

Briefs

Agricultural Trade**Imports Increase as Share of U.S. Food Consumption**

In the second half of the 1990s, Americans increased the proportion of imported foods they consumed. Imports as a share of food consumption climbed to an average 9 percent annually in 1996-2000, up from 7.6 percent in the two decades before 1996. The rise is attributed partly to greater demand for high-value agricultural products that other countries offer, and partly to the higher exchange rate of the U.S. dollar, which increases the purchasing power of the dollar. By 2000, the inflation-adjusted value of the dollar, compared with the currencies of countries who import U.S. foods, was 21 percent higher than in 1995.

The import share of food consumption—the ratio of imported quantity to the total quantity of food consumed—is influenced by long- and short-term factors affecting the supply of, and demand for, imported food relative to domestic food. Likewise, supply and demand conditions in the domestic food market have a bearing on import share. If food import quantities were unchanged, import share rises if consumption of domestic food declines. If domestic food supply drops relative to foreign supply, import share would be expected to rise, assuming total demand was unchanged. U.S. demand for imported food is influenced by relative prices of

imported versus domestic food, taste preferences, and domestic income growth. As demand changes, supply will shift accordingly. Thus, feedback effects from demand to supply and from supply to demand affect the longrun pattern of U.S. food import share.

Several factors have caused the import share of certain foods consumed in the U.S. to rise over the past 25 years. The continuous rise in import shares of fruits and vegetables is related to improved transport and storage technology, as well as consumers' desires to raise the nutrient content of their diets. Also, for certain commodities such as fish and shellfish, domestic production may be unable to keep up with consumer demand. In addition, the seasonal production of perishable domestic fruits and vegetables invites more imports during the off-season.

Changes in demographics, economic well-being, and liberalization of international trade policy are also reflected in the marketplace. The increasing ethnic diversity of the U.S. population correspondingly demands a greater variety of foods and food sources. Rising consumer income fuels the importation of high-value products, including fresh, exotic, and specialty foods and certain processed foods. And

more open trade agreements induce lower cost foreign producers to supply the large U.S. market.

Regional trade agreements can complicate accounting for trade shares. For example, products are exported from the U.S., processed into higher valued products, and may be imported back into the U.S. In the absence of trade restrictions or tariffs, the relative prices of products determines the trade flows.

Short-term changes in import share generally result from temporary developments such as exchange-rate movements, food safety concerns, and weather conditions. At times, U.S. farmers find it more profitable to produce for export markets, which reduces supply to the domestic market. A higher dollar exchange rate encourages import demand as U.S. purchasing power increases. If consumer income rises at the same time, the impact on import share is magnified. While exchange rates do not permanently affect import share, changes in per capita income growth do—and markedly affect the import share of higher value food items such as sturgeon caviar that are not available from domestic sources.

A Recent Rise in Aggregate Import Shares

USDA's Economic Research Service calculated the import shares of major food groups for 1976 to 2000. Per capita U.S. consumption shares of each food group

Import Shares of U.S. Food Consumption

| Food groups | Average | | | | 1996 | 1997 | 1998 | 1999 | 2000p | Average 1996-2000 |
|--------------------------|---------|---------|---------|---------|------|------|------|------|-------|----------------------|
| | 1976-80 | 1981-85 | 1986-90 | 1991-95 | | | | | | |
| | Percent | | | | | | | | | |
| Total food consumption | 7.4 | 7.2 | 7.7 | 7.7 | 8.6 | 9.0 | 9.0 | 9.3 | 9.2 | 9.0 |
| Animal products | 3.3 | 3.4 | 3.7 | 3.5 | 3.4 | 3.5 | 4.0 | 4.5 | 4.6 | 4.0 |
| Red meat | 6.6 | 6.7 | 8.1 | 7.3 | 6.4 | 7.1 | 7.7 | 8.2 | 8.9 | 7.7 |
| Dairy products | 1.8 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 2.4 | 2.9 | 2.9 | 2.4 |
| Fish and shellfish | 48.4 | 50.9 | 56.0 | 56.0 | 58.5 | 62.1 | 64.7 | 68.1 | 69.0 | 64.5 |
| Crops and products | 10.6 | 10.2 | 10.7 | 10.6 | 12.1 | 12.7 | 12.5 | 12.5 | 12.3 | 12.4 |
| Fruits, juices, and nuts | 8.7 | 12.4 | 16.6 | 15.5 | 16.4 | 16.6 | 17.3 | 19.2 | 19.1 | 17.7 |
| Vegetables | 4.0 | 4.8 | 6.0 | 6.0 | 7.9 | 8.1 | 9.1 | 9.1 | 9.0 | 8.6 |
| Vegetable oils | 19.7 | 15.7 | 19.7 | 19.3 | 19.2 | 20.9 | 21.0 | 17.9 | 20.2 | 19.8 |
| Grain cereals | 0.6 | 1.0 | 2.5 | 5.8 | 5.0 | 6.7 | 5.9 | 6.0 | 5.3 | 5.8 |
| Sweeteners and candy | 31.8 | 21.2 | 10.4 | 9.8 | 15.8 | 15.7 | 11.1 | 9.0 | 8.3 | 12.0 |

p = preliminary or projected.

Economic Research Service, USDA

Briefs

were used as weights in estimating the weighted average of import shares for crops, animal products, and total food consumption.

A number of adjustments were made to more closely estimate U.S. food consumption. With respect to grains, the amount used for feed, seed, alcohol, fuel, and industrial production was excluded. Correction for waste and spoilage was likewise made. Still, because of waste and spoilage in the food marketing system and in the home, food consumption estimates tend to overstate actual consumption. In addition, when a portion of imported commodities is exported, the amount of imports can exceed actual domestic consumption, which can raise the import share above 100 percent. This was the case for olive oil in 1995 and canola oil in 1980.

Following a relatively flat range of 7.5-7.7 percent from 1976 to 1995, the aggregate import share of U.S. food consumption jumped to 8.6 percent in 1996, then to 9.3 percent in 1999. Although individual food groups exhibit varying long-term import share patterns, the respective average shares for animal products and crops follow generally flat trends before a sharp incline—in 1996 for crops and in 1998 for animal products. By 2000, the aggregate import share of animal products was 4.6 percent, up from 3.3 percent in 1995. For crops, the import share climbed to 12.3 percent in 2000 from 10.5 percent in 1995.

These jumps in import share coincided with both the continued appreciation of the U.S. dollar and strong U.S. economic growth. Separating the relative effects of these two macroeconomic events is outside the scope of this analysis, although the price effect of the exchange rate by food group can be measured.

The purchasing power of the dollar grew 21 percent from 1995 to 2000 with respect to all countries supplying U.S. food imports. With respect to red meats, the dollar rose 22 percent against source countries' currencies. This explains part of the rise in import share of red meats to 8.9 percent in 2000 from 6.4 percent in 1996.

In contrast, the dollar appreciated by only 3 percent against the currencies of U.S. sources of vegetables between 1995 and 2000, due largely to the appreciation of the Mexican peso against the dollar in price-adjusted terms. That the import share of U.S. vegetable consumption rose to 9 percent in 2000 from 7 percent in 1995 is thus largely due to U.S. income and such long-term effects as improved transport and storage technology, and consumers' desire to raise nutrient content in their diets. The 33-percent boost in import share of fruits and nuts on the other hand—from 14.2 percent in 1995 to 19 percent in 2000—is partly the result of the dollar's 18-percent gain with respect to the currencies of fruit and nut source countries. The U.S. income growth of 22

percent also helped boost fruit and nut imports.

The average import share of crops in 1997 and 1998 was more than 3 times that of animal products—12.6 percent compared with 3.5 and 4 percent. Crop share in these years was also higher than its 10.6-percent average in the previous decade. Similarly, the share of crops in U.S. per capita food consumption has grown steadily to 56 percent in the late 1990s from 53 percent in 1976-85, while the share of animal products slipped to 44 percent in 1997-2000 from 47 percent in 1976-85.

These long-term trends indicate the increased importance of crop foods in American diets, and reflect the decline in per capita consumption of red meat and dairy products. Nevertheless, due largely to the strong dollar, import shares of both crops and animal products have increased in the late 1990s.

If trends in the past few years continue—that is, if more red meat, fish and shellfish, fruits, nuts, and vegetable oils are imported—the future import share of U.S. food consumption will rise. Driving these trends are increased preference for high-value imports, the strength of the dollar, and renewed growth of U.S. per capita income. **AO**

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