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# U.S. Trade Surplus in Processed Foods Expected To Continue

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**T**he United States is among the world leaders in both exports and imports of processed foods and beverages. U.S. processed food firms buy and sell in a near trillion-dollar worldwide market for all goods. The appeal of U.S. brand names, influence of U.S. multinational firms abroad, and leading role played by the United States in global commerce suggest a major role for the United States in processed food trade for years to come.

In 1994, the United States exported \$25.8 billion worth of processed foods. Five industries have accounted for half of these exports in recent years. Most produce minimally processed products, such as fresh and frozen meats, frozen fish, soybean oil, and canned fruits and vegetables. The dominance of these industries reflects U.S. efficiency in field crops and meat and poultry production.

The fastest growing processed food and beverage exports over the past few years have been in industries with relatively low trade volumes. Many of these exports are highly processed, brand-name prod-

ucts, such as frozen bakery products, chewing gum, and soft drinks. Their growth reflects rising incomes, changing demographics, and the westernization of eating habits in many developing countries. These factors have led to increases in demand for U.S. foods and beverages.

## "Processed" Foods Cover a Wide Territory

This article covers exports and imports listed in the Standard Industrial Classification code 20 (known as SIC-20)—processed foods, beverages, and related products. SIC-20 is comprised of 48 food

processing industries. Products from SIC-20 industries are often referred to as "value-added"—meaning that some combination of labor, technology, and materials has been applied to raw commodity inputs, such as wheat and yeast, in order to transform them into products like breads or pastries. The processing may be minor, as in the case of canned fruits and vegetables, or may be quite extensive, as in the conversion of cocoa, sugar, milk, and nuts into candy bars.

Some processed foods are sold at a number of value-added levels. For example, beef sold "on hoof" is listed as a raw commodity and

## Processed Food Trade Concordance

The U.S. export and import statistics in this article are based on data collected by the U.S. Customs Service using the international Harmonized System (HS). The HS trade data include over 2,000 processed foods and beverages traded between the United States and more than 200 countries. The United States adopted the HS in 1989, so 1990 is the first full year of comparable data.

Researchers with USDA's Economic Research Service (ERS) have paired the 48 domestic food processing industries composing SIC-20 with their corresponding codes in the international HS. The

Standard Industrial Classification System (SIC) is a Federal classification system that assigns U.S. establishments or plants to groups based on their principal activity. The result is a self-contained reference for use in statistical and analytical work where exports and imports of individual products and industries must be jointly evaluated.

More details on these data sets and the pairing process can be found in *Processed Food Trade Concordance* (AH-707), by Walter B. Epps and J. Michael Harris, USDA, ERS, March 1995. Call toll-free 1-800-999-6779 for price and ordering information.

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would not be included in SIC-20. However, as beef moves through various distribution channels toward the consumer, it becomes a processed product—whether it is sold as carcass beef, as boxed beef, or as a shrink-wrapped steak in the grocer's display case. Many processed foods are brand-name products from well-known companies (such as Pillsbury or Hersheys). However, a number of processed food products reflect very little product differentiation between various suppliers (such as milk, soybean oil, or animal feed).

### Trade Surpluses Began in 1991

With exports exceeding imports for the first time, the U.S. processed food industry turned a corner in 1991, posting a net trade surplus of \$156 million (table 1). Previously, trade deficits in processed foods and beverages were standard, on the order of \$5 billion per year in the mid-1980's. Then, U.S. exports of processed foods more than doubled between 1985 and 1992, reducing those deficits during the late 1980's and finally reversing them in the early 1990's. Imports also grew, but at a slower pace, increasing only 37 percent during this same time period.

Eleven food processing industries generated \$1 billion trade surpluses

over the 5-year period of 1990-94 (table 2). (We report 5-year combined totals to more accurately reflect the rankings of U.S. food processing industries and trading partners for the entire 1990-94 period.) Four of these 11 industries were grain mill processors (wet corn milling, rice milling, prepared animal feeds, and flour and grain mill products), 2 were meat processors (meatpacking and poultry processing), and 2 were fats and oils manufacturers (soybean oil mills and animal and marine fats). Together, these eight industries reflect the strength of U.S. competitiveness in field crops and meat and poultry production. The two industries most responsible for the surplus in food products trade were soybean oil mills and meatpacking, with \$8.1 billion and \$7.9 billion trade surpluses, respectively, during 1990-94. Wet corn milling and poultry processing also averaged over \$1 billion per year in trade surpluses during that period.

Five industries averaged over \$1 billion per year in export sales between 1990 and 1994: meatpacking (including hides and skins), prepared and frozen fish (hereafter designated as "frozen fish"), soybean oil mills, wet corn milling, and poultry processing. Together, they accounted for half of total U.S. processed food exports during 1990-94. Meatpacking alone, at \$22.4 bil-

lion in export sales, accounted for 20 percent (table 3). Sixteen industries were responsible for over 80 percent of U.S. processed food exports.

Of the 11 food processing industries with billion-dollar trade surpluses during 1990-94, only 7 were also top-10 exporters. That is, three industries (frozen fish, canned fruits and vegetables, and the miscellaneous category) were among the largest export industries, but also were large importers relative to their export activity. In fact, the frozen fish industry was the largest contributor to the deficit in processed food trade despite being the second-largest export industry.

Five U.S. food processing industries averaged over \$1 billion per year in imports during 1990-94: frozen fish; meatpacking; canned fruits and vegetables; distilled and blended spirits; and wines, brandy, and brandy spirits. Together, these constituted 54 percent of total U.S. processed food imports during 1990-94, with frozen fish alone accounting for 22 percent of the U.S. total. The top 12 industries accounted for over 80 percent of all U.S. processed food imports.

### Smaller Industries Posted Higher Growth Rates

Among the 10 leading export industries, the largest export increases in the last few years were in poultry

Table 1  
Surplus in U.S. Processed Food Trade Every Year Since 1991

U.S. processed food trade	1990	1991	1992	1993	1994	5-year total, 1990-94
	<i>Million dollars</i>					
Exports	18,706	20,223	22,839	23,387	25,828	110,983
Imports	20,129	20,067	21,215	21,126	23,263	105,800
Trade balance	-1,422	156	1,623	2,261	2,565	5,183

processing, with a 75-percent increase in 1993/94 (combined years) over 1991/92, and the miscellaneous category with an 83-percent in-

crease. "Miscellaneous" industries include prepared foods and miscellaneous food specialties not elsewhere classified, and such diverse

products as leavening compounds, peanut butter, tea, spices, vinegar, and cider.

The largest growth, however, in both imports and exports of U.S. processed foods over the past few years came from industries with relatively low trade volumes. Six low-volume industries more than doubled their import levels between 1990/91 and 1993/94: ice cream and frozen desserts, frozen bakery products (except bread), blended and prepared flours, flour and grain mill products, animal and marine fats, and cottonseed oil. The largest of these six—animal and marine fats—ranked only 27th in the volume of U.S. imports among all 48 SIC-20 industries, with a combined total of \$529 million worth of imports during the 5-year period 1990-94.

Export volumes for seven industries more than doubled between 1990/91 and 1993/94: frozen bakery products, potato chips and snacks, chewing gum, frozen specialties, blended and prepared flours, soft drinks and carbonated water, and ice cream and frozen desserts (table 4). Again, the fastest growth occurred among the industries with smaller export volumes. The largest of these seven—soft drinks and carbonated water—ranked only 24th in total export volume during 1990-94, with just under \$1 billion in total export sales.

### Varied Destination and Source Countries

The United States exports processed foods and beverages to nearly every country in the world. Relatively few countries, however, constitute the bulk of the business. During 1990-94, the United States exported a total of \$111 billion in processed foods to 227 countries, including the 15 nations of the former Soviet Union.

Four countries imported an average of over \$1 billion worth of U.S. processed food products per year

Table 2

### Eleven Industries Generated Billion-Dollar Surpluses in U.S. Processed Food Trade

Industry	5-year total, 1990-94
	Million dollars
Soybean oil	8,100
Meatpacking	7,880
Wet corn milling	5,423
Poultry processing	5,233
Rice milling	3,379
Animal/marine fats and oils	2,653
Flavoring extracts and syrups	2,565
Prepared animal feed	2,085
Salted/roasted nuts and seeds	2,044
Dried fruits and vegetables	1,625
Flour and grain mill products	1,448

Table 3

### Leading U.S. Food Export and Import Industries by Trade Value

Industry	5-year total, 1990-94	Share of SIC-20 shipments	Cumulative share of SIC-20 shipments
	Million dollars		Percent
<b>U.S. exports:</b>			
Meatpacking	22,396	20.2	20.2
Prepared and frozen fish	12,945	11.7	31.9
Soybean oil	8,272	7.5	39.3
Wet corn milling	6,557	5.9	45.2
Poultry processing	5,379	4.8	50.1
Salted/roasted nuts and seeds	4,000	3.6	53.7
Canned fruits and vegetables	3,965	3.6	57.2
Rice milling	3,877	3.5	60.7
Other food preparations	3,659	3.3	64.0
Animal/marine fats and oils	3,182	2.9	66.9
<b>U.S. imports:</b>			
Prepared and frozen fish	23,778	22.5	22.5
Meatpacking	14,516	13.7	36.2
Canned fruits and vegetables	6,606	6.2	42.5
Distilled and blended spirits	6,334	6.0	48.5
Wines, brandy, brandy spirits	5,989	5.7	54.1
Processed fishery products	4,913	4.6	58.8
Malt beverages	4,693	4.4	63.2
Vegetable oil	4,198	4.0	67.2
Cane sugar	3,711	3.5	70.7
Other food preparations	3,545	3.4	74.0

during 1990-94: Japan, Canada, Mexico, and South Korea. These buyers accounted for 55 percent of total U.S. exports of processed foods and beverages during this period (table 5). Japan imported \$29.6 bil-

lion worth of processed food from the United States during 1990-94 and accounted for 27 percent of U.S. processed food exports. Nearly two-thirds of Japan's 1990-94 total imports of U.S. processed foods were

from two industries—\$10.2 billion worth of meatpacking and \$9.1 billion worth of frozen fish. Japan also imported large amounts of U.S. frozen fruits and vegetables, prepared feeds, and poultry.

Canada was the second-largest destination for U.S. exports, spending \$16.7 billion for processed food imports from the United States during 1990-94. Meatpacking, frozen fish, canned fruits and vegetables, and the miscellaneous category were the leading U.S. export industries for Canadian markets. Each of these industries generated over \$1 billion worth of U.S. exports to Canada during 1990-94. However, these four industries constituted only 35 percent of total U.S. processed food exports to Canada. The remainder was a large and diverse mix of products, with an additional 31 industries shipping at least \$100 million in processed food exports to Canada during 1990-94.

Ten countries accounted for more than 70 percent of total U.S. processed food exports (table 5). Three of these importers were newly industrialized countries in East Asia: South Korea, Taiwan, and Hong Kong.

U.S. imports of processed foods are more widely sourced. The top 10 suppliers accounted for only 58 percent of total U.S. imports of processed foods (table 5). These suppliers included three developing countries: Thailand, Mexico, and Brazil. Five countries averaged more than \$1 billion per year in processed food exports to the United States during 1990-94: Canada, Thailand, Mexico, Australia, and France.

Although by far the leading exporter of processed foods to the United States, Canada commanded only a 19-percent share of the market during 1990-94. The dominant U.S. imports from Canada were from the same two industries that led U.S. exports to Canada: meatpacking and frozen fish. These two industries accounted for 44 percent

Table 4  
**Foreign Sales More Than Doubled in the Past Few Years for the Fastest Growing U.S. Processed Food Exports**

Industry	Combined calendar years	
	1990/91	1993/94
<i>Million dollars</i>		
Frozen bakery products	32	92
Potato chips and snacks	154	427
Chewing gum	46	122
Frozen specialties	42	111
Blended and prepared flours	99	215
Soft drinks and carbonated water	240	518
Ice cream and frozen desserts	80	164

Table 5  
**Japan and Canada Are the Largest Markets for U.S. Processed Food Exports**

Country	5-year total, 1990-94	Share of SIC-20 shipments	Cumulative share of SIC-20 shipments
<b>U.S. exports:</b>			
Japan	29,584	26.7	26.7
Canada	16,693	15.0	41.7
Mexico	9,011	8.1	49.8
South Korea	6,013	5.4	55.2
The Netherlands	3,915	3.5	58.8
United Kingdom	3,006	2.7	61.5
Germany	2,593	2.3	63.8
Taiwan	2,492	2.2	66.1
Hong Kong	2,461	2.2	68.3
France	2,145	1.9	70.2
<b>U.S. imports:</b>			
Canada	19,626	18.6	18.6
Thailand	6,515	6.2	24.7
Mexico	5,507	5.2	29.9
Australia	5,309	5.0	34.9
France	5,040	4.8	39.7
Brazil	4,318	4.1	43.8
New Zealand	4,131	3.9	47.7
Italy	4,123	3.9	51.6
United Kingdom	3,413	3.2	54.8
The Netherlands	3,081	2.9	57.7

of U.S. processed food imports from Canada. For example, in 1994 the United States imported \$377 million worth of beef from Canada (primarily to serve west coast markets) while at the same time exporting \$365 million worth of beef to Canada (primarily to serve the eastern half of Canada).

Thailand, the second-largest import source for U.S. processed foods, attained only a 6-percent share of the U.S. import market. Prepared and frozen fish and canned and cured fish made up 70 percent of U.S. processed food imports from Thailand. Over half of U.S. imports of Mexican processed food products consisted of frozen fish, frozen fruits and vegetables, and malt beverages. Meat products accounted for 74 percent of U.S. imports of processed food from Australia, while wine, brandy, and brandy spirits accounted for 65 percent of U.S. processed food imports from France.

### Developing Countries, Growing Markets

Six countries, among them four East Asian nations, were responsible for 70 percent of the increase in U.S. processed food exports between 1990 and 1994. All four of these Asian countries are growing markets, as are many of their "smaller" neighbors (such as Thailand and Singapore). A large portion of increased U.S. exports to Canada and Mexico can be attributed to recent reductions in trade barriers between the United States and these two countries.

A number of the East Asian countries have major import barriers in place for certain products, which, if removed, could substantially increase U.S. exports there. For example, U.S. beef exports to South Korea

are restricted because of import quotas and high tariffs.

Many of the fastest growing destinations for U.S. processed food exports are small, developing countries. U.S. export data for these countries may include some U.S. food aid in addition to commercial sales. However, food aid accounts for less than 2 percent of processed food exports. Among those nations importing at least \$1 million worth of U.S. processed foods in 1990/91, 12 more than doubled their purchases by 1993/94. Countries with the largest percentage increases were: China, Hungary, Argentina, the Sudan, Poland, Tunisia, Colombia, Guyana, Paraguay, Kuwait, Yemen, and Costa Rica. China's imports of U.S. processed foods swelled 473 percent, from \$63.3 million in 1990/91 to \$362.7 million in 1993/94.

### Outlook for U.S. Processed Food Exports

The recent trends in U.S. trade in processed foods will likely continue into the near future. The processed food trade surplus that originated in 1991 has continued to grow every year. Exports have exhibited strong growth in the past decade, particularly in a number of food processing industries with historically smaller export levels. Import growth has been at a much slower rate.

Although the industrialized countries of Western Europe have long served as major sources and destinations for U.S. processed foods and beverages, trade between the United States and Western Europe has not grown much in recent years. Thus, the share of U.S. exports going to Western Europe is expected to slowly decline.

Trade in value-added products is generally more sensitive to changes in income levels, changes in demographics, and westernization of diets in importing countries than is trade in raw commodities. As incomes have increased in developing countries, these countries (particularly the newly industrialized countries of East Asia) have become the fastest growing destinations for U.S. processed food exports. Income growth is crucial in order to increase U.S. processed food exports to the more highly populated, lower income countries like China, Vietnam, Indonesia, and India.

Since the signing of major trade agreements, U.S. exports of processed food and beverages to Mexico and Canada have increased. These trends will likely continue, even though 1995 exports to Mexico are down temporarily due to the devaluation of the peso. Further negotiations on trade agreements with other Western Hemisphere countries—notably Chile, Costa Rica, Brazil, Argentina, Uruguay, and Paraguay—could increase U.S. exports to Latin America.

U.S. companies are investing in continued future growth of U.S. processed food and beverage sales. Many U.S. firms are directly investing in overseas processed food plants. However, such investment has not diminished their export levels. Leading U.S. multinational food processors are clearly expanding U.S. exports, even as they increase their investments in foreign food processing facilities. A sample of leading U.S. food processors shows that sales from their foreign plants rose 56 percent between 1988 and 1993, while exports from their U.S. plants grew even faster—143 percent. ■