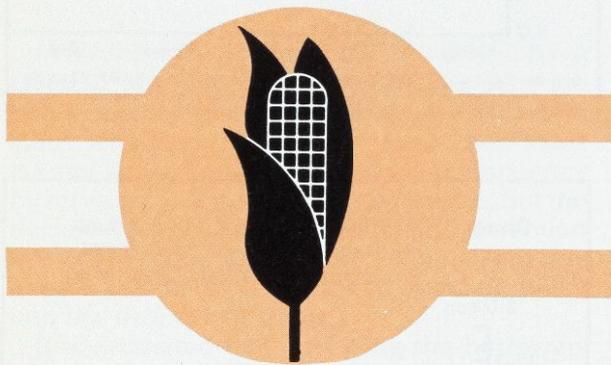
Source: Federal Reserve Bank of Atlanta.

Prospects for Recovery

Even under favorable conditions, lenders estimate that from 5 to 10 percent of the region's farmers are unlikely ever to be able to repay accumulated indebtedness. These borrowers probably will exit soon from the farm scene. With good production and prices holding near midyear levels, most other farmers will begin to recover in

1984. Several years will be required, however, for the most deeply indebted to get back on sound financial footing again.

If crop production does no better than attain the region's five-year average yields and if market prices hold at their early summer of 1984 levels, only peanut and corn producers can expect a positive return after paying all non-land costs. With this scenario, soybean producers would just break even and producers of sorghum, wheat, cotton, tobacco, and rice would face net losses. Of course, some producers obtain yields well above average levels and all hope that 1984 will be a favorable season. In that case crop yields



would far exceed the recent five-year average, which includes the serious shortfall resulting from the unusually severe drought in 1980.

For example, should average yields of soybeans equal the 27 bushels an acre obtained in 1982 and prices remain near \$7 per bushel, southeastern growers could make profits of about \$20 per acre in 1984 rather than just break even. For producers averaging above 30 bushels per acre, as many did during 1982, profits could rise substantially higher. This summer's increasingly frequent rainfall brightens prospects that most

crop yields will indeed be above average at harvest time.

Barring significant demand growth and crop price upswings, however, southeastern producers whose crop yields fall consistently at or below average levels will continue to experience financial difficulty. Much of southeastern crop production is marginal in the sense that output per acre lags behind the national average. Only in cotton, peanuts, and tobacco does regional productivity equal or exceed the national average. For soybeans, corn, grain sorghum, and rice, the southeastern states typically remain 15 percent or more below the national average productivity per acre.

The hope for most southeastern crop producers over the longer run is that they can somehow increase crop productivity or reduce production costs to become competitive with other producing areas. Double cropping, the technique of growing two crops on a given acre each year, has been used successfully by some producers to increase total revenue per acre. Biological improvements in plants, such as increasing efficiency of photosynthesis and enhancing nitrogen fixation by the plant root system, also could aid producers in competing with more productive areas of the country.

Without massive growth in demand for crops produced, however, a portion of the land now under cultivation in the Southeast may be returned to producing forage for livestock, diverted to timber production, or just left idle. Today a number of idle fields are scattered across the southeastern countryside, evidence that farmers or their lenders decided the land could not be cultivated profitably during the 1984 season. In such an economic environment, land prices are unlikely to show much upward movement in the near term. It may take several years before land markets improve to the point where farmers can again look to appreciated land values as the basis for obtaining additional credit for their operations.

¹For lender shares of farm credit by states, see "Farm Credit in the Southeast: Shakeout and Survival," *Economic Review*, Federal Reserve Bank of Atlanta (January 1983).