**United States Department of Agriculture**
**Economic Research Service**
https://www.ers.usda.gov

States
ment of
ture

Economic
Research
Service

Agriculture and
Trade Analysis
Division

# High-Value Products

## Growing U.S. and EC Competition in World Markets

Ruth Elleson

## It's Easy To Order Another Copy!

**Just dial 1-800-999-6779. Toll free (in the United States and Canada). All other areas please dial 301-725-7937.**

Ask for *High-Value Products: Growing U.S. and EC Competition in World Markets* (AGES 9022).

The cost is $8.00 per copy. For non-U.S. addresses (including Canada), add 25 percent. Charge your purchase to your VISA or MasterCard, or we can bill you. Or send a check or purchase order (made payable to ERS-NASS) to:

ERS-NASS
P.O. Box 1608
Rockville, MD 20849-1608.

We'll fill your order by first-class mail.

**High-Value Products: Growing U.S. and EC Competition in World Markets.** By Ruth Elleson. Agriculture and Trade Analysis Division, Economic Research Service, U.S. Department of Agriculture. ERS Staff Report No. AGES 9022.



## Abstract

This study examines competition between the U.S. and the European Community (EC) in world markets for high-value agricultural products (HVPs). The EC and the United States are the world's largest exporters of HVPs. A comparison of U.S. and EC export shares during 1970-87 shows that the EC, the world's leading exporter of high-value products, has successfully competed against the United States for a number of leading processed products including dairy products, meat, and flour. EC agricultural exports have benefited for many years from subsidies which make their HVP exports competitive in world markets. The United States, with its plentiful supply of high-quality, low-priced inputs and efficient processing capacity has the potential for increasing its share of the HVP market. While U.S. policy changes authorized under the 1985 Farm Bill and the lower dollar have boosted U.S. HVP exports, future expansion will depend upon U.S. competitiveness and changes in foreign demand.

**Keywords:** High-value agricultural products, European Community, export competition, export policy, United States

## Acknowledgments

The author appreciates the assistance, comments, and suggestions offered by Walter Gardiner, John Wainio, and Suchada V. Langley in preparing this report. Special thanks to Mary Wright for data assistance, Diane Woodard for electronic typing and graphics, and Brenda Powell for editorial assistance.



Washington, D.C. 20005-4788 April 1990

## Contents


Summary..... v

Introduction..... 1

U.S. and EC High-Value Product Trade..... 2

Export Policies for High-Value Products..... 5
- European Community..... 5
- United States..... 7

Semiprocessed High-Value Products..... 8
- Meat..... 8
- Oilseed Cake, Meal, and Oil..... 13
- Wheat Flour..... 16

Highly Processed High-Value Products..... 17
- Dairy Products..... 18
- Processed Fruits and Vegetables..... 20
- Cigarettes..... 23
- Cereal Preparations..... 24
- Wine..... 24
- Chocolate and Products..... 26

Unprocessed High-Value Products..... 27
- Fresh Fruit..... 27
- Table Eggs..... 27

U.S. Overseas Food Processing Operations..... 30

Conclusions..... 31

References..... 33

## Summary

Competition is keen between the United States and the European Community (EC) in world markets for high-value agricultural products (HVPs). The EC, the world's largest exporter of HVPs, dominates the markets for dairy products, poultry, and wheat flour. The United States, the second largest exporter of HVPs, dominates the markets for fresh fruits and vegetables, dried fruits, and certain oilseed products.

The share of high-value exports in the total agricultural export mix is considerably more important for the EC than for the United States. In 1987, the EC HVP share was 77 percent, compared with 40 percent for the United States.

Because of generous farm support programs and high internal prices, the EC uses export subsidies to make its HVP products competitive in world markets. The United States, for many years, was hard pressed to expand its share of the world HVP market, despite its plentiful supply of high-quality, low-priced inputs and modern processing capacity.

The United States must expect continued subsidized competition from the EC. The lower dollar and the new policies initiated under the Food Security Act of 1985 have boosted U.S. HVP exports. A number of HVPs offer excellent opportunities for the United States to expand its overseas markets. Commodities with favorable expectations include semiprocessed and processed meats, especially poultry and pork; semiprocessed oilseed products such as meals and oils; and fresh and processed fruits, vegetables, and nuts.

U.S. multinational food processing firms are very active in international markets, and many are located within the EC, thereby avoiding import tariffs and benefiting from favorable internal EC agricultural policies. When exporting to markets outside the EC, exports of U.S. subsidiaries benefit from EC export subsidies, the same as domestic firms.

U.S. exports of HVPs would be significantly higher if sales made by overseas subsidiaries were counted as U.S. exports. While the cost of developing export markets, and shipping directly from the United States has been too high for many firms in the past, U.S. promotion policies and the lower value of the dollar could offset, at least in part, this disadvantage for certain products.

# High-Value Products

## Growing U.S. and EC Competition in World Markets

Ruth Elleson

### Introduction

The United States and the European Community are the world's leading exporters of high-value agricultural products, but "the EC has fared better than the United States in maintaining or increasing market shares of HVPs" (6).1/ This study compares U.S. and EC-10 export shares to third markets for selected HVPs during 1970-87. It analyzes the competitive situation in key world markets, evaluates U.S. and EC policies affecting HVP exports, and describes the role and extent of U.S. multinational firms producing HVPs abroad.

For comparison, the 1970-87 observation period includes 10 of the 12 EC countries--France, West Germany, Italy, Belgium, the Netherlands, Luxembourg, the United Kingdom, Ireland, Denmark, and Greece--even though the United Kingdom, Ireland, and Denmark were not members until 1973, and Greece not until 1981. Spain and Portugal, on the other hand, joined the EC in 1986 and have been excluded.

HVPs are different from the more traditional low-value bulk products like wheat, corn, and soybeans. For purposes of convenience, HVPs are divided into three categories--semiprocessed, highly processed, and unprocessed but high-value products (see box).

---

1/ Underscored numbers in parentheses refer to items cited in the References at the end of this report.

High-Value Products

What exactly are high-value products? What distinguishes them from the more traditional low-value products such as wheat, corn, and soybeans that are so important to U.S. agricultural trade? The dividing line is rather arbitrary. The degree of processing or services added to the raw product, its relative per-unit value, its bulkiness, and weight are important considerations. Some typical groupings used in the analysis and the common products in each are listed below.

Semiprocessed Products

Fresh, chilled, and frozen meat, wheat flour, animal feed, oilseed cake and meal, and vegetable oil.

Highly Processed Products

Prepared and preserved meats, milk, butter, cheese, cereal preparations, dried fruits, preserved or prepared vegetables, chocolate, beverages, and cigarettes.

Unprocessed High-Value Products

Eggs, fruits, nuts, and fresh vegetables (6).

## U.S. and EC High-Value Product Trade

The United States and the EC are large, diversified exporters of HVPs. Both have highly sophisticated processing and marketing systems primarily serving domestic markets. Export markets are extensions of domestic markets and usually average around 10 percent or less of total output (8).

Major world trade patterns of HVPs are shaped to a large extent by geography. The EC's close proximity to Eastern Europe, North Africa, and the Middle East, and the U.S. close proximity to Canada, Mexico, and the Caribbean are important determinants of trade flows. The United States also has an edge over the EC by having a more direct shipping lane to the Pacific Rim markets.

World trade in HVPs increased rapidly during the 1970's but decreased after 1981. World exports (excluding intra-EC trade) rose from $19.5 billion in 1970 to a high of $80.0 billion in 1981, but declined thereafter following the trend in total agricultural trade (fig. 1). By 1987, world HVP exports remained at low levels--$68 billion--with no sign of resuming the rapid growth experienced during the 1970's.

The general downturn in world HVP trade during the first half of the 1980's is reflected in U.S. and EC HVP exports. During 1981-85, U.S. HVP exports declined from $12.3 to $9.7 billion, while those of the EC declined from $21.7 to $18.4 billion. With a strong recovery in both U.S. and EC HVP exports during 1986 and 1987, the combined U.S. and EC shares of world HVP exports reached a high of 53 percent in 1987, compared with 41 percent in 1980 and 38 percent in 1985 (13).

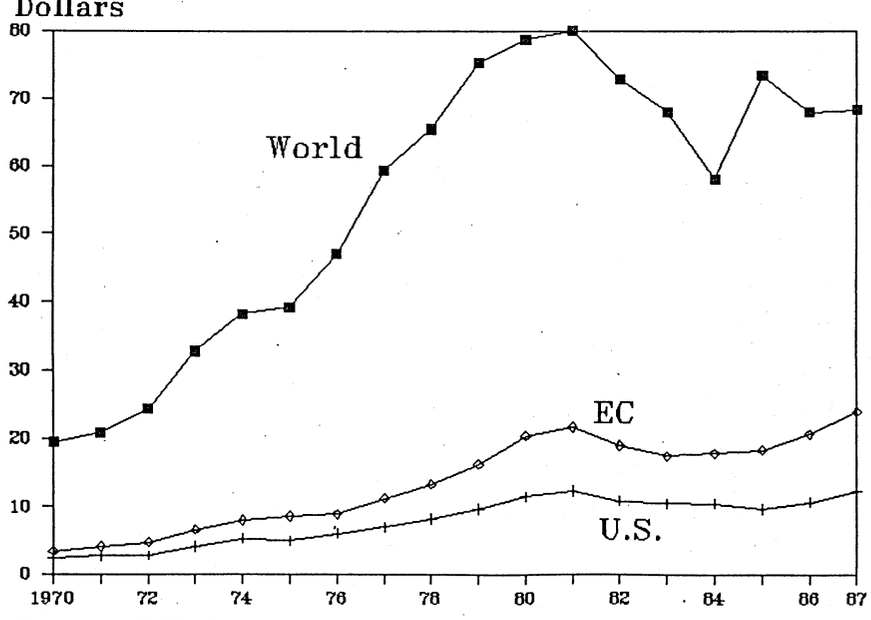
Erosion of the value of U.S. agricultural exports during 1981-85 hurt HVP exports less than bulk exports. Despite the steep 21-percent drop in U.S. HVP exports during this period, the rapid recovery during 1986-87 permitted the United States to reach its 1981 peak of $12.3 billion. The steep decline of the dollar and new export programs under the Food Security Act of 1985 helped to earn a larger niche for U.S. products in foreign markets.

Despite the strong recovery in U.S. HVP exports, EC competition intensified. EC HVP exports, after falling 15 percent during 1981-85, jumped 30 percent during 1986-87 to a record high of $24 billion (13).

The dollar share of HVPs in the total agricultural export mix is considerably more important for the EC than for the United States. In 1987, U.S. HVP exports comprised less than 40 percent of total U.S. agricultural exports, while EC HVP exports comprised over 75 percent of their total (figs. 2 and 3).

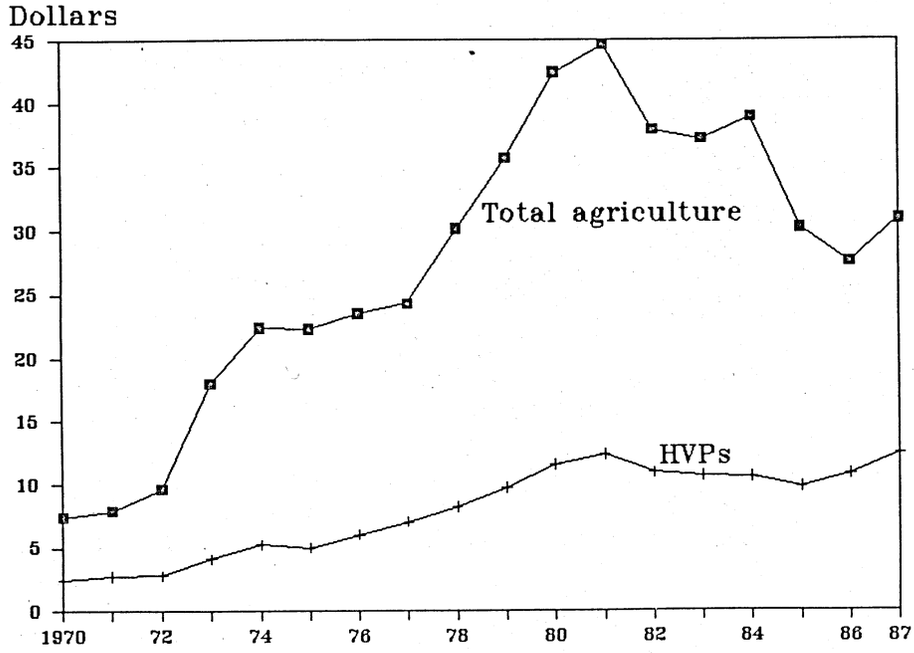
Figure 1

World, U.S. and EC HVP Exports



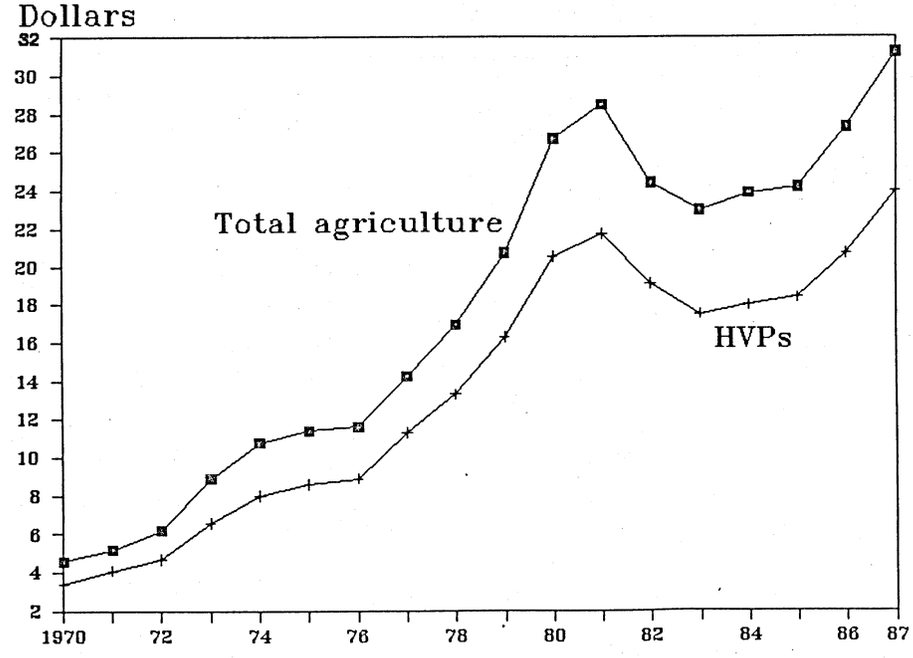

Source: U.N. data.

Figure 2
U.S. high value and total agricultural exports




Source: U.N. data.

Figure 3
EC high value and total agricultural exports




Source: U.N. data.

The composition of HVP exports--semiprocessed, highly processed, and high-value unprocessed--differs significantly between the United States and the EC. U.S. exports are dominated by semiprocessed HVPs while EC exports are dominated by highly processed HVPs. While exports of high-value unprocessed products are small for both, the U.S. share is significantly larger (figs. 4 and 5).

## Export Policies for High-Value Products

The EC and the United States have domestic policies that affect exports of processed agricultural products. These policies influence the direction and volume of trade in world markets.

### European Community

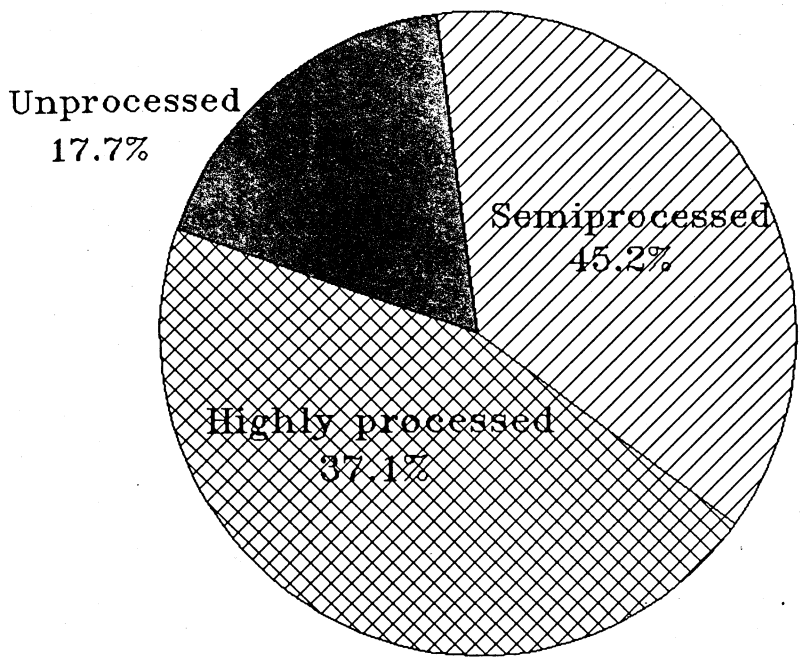
The EC uses a combination of export and processing subsidies to make HVPs competitive in world markets. The EC's high internal prices have made this a necessary policy for a number of years. Export subsidies, or restitutions, are rebates given to EC exporters to lower the cost of producing a product for export. These restitutions cover virtually all the major farm commodities traded by the EC--a wide range of bulk agricultural commodities as well as most processed foods (1).

#### Export Subsidies

EC subsidies reflect the difference between the internal price and the world price. To support farm income, internal prices are usually well above world prices, putting EC exporters of processed goods at a disadvantage compared with competitor countries that can buy their ingredients at lower world prices. To redress this disadvantage, export subsidies covering the difference between the domestic and world price of the raw ingredients used in producing processed products are paid to EC exporters.

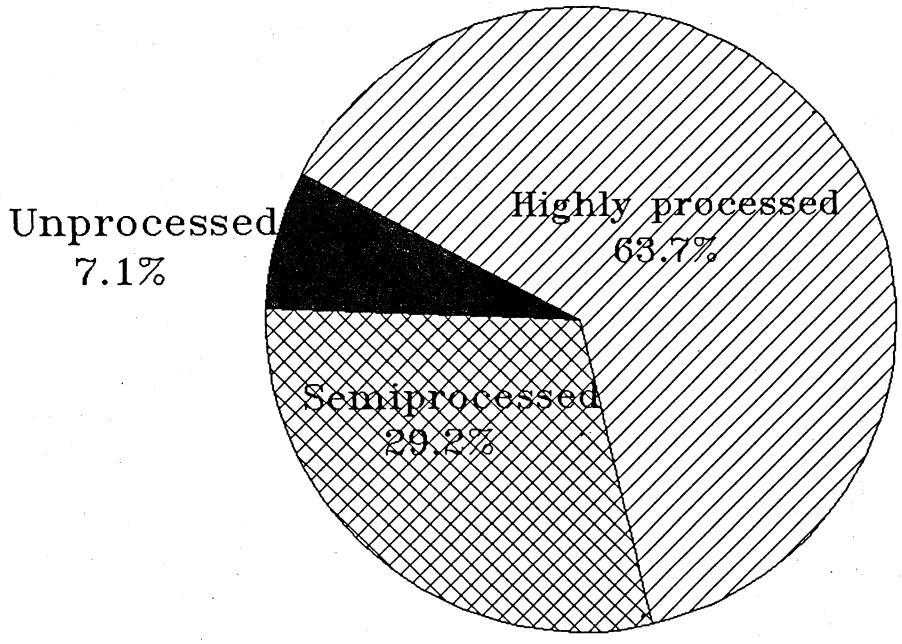
The actual calculation of export subsidies for HVPs can be extremely complicated, especially if a product contains a number of different basic commodities supported under the EC's Common Agricultural Policy. Subsidies are calculated for each ingredient contained in the product based on the proportions used. While refunds for each basic commodity are normally fixed at the beginning of each month, the EC's CAP Monitor states that "refund rates can be changed more frequently if world market conditions change" (1). In short, subsidies appear to be set at whatever level is necessary to move surplus EC products on the world market. In addition, there are provisions to vary the refunds paid on certain processed products according to destination. This places other exporters, such as the United States, at a disadvantage.

Figure 4
Composition of U.S. high-value product exports, 1987




Source: U.N. data.

Figure 5
Composition of EC high-value product exports, 1987




Source: U.N. data.

In addition to subsidizing HVP exports that utilize higher priced domestic raw products, the EC also permits processors using lower priced imported raw products to import these raw materials duty-free, provided the processed product is exported within 6 months (1).

Processing Subsidies

The EC has also instituted processing subsidies for selected HVPs to compensate for high domestic support prices of basic commodities.

Processing subsidies encourage the use of the sizeable surpluses built up as a result of high support prices. A large number of processed foods--such as candy, chocolate, pasta, biscuits, cake mixes, wheat flour, dairy-based breakfast and baby foods, casein, ice cream, sugar, frozen dinners, and soups--receive both processing subsidies and export restitutions (1).

EC export restitutions increased dramatically since the fall in the value of the dollar in early 1985. World prices fell relative to internal EC prices, and the EC had to increase subsidies to make its products competitive in world markets. The EC has made some policy modifications to reduce surpluses but, to date, export restitutions remain high, and the EC budget continues to bear the cost (2).

**United States**

The U.S. Food Security Act of of 1985 authorized several export promotion programs designed to increase U.S. exports of bulk and high-value agricultural products by making them more competitive in world markets. These programs include the Export Enhancement Program, the Targeted Export Assistance program, the Dairy Export Incentive Program, and several export credit guarantee programs.

The Export Enhancement Program (EEP) enables U.S. exporters to meet prevailing world prices for targeted commodities and destinations. The program is not used to undercut world market prices, but to meet competition from other subsidizing countries, especially the EC. EEP initiatives for HVPs include eggs and flour to Algeria, flour and poultry to Egypt, and flour to the Philippines, Yemen, and Zaire. All sales under EEP are made by U.S. exporters who have submitted bids to USDA for subsidy assistance. When bids are approved, a bonus is paid to the exporter in generic certificates which can be exchanged for commodities from the Commodity Credit Corporation (CCC) stockpile. This permits the sale to take place at an agreed-upon competitive price (18).

The Targeted Export Assistance (TEA) program also uses surplus stocks from the CCC to reimburse U.S. exporters for all or part of authorized export promotion programs. Some 80 percent of the $110 million of TEA allocations in fiscal 1986 went to support

specific U.S. high-value and processed exports such as processed peaches and fruit cocktail, frozen potatoes, California wines and fresh and processed citrus, in-shell and shelled walnuts, Washington State apples, and fresh table grapes.

In addition to specified high-value products, TEAs are also used to expand exports of processed foods in general. For example, one such general TEA program used $1.4 million to expand exports of U.S. processed food products to Japan, Korea, Singapore, and Malaysia. The purpose was to offset the adverse impact of import restrictions, such as quotas and licensing used by these countries, as well as to offset EC subsidies. The funds in this program were used for a variety of activities, including advertising, point-of-sale materials, and restaurant promotions (20).

The Dairy Export Incentive Program (DEIP) enables U.S. exporters to meet prevailing world prices for targeted dairy products to specific destinations. The program offers U.S. exporters subsidies--in the form of dairy products in the CCC stockpile--to help them meet competition from other subsidizing nations, especially the EC. The Food Security Act of 1985 made the DEIP mandatory through fiscal 1988. Only bulk packaged dairy products are eligible for inclusion in this program (17).

The United States has, in addition, several export credit guarantee programs, of which one is CCC's Export Credit Guarantee Program, GSM-102. This program is designed to expand U.S. agricultural exports by stimulating U.S. bank financing of foreign purchases on credit terms of up to 3 years. Such credit guarantee programs operate in cases where credit is necessary to increase or maintain U.S. exports to a foreign market, and where private financial institutions might be unwilling (or willing only with substantial interest premiums) to provide financing without the CCC's guarantee (19).

## Semiprocessed High-Value Products

U.S. and EC competition is especially keen for semiprocessed HVPs such as fresh, chilled, and frozen meats, oilseed cake, meal and oil, and wheat flour.

### Meat

The most important meats in international trade are beef, pork, and poultry. Both U.S. and EC total meat exports expanded rapidly during 1985-87, but EC exports remained significantly higher (table 1).

Eastern Europe, the Soviet Union, the developing countries, and Japan were growing markets for meat during 1970-87. The volume of imports of beef, pork, and poultry by these regions continued strong even during the early 1980's when world trade in agricultural products declined. The volume of poultry imports by the developing countries

is especially large, comprising more than 50 percent of total world poultry imports in 1985.

Meat is one of the most important foods used to upgrade and diversify diets in middle-income developing countries. Income elasticities for beef can range as high as +1 to +1.5 in many of these countries. Elasticities for poultry are also in this range in large areas of the Caribbean, North Africa and the Middle East, the Soviet Union, and parts of Asia. With Moslem dietary laws, pork's potential market is appreciably smaller than either poultry or beef (8).

The potential for beef production in the developing countries is generally limited since their feed livestock sectors are not sufficiently developed to satisfy rapidly increasing local demand. Importing beef provides a more economical alternative. For poultry and pork, however, expanding domestic production has been possible due to the ease with which the technology and feed inputs can be purchased on the world market and the relatively high value-added that can be captured in local feeding (8). But, in most rapidly emerging middle-income countries, demand continues to grow faster than the capacity to produce these commodities. Supplying these rapidly expanding markets has made for intense competition among large exporting countries such as the United States and the EC.

The EC's Common Agricultural Policy pays export refunds on beef and veal, pork, and poultry to enable EC exporters to compete in world markets. Export refunds for poultry also serve to maintain domestic

Table 1--Meat exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 2,959 | 8,277 | 7,558 | 7,098 | 6,841 | 7,570 | 8,733p |
| United States 3/ | 138 | 932 | 949 | 992 | 956 | 1,194 | 1,474 |
| EC-10 4/ | 199 | 1,425 | 1,279 | 1,421 | 1,366 | 1,955 | 2,329 |
| | | | | Percent | | | |
| U.S. market share | 4.7 | 11.3 | 12.6 | 14.0 | 14.0 | 15.8 | 16.9 |
| EC-10 market share | 6.7 | 17.2 | 16.9 | 20.0 | 20.0 | 25.8 | 26.7 |

p = preliminary.
1/ SITC code 011.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

poultry prices as there is no EC domestic intervention policy for poultry (2).

EC export refunds for meat have escalated over the past decade as rapidly rising domestic production and growing surpluses have created a need for expanding export market outlets (table 2).

Beef

Beef is produced and exported in large quantities by the United States and the EC. In recent years, both suppliers have made large export gains. The United States is a large producer and exporter of high-quality, grain-fed beef, using extensive forage bases and confinement feedlots for finishing on high-energy rations. EC beef production, primarily a joint product of the dairy industry, consists largely of culled dairy cows and calves sold as veal. As EC policies in recent years have been geared to reducing dairy surpluses, a larger supply of culled dairy cows has been available for export as beef.

Shifts in supplier shares are occurring constantly in the world beef market. In 1986, the EC sold two lots of 100,000 metric tons of frozen beef to Brazil, a traditional U.S. market (2). Japan, a large beef customer of the United States, recently raised its beef import quota. The United States and Australia are expected to be the major beneficiaries, but the EC is also likely to benefit (15). Both the EC and U. S. shares of beef exports to third markets have risen to all-time highs in recent years (table 3).

Table 2--EC export refunds for beef, pork, and poultry

| Year | Beef | Pork | Poultry |
|---|---|---|---|
| | | Mil. ECU* | |
| 1978 | 145.4 | 32.2 | 30.6 |
| 1979 | 270.2 | 78.4 | 63.5 |
| 1980 | 715.5 | 91.6 | 68.0 |
| 1981 | 825.2 | 132.6 | 65.8 |
| 1982 | 643.5 | 96.1 | 79.7 |
| 1983 | 828.2 | 120.2 | 92.9 |
| 1984 | 1,392.7 | 157.0 | 49.4 |
| 1985 | 1,338.6 | 102.9 | 45.0 |
| 1986 | 1,214.3* | 75.3 | 70.5 |
| 1987 | 877.9* | 111.5 | 122.9 |
| 1988 | 768.7 | 172.3 | 160.8 |

* European currency unit = $1.182 in 1988.
Source: (2).

Pork

U.S. pork exports have fared poorly relative to those of the EC. The U.S. export share declined steadily during the 1980's, reaching a low of 6 percent in 1986. Some improvement, however, took place in 1987. In contrast, the EC share rose each year during 1983-87, reaching a high of 46 percent in 1987 (table 4).

Japan, the largest market for U.S. pork accounted for almost 60 percent of U.S. pork exports in 1986. Japanese imports of U.S. pork, however, have dropped significantly in recent years, partly because of increased competition from Taiwan. U.S. pork producers have not tailored their product specifically for the Japanese market, while Taiwan's pork exports fulfill Japanese specifications, and, in addition, have low costs of production, processing, and transportation. The United States is also encountering competition from Denmark. Like Taiwan, Danish pork exports are tailored to meet Japanese requirements (15).

Poultry

U.S. and EC competition in world poultry markets is keen. EC export shares in the recent past greatly exceeded U.S. shares but, after 1985, the gap considerably narrowed (table 5).

Despite the gain in the EC's total poultry exports, whole bird exports have declined. The EC blamed most of this drop on subsidized U.S. exports of whole birds to the Middle East under the U.S. Export Enhancement Program.

The North African and Middle East poultry markets are the largest in the world. These markets are shrinking, however, because of increased self-sufficiency. In 1986, the EC share of these markets was 40 percent and the U.S. share, 7 percent. U.S. shares have increased in some parts of these regions as a result of the Export Enhancement Program. For example, in the Egyptian market the United States was able to compete successfully against subsidized whole birds from the EC. France and Denmark provide virtually all EC exports to the Middle East, and they account for about 80 and 20 percent, respectively (15).

U.S. poultry shares far exceed those of the EC in the Far East. The EC, however, is fast becoming a serious competitor in this region as it seeks new markets to replace those lost in North Africa and the Middle East. The EC also made inroads into Latin America in late 1986 when Brazil sharply reduced its poultry meat exports. The EC then replaced Brazil as supplier to Peru and Argentina.

Japan is the largest market for U.S. poultry, accounting for about one-third of U.S. poultry exports. Thailand, however, is fast becoming a serious U.S. competitor in the Japanese market. Thai exports consist mainly of boneless meat, which can be provided at competitive prices because of low labor costs. Poultry meat enters

Table 3--Beef exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 1,835 | 4,214 | 3,885 | 3,483 | 3,406 | 3,868 | 4,676p |
| United States 3/ | 45 | 240 | 366 | 447 | 450 | 597 | 723 |
| EC-10 4/ | 56 | 617 | 612 | 712 | 680 | 1,019 | 1,187 |
| | | | | Percent | | | |
| U.S. market share | 2.5 | 5.7 | 9.4 | 12.8 | 13.2 | 15.4 | 15.5 |
| EC-10 market share | 3.1 | 14.6 | 15.8 | 20.4 | 20.0 | 26.3 | 25.4 |

p = preliminary.
1/ SITC 011.1.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to United States.
Source: (13).

Table 4--Pork exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 263 | 865 | 942 | 909 | 895 | 1,142 | 1,346p |
| United States 3/ | 44 | 190 | 158 | 92 | 56 | 69 | 113 |
| EC-10 4/ | 58 | 294 | 225 | 305 | 331 | 506 | 622 |
| | | | | Percent | | | |
| U.S. market share | 16.7 | 22.0 | 16.8 | 10.1 | 6.3 | 6.0 | 8.4 |
| EC-10 market share | 22.1 | 34.0 | 23.9 | 33.6 | 37.0 | 44.3 | 46.2 |

p = preliminary.
1/ SITC 011.3
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Japan without quota restrictions, and tariffs have been lowered as a result of the agreement made under the Multilateral Trade Negotiations (15).

Another important U.S. market for poultry is Singapore. U.S. exports of poultry parts to Singapore totaled over $25 million in 1986, or 70 percent of Singapore's total poultry parts imports. U.S. whole bird exports to Singapore, on the other hand, suffered yearly setbacks throughout the 1980's, in large part the result of the EC's decision to subsidize whole birds to Singapore, and not parts. In late 1986, c.i.f. unit values of EC whole birds were priced nearly 30 percent under the U.S. price.

Another growing market for U.S. poultry meat is Hong Kong. U.S. exports rose from $22 million in 1982 to about $36 million in 1986, an increase of over 60 percent. The rapid growth in Hong Kong's fast food sector has created an expanding market for poultry meat. The principal U.S. competitors are West Germany, the Netherlands, and Brazil (15).

**Oilseed Cake, Meal, and Oil**

Despite a lack of self-sufficiency in oilseeds, the EC is a competitor of the United States in semiprocessed oilseed products, especially in oils, where a large part of EC production comes from crushing imported oilseeds. This has occurred as U.S. soybean

Table 5--Poultry exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 116 | 1,180 | 1,029 | 1,031 | 919 | 871 | 1,055p |
| United States 3/ | 33 | 342 | 248 | 248 | 221 | 285 | 378 |
| EC 4/ | 74 | 460 | 394 | 348 | 296 | 342 | 409 |
| | | | Percent | | | | |
| U.S. market share | 28.5 | 29.0 | 24.1 | 24.1 | 24.1 | 32.7 | 35.8 |
| EC market share | 63.8 | 39.0 | 38.3 | 33.8 | 32.2 | 39.3 | 38.8 |

p = preliminary.
1/ SITC Code 011.2.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

crushings have declined and world supplies of other vegetable oils, such as palm oil, have flooded world markets (16).

Soybeans, sunflowerseed, and rapeseed are oil-bearing agricultural commodities that yield meal, cake, and oil when processed, by either mechanical crushing or solvent extraction. The demand for these oilseeds is derived from the demand for their byproducts.

Oilseed meal, desired mainly for its protein content, is primarily processed into animal feed, either alone or in conjunction with other nutrients or energy sources. The crude oil byproduct is usually refined for use as edible oil, and consumed either as liquid cooking or salad oil, or in solid form as margarine and shortening.

World trade in oilseed products has fallen in recent years because of the reduction in Brazil's exports, a major world exporter. Competition has, therefore, increased among the remaining suppliers including the United States and the EC (14).

With large crushing capacity, the EC imported approximately 12-13 million metric tons of soybeans each year during 1982-87, and annually exported 2-3 million metric tons of soybean meal to third markets. While the U.S. export share of both oilseed cake and meal, as well as soybean oil, is still significantly larger than that of the EC, the EC share is rising (tables 6 and 7).

The EC crushing industry has traditionally utilized imported oilseeds, such as soybeans from the United States, to produce oilseed products for domestic use as well as for export. Since 1979, however, more attractive oilseed prices under the Common Agricultural Policy have stimulated farmers to shift from grains, which are in surplus, to oilseed cultivation. By 1985, soybean output surged tenfold, and rapeseed and sunflowerseed production nearly tripled. EC self-sufficiency in oilseeds rose from 10 percent in 1979 to 23 percent in 1985. As a result, the EC is currently utilizing a larger proportion of domestic seeds in crushing operations, and U.S. exports of oilseeds, largely soybeans, to the EC have fallen (9).

The EC accounts for 35-40 percent of world rapeseed meal exports and 65-70 percent of world rapeseed oil exports. EC exports of rapeseed oil have rapidly increased to markets in the Middle East, North Africa, and some Asian countries. U.S. rapeseed production is presently very small so the EC is encountering little competition in world markets from the United States (16).

The developing countries are the largest importers of vegetable oils, especially for upgrading and diversifying diets. Income elasticities for vegetable oils are as high as +1.5 to +2 in some developing countries of South Asia. Income elasticities are much lower in the developed countries where industrial use has become the most important demand factor (8). The limited availability of local processing capacity or the technical expertise and capital needed to

Table 6--Oilseed cake and meal exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 917 | 3,567 | 4,023 | 3,534 | 2,965 | 2,057 | 2,109p |
| United States 3/ | 199 | 810 | 610 | 643 | 522 | 690 | 745 |
| EC-10 4/ | 103 | 273 | 573 | 265 | 313 | 238 | 364 |
| | | | | Percent | | | |
| U.S. market share | 21.7 | 22.7 | 15.2 | 18.2 | 17.6 | 33.5 | 35.3 |
| EC-10 market share | 11.2 | 7.7 | 13.4 | 7.5 | 10.6 | 11.6 | 17.3 |

p = preliminary.
1/ SITC 081.3.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 7--Soybean oil exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 295 | 1,668 | 1,557 | 2,490 | 1,893 | 860 | 859p |
| United States 3/ | 189 | 625 | 415 | 732 | 426 | 249 | 259 |
| EC-10 4/ | 47 | 244 | 199 | 270 | 251 | 222 | 161 |
| | | | | Percent | | | |
| U.S. market share | 64.1 | 37.5 | 26.7 | 29.4 | 22.5 | 29.0 | 30.2 |
| EC-10 market share | 15.9 | 14.6 | 12.8 | 10.8 | 13.3 | 25.8 | 18.7 |

p = preliminary.
1/ SITC 421.2.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

build or expand capacity has led many lower income countries to purchase oil from the world market (13).

The developed countries import a relatively large percentage of the world's oilseed cake and meal. These products are used as feed in more sophisticated livestock operations that, for the most part, do not exist in most developing economies. Many middle-income countries, however, are beginning to develop livestock industries that require imports of feed to supplement local supplies (8).

**Wheat Flour**

The EC is by far the world's largest exporter of wheat flour, with approximately three-fifths of world markets during 1980-87. The U.S. share averaged less than one-fifth, but increased somewhat in 1986-87 (table 8). The U.S. Export Enhancement Program allocates subsidies for flour exports to enable the United States to compete with the EC in world markets. Retaliation by the EC during the marketing year 1986/87 involved pricing of flour in the Egyptian market at $129 per ton c.i.f., only about $40 more than the price paid for wheat (4).

World trade in wheat flour has declined from over $1.5 billion during 1979-81 to less than $1 billion by 1986-87, as many of the traditional buyers--largely developing countries--invested in milling facilities. The huge export subsidies available on flour exports from the EC and United States may have contributed to an increase in

Table 8--Wheat flour exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 370 | 1,584 | 1,044 | 1,249 | 1,138 | 955 | 897p |
| United States 3/ | 94 | 223 | 273 | 221 | 180 | 204 | 203 |
| EC-10 4/ | 166 | 1,006 | 517 | 714 | 723 | 559 | 510 |
| | | | | Percent | | | |
| U.S. market share | 25.4 | 14.1 | 26.2 | 17.7 | 15.8 | 21.4 | 22.6 |
| EC-10 market share | 44.9 | 63.5 | 49.5 | 57.2 | 63.5 | 58.5 | 56.9 |

p = preliminary.
1/ SITC 046.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

flour imports by some of these countries, but possibly at the expense of wheat sales.

Egypt, the world's largest flour importer, is determined to expand its milling capacity and to reduce its reliance on the more expensive processed product. In 1983/84, when the EC and the United States competed strongly for sales, Egyptian imports were boosted to a record 2.6 million metric tons. Since then, as new domestic mills have come onstream, Egyptian purchases of flour went down and those of wheat increased. This will have a considerable impact on global trade in flour, as shipments to Egypt account for nearly one-third of total world flour imports (4).

Flour exports by the United States have averaged over 1.4 million metric tons each year since 1980/81 but with wide year-to-year variations. In 1983/84, U.S. shipments reached a peak of 1.94 million metric tons with record sales to Egypt under a special pricing agreement. After a downturn during 1984/85 and 1985/86, U.S. flour shipments climbed steeply in 1986/87 with sales under the Export Enhancement Program. Large U.S. flour subsidies were intended to compete with those offered by the EC (4).

The developing countries are the leading markets for flour, with imports ranging from 3.5 million metric tons in 1975 to 5.6 million metric tons in 1985. By 1985, these countries imported over 90 percent of flour traded on world markets. In 1985, Egypt and Algeria together imported over 2.5 million metric tons of flour, almost 50 percent of total developing country imports.

All U.S. commercial sales to Egypt in 1986/87 were done through the Export Enhancement Program. In the noncommercial category, U.S. shipments of 163,000 tons of wheat flour (wheat equiv.) in 1986-87 were virtually all carried out under PL 480 Title I contracts. EC sales of flour to Egypt, mainly of French and Italian origin, were conducted through a mixture of annual agreements, credit arrangements, and special Community export refunds (4).

### Highly Processed High-Value Products

The EC far exceeds the United States in exporting highly processed HVPs to third markets--$15.3 billion vs. $4.6 billion in 1987. On average, the unit values of highly processed products are much higher than those of semiprocessed products, reflecting the greater value-added in their production. Highly processed HVPs, therefore, tend to be shipped in relatively small lots to developed countries, or to affluent consumers in developing countries. The percentage of highly processed HVPs imported by Eastern Europe, the Soviet Union, and the developing countries is considerably smaller than for semiprocessed HVPs. The share imported by Japan, a developed country, is also small.

**Dairy Products**

The EC dominance in highly processed HVP exports is especially pronounced for dairy products. In the total milk and cream category, which includes dry milk, butter, and cheese, the EC share has averaged around 60 percent compared with 9-10 percent for the United States (table 9).

The growth of U.S. and EC stocks of dairy products, particularly of butter and dry milk products, in the last several years has been the legacy of surplus milk production spurred by high levels of protection and price supports. The importers, largely developing countries, have benefited from sizeable price discounts and concessional sales offered by the United States and the EC (11).

The EC has used subsidies to promote exports of dairy products in the commercial market, while until recently, the United States used foreign aid. Commercial exports of dairy products from the United States, therefore, have been quite small.

The Dairy Export Incentive Program under the U.S. 1985 farm bill changed the way the United States disposes of surplus dairy products. This program allows U.S. exporters to compete on the very highly subsidized world commercial dairy markets. Only bulk dairy products, however, are eligible, which includes butter, anhydrous milkfat (butteroil), nonfat dry milk, whole milk powder, cheddar cheese, and bulk American cheese for manufacturing (15).

Table 9--Milk and cream exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 766 | 2,812 | 2,566 | 2,524 | 2,463 | 2,753 | 2,970p |
| United States 3/ | 91 | 108 | 227 | 231 | 231 | 272 | 243 |
| EC-10 4/ | 409 | 1,966 | 1,451 | 1,508 | 1,494 | 1,637 | 1,902 |
| | | | Percent | | | | |
| U.S. market share | 11.9 | 3.8 | 8.9 | 8.2 | 9.4 | 9.9 | 8.2 |
| EC-10 market share | 53.4 | 69.9 | 56.6 | 59.8 | 60.7 | 59.5 | 64.0 |

p = preliminary.
1/ SITC 022.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

The developing countries are major world importers of dairy products, importing over 50 percent of the value traded on world markets during the 1980's. Their dry milk imports have been especially large--around 60 percent of the value traded.

The United States has been experiencing competition in dairy products from the EC in Central and South America--traditional U.S. markets. In 1986, Mexico was the leading U.S. export market for cheese and fresh milk, and second largest market for nonfat dry milk and butter. During the same year, Brazil was the top market for U.S. nonfat dry milk, making commercial purchases of 90,000 tons from the United States, 100,000 tons from the EC, 21,000 tons from New Zealand, and at least 6,000 tons from other suppliers. Venezuela, a significant importer of whole milk powder, imported virtually all of its requirements from the EC and New Zealand in 1986. U.S. exports of dairy products to the Andean nations of Colombia, Ecuador, Peru, and Chile are mostly donations, but in 1987, the region purchased 5,500 tons of nonfat dry milk from the EC, Canada, and New Zealand on the commercial market (15).

Japanese per capita consumption of dairy products has doubled in the last 20 years, but still remains about one-fifth of that of the United States. Japanese dairy product imports are limited by quotas and high tariff rates, but imports, nevertheless, account for about a quarter of total dairy product consumption. About 90 percent of these imports consist of unprocessed cheese and nonfat dry milk that have little or no import barriers.

The United States is not a major supplier of dairy products to Japan. In 1986, the United States had only a 3-percent share of the Japanese market compared with the EC's 23 percent. Japan is, however, the largest U.S. market for specialized dairy products such as dried whey and lactose, and the second largest market for U.S. processed cheese. For dried whey products, the United States supplies about 30 percent of the Japanese market, with major competition coming from Canada, the EC, and Australia.

Since natural cheese production is very limited in Japan, there are practically no domestic supplies of lactose. Therefore, all lactose requirements are imported outside of the quota as long as purity is at least 90 percent. Most lactose imports are used mainly for baby formula and other edible purposes, and come primarily from the EC, with about 12 percent from the United States.

Both EC and U.S. exports to India are primarily donations. Between 1978/79 and 1985/86, the EC shipped over 217,000 tons of nonfat dry milk, more than 60,000 tons of butteroil, and 13,200 tons of white butter. In 1984/85, the Indian Government received 49,000 tons of nonfat dry milk from the EC, and 20,000 tons from the U.S. Agency for International Development (15).

The largest importers of milk in 1985 were Saudi Arabia, $155 million; Algeria, $268 million; Mexico, $118 million; and China, $175 million (13). The rationale for importing in these countries is

affluence-generated demand outstripping the pace at which dairy improvement programs can expand local production (8).

U.S. and EC export shares for butter and cheese show the EC's dominance in world markets. EC butter exports, however, have declined since 1979-81, the result of increasing production by other major dairy-producing countries (tables 10 and 11).

The major buyers of butter and cheese are the developing countries. In addition, the centrally planned countries purchase sizeable quantities of butter. Japan, self-sufficient in butter, imports very little. The Middle East is the EC's best customer for cheese. As the EC successfully substituted cow's milk cheese for sheep and goat's milk cheese, sales to this region, particularly to Iran, increased rapidly (11).

The developing countries import butter and cheese for diet upgrading and diversification. Not only is their commercial capacity to produce these commodities limited, the supply of milk in many of the developing countries is often less than that demanded for fluid consumption and the low quality of much of this local production makes processing into butter or cheese difficult.

As the growth of surpluses in the developed world accelerated in the 1980's, dairy imports by the developing countries substantially increased due to income and population increases, and greatly depressed dairy product prices in the world market. Nevertheless, strong domestic demand has led these countries to expand their own output so that their imports of late have been somewhat dampened. Facing limited commercial outlets, the developed countries, particularly the EC and the United States, have increasingly resorted to subsidizing their exports, at the expense of the low-cost dairy producers of Oceania (11).

While both EC-subsidized exports and the U.S. Dairy Export Incentive Program enable both regions to sell surplus dairy products competitively in the international market, these are not long-term solutions to the basic problem of overproduction. Over the long term, the low-cost producing nations such as New Zealand, Australia, and Argentina have a comparative advantage in milk production and will continue to prevent the United States and the EC from competing on the international dairy market without the aid of subsidies (11).

**Processed Fruits and Vegetables**

U.S. export shares exceed those of the EC for most processed fruits and vegetables. In general, U.S. and EC exports have held up well since 1980 when world trade in agricultural products began to decline.

The United States has an abundant supply of fresh fruits and vegetables with the potential for processing and exporting large quantities of the processed products. Production of these products not only provides employment and revenue for U.S. processing

Table 10--Butter exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 405 | 1,502 | 1,334 | 1,184 | 1,037 | 848 | 936p |
| United States 3/ | 5 | 25 | 37 | 74 | 71 | 27 | 16 |
| EC-10 4/ | 133 | 996 | 720 | 615 | 506 | 432 | 507 |
| | | | | Percent | | | |
| U.S. market share | 1.2 | 1.7 | 2.8 | 6.3 | 6.9 | 3.2 | 1.7 |
| EC-10 market share | 32.8 | 66.3 | 54.0 | 51.9 | 48.8 | 50.9 | 54.2 |

p = preliminary.
1/ SITC 023.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 11--Cheese 1/ exports by value and U.S./EC-10 export shares

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 403 | 1,436 | 1,471 | 1,464 | 1,403 | 1,679 | 1,916p |
| United States 3/ | 5 | 19 | 31 | 33 | 29 | 25 | 36 |
| EC-10 4/ | 112 | 565 | 618 | 641 | 593 | 731 | 851 |
| | | | | Percent | | | |
| U.S. market share | 1.2 | 1.3 | 2.1 | 2.3 | 2.1 | 1.5 | 1.9 |
| EC-10 market share | 27.8 | 39.4 | 42.0 | 43.8 | 42.3 | 43.5 | 44.4 |

p = preliminary.
1/ SITC 024.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

industries, but many kinds of fruits and vegetables are relatively labor intensive at the farm level, providing farm employment. Several can be cultivated on relatively small farms, contributing to the income of small and medium-sized farm enterprises (7).

While the main markets for processed fruits and vegetables are the developed countries, for many of the increasingly affluent developing countries--such as those in the Middle East--imports are the only source of supply. Lacking refrigeration and other processing facilities, and with production limited or highly seasonal, local fruits and vegetables cannot meet rapidly growing demand. Given the perishability of most of the fruit and vegetable products involved, trade generally takes place in the form of processed products. Exports to developing countries, therefore, should grow in future years as incomes rise and these countries continue to upgrade and diversify their diets (8).

Dried Fruit

The United States is a leading world producer and exporter of dried fruit, especially raisins and prunes. Since EC production of these tree crops is small relative to domestic demand, the EC is an expanding market for U.S. raisins and prunes rather than a competitor. European demand is currently being promoted by the U.S. Targeted Export Assistance program (21). When considering only U.S. and EC export shares to third markets, however, the shares have been relatively stable since 1985 (table 12).

Table 12--Dried fruit exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 206 | 599 | 462 | 437 | 477 | 512 | 508p |
| United States 3/ | 37 | 132 | 130 | 107 | 116 | 121 | 133 |
| EC-10 4/ | 22 | 89 | 43 | 40 | 35 | 32 | 34 |
| | | | Percent | | | | |
| U.S. market share | 18.0 | 22.0 | 28.1 | 24.5 | 24.3 | 23.6 | 26.2 |
| EC-10 market share | 10.7 | 14.9 | 9.3 | 9.2 | 7.3 | 6.3 | 6.7 |

p = preliminary.
1/ SITC 052.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

## Frozen Vegetables

U.S. export shares of frozen vegetables have traditionally exceeded those of the EC (table 13). Over 70 percent of U.S. frozen vegetable exports are french fries. Targeted Export Assistance funds have been used to promote frozen french fry exports in Japan as well as in Singapore, Malaysia, Indonesia, Hong Kong, and Taiwan. The rise of fast food restaurants in the Pacific Rim, together with the good quality of U.S. potato products, has contributed to this growth (21).

## Jams, Marmalades, and Jellies

For jams, marmalades, and fruit jellies, EC export shares have traditionally exceeded those of the United States by a sizeable amount. The value of world trade to third markets, however, is relatively small, around $100 million. During 1970-86, EC export shares to third markets averaged 20 and 25 percent of the market compared with less than 10 percent for the United States. For many of these products, the EC countries have achieved a worldwide reputation (8).

## Cigarettes

U.S. export shares for cigarettes have always been significantly larger than those of the EC (table 14). The United States has a plentiful supply of raw tobacco available for processing into

Table 13--Frozen vegetable exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 35 | 240 | 199 | 260 | 273 | 306 | 390p |
| United States 3/ | 4 | 54 | 68 | 72 | 71 | 93 | 115 |
| EC-10 4/ | 10 | 63 | 34 | 35 | 36 | 53 | 76 |
| | | | | Percent | | | |
| U.S. market share | 11.4 | 22.5 | 34.2 | 27.7 | 26.0 | 30.4 | 29.5 |
| EC-10 market share | 28.6 | 26.3 | 17.1 | 13.5 | 13.2 | 17.3 | 19.5 |

p = preliminary.
1/ SITC 05461.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

cigarettes, while the EC lacks suitable climatic conditions for growing sufficient quantities of quality tobaccos (8).

Cigarette imports are increasing rapidly in a number of developing countries such as Saudi Arabia, Hong Kong, Kuwait, and Iraq where demand is highly income elastic (8).

**Cereal Preparations**

For cereal preparations, EC export shares to third markets surpass those of the United States by a wide margin (table 15). A number of U.S. producers of cereal products, however, are located in the EC. (This subject will be explored in the last chapter of this study.) Bakery products make up almost half of this category with the remainder consisting of breakfast cereals and macaroni.

Japan is a large importer of cereal preparations, particularly for malt, bread, biscuits, and macaroni. Saudi Arabia also ranks among the top five importers of cereal preparations made up largely of bakery products. Rising affluence in the developing countries is likely to generate future growth in import demand (8).

**Wine**

The value of EC wine exports to third countries far exceeds that of the United States. During 1980-87, the U.S. share never reached 2 percent, while the EC share averaged around 50 percent (table 16).

Table 14--Cigarette exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 432 | 1,570 | 1,672 | 1,583 | 1,652 | 1,741 | 2,467p |
| United States 3/ | 163 | 779 | 819 | 834 | 867 | 861 | 1,454 |
| EC-10 4/ | 106 | 426 | 514 | 420 | 430 | 461 | 531 |
| | | | | Percent | | | |
| U.S. market share | 37.7 | 49.6 | 49.0 | 52.7 | 52.5 | 49.5 | 58.9 |
| EC-10 market share | 24.5 | 27.1 | 30.7 | 26.5 | 26.0 | 26.5 | 21.5 |

p = preliminary.
1/ SITC 1222.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 15--Cereal preparation exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 505 | 1,837 | 1,811 | 1,881 | 1,841 | 1,998 | 2,132p |
| United States 3/ | 109 | 228 | 194 | 211 | 274 | 194 | 177 |
| EC-10 4/ | 206 | 858 | 872 | 839 | 850 | 971 | 1,087 |
| | | | | Percent | | | |
| U.S. market share | 21.6 | 12.4 | 10.7 | 11.2 | 14.9 | 9.2 | 8.3 |
| EC-10 market share | 40.8 | 46.7 | 48.2 | 44.6 | 46.2 | 48.6 | 51.0 |

p = preliminary.
1/ SITC 048.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 16--Wine exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | | Mil. dol. | | | |
| World 2/ | 557 | 1,562 | 1,271 | 1,300 | 1,391 | 1,722 | 2,096p |
| United States 3/ | 2 | 21 | 21 | 17 | 18 | 24 | 40 |
| EC-10 4/ | 186 | 688 | 572 | 610 | 671 | 880 | 1,069 |
| | | | | Percent | | | |
| U.S. market share | 0.4 | 1.3 | 1.7 | 1.3 | 1.3 | 1.4 | 1.9 |
| EC-10 market share | 33.4 | 44.1 | 45.0 | 46.9 | 48.2 | 51.1 | 51.0 |

p = preliminary.
1/ SITC 1121.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

The EC's export performance is based, in large part, on brand-name recognition, an important factor in the wine market. The world market is highly differentiated by quality and is made up of a number of submarkets ranging from inexpensive table wines to high-quality champagnes (8). Also, the EC has accumulated, in recent years, sizeable stocks of alcohol distilled from surplus wine, a large proportion of which is exported.

The Soviet Union, one of the world's largest wine importers, is the EC's best customer. While wine imports by Japan have been small, the U.S. market share rose dramatically in 1986 as a result of market promotion efforts and problems with tainted European wine. U.S. wine exports to Japan are increasing as a result of the stronger yen, tariff cuts which went into effect in 1987, an aggressive marketing program by the California Wine Institute, and the increasing sophistication of Japanese wine consumers (20).

**Chocolate and Products**

The U.S. share of chocolate exports to third markets is small relative to that of the EC (table 17). Several European countries have earned worldwide reputations for quality chocolates, making it difficult for new suppliers to gain a foothold in this market. Excluding the EC and the United States, the largest importers are Japan, Austria, and Sweden. While most trade in chocolate is currently confined to the developed countries, the most affluent

Table 17--Chocolate and product exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 144 | 651 | 691 | 793 | 797 | 945 | 1,162p |
| United States 3/ | 8 | 43 | 54 | 61 | 55 | 73 | 85 |
| EC-10 4/ | 60 | 278 | 274 | 301 | 328 | 402 | 498 |
| | | | Percent | | | | |
| U.S. market share | 5.6 | 6.6 | 7.8 | 7.7 | 6.9 | 7.7 | 7.3 |
| EC-10 market share | 41.7 | 42.7 | 39.7 | 38.0 | 41.2 | 42.5 | 42.9 |

p = preliminary.
1/ SITC 073.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

developing countries are gaining in importance as importers of chocolate (8).

## Unprocessed High-Value Products

In addition to the semiprocessed and highly processed HVPs, a number of other HVPs are traded with little or no processing. The most important of these are fresh fruits and vegetables and eggs. U.S. unprocessed HVP exports were $2.2 billion in 1987, compared with $1.7 billion for the EC.

### Fresh Fruit

Fresh fruit is usually imported out of season or to supply a product not grown locally or grown only in small supply. Demand is particularly sensitive to income growth and affluence (8). The developed countries dominate trade in these high-value bulk items, but imports are growing in the more advanced developing countries as per capita income increases. Because of the perishability of the fresh products involved, trade is largely determined by proximity to markets. In general, EC markets are in North Africa and the Middle East, and U.S. markets are in Latin America and Asia (10).

#### Citrus Fruit

The United States, with large exportable surpluses of citrus fruits relative to the EC, has experienced no real competition from the EC in world markets (tables 18 and 19). The EC is instead a major market for U.S. citrus exports. In recent years, the lower value of the U.S. dollar and increased Targeted Export Assistance funding helped to increase the size of the EC market for U.S. citrus exports.

#### Deciduous

For other fresh fruit, including apples, pears, berries, and stone fruit, U.S. and EC shares have recently been about equal, a sign that competition is keen (tables 20 and 21).

### Table Eggs

The EC export market share of table eggs in 1987 was 35 percent, compared with 17 percent for the United States (table 22).

The EC ranks as a leading table egg exporter to the Middle East, one of the world's biggest import markets. Because of declining import demand in the Middle East and North Africa, EC exporters are looking to boost exports in the growing Asian market, particularly Hong Kong. Hong Kong, however, has been targeted by the United States under the Export Enhancement Program, and in 1987, the United States shipped approximately 44 million eggs to Hong Kong, a significant increase over the 6.1 million shipped in 1986 (15).

Table 18--Orange and tangerine exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 536 | 1,560 | 1,196 | 1,288 | 1,260 | 1,696 | 1,736p |
| United States 3/ | 49 | 164 | 223 | 214 | 235 | 228 | 214 |
| EC-10 4/ | 27 | 71 | 61 | 44 | 75 | 93 | 84 |
| | | | Percent | | | | |
| U.S. market share | 9.1 | 10.5 | 18.7 | 16.6 | 18.7 | 13.4 | 12.3 |
| EC-10 market share | 5.0 | 4.6 | 5.1 | 3.4 | 6.0 | 5.5 | 4.8 |

p = preliminary.
1/ SITC 057.1.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 19--Lemon and grapefruit exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 157 | 585 | 444 | 442 | 505 | 560 | 592p |
| United States 3/ | 24 | 189 | 171 | 168 | 163 | 194 | 221 |
| EC-10 4/ | 45 | 79 | 39 | 29 | 62 | 63 | 34 |
| | | | Percent | | | | |
| U.S. market share | 15.3 | 32.3 | 38.5 | 38.0 | 32.3 | 34.6 | 37.3 |
| EC-10 market share | 28.7 | 13.5 | 8.8 | 6.6 | 12.3 | 11.3 | 5.7 |

p = preliminary.
1/ SITC 057.2.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 20--Apple exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 164 | 524 | 523 | 462 | 443 | 551 | 423p |
| United States 3/ | 13 | 127 | 125 | 108 | 89 | 93 | 87 |
| EC-10 4/ | 39 | 95 | 70 | 64 | 60 | 82 | 98 |
| | | | Percent | | | | |
| U.S. market share | 7.9 | 24.2 | 23.9 | 23.4 | 20.1 | 16.9 | 20.6 |
| EC-10 market share | 23.8 | 18.1 | 13.4 | 13.9 | 13.5 | 14.9 | 23.2 |

p = preliminary.
1/ SITC 057.4.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 21--Other fresh fruit exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 244 | 818 | 893 | 943 | 1,138 | 1,225 | 1,506p |
| United States 3/ | 38 | 123 | 142 | 134 | 128 | 154 | 202 |
| EC-10 4/ | 58 | 160 | 137 | 124 | 136 | 161 | 217 |
| | | | Percent | | | | |
| U.S. market share | 15.6 | 15.0 | 15.9 | 14.2 | 11.3 | 12.6 | 13.4 |
| EC-10 market share | 23.8 | 19.6 | 15.3 | 13.2 | 12.0 | 13.1 | 14.4 |

p = preliminary.
1/ SITC 057.9.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

Table 22--Egg exports by value and U.S./EC-10 export shares 1/

| Region | 1970-73 | 1979-81 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|
| | | | Mil. dol. | | | | |
| World 2/ | 86 | 337 | 346 | 396 | 325 | 359 | 356p |
| United States 3/ | 13 | 97 | 38 | 38 | 39 | 50 | 60 |
| EC-10 4/ | 23 | 96 | 147 | 132 | 114 | 121 | 126 |
| | | | Percent | | | | |
| U.S. market share | 15.1 | 28.8 | 11.0 | 9.6 | 12.0 | 13.9 | 16.9 |
| EC-10 market share | 26.7 | 28.5 | 42.5 | 33.3 | 35.1 | 33.7 | 35.4 |

p = preliminary.
1/ SITC 025.
2/ Excludes intra-EC trade, U.S. exports to the EC, and EC exports to the United States.
3/ Excludes U.S. exports to the EC.
4/ Excludes intra-EC trade, and EC exports to the United States.
Source: (13).

## U.S. Overseas Food Processing Operations

A number of the leading U.S. food processors have manufacturing plants abroad. Foreign investment by U.S. food manufacturing firms increased significantly during the first half of the 1980's, from $4.9 billion in 1980 to $11.2 billion in 1985, according to the U.S. Department of Commerce.

U.S. food processors are quite active abroad, and, in recent years, have made substantial progress in selling HVPs in foreign markets. Unfortunately, the total value of sales made by U.S. overseas operations in the various foreign markets is not known, much information being proprietary. What is known, however, is that some of the large, well-known U.S. food processors such as Campbell Soup, Heinz, Kellogg, Kraft, Quaker Oats, and Sara Lee have processing plants abroad, including sizeable operations in the EC, and derive a large portion of their total revenue from foreign sales (3, 5, 12).

A disclosure by one of the above food processors in its 1986 annual report revealed that 40 percent of total revenue came from foreign sales. In addition, this firm listed all of its subsidiaries (factories or farms) located in the EC. The list included nine factories and seven farms in the United Kingdom, six factories in West Germany, four in Italy, three in France, and one each in the Netherlands and Portugal (22).

All U.S. food processors located in the EC benefit from the EC's Common Agricultural Policy, including the receipt of export and processing subsidies for products shipped to non-EC markets. Such exports have a competitive advantage over similar products shipped from the U.S. mainland, especially to markets in the Middle East, North Africa, and non-EC European countries.

An analysis of U.S. and EC competition in third markets cannot be complete without pointing out that sales by U.S. foreign subsidiaries are included in the trade data as EC exports, not U.S. exports. Since many U.S. food processors with foreign subsidiaries produce highly processed HVPs, this reduces the potential for some U.S. exports in this category.

Since the value of the sales of U.S.-owned foreign subsidiaries, especially in recent years, is believed to be substantial, U.S. export sales data alone do not reflect the considerable progress made by U.S. food processors in selling in foreign markets. The tradeoff for the U.S. economy between exports of agricultural products and repatriation of profits from foreign subsidiaries is an issue worthy of further investigation.

## Conclusions

Competition in the international HVP market is strong, protection of domestic markets is widespread, and many middle-income developing countries are beginning to develop their own processing plants. Yet, the expansion of U.S. high-value exports should be possible, especially in view of the recently authorized U.S. export promotion policies such as the Export Enhancement Program, Targeted Export Assistance, Dairy Export Incentive Program, various credit policies, and the lower dollar.

The decline in the value of the dollar since 1985 and lower U.S. loan rates have increased the EC's expenditures for export subsidies by widening the gap between EC domestic prices and world prices. While this has caused serious budgetary problems for the EC, it is unlikely to cause a significant slowdown in the EC's subsidized exports, at least in the near future. The United States must, therefore, anticipate continued keen competition from the EC.

Nevertheless, the United States still has considerable potential to expand high-value exports. Major factors in its favor are an abundant supply of high-quality, relatively low-priced raw bulk products, and a large U.S. domestic market that includes a well-developed and technologically advanced processing sector.

Two of the three main categories of HVPs--semiprocessed and high-value unprocessed HVPs--offer excellent opportunities for the United States to increase its exports of high-value products. Commodities with favorable expectations include semiprocessed and processed meats, especially poultry and pork; semiprocessed oilseed products

such as meals and oils; and fresh and processed fruits, vegetables, and nuts (6).

In general, the consumer-ready, highly processed category of HVPs have more limited export growth potential. Many of these products are either already being produced abroad by U.S. multinational firms, or produced by European firms with well-established brand names or quality advantages, such as French wines and Swiss chocolates. While the cost of developing these markets and shipping directly from the United States has been too high for many U.S. firms in the past, the lower dollar could offset, at least in part, this disadvantage for certain products.

U.S. exports of HVPs still depend greatly on effective marketing strategies. In most cases, U.S. agribusiness will need to use both price and nonprice competition to successfully promote U.S. high-value exports. Aggressive advertising and promotion may be effective in convincing foreign buyers that the United States can provide quality products at fair and competitive prices.

## References


(1) Agra Europe, Ltd. CAP Monitor. London, various issues.

(2) Commission of the European Communities. Agricultural Situation in the Community. Brussels, 1987.

(3) Heinz, H.J. Annual Report, 1986.

(4) International Wheat Council. World Trade in Wheat Flour in 1986/87. London, 1987.

(5) Kraft, Inc. Annual Report, 1986.

(6) Mathia, Gene, and Ruth Elleson. "Trading High-Value Products," National Food Review. U.S. Dept. Agri., Econ. Res. Serv., Sept. 1983.

(7) McNitt, Harold A. The EC Market for U.S. Agricultural Exports: A Share Analysis. FAER-179. U.S. Dept. Agri., Econ. Res. Serv., Mar. 1983.

(8) O'Brien, Patrick, and others. High-Value Agricultural Exports: U.S. Opportunities in the 1980's. FAER-188. U.S. Dept. Agri., Econ. Res. Serv., Sept. 1983.

(9) Oil World, Hamburg. Oct. 25, 1985.

(10) O'Rourke, A. Desmond. Outlook for International Trade in Fruits and Vegetables. Paper given at Annual Outlook Conference, U.S. Dept. Agri., Econ. Res. Serv., Wash., D.C., Dec. 1987.

(11) Pennsylvania State University, Dept. of Ag. Econ and Rural Sociology. The World Dairy Market--Policies, Trade Patterns, and Prospects. Aug. 1987.

(12) Sara Lee Corp. Annual Report, 1986.

(13) United Nations Trade Statistics. Tabulations by U.S. Dept. Agri., Econ. Res. Serv., Wash., D.C., 1970-87.

(14) U.S. Dept. of Agriculture, Economic Research Service. Agricultural Outlook. Nov. 1987.

(15) _____. Foreign Agricultural Service. Dairy, Livestock and Poultry, U.S. Trade and Prospects. Various issues.

(16) _____. World Oilseed Situation and Market Highlights. Various issues.

(17) _____. "Dairy Export Incentive Program," Fact Sheet. Feb. 1987.

(18) _____. "Export Enhancement Program," Fact Sheet. Feb. 1987.

(19) _____. "To Expand United States Agricultural Exports," CCC Export Credit Guarantee Program GSM-102. Jan. 1984.

(20) _____. "Processed, High-Value Items for Targeted Export Asssitance Programs," Foreign Agriculture. Jan. 1987.

(21) _____. Horticultural Products Review. Various issues.

(22) Value Line Investment Survey. Selected companies, 1987.



☆ U.S. Government Printing Office : 1990 - 261-455/20348