

Federal Reserve Bank of Dallas February 1987

## 1987 Should Be a Good Year for Texas Agriculture

Large government payments and lower input costs mean that the farm sector in Texas will receive substantially more net cash income in the years 1986-87 than in 1984-85. Crop and dairy farmers will receive almost all the direct government payments, while livestock producers are benefiting from substantially lower feed costs.

### Farm Income Concepts Tricky

The U.S. Department of Agriculture (USDA) uses several definitions of income, but the two major ones are net farm income (NFI) and net cash income (NCI). These measures can give conflicting indications of farmers' income (see Chart 1). NFI, which is tied to national income and product accounting, estimates the net value of production in a given year. As a consequence, it includes nonmoney income and expenses as well as depreciation, and it treats additions to inventory as income.

By contrast, NCI includes only cash income and deducts only cash expenses. Sales from inventory raise net cash income but depress net farm income. NCI does not include charges for depreciation. In practical terms, then, NCI gives a better picture of the farmers' ability to repay debt, undertake investment, and maintain standards of living. Thus, for short-run policy analysis, net cash income would seem to be the preferred measure to try to forecast.

### Forecasting Net Cash Income

The USDA estimates of 1986 state-level farm income will not be available until this fall. In order to provide a

forecast of Texas net cash income, the historical monthly pattern of Texas cash receipts was used with the preliminary receipts data for January-September 1986 to estimate 1986 cash receipts (see Table 1). For 1987, despite likely increases in livestock receipts, sharply lower cotton production and grain prices will mean that cash receipts will be 5 percent less than the 1986 receipts. In line with USDA national forecasts, Texas agricultural cash expenses were estimated to have fallen almost 5.5 percent in 1986, and they should fall another 3 percent in

1987. Line 3 of the table shows forecasts of 1986 and 1987 cash receipts net of expenses to be lower than their 1985 level.

Direct government payments to U.S. farmers are thought to be in the \$13 billion range for 1986 and around \$15 billion for 1987. If Texas gets its historical share (13.5 percent for the years 1981-85), then payments to Texas crop and dairy farmers will top \$2 billion in 1987. Line 5 of the table shows forecasted net cash income to be 26 percent higher in 1987 than in

*(Continued on back page)*

## Texas Citrus Faces Competition

An unusually damaging freeze hit the lower Rio Grande Valley in 1983, devastating the region's citrus groves. Citrus producers are worried that a replay of the freeze will end the industry in Texas. Less well recognized is that more moderate and regular, but still damaging, freezes pose a threat to Texas citrus growers, who face increasing competition from producers in warmer climates.

### Agriculture Responds to Risk

Weather is one of the foremost risks faced by virtually every farmer and rancher. Agricultural producers endure the possibility of calamitous weather because a bad year can be offset either by a year of abundant production or by higher prices. Competition from producers in less risky areas, however, can prevent producers in the risky area from earning the necessary higher

return. Without a good year to offset the bad year, the reduced returns will drive producers out of business.

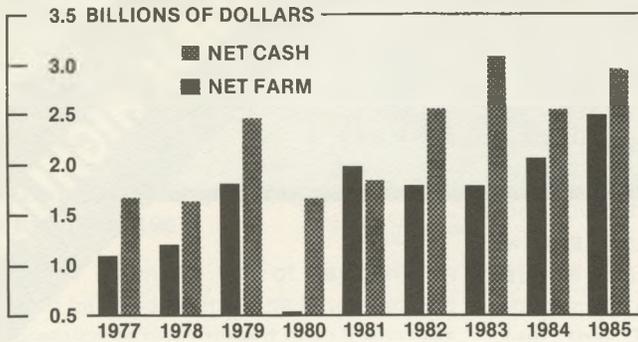
Citrus production is profoundly affected by the risk of freeze damage. To reduce that risk, some production in California and Florida has been moved to warmer areas in these states. At the same time, production in the more moderate climates of Central and South America has increased.

### Citrus Competition Affected by Several Factors

Compared with California or Florida, Texas produces a relatively small amount of citrus. In Texas, grapefruit accounts for the majority of the citrus production, exceeding slightly the quantity of oranges grown in the state. The portion consumed as fresh fruit is greater for Texas citrus than for the

*(Continued on back page)*

**Chart 1**  
**TEXAS NET FARM AND NET CASH INCOME**



SOURCE: U.S. Department of Agriculture.

**Table 1**  
**TEXAS NET CASH INCOME**  
(Millions of Dollars)

Elements	1984	1985	1986F <sup>1</sup>	1987F <sup>2</sup>
Cash receipts and related income	9,920.1	1,061.0	9,463.0	9,099.0
Cash expenses	8,164.1	8,051.3	7,613.0	7,384.0
Net cash receipts	1,756.0	2,109.7	1,850.0	1,715.0
Direct government payments	782.4	848.1	1,755.0	2,025.0
Net cash income	2,538.4	2,957.8	3,605.0	3,740.0
Proportion from government (in percent)	30.8	28.7	48.7	54.1
Proportion from government for crop and dairy farmers (in percent)	51.8	48.1	78.0	95.7 <sup>2</sup>

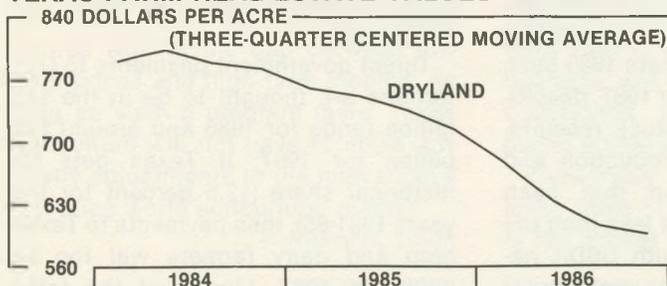
1. F = Forecast.

2. The proportion from the government is unusually high because of the one-third reduction in the cotton crop in the 1986/87 marketing year.

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

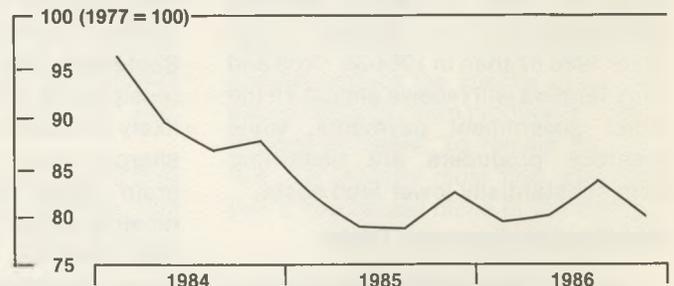
## SELECTED INDICATORS OF THE TEXAS AGRICULTURAL ECONOMY

**TEXAS FARM REAL ESTATE VALUES**



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

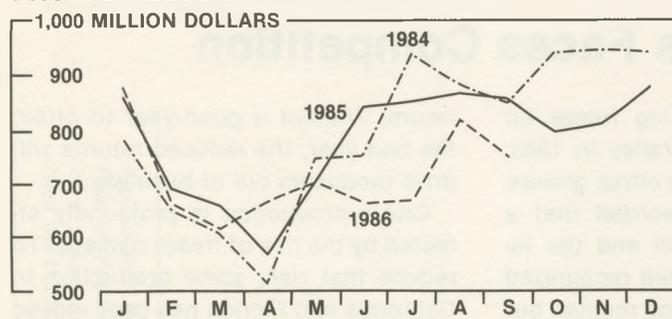
**PRICES RECEIVED/PRICES PAID**



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.)

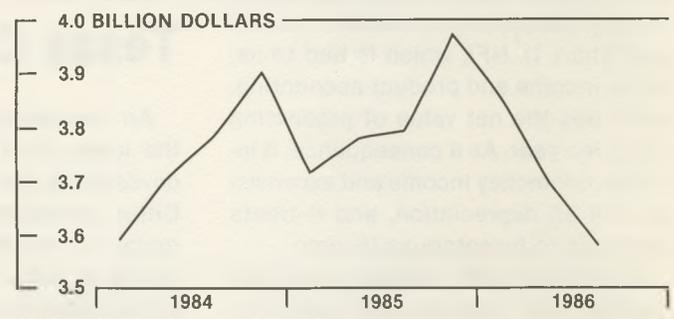
SOURCES: U.S. Department of Agriculture.  
Federal Reserve Bank of Dallas.

**TEXAS CASH RECEIPTS FROM LIVESTOCK AND CROPS**



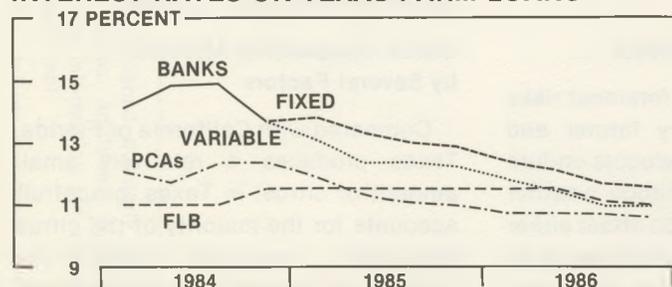
SOURCE: U.S. Department of Agriculture.

**FARM DEBT OUTSTANDING AT TEXAS BANKS**



SOURCE: Board of Governors, Federal Reserve System.

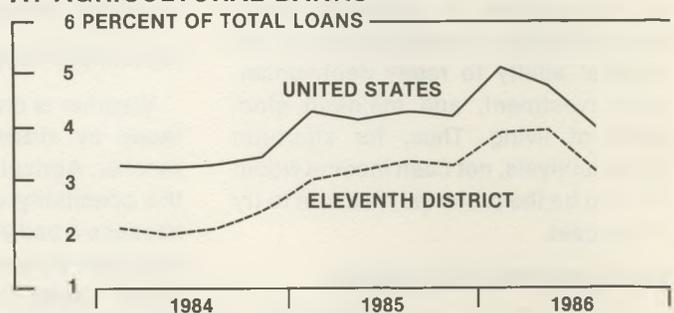
**INTEREST RATES ON TEXAS FARM LOANS**



NOTES: 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.

**NONPERFORMING LOANS AT AGRICULTURAL BANKS**



NOTE: Because of data limitations, renegotiated troubled debt is not included in nonperforming loans.

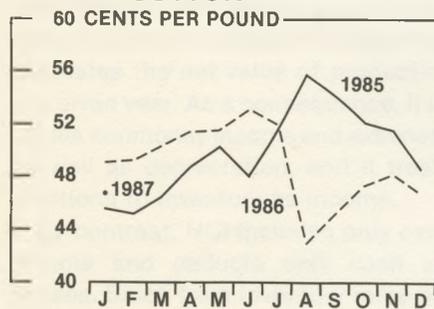
SOURCES: Board of Governors, Federal Reserve System.  
Federal Reserve Bank of Dallas.

## AGRICULTURAL BRIEFS

- District agricultural land values fell 1.5 percent during the fourth quarter of 1986, a smaller rate of decline than that in the previous six quarters. Continued strong government support for crop farmers, renewed exports, and a positive outlook for the livestock sector were probably all contributing factors.
- Government farm programs are vital to the survival of most District farms. Bankers reported that on average only 15 percent of their farm borrowers eligible for government benefits would be in the black without them. In the Texas Southern High Plains around Lubbock, the percentage of banks' farm customers that would survive outside the program dropped to under 5 percent.
- Despite government income supports, the number of District farmers leaving agriculture because of financial stress is likely to increase in 1987. Bankers reported that 4.9 percent of their farm borrowers were likely to go out of business in 1987 compared with 3.4 percent 1986. Poor weather and the falloff in oil and gas royalties weakened many farmers in marginal financial shape. The sagging Texas economy in 1986 also put additional stress on part-time farmers.
- Texas farmers will have one-third less cotton to sell in the 1986/87 marketing year than in the previous year. The reduction was caused by government programs and poor weather in parts of West Texas. If the foregone production is valued at January prices (46.5 cents per pound), the gross income loss will be about \$292 million. Given that the government's farm program is based on volume of production, farmers facing reduced yields or loss of crop receive correspondingly reduced government benefits.
- The U.S. and the European Economic Community (EEC) avoided a potentially damaging trade war by coming to terms on U.S. corn and sorghum exports to Spain and Portugal. Those two countries have joined the EEC, and as a condition of membership, they would have had to raise tariff barriers to non-EEC grain. The U.S. prevailed on that point, and Spain and Portugal can import, without tariff, at least 2.3 million metric tons of grain from outside the EEC.

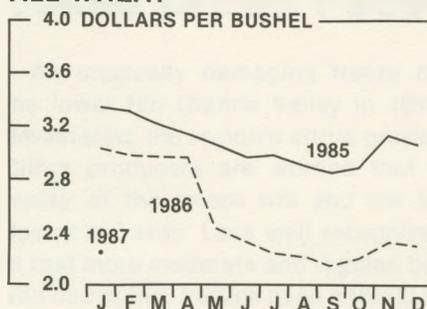
## TEXAS COMMODITY MARKET PRICES

### UPLAND COTTON



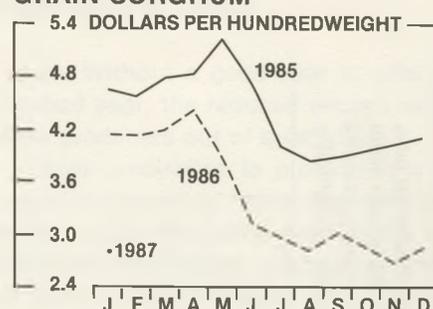
SOURCE: U.S. Department of Agriculture.

### ALL WHEAT



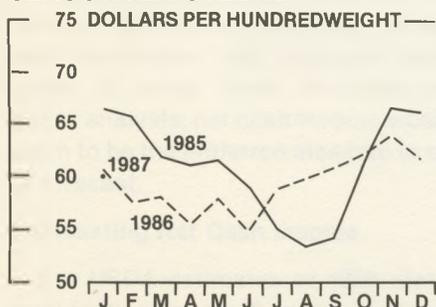
SOURCE: U.S. Department of Agriculture.

### GRAIN SORGHUM



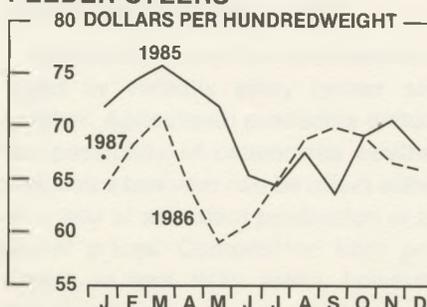
SOURCE: U.S. Department of Agriculture.

### SLAUGHTER STEERS



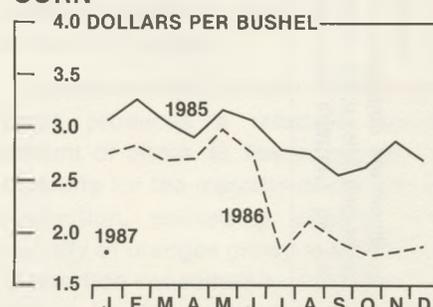
SOURCES: Texas Department of Agriculture.  
Federal Reserve Bank of Dallas.

### FEEDER STEERS



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

### CORN



SOURCE: U.S. Department of Agriculture.

## Good Year (cont.)

1985. The final line of the table shows that the government has intervened massively in 1986, and will do so again 1987, in support of crop and dairy farmers' incomes.

### Government Support Key to a Good 1987

The extensive use of payments in kind has undermined the long-standing practice of government crop loan rates (support prices) functioning as market price floors. Farmers will still get income support, however, and lower crop prices should spur exports and drive down production costs for livestock producers. Massive government expenditures will fill the gap between low crop prices and high farm income. As long as such a program lasts, Texas agriculture will not have to make any costly adjustments to the high-supply/low-price world agricultural market.

—Hilary H. Smith

## Texas Citrus (cont.)

rest of the nation. The processed portion goes into juice or canned products.

Increased production in less freeze-prone areas may put Texas growers at a competitive disadvantage. Even though Texas citrus production cannot be moved to other parts of the state with a more moderate climate, the state's citrus industry is not doomed. Production is threatened only to the extent that Texas' direct competitors have the advantage of weather. One way Texas growers can buffer competition is by producing relatively specialized fruit that does not have a close substitute. For example, some Texas grapefruit, such as the Texas Ruby Red, is renowned for its special qualities and does not have perfect substitutes among grapefruit produced elsewhere.

Conversely, because processed fruit loses some of its unique qualities, this is the market in which Texas growers

will face the toughest competition. Thus, with the most intense competition in the frozen orange juice market, efforts to increase Texas' share of the fresh fruit market would help position Texas growers more competitively. Another factor favoring Texas producers is their proximity to markets compared to producers in South or Central America. This also would provide a relative boost for the fresh fruit market as opposed to that for processed fruit, which is more easily transported.

Citrus and the associated processing industry is a small but important part of Texas agriculture. Overcoming the problems of the 1983 freeze will be difficult enough without the specter of increasing competition from producers in more tropical climates. To remain competitive, the industry must find and maintain a specialized niche in the market.

—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.