Special Article

Some Sources of Uncertainty in Trade Prospects

Global trade prospects in the baseline are bright for the next 10 years. However, as much as any time in the recent past, they are subject to an array of both general and country-specific uncertainties. Among these is the potential for an economic shock, such as the Asian financial crisis, to create a sustained slowdown in economic growth across a number of significant developing country markets. Another concerns the degree to which agricultural supplies, particularly in developing and transition economies, respond to the introduction of biotechnology as well as to the new macroeconomic and price environment they are expected to face over the next 10 years.

Country-specific uncertainties include the potential for different but plausible assumptions on key policies or on technical parameters in specific countries—such key markets and competitors as China, the European Union (EU), and the former Soviet Union (FSU)—to significantly alter global market projections.

Developing Countries' Economic Growth Is Critical

Prospects for stronger growth in per capita incomes across most developing and transition regions during 1998-2007, compared with the 1980's and early 1990's, are central to the projected expansion of bulk commodity trade. To a significant extent, the favorable outlook should be resilient to shocks because it rests on such factors as more coordinated macroeconomic management in developed countries, greater commitment to market-oriented policies in developing and transition regions, and an increasingly open world trading system.

Any number of events could alter this economic outlook. The ongoing financial crisis in Asia is the most obvious. Other possible scenarios include a new oil price shock stemming from disrupted Middle East supplies, or a loss of political support for sustaining reforms in such areas as Latin America and the FSU. However, in order to fundamentally alter the currently broad-based demand outlook, the economic shocks would need to be sustained and affect a number of significant markets.

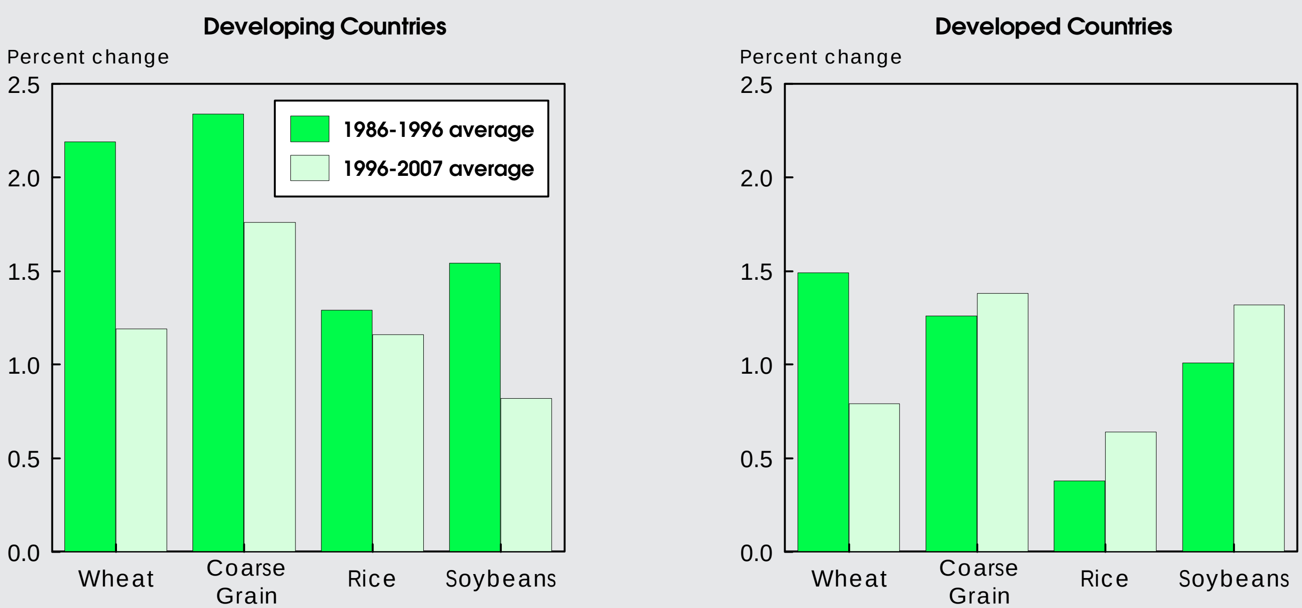
A December 1997 analysis of the Asian financial crisis by USDA's Economic Research Service indicates that the crisis could push major commodity prices down 2-5 percent during 1997-2000, compared with the baseline projections, and bring reductions in world trade volumes of 1-4 percent. Global trade impacts are softened because the most seriously affected Southeast Asian countries, while growing rapidly, still account for small shares of world trade, and the larger East Asian markets are relatively inelastic to income and price shocks. Also important, lower prices will push up import volumes in some other markets.

Supply Response Difficult To Predict

The baseline real price projections for major commodities are above the long-term trend, implying that gains in agricultural production will not continue to outpace demand at the same rate as in the past. Stronger gains in productivity, particularly on the part of competitors, would undermine the projected strength of U.S. farm exports and income.

A number of factors make it particularly difficult to predict productivity gains confidently during the projection period. More market-oriented farm policies in the U.S. and elsewhere will make farm output more responsive to price changes, but

Yield Growth Is Projected To Slow in Developing Economies



1998 forecast; 1999-2007 projected.
Economic Research Service, USDA

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the degree of price-responsiveness is difficult to predict. Many developing and transition economies, particularly those in Latin America and Central and Eastern Europe (CEE), are expected to have vastly improved macroeconomic conditions that are more conducive to investment and productivity gains than has been the case in the past 10 years.

Another potentially significant factor is the possibility in both developed and developing countries for faster gains in crop and livestock productivity through biotechnology. Finally, it is unclear to what extent environmental and resource constraints—including water shortages, soil degradation, and pest management problems—will affect farm output.

The productivity growth rates included in the baseline attempt to account for these dynamics but generally call for slower growth in crop yields than occurred during 1986-96, particularly in developing countries. But, given the significant change in the economic, policy, and technology climate, alternative outcomes for productivity gains are possible. Recent large gains in cropped area and input use in Argentina, and evidence of improved incentives for producers and investors in agricultural infrastructure in Brazil, indicate the possibility of larger supply responses than anticipated in the baseline.

China's Trade Remains a Big Question

China's future role in world markets is probably the largest source of uncertainty in the trade outlook for many agricultural commodities. USDA projections for China indicate that dynamic economic growth will increase demand for foods and feeds faster than production capacity, because of China's limited resource base. It is assumed that trade policy will be increasingly open and practical, allowing relatively low-priced imports to meet a growing share of demand, particularly in urban and coastal areas.

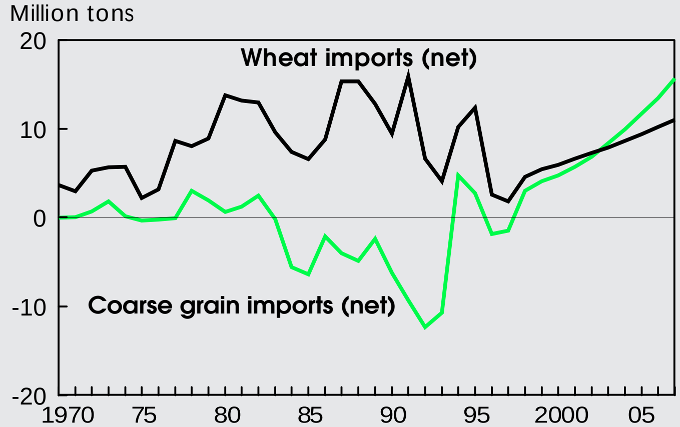
While the data available for China, together with the paths taken in neighboring countries, tend to support this general story, the data on virtually all aspects of agricultural production and consumption in China may not be accurate. In most cases, current levels of trade are so small relative to domestic supply and use that minor, and entirely plausible, changes in assumptions can alter trade projections significantly.

The most reliable agricultural data for China are trade data, which are verified by partner country information. A current concern is that recent declines in China's imports of two key commodities, wheat and corn, are not explained by other available data. This recent trade behavior raises questions about the data on such variables as crop area, yields, food use, feed use, and stocks, as well as baseline projections based on those data. Reducing the uncertainty created by China in the outlook will require improvement in the availability and reliability of data.

EU Policy Management Will Affect Markets

There is significant uncertainty about the measures the EU will use to meet its subsidized export and minimum import commitments under the Uruguay Round agreement. Alternative assumptions on management of the current Common Agricultural Policy (CAP) or for introduction of reforms under the Agenda 2000 initiative could have significant impacts on the baseline projections for such commodities as wheat and coarse grain.

China Grain Trade Remains Hard To Predict



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The baseline assumes that the EU will use current CAP policy mechanisms to meet its Uruguay Round limits on subsidized exports. For grains, it is assumed that any production in excess of intervention purchases and onfarm use that cannot be exported will depress the internal market price and dampen output. Exports without subsidy occur only when the world price is equal to or greater than the average EU price. It is assumed that the land set-aside rate will be adjusted to constrain surplus production. The set-aside rate is set at 5 percent from 1997/98 to 1999/2000, and then increased to 10 percent through 2007. Under baseline market conditions, maintaining a 5-percent set-aside would likely generate surplus stocks of wheat and barley, while raising the set-aside toward the EU statutory level of 17.5 percent would preclude opportunities to export wheat without subsidy. In the longer term, it is assumed that the EU will not allow stocks to accumulate above the historical average level; larger stocks are viewed as a short-term strategy for dealing with excess supplies.

Alternative EU policy scenarios are plausible under the CAP and could have significant market impacts. A higher EU set-aside would reduce projected EU exports of wheat and barley, likely pushing up U.S. wheat and corn exports. A smaller set-aside could produce significantly more competition for U.S. wheat exports, but since it is very unlikely that EU barley could be exported without subsidy, this scenario would likely require holding large barley stocks or somehow reducing internal barley prices to stimulate barley feed use.

Implementation of reforms under the EU's Agenda 2000 initiative, which has proposed shifting toward world prices for grains and eliminating the set-aside, could have a major impact on projections. Although some type of reform seems likely during the projection period, such measures have not been included in the baseline because both the nature and timing of the eventual package of reforms are too uncertain. Such changes, if implemented, would likely increase EU competitiveness in the world wheat market, while limiting coarse grain exports.

Transition Economies Create Large Uncertainties

Future developments in both consumer demand and farm output in the larger agricultural economies of the FSU and Central and Eastern Europe will be very important to global markets and particularly hard to assess. For the FSU, current USDA projections call for a recovery to only modest rates of economic growth, very limited gains in farm productivity, and small levels of grain exports through 2007. Stronger growth in incomes, productivity, and export competitiveness are projected for the CEE region. The outcomes for each region are difficult to project because they are dependent on the uncertain pace of policy and institutional reforms, and because the economic responses of producers and consumers in their new policy environment are hard to predict.

For the FSU, the projections assume that liberalization of markets and restructuring of agricultural enterprises will continue at their current slow pace. Crop productivity gains in the FSU are expected to be small, largely because little progress is anticipated in land reform. Grain exports out of the region are expected to remain hampered by high internal transport costs. Livestock production is assumed to recover very slowly because of the slow progress of economic reforms that could reduce production costs and increase competitiveness. Faster progress in reforms to agricultural input and output markets or in improving transport infrastructure could lead to significantly more FSU competition in global grain markets than included in current USDA projections.

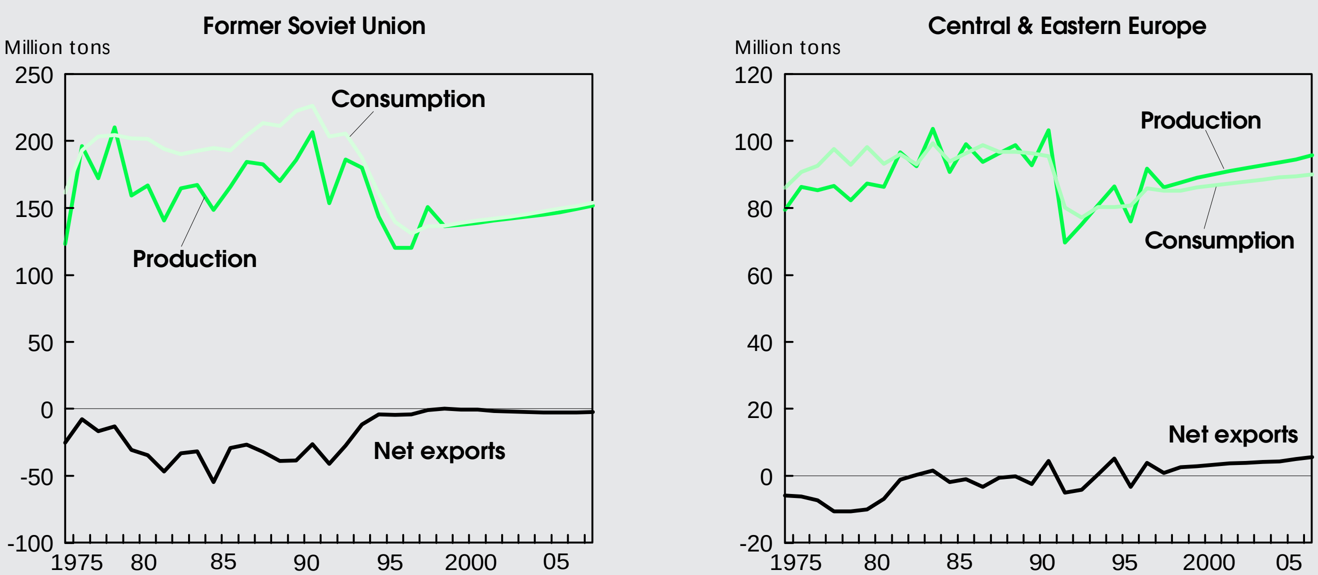
The CEE projections incorporate a steady increase in efficiency in the agricultural sector, reflected in rising yields and greater feeding efficiency in the livestock sector. Projected productivity gains are stronger than in the FSU because of rising incomes, lower interest rates, greater progress in implementing reforms, and growing investment in both agriculture and food processing. With these assumptions, the baseline projects modest growth in the region's exports of grains and livestock products. Significantly faster or slower growth in exports is plausible, however, depending on the pace of reforms and the economic responses of producers and consumers.

Potential for Multilateral Policy Change

While the USDA baseline allows the policies of individual countries to continue to evolve in a manner consistent with past trends and analyst judgment, assumptions on bilateral, regional, and multilateral policy are based solely on agreements in place as of November 1997. Although a number of policy changes under discussion may occur during the projection period (enlargement of the EU-15 to include one or more of the CEE countries and WTO accession by China and Taiwan), the terms and timing of such agreements are too uncertain to include in the baseline.

The EU's Agenda 2000 communication recommends that accession negotiations begin with Hungary, Poland, Estonia, the Czech Republic, and Slovenia in 1998, with the actual timetable dependent on progress in meeting policy targets. A preliminary ERS analysis covering a slightly different group of countries (Hungary, Poland, Czech Republic, and Slovakia) indicates the potential impacts of enlargement under two policy scenarios: one where current CAP policies are applied to the acceding CEE countries, and another where agriculture in the enlarged EU shifts to world prices and the acreage set-aside program is abolished (*AO* June 1997). Both scenarios require major adjustments. When adopting the relatively high EU CAP prices, the CEE countries expand output sharply and reduce consumption. Under the terms of the current CAP, grain exports of the EU-19 would likely fall, with higher feed use in countries of the current EU-15 more than offsetting increased production in the CEE countries.

FSU and CEE Grain Production and Use Recover Slowly



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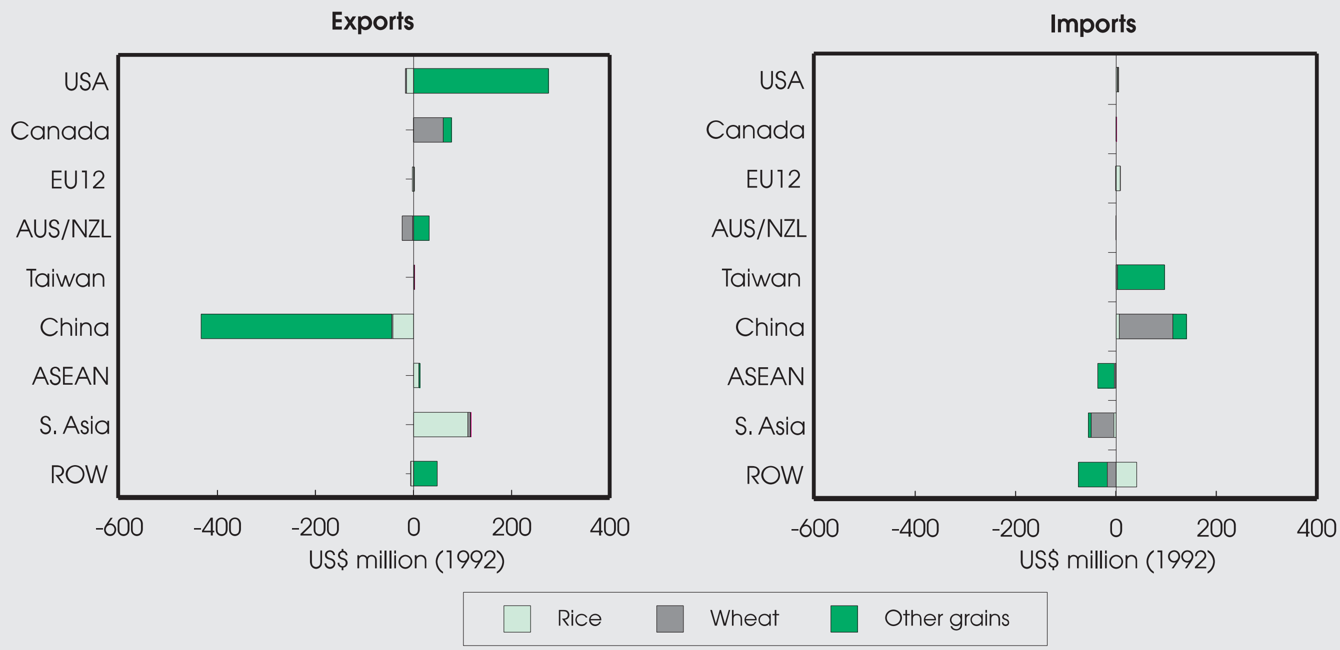
Estimated Impacts on World Grain Trade of China and Taiwan WTO Accession



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If the enlarged EU-19 shifted to world prices, which are below CAP prices, the increase in CEE production would be smaller, but there would be significant declines in production and increases in consumption in the EU-15. If the EU-19 adopted world prices and abolished the set-aside, the analysis suggests larger wheat exports, as well as larger coarse grain imports.

The terms of a possible accession to the World Trade Organization (WTO) by China and Taiwan are under discussion, with much uncertainty about required policy reforms and timing. A recent ERS study suggests the potential impacts of accession (*AO* July 1997). For agriculture, the results indicate a 3-percent increase in world trade, led by an $8-billion increase in China's annual net agricultural imports. Modest increases are predicted in world agricultural product prices, with the largest impact on coarse grain prices. Larger grain imports are indicated for China and Taiwan and larger exports by North America, Southeast Asia, and South Asia. U.S. agriculture benefits from higher exports, farm income, and export prices.

Uncertainty in Long-Term Outlook Will Continue

Just as weather shocks and business cycles affect short-term developments, the long-term trade outlook can be fundamentally changed by alternate outcomes in each of these trade-related areas of uncertainty. Although analysts will continue to improve their understanding of these issues, many important components of the long-term outlook are likely to remain uncertain.

In some areas, including supply response and developments in transition economies, sharp changes in policy regimes can mean that historical behavior offers relatively few clues about future responses. In other areas, particularly China, analytical problems associated with poor data and unclear policies defy an immediate solution. Likewise, the potential for unilateral policy change by significant players in the markets will remain a source of uncertainty.

On the other hand, current prospects for stronger and broad-based growth in developing countries will likely be an important source of resiliency in the baseline outlook for strong growth in bulk commodity demand. Another source of resiliency could be continued progress in implementing bilateral or multilateral policy reforms that can further expand global and U.S. trade, particularly for high-value agricultural products.

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