

United States Agricultural Trade: Where Are the Gains?: Reply

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The comment on my invited address to the Western Agricultural Economics Association annual meeting in 1988 is well received. It, once again, highlights the key issues surrounding the controversy over the structure, conduct, and performance of the world-grain economy. I would like to begin by responding to Martin, Lev, and Emami's concluding paragraph. I have never been an advocate for the creation of grain cartels any more than I have been an advocate of stopping agricultural mechanization in California. When I first joined the profession and wrote along with Professor Seckler, "Mechanized Agriculture and Social Welfare: The Case of the Tomato Harvester," the purpose was to point out the consequences of adopting the mechanical tomato harvester. We did not assert whether or not it should be adopted. In my writings on the world-grain trade, I have taken the same position: that of being a nonadvocate. However, while not being an advocate of grain export cartels, my work and that of my colleagues draw attention to how bad agricultural policy is in many parts of the world. While the comment seems to suggest that a grain cartel is impossible, I hope that the authors do not suggest that the current trading regime is optimal. My position is not too dissimilar from that of Professor D. Gale Johnson who argues that agriculture is in disarray. The difference, perhaps, lies in the solution of how to get agriculture out of disarray.

I will deal specifically with the points raised by Martin, Lev, and Emami. I have heard these arguments many times when presenting lectures about how to restructure the international agricultural policy and grain trade. Their first point centers on the excess-demand curve facing wheat exporters. Clearly, there is no sin-

gle excess-demand curve for wheat since a proper specification suggests that the price elasticity will depend on the quality of wheat exported and the nature of the country importing wheat. The elasticities are a function of such factors as income levels and grain quality.

I have never been able to conceptually derive (given the large policy distortions that exist) a "distorted" excess-demand curve for major traded commodities such as wheat. Because of the theoretical problems, there is little wonder that the empirical estimates on excess-demand curves vary greatly. What do these estimates mean? It is very easy to conceptually derive an excess-demand curve under perfectly competitive conditions. In that case, Martin, Lev, and Emami are right that the price elasticity at a given price has to be more elastic for the excess-demand curve than for the internal-demand curve. However, in the real world, one does not have competitive conditions; therefore, if one can derive an excess-demand curve, it is certainly not a smooth function as would be the case if a perfectly competitive environment existed. In this regard, I would once again highlight, for example, the Japanese case. I have published this example elsewhere (Carter, McCalla, and Schmitz; Schmitz). The import demand for wheat by the Japanese is essentially vertical (i.e., highly price inelastic). This is because there are several internal prices for Japanese wheat which bear no resemblance to the import price. The Japanese Food Agency imports wheat at one price, but the prices paid to producers and that paid by the millers are significantly above the import price. Our numbers show that, when the United States lowered the loan rate under the 1985 Farm Bill, there were significant gains to the Japanese Food Agency since they merely purchased wheat at a lower price. However, the price paid by millers did not change nor

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did the price received by producers in Japan. In this case, it has always been inconceivable to me, at least, how the import-demand curve for wheat by the Japanese could be price elastic. One could go on and on and make such arguments for importers of wheat. In all of these cases, the elasticity is largely a function of the degree of domestic distortions. Generally, the more pronounced the distortions, the greater would be the inelasticity of demand, although I have worked out certain cases where the opposite would be the case. The bottom line of this argument is that one cannot use results derived from perfectly competitive conditions to show what would happen if one changed agricultural and trade policy in a major way.

Also, in the above context, we are very clear in much of our work that one really does not talk about a uniform price that would be charged to all importers. Certainly, clever marketers would charge different prices depending on price elasticities. We make it very clear that in highly inelastic markets, one charges a much higher price than in the price-elastic markets; and certainly this is consistent with theory. Therefore, under a cartel arrangement, the price charged to Japan, for example, would be significantly higher than those prices charged to less-developed countries. In this regard, one can also avoid the reshipment issue that is often raised concerning cartel arrangements. Therefore, even though one may find that certain countries have elastic excess-demand curves for imported wheat, one should not infer that all countries have such schedules. Related to this, I learned several years ago how certain pricing arrangements occur in areas covering fruits and vegetables. For example, a world-renowned cooperative located in California charges different prices for a homogeneous product. It would charge a much higher price for its commodity in Californian and Canadian markets than it did in markets such as Poland. The price differences were much greater than transportation costs and other transaction costs.

In analyzing the world-grain trade, one appreciates that various qualities of wheat are involved and prices range according to quality. We (Ulrich, Furtan, and Schmitz) demonstrated that the introduction of high-yielding varieties in Canada would certainly be a plus to producers. Part of this argument is based on the notion that the demand for high-quality

wheat is highly price inelastic and that a certain percentage of the world wheat economy is highly dependent on high-quality wheat, even though that percentage is diminishing. This merely strengthens the argument that price discrimination is desirable in the world-grain trade. Price discrimination is currently practiced with the U.S. export enhancement program since the price paid by the Chinese, for example, is much lower than the price paid by the Japanese. However, price discrimination as currently practiced in the international grain trade is extremely costly because of its associated subsidy element; cartel-type arrangements are free of export subsidies.

The second point raised by Martin, Lev, and Emami concerns supply response by importing countries due to higher prices. Certainly, there are many countries in the world that have price supports now well above the import price for grains. As a result, raising the world price should not have any impact on production response in these countries since prices are generally above free-market prices, e.g., European Community prices. Concerning areas such as the Soviet Union and China, it is always interesting to look back to see what has happened to production response over the past several years. One has to recall that in the 1970s the real price of wheat generally was at an all-time high. However, one did not observe massive supply responses in these regions. Also, it is interesting to speculate as to what will happen in the future concerning technological change in the world wheat economy. I have to agree that there have been responses in the past to price supports and the like, and to this extent they are linked to the development and adoption of new varieties. However, whether such new varieties can be continuously developed to obtain the same type of yield response as has happened in the past is an interesting question. Also, it is not clear how prices influence research and development and adoption rates.

If one considers a model which includes the demand for stocks, the problem remains as to what is the most efficient way of carrying out business. Should one lower price and increase the volume of export sales while at the same time reducing stocks? The answer to this question again depends on the nature of the demand schedules confronting U.S. and other world exporters. As we show in a separate paper (Babcock, Carter, and Schmitz), one can conceive of situations where the gain in total

revenue from lowering the loan rate as was done in 1985 can be actually less than the cost of storing that quantity.

I have generally supported the notion that there are significant gains from international trade in both manufacturing and in agriculture. All of my arguments in the international grain markets have been aimed toward achieving this goal. Current policies have essentially driven us to the position where there are very few gains from international trade in major farm products (Schmitz, Sigurdson, and Doering; Carter and Schmitz). For there to be gains from trade, distortions have to be removed. The argument I presented at the Western meetings was merely that, if countries are unwilling to give up internal price supports, then certainly production controls are more desirable than having all-out production and export subsidies where the importing nations are the gainers. This is certainly not a cartel solution but would be an improvement over the existing situation. Again, ideally, one has to move toward freer trade regimes in agriculture which is currently the aim under GATT.

Lastly, somehow the profession seems to be hung up on the notion that export performance should be measured using market-share criteria. For example, if a country increases its market share over time, then somehow its comparative advantage has improved *vis à vis* its competitors. Clearly, using such criteria is a serious flaw since one can easily increase market share by the use of the treasury. If one supports producers at a price three times higher than what the commodity is sold for in the

international market merely for the sake of either maintaining or increasing market share, then one soon realizes that market-share criteria are bad measures of economic performance at least from a macro viewpoint.

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