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MARKET INFORMATION AND PRICE REPORTING IN THE FOOD AND AGRICULTURAL SECTOR

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THEORETICAL AND MECHANICAL ISSUES IN CONTRACT PRICE REPORTING

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INTRODUCTION

The purpose of this paper is to discuss some important theoretical issues in contract price reporting. First, the foundation for contract price reporting is laid. Secondly, several important issues relating to practical barriers to reporting contract prices and terms are discussed. Finally, some preliminary evidence from an ongoing Agricultural Marketing Service-University of Wisconsin study is presented.

Economic Theory and Contract Exchange

Contract exchange in agriculture often does not fit well within the world of received micro-economic theory: A world populated by large numbers of rational buyers and sellers, who possess perfect information and are engaged in trading homogeneous products, while facing the constant threat of new market entrants. Those markets where contract exchange is most prevalent in agriculture—processed vegetables, broilers, eggs, and specialty crops—differ from the theoretical competitive market in many ways.

Contract exchange generally consists of trade in non-homogeneous products (Marion [4]). There are of course exceptions. In grain markets, contracts are differentiated from spot exchange only by the separation of pricing from delivery. Here, contracts are homogeneous among buyers and have presented no particular problem for price reporting. Similarly, the futures contracts traded at major commodity exchanges present no particular problem for price reporting, because their terms are standardized. These exceptions notwithstanding, the typical contract exchange in agriculture involves situations in which the commodity traded is a complex mixture of product and associated services. Not only are exchange agreements complex, they can and do vary among buyers and sellers. Consequently, price represents only one of several terms that are of economic importance to the agreement (Jesse and Johnson [3]). The terms of these contracts are often very difficult to reduce to a reportable set of standard conditions. Further, the terms often are variable in their impact on net returns to growers, and thus it becomes difficult to unambiguously reduce the contract terms to a standard of net returns to growers.

Contract exchange often arises because of specific product or service requirements of a particular buyer. This often means that buyers and sellers are concerned about whom they contract with. While the written agreement provides guides which resolve many contingencies, it cannot possibly provide for all contingencies. The subject of contract exchange is the future performance of the parties to the agreement. In that situation, the best guarantee of satisfactory performance may be past experience.

Thus, buyers and sellers may naturally move toward repetitive contracting with the same firms. Reputation becomes an important unwritten contract term, a term that is quite difficult to objectively report. (See Williamson [5] for a discussion of contract complexities.)

Contract exchange also places the parties in an exclusive commitment (from the farmers' view) that lasts for an extended time period. Many production contracts cover only a single season, but they may still result in reduced flexibility. This reduction in flexibility causes the selection of a contractor to take on a greater significance than the sale of a single lot from a production stream or stored inventory. The processor is similarly confronted with a single procurement period for raw product supplies. The one-time nature of the procurement process results in a discontinuous pattern of market activity. Thus, the evaluation of market news and market information is not a continuous process but takes place over a short period of time. This situation is not unlike that which occurs during the limited shipping season for some fresh fruits and vegetables.

The nature of contract exchange in specialized and perishable commodities often occurs in market settings with relatively few buyers. The existence of markets with high buyer concentration encourages contract exchange, and once a system of contract exchange is established, it may become a barrier to entry. Thus, potential growers often have few contract opportunities available. We might further expect that oligopsony in procurement would lead to a de-emphasis of direct price competition and an emphasis on service competition through other terms of trade. Contract exchange lends itself to such service competition because of the importance of associated services to most production contracts. Service competition may be a major reason for the proliferation of contract differences among competing buyers. This proliferation of contract terms further complicates the task of price reporting. Additionally, service differentiation as a strategy may explain, in part, the reluctance of processors to voluntarily report contract terms.

The limited number of market outlets for the contracted commodity may, in some cases, be mitigated by competition from other production opportunities for flexible, farmer-owned resources (Helmberger et.al. [7]). This is especially true in some annual vegetable crops. In broilers and other commodities, where production depends on highly specialized resources, producers may be much less able to shift resources to production outside the contracted commodity. Market price reporting has often served to alert producers of alternative market outlets. The situation described above, however, appears to argue for market reporting that explores alternatives within and outside a particular commodity market. Such an effort would represent a degree of search and analysis beyond what market news has provided up to now. The provision of such information would serve a purpose (the comparison of production possibilities) fundamentally different from facilitating the price-discovery process.

All the concerns cited above add up to a rather complicated situation. A situation that, in many ways, appears to beg for unbiased and widely accessible market information. Yet, it is a situation far removed from the traditional spot market that has been the subject of conventional market news programs. If contract market news is to be instituted, sticky practical problems will have to be handled. Several of these are discussed below.

MECHANICAL OR PRACTICAL ISSUES

What to Report—The complexity of product and service agreements which make up contract exchanges will be very difficult to handle in a traditional market news format. It is tempting to think that, if contract terms are reasonably standardized, one could report the general sense or tone of the market regarding each major provision. However, on closer examination, such reporting may be found to be misleading. The economic outcome for each contract exchange depends not on any one contract term, but on the package of inter-related terms. A contract could be below average on one term but, as a package of terms could be a superior agreement. Thus, contracts will be most accurately reported as sets of provisions. This necessitates the identification of specific contracts and specific buyers. The lack of standardization among contracts will result unavoidably in difficulty in comparing contract offers. Thus, it is tempting to recommend that a system of evaluation be developed, so that contracts could be reported in rank order. I believe that this temptation should be resisted. First, it puts the market reporter in the role of evaluator, instead of reporter. Secondly, the evaluation of contracts can and will be accomplished by farmers and their advisors, if the contract terms are accurately reported.

When to Report—The need for market reporting occurs when contracts are being negotiated. For the major processing vegetables in Wisconsin, the negotiation period begins in January and is concluded by April 1. During this period, active reporting would be most productive to the price discovery process.

Armbruster and Helmuth, and perhaps others, have suggested that the final outcomes of production contracts might also be reported. I believe that this may be an excellent idea, especially with the possibility of building a historic information base. This information base would indicate the extent to which agreements for future performance in the contracts were actually carried out. This information might also be reported at the beginning of the following season. Such information could be particularly useful to new market entrants, both buyers and sellers.

Access to Information—Resolution of the problems outlined above requires that a large amount of specific information be collected from market participants. Under current voluntary programs, collection of this information faces substantial barriers. In many contract markets, buyers consider contract terms to be proprietary information, and they are not likely to provide the

terms voluntarily. In such cases, farmers will likely be the chief sources of information, a much more costly alternative for data collection, both in dollars and time. Producers may also be reluctant to provide information for a variety of reasons, including the fear of retaliation by buyers. It is not impossible to scientifically sample growers for market information on contracts. If this method is used, it would be desirable to verify the trades by contacting buyers. Dissemination of information may present a problem, if specific contracts and their terms are reported in their entirety. For processing vegetables in Wisconsin, for example, there are nearly 40 companies in the major products, and each contract contains 5-10 major terms. This information does not lend itself to the traditional formats used in the dissemination of market news. The dissemination of this complex information will present some real challenges in choice of media and report form.

What markets to Report—The relevant geographic coverage of contract market reports is the specific trading areas for the commodities involved. In some cases, this would mean reports covering an entire state; while in others, reports would only cover a section within a state. It may be important for crops grown in several non-contiguous areas to be reported in a national report to provide comparisons among production areas. Such a national report could serve to equalize information between multi-region processors and growers who tend to operate only in a single region.

In some production regions, bargaining associations are already reporting local market conditions. In these instances, public market news may serve to provide a check on the accuracy of bargaining association reports. Bargaining associations could become a prime source of market news, which could then be verified by processor checks. Public market news could provide important information from other production areas to both processors and bargaining associations.

Will Reporting Have an Impact—One of the key, and currently unanswerable, questions is what kind of impact will contract price reporting have on grower and buyer behavior. Helmuth and Armbruster give some helpful comments on this question in a forthcoming paper on contract vegetable price reporting. They propose four criteria to judge the relative importance of contract price reporting. The list below generalizes their four criteria to other production contract situations:

1. The availability of alternative resource uses,
2. Alternative market outlets,
3. Number of production areas, and
4. Presence of bargaining associations.

In markets where producers have alternative land or resource uses and where alternative market outlets are available, contract price reporting could have an immediate impact. In addition, one might argue that price reporting could foster alternative market outlets over time by providing better information for new entrants.

As the number of production areas increases, the potential value of a national report that would aid the arbitrage process among areas also increases. This may, however, increase the resources required to provide effective local and national reporting.

The presence of bargaining associations may both facilitate and hinder the impact of market reporting. As Armbruster and Helmuth [1] argue, bargaining associations may already provide market information and market news could be redundant. It seems equally plausible, however, that the function of the bargaining association might shift toward the analysis and evaluation of contracts, using the information provided by the public report. In addition, the public report insures the availability of the information to all growers, not just members of the bargaining association.

SOME PRELIMINARY EVIDENCE

To provide some insight into practical issues of contract price reporting, some selected data from an ongoing study of price reporting potential in the Wisconsin processing vegetable industry is presented below. The study examines the reporting potential in the grower-processor markets for peas, sweet corn, and snap beans. All three of these crops are produced under rather detailed grower-processor contracts.

This report covers the first phase of a two-year study of contract price reporting for the Wisconsin processed vegetable industry. The two phases of the study involved the assessment of the contracting environment in the Wisconsin pea, sweet corn, and snapbean markets during 1978 and the development and execution of a contract price reporting service during 1980. In phase one, two surveys of growers were conducted to collect baseline information which could be used in an evaluation of the actual contract market news experiment. These surveys were conducted during the contracting season in 1979. The surveys involved both a mail and telephone survey of a stratified random sample of pea, sweet corn, and snapbean growers, as well as a personal interview survey of vegetable growers. The random sample was selected by the Wisconsin Statistical Reporting Service from grower lists maintained for production estimates and other reporting purposes. The personal interview surveys were conducted by the Department of Agricultural Economics, University of Wisconsin-Madison, from a list of growers supplied by county extension faculty. It is the purpose of this report to condense and document the results of the mail and telephone survey.

Questionnaires were returned by 115 growers of peas, 125 growers of sweet corn and 39 growers of snap beans. The average acreage in the three crops as reported by growers was 31.5 acres for peas, 26.5 acres for sweet corn, and 49.6 acres for snap beans. (Table 1). On the average, sweet corn growers were located 14.4 miles from the processing plant they contracted with, while for pea and snap bean growers the distance reported was 13.1 and 17.7 miles, respectively. Sweet corn growers had been contracting with the same company an average of 9.8 years. This was slightly longer than the average length for pea growers at 8.8 years. Snap bean growers had been contracting with the same company an average of 4.7 years. The average number of companies available to growers for vegetable contracting was 2.8, 2.9, and 2.5 for sweet corn, peas, and snap beans, respectively. It was apparent, however, that growers had not contacted all the companies available regarding

contracting opportunities. Growers responding to the survey, on the average, contacted less than two companies regarding contract production opportunities.

Growers reported that they would most frequently consult with fieldmen when considering alternative contracting opportunities (Table 2). Very few growers responding to the survey would consult Extension agents or grower associations. Nearly one-third of the growers of all three of the commodities reported that they would consult other farmers when evaluating contracting alternatives. None of the growers reported consulting lawyers about contracting alternatives.

In general, producers of sweet corn and peas were more satisfied than dissatisfied with the information currently available on contract alternatives (Table 3). Snap bean growers reported dissatisfaction more often than satisfaction.

Table 1. Selected Characteristics of Survey Respondents

<u>Item</u>	<u>Sweet Corn</u>	<u>Peas</u>	<u>Snap Beans</u>
Average Acreage in 1978	26.45	31.57	49.64
Average Distance Farm to Processing Plant (mi)	14.44	13.14	17.69
Average Number of Years Growing for the Same Company	9.78	8.84	4.76
Average Number of Companies Available	2.80	2.96	2.45
Average Number of Companies Consulted in 1978	1.36	1.41	1.15

Table 2. Raw Counts of Who Would be Consulted When Comparing Contract Alternatives

<u>Person/Group</u>	<u>Sweet Corn</u>	<u>Peas</u>	<u>Snap Beans</u>
Fieldman	65	75	20
Extension Agent	2	4	3
Grower Assn.	5	6	4
Lawyer	0	0	0
Other Farmers	32	39	11
Other	<u>1</u>	<u>6</u>	<u>0</u>
Total	105	130	38

In all three groups, approximately 70 percent reported that they believed a contract market news report would be useful. Further, 60 percent of the snap bean growers reported they would be willing to pay for a contract market report. Approximately 49 percent of the pea growers and 36 percent of the sweet corn growers reported they were willing to pay for contract market news. In all three of the commodities, over 60 percent of the growers responding to the survey were willing to provide information to a contract reporting service.

Table 3. Selected Items Relating to Contract Market Information and Contract Market News

<u>Item</u>	<u>Sweet Corn</u>	<u>Peas</u>	<u>Snap Beans</u>
Satisfaction With Contract Information Available*	3.32	3.53	2.39
	%	%	%
Believe Contract Market News Would be Useful	69.41	72.73	72.73
Willing to Pay for Contract Market News	35.90	48.94	60.00
Willing to Provide Information for a Contract Market Report	68.83	60.87	63.64
During Negotiation	68.49	58.24	72.73
After Contract Signing	73.97	65.52	72.73

*Possible range 1-5, where 1 is completely dissatisfied and 5 is completely satisfied.

The data presented above is only a small portion of the data our survey will provide. We have had too little time at this point to make any definite conclusions. It appears, however, that there is evidence that contract market news could be useful and that it could be provided without major complications in collection. A key element of a successful contract market news program not examined by our survey is the reaction of buyers. As we proceed into the actual reporting phase of our study, processor reactions to reporting will be monitored closely.

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