

Federal Reserve Bank of Dallas February 1986

Financial Stress Begins to Idle Acres

In the past few years, increasing numbers of farmers, caught in the price-cost squeeze of lower commodity prices and higher interest costs, have been leaving farming. Before the 1980s, virtually all the acreage from farmers leaving agriculture was absorbed by other farmers wishing to expand.

Given the consensus outlook for weak export markets and low commodity prices, together with near-record agricultural debt, the ability of efficient farmers to expand is limited. Evidence of this can be seen in results from a recent survey. Eleventh District agricultural bankers estimate that 2.8 percent of farmland was left out of production in 1985 because of farm financial stress. A statistical model shows that the 1.3-percentage-point increase in the number of District farmers leaving agriculture in 1985 will likely be associated with an increase in idled acreage in 1986 ranging from 3.6 to 4.3 percent.

Efficient Farmers Expand Production

Agricultural crop production for the past 45 years has been marked by a more than doubling of productivity and large reductions in the number of farmers (Chart 1). Even with government farm programs, farmers who did not adopt new technology were generally unable to keep production costs below market prices for their commodities. Consequently, the number of farms has fallen from 6.1 million in 1940 to about 2.3 million today.

For most years, the acreage released by farmers leaving agriculture

was absorbed by efficient farmers willing to make the investment necessary for expansion. Nationally, average farm size increased from 175 acres in 1940 to 437 acres in 1984. During that period, technological advances, predictable government programs, increasing domestic demand, and new export markets provided efficient farmers with the incentives for investment.

Farm Investment Slows Dramatically in the 1980s

In the 1980s, however, many of the most efficient farmers are financially

stressed because of weak markets and the tripling of farm debt in the 1970s. The agricultural export boom of the 1970s has gone bust, driving real (inflation-adjusted) commodity prices below 1979 levels. The frantic rate of debt accumulation slowed in the early 1980s, then declined in 1984. Much of this slowdown in borrowing has come at the expense of investment. Real investment in farm machinery and buildings has fallen more than 40 percent since 1981.

A survey of agricultural bankers showed that some efficient, low-debt
(Continued on back page)

Crop Price Supports Harm Livestock and Poultry Producers

The Secretary of Agriculture recently announced reductions in price supports for feed grains. They will help livestock and poultry producers, as price support programs can act to keep feed grain prices higher than market levels. Because feed grain costs are a greater proportion of their costs, poultry producers stand to gain relatively more from lower feed prices. Reducing the price supports should also mean that consumers will eventually pay lower prices for red meat and poultry products.

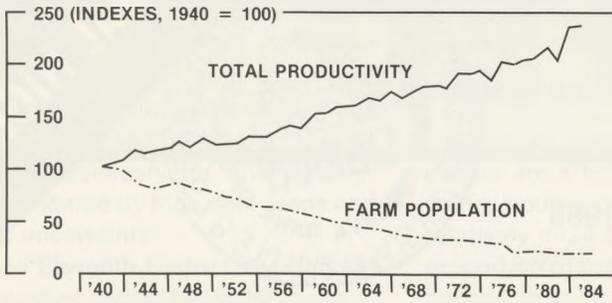
Effect of Agricultural Programs on Feed Prices

The price of feed grains can be kept above the market clearing price if commodity loans from the Commodity Credit Corporation (CCC) function as

price floors. Eligible farmers can borrow money from the CCC by using their crops as collateral for the loans. At the farmer's option, the debt can be satisfied by surrendering the crops to the CCC if the market price drops below the floor price, known as the loan rate. The crops are subsequently put into stocks. During times of weak markets and bountiful production, the loan rate can serve as the effective floor for prices in the United States.

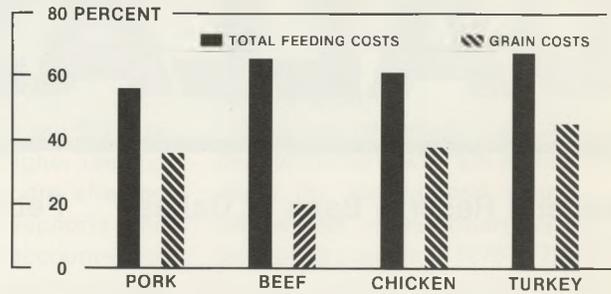
Feeding costs have fallen during 1984 and 1985. The extent of the decline, however, has been restrained by the loan rates. The recently announced reductions in the loan rates should lead to even lower feed prices. Nevertheless, given current market forecasts, the commodity loan pro-
(Continued on back page)

Chart 1
U.S. FARM PRODUCTIVITY AND POPULATION



SOURCES: U.S. Department of Agriculture.
Federal Reserve Bank of Dallas.

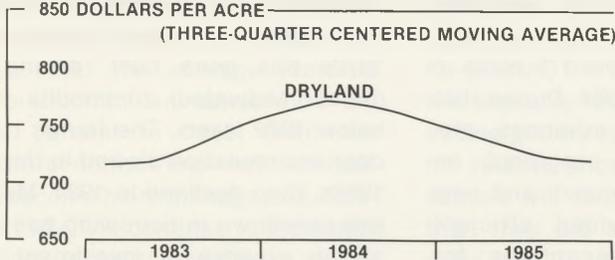
Chart 2
TOTAL FEEDING AND GRAIN COSTS AS A PROPORTION OF TOTAL PRODUCTION COSTS, 1983



SOURCES: U.S. Department of Agriculture.
Federal Reserve Bank of Dallas.

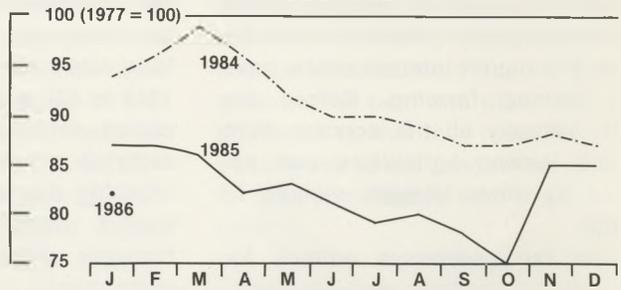
SELECTED INDICATORS OF THE TEXAS AGRICULTURAL ECONOMY

TEXAS FARM REAL ESTATE VALUES



SOURCE: Quarterly Survey of Agricultural Credit Conditions,
Federal Reserve Bank of Dallas.

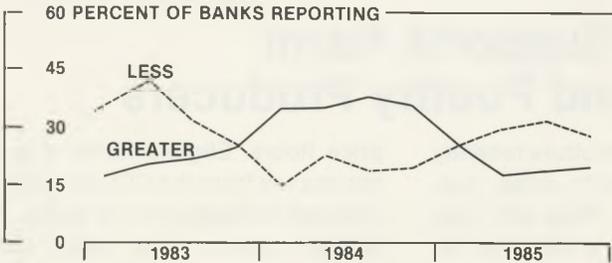
PRICES RECEIVED/PRICES PAID



NOTE: Index is constructed by dividing prices received by farmers in Texas by prices paid by farmers nationwide. (No separate series exists for prices paid in Texas.)
SOURCES: U.S. Department of Agriculture.
Federal Reserve Bank of Dallas.

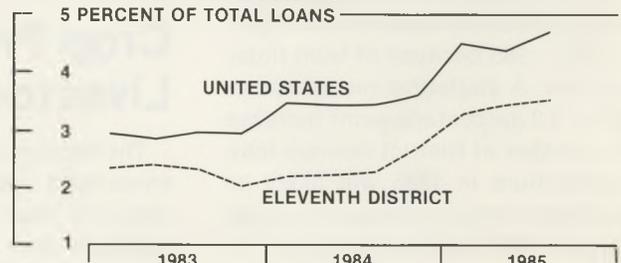
ELEVENTH DISTRICT AGRICULTURAL LOANS

DEMAND FOR LOANS



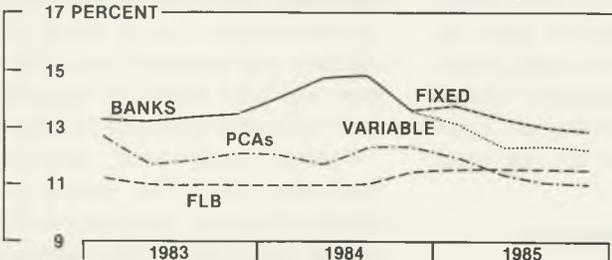
SOURCE: Quarterly Survey of Agricultural Credit Conditions,
Federal Reserve Bank of Dallas.

NONPERFORMING LOANS AT AGRICULTURAL BANKS



SOURCES: Board of Governors, Federal Reserve System.
Federal Reserve Bank of Dallas.

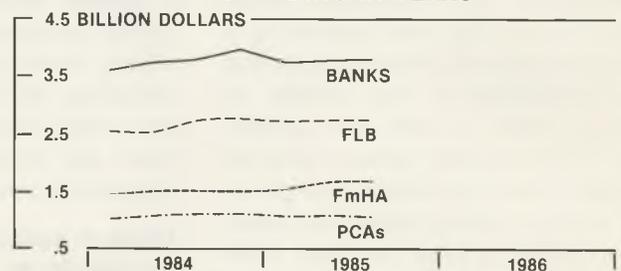
INTEREST RATES ON TEXAS FARM LOANS



NOTE: Starting with the first quarter of 1985, bank rate is decomposed into fixed and variable rates for agricultural loans.
PCA rate is for farm operating loans at production credit associations.
FLB rate is for farm real estate loans at the Federal Land Bank.

SOURCES: Farm Credit Banks of Texas.
Quarterly Survey of Agricultural Credit Conditions,
Federal Reserve Bank of Dallas.

FARM DEBT OUTSTANDING IN TEXAS



SOURCES: Farm Credit Banks of Texas.
Farmers Home Administration (FmHA).
Federal Reserve Bank of Dallas.

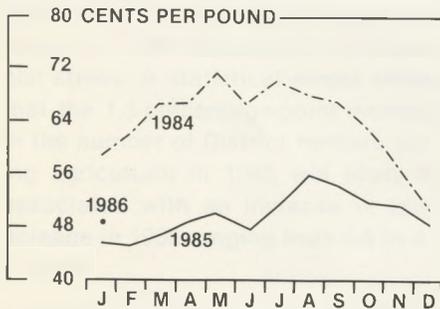
AGRICULTURAL BRIEFS

New farm bill enacted; land values stabilize; cotton export forecasts and some interest rates fall.

- In December 1985, President Reagan signed into law the new farm bill, the Food Security Act of 1985. One of the more notable features of the new law is the discretionary powers given to the Secretary of Agriculture to cut loan rates. The loan rate determines the loan—per bushel, per bale, or per hundredweight—that the government is willing to make to eligible farmers on their crops. Under current market conditions, the loan rates are functioning as price floors, keeping U.S. prices above world levels. The Secretary has already reduced loan rates on corn and wheat by 20 percent to make these crops more competitive in world markets.
- Preliminary estimates show that the rate of decline in average dry cropland and ranchland values in the District slowed during the fourth quarter while irrigated land values continued to fall. Dry cropland fell 1 percent to \$706 per acre, ranchland fell 1 percent to \$568 per acre, and irrigated land fell 4 percent to \$914 per acre. For all of 1985, both dryland and ranchland values decreased 7 percent, while irrigated land values decreased 11 percent. The trend of the data suggests that dry cropland and ranchland values may be close to the bottom.
- Estimates of 1985-86 cotton exports continue in a virtual free-fall. The United States normally exports 5 million to 7 million bales of cotton per year. In May 1985 the U.S. Department of Agriculture forecast that exports of cotton would be around 5 million bales. By August the figure had dropped to 4.0 million bales; by December, to 3.1 million bales. In January 1986 it reached 2.8 million bales. Because of domestic support prices, U.S. cotton is not competitive in world markets.
- Average interest rates on short-term fixed-rate loans at Eleventh District agricultural banks declined during the fourth quarter of 1985, following national credit market trends. These fixed-rate operating loans dropped to 12.9 percent from 13.2 percent. Short-term variable-rate loans remained unchanged at 12.3 percent. Average fixed-rate farm real estate loans remained steady at 13.1 percent, but those with variable rates fell to 12.2 percent from 12.5 percent.

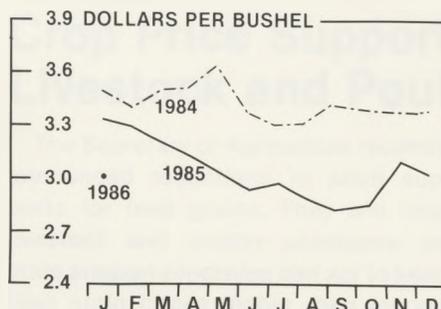
TEXAS COMMODITY MARKET PRICES

UPLAND COTTON



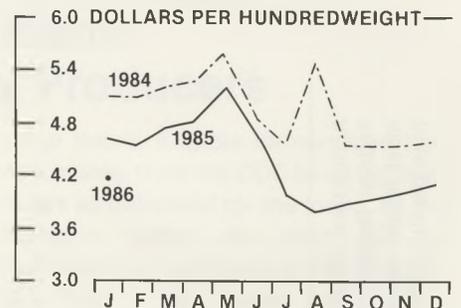
SOURCE: U.S. Department of Agriculture.

ALL WHEAT



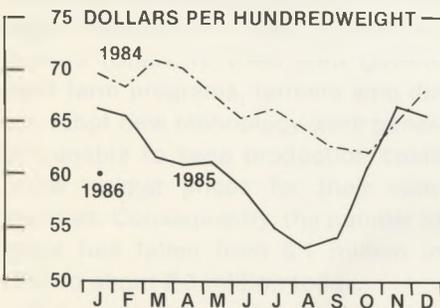
SOURCE: U.S. Department of Agriculture.

GRAIN SORGHUM



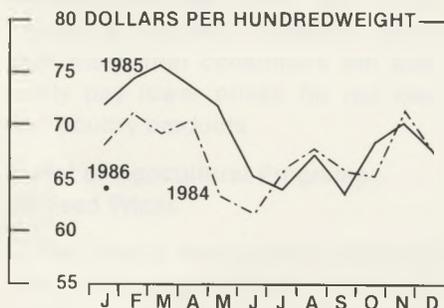
SOURCE: U.S. Department of Agriculture.

SLAUGHTER STEERS



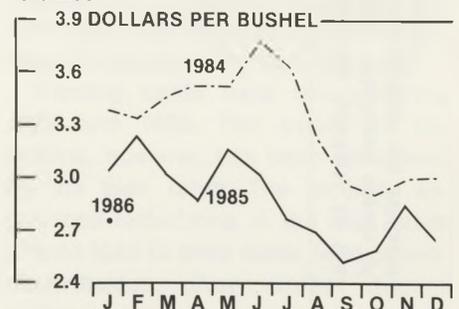
SOURCES: Texas Department of Agriculture.
Federal Reserve Bank of Dallas.

FEEDER STEERS



SOURCES: Texas Department of Agriculture.
Federal Reserve Bank of Dallas.

CORN



SOURCE: U.S. Department of Agriculture.

Idle Acres (cont.)

farmers whose capital stock is likely oversized for their existing operations have expanded operations. But these operators have been able to employ only a portion of the acres released by financially stressed farmers. The investment necessary for total absorption is hindered by high debt loads and market uncertainty.

In the Eleventh District, 5.4 percent of farmers at survey banks left agriculture in 1985, compared with 4.1 percent in 1984. Because of financial stress, 2.8 percent of normally cultivated acres were out of production in 1985. A statistical model using the increase in financial stress among farmers in 1985 predicts that the acreage removed from production will amount to 3.6 to 4.3 percent in 1986. Until the agricultural outlook improves and debt levels become more manageable, acreage left idle will continue to increase.

—*Hilary H. Smith and Eric J. Weigel*

Price Supports (cont.)

gram may still keep prices higher than market levels, which would burden the livestock and poultry industries.

Impact on Meat Producers

While all livestock and poultry producers are affected by higher feeding costs, poultry producers are affected relatively more by price supports. The proportion of total costs accounted for by feeding costs is fairly similar among livestock and poultry producers (Chart 2). A differential effect exists, however, because grains and other price-supported feeds form a larger share of production costs for poultry than for red meats. Because of this larger share for poultry, the drop in the loan rates will probably reduce the costs of producing poultry relative to red meat. As the relative price of poultry falls, consumers will tend to eat more poultry than they did at the original higher price level. The lower feeding costs will

also lead to lower prices for beef and other red meats, which is likely to boost consumption, but the gains in consumption will probably be smaller than for poultry.

This has important implications for beef producers, who are losing market share to lower-priced poultry. Per capita beef consumption fell from its peak of 96 pounds in 1976 to 79 pounds in 1983. During the same period, per capita poultry consumption increased from 53 pounds to 66 pounds. Research has shown that the decline in beef consumption stems from relatively lower poultry prices rather than the more commonly cited reason of a change in consumers' tastes. The implication for beef and other red meat producers is that they must find additional ways to cut production costs to be able to compete with lower-priced poultry.

—*Roger H. Dunstan*

The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Dallas or the Federal Reserve System.

Agricultural Highlights is published quarterly by the Federal Reserve Bank of Dallas. Additional copies of most issues and subscription information are available from the Public Affairs Department.