



International Food and Agribusiness Management Review
Volume 12, Issue 3, 2009

Executive Summaries

RESEARCH

Commodity-based Trade and Market Access for Developing Country Livestock Products: The Case of Beef Exports from Ethiopia *Karl Rich, Brian Perry and Simeon Kaitibie*

Ethiopia is the largest livestock producer in Africa and one of the largest in the world. Despite increasing growth in livestock exports, large-scale trade volumes have traditionally been constrained by animal diseases. However, commodity-based approaches to trade provide optimism that market access for African livestock exports can be enhanced, but only if technically appropriate and cost-effective systems can be developed. This paper examines the economic feasibility of a proposed two-phase SPS certification system aimed at enhancing Ethiopian livestock exports.

Baseline model results indicate that under current input prices, the proposed system is not economically feasible for exports to targeted Middle Eastern markets. However, the problem is primarily due to the current high cost of inputs, especially feed, and not the marginal costs of the SPS certification protocol, which are only 5% of the breakeven value of the final product. The model estimates that the average export price of beef would be over US\$1,000 per ton greater than the average import-unit-value of Brazilian and Indian meat in Middle Eastern markets. On the other hand, improvements in feed use through better rations or more integrated supply chains lower system costs.

An important lesson of the paper is that while technical solutions at a local level can be designed to address global market access issues, downstream issues concerning cost, marketing, and product differentiation can transcend matters of SPS barriers. Even without SPS certification, Ethiopia is not competitive in price-sensitive markets for beef relative to Brazil and India. Conversely, even with SPS certification, the costs of Ethiopian meat in target markets remain above those of competitors with equal or higher standards. Ethiopia's best hope will be to compete on quality and differentiating its product relative to competitors over and beyond higher disease-free and food safety standards.

Export Implicit Financial Performance: The Case of French Wine Companies *Jean-Laurent Viviani*

For export oriented firms the accurate measure of three export performances is crucial to obtaining a complete understanding of the economic health of the firm. This paper addresses the issue of how best to measure the financial performance of export activities.

The study presents a new export financial performance measurement approach based on portfolio theory. The company maximizes global return for a given risk or minimizing risk for a given return across domestic and export activities. The higher the contribution of export activities to global financial performance the greater should be the export intensity. This methodology calculates the implicit expected margin, the implicit margin risk of export activities, and the implicit correlation coefficient between domestic and export activities. The study setting is French wine companies selling either domestically and internationally, or both, from 2001-2005.

Export activities of French wine companies are found to be positive but not statistically significant margin to risk relationship than purely domestic firms. Said another way, it is not statistically significant that for the same level of risk; an exporting company obtains a better margin than a purely domestic company. In the case of French wine companies, this improvement of financial performance seems due to diversification rather than higher financial performance of export activities.

Managers of agribusiness firms might look at the diversification benefits of exports, not simply the higher margins. At the same time the higher margins of exporting may come with more highly correlated risk. Analyzing export financial performance measures and their decomposition may provide a more complete understanding of the economic performance and associated management strategies of the firm.

Entrepreneurial Supply Chains and Strategic Collaboration: The Case of Bagoss Cheese in Bagolino, Italy *Vincent Amanor-Boadu, Piercarlo Marletta, and Arlo Biere*

Many small businesses and their small towns and communities are struggling to sustain their competitiveness in the face of increasing competition resulting from globalization. Almost as a backlash to the globalization trend, there has also been increased demand for certain local and/or traditional products, especially local food products. Interestingly, the technologies facilitating globalization also increase the potential for small businesses and their towns to collaborate in creating expanded markets for these local and/or traditional products. These opportunities and challenges create the need to develop innovative governance systems and improve intellectual property (IP) protection to enhance small local business competitiveness.

In this paper, we argue that the development, implementation and management of entrepreneurial supply chains can foster strategic collaborations that lead to the protection of IP embedded in local and/or traditional food products while enhancing the economic performance of supply chain participants. We define entrepreneurial supply chains as inter-firm relationships characterized by a mutual recognition of need for, and dependence on, one or more valuable assets that are inexhaustible in use but easily depreciated with misuse or abuse. The essence of entrepreneurial supply chains is their ability to facilitate participant alignment, and through that alignment, remove any inherent advantages associated with moral hazard and/or opportunism.

The research uses Bagòss cheese, produced in the small Italian village of Bagolino, as a case study to illustrate the characteristics of entrepreneurial supply chains and test the effect of IP protection and the governance system on performance. Because of the complexity of the relationships among the critical variables in the Bagòss supply chain, and the multiple feedback effects from those complex relationships, we use a system dynamic modeling approach for

simulating alternative governance and IP scenarios. The results show that sharing ownership of the common asset while ensuring ownership of products and customers under the entrepreneurial supply chain governance structure reduce moral hazard and/or opportunism risks across the supply chain. This, in turn, reduces the need to implement conformation systems such as inspection and penalties which increase associated transaction costs. The results also indicate that increasing and enforcing IP protection has the potential to increase prices and improve performance. Finally, the results indicate that recruiting organizations experiencing positive externalities from the supply chain's efforts—e.g., local governments which receive increased sales tax revenues—to help defray some of the intellectual property protection costs is beneficial to the supply chain. The study provides insights into organizing supply chain governance systems that minimize inherent incentives for opportunism and moral hazard, thereby reducing total transaction costs for their participants.

Willingness to Pay for Improved Milk Quality in Northern Kenya Using

Experimental Auction *Francis Obuoro Wayua, DeeVon Bailey, Mohamed Shibia, Moses Mamo, and D. Layne Coppock*

Pastoralists in northern Kenya depend on milk as a major source of protein in their diets. African pastoralists have traditionally held most of their financial asset portfolio in the form of livestock and have limited options to obtain outside cash income. This part of Africa is subject to frequent, severe droughts and livestock losses during drought periods can be very high. During drought periods, pastoralists are forced to sell livestock to try to raise money to buy grain or other sources of protein. As a result, local grain prices are often rising during times when local livestock prices are falling. These conditions place pastoralists in extremely precarious economic circumstances. Because drought stress causes milk production to decline, pastoralists are left with little or no milk for their household to consume or sell during these periods. Increasing cash income during wet periods would provide the poorest pastoralists with cash that could be used to buy grain for human consumption. Pastoralists may be able to diversify income by selling milk in nearby towns and cities. However, milk sold in open-air markets in communities in northern Kenya is often of low quality in terms of its sensory characteristics and is also often adulterated before sale. These markets are characterized by poor consumers who need to make choices about milk quality with virtually no information other than their own sensory perceptions. This study uses experimental auctions to determine if consumers in the border town of Moyale, Kenya are willing to pay for enhanced milk sensory characteristics and assurances.

The results suggest that even poor consumers are willing to pay for enhanced sensory characteristics and assurances if these can be communicated in a trusted manner. Older, relatively well-informed women are the group most willing to pay the highest prices for milk quality. The results also indicate that participants in this market are anxious to receive more information and assurances about the milk they consume. This may provide opportunities to pastoralists to devise methods for providing and certifying these types of assurances. Doing so may increase pastoralist incomes from milk sales while likely improving the overall quality of milk being sold in the Moyale market.

The results suggest that economic incentives exist for improving the quality of milk sold in these markets. Some of this improvement may be marginal and slow because infrastructure issues create time and distance barriers to providing high quality fresh milk. However, even small

improvements could potentially add value to the milk being sold in open-air markets. Pastoralists could also consider moving to town and perhaps purchasing feed for cows so that fresh milk could be provided in a timely manner to consumers. Participants in these markets appear to be demanding more information about the milk they are buying. Pastoralists could provide this information and assurances as economic incentives appear to be present to do so.

Export Chains of Fresh Apples in Qixia, Shandong China *Xiaoyong Zhang, Huanguang Qiu, and Zhurong Huang*

In just two decades, China has made a remarkable leap from nowhere to become the world's largest apple producer and exporter. China's emergence in the global apple market has gained substantial attention. The central question is how China made the transition from one extreme to the other. Particularly, how the apple chains in China connect millions of small-scale apple producers with modern sophisticated western consumers.

By applying two qualitative research techniques, focus group discussions and individual in-depth interviews, we were able to discuss these issues with various chain actors, such as the producers, collectors, importers, exporters, etc. This study demonstrates that the Chinese apple export chains are highly coordinated through long-term loyal network relationships and vertical integration. Five types of chain governance mechanisms have been distinguished that link small-scale apple farmers in China with export markets. They were named as 'multi party network', 'preferred farmers', 'nucleus farm', 'cooperatives' and 'contracting'. The five modes have different objectives, chain co-ordination mechanism, and institutional environments embedded. These institutional innovations have perfected chain performances by improving the efficiency of price transmission and generating higher profit margins for chain actors, in particular for small-scale farmers.

Two policy observations can be drawn from our Chinese experiences. The first observation is that globalization is beneficial to improving food safety and quality in China. During the process, globalization was not the goal but was instrumental to improve the product's quality and safety. The second observation is that China has a very reactive institutional mechanism that is capable to responds to the international demand for food safety in efficient ways.

In just two decades, China has made a remarkable leap out of nowhere to become the world's largest apple producer and exporter. China's emergence in the global apple market has gained substantial attention. The central question is how China made the transition from one extreme to the other. Particularly, how the apple chains in China connect millions of small-scale apple producers with the modern sophisticated western consumers.

By applying two qualitative research techniques, focus group discussions and individual in-depth interviews, we were able to discuss these issues with various chain actors, such as the producers, collectors, importers, exporters, etc. This study demonstrates that the Chinese apple export chains are highly coordinated through long-term loyal network relationships and vertical integration. Five types of chain governance mechanisms have been distinguished that link small-scale apple farmers in China with export markets. They were named as 'multi party network', 'preferred farmers', 'nucleus farm', 'cooperatives' and 'contracting'. The five modes have different objectives, chain co-ordination mechanism, and institutional environments embedded. These institutional innovations have perfected chain performances by improving the efficiency of price transmission and generating higher profit margins for chain actors, in particular for small-scale farmers.

Two policy observations can be drawn from our Chinese experiences. The first observation is that globalization is beneficial to improving food safety and quality in China. During the process, globalization was not the goal but was instrumental to improve the product's quality and safety. The second observation is that China has a very reactive institutional mechanism that is capable to responds to the international demand for food safety in efficient ways.

Of Junk Food and Junk Science *Robert Collins and Gregory A. Baker*

We examine the claim, found frequently in the popular press, that junk food is the cause of the obesity epidemic in the U.S. We use data on the incidence of obesity in the U.S. and U.S. junk food consumption to test the hypothesis that junk food consumption Granger-causes obesity and vice-versa. The results of the Granger causality tests indicate no causality, in either direction, between junk food consumption and obesity rates.

We propose a rudimentary structural model of obesity in order to address the issues of specification error, simultaneity, etc., that plague much research on obesity. We show that because of the dynamic nature of weight status, there is no necessary reason to expect to find a statistical relation between a person's observed weight and the amount he or she is currently eating or exercising. Studies which regress weight, obesity, or the probability of obesity on eating and exercise patterns have serious specification error.

Our findings have significant implications for policymakers and food industry managers. Significantly, they argue against a simplistic explanation of the obesity problem and, therefore, a simple solution. A better understanding of the causes of obesity should lead to the development of policies that will effectively address the obesity problem. A more complete understanding of the causes of obesity should also allow food companies to profitably design, package, and market products that will enable consumers to make wise, healthful food choices.

Do Market Oriented Firms Demonstrate Clarity on Their Value Discipline? Evidence from Illinois Beef Producers

Eric T. Micheels and Hamish R. Gow

Over the past two decades, the concept of a market orientation has been extensively developed and tested. Findings suggest market oriented firms achieve superior performance due to their ability to market products and services that more accurately match consumers' expressed and latent needs. It has been stated that one consequence of a market orientation is the firm's ability to express clarity on their value discipline and its value proposition; however, this hypothesis has yet to be empirically tested. Using a sample of Illinois beef producers, we develop and test a value discipline scale based on quality, relationships, pricing and production as these are major components of a customer's value proposition and we further analyze the impact a market orientation as well as other dynamic capabilities have on value discipline clarity.

In order to determine if market oriented firms demonstrate clarity in their choice of value discipline, scales were developed to measure both the market orientation as well as the value discipline of the firm. Existing scales to measure market orientation, innovativeness, and entrepreneurship were modified to relate to an agricultural audience. A new scale was developed

to measure the choice of value discipline based on several factors. These scales were included in a survey of 1570 members of the Illinois beef association.

To measure value discipline clarity we employ a half-taxi metric (Miller, 2002) and measure the distance from the point to a boundary of the value triangle. We then use the firm's market orientation and its square, along with other dynamic capabilities to explain this distance using an OLS regression.

Using factor analysis and OLS regression, we analyzed the 343 usable responses and found high levels of market orientation to positively affect the clarity of value discipline choice. Moderate levels of market orientation were found to negatively affect value discipline clarity. This U-shaped relationship is similar to those found by Narver and Slater (1990) and Atuahene-Gima, Slater, and Olson (2005). Taken together, these results begin to confirm the hypothesis of Slater, Narver, and Tietje (1998) that market oriented firms have a clearer focus of their means of providing value. Innovation and organizational learning were also found to influence value discipline clarity.

These findings suggest that, along with the performance benefits of a market orientation, market oriented firms may have increased clarity of their value proposition. This awareness may allow firms to strategically build capabilities through targeted allocation of resources which are important to their specific value discipline rather than investing in capabilities which are not as vital to their means of providing value. Further, this awareness may be important when choosing partners in value chains. It may be that value chains where firms are more closely aligned in terms of value disciplines may outperform those value chains where value disciplines are more heterogeneous.