

~~Comments~~Comments by Ron Trostle on
Coping with Food Price Volatility: Trade Insulation as Social Protection,
by Quy-Toan do, Andrei A. Levchenko, and Martin Ravallion. August 2012.
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Introduction:

As economists, we know that prices go up, and prices go down. The market impacts of some of these price movements are reasonably well forecast and can be anticipated with considerable confidence. An example is the impact of a spike in livestock feed costs on future meat production. However, the causes of these price movements themselves tend to be almost completely unpredictable. An example is the severe drought and high temperatures in the United States and other adverse weather events in Russia, Ukraine, Kazakhstan, Turkey, southeast Europe, India, and parts of Africa that have led to the current jump in prices of certain crops.

The Do, Levchenko, and Ravallion paper compares two approaches to mitigating the negative effects of a sharp increase in food prices; what the author's refer to as a "crisis." The two approaches are trade insulation and social protection.

Under the trade insulation approach to protecting consumers, an exporting country restricts exports in order to keep more food in the country. This action lowers prices in the country's domestic market—thus assisting consumers but at the expense of producers—but raises world prices; the approach essentially transferring domestic price volatility to world markets. An importing country lowers import tariffs in an attempt to insulate its consumers from high world market prices.

In the social protection approach, the authors propose a social insurance scheme. Under the scheme, when prices are high, resource transfers (wealth) flow from net food sellers to net buyers, domestically and internationally. When prices are low, resource transfers flow from net food sellers to buyers.

The authors examine the impacts of each of the two approaches on net food sellers and net food buyers during a period of high food prices. The theory and math are elegantly set forth in the paper, although one needs to appreciate the assumptions and limitations of the model when assessing its applicability to real world needs of policymakers. The conclusions about the impacts of the two approaches on food sellers and on domestic and international food buyers are what would be expected. In essence, in a crisis situation, the nature of the impacts of the social protection and trade insulation approaches are similar; i.e., both approaches moderate the increase in food prices for net seller countries, and reduce the impact of high food prices for net buyers. Under both approaches, domestic and world consumption and world food commodity prices are higher than would have been the case under a "do-nothing" approach.

The Policy Maker's Dilemma:

Since the impacts of the two approaches are theoretically similar, in the real world of the policy maker, which approach is preferred? Traditionally, countries have used trade insulation policies to deal with food price spikes. If you were a policy maker, how would this paper help you?

If you are setting policy for an exporting country, this paper might help justify your decisions to restrict or ban exports during a previous food commodity price spike. If you are a policy maker for an importing country, the paper would help justify your past decisions to lower import taxes and subsidize consumers.

As a policy maker, one needs to determine (1) who are you trying to protect? (2) what are you trying to protect them from? (3) how much of the perceived risk are you trying to protect them from? and, (4) over what duration of time are you trying to protect them? That is, are you trying to protect producers and consumers from price swings that occur from week-to-week, from month-to-month, from season-to-season, from year-to-year, or over a multi-year period?

The Demand Side:

The paper focused on consumers, -- particularly on the impact on consumers with a high propensity to consume food. (The paper does indicate that under the social insurance scheme, producers would receive resource transfers from consumers during periods of low prices, but the focus is on consumers.)

Historically over the last 45-50 years, a food commodity price spike has occurred, on average, about every 7 years. Conceptually, when prices are high ("crisis"), the social protection approach transfers resources from food producers in exporting countries to consumers in the exporting country and also in foreign importing countries. During the intervening 6 non-crisis years, under the authors' optimal social insurance scheme, transfers flow back to the producers. Under the trade isolation scheme, it is unclear that there are any flows back to producers, either from consumers within the exporting country, or consumers from importing countries.

As a policy maker you need to consider how the social insurance scheme will be implemented. How will the social insurance scheme function, either within a single country or within an international context? What kind of administrative bureaucracy will need to be established? How much will it cost to implement the scheme? Are there functioning examples in other countries that you could emulate?

A political concern would be how to manage 6-years of transfers from consumers to producers. Low-income consumers may not like transferring resources to producers over a 6-year period of low and stable prices.

The authors assume away such implementation concerns. However, in considering these operational questions, one can see why policy makers in exporting countries have relied on export restrictions, and policy makers in importing countries have relied on reducing import tariffs and providing subsidies for food. Implementing such trade insulating policies is relatively straight forward and would require less additional administrative support.

The Supply Side:

The paper addresses the demand side, but what about the supply side. Policy makers will likely be concerned about the impact of policy decisions on food production and prices in subsequent years.

In all cases of the at least 7 distinguishable price spikes over the last 45 years, production short falls played at least a minor role; and in most cases sharply reduced global production was a primary factor. Generally, the production shortfall was caused by adverse weather in multiple producing countries.

A “spike” has both an up-side and a down-side. After most of the past 7 episodes of high prices, world food commodity prices declined abruptly and significantly. And they did so because global agricultural production responded to the incentives of high prices. Generally, the increase in production was primarily attributable to a large increase in the global area planted to crops.

Policy makers might want to adopt policies that encourage an increase in production in response to food crises. An exporting country that imposes export restrictions lowers domestic prices and incentives for future production. Not only do the export restrictions directly lower production incentives, they also increase farmers’ uncertainties associated with decisions to be made about future production. In a dynamic sense, both the social protection (as defined by the authors) and the trade insulation approaches reduce future production incentives compared to a “do-nothing” approach. At any rate, while a trade insulation approach may have some benefits in an individual country context, it is unlikely to be a valid approach in a multilateral context. Insulation approaches reduce the role that global trade can play in reducing variation in world prices, and as such, are mutually self-defeating. For the net importing country, reducing import tariffs as a means to decrease domestic prices works only to the extent that there remain import tariffs to reduce.

The “do-nothing” approach brings me to my final comment. Even if there were to evolve sufficient international political clout to impose an international social insurance scheme (regardless of the difficulties and costs of implementation), why not instead adopt a prohibition against the trade insulation policies of export restrictions and reducing import tariffs? Admittedly, if eliminating trade policy changes were the only response during high prices, there would be

negative effects on low income consumers, and possibly on producers with crop losses that likely contributed to the high prices.

To help mitigate the impact of large swings in food commodity production and prices on producers and consumers, exporting countries could rely on a crop insurance program to protect farmers from significant financial losses. Importing countries could protect low income consumers through targeted subsidy programs. Using the authors' analytical framework, a country would have domestic insurance for net food sellers, and domestic social protection programs for low income consumers. Although this approach may not result in the theoretical optimum, it incorporates some of the concepts of the social insurance approach, and would appear to be much easier to implement (with less administrative bureaucracy).