International Food and Agribusiness Management Review
Volume 11, Issue 3, 2008

Executive Summaries

RESEARCH

The Impact of Coordination of Production and Marketing Strategies on Price Behavior: Evidence from the Idaho Potato Industry *Yuliya Bolotova, Christopher S. McIntosh, Kalamani Muthusamy,Paul E. Patterson*

High potato price volatility, decreasing demand for fresh potatoes and potato prices below the cost of production led to a decision of a number of Idaho potato growers to organize United Fresh Potato Growers of Idaho, a marketing cooperative. The United was founded in November 2004, representing 85% of fresh potato growers in Idaho. The goal of the cooperative is to stabilize the supply of fresh potatoes in Idaho to provide a fair level of returns to potato growers. The key program implemented by the United is the potato supply management program which targets both production and marketing of fresh potatoes in Idaho.

We evaluate the effectiveness of the programs and strategies implemented by the United. We analyze differences in the patterns of price behavior between two periods, before the cooperative was organized (pre-coop period) and during the period when the cooperative is in the market (coop period). Prices are indicators of the economic performance of market players like the United. If the United enforced its programs effectively then fresh potato prices would reflect these effects. We expect fresh potato prices to be higher and less volatile in the period when the United is in the market relative to the pre-coop period.

To conduct the analysis, we use monthly Idaho and US fresh potato prices reported by the USDA National Agricultural Statistics Service and weekly Idaho Russet Burbank potato prices reported by the USDA Agricultural Marketing Service. We employ descriptive statistics and time-series econometric techniques (ARCH and GARCH models) to analyze differences in the price level and volatility between the pre-coop and coop periods.

We find that Idaho monthly fresh potato prices were 70% higher and the US monthly fresh potato prices were 31% higher in the coop period relative to the pre-coop period. In addition, Idaho monthly fresh potato prices were less volatile during the coop period relative to the pre-coop period. Furthermore, before the cooperative was organized, Idaho had had the most volatile potato prices as compared to other major potato growing regions in the country. During the period when the United was in the market, Idaho had the least volatile prices.

The identified fresh potato price increase is not totally due to the actions of the United. Increasing potato production costs are likely to contribute to this price increase. We found that the potato production cost increases between the coop and pre-coop periods fell in the range of 10% to 16%. Consequently, approximately 54% to 60% in the monthly Idaho fresh potato price increase is due to other than potato production cost market factors, and the impact of the United is likely to be the most significant factor explaining the observed price increase.

Based on empirical evidence presented in the paper, we conclude that programs and strategies of the United Fresh Potato Growers of Idaho directed toward stabilization of potato supply in Idaho have been effective thus far. The programs implemented by the United led to higher prices and a reduced price risk for Idaho fresh potato growers. As indicated by the US monthly fresh potato prices, all potato growers received higher prices since 2005.

Market Orientation, Innovation and Entrepreneurship: An Empirical Examination of the Illinois Beef Industry *Eric T. Micheels and Hamish Gow*

Several studies have found that there is a significant positive effect in the relationship between market orientation and firm performance (Narver & Slater, 1990; Slater & Narver, 2000). Market orientation is defined as the process of acquiring knowledge about customers expressed as well as latent needs and then diffusing this knowledge throughout the company and channel partners (Jaworski & Kohli, 1993).

In this study we empirically examine the effect of a producer's level of market orientation on their subjective performance within the US beef industry. The beef industry was chosen as it offers different production alternatives and various marketing arrangements coupled with an assortment of expressed and latent consumer identified product and market needs including leanness, traceability, animal identification, and certification. We believe that firms with a higher market orientation will be better able to meet customers' needs relating to preferences and therefore perform better.

Using a mail survey, we asked 1569 beef producers in Illinois to answer questions relating to their market orientation, entrepreneurship, innovativeness, cost focus and organizational learning. These scales had all been previously validated and drawn from prior studies in the literature. However, as scales mainly targeted at managers of large industrial firms, the specific verbiage was modified to fit a production agriculture framework. Employing factor analysis, the data and scales were then cleaned to remove questions which were empirically shown to not be important in this setting. Following scale purification, we used a structural equation model to test our hypotheses.

Our results show performance to be significantly influenced by a firm's market orientation as well as their level of entrepreneurship and innovation. These results are consistent with findings in previous studies. However, unlike Narver and Slater (1990), this study was able to show a market orientation to have a positive impact on performance in what is generally thought of as a commodity sector. These results indicate that there still is value to be created and performance implications for doing so even in a commodity business.

At the farm level, this paper demonstrates that achieving a balance between cost control and market awareness could be the key to maintaining a competitive advantage as well as improving performance measures for the farm business. At the sector level, the positive impact that market orientation is shown to have on performance may lead other producers to strategically follow suit in an attempt to better meet customer needs and thus gain better performance. The NCBA focus on improving tenderness and communication could be somewhat alleviated if more producers shift some of their focus externally to the market as opposed to a largely internal focus.

Industry-Academic Partnerships - The View from the Corner Office

Gregory A. Baker, Allen F. Wysocki, Lisa O. House

The primary objective of this paper is to explore industry-academic partnerships from the industry perspective. This paper follows a previously published paper on industry-academic partnerships that approached the topic from the academic perspective. We discuss the benefits, difficulties, and costs of several types of industry-academic partnerships as well as successful management practices utilized by industry managers and executives who have participated in such collaborations. Finally, we develop a set of guidelines for managing each of the various types of partnerships.

We found that the industry managers and executives that we surveyed had experience with many types of partnering with universities. Although our survey was not conducted by means of a random sample, the results were consistent with our prior expectations. The most common types of industry-academic cooperation were in-class visits (guest speaking), internships, site visits (field trips), student research, and serving on an industry advisory board. Working with a faculty member on research, mentoring students, and hiring faculty members as consultants was less common.

The benefits, costs, and difficulties associated with each type of partnership were, in most cases, specific to the type of partnership. However, we can draw several general conclusions. First, the experience of industry managers in working with universities proved to be almost exclusively positive. Second, the benefits to partnering with academics often related to gaining access to top students and providing a way to "give back" to the university. These benefits also served as factors in motivating industry members to collaborate. Third, many of the drawbacks identified by industry related to the time required to effectively collaborate with their university partner.

We conclude that industry-academic partnerships are generally fruitful and that both industry and faculty members should continue to explore ways to work together. In particular, members of both the academy and industry may want to explore pursuing those types of partnerships that are less commonly used.

Spatial Marketing Patterns for Corn under the Condition of Increasing Ethanol Production in the U.S. *Dennis M. Conley and Adam George*

The economics of energy versus food is leading to major structural changes in the marketing of corn in the U.S. A recent historical perspective shows that when crude oil was priced in the range of $35 to $50 per barrel and corn was $1.80 to $2.20 per bushel, the financial feasibility for ethanol plants was viable, but required risk capital from sources that believed the investment would be worthwhile. New construction of ethanol plants was happening at a modest pace. In 1999, less than a decade ago, there were 50 ethanol plants producing a little over 1 billion gallons per year. The production of corn in the U.S. was sufficient to meet the needs of the livestock sector, sustain exports at traditional levels, and supply the growing demand coming from ethanol production.

However, a series of events external to agriculture set in motion the conditions for structural change. These included a rapid increase in the price of crude oil from $40 per barrel to over $100 caused by hurricanes, geopolitical events, an increased global demand for energy from countries like China and India, and in December 2007, the U.S. raising the renewable fuel standards.

The results of this research show that there could be significant changes in the historical utilization and marketing of corn in the U.S. The change in movement patterns provides one source of visible evidence that a structural change is underway being caused by the surging development of ethanol production. The structural change is not only affecting the production and marketing of corn, but also of soybeans, wheat and even cotton because of the related nature of crop rotation and producers decisions about what crop to plant given market signals. The increased demand for corn is creating a derived demand for increased acres planted to corn that would mostly come at the expense of soybean, wheat and cotton acres. In response, the prices of soybeans, wheat and cotton have substantially increased, by double or more over historical levels, during 2008.

Heterogeneity in the Evaluation of Quality Assurance Systems: Taking the International Food Standard (IFS) in the European Agribusiness as an Example *Holger Schulze,Frederike Albersmeier, Jana-Christina Gawron, Achim Spiller, and Ludwig Theuvsen*

Farmers' direct marketing of food is a widely neglected branch of modern agribusiness marketing. It is certainly a niche market but plays a distinctive role for establishing high quality markets in the food business. The importance of direct marketing for high quality farm products has increased during the past few years. However, on-farm outlets are in lively competition with other store formats such as supermarkets and organic stores, which have developed their own assortment of regional and high quality products. In Germany, most supermarkets have entered the organic marketing segment in the last few years, introducing new articles positioned very close to traditional farm produce.

This paper analyzes the impact of customer satisfaction and its driving forces for farmer-to-consumer direct marketing and is based on a customer survey in 33 organic and conventional on-farm stores in Germany. Altogether, 1,537 customers were questioned in several regions in Germany. The results emphasize the role of store atmosphere, customer service and product quality as the main factors which influence customer satisfaction. Consumers who are satisfied with the farm outlet perceive a unique store design characterized by a special interior and an outstanding product presentation. In contrast to the retail industry, farm outlets are not standardized but stamped with the owner's personality. Store atmosphere as well as individual service must reflect the farmer's unique approach. The study demonstrates the importance of customer satisfaction for stable relationships and long-term business success. Customer satisfaction is closely connected to word of mouth communication, which is the main marketing tool for farm outlets.

Innovation in Food Products: First-mover Strategy and Entropy Metrics

Thomas L. Sporleder, Neal H. Hooker, Christopher J. Shanahan and Stefanie Bröring

Pioneer firms are first-movers that attempt to gain advantages over rivals from being first. These first-mover advantages may include strong image and reputation, brand loyalty, technological leadership, and being in an advantageous position relative to the 'learning curve' involved in managing a specific product or process innovation. Three advantages typically may accrue to pioneer firms: the preemption of rivals, the imposition of switching costs on buyers, and the benefit that accrues from being seen by customers as a technological leader compared to rival firms. Second-mover or follower firms have the advantage of lower costs through less expensive imitation of first-mover products (or processes) and the resolution of market or technological uncertainties faced by first-movers. In the aggregate, market pioneers deploy innovative products or processes with high initial costs and risks, but yield high potential returns. This also implies that second-movers or followers experience lower costs because imitation is less expensive than innovation.

Food products are in the experience goods category. First-mover firms in experience goods tend to shape consumer tastes and preferences in favor of the pioneering brand. Such preferences often are sustainable for the pioneering product. First-mover strategy is a common dilemma for managers and has special importance when the product is in the experience goods category. This research develops entropy metrics for tracking new product introductions in the context of first-mover strategy. Entropy is a novel and useful means of examining first-mover strategy and new product development (NPD) in general.

Understanding the complexities of the first-mover strategy and tracking NPD with entropy metrics holds promise for enhancing the analysis of agrifood supply chains and assisting firms in deciphering first-mover strategies of their rivals. Evidence about organic NPD presented here suggests that choosing the right certification scheme as a means to reduce information costs for the consumer (establishing complementary assets) is an important managerial first-mover issue to consider during product launch. The findings suggest that entropy metrics applied to the complex and interrelated levels and categories of food product target markets provides novel and useful information to decision makers. The relative entropy metric has special significance when applied to tracking product introductions that are in the experience goods category.

CASE STUDY

Parma Agrifood Research Management Knowledge Network: PARMa KN *Francesco Braga and Gregory A. Baker*

Funded by the Municipality of Parma, the Parma Agrifood Research Management Knowledge Network is built around a virtual global network of leading professionals from academia, industry, and the public sector. Its mandate is to create value added for firms in food and agribusiness sector by developing cutting-edge research, educational, and service activities. How can this start-up define its niche, grow it and establish its effectiveness? The case deals with a key issue for a traditional food and agribusiness industry: how to secure support for innovation while remaining true to the essential traditional features, including food culture, that are the foundations of the excellence of a typical food. The case may also be used to explore the various issues surrounding the formation of an industry association, including structure, financing, and strategic priorities. It is ideal for use as an application of stakeholder analysis. Finally, it can be used to explore the different needs of companies at different stages of the continuum commodity product ↔ typical product.

INDUSTRY SPEAKS

An Editorial Commentary

Strategies for Solving the Food Inflation Problem

Marcos Fava Neves

This article addresses some of the partial truths and misinformation in media reporting over the booming food prices debate. Many studies are only linking biofuels to the inflation cause, while ignoring several other factors such as the growth of the world population, economic development and income distribution. An overview of the causes are discussed and 10 strategies are proposed which policy makers, governments, and organizations can adapt to move the world forward towards long-term sustainability.

INDUSTRY INTERVIEWS

Global Climate Change

David Lobell, Senior Research Scholar at Stanford University's Program on Food Security and Environment

Many of the world's poorest regions could face severe crop losses in the next two decades because of climate change, according to Dr. David Lobell, a Senior Research Scholar at Stanford University in the program on Food Security and Environment. The average world temperature is increasing slightly says Lobell and a one-degree Celsius increase over time greatly impacts climatic growing conditions. Unfortunately, agriculture is also the human enterprise most vulnerable to changes in climate. Understanding where these climate threats will be is central to our efforts in fighting hunger and poverty over the coming decades. Dr. Lobell outlines some of the challenges that lie ahead and steps researchers are taking to combat the issues.

This interview was conducted by Doug Jose is a Professor and Extension Farm Management Specialist in the Department of Agricultural Economics at the University of Nebraska- Lincoln and host of the Market Journal, a weekly televised program on agriculture. This interview occurred during the 18th Annual World Forum and Symposium in Monterey, California, June, 2008.

Global Climate Change

Honorable Carole Brookins, Managing Director of Public Capital Investors

Carole Brookins is an international consultant known for her work as a policy and trade strategist on issues concerning the global political economy and its effect on the food and agriculture sector. She currently serves on the board of several corporate and non- profit organizations concerned with global food system issues and is currently helping to develop solutions which can offset the effects of global climate change through the reduction and management of carbon emissions—an issue of increasing importance in future food marketing and world trade.

This interview was conducted by Doug Jose is a Professor and Extension Farm Management Specialist in the Department of Agricultural Economics at the University of Nebraska- Lincoln and host of the Market Journal, a weekly televised program on agriculture. This interview occurred during the 18th Annual World Forum and Symposium in Monterey, California, in June, 2008.