Pork Packer Procurement and Merchandising Practices, 2000

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Summary and Implications

Hog procurement practices are expected to continue to evolve toward tighter coordination systems to satisfy pork retailers and final consumers for consistently high-quality, safe pork products. More demanding consumers are encouraging more branded retail and food service products that entail both brand loyalty and product liability. Packers report success in acquiring leaner, higher yielding hogs through coordinated systems than are generally available through traditional cash market channels. Packers report that hogs they produce themselves address the concerns of quality, consistency, and safety as well or better than market contract hogs produced by others. Although capturing the profits in the production sector, packers admit that their own hogs are not lower cost than hogs from producers. It appears that the increased quality control afforded the integrated packer is sufficient to offset possible higher costs of producing their own hogs.

From the other end of the pork chain, producers are asking for marketing agreements to secure financing to continue in hog production or to expand, and for purchasing programs that reward leaner, higher yielding hogs. Many producers are reluctant to adopt new technologies and invest in new facilities and genetics without a formal arrangement to market output. In an increasingly risky agricultural market place, long-term marketing agreements are a private sector response to a particular widespread problem—producing without a place to sell.

Introduction

Dramatic changes are taking place in the way pork packers procure hogs from producers. In 1993, 87% of slaughter hogs were purchased in the cash market (Rhodes, Grimes, Hayenga, and Lawrence). By early 2000, it was estimated that this number has fallen to 25% (Grimes and Meyer). Leading pork packers were surveyed to better understand the types of procurement practices used by packers and the motivations for evolving away from cash market transitions.

Materials and Methods

Thirteen of the nation's largest pork processors were surveyed in April 2000 regarding their procurement and merchandising activity for 1999. These processors were telephoned, asked to participate in the study, and were faxed a survey form. Eleven of the 13 processors completed the survey and returned it. Processors answered the questions based either on calendar year 1999 actual results or with adjustments reflecting recent acquisitions and practices. Drawing upon the survey results and other public information, future trends also are considered.

Results and Discussion

Packer purchasing arrangements. Collectively, the 11 responding firms accounted for 77% of the 101 million hogs processed in 1999. These firms report purchasing 27% of the hogs they bought for processing in the cash market in 1999[1] (Table 1). Formula agreements based on the cash market represented 32% of the purchases. Agreements with some type of risk management or cash flow smoothing feature accounted for approximately 22% of the purchases. Although modest changes in procurement methods are expected by 2004, recent trends are expected to continue. In 1996 these packers bought 59% of their hogs on the open market. This figure fell to below 30% in 1999 and is expected to decline more by 2004, resulting in a smaller cash market because more hogs will be purchased on formula-priced contracts.

Table 1. Hog procurement methods, 1999.

Procurement method	Percent
Cash market purchase, live basis	
Cash market purchase, carcass basis	
Formula-priced contract based on cash market	
Fixed price contract based on futures	
Fixed agreement based on feed price	
Formula contract with window	
Other purchase methods	
Self production	
Total	

The packers surveyed also produced hogs for their own plants, and in some cases for competitors. The survey respondents produced the equivalent of approximately 17% of 1999 U.S. hog slaughter, and 22% of their slaughter volume. However, 21% of the hogs produced by a packer or its subsidiary were processed by a competing packer. So the volume of their own hogs going through their slaughter plants was approximately 18% of their slaughter (as of spring 2000). Some production units are not located near a company-owned packing plant, or are operated as separate profit centers making their independent marketing decisions, or are operating under preexisting contracts with others. The

[1] Grimes and Meyer reported slightly lower cash market reliance, based on a smaller set of respondents, adding their estimates of three nonrespondents' purchasing practices, and including some transfer price systems from hog-producing subsidiaries in their calculations. In our survey, some packers also may have reported the transfer price method for hogs produced within the company or by a subsidiary, and reported them as self-produced.

smaller number of packers responding to questions about the future expected to produce more than 10% more hogs in 2004 than they do currently and process a higher percentage of their hogs in their plants.

Motivations. Motivations for the use of long-term marketing agreements were driven primarily by their need for a consistent supply of quality hogs and higher quality hogs (Table 2). The ability to assure food safety was rated next most important, receiving a ranking of 3.8 on a 5-point scale. Reducing plant-operating expenses, search cost for hogs, and week-to-week supply/price risk all rated 3.5. Long-run price risk management (3.0) and the ability to purchase hogs at lower prices (2.3) rated considerably below quality issues. All motivations for contracting (except buying hogs at lower prices) are expected to become more important by 2004.

Self-production of hogs by packers had slightly different motivations. In general, ensuring pork quality and safety, plant efficiency, and long-run price risk management were higher-ranked reasons for self-production than for marketing contracts. Producing hogs was rated lower on both week-to-week supply management and on lower price of hogs. Packers admit that they do not lower the cost of hogs processed by producing them, and place only moderate importance on profits that can be captured by producing hogs. The ability to secure consistently safe, high-quality hogs is more important to packers than are efficiency and price considerations.

In an open-ended question about the driving forces toward tighter coordination, packers added another important element to the quality, consistency, and food safety list. More than half of the packers identified the demand by producers as the driving force for packers offering and entering into more long-term contracts. Producers' reasons for wanting an ongoing relationship were reportedly to assure market access, share information about consumer concerns, and secure financing for their operations. Packers also noted that knowing where their supplies were coming from and their likely quality allowed them to enter into agreements with customers that were requesting longer-term arrangements for higher quality products. They asserted that they could not rely on suppliers in the cash market to change fast enough to meet their needs.

Packers also identified the perceived benefits of marketing and production contracts for producers, based upon their interaction with them. Access to capital was seen as the greatest benefit to producers of marketing agreements (rating 4.6 of 5). Reduced price risk (3.9), securing a market outlet (3.8), ability to sell hogs at a higher price (3.6), and the ability to secure a quality matrix (3.4) were the next most important benefits to producer. Although the higher price rationale was clearly evident based on experience under contracts, especially risk-sharing contracts in 1998 and 1999 when cash market prices were lower than some contract prices, new marketing contract offerings reflecting recent experience will likely have lower prices in 2000. Benefits to producers of production contracts were identified as increasing access to capital and reducing financial risk (both received 4.7 in a 5-point scale) followed by increased producer income at 4.5.

Pork merchandising. In 1999, the packers responding (with less than half of U.S. slaughter) sold 72% of their pork on the cash market for delivery within 21 days (Table 3).

Table 2. Motivation for increased coordination of the pork supply chain, 1999[a].

	Marketing Agreement	Hog Production
Reduce plant operating costs by improving plant scheduling	3.5	4.0
Secure higher quality hogs	4.0	4.4
Secure more consistent quality of hogs	4.3	4.6
Assure food safety	3.8	4.3
Long run price risk management	3.0	3.3
Week-to-week supply/price management	3.5	3.1
Reduce costs of searching for hogs to procure	3.5	3.6
Able to purchase hogs for lower price	2.3	1.9
Capture profits from hog production		3.2

[a]Scale of 1 to 5,1 = not important to 5 = very important.

Table 3. Pork marketing methods, share of total sales, 1999.

	%
Cash market delivery within 21 days	71.6
Forward fixed price agreement for delivery beyond 21 days	9.9
Forward formula price agreement based on current cash market	12.5
Long run agreement basis not on cash market	6.1

Only seven packers responded to questions regarding current and future merchandising methods and motivations. Approximately 22.5% of sales was sold on a forward or formula price contract for delivery in the future, and 6% was sold on a long-term agreement not tied to the cash market. These relative shares are expected to change dramatically by 2004 given the changes in pork merchandising. Several packers either have or are beginning to establish their own branded pork programs, or are forming exclusive supplier arrangements with retailers. Cash market sales are expected to fall by more than half and forward pricing will grow to a larger share of the market. Long-term agreements not tied to the cash market are expected to double as well.

The largest single market for pork today is pork for further processing, representing 37.5% of 1999 sales (Table 4). These products may become branded lunchmeats, further processed products under the processor or retail label, or further processed products going into food service or export markets. Branded programs by packers, a rapidly growing market segment, make up 18% of the current market volume. By 2004 branded programs will represent an even larger share of pork sold. These pork products must carry a higher degree of brand reputation and liability and demand higher standards to consistently satisfy end-user expectations. Within the branded products there is expected to be a switch from further processing by other companies to one of branded retail and food service pork items by packers.

Thus, the motivation for increased coordination of the pork supply chain has been driven primarily by the need for increased quality control and consistency in the hogs procured to meet rising demands from pork buyers and ultimately the final consumers. Packers report a higher level of quality and consistency from hogs under contract or self-produced compared with those purchased on the cash market.

Coordination advantages. Packers had a difficult time quantifying the cost and returns advantages from hog production or marketing contracts. However, half of the packers responding noted that they reduced the number of buying stations and procurement staff as they increased the level of coordination. In some cases, the associated cost savings have been dramatic, reducing the number of buyers 10–20% and the number of buying stations by as much as half. At the same time, the quality of the hogs increased. Several noted that the lean percentage of the hogs increased (in the range of 1.8 to 2.6% on average) and cutting and processing yields improved significantly. These answers are consistent with their earlier responses that the value of coordination was in product quality, consistency, and safety more so than plant efficiency or lower priced hogs.

Packers were asked what they thought the impact would be if packer ownership and/or agreements offering packer control of hogs were abolished. They indicated that customers and producers would not be able to get the benefits described above. Packers would have a difficult time enforcing the food safety and quality control measures that they have implemented via managing their own production or by contract supply agreements. One packer responded that coordinated systems that have evolved in the United States in response to consumer requests would emerge offshore if banned in this country. Some commented that slaughter capacity would decline because packers are not willing to maintain their large investments without a predictable supply of hogs. A

Table 4. Percentage of pork sales by category, 1999.

	%
Retail grocery nonbranded commodity sales	14.2
Retail grocery branded value-added products	14.2
Food service nonbranded commodity sales	7.8
Food service branded value added products	2.3
Sold to domestic processor for further processing	37.5
Export nonbranded commodity sales	6.3
Export branded value added sales	1.7
Wholesaler or broker	11.7
Other	4.5

couple of firms said they would not exist without their current arrangements and would go out of business. Most were uncertain about the price impact of ending such practices, but added that revoking existing agreements would penalize progressive producers who have aligned themselves with a processor.

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