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## U.S. Dairy at a Global Crossroads

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Most dairy sectors worldwide, including the U.S. sector, have been cast as heavily protected with limited exposure to global competition. However, current dynamics in world dairy markets and the potential for global and domestic trade policy reform are bringing the U.S. dairy sector to a new crossroads as it faces competitive forces from outside its borders. Those forces—demand for new products by consumers in industrialized countries, changes in technology, rapid economic growth in emerging developing countries, particularly in Asia, and the increasing role of multinational firms in domestic and global dairy markets—are leading to increased dairy consumption, more opportunities for dairy product trade, and foreign direct investment benefiting both U.S. consumers and producers. As global demand for milk and new dairy products expands, the roles of policies that support prices are diminishing, while the roles of flexibility and innovation aimed at improving competitiveness are growing.

## What Is the Issue?

Government intervention designed decades ago for improving dairy market performance has evolved into a means of producer support and protection from foreign competition. Yet, the benefits of government support can be modest and, in the long run, can distort market signals and discourage producers from pursuing new opportunities. The changing characteristics of world dairy markets have implications for the competitiveness of U.S. and international dairy industries and the role of policies in a global context. Understanding how the U.S. dairy sector might respond to liberalization of global dairy trade policies given the dynamics of current market forces will aid in assessing future domestic and international trade policy reforms.

## What Did the Study Find?

In response to changing global markets, the U.S. dairy industry is positioning itself to compete worldwide through innovation, expansion, and consolidation of firms and dairy businesses. Competition worldwide has given rise to increasing dairy consumption. In high-income countries, per capita consumption and population growth have subsided and demand for dairy products is growing at about 2 percent per year, driven primarily by consumption of higher value-added dairy products rather than volume increases. In many low-income countries, dairy consumption is growing at more than 10 percent per year; in China, for example, consumption is expanding at 15 percent per year.

As a sign of the worldwide dairy industry's vibrancy, dairy product launches more than doubled from 2000 to 2004, compared with the previous 5 years. New markets have developed for dairy

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ingredients such as milk proteins and lactose (milk sugar) used in both dairy and nondairy products. Global competitiveness is also fueled by new uses for milk-based ingredients, rising demand for cheese variety (including brands), an increase in niche product markets, and increased shelf-lives for products.

Globalization has tended to emphasize the strength of multinational dairy firms. As international dairy companies recognize the prospects for demand growth around the world, they are repositioning themselves to produce and sell milk and milk products from multiple locations. Foreign investors find the United States, with its large domestic market, particularly attractive for this purpose. Foreign companies such as Nestlé, Unilever, Bongrain SA, and the Fonterra Co-op Group now have a significant presence in the U.S. market.

The three dominant dairy trading areas today, as in the past, are the European Union (EU), Australia, and New Zealand. Australia and New Zealand, both with low-cost milk production and industries actively involved in international marketing, are prominent suppliers to the Asian markets for cheese and dry milk powders. The EU focuses on nearby traditional markets and North America, mainly exporting premium cheese. Product differentiation and consumer preferences play major roles in shaping global dairy product demand and trade flows. For example, all high-income countries import EU cheese. The largest dairy trade flow worldwide is cheese from the EU to the United States, even though milk production costs in the EU are higher than in the United States.

Dairy policies still influence the flow of products globally. For individual countries, providing an adequate supply of milk to satisfy domestic market needs is often the first priority. Thus, domestic dairy policies and programs are generally mechanisms to promote milk production, but in some cases they promote surplus production above domestic needs. Those surpluses are available for export and, in some countries, such as in the EU, Canada, and the United States, they have been subsidized. Additionally, almost all countries have trade policies in place that impede dairy imports.

Based on two independent simulation models, global liberalization of dairy policies would lead to increases in world market prices and the value of dairy product trade. For the United States, the effect would reduce dairy sector production by less than 2 percent. However, these results do not reflect recent globalization of the industry—new products, growing demand in emerging developing countries such as China and India, technological innovation, and the increasing role of multinational firms in domestic and global dairy markets. If the U.S. dairy sector continues to make gains in efficiency as it has in recent years, particularly with an open trading system, U.S. dairy producers and manufacturers could benefit from trade liberalization. Accordingly, U.S. consumers and producers would benefit from greater access to markets and higher international prices accompanying trade liberalization.

## How Was the Study Conducted?

The study was conducted in two parts. First, we performed a comprehensive analysis of changing global dairy markets. International data sources were used to examine patterns in dairy consumption, production, trade, foreign direct investments and evolving firm-level partnerships. Second, we used two formal trade models to measure the impacts of hypothetical dairy trade and domestic policy reforms. The first model, the Partial Equilibrium Agriculture Trade Simulator, explicitly captures the effects of interactions with nondairy agricultural sectors. The second model, the University of Wisconsin World Dairy Model, characterizes milk and dairy products in considerable detail and incorporates detailed specifications of dairy trade and domestic policies.