**Globalization of the Processed Foods Market.** Edited by Dennis R. Henderson, Charles R. Handy, and Steven A. Neff. Food and Consumer Economics Division. Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 742.

# **Abstract**

International commerce in processed foods substantially exceeds the value of unprocessed agricultural commodities and is expanding more rapidly. International trade in processed foods has been the most rapidly growing portion of world food and agricultural trade during the past decade. Even more significant, however, are sales from foreign affiliates of food manufacturing, grocery wholesaling and retailing, and food service firms. Foreign affiliation is acquired through foreign direct investment in foreign plants and facilities. U.S. food manufacturers' sales through foreign affiliates were more than quadruple the value of processed food exports from the United States. Foreign food manufacturers' sales through U.S. affiliates were more than double the value of processed food exports to the United States. Patterns of global commerce in processed foods are influenced by public policies addressing transportation, communication, rules for regional and multinational trade, food product and process standards, the environment, and intellectual property.

**Keywords**: food and agricultural trade, foreign direct investment, global marketing stategy, international commerce, multinational firms, product standards, trade and investment policy

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# **Foreword**

The globalization of the U.S. economy has received prominent attention in recent years. In the food and agriculture sector, this attention has spilled over into a focus on trade in farm commodities. Less broadly recognized has been globalization in the processed foods market. Yet, this has paralleled trends in the economy as a whole and, in many ways, is both more extensive and more eclectic than international commodity trade. For example, about two-thirds of all international trade in the food and agricultural sector is comprised of processed foods. What is more, international commerce in processed foods takes many forms in addition to imports and exports. The most prevalent means by which processed foods reach overseas markets is through domestic firms that operate affiliated foreign processing and distribution facilities. The processed foods market reflects its global character in numerous other ways as well.

In this publication, patterns of international commerce in processed foods are described. The impacts of such commerce on U.S. and foreign consumers, agricultural producers, and firms and employees in the food-related industries are examined. The dominant factors that motivate international trade, the operation of foreign affiliates, and other international commercial practices in the processed food sector are identified. The leading firms that account for a significant share of international commerce in processed foods are discussed in terms of who they are, how they are organized internationally, and what they do in global markets.

Public policies that influence global commerce in processed foods are also examined. This includes national and international policies aimed specifically at the processed foods sector. Also included are the implications of broader policies, such as those dealing with economic stability, national infrastructure, the environment, and intellectual capital. Most people think of international trade as the policy arena of choice for influencing global commerce. Because international commerce in processed foods is the result of many more commercial activities than exporting and importing, a policy

focus limited to trade misses much of what is particularly relevant to the sector. Without the information provided in this publication, public policies may be enacted that will have unintended consequences on global commerce in the sector that are detrimental to the interests of both consumers and the food-related industries.

This publication provides a more complete understanding of patterns of global commerce in the processed foods sector, their causes and their consequences, to those people who influence the formation of public policies that affect such commerce. The purpose is to foster informed debate on the policy issues of the day in such a way that society at large gains the greatest benefits from global interaction in the markets for processed foods.

In the end, globalization is not a destination at which the processed foods industries will someday arrive. Rather, globalization is a process that may change directions, with many features assuming greater or less prominence through time. This report moves beyond anecdote. It details what has happened, how it has happened, why it has happened, why it matters, and to whom it matters. It is organized into two parts: Part I describes and analyzes what is, while Part II addresses related policy issues as a means of affecting what will be.

# **Executive Summary**

#### Size of Processed Food Sector

Processed foods constitute the largest product manufacturing and distribution sector in the U.S. economy, accounting for more than one-sixth of the nation's industrial activity. In 1994, the total value of domestic food product shipments was \$430 billion. By contrast, total farm cash marketing receipts from livestock and crops production was less than \$200 billion. Value-added by the food processing, wholesaling, retailing, and food service industries was \$372 billion, more than four times greater than the \$84.6 billion value-added in the farm sector.

But even more, the processed food sector is a major participant in the global economy. The United States accounts for about one-fourth of the industrialized world's total production of processed foods. Six of the largest ten, and 21 of the largest 50 food processing firms in the world are headquartered in the U.S. Through a combination of imports and exports of foods and food ingredients, foreign production by U.S. food firms, host production by foreign food firms, and other international commercial strategies, the U.S. processed foods market is truly global in scope. Indeed, such easily recognized U.S. food brands as *Kellogg's* and *Hellmann's* are so well received internationally that many consumers in other countries accept them as leading local brands. As well, such seemingly-American brands as *Pillsbury* and *Almond Joy* are owned by foreign firms.

#### **Processed Food Trade**

In terms of international trade, the processed foods sector surpasses agricultural commodities by a considerable margin. In 1993, the global value of international trade in processed foods and beverages, at \$256 billion, accounted for two-thirds of all trade in food and agricultural commodities. The annual value of U.S. exports of processed foods has exceeded bulk agricultural commodities since 1991. U.S. processed food exports reached

\$24.4 billion in 1993, well above the \$18.8 billion in bulk commodity exports. During the past quarter century, the nominal value of total world trade in processed foods has increased at an average annual rate of about 10.5 percent; U.S. imports have grown at a slightly slower 9-percent rate while export growth has averaged 13 percent.

# **Foreign Direct Investment**

The international character of the processed foods market is even more dramatically reflected in trans-national activities of food processing and distribution firms. Such activities are ubiquitous throughout the processed food sector. They are dominated by firms' operation of foreign affiliates, that is, processing and distribution facilities located in other countries. Generally known as foreign direct investment (FDI), in essence this is how many firms "export" their strategies for enhancing sales in their home market to markets abroad. In 1994, sales from foreign affiliates of U.S. processed food firms exceeded \$100 billion, more than four times the total value of U.S. exports of processed foods. Most of these sales are in foreign markets; only about 2 percent are shipped to the U.S. At the same time, American affiliates of foreign firms sold more than \$45 billion in processed foods in the U.S., exceeding twice the level of U.S. imports.

### **Impacts on Consumers and Business**

The global nature of the processed food market has important, and generally favorable, impacts on consumers and businesses in both the U.S. and other countries. Characterized by differentiated products and economies associated with size, scope, and scale of operations, the processed food market is different from the textbook case of comparative advantage in international trade. Indeed, a large share of international trade in processed foods is intra-industry, that is, a country simultaneously imports and exports similar goods. For example, U.S. imports and exports are nearly equal for products produced by the meat packing, baking, confectioneries, and preserved fruits and vegetables industries. Such two-way trade

simply would not occur in a textbook world of comparative advantage.

Thus, the impacts of international commerce in processed foods are different from those associated with international specialization and the theory of comparative advantage. The case is most clear for consumers. They benefit from the availability of a wider array of products and from greater rivalry among sellers in the marketplace: rivalry that encourages product innovation, production and distribution efficiency, and competitive prices. Reflecting *inter alia* competitive pressure from abroad, labor productivity in food processing, for example, is 30 percent greater in the U.S. than elsewhere.

Generalities are more difficult for the business side. While food processing and distribution firms, their employees and investors as a whole benefit from the increased volume of commerce associated with global markets, dislocations occur. Global competition means that those firms regardless of nationality that have the most effective product development, process, and marketing strategies succeed; others are forced to be equally clever or fall by the wayside.

# **Strategies to Access Foreign Markets**

Actual patterns of international commerce in processed foods are more vested in the marketing strategies of firms than in national endowments of natural resources. To be sure, a country's productivity of land, factories, transports, warehouses, and stores affects the ability of firms located therein to compete internationally, as does the relative stability of its economy and currency. But, much also depends upon the behavior of its firms. Their behavior is in part a product of environment, affected by things such as a nation's transportation and communications infrastructure, its stock of knowledge and public market information, and its policies that encourage, or protect firms from, rivalry in the domestic and international marketplace. But, it is also very much a product of initiative by the people who make up the firms: both their physical productivity in terms of such things as

units sold per hour of work, and their intellectual productivity in terms of such things as devising new products, developing more effective processing, merchandising, and delivery systems, and creating strong brands and trademarks.

While international trade and sales through affiliated foreign operations dominate global marketing activities of processed food firms, actual strategies in any given market situation are eclectic, reflecting a firm's unique capabilities. Firms actually use a wide variety of global market strategies including international product licensing, joint production and distribution ventures with foreign partners, international franchising, and contract production in addition to trade in goods and foreign direct investment. Often, even though in aggregate FDI prevails, firms use a number of different strategies both sequentially and simultaneously, the mix changing with a firm's experience and results, and with market conditions. It is sometimes alleged that firms use exports as a precursor to FDI, which in turn displaces trade. However, evidence of such a relationship has not been found. Rather, both FDI and trade, along with other strategies, go into the mix of global marketing. The balance appears to be continuously evolving as firms seek to maximize their unique marketing advantages.

Nonetheless, regional differences are evident. For example, processed food firms with headquarters in North America appear, on balance, to rely more heavily on sales from foreign affiliates than on trade compared to firms headquartered in other industrialized countries, particularly the European Union. Further, comparing U.S.-based firms with those based elsewhere, in general the former have historically been oriented less to international markets than to their home market. The difference, however, is narrowing.

## **Public Policies**

Both national and international policies can influence, but probably not predestine, actual commercial patterns. Some policies, such as those affecting a country's infrastructure, catch processed foods in their web but are driven by broader considerations. Others are aimed directly at influencing international commerce in processed foods;

for example, multilateral trade agreements and food product and process standards. Still others, including those addressing environmental issues and intellectual capital, have both general and sector-specific purposes.

# **Transportation and Communication**

National infrastructure policies affect the ability of a nation's firms to pursue global marketing strategies. For processed foods, particularly important linkages exist with the communications and transportation sectors. Technical innovations in both communications and transportation enhance efficiency in the production and distribution of processed foods, improve managerial control and responsiveness, and help identify and fulfill new commercial opportunities. In the U.S., policies that have reduced direct government control in these sectors and that have fostered evolution of competitive communications and transportation industries are tied directly to international commercial gains in processed foods. An international spread of deregulatory policy is expected to generate greater advantage for product trade than for foreign production (FDI).

# **International Trade Agreements**

International policies, such as multilateral trade agreements that reduce barriers to international trade, can reduce the cost of international commerce as effectively as technological advance in transportation or communications. Creation of the World Trade Organization (WTO) portends an expansion of global commerce not only by reducing national protections of domestic industries, but also by creating a binding procedure for resolving trade and investment disputes between countries. The North American Free Trade Agreement (NAFTA) launches an even tighter binding of the processed foods industries among the North American countries. Because these agreements focus more on policies to liberalize trade than on investment measures, they are expected to result in greater growth in processed food export and import than in sales from foreign affiliates. Particularly relevant to the future direction in FDI

is reaching multinational accord on national competition or industrial policies, for example, resolving differences in providing financial support and other protections for industries chosen to be "national champions."

# Standards and Regulations

With reductions in tariffs and quantitative trade barriers arising from multilateral agreements such as the WTO and NAFTA, technical standards and regulations in the processed foods industries are subject to more scrutiny. In the presence of rising demand from consumers for higher quality and food safety, standards and regulations must protect consumers without restricting the marketing of innovative products. Under the provisions of the new multilateral accords, standards and regulations can be challenged as unwarranted trade barriers if they cannot be shown to be based on sound science and appropriate risk assessment. Further, international standards organizations are emerging as a means to rationalize national differences. The extent to which rationalization results in harmonization of national differences to a single multilateral standard, or mutual recognition of equivalency, is likely to have strategic implications for global marketers of processed foods, with trade the likely beneficiary of harmonization.

#### **Environmental Policies**

Environmental policies generate concern that national differences alter patterns of international commerce in processed foods by imposing differential costs on firms located in countries with high environmental safeguards such as antipollution measures, or by restricting trade with such things as "ecolabeling" requirements (e.g., dolphin-safe labels on canned tuna). Multilateral accords are beginning to emerge in an attempt to achieve international harmonization of environmental regulations as part of broader trade liberalization measures. Even when environmental standards are harmonized toward the most stringent, because the additional costs in the processed food sector are a small share of total costs, this appears to have little overall impact in terms of limiting gains

associated with increased trade. Countries with low standards, however, gain substantially in environmental quality from harmonization.

# **Intellectual Capital**

Both national and international policies affect the creation of intellectual capital and the protection of intellectual property. Firm-specific advantages, major factors driving global commerce in processed foods, result from the creation of intellectual capital and the ability of a firm to protect that capital from being cheaply copied by rivals. National policies supporting basic education and research are fundamental to the creation of intellectual capital. To the extent that significant national differences exist, they have much to do with which countries' firms become more, or less, involved as originators of international commerce in processed foods. Public policies that protect a firm's right to commercially exploit unique advantages generated by intellectual activity have much to do with where a firm chooses to do business. Recent international agreements to mutually recognize patents, copyrights, and trade secrets will encourage greater global commerce. However, creating unassailable protections will chill the rivalry among firms that drives the globalization process.