

## THE AGRICULTURAL MARKETING AGENDA FOR THE EIGHTIES

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The agenda for marketing research in the 1980s, to a great extent, has already been set by the events of the 1970s. Agriculture is in a period of transition in which commodity surpluses are expected to be less of a problem area. International markets are expanding, and the delivery systems have become complex in both structure and in the functions performed. The dynamics of the marketplace obviously influence the research agenda.

Before looking at the changing research needs for agricultural marketing, a definition of the concept is needed. For the context of this paper, marketing research is defined to be the process of assimilation and creation of information on the economic performance of potential and existing arrangements that facilitate the assembling, distribution, and consumption of foods, fibers, and ornamentals. Using the AAEA index of subjects, the above definition would include commodity price analysis; marketing, storage, and distribution; food and consumer economics; and industrial organization. During the period 1969-76, around 22 percent of the *Southern Journal of Agricultural Economics* pages included these topics (Oursbourn et al., p. 157).

### CHANGING ENVIRONMENT

Four related areas can be identified as having the most direct effect on the types of marketing research completed in the past, as well as those forthcoming. First, and probably foremost, is the change in the supply and demand conditions for specific agricultural products. This includes the state of the economy, as well as changes in consumers' tastes and preferences. Movements to highly processed products and consumption away from home have led to considerable restructuring within the distributional system. Second, agricultural trade can no longer be viewed solely from a domestic perspective. The stronger linkage between domestic and international markets must be recognized when studying most commodities. Third, marketing research will be forthcoming where there is high academic payoff

in terms of recognition and rewards. Publishability is of strong concern to the academic researcher, yet this may not be totally consistent with agribusiness needs. Fourth, research is forthcoming where there is financial support. Historically, the bulk of marketing research support has been from state and federal sources. Changes in the support base most certainly will be reflected in the content and orientation of the research. A trend toward more industry-contracted research would directly influence the content (Scroggs, p. 884).

The changing economic environment of the 1970s and that projected for the 1980s will most likely be the major factor dictating the content of forthcoming marketing research. Lee identified three major sources of economic changes that are taking place within the agricultural sector. Farms are becoming fewer and more concentrated, and factor and product markets are often "thin" (Lee, p. 1). U.S. agriculture is becoming increasingly dependent on world markets, and vice versa. Finally, agriculture is moving into a period of limited supplies in contrast to earlier problems of chronic surpluses (Lee, p. 4). Penn provides a prospective for the 1980s noting that the "global food production and consumption balance will become even more tenuous, marketed by increasingly smaller margins, greater annual variability, increased total trade, and greater demand for U.S. exports" (Penn, p. 33). In separate papers by Penn and O'Brien, a number of specific changes are projected for the 1980s: (1) global demand for agricultural products could expand to near record rates; (2) global food production may slow to three-fourth's historical rates; (3) few countries will be able to support the consumption gains; (4) the world will depend increasingly on U.S. supplies; (5) more variability in U.S. demand can be expected; (6) growth in domestic demand will probably be down from the levels of the 1970s; (7) total U.S. demand will grow; and (8) real prices received by farmers will grow and exceed earlier rates (Penn, p. 33; O'Brien).

Limited time and space prevent a detailed analysis relative to what these projections mean for marketing research. However, there are five

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subject areas to which the following comments are directed. These include the pricing process, transportation and distribution, institutional effectiveness, industry concentration, and product promotion. These areas will be discussed without implying any order of priority to the research agenda.

## THE PRICING PROCESS

Agricultural economists have clearly established their credentials for price analysis. Agribusiness turns to the universities and government for price forecasts and economic outlook analyses. While the forecast may not always be on the mark, a good quantitative understanding of the relationships between supply and demand for most agricultural products has been developed. Obviously, this is an ongoing task, and every research institution can be expected to continue these efforts.

### Thin Market

While most pricing models have generally been of high quality, a clear theoretical empirical understanding of the pricing process is still missing. Concern over the mechanisms for establishing prices continues to surface with issues such as the "yellow sheet" for beef and the "Urner-Barry" report for eggs. Thin markets have always existed for some specialty commodities. Similar pricing problems with some of the major commodities are beginning to surface (NC-117). With increased concentration among processors and changes in the numbers of outlets for selling, better models for providing new insight into "thin" markets are needed. The theoretical framework is weak, and current abilities to measure the consequences resulting from "thinness" are at best marginal. This problem will likely to be even more crucial as more commodities enter the international marketplace. Usually, there are fewer firms involved in international transactions, and all indications are that an increasing share of total agricultural production will be channeled to export markets. In the 1980s, agricultural economists must be prepared to answer questions about the consequences resulting from alternatives to the traditional pricing processes. This will be especially crucial, given the movement away from prior periods of economic surplus.

### Forward Markets

The role of forward pricing is likely to increase as price variability increases in the 1980s. Forward commitments have historically been established through direct buyer/seller contracts and through futures exchanges. Futures trading con-

tinued to increase in the 1970s, and growth is projected for the 1980s. The literature on futures price performance is extensive, especially for the non-perishables. While much has been written on the role of futures prices for semi-perishables, the literature is still void of a theoretical framework similar to that for storables. Much additional research is needed here.

In contrast to futures commitments, data on direct forward pricing is limited and often not available at all. Pricing alternatives are clear for most commodities; yet, pricing and commitment data are not systematically reported. High on the marketing research agenda should be an increase in emphasis on gaining a better understanding of direct forward commitments, and what economic effects such commitments have on the pricing process. One particular problem that producers face is not having adequate information for comparing returns from various forward pricing mechanisms. The international dimension for both types of forward pricing will place new demands on research, because much of the international transactions entail forward commitments.

### Electronic Markets

One final comment on pricing relates to electronic marketing (Sproleder). A number of pilot studies have been ongoing for selected commodities. Many of these efforts have been channeled toward development of the trading technology. While it is still too soon to judge what is likely to evolve, it is not too soon to address the economic issue of such trading. What implication does electronic marketing have for thin markets and for the levels of price competitiveness? What structural changes can be expected, and who will benefit?

## TRANSPORTATION AND DISTRIBUTION

Events of the 1970s have had a profound effect on the transportation systems of this country. Increase in fuel costs, regional truck shortages, rail maintenance problems, government regulations, and an overall increase in the demand for transportation services are but a few of the distribution problem areas facing agriculture. Transportation services are further complicated by the seasonality and general perishability of many commodities. Add to this list the numerous problems associated with international distribution, then the complexity of the transportation problem becomes even more apparent.

As a general observation, existing graduate programs have only marginally prepared researchers to deal with transportation issues. Consider the limited amount of information on much of the transportation industry, and one can readily see why research in this area has been limited. The *Southern Journal of Agricultural*

*Economics* includes a number of papers on transportation, and a considerable increase in this literature is expected.

### **Transportation Problem**

The transportation problems of the 1980s cut across many disciplines. There are three areas for which marketing economists will most likely be asked to provide new insights. The question of efficiency in the use of alternative transportation modes for various product forms will be raised. The transportation of Florida's frozen concentrated orange juice provides a good example. Concentrate can be processed and packaged in-state (Florida) and shipped in refrigerated trucks. Alternatively, concentrate may be shipped in bulk tanks and reprocessed out of state. The transportation costs can be readily calculated. Any savings, say from bulk shipments, must be balanced against associated industry structural changes. The industry could lose control over the quality of the final product packaged during the process of changing to a more economical transportation mode.

Movements to deregulate the trucking industry and some phases of the rail system will change the supply and demand for transporting services. Deregulation effects on the cost and availability of services are not totally clear. Truck shortages can be catastrophic for specialty crops where quick delivery is essential. The marketing agenda for the 1980s should prepare researchers to respond quickly to questions relating to shifts in the transportation supplies. A better understanding of the supply function for these services must be forthcoming, along with an expanded capability to provide economic data to the commodity sectors affected.

The third area relates to transportation within the international market place. The demands on domestic distribution systems will be taxed as export markets continue to grow. The potential problems are well illustrated by the example from the mid-seventies, when substantial quantities of grain were exported to the Soviet Union. The research agenda must include some effort to provide insight into storage needs and capacity utilization. The literature should provide information on how foreign policies influence the availability and use of various transportation systems. The potential for shipping delays relative to political, regulatory, and/or economic reasons needs continual attention.

### **Distribution System**

Another phase of the distributional system that has not received adequate research attention is the linkage between wholesale and retail markets. The marketing costs between these two points are increasing, and reasonably good data

on the cost components are periodically published by the USDA. Changes between these points are having a significant effect on retail prices. There is evidence that structural differences and product characteristics have a direct effect on how price changes wholesale are transmitted to retail. Bucklin provides an excellent discussion of the evolution in the distribution trade. Nevertheless, an analytical understanding of this sector and its effects on food and fibers marketing is limited. At the minimum, marketing research should provide some feedback to the commodity subsectors with respect to the changes that are occurring at these distributional points and what impacts these changes have on the pricing process. This area deserves more emphasis because of its large component in the marketing bill and because of the changes in the nature of food consumption away from home. A better understanding of the wholesale-retail distribution system will also assist with price margin studies.

## **INSTITUTIONAL CHANGES**

A number of institutions unique to agriculture have evolved over time, with one major objective being to enhance the marketing of agricultural products. Four institutions that, in particular, will require more research efforts include marketing orders, cooperatives, trade associations, and marketing boards. These institutions, while having different objectives, are common in that they foster cooperation. Cooperation, in turn, raises a whole spectrum of economic issues from market power to information dissemination. One or more of these institutions exist in every subsector of agriculture.

### **Market Orders**

Market orders were developed to provide some stability to the market system for milk and selected fruits and vegetables. They are implemented either through direct price controls and/or through quantity and quality regulations. Much descriptive information on market orders exist. Yet, efforts to show clearly the costs and benefits from orders are incomplete. Probably more is known about the effects of milk orders and their impact on prices than is known for fresh fruits and vegetables. Past research emphasis on milk is probably correct because it affects a larger number of consumers. Given the current political environment, market orders can be expected to continue to be challenged. At least some portion of the research agenda must include additional work in this area.

### **Cooperatives**

The issue with cooperatives is similar to orders to the extent that concern is with undue price

enhancement. Cooperatives have declined in numbers and grown in size and marketing cooperatives vary in importance depending on the subsector (USDA, p. 21). Dunn et al. noted that the "impact of cooperatives' horizontal and vertical activity on the functioning of exchange mechanisms and farm structure is unclear." Helmberger and Hoos developed the cooperative surplus theory in the early 1960s, and so far it has not been empirically tested. The marketing agenda, along with industrial organization research, will be expected to provide additional information on the economic performance of cooperatives and their effects on the food system. Data on payments to cooperative pools are not always accessible, hence, producers cannot always compare alternative outlets. Efforts to require standardization of contracts have been proposed in some industries so that producers can better compare cooperatives returns.

### Trade Associations

Trade associations are listed because of their importance, and because little is known about the true role they play in the marketing of agricultural products. For many industries, trade associations are the primary (and often the only) source of industry information. This is a vital service, yet trade associations are in the position to facilitate collusion. Little definitive economic research has been published in this area, and it is overdue.

### International Markets

The institutions discussed above evolved primarily from domestic market needs. Given the expected increase in exports and the international importance of the U.S. grain subsector, it is clear why recent discussions have centered on alternatives to effect better coordination for international marketing (Paarlberg and Webb, p. 99). While tariffs and agreements have been the primary means of regulating trade, marketing boards have received considerable attention. Marketing boards empowered with export authority have the potential for coordinating U.S. exports. While research in this area has been published, the need exists for innovative analyses of alternative pricing arrangements. Whatever the institutional mechanism for coordinating exports, the problem requires that the full impact on both the domestic and international markets be shown.

The list of existing and potential coordinating mechanisms for agriculture is extensive. Given the predicted increase in food and fiber demands, there is no doubt that additional research will contribute to a greater understanding of the impact of various coordination arrangements.

## MARKET CONCENTRATION

Studies of industry structure and performance fall within the domain of industrial organization. The structures that evolve to a great extent dictate the forthcoming types of marketing programs. Hence, the concepts of structure and marketing are so interrelated that to make a distinction between these two areas is not totally necessary for agriculture. Obviously, there are some cases where the topic areas are clearly separate.

The comments which follow are limited to those cited as taking place among food manufacturing and food retailing organizations. Connor showed that 50 corporations accounted for two-thirds of all food manufacturing corporations assets in 1978 (p. 228). Concentration among food manufacturers is expected to increase. A study by Hannah and Kay showed that nearly 70 percent of the changes in concentration in the food industry resulted from mergers (Cowling, p. 13). Across all industry classifications, merger activity has increased, with the majority being horizontal, and the net consequence has been a much increased degree of concentration (Cowling, p. 14). Furthermore, concentration among grocery stores and retail food chains has risen during the last two decades (Connor, p. 230).

The ultimate question is What does this mean in terms of prices and economic welfare to all economic sectors? There are many related issues that need to be addressed. Does increased concentration via mergers facilitate export sales? What implications does it have for procurement of raw agricultural products? What changes in distributional services can be expected, i.e., will there be a greater direct manufacturing-retail linkage? How will it affect product advertising? Measuring economic performance as a result of increased concentration is difficult. The results tend to be mixed and vary with industries. Along with a general effort to evaluate concentration, the implications of such changes on each regional agricultural base must be clearly communicated.

Increasing concentration in the food sector and the economy in general is frequently characterized as the "corporate economy," where giant business corporations dominate American economic and political life. Jacoby provides an excellent discussion of this issue in which he cites the myths of the corporation economy. He concludes that the evidence is ambiguous on the question of whether there really was a significant postwar rise in aggregate industrial concentration in the U.S. He stated that there was no evidence to indicate they act according to the traditional oligopoly theories (Jacoby, p. 138): therefore, it is not surprising that performance results are mixed. There is even little agreement on whether concentration has or has not increased. Jacoby's analysis is applicable because food manufactur-

ing is perceived to fit into the "corporate economy" concept.

### PRODUCT PROMOTIONS

Many agricultural industries have developed innovative schemes for disseminating information about their products. Brand promotional programs have been used for years by large food manufacturers. Simultaneously, various sectors in agriculture have successfully promoted the generic product. Many generic programs are funded via state and federal marketing orders, research and promotion acts, and joint ventures with the Foreign Agricultural Service (FAS). These programs are common in that they are generally directed to the final consumer, with the ultimate objective of market expansion. There currently exist 6 promotion acts, along with 15 federal commodity orders used for advertising. The promotional acts are often referred to as "checkoff programs."

Whereas federal involvement in the domestic promotion programs has been largely facilitative, FAS usually becomes a financing partner within the international markets. The producers' perspective in all of these programs is simply whether or not they are effective in expanding sales. Yet, a much more fundamental question relates to the total impact of generic promotion on the marketplace. Should the federal government be involved as a facilitator, or should industries work out their own methods for supplying generic promotions? Federal support programs have generally been limited to the management of the supply side via quantity controls and purchases. As an alternative, what are the implications of federal promotions instead of direct purchases?

At this point, it is not totally clear what role advertising will play as commodity surpluses decline. However, it does seem that the focus must change as markets are faced with greater domestic and international demands. Effectiveness of generic programs needs to be evaluated and alternatives set forth; much of this evaluation process falls within the domain of marketing research.

### CONCLUSIONS

The pricing process, transportation issues, institutional evaluation, market concentration, and information controls have been briefly discussed as important areas of the research agenda for the 1980s. The next step must be to provide a working outline of needed marketing research (Table 1). Limited time prevents a detailed discussion of

TABLE 1. Areas of Research Emphasis in Agricultural Marketing

Subject areas	Continuation	More emphasis
Pricing process	price forecast economic outlook demand analysis futures theory	pricing methods thin markets forward pricing electronic marketing data sources margin analyses
Transportation and distribution	efficiency studies storage analyses product forms transportation modes location studies	deregulation supply shifts in services foreign trade policies wholesale markets retail markets data sources
Institutional evaluation	market orders market boards	cooperative performance trade associations international coordination checkoff programs
Market concentration	measurement manufacturing changes retail market changes input industries	merger effects market performance vertical structures exporter concentration multinationals and conglomerate data sources
Product promotions	market orders F.A.S.	checkoffs federal alternatives

this outline. Hence, in closing, a few comments on the research methods and relevancy are considered.

Marketing research at the university level has historically been accomplished through individual staff programs. Research output varies in quality and orientation and may not always meet the needs of agribusiness. There is some validity relative to industry concerns. However, one must recognize that university research is also intended to be an educational process for graduate students, as well as a teaching tool. Basic research, which sometimes does not appear relevant to the business manager, provides the economic framework for all applied economic research. One guideline that the researcher may want to use is that for every research project leading to publications in a professional journal, there should be at least one paper on the subject matter published in an appropriate trade journal or extension leaflet.

As the agricultural industries move into periods of greater demands on supplies and distributional services, the communication process becomes more crucial. Agribusinesses do not and often cannot read the journals, thus the researcher should provide the communication leadership. Part of the agenda must be devoted to establishing additional methods for disseminating the research output to a broader audience.

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