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# FRBSF WEEKLY LETTER

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## Outlook for U.S. Agriculture

While many other sectors of the economy have grown substantially during the recovery of the past four-plus years, America's farm economy has suffered from a prolonged and deep recession. Data on farm incomes, farm exports, farmland prices, and the prices of agricultural commodities all illustrate the severity of recent agricultural problems. This *Letter* describes the origins of these farm problems and the improving prospects for U.S. farmers.

### **"Murphy's Law" comes to the farm**

In a sense, the farm economy in the United States during the past five years has provided a real-life enactment of Murphy's Law: If anything can go wrong, it will. In the first half of the 1980s, debt burdens and other production costs of farmers mushroomed while exports and the prices received by farmers plummeted. An increase in worldwide production was one cause, and the increase in the dollar's value, was another.

By 1986, farm income had fallen substantially from its healthy 1982 levels. Agricultural products generated an estimated \$132 billion in total cash income (excluding Commodity Credit Corporation loans and government payments) for American farmers in 1986, or 7.7 percent less than the peak level of \$143 billion attained in 1982. Moreover, since the overall price level increased by some 14 percent during this period, *real* farm incomes fell by about 20 percent.

### **Differences between farm sectors and regions**

As is true with most generalizations, the overall decline masks large differences among agricultural products and among different regions in the country. For example, grain producers have borne the brunt of the problems while producers of some other products, including most fruits and vegetables, have experienced somewhat less serious hardship. In addition, farmers whose land can support a greater variety of products have been able to adjust their production plans as market conditions have changed.

These differences show up in geographical variations in the severity of farm problems. Grain-producing regions and areas with less diversified farm sectors have suffered particularly severely. In Arizona, for example, cash receipts to farmers fell 16.6 percent between 1982 and 1986. In contrast, farmers in California have more flexibility in choosing what products to grow from year to year. Their problems therefore have been somewhat more manageable, and their farm receipts fell only 3.5 percent during the same period.

### **Roots of the problem**

The many sources of the U.S. farm problem have been well-documented. The profitability of farming during the late 1970s led many farmers to expand their acreage. Escalating land prices further increased farmers' wealth, but, in combination with high interest rates, meant that farmers took on large debt burdens when they expanded.

Over the last five years, the world supply of many agricultural products has soared while the growth in demand for those products has slowed. As a result, prices have fallen dramatically. The index of prices received by farmers fell by 11 percent between 1981 and 1986. Farmland values fell even more dramatically, by an average of 29 percent during the same five-year period. American farmers ended up in a tight financial squeeze, caught between low prices and high costs.

Weak prices hurt farmers throughout the world, but American farmers also lost market share. Many developing countries that previously had imported vast quantities of food from the U.S. were fast becoming self-sufficient. For example, India used to be a major market for U.S. grain, but production gains have enabled India to produce most of its own grain products. In fact, both India and Pakistan currently enjoy sizable grain surpluses. The rising value of the U.S. dollar during this period added to the problems faced by American farmers by increasing the for-

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eign currency prices that foreign buyers had to pay for American products, and thereby driving down the dollar prices received by farmers.

The loss of export markets hurt American farmers seriously, since about a quarter of U.S. farm products previously were exported. In recent years, the dollar value of agricultural exports has plunged. From \$44 billion in fiscal 1981, it dropped to \$38 billion in 1984, \$31 billion in 1985, and \$26 billion in 1986.

It is worth noting that the deterioration in farm exports also contributed significantly to the decline in total U.S. exports during the first half of the decade. In 1981, agricultural exports accounted for about 19 percent of total U.S. exports, but they comprised 70 percent of the decrease in the total value of U.S. exports during the past five years.

## **Improvement in the agricultural outlook**

Despite these recent problems, the outlook for American farmers is in some ways brighter now than it has been for several years. Improvement is expected partly because of an anticipated increase in the rate of growth in world demand for food products. The U.S. Department of Agriculture (USDA) forecasts that world demand will increase by 2.6 percent during 1987, which is a faster pace than that seen during the first half of the decade.

In addition, the competitive position of the U.S. is expected to improve because of some lower production costs and the decline in the value of the dollar relative to the currencies of most of our important trading partners. Moreover, widespread participation in government acreage-reduction programs has limited production to levels that can be absorbed better by world markets at existing prices.

As a result of stronger worldwide demand and lower world prices for U.S. products, the USDA expects U.S. export volume to rise by 3.6 percent in 1987 for the first time in seven years. However, because prices are expected to fall by about 5 percent, the USDA forecasts that the value of exports will drop by about 1 percent.

## **Declining costs**

Some production costs paid by farmers have fallen in recent years. In particular, interest rates

remain significantly below their levels of the early 1980s despite the sharp rise seen during the past few months. Not all farmers currently benefit from lower interest rates, however. Some farmers still carry long-term debt at high interest rates. Moreover, those who borrow through the Farm Credit System currently pay a premium for funds because the system is financially troubled.

Land prices also have fallen substantially. The USDA estimates that farmland values are likely to continue to fall during 1987 but that their rate of decline will slow. Although lower farmland values reduce the wealth of established farmers, they also enable new and expanding farm enterprises to buy land more cheaply. Over time, as a greater proportion of all farmers pay the new, lower prices for their land, farming will become more profitable.

Other costs of farming also have fallen substantially. In 1986, the cost of fuel stood 21 percent below its peak level in 1981. Fertilizer costs fell 14 percent during the same period, while feed costs fell 19 percent. These cost reductions were partially offset by increases in the costs of seed, chemicals, machinery, and wages.

Overall, the index of farm production costs fell by about one-and-a-half percent in current dollars. Since other prices in the economy rose almost 14 percent during this period, relative farm costs actually declined by about 15 percent between 1981 and 1986.

## **Other competitive improvements**

High participation rates in government acreage-reduction programs also improved the U.S. competitive position in world markets. By lowering U.S. production of some important crops, those programs should reduce the extent of the global oversupply of those products. In addition, the provisions of the 1985 Farm Bill should reduce the gap between the prices of American farm products and the prices of corresponding goods on the world market. Although lower product prices make profitable farming more difficult, they should allow American farmers to increase their share of the world market.

As mentioned, the decline in the value of the U.S. dollar during the past two-and-a-half years has helped make some American products more competitive on world markets. For example,

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growers of grapes and almonds have attributed climbing sales largely to the decline in the value of the dollar.

#### **Limitations of the improvements**

Most American farmers, however, have yet to benefit from the reduced value of the dollar. One possible explanation is that the currencies of many newly industrialized countries (NICs) in Asia and Latin America have remained stable relative to the U.S. dollar. Consequently, our products are no less costly to these countries than they were two years ago.

Despite the lack of improvement in our competitive position relative to the NICS, demand for our agricultural products from these nations may improve during the next year or two. Some of these countries, particularly those in Asia, have been growing very rapidly, and their economies have benefited from declines in the values of their own currencies relative to the Japanese yen. Moreover, the potential sizes of the farm sectors in South Korea, Taiwan, and Hong Kong are limited by both their small amounts of available land relative to population and their climates. As a result, the prospects for growth in American sales to these middle-income Asian NICS are quite good.

Growth in purchases of U.S. products by other countries faces additional obstacles. First, some of our products, particularly grains, remain uncompetitive on world markets. Second, no country can import U.S. products if it has no foreign exchange with which to buy them. Debt problems in many countries make U.S. dollars hard to come by, and hence limit the extent to which purchases of American farm products are possible. Finally, the government policies of

many countries subsidize their own production and often severely limit the extent to which their foreign markets are open to American farm products.

#### **Government policies**

The importance of government policies, both here and abroad, cannot be overemphasized in discussions of the prospects for American farmers. Many governments provide direct assistance to farmers through loans or price supports and, in addition, provide indirect assistance by restricting agricultural trade. Because both types of policies currently are so widespread, worldwide agricultural production has exceeded consumption by a wide margin in the last few years.

Several governments recently have indicated a desire to reduce farm subsidies and protectionist policies in recognition of worldwide surpluses and the counterproductive effects of severe trade restrictions. However, their discussions have yet to yield tangible outcomes.

#### **Conclusion**

The problems faced by American farmers have been severe and are likely to affect some financially troubled farmers for a few more years. Nevertheless, evidence suggests that deterioration in the farm situation is unlikely to continue, and that many remaining farmers should see modest improvements this year. Lower interest rates and land prices, the reduced value of the dollar, and effective government acreage-reduction programs should allow American farmers to fare better in world markets than they have during the past few years.

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**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding	Change from	Change from	6/18/86
	6/17/87	6/10/87	Dollar	Percent <sup>7</sup>
Loans, Leases and Investments <sup>1 2</sup>	205,130	- 136	3,206	1.6
Loans and Leases <sup>1 6</sup>	181,679	- 277	1,704	0.9
Commercial and Industrial	52,858	- 712	591	1.1
Real estate	69,430	738	2,835	4.1
Loans to Individuals	36,667	- 324	- 4,148	- 10.1
Leases	5,392	3	- 214	- 3.8
U.S. Treasury and Agency Securities <sup>3</sup>	16,200	149	5,261	48.0
Other Securities <sup>2</sup>	7,251	- 6	- 352	- 4.6
Total Deposits	207,153	- 222	1,702	0.8
Demand Deposits	52,655	- 130	1,037	2.0
Demand Deposits Adjusted <sup>3</sup>	37,099	- 253	1,447	4.0
Other Transaction Balances <sup>4</sup>	19,514	- 302	3,264	20.0
Total Non-Transaction Balances <sup>6</sup>	134,984	210	- 2,599	- 1.8
Money Market Deposit Accounts—Total	45,079	172	- 1,671	- 3.5
Time Deposits in Amounts of \$100,000 or more	32,157	- 4	- 4,160	- 11.4
Other Liabilities for Borrowed Money <sup>5</sup>	22,445	- 331	- 1,018	- 4.3
<b>Two Week Averages of Daily Figures</b>	Period ended 6/15/87	Period ended 6/1/87		
<b>Reserve Position, All Reporting Banks</b>				
Excess Reserves (+)/Deficiency (-)	51	56		
Borrowings	8	52		
Net free reserves (+)/Net borrowed(-)	44	4		

<sup>1</sup> Includes loss reserves, unearned income, excludes interbank loans

<sup>2</sup> Excludes trading account securities

<sup>3</sup> Excludes U.S. government and depository institution deposits and cash items

<sup>4</sup> ATS, NOW, Super NOW and savings accounts with telephone transfers

<sup>5</sup> Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

<sup>6</sup> Includes items not shown separately

<sup>7</sup> Annualized percent change