Conclusion

Economic reform in the transition economies has transformed the volume and mix of these countries' agricultural production, consumption, and trade. The main development has been a major drop in production—ranging in most countries from 25 to 50 percent for total agricultural output—with the livestock sector being hit particularly hard.

The contraction in both the production and consumption of foodstuffs is an inevitable part of market reform. The main reason for the drop is that consumers' desires for goods have replaced those of planners and the political leadership as the dominant force in determining what goods are produced and consumed. The policies that engineered the switch from planners' to consumers' preferences as the driving force of production and consumption were price and trade liberalization. These policies substantially reduced the array of subsidies to agriculture that maintained artificially high levels of output.

The main effect of the commodity restructuring of transition agriculture for U.S. agriculture is that the region of the former USSR ceased being a major market for grain and oilseeds (soybeans and soybean meal), and instead has become a large market for U.S. poultry (as well as for beef and pork, though not mainly from the United States). In fact, during the second half of the 1990s, nearly half of all U.S. poultry exports went to Russia. These trade changes indicate that the region has a comparative disadvantage in livestock products relative to crops—that is, the region produces livestock goods at a relatively higher cost than it produces animal feed and food crops.

The drop in food production and consumption has raised concerns about food security in certain countries, such as Russia and other NIS countries. The food security problem, however, is not the result of inadequate availability of food supplies. Before reform, the transition economies had high per capita levels of consumption of most foodstuffs, compared even to rich countries of the West. Although consumption of expensive livestock products has fallen, consumption of staple foods such as bread and potatoes has remained steady or even increased. Food insecurity has grown because of insufficient access to food by segments of the population and regions within countries. The growth in poverty has expanded the size of the population that cannot afford a healthy diet, while impediments to the internal flow of foodstuffs have prevented deficit-producing regions from obtaining food supplies.

That the fall in agricultural production has been a necessary part of market reform shows that output is a misleading indicator of reform progress. The absence of a decline in output for a country more likely reflects the failure to reform, rather than reform success. The transition economies that have experienced the lowest declines in agricultural output, such as Uzbekistan and Turkmenistan, have also been the least reformist.

A better performance indicator than output for transition agriculture is productivity growth. Productivity growth will raise income in the sector, as well as close the gap between agriculture's share in the labor force and its share in GDP. Also, the only way a country can increase agricultural output consistent with a marketdriven, low-subsidy, and free-trading economy is to raise productivity, which by lowering production costs makes domestic output more price competitive on the world market. Productivity growth has the added benefit that the increase in productive capacity does not have to be wholly realized in the industry in which the productivity rise occurs. Rather, existing levels of output can be maintained in that industry while resources (such as labor) are shifted to producing other goods that either are more desired by consumers or are more competitive on the world market.

The restructuring of agricultural production, consumption, and trade during transition that results from market liberalization is the more "shortrun" side of agricultural reform (which nonetheless can run for quite a few years), as well as the side of reform that involves hardship for the sector. Agricultural productivity growth, and the systemic and policy changes that would motivate the growth, represents the longer term, more dynamic, and more optimistic side of reform, through which the sector could achieve prosperity. Productivity growth in the transition economies involves changing not just the material technology of production, but more importantly the nature and behavior of farms-that is, how they are organized, managed, and motivated (the system of incentives). A necessary supplement to these farm-level changes is creating the supporting commercial and public infrastructure and institutions that a market-driven agricultural system needs. Such infrastructure involves, for example, systems of credit, market information, and commercial law.

Whatever optimism existed in the West at the beginning of the transition period concerning agricultural reform in the transition economies was based on the belief that these countries had the potential (including the will) to make the farm-level changes and build the institutional infrastructure that would allow them to close the large agricultural productivity gap between themselves and OECD countries. Based on existing evidence, productivity growth to date in transition agriculture has generally been disappointing. The more progressive reformers in Central and Eastern Europe, such as Hungary and the Czech Republic, have done better than others. This conclusion is based on both (limited) empirical measures of productivity and the observed degree of policy and institutional change. The NIS countries (which exclude the Baltic States) have done poorly, with respect to both empirical results and observed policy and institutional changes.

Poland is an example of a country that in terms of overall economic reform has been a relatively fast and successful reformer, but suffers from a large agricultural workforce and a system of small household farms that cannot exploit economies of scale.

If the goal of agricultural reform in the transition economies is to create a profitable, market-driven agricultural economy with productivity levels and supporting infrastructure that allow it to compete effectively on the world market, the process in most countries is far from complete, with the degree of progress to date diminishing the farther one moves east. The agricultural sector in the transition economies has already endured a large part of the costs of economic reform. That most of the benefits that would come from effective reform still remain to be captured can be a basis for both frustration and optimism.