Factors Shaping Global Food Markets

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Modern food markets are responding to consumer preferences at a local level, as the food industry becomes more global.

Consumers today are upgrading their diets to include more higher valued products than in the past (Regmi, 2001; Rosegrant et al., 2001). Initially, this trend was accompanied by rapid growth in trade for high-value foods, fueling speculation of continued trade growth in the sector. However, contrary to conventional wisdom, global food trade patterns have shifted again and the trade share of high-value food, particularly processed products, has started to decline.

Competing in the global food industry is a complex undertaking, as firms must continually react to the demands of wealthier and more selective consumers for higher quality and more varied products. Markets for individual food products, however, are not becoming global. Rather, consumer demand for food products varies based on income and regional cultural preferences. Successful local, regional, and global firms supplying foods to these diverse markets employ increasingly sophisticated technologies and business practices to customize food products to meet local tastes and preferences.

Size and Changing Shape of the Global Food Market

Food is sold either through retail stores or through foodservice establishments, mainly hotels and restaurants. Global sales of food, including food sold through foodservice establishments, are estimated at \$4 trillion in 2002 (table 1-1). Over 40 percent of the total value of global food sales is currently accounted for by the foodservice sector. With consumers increasingly demanding convenience, it is likely that the value of global foodservice sales will overtake global retail food sales in the future. The demand for convenience is not limited to consumers in developed countries. In the developing countries, rising demand for convenience is reflected by the rapidly expanding fast food sector.²

As the food sector is not consistently defined across countries and regions, nor is food sold in the same manner, it is difficult to measure precisely the actual size of the world food market. For example, in developed countries, the foodservice sector accounts for a large and growing share of total food sold. However, food service covers a wide variety of outlets, and reliable data are generally hard to obtain across different countries. In developing countries, a large share of food is traditionally sold through streetside

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² The World Bank defines high-income countries as those with year 2000 per capita Gross National Income (GNI) above \$9,266; upper-middle-income countries as those between \$2,996 and \$9,266; low-middle-income countries as those between \$756 and \$2,995; and low-income countries as those below \$756. Countries in the low- and middle-income groups are generally considered to be developing countries.

Table 1-1—Global food sales, 2002

	Retail stores	Food service	Total
		Billion dollars	
Fresh food	531	382	913
Processed products	1,762	1,420	3,182
Packaged food	1,148	828	1,976
Beverages	614	592	1,206
Alcoholic drinks	316	422	729
Hot drinks	53	12	65
Soft drinks	245	167	412
Total food	2,293	1,803	4,096

Source: Euromonitor, 2003.

stalls. Products sold in such markets include food prepared at vendors' homes and sold to consumers in a ready-to-eat form.

At the retail level (which excludes food service), a relatively consistent comparison across regions is possible through the use of food sales data from grocery stores. However, these data fail to completely capture all food sales, especially in the developing countries. Although supermarkets are increasingly prevalent in developing countries, the available food sales data from these outlets may understate the actual size of individual developing country markets. Nevertheless, lacking alternative sources, this study uses retail sales data collected by a commercial vendor, Euromonitor, which consists of globally consistent food categories (see box on Euromonitor).

At the retail level, food can be broken down to fresh (\$531 billion) and processed (\$1.7 trillion). Processed product sales are the combined sales of packaged food (\$1.1 trillion) and beverages (\$641 billion). High-income regions, including European Union (EU) countries, the United States, and Japan, accounted for over 60 percent of packaged food sales in the world in 2002. Packaged food accounts for about half of total food expenditures in developed countries but only a third or less in most developing countries (fig. 1-1). In most countries, packaged food accounts for about two-thirds of all processed products sales, with alcoholic beverages, soft drinks and hot drinks constituting the remaining one-third. The value of packaged food sales varies among countries based on per capita incomes (table 1-2).

Market sizes, as indicated by the value of retail sales, are much larger in high-income countries, but market growth has generally been faster among developing countries (table 1-3). Among developing countries, oils and fats, dried food, and dairy products have sizable retail markets with strong growth trends. While smaller in terms of retail value, the breakfast cereals market has skyrocketed, registering double- and triple-digit sales growth in some developing countries.

In the mature markets of high-income countries, processed food retail sales are growing at a slower pace than in the developing countries. Ready-to-eat meals are one of the fastest growing sectors in developed countries, while breakfast cereals are making inroads in the nontraditional French and Singaporean markets. As growth rates of ready-to-eat products have risen, growth rates in

Euromonitor Data

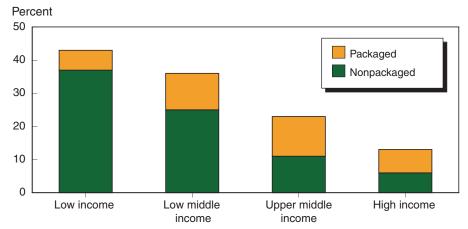
The data on global food sales in this chapter come from a single commercial vendor, the Integrated Market Information System of the Euromonitor International. Data on products and brands are collected from national statistical offices, international and intergovernmental bodies, manufacturers and retailers, and store visits in 70 countries. Standardized international product sectors are developed by the Euromonitor to ensure global comparability (see table A). Industry average markups as defined by the Euromonitor include wholesaler, distributor, and retailer as well as value-added tax/sales (VAT/sales) when appropriate. Comparative checks are made on per capita expenditure growth rates and product breakdowns. Trade interviews with companies are conducted at all levels of the supply chain. If irregularities are found, supplementary research is conducted in the relevant countries to confirm or amend findings. In addition to indepth data collection from 70 countries, the Euromonitor generates data using statistical models for those countries where official data cannot be obtained. The models are used to generate composite regional figures based on population, consumer expenditures, gross domestic product, food price indices, Gini index, and purchasing power parity. For example, model-based data on packaged food retail sales are available for Africa and the Middle East, although actual data are unavailable for many countries in these regions.

Table A—Food product categories provided by the Euromonitor

Sectors	Products	Subproduct (>150, examples below)
Alcoholic drinks	Beer	Lager
	Wine	Still red wine
	Spirits	Whiskey
	Flavored alcoholic beverages (FAB)	Wine-based drinks
Hot drinks	Coffee	Instant coffee
	Tea	Green tea
	Other drinks	Chocolate-based hot drinks
Soft drinks	Carbonates	Cola carbonates
	Fruit/vegetable juice	Nectars
	Bottled water	Carbonated bottle water
	Functional drinks	Sports drinks
	Ready-to-drink (RTD) concentrates	Powder concentrates
	RTD tea	Carbonated RTD tea
Packaged foods	Confectionery	Chocolate confectionery
, and the second	Bakery products	Breakfast cereals
	Ice cream	Take-home ice cream
	Dairy products	Yogurt
	Savory snacks	Tortilla chips
	Snack bars	Energy bars
	Meal replacement drinks	Slimming drinks
	Ready meals	Frozen ready meals
	Soup	Instant soup
	Pasta	Canned pasta
	Noodles	Instant pasta
	Canned food	Canned beans
	Frozen food	Frozen potatoes
	Dried food	Rice
	Chilled food	Chilled processed meat
	Oils and fats	Olive oil
	Sauces, condiments	Soy-based sauces
	Baby food	Milk formula
	Spreads	Jams and preserves

Figure 1-1

Food share of total expenditures declines while processed food share of food expenditures increases with income, 2002



Note: The World Bank defines high-income countries as those with 2000 per capita Gross National Income (GNI) above \$9,266; upper-middle-income countries as those with per capita GNI between \$2,996 and \$9,266; low-middle-income countries as those with per capita GNI between \$756 and \$2,995; and low-income countries as those with 2000 per capita GNI below \$756. Countries in the low- and middle-income groups are generally considered to be developing countries.

Source: Euromonitor, 2003. World Bank classification of countries.

retail sales of items used in meal preparations, such as oils and fats and dried food, have slowed or turned negative in many high-income countries.

In Eastern European countries, retail sales of processed food products grew rapidly during the 1990s.³ This growth resulted from ongoing westernization of both consumers and food marketing sectors in the region. Multinational companies and Western brand products have become increasingly visible in these markets. At the same time, Eastern European consumers are growing more sophisticated, with greater demand for products offering health benefits and convenience. Czech and Hungarian consumers, in particular, have increased consumption of nutrient-enriched and low-fat products, such as yogurts and specialty drinks. The busy lifestyles of young professionals and entrepreneurs have accounted for increases in the demand for labor-saving breakfast cereals, snack foods, and ready-to-eat meals. Sales of such products as canned ready meals, frozen pizza, and dehydrated soups are high in the region. Dried food products, particularly pasta and other noodles, have been one of the most dynamic growth sectors in this retail market. Foreign investments in private label product development have also helped drive the demand for high-value processed foods in some Eastern European countries.

Retail food sales in Latin America and developing countries in Asia are undergoing changes similar to those in Eastern Europe. However, the markets in such countries as China and Vietnam are at the early stages of transformation, with smaller shares of multinational retail chains and limited penetration of packaged food products in the rural areas. As in Eastern Europe, wealthier consumers in Latin American are purchasing more time-saving products and products associated with higher health attributes. Lowfat yogurt and lean chilled and frozen food products are becoming very popular in Brazil, while meal replacement drinks are one of the strongest

³ Except Russia, where retail sales trends mirror those of high-income countries.

Table 1-2—Annual average growth in retail sales of packaged foods

Country group	Per capita gross national	Per capita 2002 retail sales	Total reta	il growth	Per capi	ta growth
	income (2000)		1996-2002	2002-08 ¹	1996-2002	2002-08 ¹
	Г	Dollars	Per	cent	Per	cent
High-income	>=9,266	979	3.2	1.7	2.5	1.1
Upper-middle-income	2,996-9,265	298	8.1	4.0	6.7	2.8
Lower-middle-income	756-2,995	143	28.8	4.4	28.1	3.8
Low-income	<755	63	12.9	6.1	11.9	5.3

Note: Country classifications as per the World Bank. Retail sales are sales of packaged foods.

Source: Euromonitor, 2003.

Table 1-3—Retail sales size and growth of selected food items

_		R	etail sales	, 2002		Ave	Average annual growth rate (1998-2003)				
Market	Oils &	Breakfast	Ready	Dried	Dairy	Oils &	Breakfast	Ready	Dried	Dairy	
	fats	cereals	meals	food	products	fats	cereals	meals	food	products	
			Million dol	lars				Percent			
High-income coun	tries:										
France	2,294	646	2,924	1,085	14,733	1.3	5.0	4.8	1.5	3.8	
Germany	2,413	711	1,986	1,969	13,798	-1.7	0.4	3.4	2.2	2.4	
Japan	2,731	300	11,573	22,510	18,801	-1.8	2.2	4.9	-1.5	0.9	
Singapore	35	17	22	139	134	2.2	10.0	3.6	3.6	4.7	
United Kingdom	1,997	1,999	6,172	1,215	10,239	1.1	1.0	5.9	3.5	1.8	
United States	4,673	9,476	17,278	9,965	46,969	-0.1	1.3	5.8	1.4	3.8	
High-middle-incom	e countries	::									
Brazil	2,559	117	203	3,369	7,106	24.0	8.9	17.3	16.1	13.4	
Chile	250	48	10	217	747	1.0	10.3	4.0	-0.2	3.7	
Czech Republic	443	19	201	221	1,427	0.8	12.4	10.8	11.3	4.4	
Hungary	319	40	124	378	1,206	6.9	16.2	10.2	7.9	8.6	
Mexico	1,105	1,008	36	1,757	7,393	9.6	14.6	13.8	20.8	9.8	
South Africa	964	144	196	637	1,404	10.4	4.0	3.3	7.9	6.2	
South Korea	782	141	24	3,936	2,608	4.9	9.2	5.0	4.6	4.1	
Turkey	2,097	27	33	447	4,692	1.5	2.2	-1.1	-1.8	3.0	
Low-middle-incom	e countries:	:									
Bulgaria	142	6	4	60	348	2.9	14.5	5.0	4.4	5.1	
China	1,576	_	665	4,615	4,479	11.2	_	2.9	10.4	15.4	
Colombia	909	58	20	754	3,266	5.6	11.0	8.9	11.0	13.3	
Morocco	697	1	1	98	705	3.5	16.1	5.1	5.1	5.9	
Philippines	492	23	30	305	571	8.0	12.0	4.8	12.0	11.0	
Romania	270	6	3	169	652	29.4	27.8	34.6	37.3	27.3	
Russia	3,095	207	618	1,543	3,790	-3.6	2.5	9.3	-3.8	1.8	
Low-income count	ries:										
India	1,466	16	_	437	1,245	5.5	11.7	_	10.6	9.8	
Indonesia	404	20	12	1,944	895	6.7	10.8	9.5	3.8	14.8	
Ukraine	1,177	9	33	457	651	19.6	20.7	12.5	12.6	10.4	
Vietnam	208	0.2	_	96	156	14.7	182.0	_	30.6	10.6	

Note: — = unavailable sales data. Source: Euromonitor, 2003.

¹ Retail growth projections made by Euromonitor.

growth sectors in Colombia. Latin American consumers are also developing a taste for different ethnic foods, with pasta being the fastest growing dried packaged product sold in the region.

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 five product categories account for 71 percent of processed food retail sales for Mexico and 74 percent for India, but only 48 percent for the United States and 47 percent for the United Kingdom. In most countries, the top five product categories are bakery, dairy, confectionery, carbonated drinks, and chilled foods.

As the demand for processed foods is also driven by the demand for higher quality and labor-saving products, the items consumed by countries at different income levels reflect different levels of demand for services embodied in the products. For example, ready-to-eat meals account for about 4 percent of total retail sales in the United States and the United Kingdom, but only 0.06 percent in Mexico, 0.55 percent in China, and 0 percent in India. On the other hand, intermediate products, such as fats and oils, while accounting for over 7 percent of total processed food retail sales in India, 13 percent in Indonesia, and 5 or more percent in many developing countries, account for less than 2 percent of retail sales in high-income countries (0.79 percent in the United States).

Trends in the soft drink and beverage sector are often an indicator of the ability of consumers to purchase higher value foods. For example, growing affluence in the developing countries is associated with greater expenditures on soft drinks, which, in turn, indicates increased consumer ability to purchase processed foods. In fact, foreign direct investments (FDI) in the beverage sector often function as a bellwether in the local food industry (Bolling, 2002). The global market for soft drinks is rapidly expanding, with large growth in sales in Eastern Europe and Asia (table 1-4). Growth in soft drink sales is particularly high in East Asia, with markets expanding at rates ranging from almost 12 percent (Philippines) to 22 percent (Indonesia) annually. The soft drink markets in developed countries, however, are sluggish, with average annual growth rates for all soft drinks ranging from 3 percent in Germany to about 5 percent in Singapore. The growth in sales of carbonated drinks is considerably lower in all developed country markets, where many consumers seek more healthful alternatives to carbonated drinks, with annual growth rates at or below 3 percent, and negative for Singapore. Sales growth data for soft drinks offer a picture of future growth for processed food sales.

Although high-income countries account for over 60 percent of total processed food retail sales, they are essentially mature markets with limited future growth potential in this sector. In developed countries, growth in food consumption is expected to arise mainly from slow rates of population growth rather than from increases in per capita consumption. Developing countries, on the other hand, are expected to account for most future increases in food demand, resulting from both increases in population as well as increases in per capita food consumption. Diet upgrades made possible by income growth are expected to double the quantity of meat demanded by consumers in developing countries by the year 2020, as well as increase the demand for other high-value food products (Rosegrant et al., 2001).

Table 1-4—Retail sales of soft drinks

			1997-2002	an. avg. growth
Market	2002	Share of	All	Carbonated
	sales	carbonated drinks	soft drinks	drinks
	Million liters		— Percent –	
High-income countrie	es:			
France	12,755	17.4	4.4	2.4
Germany	18,920	31.2	2.4	2.9
Japan	16,885	16.3	4.5	1.0
Singapore	448	41.2	4.9	-0.9
United Kingdom	10,031	57.3	3.6	1.9
United States	91,286	66.0	3.1	1.4
High-middle-income	countries:			
Brazil	16,630	71.8	5.9	2.5
Chile	1,762	85.2	2.4	1.9
Czech Republic	2,524	33.3	10.7	8.0
Hungary	1,561	44.1	7.0	1.6
Mexico	34,874	46.0	8.6	4.1
South Africa	2,938	80.1	6.8	6.2
South Korea	3,737	33.4	5.7	3.8
Turkey	7,508	32.2	6.7	5.2
Low-middle-income c	ountries:			
Bulgaria	774	52.3	14.3	10.4
China	22,952	27.4	15.9	8.8
Colombia	3,484	76.0	-0.1	3.3
Morocco	961	38.6	3.5	2.8
Philippines	4,998	64.2	12.0	8.4
Romania	1,561	41.8	13.5	9.9
Russia	5,010	47.6	7.9	2.7
Low-income countries	s:			
India	3,272	60.3	13.9	7.9
Indonesia	9,017	8.9	21.7	7.8
Ukraine	1,378	47.7	7.9	6.0
Vietnam	539	58.4	4.8	-1.8

Source: Euromonitor, 2003.

While retail sales of packaged foods have grown at about 2-3 percent annually in high-income countries, they have grown much faster among developing countries, ranging from 7 percent in upper-middle-income countries to 28 percent in lower-middle-income countries. The dramatic growth among middle-income countries is partly due to tremendous growth in sales among Eastern European countries, such as Romania, Poland, and Hungary. With sales in these countries nearing their peak potential, 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 with retail sales in the soft drink and beverage sectors, a slowdown in sales of packaged foods in Eastern Europe is expected to be offset by growth in sales in East Asia. China, Thailand, the Philippines, Indonesia, Vietnam, and India are expected to be some of the fastest growing markets for packaged food retail sales in the next 5 years.

Based on per capita income levels, retail sales of different food products vary across countries, with greater sales in higher value-added products occurring in wealthier countries. In fact, high-income countries currently account for most global retail sales of processed foods. However, these large markets offer little potential for future growth in this sector. On the other hand, markets for processed foods and beverages are rapidly expanding in developing countries.

The Changing Consumer

A primary driving force in the global food market is the consumer. Income growth, lifestyle changes brought about by urbanization, and changing family structures have resulted in diet changes among consumers worldwide. Because of either 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, whose diets have traditionally been high in low-value, carbohydrate-rich cereals, have increased their consumption of higher value meats, fruits, and vegetables. Similarly, consumers in wealthier countries are increasingly moving their diets toward relatively higher value foods, although the higher value reflects not increases in quantity and nutrient value of the food basket but the value-added service embodied in the products, which reduces time required to prepare the foods for 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 incomes on more expensive items, such as health care, energy, and recreation (Seale, Regmi, and Bernstein, 2003). During the last decade, consumers in high-income countries spent an average of 13 percent of their total household expenditures on food while consumers in low-income countries spent an average of 43 percent (fig. 1-1).⁴ In 2002, these shares ranged from a high of 55 percent of total household expenditures in Indonesia, to 7 percent in the United States. Over half of total food expenditures in high-income countries are attributable to packaged food products. In developing countries, packaged foods account for a smaller share of the total food budget. The average share in low-income countries is 14 percent.

The increased share of high-value food expenditures in total food expenditures reflects not only consumers' increased purchasing power but also lifestyle changes brought about by the increased prevalence of household amenities. For example, increases in acquisitions of refrigerators may lead to greater household purchases of perishable food products, while increases in ownership of microwave ovens may lead to increased purchases of ready-to-eat foods that require minimal preparation. Ownership of refrigerators has risen significantly in most developing countries over the last decade (table 1-5).

Microwave oven ownership in high-income and high-middle-income countries increased significantly during the last decade. Over 90 percent of households in Japan now possess microwave ovens, compared with about 76 percent a decade ago, while over 85 percent of U.S. households possess microwave ovens, compared with less than 80 percent in 1990. In lower income countries, such as Bulgaria, Brazil, Indonesia, and Mexico, the number of households possessing microwave ovens is small but growing (table 1-6). Increased ownership of microwave ovens is likely to increase

⁴ Food expenditure data exclude expenses on food consumed away from home.

Table 1-5—Refrigerator possession per 100 households

	J			
	1990	1995	2000	2002
		Nu	mber	
China	1	4	6	6
India	5	9	12	13
Vietnam	9	14	17	18
Indonesia	13	20	24	26
Philippines	22	31	38	41
Morocco	27	34	41	44
Egypt	47	56	69	70
Romania	59	66	74	76
Brazil	62	75	82	83

Source: Euromonitor, 2003.

Table 1-6—Ownership of microwave ovens and retail sales of ready meals

	Ownership of	Ownership of microwave ovens		
	2002	An. av. growth 1998-2002	An. av. growth 1998-2002	
	No. per 100 households	F	Percent ———	
Brazil	5	7	17	
Bulgaria	9	23	5	
Chile	9	6	4	
Colombia	8	4	9	
Czech Republic	36	8	11	
Hungary	47	9	10	
Indonesia	1	6	10	
Japan	91	0	5	
Malaysia	65	1	2	
Mexico	22	7	14	
Morocco	0	3	5	
Russia	4	9	9	
Singapore	53	6	4	
South Africa	6	5	3	
Thailand	3	3	4	
United Kingdom	87	3	6	
United States	85	0	6	

Source: Euromonitor, 2003.

purchases and consumption of prepared foods. Retail sales of ready meals have increased among some developing countries, with dramatic rates of growth 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 due to the Asian financial crisis. Given the region's financial recovery, ready meal sales are picking up and have registered healthy growth rates between 1998 and 2002.

The eating habits among countries at different income levels illustrate the trend to upgrade diets as incomes grow. As incomes rise, consumers increasingly substitute products embodying higher levels of value-added service into their diet. For example, in 2000, total per capita consumption in Vietnam was

about 1,200 calories less per day than in the United States (table 1-7).⁵ However, cereals, which require greater food preparation time, accounted for about 70 percent of the total calories consumed by the average consumer in Vietnam. In contrast, cereals accounted for about 22 percent of the total calories consumed in the United States. Although cereals accounted for a smaller share of total calories in the United States, per capita expenditures on cereals were higher in the United States (\$274 per capita in 2000) than in Vietnam (\$15 in 2000). The higher expenditures incurred by U.S. consumers reflect the additional value added embodied in the cereal products.

Changes in expenditures on different food items over time (reflecting income growth over time) relative to calorie consumption 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 United States increased 4 percent; however, per capita food expenditures increased over 13 percent. The most dramatic change in the United States is noted for dairy and eggs, which increased 3 percent in per capita calories but 15 percent in expenditures. Similarly, across all countries, expenditures on food products have generally grown much faster than per capita calorie supplies. This increase in expenditures may reflect the increased demand for value added in food products.

Varied Strategies To Meet Growing Demand in Emerging Markets

Food retailers and manufacturers are adjusting to specific needs in individual markets.⁶ In the developing country markets, changes are primarily driven by increased demand for different food products. Although Europe remains a

Table 1-7—Expenditures share and calorie contribution of different food products

			Fruits &		Dairy &				Fruits &		Dairy &	
Countries	Total	Cereals	vegetables	Meat	eggs	Seafood	Total	Cereals	vegetables	Meat	eggs	Seafood
			1996 per cap	ita calo	rie supply	/		2	2000 per cap	ita calo	rie supp	ly
Developed	3,203	1,020	163	342	326	46	3,260	1,006	173	342	766	45
Developing	2,644	1,494	124	156	100	22	2,679	1,453	135	182	102	23
United States	3,616	639	196	427	431	28	3,772	848	209	446	445	30
EU	3,401	838	208	431	362	42	3,487	864	218	441	365	44
Brazil	2,868	897	132	299	223	12	2,985	901	123	337	218	10
China	2,941	1,736	145	325	76	31	3,029	1,646	176	411	84	35
India	2,446	1,549	81	22	114	9	2,428	1,455	93	22	118	8
Philippines	2,360	1,203	188	166	50	71	2,379	1,231	181	188	52	63
Vietnam	2,508	1,826	98	168	13	33	2,583	1,796	106	203	15	35
		199	6 per capita e	expendi	tures (do	llars)	2000 per capita expenditures (dollars)					
United States	1,543	247	179	307	176	77	1,745	274	202	337	202	89
EU	1,261	204	190	302	170	30	1,440	229	220	341	194	41
Brazil	233	34	22	47	37	3	363	46	37	75	64	5
China	129	26	30	35	9	11	136	21	35	37	11	14
India	87	23	24	2	15	4	129	28	39	3	22	7
Philippines	185	63	19	31	16	31	233	71	26	37	21	42
Vietnam	48	12	12	8	4	3	61	15	15	10	5	4

Source: Calorie supply from Food and Agriculture Organization of the United Nations (FAO), and food expenditures from Euromonitor.

⁵ Per capita calorie consumption figures are based on FAO's per capita calorie availability estimates calculated from the per capita food supply in a country. Note that these figures represent an upper bound since total food supply in a country is generally higher than the total food consumed.

⁶ For more information, see chapters 2-4.

growing food market, it has noticeably lagged behind other regions in retail food sales growth. Nestlé, the world's largest food company, had 37 percent of its total sales in Europe in 1998 but only 32 percent in 2002, with overall European sales growing only 7 percent during the period (table 1-8). In other countries, Nestlé's sales grew more rapidly. For example, sales in the Americas grew nearly 30 percent between 1998 and 2002. Similarly, Unilever achieved a mere 3-percent growth in its European market during 1998-2002, a much slower growth rate than the company's 19-percent global average over the period. Europe accounted for 47 percent of total Unilever sales in 1998 but only 40 percent in 2002. Markets outside Europe expanded at faster rates. Population, demographics, and economic growth have all contributed to increased sales in the developing country markets, where food firms continuously seek new strategies for expansion.

Food companies have several options for selling in the developing-country markets. Exporting high-value food products remains an option, but most food company sales are generated by investing abroad and processing food in foreign markets. The choice of mode of sale depends on the type of products sold, and is generally based on product characteristics that determine a product's suitability for trade or for FDI. Most food sold in retail outlets can be considered as either commodity based or manufactured. Commodity-based products are those that are identifiable with a specific commodity, such as meat, fruits and vegetables, fish, milk, or sugar, and are typically sold under generic labels. A manufactured product undergoes substantial transformation during manufacturing and includes multiple commodities as ingredients. 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, and eggs. Manufactured products are processed into consumer-ready packages carrying company brands, which differentiate products in the marketplace.

Commodity-based products are less suited for FDI because production is limited by specific growing conditions. Commodity-based products are generally processed close to the location of primary production. Once

Table 1-8—Sales growth for leading companies

Company	1998	2002	Sales growth 1998-2002
	Billio	n dollars	Percent
Nestlé:			
Europe	15.9	17.0	7.0
Americas	13.4	17.3	29.8
Asia, Oceania, and Africa	7.4	8.8	19.7
Other (not specified)	5.9	9.7	63.8
Total	42.5	52.8	24.3
Unilever:			
Europe	11.2	11.6	3.2
North America	5.0	7.4	47.9
Africa, Middle East, and Turkey	1.3	1.9	40.9
Asia and Pacific	3.4	4.5	32.3
Latin America	3.0	3.2	8.3
Total	23.9	28.6	19.4

Source: Euromonitor, compiled from company reports.

Sales data converted from local currency to U.S. dollars using fixed exchange rate for year 2000.

processed, commodity-based products, such as fresh or frozen meat, frozen and canned fruits and vegetables, and dry milk powder, can be exported to foreign markets. Commodity-based products tend to be traded far more than manufactured packaged products and account for nearly 75 percent of the total value of U.S. processed food trade (table 1-9).

Production of manufactured products is less location specific than agricultural production, since processing technology and capital are mobile in the world food economy. With FDI, food manufacturing can be relocated to another country to satisfy local demand. Firms investing abroad can strategically tailor both manufacturing and packaging to suit local tastes and preferences, as well as cater to retailers' demands. Firms generally opt for an FDI sales strategy over an exporting strategy in markets where the demand base is large enough to warrant investing in a local manufacturing affiliate. The effect of this strategy tends to lessen global trade in manufactured food products. For example, beverages and bakery products account for the bulk of U.S. products manufactured abroad, but commodity-based products, such as meat, vegetable oils, fruits, and vegetables, account for the largest share of U.S. processed food exports. Given the rationale for foreign direct investment among many food manufacturers, U.S. processed food sales through FDI (\$150 billion) are five times more than U.S. processed food exports (\$28 billion) in 2002.⁷ This illustrates how food manufacturers can meet the growing demand in overseas markets with little increase in overall processed food trade.

Table 1-9—U.S. high-value food exports

Item	Value in 2002	Share of total high-value food trade
	Million dollars	Percent
Commodity-based products:		
Meat and poultry	8,763	21.5
Fresh fruits and vegetables	3,286	10.3
Fats and oils	3,085	11.3
Preserved fruits and vegetables	2,765	7.2
Fish and seafood	2,651	8.2
Flour and milling products	2,266	6.8
Dairy products	1,076	3.3
Processed nuts	849	3.3
Animal feeds	597	2.0
Sugar and roasted coffee	157	0.6
Total	25,494	74.5
Manufactured packaged products:		
Food preparations	1,990	6.3
Alcoholic beverages	1,425	4.5
Breakfast and bakery products	1,393	4.4
Flavorings	1,013	3.2
Candy and chocolate products	865	2.7
Pet food	691	2.2
Snack foods	245	0.8
Soft drinks	241	0.8
Speciality foods	164	0.5
Pasta and noodles	85	0.3
Total	8,113	25.5

Source: U.S. Census Bureau, Foreign Trade Statistics, ERS classification.

⁷ Food sales from FDI and trade correspond to the Standard Industrial Classification (SIC 20) "food and kindred products," which includes processed food, beverages, processed animal feeds, and food ingredients.

Looking Ahead

While the United States, the European Union, and Japan currently account for about two-thirds of global processed food sales, developing countries account for over three-fourths of total global food consumers. Given the growth in demand and projected food sales in developing countries, multinational food retailers and manufacturers are expected to increasingly focus on those markets. Data on retail sales across regions and FDI in the processed food sector tend to support the hypothesis that a global market may exist only for limited food products. Food preferences vary based on income and geographic location. Moreover, processed food products tend to be manufactured locally, which allows manufacturers to prepare and package products to suit local preferences and values. Therefore, while the food industry becomes more global, with retail chains and multinational manufacturers operating across many countries, growth in food trade may not keep pace with growth in global food demand.

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