Global Developments Affecting the U.S. Food Marketing Sector

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The marketing of food is going international. Around the world, food processors, wholesalers, and retailers, as well as foodservice firms, are looking to foreign nations to expand their markets. Growing interdependence presents new profit opportunities for food firms, especially those who can effectively transfer existing competitive advantages to new markets. But growing trade and increased foreign direct investment links may also lead to increased competition in domestic markets and an erosion of existing competitive advantages held by domestic firms and employees. In this competitive environment, firms of all sizes must develop global sourcing and marketing strategies. New technology in plant and animal breeding, ingredients, processing equipment, packaging, and distribution must be sourced from around the world and adapted to individual situations.

The rapid internationalization of our food and agribusiness economy is forcing renewed attention on food policy and the rules affecting the players in the global market place. These rule changes include the current GATT negotiations to reduce tariff and non-tariff trade barriers, bilateral trade negotiations, product standards, and a variety of food safety and labeling regulations. A major food policy issue is how to avoid letting legitimate concerns for food safety from becoming an excuse for erecting new barriers to trade. Thus the harmonization of food standards and the concept of mutual recognition of food standards by countries within trading blocs will continue to be major food policy issues.

In this presentation, I will discuss: (1) The relative size of the U.S. food processing industries and how well U.S. firms are positioned to compete internationally; (2) the relative roles of trade versus foreign direct investment in accessing foreign markets; and (3) the characteristics of foreign-based versus U.S.-based multinational food processors.

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Relative Size of U.S. Food Processing

The food processing industries are the largest manufacturing sector in the U.S. economy, accounting for approximately 14 percent of total U.S. manufacturing output (Food Marketing Review, forthcoming). Food processing shipments have increased steadily in the last decade, from $330 billion in 1987 to $404 billion in 1992 and $430 billion in 1994. The number of food processing establishments peaked at 28,193 in 1972, and had fallen to 20,583 by 1987. This decline seems to have halted, however. By 1992, the number of establishments had increased slightly, to 20,792. There has also been a slow long run decline in the number of employees in the U.S. food processing industry -- from 1.75 million in 1972 to 1.64 million in 1982. Since 1982, the number of employees has remained virtually static, with only small year-to-year fluctuations.

There are no data available on the total value of food processing shipments world-wide. However, the Organization for Economic Co-operation and Development (OECD) provides a Structural Analysis (STAN) industrial database. This is an internationally comparable time series which currently covers 20 countries (19 OECD countries plus Korea) for all manufacturing industries. Data for the food and beverage industry (reasonably comparable to the U.S. food processing industry) is consistently defined across all countries.

In 1992, the gross output of processed food for all 20 countries totaled $1.5 trillion (Table 1). Output from the U.S. food processing industry (adjusted for international consistency) was valued at $384 billion, accounting for 26 percent of the OECD-plus-Korea (OECDK) total across all

Table 1. U.S. and OECD plus Korea Food Processing Sectors, 1992.

Region/Country	Gross Output (Shipments)	Share of Total Manufacturing	Total Employment	Gross Output per Employee
	($ billion)	(percent)	($1,000)	($1,000)
OECD plus Korea	1,502	13.5	8,199	183.2
United States	384	13.5	1,615	237.7
Japan	281	9.8	1,772	158.8
Germany	155	11.3	841	184.0
France	118	16.7	561	210.1
United Kingdom	93	16.3	559	165.6
Canada	39	14.8	223	177.1
Australia	26	20.8	188	137.3

Source: ERS tabulation of OECD data.

countries. Japan had the second largest food processing sector with shipments of $281 billion, followed by Germany, France, and the United Kingdom at $155 billion, $118 billion, and $93 billion, respectively. The U.S. food processing industry accounted for 13.5 percent of total U.S. manufacturing output, the same as the average for all OECDK countries. Food processing's share of total manufacturing output ranged from a high of 33.7 percent in New Zealand to a low of 9.8 percent in Japan.

Food processing plants on average are larger in the United States than in other OECDK countries, and are also more capital intensive. Although the U.S. share of OECDK food processing output in 1992 was 26 percent, its share of food processing employment was only 20 percent. As a result, labor productivity (output divided by employment) in the U.S. is approximately 30 percent greater than the average for all OECDK countries. Labor productivity in the U.S. food processing industry was approximately $238,000 per person in 1992 compared to $183,000 per person across all OECDK countries. Average labor productivity in the U.S. food processing industry was much higher than in most of the other major food processing countries: France ($210,000), Germany ($184,000), United Kingdom ($166,000), Japan ($159,000) and Australia ($137,000). Because these numbers are averages that reflect an average size and product mix of food processing plants in each country, they present a slightly distorted picture of worldwide competitiveness. If we consider only the leading food processing firms in each country, we find that these firms have access to the same technology regardless where their plants are located. For example, H.J. Heinz reported that, "We're benchmarking ourselves against international standards of productivity. We have to get the same capacity and the same performance world-wide as the best of the best get." In its Australian food processing operations where efficiency levels were below international standards, Heinz said it was cutting its work force by 20 percent.

U.S. firms dominate the list of the world's 50 largest food processing firms (Table 2). In 1993, the United States accounted for six of the world's ten largest food processing firms and 21 of the 50 largest firms. The United Kingdom and Japan are second on this list, each with ten firms listed among the top 50 food processing firms. Only two of the top 50 firms were headquartered outside the United States, Europe, or Japan -- Seagrams in Canada and Foster Brewing in Australia. Turnover among the top 50 firms is moderate. Seven firms that were on the 1989 list were not on the 1993 list the 50 largest food manufacturers.

In summary, the United States is a dominant player in international processed food markets. It is near or at the top in average firm size, labor productivity, total production, and international trade.

Table 2. World's Largest Food Processing Firms, 1993

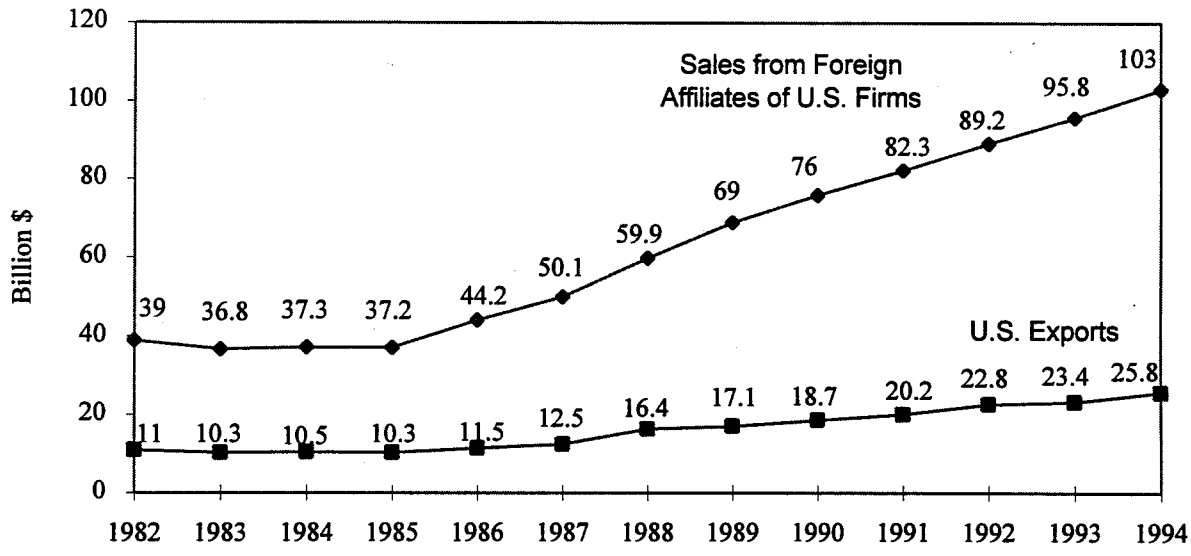
Company	Headquarters	Processed Food Sales	Total Company Sales
		------(billion dollars)------	
1. Nestle S.A.	SWITZERLAND	36.3	39.1
2. Philip Morris/Kraft Foods	USA	33.8	50.6
3. Unilever	UK/NETHERLANDS	21.6	41.9
4. ConAgra	USA	18.7	23.5
5. Cargill	USA	16.7	47.1
6. Pepsi Co	USA	15.7	25.0
7. Coca Cola	USA	13.9	14.0
8. Danone S.A.	FRANCE	12.3	12.3
9. Kirin Brewery	JAPAN	12.1	12.1
10. IBP, Inc.	USA	11.2	11.7
11. Mars, Inc.	USA	11.1	12.0
12. Anheuser-Busch	USA	10.8	11.5
13. Montedison/Feruzzi/Eridania	ITALY	9.9	12.3
14. Grand Metropolitan	UK	9.9	11.2
15. Archer Daniels Midland Co.	USA	8.9	11.4
16. Sara Lee	USA	7.6	15.5
17. Allied Domecq Plc	UK	7.2	7.2
18. RJR Nabisco	USA	7.0	15.1
19. Guinness Plc	UK	7.0	7.0
20. H.J. Heinz	USA	6.8	7.0
21. Asahi Breweries	JAPAN	6.8	6.8
22. CPC International	USA	6.7	6.7
23. Dalgety	UK	6.7	6.7
24. Campbell Soup	USA	6.6	6.6
25. Bass Plc	UK	6.6	--
26. Suntory Ltd.	JAPAN	6.6	6.6
27. Associated British Foods Plc	UK	6.5	6.5
28. Kellogg Company	USA	6.3	6.3
29. Hillsdown Plc	UK	5.8	6.0
30. Quaker Oats	USA	5.7	5.7
31. General Mills	USA	5.6	8.5
32. Tate & Lyle Plc	UK	5.6	5.6
33. Cadbury Schweppes	UK	5.6	5.6
34. Coca Cola Enterprises	USA	5.5	5.5
35. Seagram	CANADA	5.2	5.2
36. Sapporo Breweries Ltd.	JAPAN	5.1	5.1
37. Borden, Inc.	USA	4.8	6.7
38. Nippon Meat Packers	JAPAN	4.8	4.8
39. Yamazaki Baking	JAPAN	4.8	4.8
40. Tyson Foods Inc.	USA	4.6	4.7
41. Heineken	NETHERLANDS	4.6	4.6
42. United Biscuits	UK	4.5	4.5
43. Fosters Brewing Group LTD	AUSTRALIA	4.4	4.4
44. Ajinomoto Co., Inc.	JAPAN	4.3	5.2
45. Snow Brand Milk	JAPAN	4.3	4.8
46. LVMH Moet Hennessy	FRANCE	4.2	4.2
47. Besnier S.A.	FRANCE	4.1	4.1
48. Itoham Foods Inc.	JAPAN	3.9	3.9
49. Meiji Milk Products	JAPAN	3.9	3.9
50. Hershey Foods Corp.	USA	3.5	3.5

Relative Size of FDI and Exports in Food Processing

Exports of processed food have increased rapidly since the mid-1980's, but they still account for only six percent of the output of the U.S. food processing sector. In addition to exporting, U.S. food processing firms access foreign markets through a number of other avenues, including licensing agreements, partnerships, subsidiaries, and joint ventures. U.S. firms also invest directly (both physically and financially) in production facilities in other countries. Likewise, foreign firms invest in U.S. food processing facilities as an alternative to exporting to the United States. This latter means of access is known as foreign direct investment (FDI). U.S. firms investing in production facilities in other countries is known as outbound FDI, while foreign firms investing in U.S. facilities is known as inbound FDI.

Most large food manufacturers rely much more heavily on foreign direct investment than on exports from their home country to access foreign markets. In 1993, the latest year in which industry-level data is available from the Bureau of Economics Analysis, 64 U.S. multinational firms held at least 10 percent equity in 762 food manufacturing affiliates in foreign countries. Figure 1 shows the relative sales volume of U.S. owned food manufacturing affiliates abroad compared with the value of total processed food exports from the United States. Foreign affiliate sales have long exceeded the value of U.S. exports, but since 1985, the gap was widened. In 1982, sales from U.S. affiliates in foreign countries at $39 billion were 3.5 times larger than U.S. exports of $11 billion. Neither FDI nor exports grew in the early 1980s. Since then both have recorded uninterrupted growth. From 1985 to 1993, sales from U.S. affiliates abroad grew 157 percent to $95.8 billion while U.S. processed food exports increased 127 percent to $23.4 billion. By 1994, sales from foreign affiliates are estimated to have reached $103 billion -- 4 times larger than U.S. exports of $25.8 billion.

Figure 1. U.S. Exports and Foreign Affiliate Sales of Processed Food.



Patterns and Trends in U.S. Processed Food Trade[1]

The U.S. processed food industry turned a corner in 1991 with its first SIC-20 (Food and Kindred products) trade surplus (table 3). Deficits on the order of $5 billion in the mid-1980s had been reduced to $2 billion by the end of the decade. These decreasing deficits were being fueled mostly by rising export levels, which increased 97 percent between 1985 and 1991. Imports were also growing, but at a much slower pace, increasing only 26 percent during this same time period. The group most responsible for the deficit turnaround was SIC-201 (meat products), which went from a small $114 million deficit in 1985 to a substantial $2 billion surplus in 1991. Other major contributors to the positive trade balance included SIC-204 (grain mill products) and SIC-207 (fats and oils), which averaged $2.4 and $1.7 billion trade surpluses, respectively, between 1985 and 1991.

The leading three-digit export industry is meat products (SIC-201). With nearly $7 billion in exports in 1994 (see figure 2), meat products constituted 26.5 percent of the total value of all SIC-20 exports. Other leading export industries included the miscellaneous category (SIC-209), with $4.5 billion, and grain mill products (SIC-204), with $3.7 billion in 1994 exports. At the four-digit level, five industries -- meat products, fresh seafood, wet corn milling, soybean oil, and poultry products -- each averaged over one billion dollars per year in export earnings between 1990 and 1994. Together they accounted for just over half (50.1 percent) of total U.S. exports of processed foods and beverages. Meat packing alone, at $22.4 billion, accounted for 20.2 percent. The four-digit industries that realized the largest growth rates over the past few years were the lower trade volume industries. Those which doubled their exports in combined calendar years 1993-1994 as compared to their combined CYs 1990-1991 totals included frozen bakery products, potato chips and snacks, chewing gum, frozen specialties, flour mixes and dough, soft drinks and carbonated water, and ice cream and frozen desserts, with fluid milk falling just short of the mark.

On the import side, the leading three-digit industry is the miscellaneous category (SIC-209), with over $7.9 billion in 1994 imports (figure 3), accounting for over one-third of the total 1994 U.S. processed food imports. Other leading import groups include beverages (SIC-208) and meat products (SIC-201), with $4.1 and $3.0 billion in imports in 1994, respectively. There were five four-digit industries that imported an average of one billion dollars or more during 1990-94: fresh and frozen fish; meat packing; canned fruits and vegetables; distilled and blended spirits; and wines and brandy. Together these five constituted 54 percent of total U.S. processed food imports in 1994, with fresh fish alone accounting for 22.5 percent of the U.S. total. Lower trade volume industries were also the fastest growing on the import side. Those which more than doubled their imports during 1993-94 over 1990-91 included ice cream and frozen desserts; frozen bakery products; flour mixes and doughs; flour and grain mill products; animal and marine fats and oils; and cottonseed oil.

Table 3. U.S. Processed Foods Trade, 1990-1994.

	1990	1991	1992	1993	1994	1990-94
	(million dollars)					
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

[1] Material in this section prepared by Fred Ruppel, ERS.

Figure 2. U.S. Processed Food Exports (SIC-20), 1985-1994.

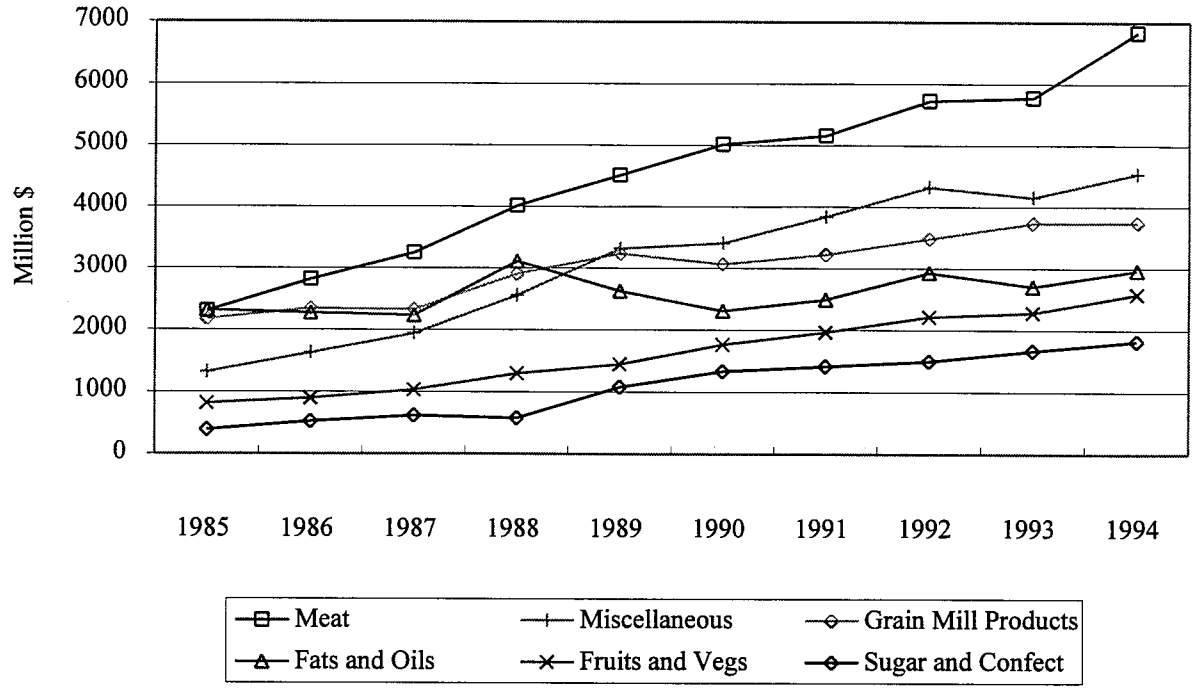
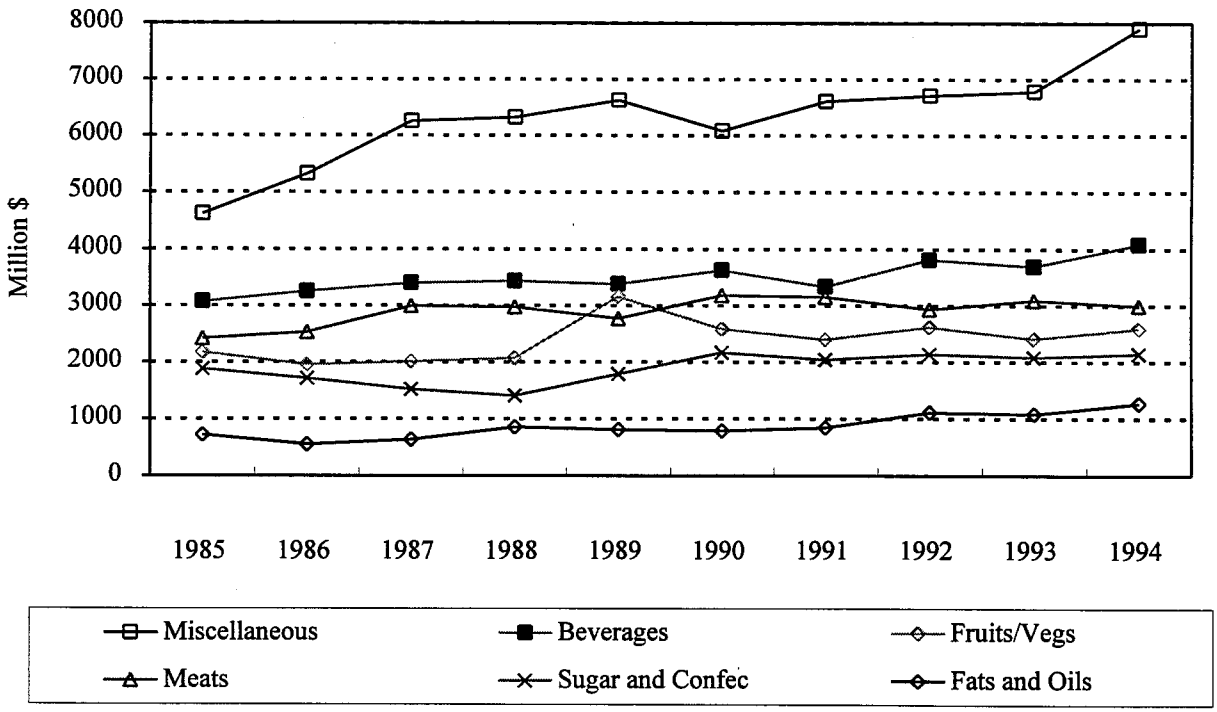


Figure 3. U.S. Processed Food Imports (SIC-20), 1985-1994.



The United States exports processed foods and beverages to nearly every country in the world. However, relatively few countries constitute the bulk of the business. Four countries averaged more than one billion dollars per year in processed food imports from the United States: Japan, Canada, Mexico, and South Korea (table 4). These four accounted for 55 percent of total U.S. exports of processed foods and beverages during this period. Japan, at $29.6 billion, imported 26.7 percent of all U.S. SIC-20 exports. Nearly two-thirds of Japan's 1990-94 imports of U.S. processed foods were from two industries, meat packing at $10.2 billion and frozen fish at $9.1 billion. Canada, at $16.7 billion, was the second leading importer of U.S. processed foods. Like Japan, meat packing and frozen and prepared fish, at $2.4 billion and $1.3 billion, respectively, were the leading export industries for Canadian markets. The top ten countries accounted for more than 70 percent of total U.S. processed food exports. Three of the top ten importing countries were newly industrialized countries from East Asia: South Korea, Taiwan, and Hong Kong.

Many of the fastest growing destinations for U.S. processed food exports are smaller, less developed countries. Among all nations which had at least one million dollars in imports from the United States in combined calendar years 1990 and 1991, there were fifteen that more than doubled their imports during 1993-1994 over their 1990-1991 totals. In order of percent increases, these countries were: Albania, China, Somalia, Hungary, Argentina, Sudan, Poland, Tunisia, Kenya, Colombia, Guyana, Paraguay, Kuwait, Yemen, and Costa Rica. Albania went from $2.9 million in 1990-91 imports to $23.1 million in 1993-94, a 692 percent increase, while China's U.S. imports increased 473 percent, from $63.3 million in 1990-91 to 362.7 million in 1993-94.

Table 4. Leading Destination and Source Countries For U.S. Processed Food Trade.

Country	90-94 Value	U.S. Exports SIC-20	Cumulative
	($1,000)	----------(percent)----------	
Japan	29,584,370	26.7	26.7
Canada	16,693,323	15.0	41.7
Mexico	9,010,501	8.1	49.8
South Korea	6,013,155	5.4	55.2
Netherlands	3,914,617	3.5	58.8
United Kingdom	3,006,454	2.7	61.5
Germany	2,593,476	2.3	63.8
Taiwan	2,491,572	2.2	66.1
Hong Kong	2,461,293	2.2	68.3
France	2,145,282	1.9	70.2

Country	90-94 Value	U.S. Imports SIC-20	Cumulative
	($1,000)	----------(percent)----------	
Canada	19,626,137	18.6	18.6
Thailand	6,514,546	6.2	24.7
Mexico	5,507,421	5.2	29.9
Australia	5,309,045	5.0	34.9
France	5,039,986	4.8	39.7
Brazil	4,317,548	4.1	43.8
New Zealand	4,130,905	3.9	47.7
Italy	4,122,940	3.9	51.6
United Kingdom	3,412,711	3.2	54.8
Netherlands	3,081,361	2.9	57.7

U.S. imports of processed foods are much more widely sourced. Canada, by far the leading exporter of SIC-20 goods to the United States, commanded a 18.6 percent market share during 1990-1994, but Thailand, the second largest import source for U.S. processed foods, had only a 6.2 percent share. The top ten exporters constituted only 58 percent of the U.S. import market. Three lesser developed countries were among the ten leading U.S. import sources (Thailand, Mexico, and Brazil). Five countries averaged $1 billion per year in processed food exports to the United States during 1990-94: Canada, Thailand, Mexico, Australia, and France.

Patterns and Trends in FDI

Tables 5 and 6 give an overview of the relative size of outward and inward FDI for the entire food processing sector. Sales from outward FDI has remained slightly higher than sales from inward FDI throughout the 1982-93 period. Sales from all U.S. food marketing affiliates abroad totaled $132.5 billion in 1993, while sales from foreign-owned food marketing affiliates in the U.S. were $124.3 billion.

The composition of outward versus inward FDI varies widely by type of affiliate. Food manufacturing affiliates account for 72 percent of outward FDI in food marketing abroad, but accounts for a much smaller 37 percent of total inward FDI in the U.S. food marketing sector. For the food retailing industry, just the opposite is true. Sales from U.S. food retailing affiliates abroad account for just 9 percent of total outward FDI, while U.S. food retailing affiliates of foreign firms account for 42 percent of total inward FDI.

Table 5. Sales by U.S.-Owned Food Marketing Affiliates Abroad.

Sector	1982	1987	1992	1993	Share of Total
	---------- (million dollars)----------				(percent)
Food Manufacturing	$39,023	$50,067	$89,159	$95,782	72.3
Food Wholesaling	6,172	9,206	14,388	15,783	11.9
Retail foodstores				11,930	9.0
Eating & drinking places	8,691	9,674	21,169	9,007	6.8
Total, all food marketing	53,886	68,947	124,716	132,502	100.0

Source: Dept. of Commerce, BEA.

Table 6. Foreign Direct Investment in the U.S. Food Marketing System: Sales of U.S. Affiliates of Foreign Firms.

Sector	1982	1987	1992	1993	Share of Total
	----------(million dollars)----------				(percent)
Food Manufacturing	$14,847	$22,862	$46,799	$45,765	36.8
Food Wholesaling	7,039	13,953	18,984	21,734	17.5
Retail foodstores		24,312	48,159	51,537	41.5
Eating & drinking places	18,758	498	4,904	5,236	4.2
Total, all food marketing	40,644	61,625	118,846	124,272	100.0

Source: Dept. of Commerce, BEA.

Location of Affiliates: The destination of U.S. foreign direct investment has been concentrated in developed countries (table 7). In 1993, European countries accounted for $54.4 billion or 57 percent of total U.S. affiliate sales abroad. Within Europe, the United Kingdom is by far the largest recipient of U.S. FDI followed by Germany, Netherlands, and France. Adding Canada and Japan to the European countries brings these countries' share of U.S. affiliate sales to about 73 percent. U.S. affiliate sales grew much faster in Europe (187 percent) than in either Canada (107 percent) or Japan (105 percent) during 1982-93. Sales from U.S. affiliates declined in both South- and Central America from 1982 to 1987, but have grown rapidly since. From 1987 to 1993, sales from U.S. affiliates in South America doubled and sales from U.S. affiliates in Mexico increased 282 percent.

Table 7. Sales by U.S.-Owned Food Processing Affiliates Abroad, 1982-93.

Country/Region	1982	1987	1992	1993	1982-93
	----------(million dollars)----------				(percentage change)
Total (all countries)	$39,023	$50,067	$89,159	$95,782	145.4
European countries	18,974	29,044	53,752	54,371	186.6
United Kingdom	5,696	7,124	12,214	11,579	103.3
Canada	5,258	5,522	NA[1]	10,891	107.1
Asia and Pacific	5,432	8,559	13,712	14,411	165.3
Japan	2,363	4,442	4,055	4,844	105.0
South America	5,133	3,911	6,794	8,033	56.5
Argentina	630	758	2,040	NA	NA
Brazil	2,535	1,869	2,874	3,431	35.3
Central America	2,951	2,176	5,163	NA	NA
Mexico	2,556	1,596	4,460	6,093	138.4

[1] Withheld by BEA to avoid disclosure.
Source: Dept. of Commerce, BEA.

Destination of Affiliate Sales: In general, U.S. food processing MNCs do not establish affiliates abroad for the primary purpose of exporting product back to the U.S. market. Of total U.S. affiliate sales abroad, 78 percent remained in the host country (local sales) while 22 percent was exported to other countries. But only 10 percent ($1,726 million) was exported back to the U.S.--up from 7 percent in 1992. By comparison, U.S. non-food manufacturing affiliates abroad exported an average of 14 percent of their total shipments back to the U.S.

Proximity of affiliates to the U.S. plays a large role in explaining their export behavior. Even though Canada accounts for only 11 percent of U.S. affiliate sales worldwide, Canada accounts for 40 percent of affiliate exports back to the U.S. Likewise, Latin America accounts for 16 percent of U.S. affiliate sales, but a much higher 27 percent of affiliate exports to the U.S. Conversely, U.S. affiliates in Europe have 60 percent of all affiliate sales, but their share of affiliate exports to the U.S. is only 25 percent.

Dynamics of FDI and Trade

Firm-level data compiled by ERS provide the basis from a more detailed analysis of FDI and trade behavior for a sample of 39 large U.S. food processing multinational cooperations. In 1993, these 39 MNCs accounted for 52 percent of the total U.S. food processing industry output. Their share of foreign affiliate sales was much higher at 66 percent, while their share of U.S. processed food exports was 32 percent.

Table 8 shows that foreign affiliate sales for these firms increased 56.5 percent from $40.9 billion in 1988 to $64 billion in 1993. In addition,

Table 8. Growth in FDI and Exports for 39 U.S. Food Multinational Firms, 1988-93.

	---1988---		---1993---	
	Billion dollars	% of sales	Billion dollars	% of sales
Sales from foreign affiliates	$40.9	26.4%	$64.0	31.0%
Exports from U.S. operations	3.0	2.6	7.3	5.1

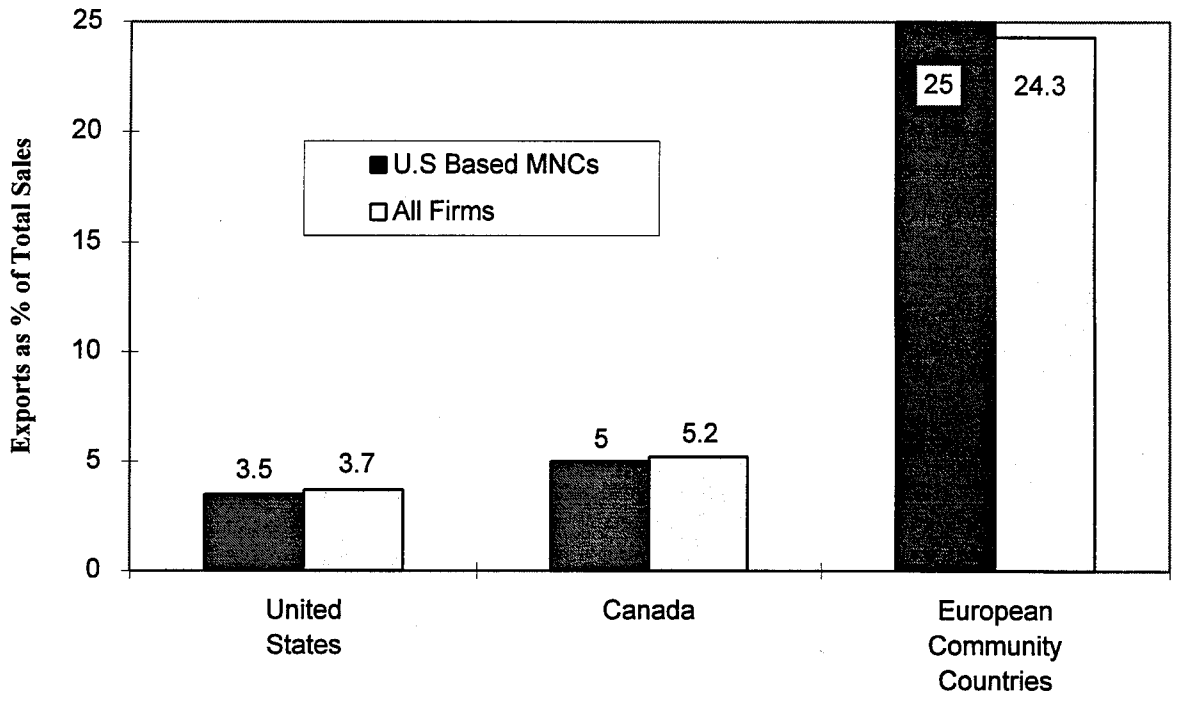
Source: ERS firm-level data base.

FDI propensity rose significantly. Affiliates' share of total company world-wide food sales increased from 26.4 percent of sales to 31 percent. While growth in FDI propensity was expected, somewhat surprising was the rate of export growth for these U.S. multinational food firms.

Exports grew a robust 143 percent from a relatively low base of $3 billion in 1988 to $7.3 billion in 1993. Exports increased from 2.6 percent of these firms' U.S. food sales to 5.1 percent in 1993. With exports increasing 143 percent during 1988-93 compared to FDI growth of 56 percent, the FDI-to-exports ratio fell from 13.6 to 8.8. Thus, these leading U.S. food processors are clearly expanding their export markets even as they increase their FDI sales. On balance, FDI and exporting from the home country have a complementary relationship.

Export behavior appears to be more a function of the geographic location of production facilities than the nationality of the firm. U.S. Commerce Department data show, for example, that foreign affiliates of U.S. food processing firms are more export-oriented than are their U.S. operations. On average, U.S. parent firms export about 4 percent of the output from their home country facilities whereas exports average 19 percent of the output of their foreign affiliates. Further, export propensities (exports as a share of total shipments) vary widely among foreign affiliates of U.S. firms. Those located in Canada, for example, export an average of about 5 percent of their output, paralleling all Canadian food processors, while the export propensities of those located in the countries of the European Union register export propensities averaging 25 percent, again similar to the export performance of all EU-located food processors (Figure 4).

Figure 4. 1989 Exports of U.S. Multinational Food Manufacturers and Their Foreign Affiliates.



Conclusions

U.S. food firms are well positioned to compete in the global food system. Food processing plants in the U.S. are, on average, larger and more efficient than plants located in other countries.

The U.S. leads the world in trade in processed food products. U.S. exports have grown much faster than imports since the mid-1980's. Although "processed commodities" such as fresh meat, fish, and grain mill products account for the bulk of U.S. exports, the fastest growing exports tend to come from lower export-volume industries such as bakery products and snacks. Likewise, many of our fastest growing export destinations are the emerging markets of less developed countries.

Multinational firms demonstrate a preference for serving foreign markets through foreign direct investment strategies rather than exporting from home-country facilities. This preference is not country-specific, but is demonstrated with more-or-less similar intensity by firms regardless of their home-country affiliation. Empirical evidence demonstrates that exports, FDI, and other global strategies such as licensing and joint ventures tend to be more complementary than competitive.

As Denny Henderson and I concluded in a recent article, great progress has been made toward a truly integrated international food marketing system. But, many nationalistic goals still restrict international commerce. This need not be the case. Continuous and effective trade negotiations, bold agribusiness leadership, and sustained political leaderships that recognizes the benefits associated with liberalized trade and investment policies will be required to realize a truly global system of food marketing.