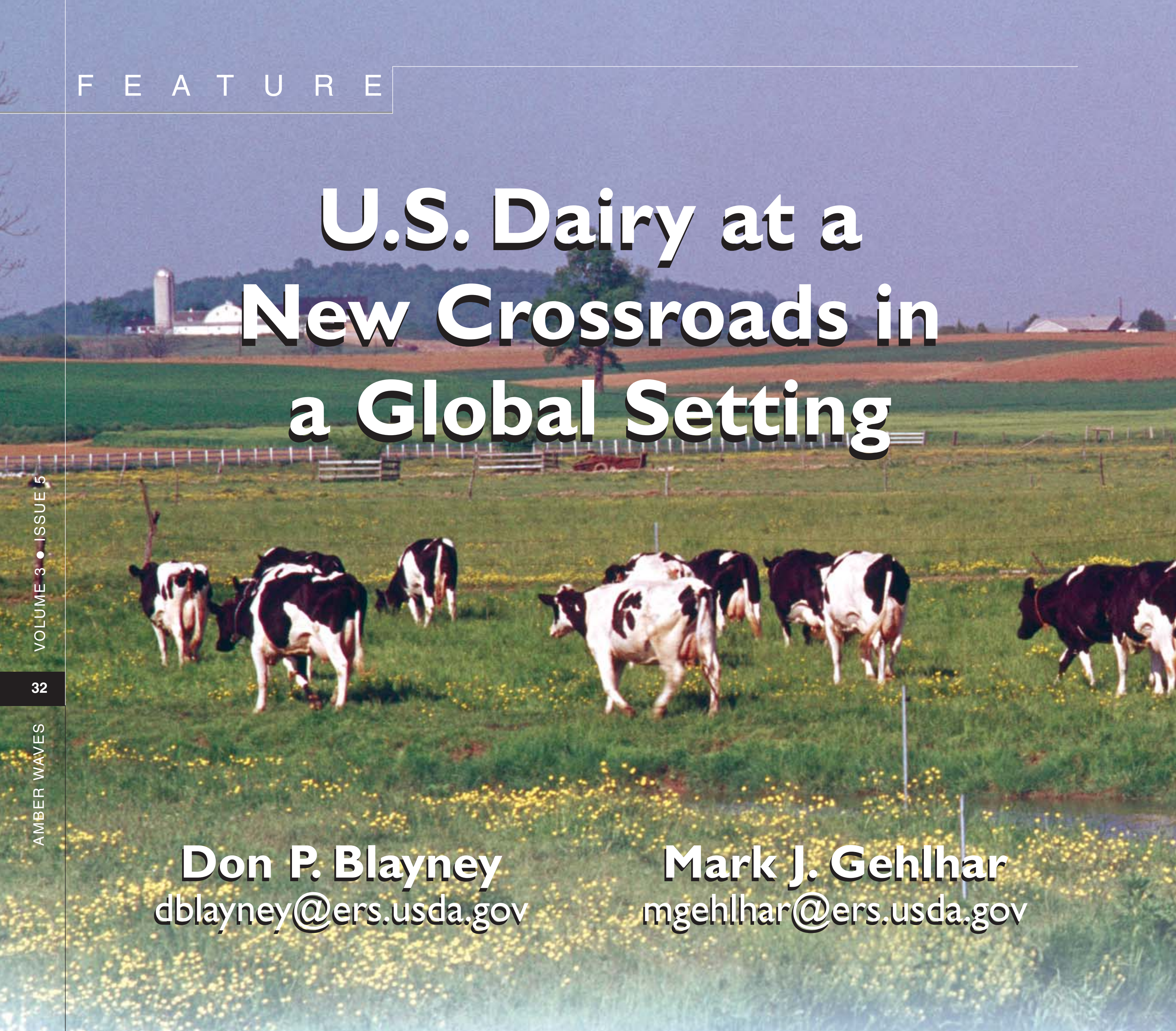

U.S. Dairy at a New Crossroads in a Global Setting

Don P. Blayney
dblayney@ers.usda.gov

Mark J. Gehlhar
mgehlhar@ers.usda.gov

Domestic dairy industries and markets worldwide are often cast as heavily protected with limited exposure to global competition. However, despite high tariffs and price support policies that persist in many of the world's dairy-producing countries, today's milk producers and dairy companies face increasing competitive forces from outside their borders. Globalization of the dairy industry is exerting pressures on both domestic-oriented dairy industries and international market "players" to adapt to changing market relationships.

International dairy trade has often been called a dumping ground for unwanted surplus commodities. However, dairy trade is now increasingly driven by demands from developing-country consumers wanting to upgrade diets and developed-country markets seeking specialty products. Competition worldwide has given rise to increasing dairy consumption, trade, and foreign direct investment in domestic dairy industries, and though many trade barriers remain in place, they do not appear to be stopping globalization of the dairy industry.

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In this environment, domestic dairy sectors must compete aggressively for a share of consumer food budgets and for resources and investment capital. Dairy farmers, processors, and manufacturers who prosper are those who continuously innovate by adopting new technology and adapting to changing consumer demands. These forces have brought about major changes within the U.S. dairy industry, namely, expansion and significant consolidation. The U.S. dairy sector has advantages over its competitors that enable it to withstand such changes—it has efficient production systems open to foreign investment and it serves a large, growing population of affluent consumers. Nevertheless, the pressures of globalization, structural changes in world dairy markets, and the potential for further trade liberalization as a part of the current round of trade negotiations have brought the U.S. dairy sector to a crossroads.

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Dairy Companies Adopt New Strategies

Dairy markets everywhere are being shaped by consumer demands, the ability of dairy farmers to react to change, and dairy company strategies for maximizing profits. Firms operating successfully in global dairy markets are those that respond quickly to changing economic forces, changing policies—nonagricultural as well as agricultural—and shifts in milk supply and demand factors. Those firms may be national firms operating in single countries, regional firms operating in a well-defined area, or multinational (global) firms with a presence in multiple regions or areas. Competition among firms has grown, but so has the number of firms joining forces. As international dairy companies recognize the potential benefits from supplying milk and dairy products in different countries and the prospects for demand growth, they are repositioning themselves to source milk and products from multiple locations. This trend is spawning partnerships and joint ventures among firms seeking to benefit by controlling all stages of the production process. Direct investment across borders has also altered competition in dairy markets. Globalization has tended to emphasize the strength of multinational dairy firms, with the most prominent being Nestlé (Switzerland), Arla Foods (Denmark-Sweden), Danone (France), the Fonterra Co-operative Group (New Zealand), Lactalis (France), Unilever (Netherlands-U.K), and Kraft Foods (U.S.).

Multinational firms can operate in several countries or regions using any number of approaches. They can build new facilities to manufacture locally demanded products, or they can form alliances or partnerships with existing local firms that have cultivated local demand. Purchase of local brands is another option. A strategy that employs all of these approaches enables multinationals to reduce price risks and market volatility. While multinationals are most active in stable, well-established markets, alliances or partnerships with local firms have helped them expand to emerging markets in recent years.

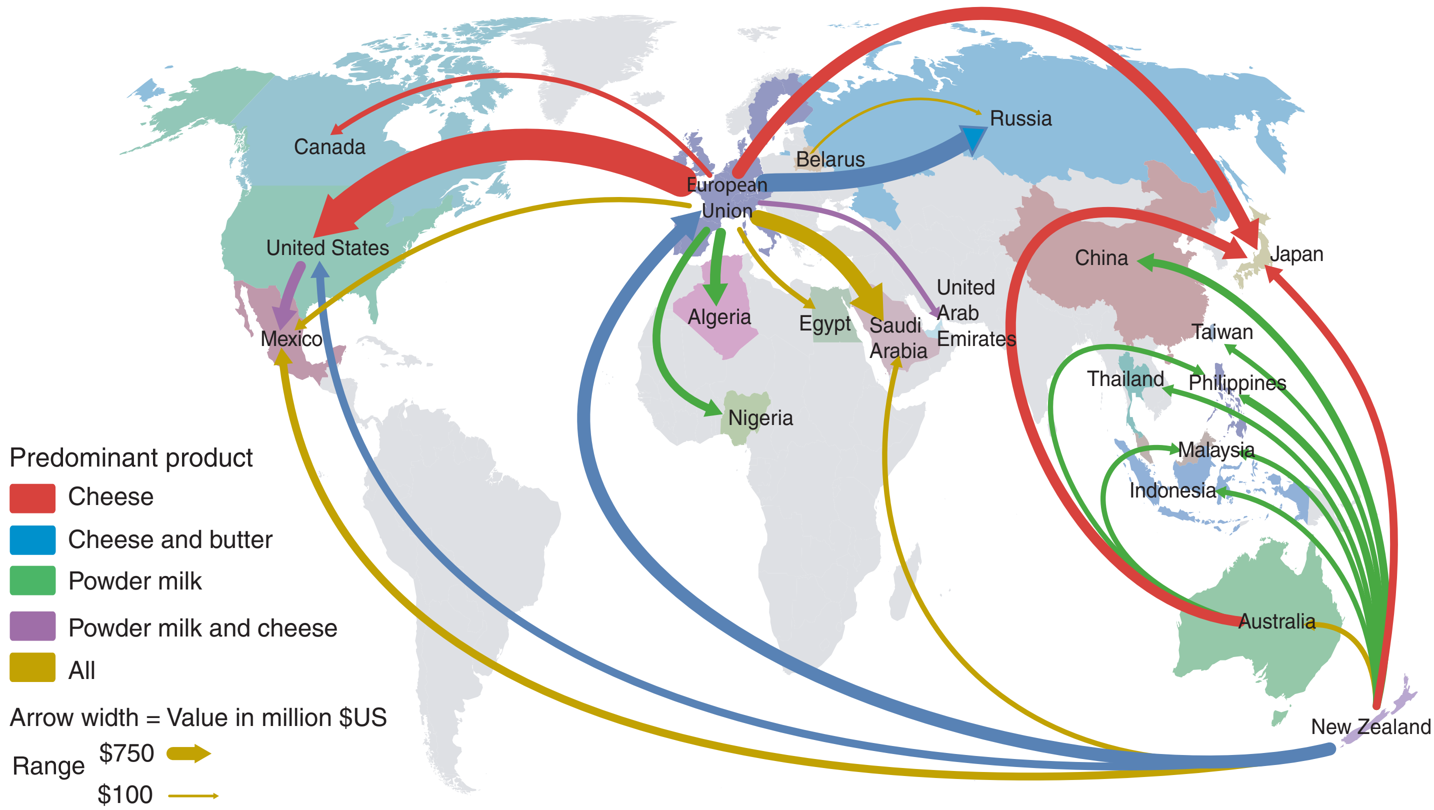
Multinational dairy companies have long viewed the U.S. with its large and affluent market as an opportunity. Since trade opportunities are limited by trade impediments, multinationals have chosen to make direct investments. Led by firms based in the European Union (EU), foreign direct investment in the U.S. now stands at about $5 billion. Nestlé and Unilever have gained a major stake in the U.S. ice cream industry through purchases of U.S. brands. Together, they account for about 30 percent of supermarket ice cream sales in the U.S. Several French companies—Fromageries Bel, Sodiaal, Lactalis, and Bongrain—are involved in U.S. yogurt and cheese markets. Yoplait, a premier brand of Sodiaal, has been licensed to General Mills, while the Président brand of cheese is a Lactalis product manufactured in Wisconsin and California.

New Zealand's Fonterra, the world's top dairy product exporter, has also

New Zealand's Fonterra: Partnering in a Global Dairy Industry

The Fonterra Co-operative Group was formed by the merger of New Zealand Dairy Group, Kiwi Co-operative Dairies, and the New Zealand Dairy Board in late 2001. The group is owned by its 13,000 dairy farming shareholders and is the world's largest exporter of dairy products, exporting 95 percent of New Zealand's production. Fonterra is considered a "partnership model" because of the growing number of foreign companies with which it has established partnerships. This strategy enables it to access dairy markets where dairy demand is met by local supply. Partnerships, such as joint ventures, give Fonterra market access without major capital investments and financial risks, while providing mutual benefits to both companies. In the U.S. market, Fonterra is a buyer and an exporter of U.S. nonfat dry milk to other foreign markets, providing valuable global marketing expertise. Its other partnerships include joint ventures with Nestlé through Dairy Partners Americas in South America, Arla Foods in the United Kingdom, Clover Industries in South Africa, and Britannia Industries in India. Fonterra is the world's largest dairy ingredients company, but is also a supplier of consumer branded products, such as its Anchor brand butter, Anlene brand milk powders, and Mainland brand cheese products. Fonterra has a major stake in the Australian dairy company, Bonlac Foods Limited, and has undertaken the formal merger of both companies' consumer products operations in Australia and New Zealand.

Major Global Trade Flows of Dairy Products in 2003



increased its presence in the U.S. market. Fonterra has formed a number of partnerships throughout the world that enable it to source milk and dairy products from multiple locations (see box, "New Zealand's Fonterra: Partnering in a Global Dairy Industry"). In the U.S., Fonterra has teamed with Dairy Farmers of America, the largest farmer-owned dairy cooperative in the Nation. The resulting partnership, DairiConcepts, produces and markets milk protein concentrates—the first commercial production of its kind in the United States. Fonterra has also entered into an agreement with Dairy America, a federated marketing cooperative, to serve as the marketing agent for the nonfat dry milk received from its members (seven U.S. farmer-owned dairy cooperatives).

The Changing Face of Dairy Products

Dairy products available on the market range from basic raw milk to fairly standardized "commodity" products to an array of higher valued products that have only recently gained wider market presence. Historically, when trade is the issue, both within and between countries, the commodity products—cheese, nonfat dry milk, and butter—have held center stage. These were the products that could best withstand the rigors of transport. However, factors such as the emergence of sophisticated milk components as ingredients, greater emphasis on cheese variety (including brands), recognition of well-defined local, national, and even international product markets, development of manufacturing processes that lengthen shelf-life, and improved transportation systems have changed the way firms assess both domestic and global dairy marketplaces.

The major dairy products traded internationally can be broadly placed in four categories: butter, cheese, dry milk powders, and ingredients. Within these categories are a large number of "differentiated products"—cheese varieties, dry milk powders with a range of fat contents, or milk components, such as the various milk proteins. The ingredient trade has only recently emerged as a key sector, driven primarily by widening uses of milk proteins and lactose (milk sugar) in various food applications.

Trade Flows Reflect Consumer Demand and Dairy Resources

The biggest players in international dairy trade are not necessarily the largest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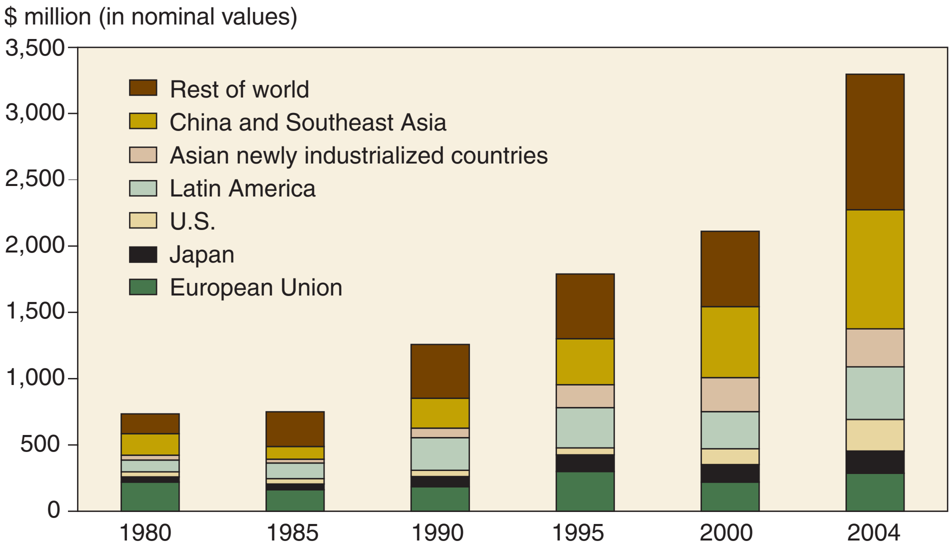
producers. New Zealand, for example, is one of the smallest producing countries but is a major dairy trading country. A country's population relative to its production of milk is a key to determining the likelihood of its having a milk surplus or a milk deficit. Milk-surplus countries that supply foreign markets typically have an efficient manufacturing sector capable of producing storable dairy products with quality attributes at prices that make exporting economically feasible.

Based on the value of trade flows in 2003, New Zealand, Australia, and the EU are leading dairy exporting countries/regions. Low-cost producers in Australia and New Zealand are the principal suppliers of cheese and dry milk products to Asian markets, while subsidized EU producers focus on nearby markets in Africa, the Middle East, and Russia and export significant amounts of cheese to North America.

As diets around the world have changed, so, too, has global demand for milk and dairy products. The mix of products demanded, however, varies by region or country and the stage of a region's economic development. The largest consumers of dairy products are high-income developed countries, such as the U.S., EU, Australia, New Zealand, and Japan. Middle-income developing countries use large quantities of dry milk powders for fluid milk reconstitution programs and as ingredients in other foods. In low-income developing countries, demand is insignificant outside of food aid programs.

In some developing countries with fast-rising urban populations, demand for dairy products is outstripping domestic milk production. Rapid growth in consumption is driving growth in dairy imports in land-scarce Southeast Asia and in China. New Zealand's dairy exports to the EU have remained nearly unchanged for 25 years, but the EU share of New Zealand's dairy exports has dropped from 30 to 8 percent, due largely to increasing exports to developing countries in Asia. Because water and land needed to produce high-quality dairy feed are limited in these countries, rising demand has exerted upward pressure on international dairy prices. As a result, the gap between prices of milk received by farmers in the U.S. and New Zealand's price has diminished in recent years from $147 per metric ton in 2000 to $128 per metric ton in 2004.

Developing countries are driving New Zealand dairy product exports



Source: Statistics New Zealand.

Are Dairy Policies Keeping up With Today's Market?

These changes in global dairy markets are taking place in the context of significant market intervention by some of the world's leading dairy product importers and exporters. Many countries maintain border and domestic support measures of various types for their dairy sectors (see box, "Domestic Dairy Policies in Key Global Markets"). Of the three largest exporters, only the EU intervenes significantly in its dairy markets. Canada, the United States, and Japan also have significant domestic dairy policies, but all three countries are net importers of dairy products.

Dairy policies around the world are changing slowly, primarily as a result of the Uruguay Round of trade negotiations. The dominant border measures now in place are tariffs or tariff-rate quota systems, and they are at the core of many issues surrounding market access. Domestic dairy policies include mainly price support and institutionalized pricing systems, policies that have been called trade distorting in many circles. What would happen to global dairy markets and

Domestic Dairy Policies in Key Global Markets

In a recent analysis of trade liberalization, USDA developed a 12-country/region model of international dairy trade and identified border measures (tariffs and tariff-rate quotas) for all regions. Only four of the countries/regions—Canada, the European Union, Japan, and the United States—have domestic support or regulatory policies or programs in addition to border measures. Japan, however, receives more protection from border measures than from its many domestic support programs.

The principal types of policies and programs affecting dairy producers in these four countries/regions are as follows:

Canada
- Milk production/marketing quotas
- Classified pricing
- Price support (purchase or sales program for butter and nonfat dry milk)
- Subsidized exports of dairy products

European Union
- Milk production/marketing quotas
- Price support (intervention purchases of butter and nonfat dry milk)
- Subsidized exports of dairy products
- Consumer subsidies for some products

Japan
- Direct producer payments
- Subsidized manufacture of certain products
- Strict labeling program for dairy products
- Consumer subsidies for some products
- Subsidized input costs—environmental protection, insurance of animals

United States
- Direct producer payments
- Price support (purchase program for butter, cheese, and nonfat dry milk)
- Subsidized exports of dairy products
- Federal milk marketing orders

the U.S. dairy industry if all of these policies were stripped away?

Empirical analyses of international dairy markets suggest that a global liberalization of dairy policies eliminating all tariffs, quotas, export subsidies, and domestic supports would lead to a significant increase in the world market prices for dairy products. While the volume of trade would decline, primarily due to the elimination of export subsidies, the value of trade would increase.

Trade liberalization would generate relatively modest impacts on the U.S. dairy sector because of the large size of the U.S. market and high level of efficiency of U.S. dairy farmers. If the efficiency of the U.S. dairy sector continues to increase as it has in recent years, it is possible that American dairy producers and manufacturers could even gain from trade liberalization—analysis suggests that productivity increases as small as 1 percent a year would offset the impact of trade liberalization on U.S. milk production. The ongoing processes of technological change, globalization, and shifts in consumer demand are far more likely to affect the future of the U.S. dairy sector than changes in dairy or trade policy.

Challenges and Opportunities for the United States

The U.S. is a significant dairy market in the international arena—as an importer of certain products and, more recently, as a source of supplies for export by international dairy firms. Globalization of dairy markets provides a potential opportunity for producers of certain U.S. dairy products, such as dry milk powders. The sheer size of the U.S. domestic market and projected higher international prices, which could rise even more if the current round of trade negotiations leads to further trade liberalization, suggest that there may be additional opportunities for the U.S. dairy sector in international markets in the future.

Foreign direct investments in U.S. dairy product markets contribute to the continued strength of domestic markets for U.S. products produced from U.S. milk. Traditional methods of analyzing trade liberalization scenarios do not readily anticipate the effects of strategic decisions of firms in international markets. Because of international market dynamics, dairy trade liberalization, were it achieved, would foster both opportunities and challenges for U.S. milk producers and manufacturing firms.

As global dairy markets evolve, policies designed to limit foreign competition will become less relevant. Moreover, protectionist policies can be detrimental to a country's continued longrun prosperity as new opportunities are squandered. How trade policy supports U.S. dairy farm income is less clear today than in the past, given rapid changes in the structure of the industry. The efforts of U.S. milk suppliers, processors, and product marketers to remain competitive in a global setting are continuing to benefit U.S. dairy farmers and consumers. W

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