PRICING PROBLEMS IN THE FOOD INDUSTRY
(With Emphasis on Thin Markets)

A compendium of papers presented at the Symposium on Pricing Problems in the Food Industry (with Emphasis on Thin Markets), Washington, D.C., March 2-3, 1978

Marvin L. Hayenga, editor

North Central Regional Research Project NC-117
Monograph No. 7

PRICING PROBLEMS IN THE FOOD INDUSTRY: RESEARCH PRIORITIES

Willard F. Mueller
Professor of Economics, Agricultural Economics, and Law
University of Wisconsin-Madison

At yesterday's opening session, there wasn't unanimity concerning the definition of thin markets but, surprisingly, most of the subsequent speakers talked quite intelligently about the subject and seemed to have had no difficulty in identifying a thin market when they saw one. I guess it's as the farmer said to the milkmaid, "I can't prove you watered the milk but how else can you explain the fish in your pail." Likewise, many reputable economists and industry representatives evidently feel that there is something fishy going on here although they are not quite sure as to whether it's a good fish or a bad one. Enough concern has been expressed, questions raised, and tentative answers given to support the proposition that we've been talking about a problem crying out for more study. Thus, a problem exists, it is potentially very significant and, hopefully, its dimensions and consequences can be measured.

I think it is important to place in perspective thin markets in agriculture because, outside of agriculture, I believe thin markets are the rule rather than the exception. Mr. Sinclair, from the Antitrust Division, made the point this morning that only in agricultural markets and in securities markets is there wide-spread concern and expressions of the need for more research and knowledge on this subject. Also, only in these areas is there much publicly supported reporting of price information for the purpose of trying to influence — presumably improve — the price making process. We have the Bureau of Labor Statistics collect price information in a large number of industries, but this isn't done to improve the functioning of markets, but rather to find what is happening to the wholesale price index. Businessmen don't rely on the wholesale price index in making price decisions.

There must be something special about agriculture that makes many persons believe thin markets present a public policy problem. Perhaps it is because these markets, unlike most industrial markets, can still be changed in such fashion as to make them perform better. In other words, many will not concede it is inevitable that we have the same kind of thin markets in agriculture that we have in most industrial markets. Also, the balance of power between the participants is more equal in industrial markets so no one really worries about pricing equity among competitors in the steel industry or the auto industry. Most industrial firms can pretty well take care of themselves because they have ways of getting sufficient information to make rational pricing decisions.

To conduct research on any subject, you need two things—a research framework and some norm for evaluating performance. It does make a big difference where you come from in examining a problem or the kind of framework that you use. Not too surprisingly I came at this problem from the same direction as Dick Caves, i.e., primarily from an industrial organization framework, which views thinness not as a dimension of performance but rather as the reflection of a set of structural conditions that can affect performance.

I believe most of those here have really been talking about this problem within this framework, although some may not acknowledge it. This methodology involves testing the significance and consequence of so-called thin markets by examining various dimensions of market structure and conduct that cause thin markets, and then evaluating how manipulation of structure and conduct might change performance. The framework is essentially neutral with respect to the kind of findings you end up with. The entire matter of "good" or "bad" market performance and what can be done about it is an empirical question. The reason I reject the performance definition of thin markets is the same reason I reject performance as a criterion in defining whether or not a market is competitive. Oligopoly theory predicts a positive relationship between structure and performance, but it doesn't tell us precisely what that relationship is; the whole purpose of empirical research is to determine the nature of the structure - performance relationship.

In studying thin markets, it is especially important to keep in mind that the industrial organization framework is actually very broad. It doesn't include just the number and size distribution of firms. Particularly in this area, it's well to keep in mind that information may be a crucial structural variable. Although it often is overlooked as such, it clearly is one of the key variables in some markets.

There also are other structural variables such as vertical integration. There also may be other factors that are unique to a particular market that would qualify as structural variables. Government programs, for example, might be relevant structural variables in some industries.

Additionally, when we talk about using the industrial organization approach, this includes looking at things responsible for the existence of a particular structure in an industry. This is important to better understand why existing structures emerged and whether it is possible to have alternative structures. Secondly, it is essential in making the normative judgment of the benefit/cost of alternative structures.

This immediately raises the question of the kind of norm to be used. I think it simply comes down to something like this. If we really understand the reasons for the existence of a thin market and the consequences of it, we then must ask: (1) can we change the structure or conduct of the market so as to improve performance in terms of pricing efficiency; and (2) will the benefits of the improved performance exceed the cost of bringing about the improvements?

We have implicitly made such a determination in some areas. We have conceded, in effect, in processed fruits and vegetables, where markets have always been thin and no one can think of realistic ways of doing anything about it, that it is impractical to eliminate thin markets. This isn't to say that some other course might be taken in such markets.

Where, then, are some of the researchable problems? Much research in thin markets relates to how information systems might be changed. That is what Ron Knutson and others were talking about. The idea here being that it would be desirable to set up a system that will reduce the cost of obtaining information. This, of course, is one means of improving the structure of a market and, thereby, its performance.

In examining the role of information its unique nature should be kept in mind. J. M. Clark used the analogy of the difference between a four-legged and a three-legged chair in explaining that if one structure variable is changed, the significance of others also change. For example, the impact of improved information on performance differs depending on whether the market is concentrated or competitive. Whereas we usually think better information means better performance, this is not necessarily so.

For example, in an auction market with very few tobacco companies, the auction market might provide a means of perfecting collusion among the oligopsonistic buyers, since each can keep an eye on his competitors. There is a good deal of theoretical work on this and some empirical work by people of the Chicago school. So it's well to keep in mind that merely improving information doesn't always improve market performance.

Many other problems relate to the causes and consequences of thin markets. I endorse Dick Caves' suggestion of in-depth case studies. We can learn a good deal by looking at them across different geographic markets.

As Mr. Haverkamp mentioned yesterday, it should be possible and certainly researchable to look at transaction costs of alternative arrangements. Just what are they and what kinds of savings are possible? This is essential in making some final judgment as to the cost of changing a given system.

Caves suggested a couple of hypotheses for explaining the emergence of vertical integration. They are not new to many in this group who have been studying the causes and significance of vertical integration and coordination in a variety of sectors of the food industry.

I would think we should be able to research fully such problems as the accuracy and significance of the yellow sheet. But how do we go about determining how accurate it is? Just what data do we need to answer that question? Obviously, the individual researcher working independently couldn't do this. He must have access to data. On the other hand, by collaborating with the USDA he should be able to study the accuracy of the price reporting systems of the USDA.

This morning, Knutson, Henderson and Raikes suggested additional problem areas, indicating that there clearly are many questions in search of reliable answers. There are, of course, many normative questions. But what norm to apply? I think we must ultimately view agricultural markets in the broad context of the entire economy, which generally is less open than are farm subsectors at the first handler level.

I think the National Cheese Exchange is a good example of the normative problems we face. When Mr. Gould began, he said he didn't have any trouble defining a thin market. He knew one when he saw it and I thought at that time he was implying the National Cheese Exchange was one. But at the end of his talk he concluded it wasn't a thin market. I think he used a performance norm and that, because he believed the market was performing well, he concluded it wasn't a thin market. But it seems to me that according to the definitions used in the last day and one-half, it clearly meets the test of a thin market, based on the comments of Truman Graf and Mr. Gould.

The prices generated on the Exchange are important because the firms using it are important factors in the industry. Someone mentioned that it acted as a price barometer. Some economists would infer that those on the Exchange were barometric price leaders, i.e., representatives of the leading firms in the industry sit around and make transactions in such a fashion as to generate prices that they think are appropriate.

In this scenario, the exchange may well be the means of legitimizing this process. Obviously, they would violate the antitrust laws if they made these decisions jointly behind closed doors. If the characterizations I have made about the Exchange are correct, the question still remains, how well does it perform? As I suggested, the relevant question is how well compared to what? It very probably doesn't perform as well as do many futures markets, nor as well as the stock exchange and many spot markets. On the other hand, it probably performs better than many industrial markets.

Thus we come to the bottom line. After researching this market we may conclude that it is quite imperfect by some standards, but unless we can think of some way of improving it we may conclude it performs in an acceptable manner. It is an acceptable pricing mechanism when compared to many other sectors of the economy; and while it isn't perfectly competitive, we apparently cannot come up with a better alternative.

Professor Graf has studied it. Professor Cook didn't particularly like it compared to some ideal. But neither came up with an alternative. So we may simply have to live with it, and say it performs in the most acceptable manner we can think of.

The Exchange clearly provides some valuable functions such as insuring equity among different sellers, i.e., all firms selling a certain grade and type of cheese probably get essentially the same price because of the Exchange.

Finally, I would like to end on the same cautionary note as Dick Caves. He pointed out that (based on available information) certain vertically integrated markets seemed to perform okay. But then he pointed out that the evidence in the Socony-Vacuum case showed that the petroleum industry, at that time, was actually behaving differently than one would have inferred based solely on public information.

There are a lot of situations where we just don't know the facts and we have to rely largely on theory and fragmentary evidence. In all such cases we are skating on very thin ice and should be cautious in our policy recommendations. Often it takes an in-depth investigation, using mandatory processes, to uncover the facts as to what really is going on in a market.