

## **Appendix A**

### **Putting the Trade Balance in Perspective**

As discussed previously in this report, our analysis and scenario results suggest that global growth trends and macroeconomic fluctuations may sustain the renewed growth of U.S. agricultural exports and potentially subdue import growth in the coming decade. Although the food sector encompasses a broad and diverse set of interests, this path is likely to be perceived as beneficial for the agricultural sector, especially given the attention to the narrowing of the agricultural trade balance in recent years.<sup>27</sup>

Most economists are quick to remind others that the trade balance is not a meaningful measure of consumer well-being (welfare), and that reaping the gains from trade necessarily requires that, over time, net exports in some sectors are offset by net imports in others. In addition, several specific points about U.S. agricultural trade illustrate that, even for an individual sector, the trade balance at any given time is not necessarily the best barometer of a sector's financial condition or relative competitiveness. First, although exports are an important component of agricultural demand, the recent decline of the trade surplus has not corresponded with reduced incomes at the farm level. U.S. agricultural exports and farm incomes have been at or near record levels in recent years. Instead, the agricultural trade surplus has declined largely because a strong economy and robust consumer spending have raised import growth to unprecedented levels, particularly for processed and consumer-ready products. Second, although imported foods constitute a growing share of U.S. food consumption, U.S. "dependence" on imported agricultural products remains low—about 14 percent of domestic food and beverage consumption by volume—compared with that of many other countries. Third, while the U.S. faces increasing competition, both domestically and abroad for some agricultural products, the sector as a whole continues to have a strong advantage in trade compared with most other sectors of the economy.

### **Farm Sector Revenues Strong Despite Lower Trade Surplus**

A country's trade or current account balance cannot by itself be taken as a primary indicator of its economy's health or the well-being of its consumers. In fact, rising trade deficits, or diminishing surpluses, are often associated with periods of strong economic growth, as rising incomes allow consumers to purchase both more imports and domestically produced items. Many economists also observe that there is nothing inherently wrong with a trade deficit, or inherently desirable about a surplus. Countries trade with one another because it allows them to consume products that are either different, not available, or less expensive than domestic goods. Trade provides the further benefit of encouraging specialization, which allows countries to make products (goods or services) more efficiently, thus lowering consumer prices and raising real incomes.

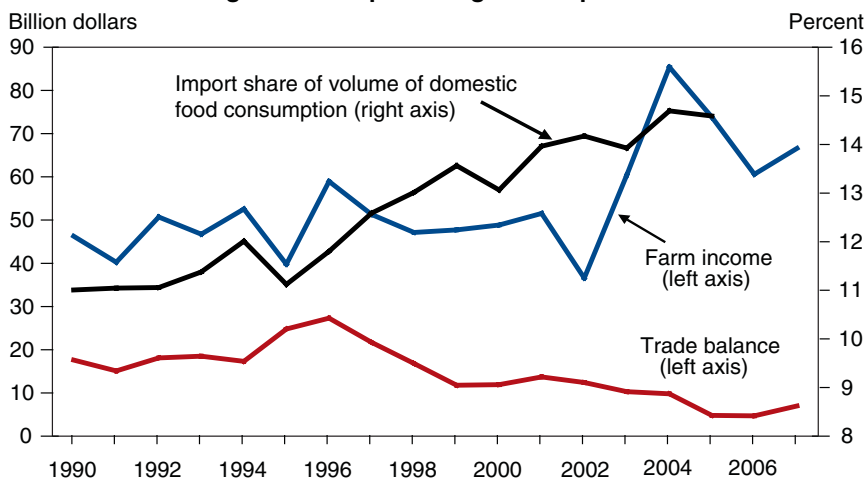
<sup>27</sup>Interests would vary based on commodity produced, size, location, position in the processing or retail chain, and other factors.

Changing trade patterns—such as rising overall deficits or increased competition for a particular industry or sector—do, however, have economic consequences requiring adjustments by both producers of tradable goods and consumers. Sectoral trade balance developments are also often closely observed as an indicator of the strength of demand and, hence, returns to the labor, land, and capital resources used to produce outputs in that sector. For example, a declining market share for a particular industry or sector implies declining employment and lower returns (wages, profits) to those associated with that sector. A persistent deficit also means that current consumption is being financed through borrowing from abroad. Eventually, increased exports and/or lower imports, and thus lower consumption (or sale of U.S. assets), will be required to repay that borrowing.

In the case of agriculture, though, the recent dip in the sector’s trade balance has not coincided with general financial stress in the farm sector. In contrast to the mid-1980s—when farm incomes suffered and exports declined—net farm incomes have been comparatively strong in recent years, bolstered in part by government payments to farm producers. Net farm incomes surpassed \$60 billion for the first time in 2003 and exceeded that level in each of the ensuing 4 years. Revenues from farm commodities have also reached record levels in recent years.<sup>28</sup> Current farm wealth and debt-to-equity ratios are also favorable compared with those of previous years. This partly reflects the fact that U.S. agricultural exports rose during the past several years and reached a record \$78 billion in FY 2007. In many ways, change in the agricultural sector’s trade balance reflects the strong overall domestic spending—and its underlying causes—which has affected trade in all sectors of the economy (app. fig. 1).

<sup>28</sup>For information on the USDA, ERS 2007 farm income and cost forecast, see [www.ers.usda.gov/briefing/farmincome/nationalestimates.htm](http://www.ers.usda.gov/briefing/farmincome/nationalestimates.htm)

Appendix figure 1  
**Farm income strengthened despite rising food imports**



Sources: Trade balance (1990-2006 fiscal year): Bureau of the Census; 2007 data (forecast) from "Outlook for U.S. Agricultural Trade, August 2007, <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1196>; farm income: ([www.ers.usda.gov/briefing/farmincome/data/va\\_t1.htm](http://www.ers.usda.gov/briefing/farmincome/data/va_t1.htm)); import share: compiled by USDA, ERS, updated from *Amber Waves*, February 2004, [www.ers.usda.gov/amberwaves/february04/features/ustradebalance.htm](http://www.ers.usda.gov/amberwaves/february04/features/ustradebalance.htm)

## Imported Share of U.S. Food Consumption Remains Low

Some observers have expressed concerns that a lower agricultural trade surplus, and fast-rising imports in particular, indicates increasing dependence on foreign sources of food. Agricultural imports do constitute a growing share of U.S. consumption, but the share remains a relatively small proportion of overall food expenditures. Furthermore, many imported products (e.g., tropical goods, seasonal fruit and vegetables) do not compete directly with U.S. grown goods, are nonfood products (e.g., tobacco), or are processed “luxury” products, such as wine or malt beverages. Several additional points should be kept in mind:

- In 2005, the United States imported \$40 billion of processed food—about two-thirds of total agricultural imports. A decade ago, U.S. processed food imports were less than half as much. Although Americans’ appetite for imported processed food and beverages is rapidly rising—largely due to a more diverse population, a wider range of food preferences and choices, and higher disposable incomes—the share of processed food imports in domestic consumption remains small at 5 percent, based on wholesale value. Similarly, the import share of unprocessed food in domestic consumption, including fresh fruits and vegetables, is 10 percent. These relatively low import shares do not reflect high dependence on imported food.
- Close to 90 percent of U.S. agricultural imports of \$59 billion in calendar year 2005 was for food use. Of these food imports, about a third are either not grown or produced in the United States or are more cheaply supplied from foreign sources, including bananas, coffee, cocoa, olive oil, pineapples, avocados, mangos, and cashew nuts. The strongest import growth has been among horticultural products. Many fresh fruit and vegetables are seasonal and can only be supplied from other countries during the winter months. The remaining 10 percent of U.S. agricultural imports are nonfood goods, such as tobacco, rubber, flowers, hides and skins, and nursery products.
- Not only are U.S. affiliates of foreign food companies helping supply the U.S. domestic market with locally produced processed food and beverages, but they contribute significantly to U.S. agricultural export earnings. The U.S. processed food and beverage industries generated \$553 billion in sales in 2003, of which 13 percent, or \$73 billion, was sold by foreign-owned food manufacturers operating in the United States. Of the \$30 billion of U.S. processed food exports in 2003, \$8.3 billion, or 27 percent, were shipped by these foreign-owned companies. Without these companies, U.S. dependence on imported food would be higher and U.S. agricultural exports would be smaller.

## U.S. Maintains a Comparative Advantage in Agriculture

In the shorter term, exchange rate movements and other factors that influence relative prices certainly affect the competitiveness of U.S. agriculture, but longer term underlying patterns of trade—the composition of goods and services that a country exports and imports—continue to reflect the factors determining a country’s comparative advantage in production and trade, such as the relative abundance and quality of land, labor, and capital (Dohlman, Osborne, and Lohmar, 2003). Despite changes in the agricultural trade balance, indicators of comparative advantage suggest that the United States continues to retain an advantage in production and trade of agricultural products, particularly land-based bulk commodities.

One indicator of the relative competitiveness of U.S. agriculture—and the importance of exports to the sector—is the exported share of the volume of agricultural production. In value terms, the share of U.S. agricultural output that is exported is roughly double the proportion exported by the rest of the economy. By volume, exports accounted for over 20 percent of U.S. agricultural output during 2003-05.<sup>29</sup> Productivity gains have allowed the United States to simultaneously produce, consume, and export more agricultural products. The share of agriculture in U.S. GDP has declined steadily over the years, but the value (as measured by gross cash income) of agricultural production has continued to climb.

Another measure of the comparative advantage of agriculture in U.S. trade is the revealed comparative advantage (RCA) index. The RCA index measures the extent to which an exporting country captures world market share in a particular sector relative to its export share for all traded goods (Regmi et al., 2005). An RCA greater (less) than one signifies a comparative advantage (disadvantage) for the particular item. According to Regmi et al. (2005), U.S. agricultural products as a whole, and “land-based foods” (e.g., bulk commodities) in particular, have maintained their comparative advantage in trade. In contrast to the very strong comparative advantage of U.S. land-based foods, U.S. manufactured foods did not have a comparative advantage during 1989-2001. However, RCAs for manufactured products rose in the latter part of this period, indicating increasing competitiveness.<sup>30</sup>

<sup>29</sup>See “indicators” in the latest issue of *Amber Waves*, available at [www.ers.usda.gov/amberwaves/allissues/](http://www.ers.usda.gov/amberwaves/allissues/)

<sup>30</sup>Regmi et al. (2005), pp. 23-26.