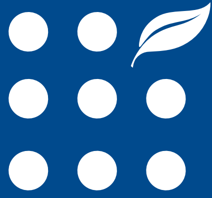
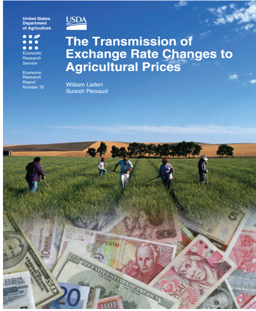


ERS Report Summary

Economic Research Service | July 2009 | U.S. Department of Agriculture



This is a summary of an ERS report.

Find the full report at www.ers.usda.gov/publications/err76

The Transmission of Exchange Rate Changes to Agricultural Prices

William Liefert and Suresh Persaud

Exchange rate movements can change countries' domestic prices, thereby affecting incentives to produce, consume, and trade goods. For example, consider an exporting country that has a depreciating currency. The price domestic producers receive for exporting a good should rise because the trade price converted into domestic currency is now higher. This benefits domestic producers and motivates them to produce and export more of the good.

However, many countries have trade policies or market conditions that prevent or reduce the transmission (or pass through) of changes in exchange rates to domestic prices. This blunts the domestic price and market response to exchange rate changes. In the example above, incomplete transmission could keep the domestic price, production, and export of the good from rising as much as possible. Incomplete transmission thereby can prevent countries from attaining the levels of production, consumption, and trade of goods that would bring them, and their trading partners, the most economic benefit.

What Is the Issue?

The main reason exchange rate transmission is important for U.S. agriculture is because a large share of U.S. agricultural production is exported. Over the last 15 years, about a quarter of U.S. agricultural output has been sold abroad. Incomplete transmission of agricultural prices and exchange rates to domestic prices within countries means, however, that these countries are not fully integrated into world agricultural markets. They are not trading as much as they profitably could. More specifically, as a group they are not importing as many agricultural goods from the United States as is in their, and the United States, economic interests.

What Did the Study Find?

The two main causes of incomplete exchange rate transmission for agricultural products are trade policies and poor market conditions. Trade policies that impede transmission include import quotas and systems of managed (or fixed) agricultural prices. Poor market conditions can involve deficient market infrastructure and the use of market power by large buyers and sellers to set prices. The deficiencies can be in physical infrastructure, such as roads, transport, and storage, or in commercial and institutional infrastructure, such as systems of market information, finance, and law. Poor infrastructure isolates regional markets within countries from each other, as well as cuts them off from the world market, thus weakening transmission.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

The United States has been moving away from transmission-impeding agricultural trade and support policies, it has fairly good infrastructure supporting the agro-food economy, and its agricultural markets are reasonably competitive. Thus, price and exchange rate transmission is not a serious problem for the workings of U.S. agriculture. Empirical research shows, however, that price and exchange rate transmission for agricultural products is lower in developing economies than in the United States and other developed countries. Analysis of 56 developing countries over a 30-year period found that about a third of the countries had almost no transmission of border price changes to domestic prices, even after allowing for an adjustment period of 5-7 years. In 23 other countries, after 5 years, no more than half of the change in border prices was transmitted to domestic prices.

Policies within developing economies certainly account for some of the weak transmission. Yet, during the last 20 years, many developing countries have liberalized their agricultural policies, a process promoted by the 1994 Uruguay Round Agreement on Agriculture, such that price and exchange rate transmission should improve. However, poor market conditions, such as weak infrastructure, continue as a serious impediment to price and exchange rate transmission in many developing economies.

Incomplete transmission has implications for the interpretation and use of standard measures of agricultural protection and support. These measures all involve some sort of gap between the domestic price for a commodity and its border price. This price wedge is typically interpreted as a measure of the degree to which government policies distort domestic prices, and thereby distort market incentives to produce, consume, and trade goods. However, measures of protection and support could be used to misidentify the cause of price gaps. This could happen if a large part of the price wedges were caused not by policies but by incomplete price and exchange rate transmission resulting from market imperfections, such as deficient infrastructure. By misidentifying the cause of price gaps, governments might adopt inappropriate policies intended to eliminate the gaps.

How Was the Study Conducted?

The study uses market and trade analysis to examine how changes in exchange rates affect a country's domestic markets for agricultural commodities. The same conceptual framework is then used to analyze the causes and market effects of incomplete price and exchange rate transmission for agricultural commodities. The study also examines the empirical evidence concerning exchange rate transmission for the United States, other developed countries, and, particularly, developing countries, as well as evidence that market conditions alone can cause incomplete transmission.