

Biographical Sketch

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Alan joined the Bank as an Economist in the Economic Research Department in 1986. In 1996, he was appointed Professor and Head of the Agricultural Economics Department at Oklahoma State University. In 1999, Alan returned to the Bank to help launch the new Rural Center.

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By

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The views expressed herein are strictly those of the author and do not necessarily represent those of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

In striking contrast to a U.S. trade deficit in non-agricultural goods that has swelled to record proportions, agriculture makes a substantial positive contribution to the nation's trade balance. The nation's farm trade surplus has shrunk in recent years, paralleling the deepening of the overall trade deficit. Despite the current slump in farm trade, however, prospects for U.S. farm exports and a wider farm trade surplus remain bright.

Improvement in the nation's farm trade balance hinges on growth in global food demand, driven primarily by income gains in the developing world. Thus, a healthy and growing global economy is the best environment for boosting U.S. agriculture's contribution to the nation's trade position. For the industry to reach its trade potential, a framework of domestic and international farm and trade policies must support free trade and foster rapid gains in global incomes.

This testimony develops these views on opportunities for U.S. farm trade in three sections. The first section describes recent developments in U.S. farm trade, highlighting the recent farm export slump. The second section explores prospects for farm trade in the years ahead. The third section sketches the broad outlines of a farm and trade policy framework that would enable U.S. agriculture to realize its full trade potential.

Recent Developments in U.S. Farm Trade

Each year, U.S. agriculture sells more than a fifth of its output in foreign markets, including an even larger proportion of the nation's major crops (about a third overall) and a smaller but growing proportion of livestock products (about a tenth--Chart 1). The industry's exports swelled to a record \$60 billion in fiscal 1996--about 10 percent of the nation's exports of all goods--producing a farm trade surplus of \$27 billion. Since then, however, farm exports have dipped sharply, falling to \$49 billion in fiscal 1999, down about 18 percent from the 1996 record. In

fiscal 2000, U.S. farm exports are expected to improve only slightly to \$49.5 billion, and the farm trade surplus of \$11.5 billion is expected to be the smallest since the mid-1980s (Chart 2).

A sharp drop in foreign demand and a surge in global grain production triggered the current slump in U.S. farm exports. Beginning in the summer of 1997, a wave of financial turbulence in key Asian and Latin American markets shrunk incomes and weakened currencies, trimming demand for U.S. farm products. At the same time, global production of the nation's leading crops—corn, wheat, and soybeans—ratcheted up sharply, driven by a four-year run of generally favorable weather. The production surge outpaced the weakened global consumption, global grain inventories swelled, and U.S. farm exports shrank.

Because such a large portion of U.S. agriculture's output is produced for foreign consumers, the industry's fortunes have closely paralleled its recent performance in the global marketplace. The nation's farm income climbed to a record \$54.9 billion when farm exports surged in 1996. Since then farm income has fallen sharply to \$48.1 billion in 1999, 12 percent below the 1996 crest. The decline would have been much greater without generous government subsidies that rose to more than 45 percent of the total (Chart 3).

Today, a recovery in the global economy is brightening the outlook for U.S. agriculture's foreign sales, but current projections suggest substantial improvement is still at least a year away. With farm exports expected to remain soft another year, the nation's farm income could fall another 15 percent this year, unless additional government subsidies mitigate the decline.

Prospects for U.S. Farm Exports

Despite the recent downturn in U.S. farm exports, the longer-term prospects for the nation's agricultural trade remain fairly bright. That conclusion hinges on U.S. agriculture's productive capacity and prospective growth in world food trade. The United States is home to an expansive

landscape of some of the world's most productive arable land, a favorable climate, leading agricultural technology, skilled farmers, an efficient transportation infrastructure, and an economic system that encourages innovation and efficiency. In concert, these factors make the industry a highly competitive, high volume player in the global marketplace.

The world food market is keenly competitive, however, with many traditional exporting nations--like Canada, Australia, and the European Union in the wheat market--and rapidly expanding new comers--like Argentina and Brazil in the soybean market--vigorously competing for market share. Thus, U.S. agriculture's share of the world market is neither won nor held easily. But the industry is well positioned to maintain or boost its foreign sales by expanding its production when growth in the global market offers the opportunity.

The world food market will almost certainly grow in the years ahead, driven by growth in populations and incomes. And most projections suggest the world's food production capacity will keep pace with gains in world food demand. The experience of the past two decades also suggests, however, that the world food market could remain highly volatile. Changing weather causes periodic swings in food production, and shifting economic and financial developments cause swings in consumption (Chart 4). The results are shifts in world food supplies, trade, and farm commodity prices. Thus, the recent surge and subsequent slump in U.S. farm exports is a likely prologue to the future.

Despite this ebb and flow, however, a growing world food market could provide opportunity for U.S. agriculture to expand its foreign sales. The two biggest markets for U.S. farm products today are Japan and Western Europe. Yet while large, these markets have matured and provided relatively little growth in recent years (Chart 5).

In contrast, the next two leading markets--Canada and Mexico--have grown rapidly in the past decade, with much of the growth occurring since the North American Free Trade Agreement

was implemented in 1994. Since 1989, U.S. agricultural exports to Canada have more than tripled to over \$7 billion. Imports of agricultural products from Canada have also risen sharply to about \$8 billion, creating a farm trade deficit of slightly less than \$1 billion. U.S. agricultural trade with Mexico has also grown sharply. Farm exports to Mexico have more than doubled to about \$6 billion a year, maintaining a U.S. farm trade surplus of slightly less than \$1 billion. The surge in farm imports from Canada and Mexico—especially during the current slump in the U.S. farm economy—probably accounts for many of the concerns about the trading relationships with our North American neighbors, despite the roughly offsetting surge in Canadian and Mexican imports of U.S. farm products.

Other leading candidates for future growth in U.S. agricultural exports are the developing nations of Asia and Latin American. Generally, these parts of the world face food production deficits, measured here by production and consumption of grain and oilseeds, the world's most important foods consumed directly or as livestock feed. These deficits are largely matched by the exportable surpluses produced in the European Union, Canada, Australia, and the United States (Chart 6).

Food demand in these developing nations is likely to grow in the years ahead, boosted by rapid growth in populations and per capita incomes. Last year, the world added its 6 billionth inhabitant, and if current projections hold, the global population will swell to 8 billion in the next two decades. Population growth rates are much faster in the developing world than in wealthier countries like the United States and European nations, and by the year 2015, some 80 percent of the world's people are expected to live in Asia, Africa, and Latin America.

In addition to rapidly growing populations, rising incomes will also boost food demand in the developing world. During the past decade, income growth in the world's developing nations

outpaced growth in the richer developed nations. Although many developing economies stumbled in recent years, they are on the mend again, brightening the outlook for the years ahead.

In much of the developing world, where food production is in deficit, the emphasis in food consumption is on subsistence. Higher quality foods and highly processed foods are generally beyond the reach of most consumers. Instead, dietary needs are generally met with the least cost foods that are locally available. Growing incomes can quickly change that picture, however, enabling consumers to improve their diets, purchasing in the world market higher quality foods that are not available locally.

Rising incomes are an especially potent force in boosting food demand in the developing world, because consumers there spend a significant share of their incomes on food--typically a third, a half, or more. In contrast, consumers in the United States and other rich nations are able to purchase the world's best diet with a much smaller share of their much bigger incomes (Chart 7). But income gains in the developing world will enable consumers there to gradually close that gap.

The effect of income gains and improved diets in the developing world is already evident in a shift in world food trade from generic commodities to value-added food products. In the early 1980s, for example, generic commodities--primarily unprocessed grains--were more than two-thirds of U.S. farm exports. Today, that proportion has flipped with value-added food products comprising nearly two-thirds of the industry's exports (Chart 8). A striking example of this product shift is a sharp increase in U.S. meat exports. Since the early 1980s, U.S. exports of poultry products have risen 12 fold, pork 9 fold, and beef more than 7 fold.

Moreover, value-added exports have remained fairly steady, despite the current farm export downturn. Most of the decline in farm exports has occurred in traditional commodity exports. Thus, the shift to value-added exports could be a valuable stabilizer in U.S. agriculture's participation in a volatile world food market.

A Policy Framework for Boosting U.S. Agriculture's Trade Prospects

U.S. agriculture's position and prospects in the world market suggest the industry is likely to fare better in a growing global market that enables it to take full advantage of its technological prowess and high-volume capacity. Both international trade policy and domestic farm policy bear important implications for the industry's performance in the world marketplace. The industry's success in global markets rests on international trade policies that foster a healthy global economy with brisk income gains in the developing world. In addition, a helpful policy framework would include domestic farm policies developed with an eye on maintaining the industry's competitive strength in the world marketplace.

International trade policies

Agriculture's focus in international trade policy often centers on efforts to broaden the industry's access to foreign markets while limiting unfair competition from other food exporting nations. Certainly, these are important considerations. An international policy framework that actively promotes freer trade swings open the door to more markets for U.S. farm products.

But a second less obvious and more important benefit also accrues from a free and open trading system. Free trade gives developing nations broader access to global markets for their products of all types. The result is faster income growth and purchasing power among the most promising markets for U.S. farm products. Moreover, agriculture benefits from its inclusion in a broad, multi-lateral agenda for trade reform that spans a wide range of products and industries. A broad trade agenda provides more flexibility for balancing trade concerns in other industries with unique trade problems in agriculture, where trade remains much more restricted. At the same time, expanding trade in other products gives farm trade an added boost by enhancing incomes among agriculture's leading customers.

Thus, U.S. agriculture has much to gain from efforts to expand trade in both agricultural and other products. For example, the prospective Free Trade Area of the Americas is expected to provide a healthy boost--about 8 percent--to annual U.S. farm exports to other Western Hemisphere nations, which already absorb well over a third of the industry's total exports. Similarly, market access commitments accompanying China's prospective entry into the World Trade Organization (WTO) could more than double Chinese imports of U.S. farm products to nearly \$3 billion a year.

Prying open foreign markets to U.S. farm exports remains an important objective of international trade negotiations. Though temporarily stalled, the next round of global trade talks under the WTO's aegis provides a substantial opportunity to enhance U.S. agriculture's access to global markets. Key issues in the negotiations include product regulations, tariffs and quotas, and export subsidies.

Product regulations are a farm-trade challenge that is rapidly becoming one of the most difficult and potentially most important trade issues the industry faces. In recent years, many countries have limited or banned imports of various goods, citing concerns over food safety or plant and animal health standards. Food safety and health standards are legitimate concerns that can be addressed by various regulations, including product standards and testing, labeling requirements, or bans on unacceptable imports. Product regulations applied arbitrarily or without a sound scientific base, however, can be thinly disguised trade barriers designed to protect domestic industries from foreign competition.

A recent and important example of the application of product regulations is the regulation of Genetically Modified Organisms (GMOs), especially new crop varieties developed with the aid of recent advances in molecular genetics. Today's most common GMO crops are engineered to be resistant to various insect pests and chemical weed killers. The new crops have been very popular

with U.S. farmers, with the proportion of U.S. corn, soybean, and cotton crops planted to GMOs rising rapidly to almost half since the technology's commercial introduction in 1996.

The new technology has met considerable resistance in some markets, however, especially Europe and Japan. One concern is the potential—though unknown and unproven—risk to food safety. Another concern is the potential—and similarly unknown and unproven—risk of environmental damage from the uncontrolled introduction of resistant genes into new crop pests, the unintended development of “super” weeds or insect pests, and the impact of the GMO crops’ on friendly insects.

The rewards from the new technologies are more apparent and readily measurable, including lower production costs and reduced environmental damage due to less chemical use. Soon the technology will create crops with improved nutritional attributes and valuable pharmaceutical traits. Thus, the unproven risks of the new technology must be weighed carefully against these valuable new benefits.

Under the WTO, good science is the accepted balance for weighing the risks and rewards of the new technology. The WTO approach works well in the United States, where consumers generally place high confidence in science. As a result, GMO crops have met relatively little consumer resistance in the United States. Elsewhere, however, consumers are more skeptical. In the European Union, for example, recent experience with mad cow disease and dioxin contamination of livestock feed appears to have eroded consumer confidence in science and left consumers reluctant to accept foods made with GMO crop varieties.

The global leadership of U.S. companies in developing GMO products and their growing use by U.S. farmers makes stricter guidelines for product regulations a critical negotiating point in future trade talks. Unless future trade agreements can strengthen the scientific basis required for

such regulations, exports from the United States and other countries could be hurt, producer costs could rise, and consumers around the world could be denied access to valuable new products.

Tariffs and quotas are long-standing devices for protecting an importing country's farmers from foreign competition. The Uruguay Round of trade negotiations, concluded five years ago, attempted to improve market access by eliminating quotas and converting to tariffs all other trade barriers that limit imports. Nevertheless, tariffs on agricultural imports still average about 40 percent, compared with an average of just 4 percent on other internationally traded goods. The challenge ahead is to build on the limited success of the Uruguay Round, by further reducing tariffs and lifting quotas on agricultural products.

Export subsidies also remain a problem in global farm trade. Some countries aim to boost incomes for domestic producers by paying them a subsidy as their products leave the country. Like domestic support programs, export subsidies encourage excess production and push down world prices. As a result, incomes for domestic producers rise and incomes for foreign producers fall.

Currently, the use of export subsidies is concentrated in just a few countries, but their impact on world markets is still a problem. In 1996, the European Union was the largest user of export subsidies, accounting for 84 percent of the world's total. The United States has also used export subsidies to boost foreign sales of farm products. Many countries, including the United States, have already proposed to eliminate export subsidies, and most studies suggest U.S. farm products would remain competitive in a world without export subsidies.

Domestic farm policies

With the current downturn in the U.S. farm economy, numerous domestic farm policy prescriptions are likely to surface, especially as the scheduled 2002 rewrite of the nation's farm laws draws near. The foregoing review of trade's vital role in the industry's well being, however,

suggests that any U.S. farm policy prescription must take into account both domestic and international developments. The world market is simply too important to ignore. In particular, it's important to recall that efforts to boost domestic crop prices with policies that cut back U.S. production erode U.S. agriculture's competitive advantage while encouraging bigger production in other parts of the world to fill the market void. In addition, rigid farm price subsidies tend to wed the industry to commodity production, despite the shift in global food trade toward value-added products. In contrast, farm policies that preserve the industry's exposure to market prices foster nimble adjustment to shifting global markets.

The impact on global trade of national farm policies in other nations also remains a fundamental concern for U.S. agriculture. Aimed at protecting or boosting incomes of foreign farmers, such programs subsidize farm commodity prices, encouraging surplus production that pushes down world market prices. The Uruguay Round of international trade negotiations aimed to reduce farm subsidies, and further progress in trimming these subsidies would be helpful to U.S. agriculture.

A recently introduced rationale—"multifunctionality"—for national farm support programs, however, could make further progress in scaling back global farm subsidies more difficult to negotiate. Multifunctionality refers to the indirect or spin-off benefits of agriculture, such as pleasant rural communities, enhanced rural employment, or even the aesthetic benefits of viewing cattle grazing a green hillside. There is little doubt of the value of these indirect benefits, although they can be hard to measure.

Appropriate policies to enhance such multifunctional benefits, however, are subject to considerable debate. In particular, efforts to enhance these benefits by subsidizing agriculture have generally proven both expensive and ineffective. For example, policies to boost job skills and local entrepreneurship in rural communities are likely to be much more successful in boosting

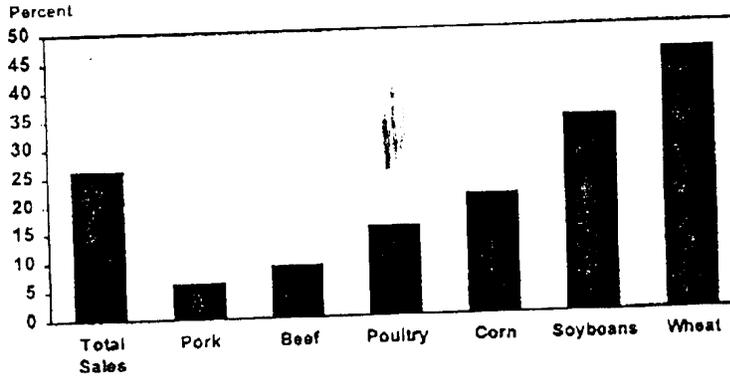
rural employment than most farm policies. Moreover, farm subsidies in one nation or region—the European Union, for example—may boost local farming activity and spin off benefits, but only at the expense of farming activity and such benefits in other places like the United States or Canada or Australia.

Conclusions

Each year U.S. agriculture makes a substantial positive contribution to the nation's trade accounts, and prospects for enhancing the industry's trade surplus appear relatively bright. With more than a fifth of its output shipped abroad each year, the industry is heavily reliant on the world's trading system. A recent slump in farm exports contributed to the current downturn in the U.S. farm economy and reminded the industry of the up and down nature of its foreign sales. But export prospects are beginning to improve again, as economic recovery takes root in Asia and other important markets.

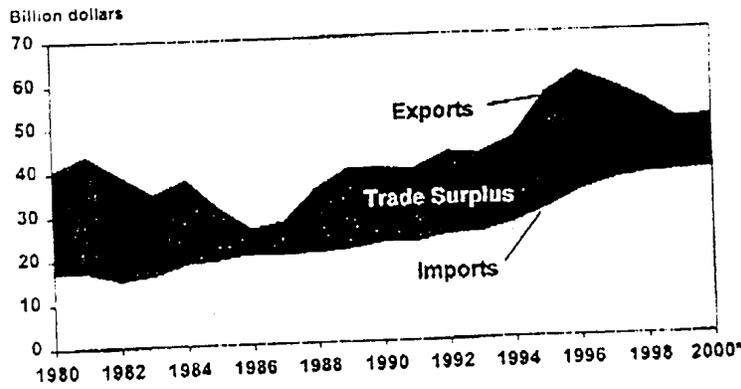
Unfettered trade promises a further expansion in the global economy, as producers from the United States and other countries gain freer access to world markets and consumers gain access to products from other lands. As global incomes rise, food demand grows—especially in the developing countries that are U.S. agriculture's most promising customers. While the ebb and flow of U.S. farm exports is likely to continue in the years ahead, a solid framework of policies that promote free trade and global income growth is the best bet to bolster U.S. agriculture's trade prospects.

Chart 1 Exported Share of U.S. Production 2000



Source: USDA, Economic Research Service

Chart 2 U.S. Agricultural Trade Balance



*Forecast
Source: USDA, Economic Research Service

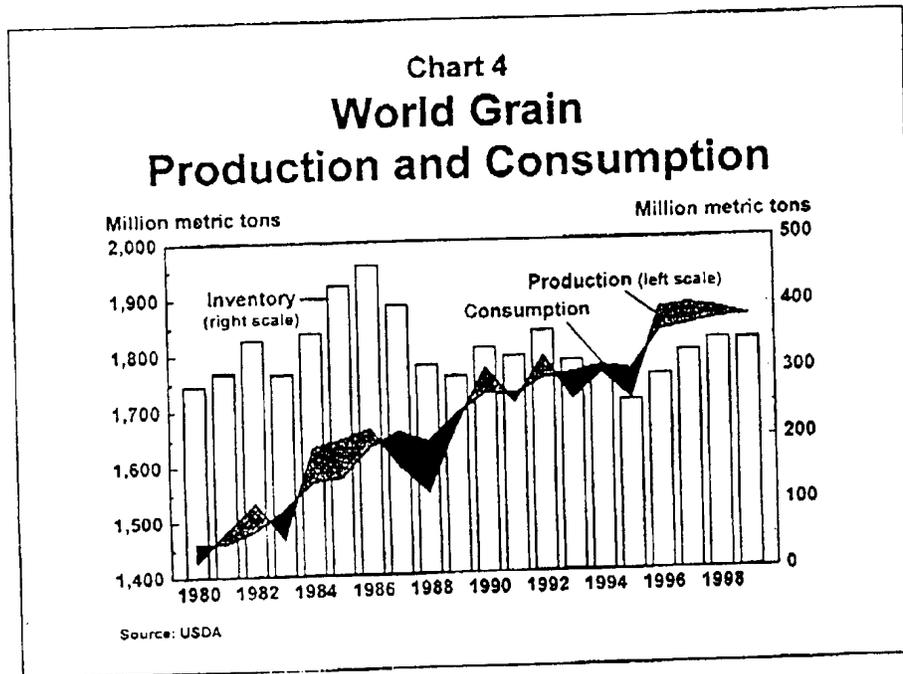
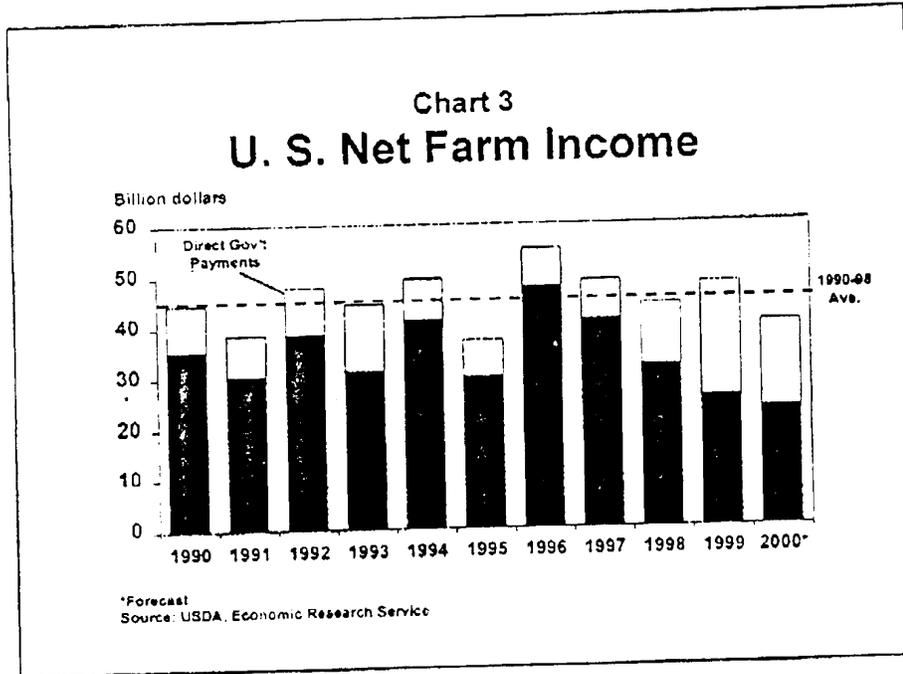
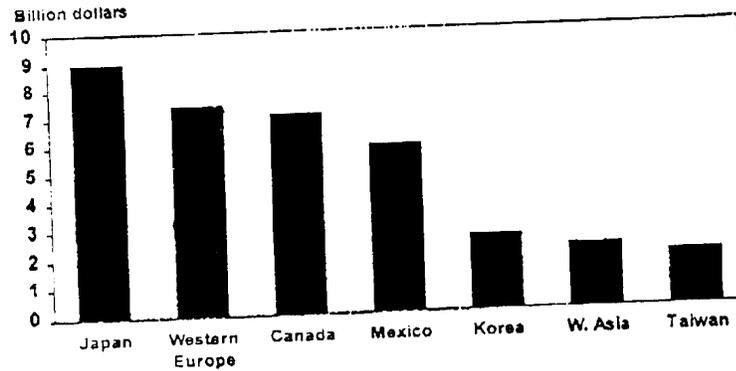
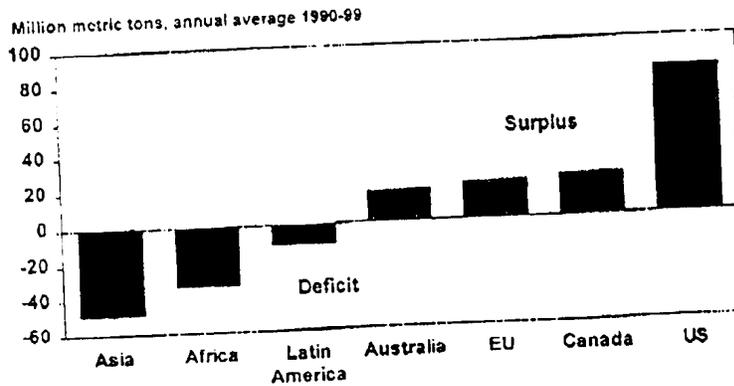


Chart 5 Top Destinations for U.S. Exports 2000*



*Forecast
Source: Economic Research Service, USDA

Chart 6 World Grain and Oilseed Balance



Source: USDA

