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Global Growth, Macroeconomic Change, and U.S. Agricultural Trade

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Abstract

After a decade of uneven export growth and rapidly growing imports, U.S. agriculture has begun to reassert its position in global trade markets. Rising exports and signs of moderating demand for imports mark a departure from previous trends. This report places past trends and emerging developments in perspective by spotlighting the role of two specific factors that help steer U.S. agricultural trade patterns: global growth and shifts in foreign economic activity that affect U.S. exports, and macroeconomic factors underlying the growth of U.S. imports. Consistent with actual changes in the level and destination of U.S. exports, model simulations corroborate the contention that renewed export growth can be sustained by expanding incomes and growing food import demand in emerging economies. In contrast, the rapid growth of U.S. agricultural imports appears less related to domestic income growth than to changing consumer preferences and other, perhaps less sustainable, macroeconomic conditions that fostered the growth of U.S. current account deficits.

Keywords: agricultural trade, trade balance, income growth, economic development, population, macroeconomics, exchange rates, current account, growth projections.

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Summary

Historically, U.S. agricultural exports have been highly erratic, with brief periods of strong growth to individual markets often followed by interludes of reduced demand. The growth of U.S. agricultural imports has been comparatively steady and, in recent years, increasingly strong. After peaking at a record \$27 billion in 1996, the U.S. agricultural trade surplus dropped below \$5 billion a decade later, due to a temporary downturn in export growth and fast-rising imports. More recently, however, rising exports to a broader spectrum of countries and strong but moderating demand for imports appear to signal a reversal of past trends. Many different factors, particularly differences in foreign economic growth rates in key markets and macroeconomic forces, are altering the course of U.S. agricultural trade.

What is the issue?

In previous decades, U.S. agricultural export growth relied heavily on demand from key high-income markets, such as Japan and the European Union. In the absence of significant new openings in market access, limited economic growth and stagnant food demand in these markets contributed to a decline in their importance as a destination for U.S. exports—placing a drag on overall U.S. export growth. Currently, however, increased demand from fast-growing emerging markets is offsetting weaker growth elsewhere, leading to upward revisions in USDA's long-term export projections. Also, the unprecedented recent growth of U.S. agricultural imports is far more rapid than what would have been expected based on domestic income and population growth rates. Is the simultaneous growth of exports and imports a temporary trend, or one that will be sustained? Previous periods of strong growth have rarely been sustained for more than a few years at a time. Clarifying the influence of foreign economic growth and macroeconomic forces on export and import growth may enable stakeholders to gauge the future direction of U.S. agricultural trade.

What did the study find?

Income levels and the rate of economic growth are key determinants of foreign demand for U.S. agricultural exports, and differences between developed-country and emerging-market growth have played a strong role in shaping U.S. export patterns. Slow income and population growth in traditionally important high-income markets, and a low propensity for consumers in these countries to spend additional income on food, have curtailed U.S. exports to these areas since the mid-1990s. New demand from emerging markets, however, is more than offsetting weakened demand elsewhere. These markets provide a foundation for sustained growth of U.S. exports, which in FY 2008 are on track for a fifth consecutive year of record demand.

Rising incomes in emerging markets, in conjunction with a high tendency for consumers in these areas to spend their additional income on food, helped spur a 50-percent increase in global agricultural trade in just 5 years (2001-05). The impact on U.S. agricultural exports is becoming more appreciable as emerging markets continue to raise their share of world trade. In the early 1990s, emerging markets accounted for just 30 percent of U.S. exports, but steady economic growth and continued population gains have raised their share to 43 percent. In 2006, China and Mexico combined accounted for 25 percent of total U.S. agricultural exports—nearly triple their share in 1990.

The shift in the direction of trade from mature economies to emerging markets potentially signals continued strong foreign demand for U.S. exports in the future. Based on analysis of global economic growth and population changes, these factors accounted for U.S. export growth of 2.6 percent annually during 1990-2001 but are anticipated to contribute to a projected 3.7-percent annual growth during 2006-16. Accordingly, emerging markets would account for nearly 60 percent of U.S. agricultural exports within a decade.

In contrast to exports, domestic population growth and economic growth do not appear to have been the primary drivers of U.S. import demand during the past decade. U.S. agricultural imports have doubled since 1996, with average import growth surpassing 10 percent annually since 2001. Two independent factors have helped to contribute to U.S. import growth: consumer preferences for product variety; and, equally important, broad macroeconomic conditions that fostered the growth of the U.S. current account deficit. The current account measures the balance of trade in goods and services and net investment earnings to and from the rest of the world. Supported by increased wealth, declining domestic savings, and a relatively resilient dollar, the U.S. current account deficit has been rising steadily, reaching a record \$880 billion (6.3 percent of GDP) in 2006.

Because current account deficits represent the level of foreign lending to the United States, foreign investment and savings decisions increasingly influence economic variables that determine export and import demand. Reduced foreign demand for U.S. financial assets, for example, can cause higher interest rates, a weaker dollar, subdued domestic consumption growth, and higher net agricultural exports. Although there is no consensus, many analysts consider such an adjustment likely. Alternatively, U.S. consumption and the value of the dollar could remain steady, supporting continued robust growth of agricultural imports.

How was the study conducted?

To distinguish between the impacts of global growth factors and other macroeconomic influences on agricultural trade, two separate economic models were employed. Global economic growth and population impacts on world and U.S. trade were evaluated with growth simulations using a static global modeling framework (GTAP). This model generates growth-related effects on past and future U.S. and world trade and illustrates how they

contributed to the previous slowdown and current expansion of U.S. agricultural export growth. This framework does not address macroeconomic factors affecting exchange rates or international financial flows. A separate dynamic model of the U.S. economy (USAGE) was used to examine alternative macroeconomic conditions related to exchange rates and changes in foreign demand for U.S. financial assets. The main scenario centers on the implications of changing demand for U.S. financial assets by foreigners. The model was used to trace the effects of resulting exchange rate and other macroeconomic changes on domestic consumption and agricultural trade.