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

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COLLECTIVE ACTION AS A POLICY ISSUE AND PRESCRIPTION IN THIN MARKETS

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This discussion summarizes the alternative courses of action producers might take to deal with the problem of thin markets. This problem is not, in my opinion, unrelated to general problems of imperfect competition faced by producers in the markets for their products.

I start from the basic premise that the problems of thin markets and imperfect competition in agriculture are widespread. The result is a less than competitive price (monopsony) being received by producers of most agricultural products most of the time. These problems exist at more than a single market level. Imperfections in advanced as well as producer level markets tend to distort the price signal to producers as well as consumers. For example, imperfections in pricing beef exist in the wholesale dressed meat market (yellow sheet), fed beef markets, and feeder cattle markets. In grain, imperfections arise from international grain markets, futures markets, terminal cash markets and first-handler producer markets. Some products such as eggs and manufactured dairy products have been identified as having pricing problems since the 1930's.

These imperfections are, in part, a function of the structure of these markets — which is invariably imperfect. However, structure is, in part, a function of the pricing mechanism. That is, the pricing mechanism can affect and determine how the relevant market is defined. For example, a first handler market, where sales are direct to a limited number of grain elevators within economic hauling distance, has considerably different dimensions and thus structure than if one of the producer-owned local elevators gives producers access to a larger number of buyers through an electronic market computer terminal. Thus by changing the pricing mechanism itself, cooperatives and their producer representatives can change the structure of a market. Beyond this, it can change transaction costs associated with market operations, change competitive and bargaining relations within and among the market participants, change the incidence of interproducer discrimination and change the quantity of information available to participants in the market.

Alternative market or pricing mechanisms are important because traditional cooperatives that simply buy and sell commodities in existing spot markets only add one additional competitor. Experience indicates this cooperative strategy is not sufficient to stem the decline of competition in spot markets because the co-op's objectives are different. The structural shock is not great enough and the cooperative does not operate sufficiently different from its competitor to offer producers anything substantially different than an alternative outlet.

By analyzing trends in existing pricing mechanisms and the impact of those trends upon competition, some guidelines may emerge for producer collective action decisions with respect to the type of organization and strategy needed to increase competition for their products. My conclusions will draw heavily on extensive discussions in two major marketing alternatives projects reported elsewhere.[1]

Research on these pricing mechanisms is not sufficiently advanced to allow quantification of either the magnitude of trends or impacts. They, of course, vary from commodity to commodity. However, fairly general agreement appears to exist on: (1) the direction of change and (2) the theoretical impact of change on competition.

TRENDS IN MARKET OR PRICING MECHANISMS

Pricing mechanisms can be grouped into three general categories: (1) open spot markets, (2) forward contract markets, and (3) integrated markets. Within each of these categories, specific alternative pricing mechanisms can be identified. For each of these alternatives, trends in the proportion of agricultural products marketed through each mechanism can be specified. Table 1 identifies these mechanisms and trends for agriculture as a whole for two time periods — 1950 to 1970 and 1970 to present. Differences exist in these trends from commodity to commodity. However, the basic trends may be sufficiently broad based as to gradually spread across agriculture. This is particularly true of the general progression from open markets to forward contracts to integrated systems.

Table 1 shows that the general trend in the open spot market from 1950 to 1970 was away from the centralized spot market toward increased private treaty spot or direct spot sales. In the 1970's, the central spot market continues to decline while the trend in private treaty selling has reversed itself. The only hope for saving the open spot market appears to be the use of electronic markets.

Forward contract markets are defined as marketing contracts where price is specified.[2] Most of these contracts begin as private treaty contracts but over time evolved either into bargaining arrangements or changed from simple marketing contracts to resource providing contracts which take on the characteristics of integrated market structures. Private treaty contracting continues to increase but is variable from year to year in products such as cotton and feed grains depending on producer expectations. Bargaining over contract terms increased rapidly on producer expectations. Bargaining over contract terms increased rapidly from 1950 to 1970 but appears to be relatively stable today. Electronic markets in contracts must be considered to be in experimental developmental stages since they have only been used in cotton for part of a contracting season.

All types of integrated marketing systems have been expanding from the 1970's to the present. Some might argue with the notion of putting resource providing contracts and corporate ownership integration in the same category. However, from a pricing, control and impact standpoint any distinction is a myth. In most resource providing contract situations, the integrator holds title to the product, making the producers largely skilled laborers.

Cooperatives with marketing agreements binding the producer to market his production and accept pool prices also fall in the category of integrated systems. Cooperatives need the authority to market to best advantage in order to compete with the more sophisticated corporate sector. Some cooperatives, finding these systems attractive, close membership in order to retain the advantages for current members and prevent dilution of earnings. The number of closed systems increased in the 1950-1960's and stand higher or stable in the 1970's. Cooperatives operating closed systems generally find that production outside the cooperative continues to expand and market share declines unless there is a marketing order that effectively controls production.

Table 1
Trend in major first handler pricing mechanisms.

Pricing Mechanism	1950-70	1970's to Present
Open Spot Market		
Centralized Spot Market	⬇	⬇
Private Treaty Spot Market	⬆	⬇
Electronic Spot Market	na[a]	⬆[b]
Forward Marketing Contract		
Private Treaty Contract Market	⬆	⬆
Bargaining	⬆	Stable
Electronic Contract Market	na	Experimental
Integrated		
Corporate		
Resource providing contract	⬆	⬆
Ownership integration	⬆	⬆
Cooperative Marketing		
Agreement with pooling		
Open membership	⬆	⬆
Closed membership	⬆	⬆

[a]na means the alternative was not available to producers.

[b]Applied successfully in the U.S. only in cotton for three seasons.

IMPACT ON CURRENT TREND ON COMPETITION

The impacts of the current trend in the proportion of product marketed through the various pricing mechanisms are specified in Table 2. Impacts are measured in terms of their effect on competition. Competition is measured in terms of impact on price relative to the competitive norm — that is the supply-demand equilibrium price.[3] Impacts in terms of the competitive norm are suggested as being either positive or negative. A positive impact suggests an increase in competitive forces tending to drive price toward the competitive norm. A negative impact may either result from the insertion of monopoly or monopsony elements into the market. Table 2 suggests both short and long run impacts on competition which can differ in sign for the same pricing mechanism.

Open Spot Market

The decline in centralized spot markets has the well recognized effect of reducing competition in both the short and the long run. The initial effect of the decline in centralized spot markets was accompanied by an increased prevalence of private treaty or direct sales in the spot market. Such one-on-one negotiations between the well-informed large buyers and smaller producer-sellers inherently put the producer at a disadvantage. Increased direct marketing during the 1950's-70's thus reduced competition. However, the current trend toward less private treaty marketing could have the opposite effect. Increased electronic markets have the potential for restoring the benefits of the centralized spot market without many of the costs of physical transport to the centralized market. As a result, electronic markets increase competition both in the short and long run.

Forward Marketing Contracts

Much of the decline in the private treaty spot market during the 1950's-1970's appears to have been in the private treaty contract market. In this market, the superior market position of the contractor as opposed to the producer inherently creates the potential for less competitive prices in both the short and the long run.

To offset this inferior market power position, producers operating in commodities where contracts are prevalent have formed bargaining associations to negotiate contract terms. History has indicated that if effective, such bargaining associations in the short run have the tendency to exercise too much market influence. In the longer run, however, bargaining associations learn the limits of power and more competitive results occur.

Electronic contract markets, also referred to as forward deliverable contract markets, determine at least the price in the contract on a competitive basis. As a result, the normal one-on-one price determining relationship is broken, bringing increased competition in both the short and long run.

Integrated Systems

The trend toward increased corporate integration by either resource providing contracts or ownership has the effect of reducing competition in both the short and long run. The volume of product produced in corporate integrated systems bypasses traditional markets. The inherent effect is thus to make these markets more "thin" and less subject to competitive market forces.

Cooperative integrated marketing systems with pooling have a similar short run effect as corporate integrated systems. That is, production committed to the cooperative under a marketing agreement bypasses traditional open markets.

Sufficient volume may be drawn away from open markets to make them "thin." Such "thinness" may be augmented by corporate proliferation of contracts in reaction to cooperative integration or the development of competitive corporate integrated systems. In the process it can be seen that integrated systems and market "thinness" tend to grow on themselves. It may be initiated from either the corporate or cooperative sectors. In either case the short run effect on competition is negative.

In the long run, however, the effect on competition of cooperative integration with open membership is positive. With open membership the integrated cooperative becomes a new competitive element. Superior marketing associated with turning the producer marketing decision over to cooperative management has the effect of offsetting the monopsony element. Any dangers of a cooperative with open membership overstepping the bounds of competitive pricing would be eliminated by an influx of new producers. The same safeguards do not exist with closed membership — particularly when accompanied by a production-restricting marketing order.

Table 2.
Pricing Mechanisms' Impact on Competition

Pricing Mechanism	Short Run	Long Run
Open Spot Market		
Centralized Spot Market	-	-
Private Treaty Spot Market	-	+
Electronic Spot Market	+	+
Forward Marketing Contract		
Private Treaty Contract Market	-	-
Bargaining Contract	-	+
Electronic Contract Market	+	+
Integrated		
Corporate		
Resource providing contract	-	-
Ownership integration	-	-
Cooperative Marketing		
Agreement with pooling		
Open membership	-	+
Closed membership	-	-

CONCLUSIONS

Trends in pricing mechanisms indicate a general movement in the direction of less competitive pricing. These trends have advanced over time from increased direct marketing, to contract marketing and integration. The competitive problem is compounded by evolving corporate integrated market structures being in a position to limit information available to producers and limit access to markets.

A limited number of strategies exist for restoring competition in agriculture's product markets. Electronic spot and contract markets broaden the base of the market while at the same time improving producer access to markets. They thus tend to improve competition in both the short and long run. Bargaining and cooperative integration hold the potential for improved competition in the long run. They, however, also run the risk that the potential for undue exercise of market power may be realized when the cooperative closes membership. The effect is to limit market access and inhibit the diffusion of cooperative benefits to all producers.

NOTES

[1]*Marketing Alternatives for Agriculture, Is There a Better Way?,* National Public Policy Education Committee Publication No. 7, New York College of Agriculture and Life Science, Cornell University, Ithaca, N.Y., 1976. *Who will Market Your Beef, Milk, Grain, Peanuts, Cotton and Products,* Texas Agricultural Extension Service Publications D 1053-D 1058, Texas A & M Univ. College Station, March 1978.

[2]Contracts involving delayed pricing *do not* fall in this category. For all intents and purposes such a contract is a delayed direct spot market transaction with the buyer designated.

[3]This is, of course, a performance measure as opposed to a structural measure. The structural impact of the various alternatives might also be analyzed. These impacts could be viewed as being either primary or secondary. Primary impacts result from a change in the structure of the market as a result of a change in market bounds when a new pricing mechanism is introduced in an existing market. Secondary impacts result from the longer term impact of price and competition on the structure.