Processed Foods Trade Benefits U.S. Agriculture and Consumers

Fred J. Ruppel, Margaret A. Malanoski, and Steven A. Neff
(202) 219-0883 (202) 219-0041 (202) 501-6761

Americans enjoy a wide variety of processed food products from around the world, such as French wines, Danish hams, Chilean processed fruits, Swiss chocolates, and Colombian coffee. Similarly, consumers in foreign countries enjoy a variety of U.S. products and, in some cases, U.S. food brands are the leading local brands in foreign countries.

U.S. participation in the global market for processed foods, as both a consumer and producer, is large and growing (table 1). In 1993, U.S. firms provided approximately $119.2 billion worth of processed foods to foreign markets: $23.4 billion worth exported from their U.S. operations and $95.8 billion worth from production in their plants abroad. Foreign firms provided $66.9 billion worth of processed foods to U.S. consumers: $21.1 billion worth from their domestic operations and $45.8 billion worth from plants located in the United States. Both U.S. and foreign firms also used other arrangements, such as licensing and joint ventures, to provide processed foods globally.

The U.S. role in processed food markets has far-reaching implications for U.S. food industries, farmers who supply raw materials to those industries, employees in those industries, and ultimately the consumers of the foods produced in those industries.

The authors are economists with the Food and Consumer Economics Division, Economic Research Service, USDA.

Global Markets Benefit Food Processors

Processed food firms seek foreign markets to pursue growth opportunities unavailable in the domestic market, to spread risk through geographic diversification, and to capitalize on their investments in brand-name products and technology. For example, the relatively slow population growth, maturity of the processed food markets, and existence of high domestic market shares lead many U.S. firms beyond their domestic market. Foreign markets present greater growth potential and the opportunity for U.S. firms to gain from their competitive advantages.

Firms can reach these foreign markets through exports, through licensing foreign companies to produce their products, or by locating production plants abroad through foreign direct investment. Foreign direct investment refers to the ownership of assets in a business by a foreign firm for the purpose of exercising control over the use of those assets (see “Direct Investment Is Primary Strategy To Access Foreign Markets,” elsewhere in this issue).

Table 1
U.S. Participation in Global Processed Food Market Is Growing

U.S. international commerce in food processing	1985	1990	1993
		Billion dollars	
Outbound commerce:			
U.S. exports	11.0	18.7	23.4
Sales by U.S. affiliates abroad	37.2	76.0	95.8
Inbound commerce:			
U.S. imports	10.3	20.1	21.1
Foreign affiliate sales in the United States	19.4	47.0	45.8
Total	77.9	161.8	186.1

Moving to the global market also provides firms with opportunities to reduce unit costs. Expanding production allows firms to spread their fixed costs for facilities and management over a larger volume. Further efficiencies may be gained from acquiring supplies in greater quantities or through using existing production technologies more extensively. As firms increase in size, they may also gain advantages in information gathering and processing, in transportation and distribution, and in research and development.

In addition to the benefits from participating in the global market, U.S. processed foods firms face challenges. The introduction of foreign products in the domestic market increases the level of competition and may limit price increases or even cause price decreases. This puts competitive pressure on domestic firms to find innovative ways to lower their costs or to create new products. For example, Nissin, a Japanese food processor, introduced Cup Noodles, a dried ramen soup in a cup, to the U.S. market in the 1980's. With Cup Noodles, consumers are able to make soup in minutes simply by adding hot water. The success of this product led Campbell Soups to create a similar line of soups. Ultimately, the increased competition could force less innovative or poorly managed firms to leave the market. Although individual firms may suffer, the overall efficiency of the entire industry improves and product variety increases.

Effects Ripple to Wholesale and Retail Operations

The food wholesaling and retailing sectors benefit from both trade in processed foods and foreign direct investment in food processing operations.

Wholesaling, almost by definition, is an industry that operates on volume. This sector benefits from increases in both exports and imports by having more products to distribute to retail outlets at home and abroad.

Food retailing benefits from increased imports of processed foods. To the extent that imports lower prices and increase available product variety, retailers' purchase costs are reduced and their product choices are expanded. Overall, an increase in processed food exports would probably be neutral for domestic food retailers. Processed food costs for retailers could decline if food manufacturers passed to retailers any reduction in unit costs gained by increased size due to exports. However, the increase in foreign demand associated with exports could raise the prices that domestic retailers pay for processed foods.

Foreign direct investment in food processing operations has a similar impact on food retailing and food wholesaling. To the extent that foreign-owned manufacturing plants increase the volume of processed food products, U.S. food retailers and wholesalers will realize gains from greater volume and variety of products offered.

Foodservice Investments Stimulate Investment in Food Manufacturing

Globalization of the foodservice industry occurs generally through either foreign direct investment or franchise agreements (see "The U.S. Foodservice Industry Looks Abroad," elsewhere in this issue). There is little international product trade in the sector, except in selected food ingredients and other supplies. Much of what the major foodservice firms export is intangible: trademarks, logos, merchandising slogans, quick service techniques, and product consistency.

When U.S. foodservice firms invest abroad, exports of some ingredients and supplies may increase. However, the overall impact is probably relatively small, primarily because labor constitutes much of the operating costs of foodservice operations and, except for personnel engaged in firm management, is supplied in the host country. Investment by foreign firms in U.S. foodservice operations has a similar effect, with possible minor increases of imports of some supplies.

Ownership of foreign operations in foodservice may induce ownership of foreign operations in food processing. Many foodservice firms develop strong dependency relationships with specific food manufacturers. For example, as McDonald's expands its foodservice operations to new foreign markets, Keystone Foods, one of their longtime U.S. meat suppliers, follows by investing in or building new meat processing operations in or near those markets.

Impacts on Farmers Difficult To Predict

While the impacts of globalization on manufacturers, wholesalers, retailers, and foodservice firms are predominately positive, implications for agricultural producers are ambiguous. For the most part, U.S. producers as a group benefit from exports of processed foods and from foreign investment in the United States. However, processed food imports and U.S. investment abroad can generate gains and losses to agricultural producers, the net effect of which is difficult to quantify.

Gains and losses from exports and imports of processed foods are relatively straightforward. If U.S. food manufacturers increase their exports of processed foods, then U.S. production increases. The increased production of processed foods raises the demand by food manufacturers for the U.S. agricultural commodities used as ingredients. This, in turn, can lead to an increase in total revenue, which benefits U.S. producers.

In a similar fashion, increases in U.S. imports of processed foods may reduce revenues to U.S. producers. To the extent that imported foods displace domestic products in the marketplace, the demand by food manufacturers for basic agricultural commodities declines, thereby lowering revenues to producers. This is a clear case of producer loss.

The overall effect of imports and exports of processed foods on U.S. agricultural producers is virtually impossible to determine without a detailed analysis. In general, however, because the annual values of U.S. imports and exports of processed foods are roughly equal, the net impact may be relatively small. The trend in recent years toward faster growth in U.S. exports than in imports suggests, on balance, that U.S. trade in processed foods may be increasingly beneficial to the farm sector.

The effect of foreign direct investment on U.S. agricultural producers is even more difficult to evaluate. To the extent that a foreign investor builds new processing plants or distribution facilities and uses local raw materials, it is generally beneficial for domestic producers. Like their domestically owned competitors, U.S. affiliates of foreign food manufacturers and foodservice firms need agricultural commodities and intermediate ingredients as inputs. Thus, the addition of new facilities increases the overall demand for agricultural commodities, with the corresponding benefits to producers.

However, when a foreign concern purchases an existing food processing facility, producers could gain or lose. If the foreign entity makes changes in the facility that increase processed food output, producers could gain. Similarly, agricultural producers could benefit if the foreign entity introduces new product ideas or production, merchandising, or distribution techniques that increase the demand for U.S. agricultural commodities. On the other hand, producers could lose if the foreign investor closes some production facilities.

When U.S. food processors invest in foreign operations, assessing the net effect on U.S. agricultural producers can be difficult. Foreign production that results in a decline in U.S. exports can harm U.S. agricultural producers. To the extent that U.S.-owned operations located abroad substitute ingredients purchased locally or on world markets for U.S. agricultural commodities, U.S. agricultural producers will lose. However, if the U.S. affiliate in the foreign country adds a complement of U.S. ingredients to the agricultural commodities purchased in the host country, U.S. agricultural producers benefit. This may occur because key domestic commodities or ingredients are considered essential to the foreign manufacture of the American-style foods being produced and sold abroad or because of a long established relationship with a U.S. ingredient supplier. There are many examples of U.S. firms continuing to use U.S. agricultural ingredients in foreign production: Ocean Spray's use of U.S. cranberry juice as a key ingredient in foreign-produced varieties of its cranberry-fruit drinks; overseas shipments of U.S. citrus concentrate for use by foreign formulators of Sunkist soft drinks; and Hershey's delivery of U.S.-produced chocolate syrup for use in foreign production of its candy bars.

Employees of the U.S. Food Sector Are Not Left Out

Employees benefit from the likely increase in employment and wages associated with exports of processed foods. Food processing is a "value-added" enterprise. Employees add value to raw agricultural commodities through food manufacturing, packaging, distribution, retailing, and service functions. Typically, the greater the value-added component, the greater the employment share of total production expenditures. Thus, the domestic workforce benefits more when U.S. firms export value-added products, such as frozen apple pies, instead of commodities, in this case apples. There is also an income multiplier—that is, income earned by employees in the food sector is spent in the local economy.

By contrast, there are often costs to employment and employees' incomes associated with food imports. To the extent that the competition from imported foods adversely affects production levels of domestic foods, employees in the U.S. food sector could suffer in terms of higher unemployment. This could also result in downward pressure on wages and, to the extent that either wages or hours worked declines, employees' income levels could fall.

Employees of the U.S. food sector can also benefit from foreign operations locating in the United States. As with the demand for agricultural ingredients, such inbound investment that results in a greater volume of products sold may increase the demand for workers. This, in turn, can result in higher employment. Though this may be more likely to occur with newly built plants, it can also occur if foreign firms acquire existing plants.

Consumers Get More Variety

International commerce in processed foods benefits consumers both on the inbound side (imports and inward foreign direct investment) and on the outbound side (exports and outward foreign direct investment). Enhanced selection is an obvious benefit for consumers from inbound foreign commerce.

Some foreign foods are imported, but most are produced by U.S. firms under contract or license from foreign firms or by U.S. affiliates of foreign firms. In the foodservice industry, virtually all inbound commerce is through foreign direct investment, contract, or license. As with retail processed foods, increased selection of foodservice offerings is a major benefit afforded consumers. Foreign firms now own many foodservice chains, such as Burger King, which is owned by Grand Metropolitan, PLC, in the United Kingdom or Dunkin' Donuts and Baskin-Robbins, both owned by Allied-Domecq in the United Kingdom.

Consumer gains from outbound foreign direct investment and foreign production under U.S. license and contract are less clear, but nonetheless real. Many firms can gain economies of size by expanding their operations abroad, thus lowering per-unit costs for products sold to domestic buyers as well as to foreign consumers.

The United States' role as an international supplier of processed foods is well established and should continue into the future. U.S. processed food exports have grown steadily in the past 5 years and were up by 12 percent in 1995. U.S. firms continue to invest abroad, with new ventures planned for Asia and Latin America. While consumers generally gain from trade and international investment, gains and losses for U.S. agricultural producers are less clear and depend on a variety of business conditions.

References

Henderson, D.R., I.M. Sheldon, and K.N. Thomas. "International Licensing of Foods and Beverages Makes Markets Truly Global," *FoodReview*, USDA, Economic Research Service, Vol. 17, No. 3, Sept.-Dec. 1994, pp. 7-12.

Malanoski, M.A. "U.S. Multinational Food Manufacturers Choose Production in Foreign Markets Over Exports," *FoodReview*, USDA, Economic Research Service, Vol. 17, No. 3, Sept.-Dec. 1994, pp. 13-17.

Ruppel, F.J., and J.M. Harris. "U.S. Trade Surplus in Processed Foods Expected To Continue," *FoodReview*, USDA, Economic Research Service, Vol. 18, No. 2, May-Aug. 1995, pp. 43-47.

USDA, Economic Research Service. *Globalization of the Processed Foods Market*, AER-742. D.R. Henderson, C.R. Handy, and S.A. Neff, eds. Sept. 1996. ■