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THE UNITED STATES FOOD SYSTEM OF THE 1970's - DISCUSSION

by

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University response to Professor Goldberg's paper.

Typical of Ray Goldberg, this paper has approached the subject of the U.S. Food System of the 1970's with a "big picture" perspective. This is the paper's strength. At the same time, it is also the source of some frustration since some of the more thought provoking ideas are not very well developed. It's obviously difficult to write a paper that accomplishes both.

I find little in the paper with which to disagree. I believe Ray is correct in emphasizing the new environment that has resulted from events of the last three years. With depleted world reserve stocks, the world is walking a tight rope between serious famine and adequate, though high priced, food supplies. Now fully exposed to world supply and demand forces, the U.S. food system is vulnerable to such a precarious situation--as mercurial prices during the last two years have convincingly demonstrated. And, if Reid Bryson of the University of Wisconsin is correct in predicting less favorable weather in the years ahead, the world food crisis will not be a short-term phenomena.^{1/}

Ray indicates several implications of this new world food situation which warrant comment.

Food Reserve Program

The logic for a world food reserve program is persuasive, particularly if it

is organized in a way that is responsive to world supply and demand conditions, to production incentives, and that is sheltered from short run political mentality. Whether this is possible I don't know. It would seem to call for an international administrative agency that is nonpolitical in nature, thereby freeing it to make decisions on the basis of humanitarian and international economic conditions. To provide the desired supply/price stability, such a program would require substantial funds; one author estimates \$10 to \$15 billion would be needed to offset the sort of shortfall experienced in 1972-73.^{2/}

Without isolating the U.S. food economy from the rest of the world, a world food reserve would provide some protection for consumers on the high side, and some protection for producers on the low side.

The problems in bringing such a program to reality would be great. Indeed, we may find it is not operationally feasible. This possibility is hardly justification, however, for abandoning the idea before it has been carefully examined.

New Coordinating and Procurement Arrangements

Ray Goldberg's interest in vertical coordination is long standing. He has been at the forefront in studying the coordinating mechanisms within commodity sub-sectors. Hence, his concern about this

subject in this paper is both expected and warranted.

Ray suggests that new coordinating arrangements are needed that "build on the mutuality of interest of producers, processors, distributors and consumers", and that take the place of price support programs, international commodity agreements, etc. Included are such things as contract integration, cooperative-corporate joint ventures, more effective use of future markets, tax incentives, and many other coordinating arrangements.

In the main, I agree. Volatile supply and price conditions are likely to stimulate the use of coordinating arrangements that reduce uncertainties. A recent study in the Texas Rolling Plains, for example, indicated a dramatic increase in forward sale contracting of cotton, grain and stocker cattle during 1973.^{3/} However, this study also showed a significant decline in contracting in 1974 due to dissatisfaction with the 1973 contracting arrangements.

I wish that Ray had elaborated further on this topic. New coordinating arrangements are needed. Some are being tried. However, the influence of these coordinating arrangements on system performance is really not known. In addition, the road is far from clear for their general acceptance. Knotty problems exist, particularly with respect to the distribution of returns, risk, and financing.

On the surface, many of these arrangements are appealing. Cooperative-corporate joint ventures, for example, seem to represent in many cases a desirable combination of talents and needs; a perfect marriage built on mutuality of interest. But--in all vertical relationships of this type, there are also fundamental and to some extent desirable conflicts of interest that can make the honeymoon short indeed. Bertram Gross has commented:

"Conflict among and within systems is probably the greatest source of continuing change...The common interests and goals that keep a system together are always embedded in a network of divergent and competing interests and goals... Some degree of conflict--both internal and external--is an essential stimulus to system adaptability and creativity."^{4/}

These conflicts come into particular focus in the transfer pricing arrangements between two entities. As contracts and other types of conditional pricing mechanisms increase in use, open markets to serve as a base for transfer become thinner and more subject to manipulation. In this case, how does one determine a price that is fair and has sufficient credibility to be accepted by both parties? With disparities in the bargaining position and level of information of producers and processors, it is difficult to know when such arrangements are equitable, and perhaps even more difficult to convince producers of that fact. A great deal of trust is required.

I also have some reservations about the ability of contracts, joint ventures, etc. to improve supply and price stability. Commodity price stability depends largely on horizontal coordination at some stage in a commodity system. This is difficult to accomplish unless one stage is highly concentrated (in which case coordination takes the form of collusion), or some form of government supply regulation is used. Improved vertical coordination may increase efficiency and allow individual firm vertical networks that are more synchronized. As long as there are many decision makers making decisions about the quantity to produce, however, supply is likely to vary considerably over time.

Broilers are probably the best illustration. Although this is now a tightly coordinated vertical system, serious price instability continues to

exist. Instead of thousands of individual farmers making production decisions, there are now 100 plus large broiler contractors. Apparently this is still too many for effective collusion.

I agree with Ray and with Gordon Bloom^{5/} that much can be gained from greater inter-firm cooperation within a vertical system. However, I think we must also be realistic and face up to the inherent conflicts that make such cooperation difficult to achieve, and cautious in appraising the performance implications of more cooperative arrangements.

Financial Stress

Ray refers briefly to the financial stress in the food system resulting from recent economic conditions. Let me add a few comments since I believe it warrants more attention.

Working capital requirements in many parts of the U.S. food system have skyrocketed in the last two years. This is particularly true for producers with spiralling prices on many farm inputs, and for those marketing firms that carry large slow turning inventories. Capital expenditures to comply with safety, sanitation and environmental laws have compounded the financing problems of many firms. And this has occurred at a time when lines of credit are both more restrictive and expensive. There are several possible implications.

1. To the extent that binding advanced sale contracts facilitate borrowing power, producers and marketing firms will be encouraged to contract for the sale of their products.

2. Some small and medium size firms with weak capital structures and limited lines of credit will either find willing merger suitors or go bankrupt. This will increase concentration in some industries, with large well financed companies the long-run beneficiaries.

The number of private label packers available to distributors will likely be reduced.

3. At the same time that the financial structure of many firms is under stress, market price risks have also increased. This raises the question of who can best accept these risks? Both producers and processors may be interested in forward contracting with their customers, but can their customers stand the risk exposure?

Recent discussions with the meat packing industry, for example, revealed that if all livestock procurement was via contracts, a loss of \$4.00 per hundred weight would wipe out the total industry's net worth, and a loss of much less than that would put many firms in trouble. The same holds true for upward movements against short positions in the Future Market.

Food processors, such as millers, who are able to forward contract with their customers are in a different situation since price risks are shifted forward. Forward contracting possibilities with retail firms as a way of shifting risk are rather limited. Thus, in many sub-sectors (particularly where little value is added and product differentiation is weak) price risks are likely to stay at the producer or processor level, and more likely at the former.

4. Agribusiness organizations will be receptive to new sources of capital. Cattle feeding has already received an infusion of nonfarm capital through limited partnerships and other arrangements.^{6/} Unless tax laws are changed, I suspect we'll see more of this type of thing happening, although it may be from Japanese or Arab investors rather than U.S. doctors and lawyers.

5. The financial stress in the food system will open up some natural opportunities for cooperatives to increase their involvement in food marketing,

particularly through the purchase of food assembly and processing operations.

In short, I expect some definite shake-out and reorganization as a result of the financial stress affecting many industries--particularly if volatile commodity prices continue to prevail.

Summary

It should be clear that recent changes in the economic environment may have significant impacts on the organization and coordination of our food system. It should also be clear that there remain many questions about the exact nature of these changes. Ray's paper has raised up some of the more important national and global issues that warrant our attention in the years ahead. In that sense, and in the perspective it provides, it has made a valuable contribution to our deliberations.

Footnotes

- 1/ Bryson, Reid E., "Perspective on Climatic Change", Science, Vol. 184, May 17, 1974, p. 753-60.
- 2/ Revelle, Roger, "Food and Population", Scientific American, September, 1974.
- 3/ Martin, Rod and Don Moore, "Observations and Impressions Concerning First Handler Exchange Contracts Involving Field Crop and Beef Cattle Farms in the Texas Rolling Plains", draft copy, 1974.

- 4/ Gross, Bertram, "The State of the Nation: Social Systems Accounting", in Social Indicators, ed. Raymond A. Bauer, Cambridge, Mass.: MIT Press, 1966.
- 5/ Bloom, Gordon, Productivity in the Food Industry: Problems and Potential, MIT Press, Cambridge, Mass., 1972.
- 6/ Some estimate that 20 percent of the capital in cattle feeding is now from nonfarm sources.