

Federal Reserve Bank of Dallas August 1986

Host of Problems Have Restrained U.S. Agricultural Exports

The value of U.S. agricultural exports has plummeted in recent years. One reason for the decline has been the high value of the U.S. dollar. As such, the recent fall of the dollar against the currencies of Japan and Western Europe has been heralded as good news for agriculture. This reaction, however, ignores the importance of many other competing nations whose currencies have not appreciated against the dollar. In addition, the outlook for exports is clouded by other factors, such as low economic growth rates in consuming countries, barriers to free trade, and high U.S. prices. A consideration of major elements leads to the conclusion that regaining export markets will be a difficult task for U.S. farmers.

Agricultural Trade and the Dollar

The dollar has been strong during much of this decade, making U.S. products relatively expensive in world markets. This role has been partially reversed over the last 18 months as the value of the dollar declined about 30 percent against the currencies of Japan and Western Europe.

The effect of the declining dollar on agricultural trade is limited, however, because the currencies of some major agricultural competitors have either been stable or depreciated significantly against the dollar. Some examples can be seen in wheat and soybean trade. For wheat the major competing countries are Australia, Canada, and Argentina, with a combined market share of about 30 percent. Argentina and Brazil are the major soybean competitors. An index of U.S. dollar ex-

change rates for the four countries is shown in Chart 1.

Other Factors Shaping Demand for U.S. Agricultural Products

Several other elements have played a role in depressing agricultural exports. Lackluster economic growth in many major importing countries has curtailed demand. The decline in oil prices has also marred economic performance in some countries. Of the 20 largest importers of U.S. agricultural products, 8 are major oil-exporting countries. For oil-importing countries, however, lower oil prices are likely to improve economic performance and in-

crease demand for agricultural products.

Trade barriers have also reduced U.S. agricultural exports. For example, the entry of Spain and Portugal into the European Economic Community led to the imposition of the EEC's trade restrictions in those countries. This development has disrupted agricultural trade, and further cuts in U.S. exports are threatened.

Also important are domestic agricultural policies, such as the support prices of the Commodity Credit Corporation (CCC). The CCC will accept a farmer's crops, at the support price, as loan repayment. In recent years the

(Continued on back page)

Farm Loan Defaults and Bank Structure Stress Texas Banks

The agricultural prosperity of the 1970s, which was marked by equally spectacular run-ups in agricultural debt and land values, did not last into the 1980s. Many farmers and ranchers, burdened with debt, have gone under. All lenders to agriculture have been hurt by these farm failures, and some commercial banks have failed. Banks in Texas, a unit-banking state, are more likely to fail than banks in branch-banking states, such as California.

Diversity Helps Shield Banks During Economic Downturns

When a sector of the economy declines, as has Texas agriculture, commercial banks that have made loans to the sector experience rising loan default rates. Individual banks

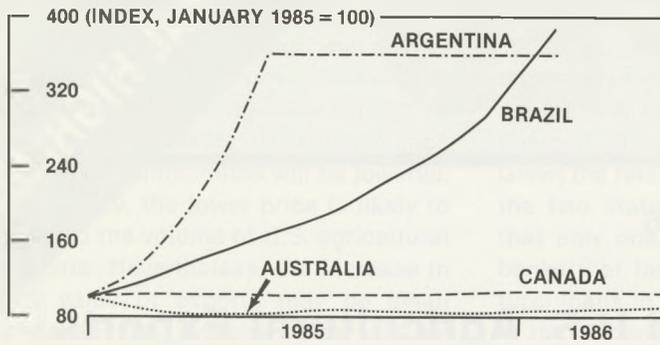
can spread the default risk by distributing their loan portfolios across many industries, but banks in more rural areas have less opportunity to diversify loan portfolios. In states that allow branch banking, however, a bank can have branches concentrating in agriculture but still be well diversified within the state. In 1985, for example, California had no bank with more than 34 percent of its loan portfolio in agriculture, while Texas had 49 banks with 50 percent or more of their loans in agriculture. Six of these had more than 80 percent.

California and Texas Have Different Agricultural Loan Loss Experiences

California and Texas are major agricultural states, and farmers in

(Continued on back page)

Chart 1
FOREIGN EXCHANGE VALUE OF U.S. DOLLAR
IN SELECTED CURRENCIES



SOURCES: International Monetary Fund.
 Federal Reserve Bank of Dallas.

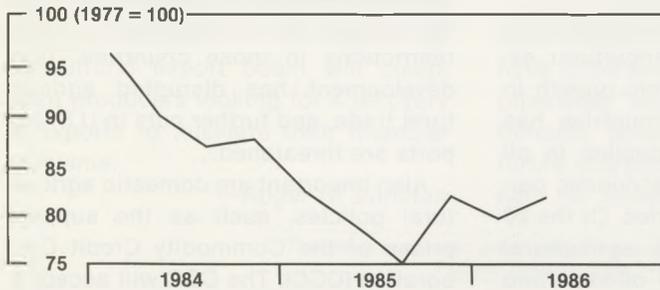
Table 1
PROBABLE BANK FAILURES, BY LEVEL
OF AGRICULTURAL LOAN CHARGEOFFS

Percent of farm loans charged off	California estimates		Texas estimates	
	Bank failures	Cumulative	Bank failures	Cumulative
0-10	0	0	1	1
11-20	0	0	3	4
21-30	0	0	8	12
31-40	0	0	24	36
41-50	0	0	28	64
51-60	1	1	32	96
61-80	3	4	59	155
81-100	3	7	69	224

NOTE: Banks were considered likely to fail in 1986 when chargeoffs of agricultural loans exceeded a measure of total capital (equity plus limited-life preferred stock plus subordinated notes and debentures plus 1985 year-end loan loss balance plus 1986 income, estimated as 1985 income before provision for loan losses and taxes).
 SOURCE: Federal Reserve Bank of Dallas.

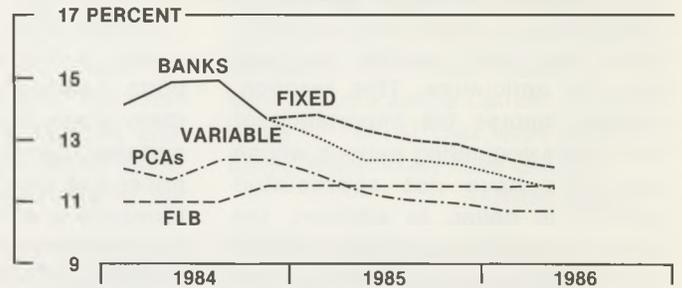
SELECTED INDICATORS OF THE TEXAS AGRICULTURAL ECONOMY

PRICES RECEIVED/PRICES PAID



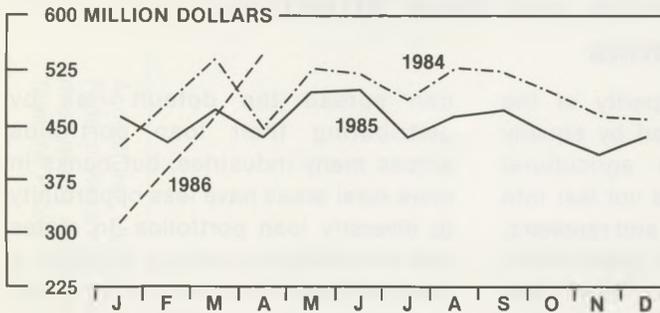
NOTE: Index is constructed by dividing prices received by farmers in Texas by prices paid by farmers nationwide. (No separate series exists for prices paid in Texas).
 SOURCES: U.S. Department of Agriculture.
 Federal Reserve Bank of Dallas.

INTEREST RATES ON TEXAS FARM LOANS



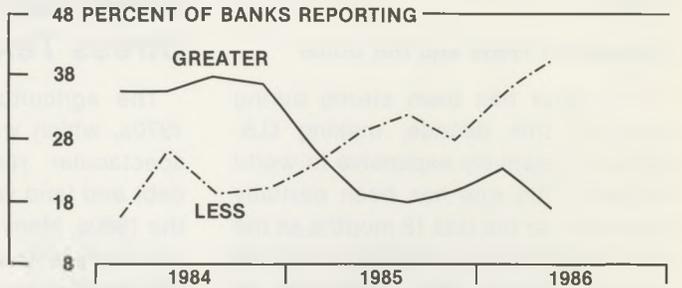
NOTE: Starting with the first quarter of 1985, bank rate is decomposed into fixed and variable rates for agricultural loans.
 PCA rate is for farm operating loans at production credit associations.
 FLB rate is for farm real estate loans at the Federal Land Bank.
 SOURCES: Farm Credit Banks of Texas.
 Quarterly Survey of Agricultural Credit Conditions,
 Federal Reserve Bank of Dallas.

TEXAS CASH RECEIPTS FROM LIVESTOCK AND CROPS



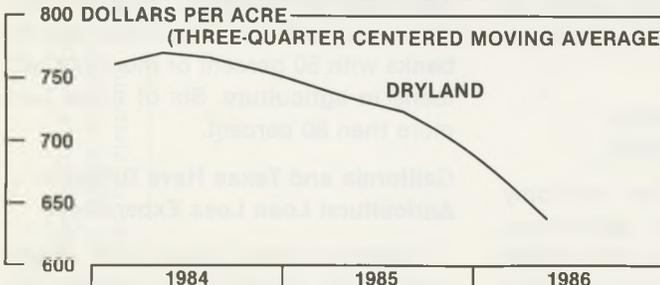
SOURCE: U.S. Department of Agriculture.

DEMAND FOR LOANS



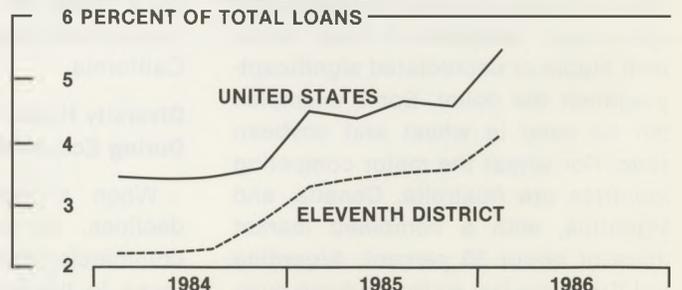
SOURCE: Quarterly Survey of Agricultural Credit Conditions,
 Federal Reserve Bank of Dallas.

TEXAS FARM REAL ESTATE VALUES



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.

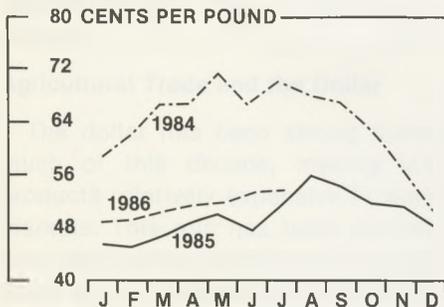
AGRICULTURAL BRIEFS

Lower energy prices hurt land values and agricultural debt service;
more farmers leave as returns to agriculture remain negative.

- The decline in District agricultural land values accelerated during the second quarter. To the degree that mineral rights are incorporated in agricultural land values, especially those for rangeland, the precipitous decline in energy prices has spilled over into the real estate market. The earning potential of cropland is diminished by the likelihood of modest export sales and reduced government payments to farmers beyond the current crop year. Preliminary second-quarter estimates show marked declines from the first quarter: rangeland down 9.5 percent to \$438 per acre, dry cropland down 4.3 percent to \$619 per acre, and irrigated land down 7.7 percent to \$770 per acre.
- Energy price declines have affected debt service on about 21 percent of the farm and ranch loans at District commercial banks. This survey result indicates that oil and gas royalties have been used to subsidize agricultural borrowing. The weak outlook for energy prices increases the pressure on some already-troubled agricultural borrowers and their lenders. Bankers estimate that 78.9 percent of their farm loan portfolio is not affected by energy price declines but that debt service on 2.6 percent of farm loans is heavily dependent on oil and gas income.
- While the 1980s are thought to be a time of low farm incomes, real income from farm assets for the two-year period 1984-85 was the highest in history except for pairs of years that include the exceptional years 1973 and 1974. In 1985, however, negative capital gains and continued high interest costs made total returns to equity negative for the fifth straight year.
- Farmers and ranchers continue to leave agriculture because of financial stress. District bankers report that an average of 4 percent of their agricultural borrowers left farming in 1985 as a result of financial problems. These bankers expect that in 1986 a total of 5 percent of their customers will quit agriculture for similar reasons.

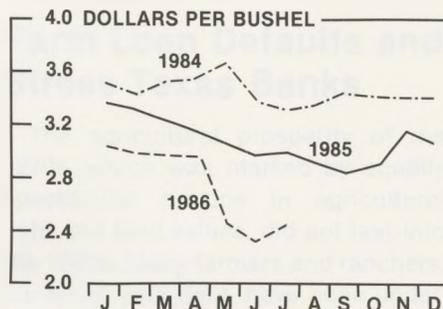
TEXAS COMMODITY MARKET PRICES

UPLAND COTTON



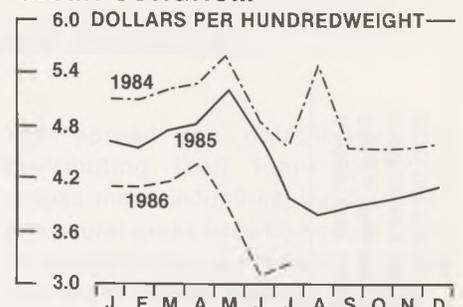
SOURCE: U.S. Department of Agriculture.

ALL WHEAT



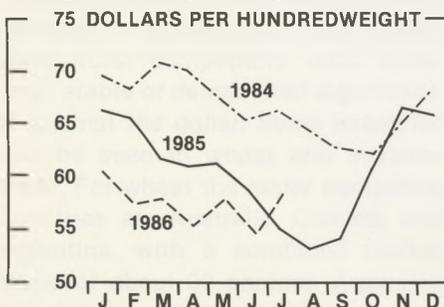
SOURCE: U.S. Department of Agriculture.

GRAIN SORGHUM



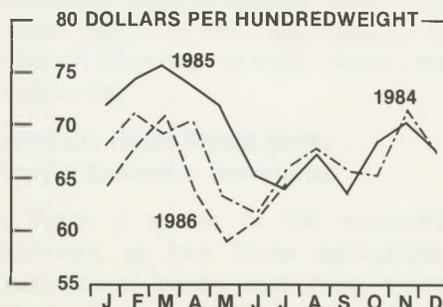
SOURCE: U.S. Department of Agriculture.

SLAUGHTER STEERS



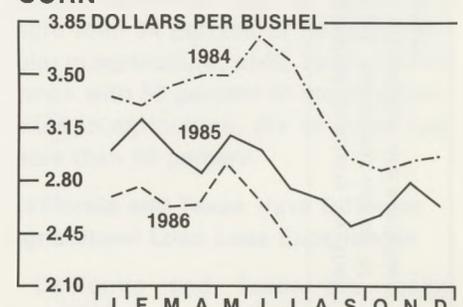
SOURCES: Texas Department of Agriculture.
Federal Reserve Bank of Dallas.

FEEDER STEERS



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

CORN



SOURCE: U.S. Department of Agriculture.

Exports (cont.)

support price for covered crops has been higher than the world price, leading to a loss of export markets as farmers turned crops over to the CCC rather than marketing them abroad. To help regain markets, the support price for many commodities will be lowered. Eventually, the lower price is likely to expand the volume of U.S. agricultural exports. Nevertheless, the increase in the value of exports may be small because the average price will be significantly lower.

In conclusion, numerous factors have hampered U.S. agricultural exports. Thus, regaining export markets is complicated and probably will not be accomplished solely through the dollar's depreciation. The lack of an agricultural export boom will disappoint producers looking for a recovery in exports to alleviate their financial problems.

—Roger H. Dunstan

Loan Defaults (cont.)

each had about \$4 billion in agricultural loans at commercial banks in 1985. During that year, California banks charged off 5.0 percent of their agricultural loans, while Texas banks charged off only about 1.4 percent. Given the relative size of chargeoffs in the two states, it may be surprising that only one of the seven California banks that failed in 1985 had agricultural loans in its portfolio. In Texas, 5 of the 12 banks that failed had 14 percent or more of their loan portfolios in agriculture.

Farm Debt and Banking Laws Influence Bank Failure Rates

Some analysts have said that about 10 to 25 percent of total farm debt will have to be written off, restructured, or otherwise "worked through." The relationship between bank failures and future chargeoffs of agricultural loans can be conservatively estimated by

comparing a bank's total capital position against various chargeoff levels of agricultural loans. Measures similar to the one used here have identified banks that later failed.

Table 1 shows estimates of likely Texas and California bank failures when farm loan chargeoffs exceed total capital. Total capital includes equity, loan loss provisions, and projected earnings. At low levels of chargeoffs, few banks fail in either California or Texas. These failure estimates may be too small, for bank loans to rural businesses also could be affected by a downturn in agriculture. Even with that caveat, the results are striking: the level of agricultural loan chargeoffs at more diversified California banks would have to reach 60 percent before a single California bank is liable to fail. At that level, 96 Texas banks would likely have failed.

—Hilary H. Smith

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.

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