

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search. 

## Help ensure our sustainability. Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

# International Profile of U.S. Food Processors 

by<br>Charles R. Handy<br>Economic Research Service<br>U.S. Department of Agriculture<br>Naaman Seigle<br>Economic Research Service<br>U.S. Department of Agriculture

The rapid internationalization of our food economy is forcing renewed attention on the rules affecting the players in the global market place. These rule changes include the Uruguay Round GATT negotiations to liberalize trade by reducing tariff and non-tariff trade barriers; bilateral agreements to reduce trade barriers; and the continuing debate over the pros and cons of direct foreign investment. While everyone is in favor of improving our international "competitiveness," no one really seems to know how to define this term--let alone how to measure it. Most equate competitiveness with trade. But especially in food processing, one must look at the total "foreign presence" of U.S. firms in addition to international trade when evaluating competitiveness.

## Strategies to Access <br> International Markets

There are many alternative strategies firms can use to enter foreign markets. Some involve considerable more investment in time, money, risk, and expertise than do others. Figure 1 ranks these strategies roughly by degree of investment and involvement required by U.S. food marketing firms.

The first three strategies relate primarily to exporting U.S. produced products, while the last three strategies involve varying degrees of direct investment. Most firms enter the export market for the first time by using foreign agents or brokers. As export sales increase, many firms take the next step of setting up a separate export office or division within their U.S. companies. U.S. processors can also decide to pack under contract for a foreign firm. For example, several Japanese manufacturers of soda and
fruit drinks are contracting out production of their Japanese brands to American bottlers. This is nearly identical in concept to co-pack operations for private label accounts. Firms may also choose to have their branded products produced and marketed in foreign countries under a licensing agreement with a foreign firm. While this generally requires no direct investment in foreign production facilities, considerable investment is required to identify appropriate licensees, develop production and marketing procedures, and establish quality control safeguards. Joint ventures allow a U.S. firm to tap into the production, marketing, and regulatory know-how of a host country firm without the expense of acquiring a whollyowned subsidiary. Finally, a U.S. processor can acquire or build foreign manufacturing facilities and operate them as wholly-owned subsidiaries. In actual practice, a firm can use any one or all of these strategies at the same time.

Of these six strategies, licensing and joint ventures are often nearly invisible as far as being reported in public statistical series. Data on licensing and joint ventures are generally not included in trade and investment statistics. They are also frequently omitted from company annual reports. In this paper I will focus on export activities and on direct foreign investment.

## Processed Food Exports

The majority of U.S. agricultural exports comes from raw or bulk agricultural products. In FY1987, U.S. agricultural exports totaled $\$ 28.6$ billion. Of this amount, $\$ 11.7$ billion or 40 percent came from processed products while unprocessed agricultural products accounted for

60 percent. Recently, renewed emphasis has been placed on increasing exports of processed food products through programs to counter unfair foreign trade practices. The Export Enhancement Program has resulted in additional sales of wheat flour, rice, frozen poultry, poultry feed, table eggs, and vegetable oil. The Targeted Export Assistance (TEA) Program provides export assistance by reimbursing eligible participants a portion of their foreign promotion expenses. Even with these efforts, the proportion of U.S. agricultural exports that are unprocessed has remained stable at about 60 percent.

Figure 1
Alternative Strategies
To Access Foreign Markets


The U.S. food processing industry is dom-estic-market oriented. Exports in 1987 accounted for less than 4 percent of domestic sales. Exports as a percent of domestic sales peaked in 1980-81 at 5 percent, declined gradually to 3.5 percent in 1985, then slowly increased to about 4 percent. We also import a relatively small and stable share of our processed food supply. Since 1972, we have imported between 3.5 percent and 4.5 percent of our processed food.

While processed food imports and exports account for a relatively small share of domestic production, in absolute terms the United States is the world's largest importer and exporter of processed food. In 1987, U.S. processed food exports totaled $\$ 12.5$ billion while imports totaled $\$ 18.9$ billion.

One lesson we can draw from this is that trade in processed food is not as sensitive to macro economic variables, such as exchange rates, as is trade in bulk agricultural commodities (Figure 2). While U.S. exports of processed foods peaked in 1981 and then declined through 1985 as the dollar rose, the decline was relatively mild ( 2.8 percent) compared to the decline for all U.S. agricultural exports (49.3 percent).

We now turn to the composition of trade within the processed food sector. Which industries account for the bulk of U.S. exports and have they changed over time? Even within the food processing sector, the majority of U.S. exports are relatively low value-added producer goods rather than packaged consumer foods. Of the 47 industries that make up our food processing sector, only 4 have exports that exceed $\$ 1$ billion annually. The largest is meat packing which exported $\$ 2.7$ billion in 1987. But producer goods such as cattle hides, tallow, and lard account for nearly 50 percent of these exports, while beef products account for about 35 percent. The second largest exporter is the soybean oil mill industry with 1987 exports of $\$ 1.6$ billion. The fresh or frozen fish and seafood industry exported $\$ 1.5$ billion in 1987. The final industry with exports of $\$ 1$ billion or more is wet corn milling. Within the grain mill products industry group, high value-added industries such as cereal breakfast foods had exports of only $\$ 31$ million which is only one-half of one percent of domestic sales. Thus, while there are opportunities to increase exports of high value-added products, these represent a relatively small share of total agricultural exports.

## Firm-level Analysis

The Economic Research Service is currently studying the international operations of about 60 of the largest U.S. food processing firms. We obtained deta on total company sales of processed food, sales from U.S. operations, sales from foreign subsidiaries, exports from U.S. operations, and total number of plants operated in the United States and in foreign countries. For the 57 firms in our sample, food processing sales in 1986-87 ranged from over $\$ 10$ billion to $\$ 182$ million. Total processed food sales for these firms came to $\$ 147$ billion in 1986-87. This represents 48 percent of all U.S. food processing sales.

## Export Profile

It is interesting to examine the extent to which these larger than average food processing firms in our sample are engaged in export activities. Surprisingly, even our largest food marketing firms are not, in general, major exporters of high value-added food products. In fact, these firms on average exported a lower percentage of their domestic production than the average for all U.S. food processing plants. From their total U.S. sales of $\$ 147$ billion, these 57 firms exported only $\$ 3.3$ billion which amounts to 2.8 percent of their sales. By comparison, all U.S. food processing establishments exported an average of 4 percent of their sales according to Census Bureau data.

In looking at individual companies, only two of the 57 had exports that exceeded 15 percent of their domestic processed food sales. One company, Archer Daniels Midland, exports large quantities of feed and other bulk grain mill products. The other firm, Riceland, is a cooperative and a major exporter of rice and other grain products. Only three additional companies had exports that exceeded 5 percent of their domestic sales.

At the other end of the scale, four firms reported no export sales at all. Included are some very large processors with internationally recognized brand names. Sixteen firms had exports of less than one percent of sales, while another twenty-one firms in our study exported only 1 to 3 percent of their domestic sales. The final thirteen firms exported between 3.1 and 7 percent of their domestic production. Export statistics, by themselves, greatly understate the foreign "presence" of U.S. food processors.

## Foreign Investment Profile

Rather than rely on exports, it appears that large food processors use foreign investment as the major strategy for gaining sales in international markets. Indeed, 36 of the 57 firms in our study owned food processing plants in foreign countries (Table 1). These 57 firms operated a total of 2,503 processing plants--74 percent located in the United States and 26 percent located in foreign countries.

As examples, RJR Nabisco operates 170 food processing plants, 47 in foreign countries; Campbell Soup has 87 plants, 28 in foreign countries; CPC International has 112 plants, 83 in foreign countries; Heinz has 63 plants, 38 in foreign countries; Quaker Oats has 65 plants, 34 are foreign; Kellogg Co. has 37 plants, 15 are foreign; and Ralston Purina has 123 plants, with 66 in foreign countries.

Sales from these foreign plants accounted for 20 percent of total processed food sales for the 57 firms. Thus, large U.S. food processors receive 20 percent of their sales from foreign subsidiaries while exports account for less than 3 percent of sales.

Foreign subsidiaries account for a substantial share of sales for many U.S. food processors (Table 2). Two companies, CPC International and Coca-Cola, Inc., receive over 50 percent of their processed food sales from foreign operations.

Table 2
Food Processing Sales From Foreign Subsidiaries

## $\$ 1$ billion or more

( 10 firms)

| Philip Morris (G.F.) | Heinz |
| :--- | :--- |
| Coca Cola | Sara Lee |
| CPC International | United Brands |
| RJR Nabisco | Kellogg's |
| Kraft | Quaker Oats |

$\$ 500$ million or more
( 7 firms)

Pepsico
Ralston Purina
Castle \& Cooke
Campbell Soup

Hershey's
Pillsbury
Borden

Table 1

| Firms | U.S. and Foreign Food Processing Plants Owned by U.S. Food Processing Firms |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Total Plants | U.S. | Foreign | Percent Foreign |
|  | -- | Numbe | ---- | Percent |
| CPC International | 112 | 29 | 83 | 74 |
| Ralston Purina | 123 | 57 | 66 | 60 |
| RJR/Nabisco | 170 | 123 | 47 | 28 |
| Kraft | 96 | 52 | 44 | 46 |
| Philip Morris (G.F.) | 103 | 60 | 43 | 42 |
| Heinz | 63 | 25 | 38 | 60 |
| Quaker Oats | 65 | 31 | 34 | 52 |
| Campbell Soup | 87 | 59 | 28 | 32 |
| Borden | 153 | 127 | 26 | 17 |
| Pepsico | 115 | 91 | 24 | 21 |
| ConAgra | 150 | 127 | 23 | 15 |
| International Multifoods | 45 | 24 | 21 | 47 |
| Sara Lee | 67 | 47 | 20 | 30 |
| McCormick | 52 | 32 | 20 | 38 |
| Coca Cola | 63 | 48 | 15 | 24 |
| Kellogg's | 37 | 22 | 15 | 41 |
| Pillsbury | 77 | 63 | 14 | 18 |
| Staley Continental | 56 | 44 | 12 | 21 |
| General Mills | 47 | 35 | 12 | 26 |
| Castle \& Cooke | 47 | 36 | 11 | 23 |
| Wm. Wrigley | 17 | 6 | 11 | 65 |
| Archer Daniels Midland | 122 | 113 | 9 | 8 |
| Anheuser Busch | 86 | 77 | 9 | 10 |
| Hershey's | 20 | 12 | 8 | 40 |
| Procter \& Gamble | 23 | 16 | 7 | 30 |
| IC Industries (Pet) | 50 | 45 | 5 | 10 |
| United Brands | 25 | 20 | 5 | 20 |
| Gerber Foods | 6 | 4 | 2 | 33 |
| Brown Forman | 7 | 5 | 2 | 29 |
| Curtice-Burns | 29 | 27 | 2 | 7 |
| Hormel | 23 | 22 | I | 4 |
| Wilson Foods | 12 | 11 | 1 | 8 |
| Am. Home Products | 5 | 4 | 1 | 20 |
| Flowers | 35 | 34 | 1 | 3 |
| Clorox | 4 | 3 | 1 | 25 |
| American Brands | 14 | 13 | 1 | 7 |

Source: Company annual reports and form $10-\mathrm{K}$ reports.
Figure 2
Figure

An additional nine firms received between 30 and 50 percent of their sales from their foreign subsidiaries. And ten firms had between 15 and 29 percent of their sales come from foreign subsidiaries.

But foreign investment is by no means universal for these large firms. Twenty-one of the 57 firms reported no sales from foreign operations. While most of these firms did engage in exports, four firms said they had no export sales as well as no sales from foreign operations.

Sales from foreign subsidiaries tend to understate the full international "presence" of many U.S. food processors. Most U.S. food processors do not include licensing and joint venture operations in reporting their foreign sales. For example, many U.S. brewers, including Miller Brewing Company and Coors, license Canadian firms to produce their brands in Canada. Many firms prefer to license foreign firms to produce specific branded products since they can avoid the expense of establishing their own foreign subsidiary. U.S. food processors are increasingly developing joint ven-tures--especially in centrally planned countries. Both Heinz and RJR/Nabisco have recently established joint venture food processing operations in China.

## Can We Expand Value-Added Trade?

While large U.S. food processing firms tend to be internationalists, most are not major exporters--especially of value-added consumer food products. What factors influence U.S. firms to produce finished consumer food products in foreign plants rather than export from U.S. plants? One obvious answer is that setting up production facilities in foreign countries avoids tariff and most non-tariff trade barriers. But even where trade barriers are minor, many firms apparently prefer producing in the foreign country rather than exporting. Companies give several reasons.

One is to reduce transportation costs. This is especially important for products where consumer packaging adds considerable weight. Second, U.S. firms find it easier to deal with local governments and regulatory agencies when the product is produced in the host country. Third, for consumer value-added products, it is easier to keep abreast of local tastes and opportunities for new product development or reformulations when products are produced in the foreign country. Fourth, some firms prefer to acquire established brands in foreign countries
and use those facilities as a base for further expansion. Fifth, producing a product in a foreign plant may improve access to local food distribution firms and facilitate a variety of marketing and promotional activities involved in marketing a branded consumer product. Finally, a firm that initially exports to a market may decide to switch to foreign production once the export market becomes large enough. For example, CPC International initially exported Heilman mayonnaise to Chile. But in 1986, CPC opened a new plant in Chile to manufacture mayonnaise and other products thus eliminating a major export market. The paradox here is that the very success and growth of an export market led to its elimination as it became more profitable for the firm to switch from exporting to producing the product in its foreign subsidiary. This is another example of how foreign trade data can be a misleading measure of "competitiveness."

While many of the largest U.S. processors are not major exporters, hundreds of medium and smaller size processors have opportunities to identify and develop export markets for specialty products and for market niches too small to interest the largest firms. Sun-Diamond Growers, Tri/Valley Growers, Welsh Foods, Smucker's, and Thorn Apple Valley are examples of medium size firms that have aggressively developed export markets.

Since 1986, there have been significant increases in our traditionally strong export markets for grain mill products, soybean oil mills, and fish and seafood. Exports have also increased significantly for red meats, poultry, processed fruits and vegetables, confectionery products, and beverages. Current negotiations to reduce trade barriers could be especially important for increasing trade in this latter group of industries. Negotiations with Taiwan, Japan, and South Korea has further opened these markets to U.S. beer and wine exports which increased 40 percent and 72 percent respectively in 1987 over 1986.
U.S. general line grocery wholesalers are also becoming more active in exporting processed food products. In a survey conducted by the National American Wholesale Grocers Association in 1987, leading grocery wholesalers such as Super Valu and Fleming reported exports averaging about $\$ 18$ million per wholesaler. Wholesalers have an advantage in that they can combine orders for several brands from different processors into a single shipment to foreign customers.

## Prospects for the Future

For a variety of production cost and marketing reasons, the majority of U.S. food processing exports are in lower value-added and bulk semi-finished products such as grain mill products, cattle hides, bulk fats and oils, and fresh or frozen fish and seafood. This is likely to continue.

However, exports of high value-added products are increasing and are likely to continue to expand. Many smaller and mediumsized processors have developed significant export markets. Wholesalers are also expanding their exports of processed products. But this must be kept in perspective. Processed food exports account for less than 4 percent of total industry shipments.

Many of the largest U.S. food processors report very modest export sales of finished consumer food products. They generally do not expect large growth in their exports of these products. Rather, these firms continue to expand aggressively in foreign markets by increasing their investment in foreign plants and/or expanding licensing arrangements with foreign firms to produce and distribute their branded products in foreign markets. Large food processors will continue to acquire or build foreign food processing plants as a major strategy for expanding sales.

While the reasons for producing in foreign markets are largely marketing related, U.S. processors are aggressively seeking to improve productivity in their foreign subsidiaries and become the low cost producer in their host country. The scheduled removal of all internal trade barriers in the European Community in 1992 provides opportunities to obtain further economies of scale in European based plants.

## References

U.S. Department of Agriculture, Economic Research Service, Foreign Agricultural Trade of the United States, various issues.

U.S. Department of Agriculture, Economic Research Service, internal compilation of data from annual reports and SEC $10-\mathrm{K}$ reports, supplemented by data supplied by individual companies.
U.S. Department of Commerce, Census of Manufacturers, Annual Survey of Manufacturers, 1986.
U.S. Department of Commerce, 1988 U.S. Industrial Outlook, January, 1988.

