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

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PRICE REPORTING IN THIN MARKETS: ISSUES AND ALTERNATIVES

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The direct correlation between the thinness of markets and the efficacy of market news and price reports is clear. My purpose is to examine the impact of market thinness on market news and price reporting, the impact of price reporting on market thinness, and, based upon this analysis, to identify the relevant public policy issues for market news.

In a market economy, market news plays an important role in the price discovery process. Received microeconomic theory teaches us that market prices are determined by the interactions of numerous economic forces which, for simplicity, we frequently reduce to the functions of supply and demand. Those market-determined prices, however, are transparent. They are theoretical concepts that have no empirical visibility. They are approximated, in practice, by aggregating prices in numerous individual trades.

Individual buyers and sellers cannot turn to a gigantic CRT in the sky or even a chalkboard illustration in "Economics 100" to discover what is that market-determined price. Rather, they use numerous mechanisms to discover prices for individual transactions. Auctions, direct negotiations, collective bargaining, and formulas are all types of mechanisms used for price discovery in actual trading. The function of market news is to facilitate these price discovery processes. Market news does not report a market-determined price, but prices and aggregations of prices discovered in individual transactions. Houck has described the three major functions of prices in any economy as allocative, distributive, and equilibrating.[1] The allocation function is that of providing a signal or guide for resource allocation and utilization of production outputs.

In a pure market economy, prices are the most important allocative signals, while allocation is more a function of command in administered economies. The distributive function of price is basically one of score-keeping; that is, determining the size and distribution of monetary flows within an economic sector. In an administered economy, the distributive function is clearly much more important than is the allocative function. The equilibrating function is essentially consonant with the theoretical market-clearing concept of price.

Market news price reports focus basically on the allocative function. Ideally, reported prices are pseudo-opportunity prices for actual and potential buyers and sellers. They provide the manager with a decision-making guide on when and where to buy or sell. For many sellers in agricultural markets, market news is the only source of knowledge on price opportunities other than what is offered by a given buyer.

By the same reasoning, market news is not, by and large, concerned with the distributive or score-keeping functions of price. That function is the primary concern of social and economic indicators. USDA's series of prices received and paid by farmers are basically attempts to report on the distributive aspects of price. It is these indicators which are used, directly and indirectly, as measures of aggregate market performance.

They are also rough corollaries of market-determined prices. However, there is only a historical relationship between prices as economic indicators and the allocative prices which buyers and sellers discover, and potential buyers and sellers attempt to discover, in actual market confrontations.

In view of the major purpose of market news price reports, the major policy issues facing market news as a result of market thinness can be clarified. Three important issues that I want to discuss are: (1) the accuracy of reported prices, (2) the role of the market reporter, and (3) the integrity of market news.

ACCURACY OF REPORTED PRICES

Given that the purpose of market news price reports is to provide a useful allocative guide to resource and product owners and that price reports frequently function as alternative sales opportunities in the marketing calculus of individual traders, the importance of reporting accurate prices is readily apparent. Market thinness often results in prices which are not necessarily accurate reflections of actual marketing opportunities for many traders or for a full spectrum of product variations (different quality grades, weights, and other physical features, for example). Thus, a serious question can be raised about the usefulness and overall efficacy of market reports based upon prices generated in these markets.

Given the existence of a thin market, and its corollary potential for generating non-representative prices, several issues need to be addressed relative to the operation of a market news service. First, should the market volume upon which the reported prices are based be exposed in the market report? This would allow users to make their own determination of the extent of thinness in the base for the reported prices. This shifts the burden directly to market news users for determining the accuracy and acceptability of reported prices.

This approach would help focus attention on the issue of market thinness, which may in turn help generate pressures for changes in pricing procedures and then broaden the pricing base in the industry. An excellent example of this is the current interest evidenced by Congress in wholesale beef pricing and legislative recommendations to proscribe the use of formula pricing in that industry. This interest developed when it became public that the majority of wholesale beef trades were being priced based on the Yellow Sheet, a report based on relatively few trades. Since the potential for manipulation also suggests the possibility of scandal (and it is uncovering scandal upon which numerous political careers have been built), the interest of Congress in meat pricing poses little mystery.

Clearly, there are going to be some legislative initiatives to deal with this thin market problem. I'm less confident that there will be a legislative solution, particularly given the amount of attention that has been focused to date on the proscription of formula pricing and the lack of serious discussion of more viable pricing alternatives. Nonetheless, a more reasoned approach may emerge out of the congressional process. Or, perhaps more likely, the industry will take it upon itself to engage alternative pricing procedures in order to defuse their congressional critics. Thus, awareness of market thinness can, in some situations, be an important catalyst in bringing about change in pricing procedures which, in turn, helps resolve the thinness problem.

However, it's conceivable that only a few percentage points of the total marketing volume may be sufficient, under the right conditions, for efficient and accurate price discovery. The market clearing functions of the Egg Clearinghouse, Incorporated, with something less than 1 percent of the nation's wholesale egg trade, may stand as an example. In such situations, adding relative market volumes to price reports may lead to an undue indictment of the representativeness of those prices and the marketing system within which those prices were generated.

Another approach that could be taken where thin markets exist is to expand reporting of non-price market information. For example, information on processor inventories and production plans by producers, handlers, and processors, firm market commitments and other contractual arrangements, and similar information could be expanded. This offers the advantage of allowing factual reports of some market information where price information is of questionable value. If marketing decisions are based largely upon non-price factors, reports on those non-price factors may facilitate the marketing calculus of all traders.

It is less clear, however, how many traders would make use of such information. One basic premise for a market news service is to close the information gap between big and small traders by providing more information to smaller traders than they would otherwise have. But, what use would the typical farmer make of more extensive non-price information? How many different kinds of information can he effectively digest and integrate into his marketing plans? Does the availability of substantial non-price information effectively substitute in his marketing decision-making for even grossly imperfect price information? How would an individual broiler grower, for example, change his operating decisions armed with more information on integrator's feed mill inventories or next week's slaughtering plans? Or, would such information benefit primarily the bigger trader, thus defeating much of the rationale for market news?

A third alternative is for market news to simply ignore thin markets. That is, simply not use any market reports rather than reporting a non-representative price, one which does not facilitate accurate or efficient price discovery nor represent a viable marketing alternative. This would limit market news to "thick" markets and would directly absolve the market news service from any charge of reporting inaccurate prices. As a result, users would be assured that any price actually reported would be an accurate and reliable indicator of alternative marketing opportunities and would, therefore, be useful for price discovery purposes. Likewise, the absence of a price report would become a clear indicator to traders that no reliable indicator of market-determined values exists, and that they are left to their own resources relative to price discovery. The other edge of the sword is, of course, that the lack of a market news service leads directly to further market closure, reduces freedom of oportunity in the market, and enhances the potential for market manipulation by powerful traders with vested interests.

A fourth alternative is to tie standard terms of contract or trade to the market reporting system. By requiring standard non-price terms of trade, a larger share of all transactions would occur in one common and easily reportable language. Thus, prices in each trade would be directly comparable. If all non-price terms of contract had to comply with a standardized format, price would become the major variable in trade, thus emphasizing its theoretically important role as a guide to resource allocation. In essence, this would be using market news as a means to fatten thin markets by forcing a larger share of all sales onto a price-competitive basis and into a common, reportable framework.

This may be one of the most compelling arguments for some type of a mandatory market reporting system. Limited efforts have been made, in a few States, to require mandatory reporting of contract terms for certain crops. To facilitate such reporting it has been necessary to specify a standard format for collecting information. Because the format in which traders must report information to the market news agency is specified, it becomes a matter of convenience for buyers and sellers to conduct their trading in that same format or framework. Thus, by requiring traders to report on their transactions in a standard manner. Traders are encouraged to standardize their trading procedures, which creates a broader base of comparable trading information and thus, less thinness in the marketplace. Such an approach, however, goes well beyond the traditional role of market news as a passive participant in the marketing system.

Another alternative is for market news to simulate or formulate prices for thin markets based upon prices of related products that are traded in less thin or more price-representative markets. The Federal-State Market News Service already does this on a limited basis. For example, beef carcass prices are being formulated and reported based upon wholesale prices for boxes of primal and subprimal cuts. This process can obviously be expanded. Live cattle prices can be formulated from beef carcass prices which, in turn, are formulated from boxed beef prices. Live broiler prices can be formulated from ready-to-eat broiler prices. Farm-product prices could even be formulated from input prices. For example, live broiler prices might be formulated from grain and chick prices. Of course, if the chick market is thin, perhaps those prices would have to be formulated from the prices of eggs and incubators, Ad infinitum.

The advantage of this approach is readily apparent. It creates a reportable price that is based upon a significant volume of trading and upon prices which are accurate guides to resource allocation from related markets. With this approach it might be feasible to concentrate efforts to maintain "thick" markets for just a few products in the agricultural sector and formulate reported quasi-prices for all other product markets. However, a serious question can be raised, I believe, regarding the value of such quasi-prices in the marketing calculus of managers if those prices do not represent an actual alternative trading opportunity. These price reports may be very useful as social indicators, but may be less valuable in performing an efficient allocative function.

THE ROLE OF THE MARKET REPORTER

Harold Breimyer observed long ago that traders exhibit a strong desire to trade on someone else's price.[2] This seems understandable, given the cost and trauma that are frequently associated with price negotiation and other price discovery activities.

A relevant question is upon whose price do they trade? Traditionally, prices in some central or major markets have served this function. However, as the relative importance of central markets has declined, the prices emerging from these markets are based upon an increasingly thinner slice of the industry. This, in turn, makes them less accurate and less useful as base prices for other trades. As a result, market news price reports are increasingly used as base prices. Essentially, trading on someone else's price becomes trading on the market reporter's price. The National Provisioners's Yellow Sheet, the Urner-Barry wholesale egg price quotes, and the USDA Broiler Market

Report are examples of price reports that have become almost synonymous with base prices in the wholesale meat, egg, and ready-to-eat broiler markets.

Given the understandable gravitation of actual trading to a market news reported-price basis as markets become thinner, the importance of maintaining objective, comprehensive market reports increases. This places a substantial burden on the market reporter, as he essentially becomes the entire price discovery process. One possible course of action to help assure objectivity and accuracy of market reports in these situations is to expand the data collection effort. While there may be few identifiable points where meaningful price data can be collected, substantial trading information, perhaps much of it of a non-price nature, does exist wherever trading occurs. Thus, the collection of trading information could be expanded to numerous country sales locations, private treaties, and even foreign markets. This would help to provide the market reporter with a broader spectrum of information upon which to base his price reports.

By expanding the information collection effort, the reporter may discover prices that otherwise would go unnoticed, thus directly expanding the base for his price reports. At the least, he would have more information on volumes of shipments and other transactional details which could facilitate more accurate price "guesstimations" by the reporter.

Cost of market news increases appreciably as the data collection effort is expanded. An important question is, who pays these additional costs? If these costs are being generated in order to develop more accurate base prices for traders to use, it seems reasonable to shift these costs directly to buyers and sellers. Yet, whenever the Federal-State Market News Service has broached the question of user fees for market news, a hue and cry has resulted from traders and academic economists alike. There are public as well as private benefits to accurate and objective market news. Yet, it is literally impossible to determine the line of demarcation between the two. Therefore, no precise guidelines can be developed for "correctly" dividing the costs for market news between users and the public.

Perhaps the high cost of maintaining a comprehensive collection system for market information is at least partially a cause of thin markets. For example, where much trading in an industry occurs by private treaty, the cost of collecting sufficient price information from these private transactions may be limiting the amount of price data collected. In turn, this may be creating a thin basis for reported prices and thus, in effect, a thin market. Where trading is so dispersed that the cost of comprehensive price data collection is prohibitive, the result may be a thin market because insufficient information can be made available to facilitate accurate price discovery by individual traders.

An alternative is the use of a price committee where sufficient trading information is not available for accurate price reporting. With this approach a committee of trade experts is formed which evaluates market conditions and the limited trading information available, superimposes impressions of committee members regarding what the price ought to be, and issues price reports accordingly. This method has been used by the Egg Clearinghouse for formulating their egg price quotations and by the New York Coffee and Sugar Exchange for wholesale sugar price quotes. Quite possibly it is used in several other markets, as well.

Committee pricing puts tremendous control in the hands of the committee members, particulary where substantial pricing actually occurs based upon the reported price. Considerable potential exists, without proper safeguards, for committee members to turn both their advance knowledge of price reports and their influence over those reports to personal gain. This leads to the question, who should be on pricing committees? Will people with opposing market interests work to counteract the vested interests of one another, or will they find a mutual advantage and act accordingly? Major buyers and sellers would be expected to have the best feel for current market developments which need to be reflected for the sake of accuracy. However, they also have obvious vested interests. It probably is not realistic to expect them to function in a vacuum from those interests. Thus, it appears to be an exceedingly difficult task to determine a membership policy for a price committee which will assure accuracy and objectivity.

INTEGRITY OF MARKET REPORTS

As markets become increasingly thin, maintaining the integrity of market price reports becomes increasingly difficult. The potential for the market reporter to misrepresent market conditions is considerable, whether it is by intent, mistaken analysis, or insufficient investigation. The potential for error is high. The related policy issue I want to raise is, what is the appropriate division of responsbility for market price reporting between public and private agents?

Maintaining open examination and evaluation of price reporting procedures argues in favor of a public price reporting service. Certainly, scandal does occur in public agencies, as a brief revisit to the Watergate affair so aptly demonstrates. But, the probability of uncovering any fraudulent practices in a public agency is much greater than in a private organization. Almost all records of a public agency are open to public examination, whereas the process of accessing private records is open only to those who have or can obtain subpoena power. And, not only is that a cumbersome process, but the costs are considerable as the Department of Agriculture is learning with its investigation of the Yellow Sheet under authority of the Packers and Stockyards Act. Public regulation of private reporting services might be one way of exercising oversight and thus expanding ongoing evaluation of private reporting practices. However, public regulation often creates an adversary relationship which may encourage circuitous procedures to avoid total disclosure.

In terms of comprehensiveness, public reports again appear to have the advantage, at least conceptually. Given a legislative mandate, a public agency can require individual buyers and sellers to report trading information. Legislative precedent for the Secretary of Agriculture to mandate information on private trades has already been estabished (for cotton).[3] While that authority has not been exercised, the precedent for a public agency to mandate disclosure is significant. As a result, the potential to gather more and more accurate information argues in favor of a public price reporting service. However, government regulations which prohibit disclosure of information based upon fewer than three informants may restrict the reporting activities of a public agency. Where a very small volume of trading for a given product specification exists, a public agency may be precluded by privacy disclosure considerations from issuing any market reports.

When judgment enters into the development of a market report, such as where little price information actually exists and non-price data must be considered in deriving reportable information, a private agency may have the advantage. Government employees appear to be very uncomfortable in a situation that requires them to exercise their judgment on market conditions. This is understandable, I think, as objectivity is important to the credibility of a public employee and such credibility is difficult to maintain in a situation that openly welcomes charges of bias and favoritism by parties on at least one side of the market. Private agents can perhaps be somewhat less sensitive to such criticism as long as they find a sufficient number of customers for their services on either side of the market.

Flexibility in market reporting also seems to favor the private agent. It is clearly important, particularly where market thinness exists, for a market reporting service to have the flexibility to shift its reporting points as pricing and marketing practices in the industry change. History has taught that it is sometimes difficult for a public agency such as the Federal-State Market News Service to curtail reports in one market segment and thus shift its resources to more important segments of the industry. Rational resource allocation is sometimes thwarted because having a market news office located in this district has a certain political appeal to a congressman.

NOTES

[1]Houck, James P. "Concepts of Price: Implications for Agricultural Data Collection" in *Proceedings of Workshop on Agricultural and Rural Data, Economic Statistics Committee, American Agricultural Economics Association, May 4-6, 1977.*

[2]Breimyer, Harold F. "Statement Before the Small Business Committee of the U.S. House of Representatives," Washington, D.C. October 13, 1977.

[3]Section 4862, Internal Revenue Code of 1954 (26 USC 4862).