Bursting the Dollar's Balloon: Its Impact on U.S. Agricultural Trade

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The U.S. agricultural trade picture has changed significantly since the early 1980's. Several factors account for the decline in exports and rise in imports. Among them are U.S. and foreign government policies, production increases in competing and importing nations, slow growth in foreign incomes, and mounting external debt in developing countries.

The value of the U.S. dollar also has a significant impact on this country's trade. In the 1970's, it contributed to the record growth in agricultural exports. In contrast, the dollar's rapid rise in the early 1980's brought a significant downturn in our sales abroad. However, since 1985, another turnaround in the dollar's value has begun to contribute once again to the competitiveness of U.S. agricultural exports.

Tracking the Dollar

In the 1970's, the declining value of the dollar meant that the price of U.S. farm products dropped in terms of the currency of many importers. As a result, the volume of U.S. grain and oilseed exports more than doubled in the 1970's alone. The total value of our agricultural exports during that decade increased sixfold. At the same time, the declining dollar made foreign products more expensive for U.S. customers *(see sidebar)*.

By the late 1970's, the trend in the value of the dollar began to reverse. The dollar appreciated an average of 46 percent from 1978 to 1985. Foreign importers had to spend more of their currency to buy American farm products *(see sidebar)*. As the "price" of our exports rose, foreign buyers increasingly turned to other countries for their food imports or increased their own production. As a result, U.S. farm exports fell to $26 billion in 1986 from the peak of $44 billion in 1981.

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Understanding Changes in the Value of the Dollar

To understand how changes in the exchange rate of the U.S. dollar affect the "price" of U.S. exports and imports, consider the following two examples.

Assume that a dollar is worth 50 dracles in the hypothetical country of Ishbat. Ishbatans import their favorite U.S. food product for $2, or 100 dracles a pound. However, international events cause a decline in the value of the dollar so that it is worth only 25 dracles. Assuming Ishbat is a small country, the price of the U.S. product falls to 50 dracles, encouraging Ishbatans to purchase more U.S. exports. Conversely, U.S. imports from Ishbat would decline because the falling value of the dollar raises the cost of an Ishbatan product costing 200 dracles from $4 to $8.

Now assume that international events raise the value of the dollar from 50 dracles to 100. Because it takes more dracles to "buy" a dollar, the price of U.S. exports increases. Ishbatans will likely buy less of their favorite U.S. food. In contrast, imports from Ishbat are cheaper. For Americans, the price of the same item that cost 200 dracles falls from $4 to $2.

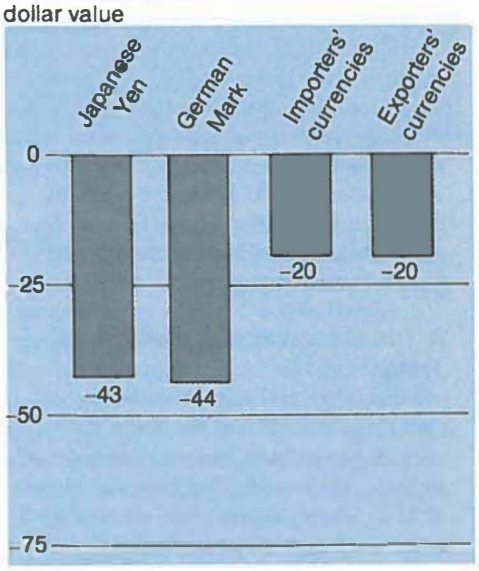
After rising nearly 7 years, the value of the dollar is again declining—a possible signal that exchange rates are no longer eroding the competitiveness of U.S. exports. Because exchange rates vary widely among countries, the drop in the dollar's value has been significant for some of our trading partners. Measured against the Japanese yen and the German mark, for example, the dollar depreciated approximately 45 percent between the first quarter of 1985 and April 1987 *(figure 1)*.

Yet when considered against the currencies of all of our customers and competitors, the dollar has not depreciated nearly as much. After adjusting for inflation, the dollar, relative to currencies of countries importing U.S. farm goods, depreciated less than 20 percent between first quarter of 1985 and April 1987.

Compared with our competitors' currencies, the value of the dollar fell 20 percent over the same period. Looking at specific countries, the dollar changed only marginally against several of our most important competitors' currencies—the Canadian and Australian dollars and the Thai baht.

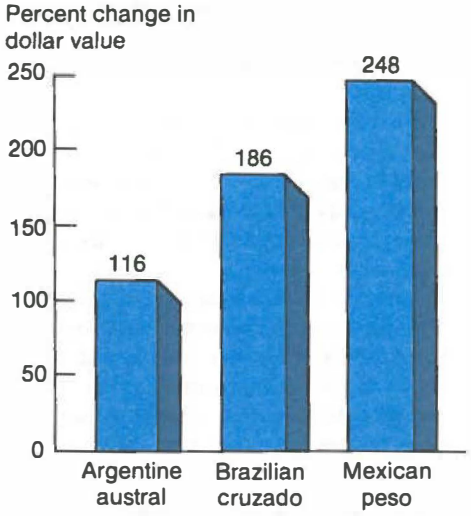
Moreover, some exporters' products may be helped by changes in the value of the dollar relative to their currency. For example, the dollar appreciated at least 100 percent against the Argentine austral,

Figure 1. Rate of Decline in Dollar's Value Varies[1]



[1]Percent change in dollar's value compared to currencies shown from the first quarter in 1985 to April 1987.

Figure 2. U.S. Dollar Appreciates Against the Currencies of Several Latin American Countries[1]



[1]Percent change in dollar's value compared to currencies shown from the first quarter of 1985 to April 1987.

Brazilian cruzado, and Mexican peso *(figure 2)*. As a result, their food exports have become very competitive in world markets.

The appreciation of the dollar relative to these countries' currencies has placed downward pressure on U.S. import prices of coffee, cocoa, juices, vegetables, and beef. As a result, our imports of these products have remained strong.

A Turnaround in U.S. Agricultural Trade?

Recent ERS research indicates that changes in the value of the dollar do impact on U.S. agricultural trade performance. For instance, the research suggests the volume of U.S. wheat exports could increase by 5 percent for each 10-percent depreciation in the value of the dollar compared with our trading partners' currencies. The volume of corn exports are estimated to rise 8 percent and soybeans, 3 percent (other things remaining the same).

Extending the analysis to include both customers' and competitors' currencies, U.S. wheat exports could increase by as

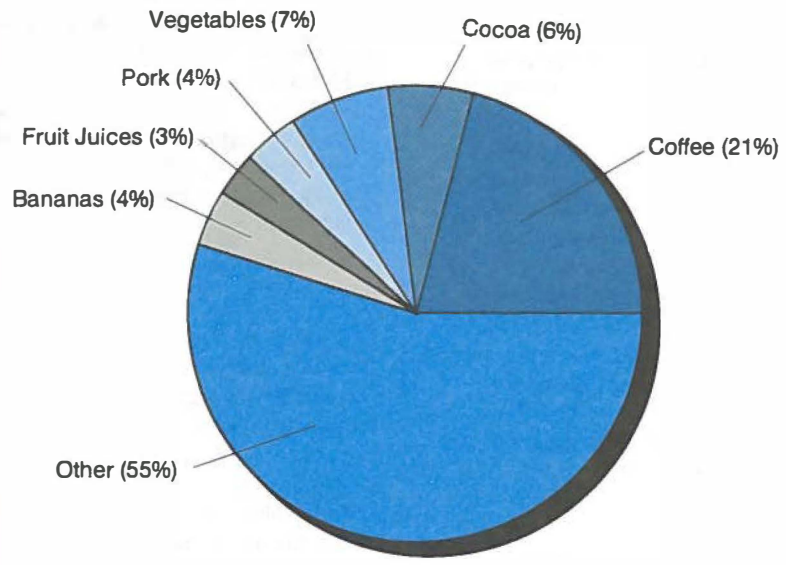
Sketching the U.S. Trade Picture

After increasing during the 1970's, U.S. farm exports plummeted 40 percent from the 1981 peak to $26 billion by 1986. During the same time, we lost one-third of our export volume which fell to 108 million metric tons (mmt). This suggests a decline in unit values as well.

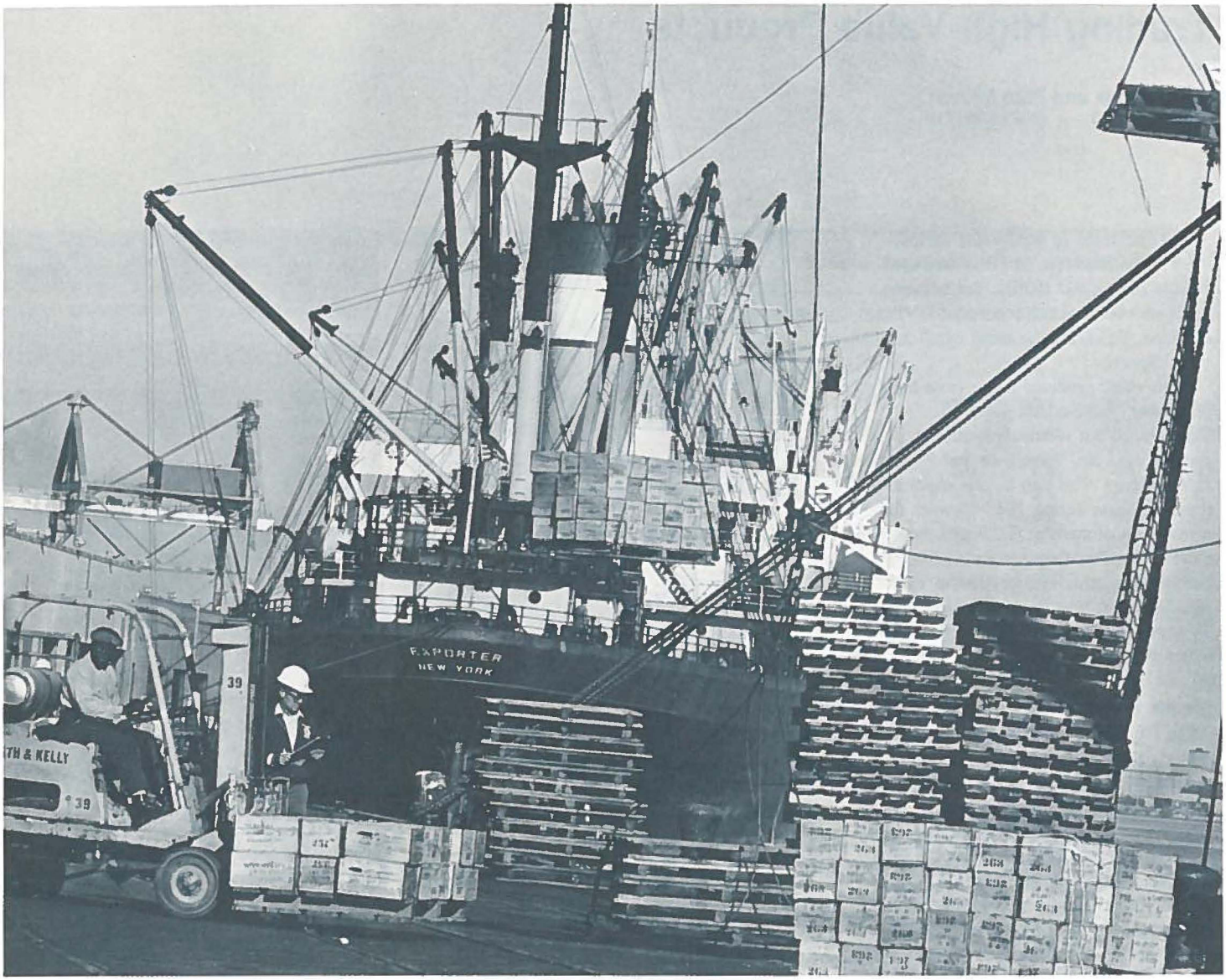
Between 1981 and 1986, the value of wheat and corn exports each fell 55 percent, and soybeans, 26 percent. These commodities accounted for nearly 65 percent of the value of total agricultural exports in 1975, but dropped to less than 50 percent a decade later. Animal product exports during 1981-86 rose 6 percent, vegetable exports declined 31 percent, and fruit dropped 18 percent.

On the other hand, the value of imports increased to $21 billion in 1986, up from $15.5 billion 4 years earlier. Coffee imports rose $1.5 billion, cocoa, $500 million, and vegetables, $440 million. Imports of pork jumped $340 million and fruit juices increased $310 million. We also imported $160 million more in bananas and plantains. Together, these six food items constitute 45 percent of U.S. agricultural imports *(figure 3)*. Many of these products come from our southern hemisphere neighbors. Brazil and Mexico, in particular, exported $3.8 billion in agricultural products to the United States in 1986.

Figure 3. Coffee is a Major U.S. Agricultural Import[1]



[1]Percent of total, 1986.



The value of U.S. farm exports during the 1970's increased sixfold.

much as 8 percent for each 10-percent decline in the value of the dollar, corn by 12 percent, and soybeans by 4 percent. In addition to the volume increases, the U.S. share of world trade in these commodities would rise.

The ERS research also indicates that trade adjustments to currency changes can take 3 years. Since production decisions are generally made only once a year in agriculture, it can take at least that long before production adjusts to exchange rate and price changes. Production adjustments are also affected by the fact that much of the equipment and many of the buildings and facilities used in farming are specific to certain agricultural uses. Since the costs of these assets are often fixed over time, farmers may be slow to respond to new exchange rates and prices.

Because it is only one of several factors affecting U.S. trade, a change in the value of the dollar is not a panacea for U.S. agriculture. Farm policies of foreign governments tend to buffer producers and consumers from world price movements and discourage rapid supply and demand adjustments.

For example, the European Community (EC) has significantly altered its export subsidies to insulate its farmers from world price and exchange rate changes. When the dollar rose in value from 1980-84, the EC lowered its export subsidies. They were then increased following the recent decline in the dollar. Adjusting the subsidies in this way assures that the EC farmer receives a stable domestic price and is not provided with market incentives to alter production levels.

However, the cost of protecting domestic agriculture increases as the value of the dollar declines. The EC's spending for agriculture rose to $23 billion in 1986. Such budgetary pressures are encouraging some countries, like the United States, to participate in multilateral trade negotiations aimed at reducing subsidies and other protection barriers. □

References

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