We study business organization and coordination of specialty-market hog production using a comparative analysis of two Iowa firms marketing niche pork. We analyze each firm’s management of five key organizational challenges: planning and logistics, quality assurance, process verification and management of “credence attributes,” business structure, and profit sharing. Although each firm is engaged in essentially the same activity, there are substantial differences across the two firms in the way production and marketing are coordinated. These differences are partly explained by the relative size and age of each firm, but also by the formal organizational separation between marketing and production activities in one of the firms.

Markets for specialty, or niche, agricultural products have grown considerably in recent years. Organic produce is perhaps the most prominent example, but markets for so-called “natural foods” and for foods with a regional appellation have also expanded a great deal (Dimitri and Greene; Grannis and Thilmany).

In contrast to other dimensions of the ongoing evolution of agricultural markets, the growth of specialty production is not the result of technological advances and improved agricultural productivity. Instead, product differentiation is based largely on the use of technologies that tend to increase costs and reduce productivity (e.g., source verification; animal-welfare “friendly,” antibiotic-free, and free-range production systems; use of heirloom genetics). There has been considerable research on the welfare effects and organizational changes resulting from productivity-enhancing technological change. Much less has been said about the
consequences of agricultural “deindustrialization.” We take a step in this direction by comparing the activities of two Iowa firms marketing niche pork. We focus in particular, on the organizational and coordination challenges associated with specialty-market production. The purpose of our analysis is mostly descriptive; however, we also provide normative analysis indicating where there seem to be opportunities for improved coordination.

Both firms we study supply primarily restaurants and “high-end” meat-distributors, but each has adopted its own distinctive approach for defining its product to consumers and coordinating delivery. One firm is considerably larger than the other, and this may explain some of the differences; but there are also important differences in the relationship between each firms’ production and marketing activities. One firm maintains a strict separation by having separate organizations carry out their marketing and production coordination. In contrast, the other firm is fully integrated.

We frame our comparison around five generic coordination topics: planning and logistics, quality assurance, process verification, business organization, and profit sharing. Hog production systems are inherently uncertain, particularly in “natural” production systems. Therefore, arrangements must be made to accommodate unforeseen events and flexibly and efficiently manage the flow of animals from farm to consumer.

Developing a reputation for quality requires consistent production of the set of attributes desired by end consumers, and consistency requires some kind of process for quality assurance. Additionally, specialty markets typically involve providing one or more “credence” attributes, in which case process verification is important. Finally, business organization and profit sharing are somewhat related, but also separate in that many forms of profit sharing can be implemented within a given organizational structure. Although not the only possible taxonomy of coordination issues facing specialty producers, this set of topics represents a convenient grouping of issues for comparison across the firms we study.

Related Literature

Our work contributes to a larger literature that addresses various topics within the overarching theme of “specialty markets” in agriculture. “Niche marketing” focuses on a specific market segment by assigning a regional appellation, guaranteeing a production attribute (e.g., organic or welfare friendly), or specifying a specific quality attribute (e.g., tenderness or maturity). In this section, we briefly summarize recent works that address specialty markets of these kinds.

One line of research documents the incidence and growth of specialty markets. Dimitri and Greene detail growth in organic foods markets during the 1990s. During this period, retail sales grew 20% or more per year, and certified organic cropland and pasture more than doubled, reaching 2.3 million acres by 2001. Although there are no corresponding aggregate statistics for other forms of specialty production, it is easy to point to examples. Kennedy et al. also note that the term “value-added” has become widely used in agricultural markets, and typically refers to some form of branding and product differentiation by farmers.

Among work that focuses on specific cases of niche marketing, Hayes, Lence, and Stoppa document the development of three well-known “farmer-owned brands” and discuss the economics behind these successful branding strategies.
“Farmer-owned brands” is a term that the authors use to reference both “designation of origin” and “guarantee of production process” branding. The authors note that supply control is a key feature of successful branding strategies; and without supply control, successful niche markets quickly become commodity markets. Such has arguably been the case for U.S. organic producers (Blank and Thompson).

Buhr uses three case studies to show how a relatively small pork marketing firm can find a unique niche within a larger, mostly commodity market. Strategies range from specializing in cuts for a particular ethnic minority and season to diversifying across different kinds of sales outlets (wholesale, restaurant, retail direct to consumers).

Other authors have evaluated consumer preferences toward particular product attributes. For example, Grannis and Thilmany study the potential market for natural pork in the U.S. intermountain west using contingent value techniques. They find a strong influence of household income and previous consumption of other natural products on mean willingness to pay for natural pork. They find that with respect to production attributes, feed additives and external effects on the environment are important explanatory variables, while product-of-origin labeling has little effect.

Finally, as in this article, some authors have studied the organization and coordination of niche marketing. For example, González-Díaz, Fernández Barcala, and Arrunzúa study quality assurance procedures that support branding in Spanish markets for fresh meat, and note that geographical indicators and private branding (by individual firms) can be complementary in signaling multiple quality attributes. Brester presents a case study of a successful niche marketing venture in milling and baking. The case involves full integration by a single large Montana wheat farmer into the provision of milled wheat products for specialty bakers.

In this article, we focus on organization within specialty pork markets. Relative to the literature discussed above, we emphasize the communication, informational and overall coordination requirements for marketing niche pork. In what follows, we describe the coordination issues facing a typical specialty market producer, and then summarize how our pair of case firms addresses these issues. There are some similarities, but also significant differences in the way coordination is achieved. Additionally, there is much less formality in the contractual mechanisms used by the various parties. In this sense, “deindustrialization” at a technical or production level resulted in mechanisms of coordination that are normally associated with developing economy agriculture.

**The Coordination Problem**

In this section, we briefly discuss a set of generic coordination and organizational issues facing any group of producers interested in selling product in a specialty market. Parts of this section are specific to issues facing natural pork producers, but some of the discussion also applies more broadly to any production and marketing operation where there are multiple individuals and production uncertainty.
**Coordinating Supply and Demand**

Coordinating supply and demand requires search effort on both sides of the market. Specialty market buyers are relatively difficult to find almost by definition, and hogs that satisfy a given specialty firm’s particular set of product attributes also are relatively scarce. As the search cost (including price cuts relative to normal specialty-market premiums) rises for a given group of hogs, selling on the market for generic “commodity” hogs may be the best alternative.

As we will see in more detail below, production for a specialty market often entails costs beyond what is required for the commodity market. Thus, output produced for the specialty market, but which ultimately is sold on the commodity market, typically results in a collective net loss to the firm and producer. Similarly, a buyer may arrive at a time when no specialty hogs can be procured. The cost of this sort of “excess demand” is either the inability to supply a new customer, and thus the loss of an opportunity to expand the firm’s market, or potentially the inability to supply an existing customer, and the consequent risk of losing this customer’s future purchases.

Also, there are important within-firm distributional issues to manage, particularly in periods of excess supply. Establishing a steady base of demand is essential for firm success, and this requires a critical mass of producers who can fulfill the demand. However, in periods of low demand, there needs to be some mechanism for allocating sales to individual producers. For example, it may be important for long-run sustainability of the producer base to share sales revenues in low-demand periods across all producers; however, short-run efficiency may dictate sourcing product from one or perhaps a small number of producers. Attempts to transfer revenue from delivering to non-delivering producers complicate accounting, requires explicit efforts to maintain organizational transparency, and can create various incentive problems (e.g., producers delivering supplies to other outlets when opportunities are available). Below, we indicate how each firm attempts to resolve these tensions.

**Quality Assurance**

Quality assurance requires developing a system to deliver a consistent set of quality attributes to consumers. Genetics are perhaps the primary determinant of ultimate eating quality, though management and handling also play an important role. In both cases, growers must undertake extra effort to ensure delivery of high-quality hogs, and it is unrealistic to believe that these efforts will be undertaken without a compensatory reward. There is no single easily measurable attribute that is perfectly correlated with quality, so any reward system inevitably involves a degree of uncertainty. Moreover, rewarding exclusively on one attribute can lead growers to overemphasize this attribute at the expense of other less easily measurable, but still important, attributes. This, to some degree, has happened in commodity pork with the movement to an emphasis on lean (Schwab et al.).

Eating experience, which depends on such things as the taste, aroma, and tenderness of cooked meat, is difficult to measure objectively. As a result, firms must identify other characteristics that have some relation to eating experience, and decide to what extent these characteristics will be assured and rewarded. Measurable
attributes that have been used to some extent in pork markets can be distinguished by the specific quality attribute that they proxy.

Loin-eye area is used to judge size in relation to some standard that is considered a “normal” portion. Color is considered one of the most important aesthetic factors that determine the attractiveness of meat and is visually evaluated using a six-point scale or with the use of a chromometer (which measures light reflectance). Marbling is the visible fat within the boundaries of the muscle and is often assessed visually, again on a 1–6 point scale. Firmness, texture (“shear force”), and drip loss are also sometimes measured. Finally, there is some evidence that pH proxies well for a variety of important quality attributes. There are varying costs associated with measuring each of these variables and varying degrees of correlation with “eating experience.” For the purpose of rewarding growers for delivering high-quality hogs, there should be a strong relationship between grower actions (i.e., genetic selection and management activities) and the relevant measures. As we will see below, one of the firms we study has a fairly sophisticated quality assurance system, while the other relies more on *ex ante* quality assurance that comes from more uniform genetics.

**Process Verification**

Marketing and labeling play an important role in specialty markets. When labeling claims involve process attributes, such as “natural” or “antibiotic-free,” regulatory standards for reporting accuracy must be ensured. Moreover, final consumers must have confidence that the relevant claims have merit. There are well-established and government-backed criteria supporting the organic label. However, there is wide variation and misunderstanding regarding the meaning of “natural.” In principal, this ambiguity could be removed by offering more specific process attributes, such as “free range” and “hormone free.” In this case, federal truth-in-labeling requirements can be counted on to provide some degree of enforcement.

If more formalized and stringent verification is required, the ISO 9000 process can be implemented. Zaibet and Bredahl discuss use of this system in the UK meat sector. Recently, the U.S. Department of Agriculture implemented its own version of process and product verification services (U.S. Department of Agriculture).² The creation of trust through a reputational mechanism is an alternative to formal third-party verification. However, creating a reputation is costly and in some circumstances it may be more efficient to rely on a third party.

**Business Structure**

Perhaps the simplest means of organizing the business structure around specialty marketing activities is with a single entrepreneur and sole proprietorship. This is feasible to the extent that capital requirements are sufficiently low and can be provided by a single individual. Once outside investors become involved, independent of whether or not the “investors” are also the firm’s users (as they might be in the case of a cooperative marketing effort among a group of farmers), the business must be designed to accommodate group decision making and
profit sharing. There is a fundamental friction in the organization of any sort of joint venture between those who invest funds and those who run the business. This friction is the result of putting funds at risk and the potential for managerial opportunism.

In all business structures widely used, there are formal mechanisms for investors to monitor the activities of management. Joint ventures among farmers have increasingly been structured under the Limited Liability Company (LLC) arrangement. Relative to the cooperative structure, this arrangement allows greater flexibility in sourcing investment funds. Both structures offer the ability to avoid double taxation (as in a corporate structure) and to protect owners against debt incurred by the organization (i.e., limited liability). The cost of the LLC structure, relative to a cooperative, is the potential for conflict of interest among investors. The cooperative requirement that all investors be firm “members” essentially guarantees that all investors will be farmers, hence each will have similar interests. Both the firms we study use the LLC form but structure their operating agreements to mimic certain cooperative features. Details of the operating agreements are described below.

**Sharing Returns**

The way firm profits are allocated among the participants of any venture is of paramount importance. To begin, some portion of returns should have an incentive component in order to ensure that the interests of each of the relevant parties are properly aligned. One way to achieve this is to pay each grower based on the value of animals delivered. However, there is typically some degree of mixing of the meat from animals across multiple growers before the value of the meat is realized when sold to customers. Although technologically feasible, it is generally prohibitively costly to separately market the meat from each individual producer’s hogs. As a result, some degree of revenue pooling is unavoidable, and this creates a need to generate a reliable measure of the relative value of each grower’s animals before this mixing occurs. Moreover, there is considerable variation in the value of hogs that has nothing to do with the performance of an individual grower. Shielding growers from some of this variation may have value in itself.

As a result of these difficulties, growers in commodity pork-production systems are normally compensated according to measures of quantity (e.g., percentage lean and weight) and quality (e.g., pH and backfat depth) performance at the time hogs enter the slaughter facility (and hence, well before final value has been realized). Although imperfect measures of total value, there is a significant degree of positive correlation. One of the organizations we study uses exactly this procedure but also pays a periodic quality premium. The premium depends on an index of quality measures and on each grower’s ranking with regard to this index across all growers in the organization. The other organization does not pay on a percentage lean/weight grid, but uses uniform genetics across all growers. Given that some *ex ante* measure(s) of value is (are) available (e.g., percentage lean and weight), there are still a wide variety of issues to address in designing a specific payment scheme. As described below, the most important issues include
seasonality and equity across producers delivering at different times of the year, price in relation to the commodity market, and travel cost.

In the next section, we describe management of each of the coordination issues discussed above by two specialty-pork marketing firms in Iowa. Information for our analysis was obtained through on-site interviews of management and a sample of growers from each firm. Each firm also provided historical slaughter data for hogs delivered to their respective organization.

The Solutions: Two Examples from Iowa

Specialty marketing of pork by Iowa producers has grown substantially in recent years. Although still a relatively small part of Iowa’s overall hog economy, recent data indicate that there are over 240 Iowa farms engaged in specialty pork production. Our interviews focused on participants in two different marketing efforts. One of the firms we studied is quite large, with an estimated 400 growers spread across 10 midwestern states, Florida, and North Carolina. Table 1 shows the distribution of the size of operations for both companies and for Iowa in general. Firm A producer sizes are more homogeneous than for Iowa in general and are concentrated in the 100–999 size category. Firm B producers are smaller on average and are concentrated in the 1–499 size category. Neither firm has a significant number of extremely large (size category 2,000+) growers. For both firms, specialty meat distributors and restaurants represent the principal market for final fresh-meat cuts.

Firm A

Firm A has a strict division between marketing and production activities, and we have very little information about the marketing end of the operation. On the production end, there is a formal requirement that producers fill out an expected delivery form covering monthly deliveries (with weekly estimates within each month) during the subsequent six months. However, the firm indicated that only about 60% of growers actually comply with this requirement in any given month. The market for niche pork has been growing rapidly in recent years, so the marketing operation has been asking the firm to increase the number of growers and the level of production from existing sources. Firm A pays an explicit seasonal premium to growers who deliver hogs during the low-supply season (May 15–August 15) and guarantees a delivery slot for an equal number of hogs during the high season (October 1–December 30). Currently, there is no delivery contract

Table 1. Distribution of operation sizes

<table>
<thead>
<tr>
<th>Size (Marketed Head)</th>
<th>Number of Operations</th>
<th>Percentage of Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iowa</td>
<td>Firm A</td>
</tr>
<tr>
<td>1–99</td>
<td>1,560</td>
<td>40</td>
</tr>
<tr>
<td>100–499</td>
<td>3,040</td>
<td>199</td>
</tr>
<tr>
<td>500–999</td>
<td>2,000</td>
<td>79</td>
</tr>
<tr>
<td>100–1,999</td>
<td>1,820</td>
<td>21</td>
</tr>
<tr>
<td>2,000+</td>
<td>1,920</td>
<td>9</td>
</tr>
</tbody>
</table>
that guarantees producers a minimum number of hogs to market through the specialty channel, nor is there any commitment implied by growers’ announcements of expected future deliveries.

Firm A engages in two levels of quality assurance. All animals are purchased on a payment grid based on percentage lean and carcass weight. In addition, random loads are sampled each week, and cuts from each sample are subjected to detailed quality evaluation. Minolta (color) and pH measures are taken, and center-cut pork chops are extracted for further testing. According to one of the firm’s annual “pork quality reports” that are distributed to growers,

Raw pork chops are evaluated for color, marbling, firmness, and drip loss values. Pork chops are then broiled to an internal temperature of 160 degrees. Next, the cooked pork chops are evaluated for their eating-quality values, specifically pork flavor, juiciness, tenderness, and texture. Instrom and shear force values are collected as another determinant of the samples’ eating quality (tenderness and texture).

These measures are aggregated into a quality index, and over time each grower’s indices are averaged and compared with those of other growers. Producers in the lower quintile of the quality distribution are required to improve their performance before their hogs will be purchased. Producers in the upper quintile are given priority in low-demand weeks when there are more hogs available than are needed to supply current customer orders. This is a form of relative performance evaluation (Hueth and Ligon), though less explicit than the “tournaments” used in the poultry sector (e.g., Levy and Vukina). More recently, the organization has taken this system a step further by also providing explicit premia as high as $.75 per hundredweight, depending on performance measured by this quality index.

Despite this detailed quality incentive system, Firm A does not engage in any in-plant quality inspection, other than pH measurement, which goes beyond the normal procedures of the plant. However, there is further inspection of carcass quality at the next level when the marketing end of the firm takes possession of the meat for further fabrication and processing.

Firm A claims free-range production, no antibiotics nor hormones, and no use of meat by-products during the entire life of the hogs. In addition, the firm uses the terms “natural” and “humanely produced” in its marketing. Each grower is required to sign an affidavit that each of the firm’s credence attributes are met, and there is an on-site inspection of each new farm that enters the organization. However, currently there is no formal auditing procedure, though potential expulsion is implicit in the event of an observed violation by firm management.

Originally, the production arm of the firm was structured as an LLC. For approximately one year, the organization went to a cooperative structure, and subsequently changed back to an LLC. The cooperative structure was adopted as means to further facilitate incorporation of growers outside of Iowa into the organization. However, after further legal research, the firm was able to achieve similar outcomes with the LLC structure and preferred this organizational form. Out-of-state growers are treated no differently than Iowa growers, though, of course, they deliver to a different packing plant.

There is a clear break between the marketing and production arms of the organization. This break effectively sets up the production arm of the organization in the position of bargaining agent on behalf of growers vis-à-vis the members of
the marketing arm of the organization. Growers we spoke with all indicated high levels of trust in the leader of the production group, and believe that efforts are made to support grower interests. Evidence of this support comes from recent acceptance of a new pricing structure that reduces the base payment for all growers but compensates with payment based on transport costs. This effectively redistributes returns from close-by growers to more distant growers and facilitates expansion and new-grower recruitment.

**Firm B**

At present, Firm B operates as an LLC but with very little formal structure as a business organization. There is a single manager who created the firm’s name and official label, and who manages all of the marketing activities with the help of one assistant. However, the pricing of growers’ product and revenue sharing within the organization are jointly administered by the manager and all participating growers. The firm has an explicit target price per live hundredweight. Returns above this target are put into a holding account to be paid out when returns are low. Thus, the growers in this organization effectively operate a price insurance scheme: Growers who happen to deliver in high-price periods indemnify the growers who happen to deliver in low-price periods.

Firm B is a much smaller than Firm A, and somewhat paradoxically Firm B’s size generates significant logistical problems. Transportation and slaughter infrastructure are geared to large-scale commodity production, so being small is not necessarily a benefit. For example, Firm B growers must coordinate among themselves for delivery to the slaughter plant because each grower typically does not have sufficient hogs to fill an entire delivery truck.

At any given point in time, the firm’s manager has a rough idea of the number of hogs that will be ready for slaughter for the coming week and tries to find a “niche market” for that week’s production. Once the total demand for the week has been determined, ready hogs are called in for slaughter. Any product that is not sold is purchased by the packing plant (which custom slaughters for the firm) at prevailing market prices for commodity pork. Simultaneously, the firm’s manager searches for future customers and communicates with growers about supplies needed in the future. Remarkably, there are no formal commitments among any of the growers and customers that interact with Firm B. This is made possible by management having developed personal relationships with each of the relevant customers and growers.

Firm B markets a specific breed of hog, and to a large extent relies on this breed to deliver quality meat. The meat has a distinctive color, and each loin is visually inspected to ensure the appropriate color. Beyond this, there is no formal quality measurement of individual producers’ hogs. However, the breed information for each producer’s hogs is verified. Additionally, the firm markets its product as “naturally produced.” For Firm B, this means that no antibiotics are used during the last 2 months of feeding (though the organization is currently experimenting with complete removal of antibiotics at the request of some customers), and the animals never receive hormones or animal by-products in their feeds. Neither the animal genetics nor the “natural” attributes marketed by the firm are third-party verified.
Because Firm B does not take carcass measurements, payment is made each week based on the average market performance of all delivered animals. Growers initially receive a target price per hundredweight, and are then allocated a share of market revenues in proportion to the tons they deliver as a fraction of total tons for the week. This latter payment is retained in a “capital account” that can be used by the firm’s manager in low return periods to reach the target price. Thus, in most weeks, multiple growers’ animals are pooled for the purpose of computing compensation. The exception is for damaged (e.g., severely bruised) meat, where an attempt is made to trace back the carcass to an individual producer and make a deduction corresponding to average live weight.

Firm B initially operated as a Limited Liability Partnership. The owner of the company during this period developed the company name and branding. Subsequently, the firm converted to a LLC as a means of granting ownership and control of the firm to the growers. Ownership of the company name and label remains with the founder. Although formally an LLC, the company operating agreement is structured much like a cooperative (grower board, restriction on outside ownership, democratic voting). Management indicated a desire to operate like a cooperative with the flexibility of an LLC for attracting outside investment.

**Discussion**

The first lesson to be drawn is surely that there is no unique organizational arrangement that solves every problem. The firms we studied each use somewhat different approaches to address the coordination problems discussed in this article. This is due to the different size and age of the respective firms, but also reflects the nature of each firm’s product. In one case, breed is explicitly marketed, while in the other the “natural” attribute is more heavily emphasized.

The principal logistical difficulty for each firm is matching supply with demand. Neither firm has a completely stable set of buyers, and both are constantly searching for new markets. Given the time lag and uncertainty involved in production, particularly if new growers must be recruited, it is impossible to respond instantaneously to new markets; there are inevitably periods where the firms are either long or short on product.

Both firms make an effort to be in a position with excess supply, so that the orders of existing customers can be filled with absolute certainty, and new and unforeseen opportunities can be seized. Being in such a position also provides incentive to constantly search for new markets. However, the cost of hedging in this way is the excess supply that must occasionally be sold on the commodity market. Prices in these markets do not fully cover the extra costs associated with specialty hogs production.

Figure 1 plots average prices received by growers in firms A and B during 2003. Calculations are based on reported prices and data on the carcass characteristics of each animal delivered to the relevant firm. For comparison, these same animals are evaluated on the pricing grid of a representative commodity-market grid in Iowa. Note that Firm B’s price premium is consistently above Firm A’s, and both far exceed commodity prices. The price premium offered by Firm B in relation to Firm A to some extent reflects differing levels of maturity in the marketing end of the respective operation. In effect, growers for Firm A are paying for a substantial marketing effort and a national reputation.
Average discounts that would be applied to the “niche” hogs sold on a commodity grid are slightly lower than discounts applied on specialty grids. For example, the average discounts were -$2.91/cwt for the hogs delivered to Firm A in 2003. These same hogs evaluated on commodity grids would have received average discounts of -$1.05/cwt. Interestingly, the discounts charged by Firm A are for hogs that are too lean, while the discounts charged for the same hogs sold on a commodity grid are for hogs that would have been too fat.

Both firms struggle to find markets for all parts of the hog. Selling in the specialty market is of great economic importance. During 2003, Firm B received an average wholesale price for loins four times the price for the same product sold in the commodity wholesale market. Hams, butts, bellies, and spareribs sold at between roughly 1.5 and 2.5 times the comparable wholesale price on the commodity market. Figure 2 reports the percentage of total carcass weight sold into the niche market by Firm B for each month during the 33-month period starting in January, 2003.

Each week, Firm B slaughters the number of hogs needed to supply customer demand for loins. The firm then tries to find specialty outlets for remaining pig parts. What is not sold to a specialty customer is bought by the packing plant at commodity market prices. Butts and ribs are often sold to specialty customers in addition to loins. Hams, bellies, and picnic missiles are occasionally sold to a specialty customer; and bones, fat, and trim are almost always sold into the commodity market. Overall, roughly 50% of each month’s total slaughter weight is sold on the specialty market. There also appears to have been a gradual reduction in the uncertainty of specialty market sales. Both firms have undertaken efforts to develop further processed meats (e.g., hams, bacon, sausages) as a way to increase specialty sales. Products of this nature also lengthen the shelf life for a given week’s slaughter, thus increasing the set of market opportunities.
Only one of the firms we studied measures carcass attributes for each animal with a tracking system that can associate an animal with a grower. However, given the relatively small size of the organization without such a system, it is plausible that casual observation is sufficient to identify poor performing growers. Also, growers in the organization without such a system all produce the same breed of hog, so there is much less variability in carcass characteristics.

Perhaps one of the more surprising discoveries from our investigation of each firm is the relatively small amount of effort devoted to process verification. Although there is an initial check for new growers, there are no formal auditing procedures in place for either organization. One of the organizations uses a “seal of approval” by a third party that does not have any formal enforcement or oversight responsibilities. Despite this, we saw no indication, nor is there any anecdotal evidence, that either firm experiences problems with non-conforming growers. For these firms, it appears that the incentives associated with wanting continued access to each respective organization is sufficient to ensure performance by growers. Similarly, each firm has developed sufficient reputational capital to persuade customers that the relevant set of credence attributes exists.

Although difficult to quantify, loyalty is clearly important in both organizations. The growers we interviewed expressed satisfaction in the pricing policies of their respective firms, and management similarly expected loyalty from growers. One firm uses a formal contract with a small fraction of its growers and intends to increase the proportion of contracted production. The other organization does not use a formal contract. Both firms have highly transparent pricing systems, where it is clear that all growers are treated equally. In one case, growers are paid a premium above the prevailing market price, and there is effectively collective negotiation on the premium level by the growers with the marketing end of
the operation. The other organization promises to pursue a target price that is considered “reasonable” by all participating growers. Each week sales are verbally reported and growers exercise intensive oversight over the handling of revenues that exceed the target price.

**Conclusion**

This article presents the results of a comparison of two pork niche-marketing firms, focusing on coordination issues that are somewhat unique to niche marketing. Standard logistical problems are similar to those encountered in almost any production and marketing activity. However, longer-run planning and coordination of supply and demand is somewhat more difficult than in more traditional commodity markets. This is due to production uncertainty and the relatively low level of liquidity in specialty markets. In contrast to commodity markets, there is more uncertainty about future demand conditions and considerably more effort devoted to market search activities. Given this uncertainty about future demand, it is not possible to provide exact information to growers about future supply needs. Both firms we studied struggle with this issue, and neither has developed a “solution.” However, both firms have indicated interest in developing a firmer commitment from growers, perhaps with some form of delivery contract for future deliveries.

Quality assurance and process verification are managed somewhat differently across the two firms. In the case of quality assurance, much of the difference can be attributed to the different nature of the product marketed. In one case, breed is the essential product that is marketed. Given that there tends to be much less within- than across-breed variation in carcass attributes, there is less need for individual carcass measurements to evaluate grower performances. Somewhat surprisingly, neither firm uses formal third-party verification of process attributes (e.g., hormone and antibiotic free). This observation suggests that the extra benefit from process verification may be small in comparison with the cost of implementing such a system.

Finally, one of the firms we studied uses a sophisticated quality-based compensation system to pay growers, while the other firm engages in direct profit sharing. To some extent, this outcome is due to a formal separation between the production and marketing operations of the firm where quality incentives are used. The marketing operation in this firm engages in activities other than marketing specialty hogs, so it is likely to be difficult to separate profits specifically attributable to Iowa hog producers. However, this difference in the structure of compensation arrangements may also have something to do with the relative size of each organization. The relatively small firm that does not explicitly measure the performance of individual producers may find doing so necessary as the firm grows.

**Endnotes**


2. At present, http://processverified.usda.gov/ lists eight organizations that have obtained a U.S. Department of Agriculture (USDA) Processed Verified Program (PVP) label. In this program, each organization defines the specific process(es) that it would like USDA to “verify.” For example, one
organization verifies “production of swine that originates from parents that meet the American Berkshire Association requirements for Berkshire; and traceability of an individual pig, or pork product, to its farm of origin.” The USDA specifies the information reporting and verification requirements necessary to obtain the PVP status. Benkstein and Telford provide an excellent discussion of one organization’s (successful) attempt to create a process verified program. Clayton and Preston discuss USDA grading and certification programs more generally.

At the request of the management of each firm who participated in our study, we maintain confidentiality throughout our analysis by referring to the firms as Firm A and Firm B.

Since 2001, each carcass has also been measured for pH, though at present there are no direct premiums associated with this measure alone.

“Humanely produced” is a third party standard sponsored by the Animal Welfare Institute. Any fresh meat is “natural,” and processed meats are natural so long as they “do not contain artificial ingredients and are no more than minimally processed” (see http://www.fsis.usda.gov/oa/pubs/labterm.htm).

References


