Sociological and Demographic Structure of Dairy Demand — Some Comments on Current Research

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This paper briefly discusses the results of three recent papers dealing with sociological and demographic factors in dairy industry demand. The papers were all prepared for the "Demand, Promotion and Advertising in the Dairy Industry in the 1980's: A Research Conference." This conference was jointly sponsored by NC-176, NE-153 and S-166 which are the three currently active Regional Dairy Marketing Research Committees. After some brief comments on each of the papers, a few comments from the author's perspective are presented.

Why People Do or Do Not Drink Milk

The paper titled "Why People Do or Do Not Drink Milk," written by Blair J. Smith, Rex H. Warland, Robert R. Herrmann, and Sandra M. Houts all from Pennsylvania State University, is a report on research work in progress. There is a brief discussion of the methodology and the sampling techniques used to collect primary data from both a national and a Pennsylvania state audience of milk consumers. A particular strength of this project is the researchers' attempt to include consumer behavioral principles, concepts or models in the research design. This is an attempt to develop broader views of the reasons people do or do not drink fluid milk. The authors are attempting to get a more holistic picture of demand determinants for dairy products. The paper, however, only briefly sketches the behavioral concepts and models used. Because this is a somewhat different approach to evaluating demand characteristics it is critical that the principles, concepts, and models used be more fully elaborated in future published papers reporting this research project.
This and other attempts to expand the array of variables examined by researchers of demand phenomena is useful for two reasons. First, expanded research horizons will lead to very useful and more relevant findings for promotion agencies and their dairy farmer sponsors. Second, considerable amount of work in the area of psychographics and associated sociological and psychological demand determinants have been and are being done by private research institutes. Their findings are beginning to be adopted by the advertising agencies and strategic planners in major food companies. Because of this, the agricultural economics profession needs to become familiar with these approaches. They will soon be part of the advertising and promotion evaluation lexicon.

The authors' report that in a latter stage of this research study, there will be in comparison of a group of Pennsylvania consumers to the national consumer sample. This will be an interesting research component. Likewise, the stage of the study singling out the school segment of dairy demand will be a most valuable component of the research. Agricultural economics professionals involved in dairying marketing extension hear many comments about school milk programs. However, to date they have the least amount of research data available to answer school milk questions.

**Analyzing the Attitude, Usage and Trends Survey Data (AUTS)**

In a paper titled "Consumer Preferences and Attitudes Towards Characteristics of Dairy Products: A Selected Analysis of the Attitude, Usage, and Trends Survey Data (AUTS), 1976-1984," by Ohio State University's Cameron S. Thraen, David E. Hahn and M.M. Wu, report on an exhaustive investigation of the economic use of the AUTS data collected by the United Dairy Industry Association. The AUTS data is a long-term discreet time series/cross-sectional data set on consumer attitudes towards various dairy products. The data set has been the primary source of trends and socio-demographic correlations used by the largest and most prominent dairy promotion organization. The authors, after obtaining this data set, took on the heroic task of trying to put economic content to this discreet data set.
This is a major piece of work and the authors must be complimented for their attempt to ring useful economic information from this particular body of data. A major strength of this paper is the review and evaluation of the statistical methodology available to turn qualitative, discreet data into a form with which economic hypotheses can be tested. The paper is highly recommended to demand researchers who are faced with data sets similar to AUTS.

Those familiar with the AUTS data set realize its extensive nature. The authors have done a comprehensive job of ringing out many conclusions from the data. This was an exhaustive process for which they must be congratulated. However, by their success they have produced an additional challenge. That challenge is how to present the key findings in ways which will be understood and used by key dairy promotion decision makers.

The economists' conclusions and analysis can be a great help to promotion decision makers. However, the results are presented in a traditional research reporting format which many in the promotion industry will find difficult to interpret. It is critical that industry decision makers be made aware of the findings of this research. This author hopes that these researchers will carry their work the additional step of reporting it in forms which lay audiences can interpret.

At-Home Expenditures for Dairy Products

The paper titled "Consumer Participation and At-Home Expenditures for Dairy Products," by USDA Economic Research Service economists James R. Blaylock and Lester H. Myers presents related material on recent changes in at-home dairy expenditures and a methodology to explore the origins of changes in dairy demand.

The paper provides excellent review of the Bureau of Labor Statistics Continuing Consumer Expenditures Survey (CCES). This review includes a description of what the CCES is and presents the dairy industry findings through 1984. Their analysis of the at-
home consumption of dairy products highlights and reinforces a major point in dairy
demand research. That point is, that agricultural economists interested in dairy demand
need to develop a better understanding of the away-from-home and ingredient markets
for dairy products. It is clear through their analysis at least through 1984 that the
tremendous upsurge in commercial utilization of dairy products has been and is being
driven by the away-from-home and ingredient markets.

A second major element of the Blaylock and Myers paper is the development of a
theoretical framework for looking at the impacts of consumer entry and exit behavior on
the demand for dairy products. Refinement of the theory and further empirical analysis
using this element of demand theory will be a very useful addition to understanding the
dynamics of food demand. The empirical results reported were from previous work which
is becoming a classic in the agricultural marketing literature. The authors tempt us with
a footnote indicating that this theoretical formulation will be applied to data provided by
the Marketing Research Corporation of America (MRCA) data set. As the authors
continue their work in this area demand research, our understanding of the dairy demand
dynamics will be greatly enhanced.

An Overview of Research Into Sociological and Demographic Demand Factors

Perhaps the critical question needed to be asked to evaluate all three papers is,
have we learned something useful? Yes. All three papers deal with analyses of primary
consumer demand data collected through various methods. All three analyses can and
will provide very useful findings and information to decision makers involved in the
advertising and promotion of dairy products. The results clearly indicate that
agricultural economists when they maintain an applied research orientation can provide
very useful information to real world decision makers. Also, the information they
provide is probably more substantive and better documented than the information
received from traditional advertising and market research firms.
All three papers do as they intended; report research finds to a research oriented community. However, in order for these useful results to be used by decision makers, the research findings must be repackaged in forms which will be useful promotion decision makers.

Within the Land Grant university system this role has been traditionally filled by extension economists. However, on dairy promotion and demand matters agricultural economics researchers usually have had closer access to the decision makers. The national orientation of dairy advertising and promotion typically bypasses the Extension Service network. There needs to be a willingness and dedication by the agricultural economics demand research community to repackage and represent their research findings for lay audiences.

**Future Industry Needs From Agricultural Economics Demand Research**

When the dairy industry looks to the agricultural economics profession for analysis and research of dairy demand, what is it that they are expecting? Most often they have been looking for sophisticated analyses which help evaluate the effectiveness of the industry's past promotion efforts. However, in the future, as the pace of economic structural change accelerates, these decision makers may increasingly turn to the profession for strategic planning assistance. The kind of work needed will be research which provides dynamic, evolutionary, and predictive models of structural change.

Econometric analysis has got the profession well established with the dairy promotion and research community. It will probably remain as the main tool for analysis and evaluation. But econometric analysis tends to be history bound. The ad agencies and decision makers are future oriented. In fact they attempt to anticipate and enhance structural change to the benefit of their particular product or product group.

Historically very critical financial decisions as to the direction of promotion and advertising have been made with correlation trend analysis. This has been the domain of
the marketing research firms and their allies in the advertising agency bureaucracies. A convincing argument could be made that these kinds of analyses are shallow support for making such critical strategic industry promotion plans. Perhaps a good example would be the marketing research/advertising agencies positioning of nearly all food products to the health and nutrition trend well identified through their typical trend analysis methodology. Yet, as reported in Karen Roepken's paper earlier in this volume, the health and nutrition trend is by no means monolithic in the US and consuming population. By positioning one's product because of a gross correlation between health and nutrition and lifestyle, many critical and profitable market segments may be ignored or, even worse, alienated by promotional efforts.

Demand researchers have the tools and conceptual framework to do much better than the correlation oriented analyses currently in use. Our profession has done and does do good work. However it could be hypothesized that if we did package and present our results in more meaningful ways for industry decision makers, the profession would have a greater impact in the demand and promotion arena.

**Working in a Strategic Planning Environment**

To help us develop more relevant research for a strategic planning environment, I would offer three general suggestions to be considered by those involved in demand research. First, has our research become obtuse because of the use of increasingly abstract theoretical and statistical models? If it has, has our movement in this direction been driven by our lack of proper data for doing fundamental theoretical research on the demand for agricultural products? The advent of the UPC scanner and the collection of scanning data provides the first real opportunity to get comprehensive data sets for demand analysis. There is no questions that UPC scanning data has many problems. These are being better understood. It is time for a selected number of researchers to shift increasing amounts their time away from methodological and statistical refinement
toward major commitments to a primary data set which could lead to highly accurate basic price and income elasticity estimates?

Second, other research institutes such as the Stanford Research Institute (SRI) have and are developing integrative theoretical frameworks of consumer choice. The whole field of psychographics which attempts to integrate psychology beliefs and values with economic and sociological factors into a comprehensive theory of consumer choice will continue to expand. Again, a small group of researchers within our profession needs to make a commitment to methodological and theoretical developments in other professions and nonacademic institutions. Clearly this will be difficult because of jurisdictional and financial constraints imposed upon most academic researchers. However, it would be very useful to the agricultural economics profession to help bring this ideas and concepts into our consciousness.

Third, strategic planning analysis is nearly always multidisciplinary in nature. We will need to develop mechanisms to work across professional boundaries and with our colleagues in business schools, psychology departments, philosophy departments, etc. As with applied research, multidisciplinary research has not always been consistent with the reward system for professional academics. If we are to provide relevant information for real world decision makers, more professional agricultural economists may need to move toward a multidisciplinary applied research model.

**Conclusion**

As a profession we have done and are capable of doing relevant work that provides for better industry and societal allocation of marketing and promotion resources. However, our work must be considered to be important and relevant by those who are making the decisions. Increasingly decision makers are relying upon analyses from marketing research firms and private think-tanks rather than analyses from academic researchers. If we consider it important to stay relevant to industry decision makers, we may have to change some of our professional ways.