

## World Agriculture & Trade



Ahold Corporate Communications

# Shaping the Global Market For High-Value Foods

The global market for high-value foods is complex, and subject to an ever-changing product mix demanded by wealthier and more selective consumers. While consumers in industrialized countries are the primary customers for high-value foods, developing countries are a growing market. As income and population levels grow, these countries account for a growing share of global food sales. In response, multinational food companies are rapidly restructuring their manufacturing and retail operations to better serve evolving world food demand. The resulting coordination between retail and supply chains has implications for both food producers and exporters.

The size of the global food market is difficult to measure precisely given varying national definitions of the food sector and the range of venues in which food is sold. From street-side stalls in developing countries to supermarkets in highly developed countries, the market may also be defined by its stage in the distribution channel (wholesale, manufacture, retail, or food service). This article focuses on the retail level of the food market where virtually all products sold are high-value products. These products are either com-

modity-based—such as meat, fruits and vegetables—or manufactured—such as beverages, and bakery products. Global sales of high-value food products including food sold through food service were estimated at US\$4 trillion in 2000 with beverages representing more than a fourth of total retail sales.

Much of the growth in the global food market can be accounted for by increased “value-added” rather than volume. Value is added at various stages along the food marketing chain. At the manufacturing level, raw commodities are transformed into palatable products and packaged for the retail market. Further value may be added to products destined for the food-service sector, one of faster growing segments of the food market, and accounting for about one-third of global food sales.

### Who Buys What?

Developed countries account for most of the about US\$2.2 trillion worth of food products that move through global retail outlets. European Union countries, the U.S. and Japan together accounted for over 60 percent of processed food (packaged food and beverages) retail sales. Retail sales of processed food account for

about half of total food expenditures in developed countries, but only a quarter or less in most developing countries. In most countries, packaged food products account for about two-thirds of all retail processed food products with alcoholic, soft and hot drinks comprising the remainder.

The value of total packaged food retail sales varies among countries based on per capita income levels. For example, in 2001, per capita retail sales of packaged food averaged about \$1,190 among high-income countries, \$491 among upper-middle-income countries, \$209 among low-middle-income countries, and \$107 among low-income countries. Japan spent \$1,255 per capita on packaged food, the U.S. \$912, and Mexico \$334, compared with \$33 per capita for China and \$10 for India.

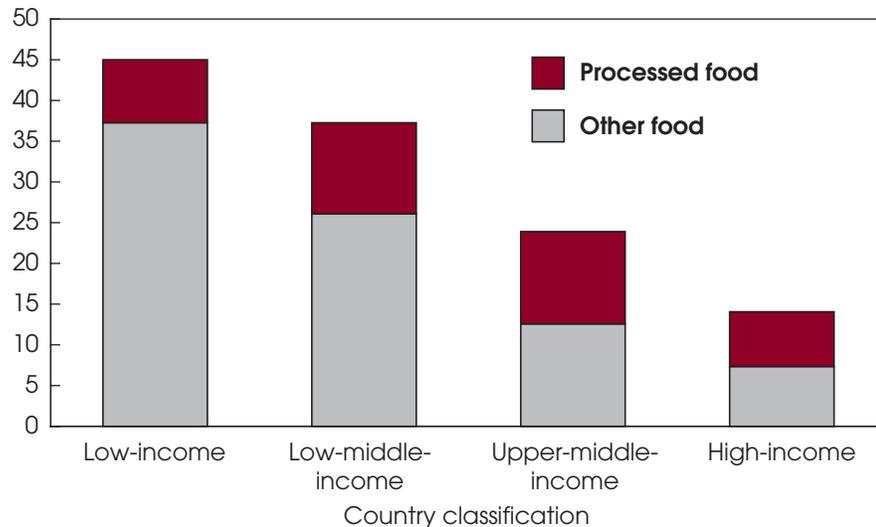
While market size as measured in retail sales is much larger in high-income countries, market growth has generally been faster among developing countries, where oils and fats, dried food, and dairy products have sizable retail markets with strong growth trends. Although a smaller market, breakfast cereal sales have skyrocketed, registering double- and triple-digit growth in many developing countries.

Processed food retail sales are generally growing at a slower pace in high-income countries than in developing countries. Ready-to-eat meals is the fastest growing sector, with the exception of markets where cultural values may tend to discourage purchases (e.g., France and Singapore). Growth in retail sales of items used in meal preparations such as oils and fats and dried food have slowed or decreased in many high-income countries. Breakfast cereal sales, which increased in Europe and Asia during the past 5 years, have declined in the U.S. The decline in the U.S. may be due to increased competition from other items such as frozen breakfast food, bagels, and other bakery products.

The global market for soft drinks is expanding rapidly with large growth in sales in Eastern Europe, Asia, and Latin America (see related story, page 25). Growth in the soft drink market in the

## Processed Food Accounts for a Larger Share of Total Food Expenditures In High-Income Countries

Percent of income expenditures



Low-income countries have per capita GNI (Gross National Income) below \$756; low-middle, \$756-\$2,995; upper-middle, \$2,966-\$9,266, and high-income, above \$9,266. Source: Euromonitor, 2002. World Bank classification of countries based on 2000 per capita GNI. Economic Research Service, USDA

U.S. has slowed with average annual growth under 2 percent, but continues strong with 3-4 percent growth in other high-income countries. Growth rates in developing countries are much higher, with Asian markets ranging from almost 13 percent in the Philippines to 19 percent in Indonesia. In the U.S., Latin America, India, the Philippines, and South Africa, most soft drinks sold in retail stores are carbonate based, but in other countries a larger share is accounted for by fruit juices and various ethnic drinks. However, carbonate-based drinks register higher growth rates in these countries.

Reflecting the increased demand for variety as incomes increase, the number of products purchased at retail outlets is greater for wealthier countries. For example, the top 5 product categories account for 71 percent of the entire processed food retail sales for Mexico and 74 percent for India, but only 48 percent for the U.S. and 47 percent for the United Kingdom (UK). In many countries, the top 5 categories are bakery, dairy, confectionery, snack foods, and dried foods. As the demand for processed food products is also driven by the demand for quality and labor-saving products, the items con-

sumed by different income groups reflect different levels of services embodied in the products. For example, ready-to-eat meals account for about 4 percent of total retail sales in the U.S. and the UK, but only 0.06 percent in Mexico, 0.55 percent in China, and none in India. In contrast, products such as fats and oils, which account for over 7 percent of total processed food retail sales in India, 13 percent in Indonesia, and 5 percent or more in many developing countries, account for less than 2 percent in high-income countries (0.79 percent in the U.S.).

### As Consumer Demands Change...

Consumer's diets have changed worldwide due to income growth, lifestyle changes brought about by urbanization, and increased availability of a wide variety of food products. Either because of increases in purchasing power or the increased opportunity cost of time required for preparing food, the demand for higher value and processed food products has expanded globally. Consumers in developing countries, who have traditionally consumed low-value carbohydrate-rich cereals, have increased their con-

sumption of higher value meats, fruits, and vegetables. Similarly, consumers in wealthier countries are increasingly substituting semi-processed products for relatively higher value prepared meals.

Although the quantity and nutrient value of the foods consumed may not have changed, the increased value of the products consumed may reflect value-added services embodied in the products, which reduce preparation time required before consumption.

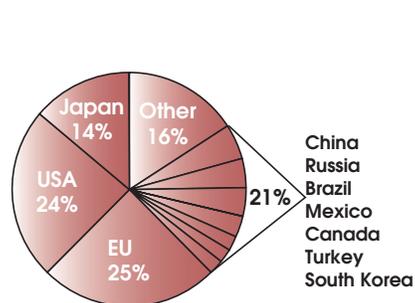
Although consumers with higher income levels spend more money on food, the food share of total household expenditures is low for wealthier consumers who typically spend a larger share of their income on more expensive items such as health care, energy, and recreation. During the last decade, consumers in high-income countries spent an average of 14 percent of their total household expenditures on food, while consumers in low-income countries spent an average of 45 percent. In 2001, this share ranged from a high of 56 percent of total household expenditures in Indonesia to 35 percent in Morocco, 26 percent in Mexico, 11 percent in Japan, and 7 percent in the U.S. About half of the total household food expenditure in high-income countries is for processed food products.

Shares of food expenditures spent on high-value products have generally risen during the last decade in most countries. The increased share of total food expenditures for high-value food products not only reflects greater consumer purchasing power but also changes in lifestyle afforded by increased prevalence of household amenities.

For example, having refrigerators may lead households to purchase perishable food products, while increases in microwave ovens may boost purchases of ready-to-eat food items that require minimal preparation before consumption. Most developing countries have significantly increased the number of households with refrigerators. Between 1990 and 2001, the share of households with refrigerators in India increased from 4.6 to 12.6 percent, in China from 1 to 6.4 percent, in Indonesia from 13.4 to 25.1 percent, in Morocco from 27.1 to 42.6

## World Agriculture & Trade

### Industrialized Countries Account for Most Retail Sales of Processed Foods. . .



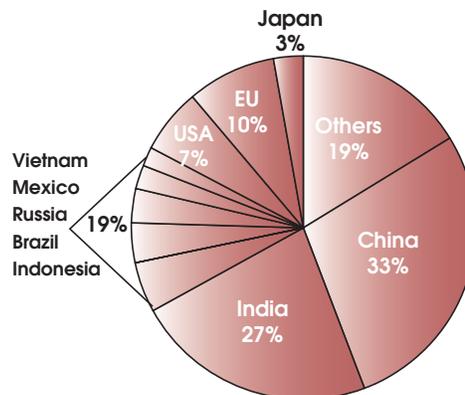
Source: Euromonitor, 2002.  
Economic Research Service, USDA

percent, and in Brazil from 62.4 to 82.6 percent.

The share of households with microwave ovens in high- and high-middle-income countries has significantly increased during the last decade. Ninety-one percent of households in Japan now have microwave ovens compared with about 76 percent a decade ago. Over 84 percent of U.S. households have microwave ovens compared with less than 80 percent in 1990. Microwave oven ownership has also increased dramatically in the UK, Singapore, Hungary, and many other wealthier countries. In lower income countries such as Brazil, Morocco, and Indonesia, the number of households with microwave ovens is small, but growing.

Increased ownership of microwave ovens is likely to increase purchases and consumption of prepared food products. Accordingly, retail sales of ready-to-eat meals, though small, have grown among some developing countries, with dramatic growth rates in many middle-income countries in Eastern Europe and Latin America. In developing Asia, total value of retail sales of prepared meals is relatively small, and annual growth in sales suffered in the late 1990s as a result of the Asian financial crisis. Given the financial recovery, sales of ready-to-eat meals are expected to grow along with increases in

### . . .but Developing Markets Contain Over Three-Fourths of 2001 Population



the number of households with microwave ovens.

Eating habits among consumers vary with their income level. Consumers diversify their diets as their incomes grow—products with more value-added services are increasingly substituted in the diet. For example, in 2000, an average consumer in Vietnam consumed about 1,200 calories less per day than an average American consumer. However, about 70 percent of the total calories consumed by the Vietnamese consumer were from cereals, which require more preparation time. Only about 22 percent of the total calories consumed by the average American were cereals, while 12 percent were from meat (8 percent in Vietnam) and another 12 percent were from dairy products (less than 1 percent in Vietnam).

Changes in expenditures for different food items over time (reflecting income growth over time), relative to caloric intake may also capture the additional premium paid for food quality, preparation, and processing embodied in the product. Between 1996 and 2000, total available calories per capita in the U.S. increased by 4 percent, while per capita food expenditures in constant dollars increased over 5 percent. Seafood showed the most dramatic change—with a 7-percent increase in per capita calories, but a nearly 26-percent increase in expenditures.

### ...So Do Firms' Strategies

Firms have several options for selling in foreign markets. Exporting high-value food products is one option, but foreign direct investment (FDI)—investing or acquiring assets abroad and manufacturing—is often preferred. Commodity-based products are less suited for FDI since processing is generally done close to the primary production location. Once processed, commodity-based products can be exported like most other food products. Commodity-based products are traded far more than are manufactured packaged products, and account for over 75 percent of the total value of U.S. high-value food trade. While the bulk of FDI-based food sales is in beverages and cereal products, the largest share of high-value food exports is in meat, fruits and vegetables, and fish and seafood.

In the case of manufactured products, firms can tailor both manufacturing and packaging to suit local preferences. Thus, firms generally opt for an FDI-based sales strategy over an export-oriented sales strategy. For private firms owning trademarks, brands, formulas, and processing technologies associated with manufacturing, licensing and marketing agreements with other national and multinational firms play a big role in determining how products are sold in foreign markets. A manufacturer's ability to establish close business relationships with global super-market chains is increasingly important.

An export-oriented sales strategy is important in cases where the geographical origin of production matters to the consumer. In these cases, a foreign brand can sell at a premium over a comparable domestically produced good. Alcoholic beverages (wine in particular), and various confectionery products are good examples. A combination of trade and FDI sales strategy is another alternative. For example an Australian beer (Fosters) can be brewed and exported from Canada and sold at a premium in the U.S.

Food manufacturing firms have traditionally relied on brand ownership to successfully differentiate their products. As a result, firm dominance can be seen at the global level for specific product markets. For example, a single company, Coca-

## World Agriculture &amp; Trade

**Western Europe Represents a Declining Share of Global Sales for Major Food Companies**

	1996	1997	1998	1999	2000
			<i>Percent</i>		
Nestle	40	37	37	36	32
Unilever	50	47	47	46	42
Cadbury Schweppes	46	45	46	44	41
Philip Morris	35	34	34	32	29
Kellogg Co.	Na	Na	25	23	21
Coca Cola	Na	Na	26	23	21
Campbell Soup	Na	14	13	10	9

Na=Not available.

Source: Euromonitor, 2002.

Economic Research Service, USDA

Cola, is dominant in global soft drink sales. Due to changes in consumer preferences, the market has shifted from carbonated drinks to functional drinks, teas, and bottled water. While Coca-Cola led the market in carbonated drinks, it ranks no higher than third in other soft drink categories. With faster growth in non-carbonated beverage sectors, Coca-Cola's share in the soft drink market has somewhat declined in recent years.

The Kellogg Company illustrates how firms adjust to consumer demand to remain competitive. As consumer disposable income grew in the second half of the 20th century, Kellogg capitalized on consumer demand for convenience and consumer perception that ready-to-eat

cereals were nutritious. Consumer demand shifted in the late 1990s as eating patterns and consumer lifestyles evolved, and eat-out-of-hand baked goods and snack bars started replacing ready-to-eat cereals. By 1998, ready-to-eat cereal sales declined in the U.S. and, under pressure from competition, Kellogg was forced to cut prices on 16 of its brands. Since many products—such as Kellogg's Corn Flakes—were relatively easy to imitate, competition had grown from private labels and other cereal competitors. In response, during the past 5 years, Kellogg has diversified its product portfolio through acquisitions of smaller companies specializing in convenience snack and breakfast foods.

In addition to shifting consumer demand, food companies have had to develop strategies for geographic coverage. Since 1996, Western European sales shares for both U.S. and European companies have declined. Nestle, the world's largest food company, had 40 percent of its sales in Western Europe in 1996. By 2000, this share declined to 32 percent, mainly as a result of stronger sales outside Europe. Population, demographics, and economic growth have all contributed to changes in food consumption patterns, particularly among consumers in developing countries.

**Future Lies in Developing Countries**

Although high-income countries account for over 60 percent of total processed food retail sales, they are essentially mature markets with little future growth potential. Developing countries are expected to account for most of the future increases in food demand, resulting from increases in population and per capita food consumption. Accounting for over three-fourths of total global food consumers, developing countries also register higher rates of population growth and younger population, signaling faster growths in future food demand.

**Measuring the Global Food Market**

The size of the global food market is difficult to measure accurately. Consistent definitions of "markets" and data availability make comparisons across countries problematic. In developing countries, a large share of food is traditionally sold through street-side stalls which are likely not captured in a consistent and clear manner. Supermarkets have begun to have a greater presence in these markets making commercial food sales data more available, although such data may understate the size of the actual market.

A market may be defined in terms of product coverage and the stage in the distribution channel (wholesale, manufacture, retail, or food service). In the retail level of the food market, virtually all products sold are high-value products. High-value food products can be divided into either commodity-based products or manufactured products. *Commodity-based* products are those that are identifiable with a specific commodity such as meat, fruit and vegetables, fish, milk, or sugar. *Manufactured* products combine multiple commodities, undergoing substantial transformation from their origi-

nal raw materials. For example, breakfast cereals or bakery products are manufactured from a wide variety of ingredients such as milled grain, flours, oils, sugar, fruit, nuts, dairy products, and eggs. These are processed into consumer-ready packaged products carrying company brands that differentiate themselves in the marketplace. High-value, commodity-based products are typically sold under generic labels.

In this article, world estimates of food sales and specific food and beverage categories are drawn from Euromonitor, a commercial market data vendor, containing globally consistent food categories. Global sales of high-value food products including food sold through food service were estimated at US\$4 trillion in 2000. High-value foods can basically be broken down into packaged food, fresh food, and beverages. Processed food sales are combined sales of packaged food and beverages. Beverages are an important part of the high-value food market, representing more than a fourth of total retail sales.

## World Agriculture & Trade

With per capita income levels forecast to grow faster in developing countries, their demand for high-value and processed food products is expected to increase. USDA's published estimates of world average per capita Gross Domestic Product (GDP) shows annual growth rates of 2 percent during the next decade, but developing country GDP is estimated to increase by about 3.5 percent annually. Studies indicate that as income levels rise, consumers in developing countries spend a larger share of the additional income on food compared with consumers in high-income countries with similar increases in income levels. The additional expenditure on food by consumers in developing countries often translates to diet diversification and increased expenditures on high-value food products, such as retail packaged items.

Changing food demand in developing countries, along with the structure of food markets, is transforming into more coordi-

nated systems linking consumer demands with procurement strategies. In fact, the basic structure of an industrialized food market is evolving rapidly in these countries. Of significance is the explosive growth in supermarkets and large-scale food manufacturers. In Latin America, supermarket sales rose from 10-20 percent of total retail food sales to 50-60 percent during the past decade. Global multinational retailers such as the Dutch Royal Ahold, Carrefour, and Wal-Mart are beginning to dominate the sector in this region.

With increasing demand and changes in the retail sector, developing countries will largely account for future growth in high-value food sales. While retail sales of packaged food products grew at about 2 percent annually in high-income countries, these sales have grown much faster among developing countries, ranging from 7 percent in upper-middle-income countries to 29 percent in lower-middle-

income countries. The dramatic growth among middle-income countries is partly due to a tremendous growth in sales in Bulgaria, Romania, Poland, and Hungary. With sales in these countries peaking, future growth in packaged food retail sales among developing countries is expected to be much slower, but will continue to exceed the rates for high-income countries. As growth in sales slows in Eastern Europe, markets in the Far East are predicted to pick up. Vietnam, China, and Indonesia are expected to be the fastest growing markets for packaged food retail sales over the next 5 years, with growth rates forecast at 11, 10 and 8 percent, respectively. Additionally, Korea, Thailand, India, and the Philippines rank among the top 10 growing markets, with total packaged food retail sales expected to grow 5-7 percent annually. **AO**

Mark Gehlhar (202) 694-5273  
mgehlhar@ers.usda.gov  
Anita Regmi (202) 694-5161  
aregmi@ers.usda.gov

### Want to know more?

#### USDA publications

"Cereal Sales Soggy Despite Price Cuts and Reduced Couponing," *FoodReview*, May-August 2002, Vol. 23 Issue 2.  
[www.ers.usda.gov/publications/foodreview/may2000/may2000d.pdf](http://www.ers.usda.gov/publications/foodreview/may2000/may2000d.pdf)

"Cross-Country Analysis of Food Consumption Patterns," in *Changing Structure of Global Food Consumption and Trade*, Agriculture and Trade Report WRS-01-1, ERS-USDA, May 2001. [www.ers.usda.gov/publications/wrs011/](http://www.ers.usda.gov/publications/wrs011/)

USDA, *USDA Agricultural Baseline Projections to 2011*, February 2002.  
Access report at [www.ers.usda.gov/briefing/baseline/](http://www.ers.usda.gov/briefing/baseline/)

#### Other articles and publications

"Continuing Concentration in Food Industries Globally: Strategic Challenges to an Unstable Status Quo," Food Marketing Policy Center Research Report No.49, 2000.

"The Rapid Rise of Supermarkets in Latin America: Challenges and Opportunities for Development," *Development Policy Review*, 2002 20(4):317-334.

*Global Food Projections to 2020*. Washington, DC: International Food Policy Research Institute; 2001. 2020 Vision series.