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Meat Processors Purchasing and Sale Practices: Lessons Learned from the GIPSA Livestock and Meat Marketing Study

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Practitioner's Abstract

The meat value chain is a complex organization with multiple participants performing numerous value added functions. Perhaps the most complex and least well understood segment is that downstream from the packer, e.g., the processor, wholesaler, exporter, retailer and food service (or restaurant) operator. One portion of the Livestock and Meat Marketing Study provided an overview of marketing and pricing methods used in this sector and, in particular, the results of analyses of the relationship between use of alternative marketing arrangements (AMAs) and the distribution and sales of meat products downstream from the packer. The analyses include both beef and pork products, are descriptive and focus on the relationships among industry participants beyond the packing plant. The information used includes the results of the industry interviews, data from the industry surveys, and transactions data from meat processors.

Primary conclusions related to meat processing, distribution, and sales, are as follows:

- *Firms differ greatly in the sales, purchase, and pricing methods for meat. Firms rely heavily on the spot market but also use other methods. They also mix-and-match purchase and pricing methods, e.g., buying on the forward market, but pricing on a formula.*
- *Meat processors play an important distribution role in the meat value chain by purchasing large lots from a few sources and selling small lots to many firms.*
- *Packers sort cattle purchased under various marketing arrangements to meet the needs of its buyers, but aggregate transactions data suggest that downstream marketing arrangements have little or no relationship to cattle purchase methods or branded beef sales programs.*

Keywords: Downstream meat marketing, alternative marketing arrangements, supply chain

Introduction

In 2003 Congress mandated a study of the effects of alternative marketing arrangements (AMAs) on livestock and meat markets. The resulting research is the 2007 USDA GIPSA Livestock and Meat Marketing Study. This paper summarizes the results of analyses on the distribution and sales of beef and pork products downstream from the packer, Volume 2 and Volumes 6 of the GIPSA Livestock and Meat Marketing Study (Cates, et al., 2007; Muth, et al., 2007). It focuses on the extent of use of AMAs, describes the linkages between the stages of meat production, and describes the relationship between the use of AMAs and beef quality. In the study, AMAs refer to all possible alternatives to the cash or spot market and includes arrangements such as forward contracts and marketing agreements. Cash or spot market transactions include sales through dealers and brokers and direct trades.

One of the weaknesses of the 1996 USDA P&SA Concentration Study was that the work focused primarily on the measurement of market power at the fed cattle transactions level. There was

little analysis of other levels of the marketing system and no analysis of benefits to AMA use. The 2007 Livestock and Meat Marketing Study has provisions to address these shortcomings.

The meat value chain is complex and includes several entities (Figure 1). The information used in this research includes the results of industry interviews, data from the industry surveys, and transactions data from meat processors. The surveys were statistically designed to represent each segment of the downstream market and include responses from 125 meat processors, 108 food service providers, 136 retailers, and 142 wholesalers. The transaction data includes beef packer sales: 24 plants, meat processor purchases: 32 plants, and meat processor sales: 11 plants. These businesses were surveyed about beef, pork, and lamb marketing practices.

Surveys of downstream market participants were used to analyze the extent of AMA use and the reasons for using the purchase and pricing method chosen. Does the AMA use at the producer/packer level extend downstream to processor, distributors, retailers and food service? And why do downstream businesses use these tools? Are they cost reducing, are they a means of improving quality, or are they effectively mandated by some participant in the system?

The paper first summarizes analysis of surveys of meat processors, wholesalers, retailers and food service firms. Then analysis of purchase and sales transactions from meat processor is discussed. Finally, we discuss the relationship between cattle purchase method and beef sales and downstream AMA use based on packer transaction data.

Downstream Firms Surveyed

Meat Processors

Meat processing plants for this analysis are defined as firms that receive meat inputs and produce a variety of products, but they do not slaughter livestock. They must also sell products that contained at least 50% meat by weight during the past year. The 125 meat processors responding to the survey operated plants that processed beef, pork, lamb, and combination meats (e.g., products made with beef and pork), but we report only the beef and pork results here. Most plants (80%) responding to the survey are small, independently owned businesses and are not part of a company that owns another slaughter or processing plant. In the prior year, approximately 40% of plants had processed meat sales of less than $1 million, nearly 30% had sales between $1 million and $5 million, 14% had sales between $5 million and $50 million, 13% between $50 million and $1 billion, and nearly 4% with more than $1 billion of processed meat sales. For plants with beef sales, average sales were $15 million during the past year and for plants with pork sales, average sales were $5.5 million. The most common beef products produced were ground beef and trimmings (53%), followed by processed ready-to-eat products (49%). The largest volume of pork products were ready-to-eat (54%) and ground pork and trimmings (44%).

As indicated in Table1, the most common purchasing method used by processors was the cash or spot market. The cash and forward markets are defined differently for live animals and meat. Live animals delivered within 14 days of purchase are cash sales and greater than 14 days are forward contracts. Meat products delivered within 21 days of purchase are cash sales. Ninety-

one percent of plants used the spot market for purchases, and 63% used it exclusively. Forward contracting was used by nearly 20% of plants, and marketing agreements and internal company transfers were each used by approximately 13% of plants. Based on the survey responses, purchasing methods are expected to be relatively stable over the next 3 years, with perhaps a slight increase in forward contracting.

The most frequently cited methods used to price meat purchases (see Table 2) were price lists and individually negotiated prices, with approximately 60% of plants using each method.[1] Formula pricing was used by 32% of plants, and 13% of plants used internal transfers. For plants using formula pricing, 63% used a USDA publicly reported price. Most of the meat purchased by processors was on the basis of short-term verbal agreements. Only 8% of the dollar volume of meat purchased was covered under a written contract. Twenty-eight percent of purchases were under a contract (oral or written), and these were typically less than a year in length. Nearly two-thirds of the respondents reported scheduling delivery within a week of the order.

Respondents who used only the cash market to purchase meat products were asked to identify the three most important reasons for using the cash market (see Table 3). The most cited reasons related to the respondent's business philosophy and the ability to adjust to market conditions. More specifically, the reasons were: (1) "Allows for independence, complete control, and flexibility of own business" (51%), (2) "Allows for adjusting operations quickly in response to changes in market conditions" (48%), and (3) "Can purchase meat inputs at lower prices" (46%). These responses suggest that processors prefer flexibility and simplicity as a way to adjust to changing market conditions and to reduce their risk exposure when purchasing meat.

Respondents who used alternatives to the cash market were asked to identify the three most important reasons for using AMAs (Table 3). The three most frequently cited responses were (1) "Can purchase meat inputs at lower prices" (69%), (2) "Reduces price variability for meat inputs" (59%), and (3) "Improves efficiency of operations due to product uniformity" (43%). While AMA users were as concerned as cash market purchasers about price, if not more concerned, the AMA users also identified plant efficiency, supply management, and product quality as important reasons for using AMAs.

Companies in similar businesses had different perceptions and preferences regarding meat purchases. The cash-only processors value flexibility over plant efficiency and value simplicity over price stability. It is interesting to note that both cash-only processors and users of AMAs thought that their marketing choice allowed them to obtain lower purchase prices and reduce their risk exposure. Thus, there are similar concerns across both groups of processors, although they have different approaches to addressing these concerns in the individual product markets.

Processors were also surveyed regarding their meat product sales. They report 41% of sales to wholesalers and distributors, 29% to food service operators, 21% to retailers, and 8% to other processors and manufacturers. Sixty percent or more of plants used the cash or spot market when selling product. Ten percent or more of plants used forward contracts, 10% or more used marketing agreements and 9% of sales to other processors/manufacturers were internal transfers.

[1] Respondents could indicate multiple – up to three – responses and thus, percentages sum to greater than 100%.

Processors were asked their views on the types of sales methods they will use three years from now. In general, they expect that cash market sales will still be the largest (85% of plants), and forward contracts and marketing agreements are expected to be used by approximately one-fourth of plants.

The most frequently cited methods for pricing meat products were price lists and individually negotiated pricing; formula pricing was used to a lesser extent. The type of pricing method used varied depending on the type of buyer or recipient. When selling to other processors, individually negotiated pricing was most often used. For wholesalers and distributors, retail establishments, food service establishments, and foreign buyers, price lists were most often used. For those processors selling products using formula pricing, 49% of plants used USDA-reported prices as the base. The majority of plants reported using some type of special marketing practices, such as two-part pricing, volume discounts, exclusive dealings, or bundling.[2] The most common of these across all buyers was volume discounts, followed by two part pricing. Only 10% of meat sales were covered by a written contract, and 77% of sales were transacted without an oral or written agreement or contract. Most contracts were less than one month in length. Delivery was scheduled for 3 days or less for one-half of meat sales.

When asked to identify the three most important reasons for using only the cash market for meat sales, two items were chosen more than the other responses (see Table 4). The two most cited responses were (1) "Allows for adjusting operations quickly in response to changes in market conditions" (51%) and (2) "Allows for independence, complete control, and flexibility of own business" (39%). Five other items received a similar number of responses and reflect simplicity, price level, and risk exposure: "Does not require managing complex and costly contracts" (29%), "Reduces costs of activities for selling meat products" (29%), "Reduces risk exposure" (28%), "Can sell meat products at higher prices" (24%), and "Does not require identifying and recruiting long term contracting partners" (22%).

Respondents that used AMAs were asked to identify the three most important reasons for using AMAs for meat sales (Table 4). One response, "Reduces risk exposure," was selected by 40% of plants. Several others had responses between 24% and 31% and included, "Allows for sale of higher quality meat products," "Improves week-to-week production management," "Reduces price variability for meat products," "Can sell meat products at higher prices," "Increases flexibility in responding to consumer demand," and "Reduces costs of activities for selling meat products." The reasons for using AMAs are more diverse than identified on the purchasing side, but still tend to focus on reducing risks, costs, and price variability and emphasized quality and production management.

[2] Pricing terminology

- Two-part pricing—includes a fixed payment (e.g., slotting allowance) and a per-unit price;
- Volume discounts—larger shipments have lower per-unit prices;
- Exclusive dealings—the buyer is prohibited from buying and reselling the same products from another supplier;
- Bundling—the buyer must purchase other related products to receive a lower price.
- Flat pricing, buyers and sellers agree to a specific dollar per pound for a specified period.

In summary, the survey of meat processors reflects an industry largely composed of independent companies that buy meat inputs and sell meat products, often in a short time frame. The largest share of purchases and sales were conducted in the spot market, although some plants had AMAs with buyers and sellers. Plants do not expect much of a shift in their use of marketing methods three years from now. Processors using cash markets exclusively for either meat purchases or meat sales identified operational independence and the flexibility to react to market conditions. These plants also believed that they could achieve better prices with less risk exposure and that AMAs are costly to initiate and maintain. While processors using AMAs to purchase meat inputs identified reducing input prices as an important reason for using AMAs, the most cited reasons for using AMAs on both purchases and sales focused on reducing operating costs and price risk and improving product quality and production efficiency.

Wholesalers

Meat wholesalers purchase and sell meat products but conduct no processing activities at their establishments. Forty percent of wholesalers did not own a warehouse or distribution center, 56% owned one warehouse or distribution center, and 4% owned two or more. Thirty-eight percent of the companies had annual gross sales of beef, pork, and lamb products of less than $1 million, 30% had sales between $1 million and $5 million, and 31% had sales of more than $5 million a year. Beef purchases by wholesalers were made up of 81% fresh or frozen product, 15% processed, and 5% variety meats. Pork purchases were 75% fresh or frozen, 21% processed, and 5% variety meats. Nearly all companies purchased some case-ready beef and pork, but the percentage was relatively small. Beef and pork case ready purchases averaged 17% to 18% of total dollar purchases.

Nearly two-thirds of wholesalers purchased or received meat products that had some type of certification. The most frequently cited type of certification was USDA Process Verified (47% of companies).[3] Other certification programs included CAB (20%), other breed or livestock quality certification (19%), organic (10%), and Halal (9%). More than 70% of the beef and pork purchases had national or regional brand labels that most often were a brand name used by a packer or processor. Wholesalers purchased 40% of their beef, and pork from packers and 38% from another wholesaler (Table 5). To a lesser extent, further processors and dealers supplied 9% each, and importers and others provided 2% or less each.

Wholesalers were asked to identify the three most important reasons for purchasing meat products from a chosen supplier (Table 6). The most often cited reason was “Has provided good quality product in the past” (64% of companies). Other reasons given included “Provides product quality guarantees” (33%), “Offers lower prices for given product specifications” (32%), and “Can meet all my product needs” (30%). The most common terms (see Table 7) were product quality specifications (44%), maximum or minimum purchase quantities (36%), volume discounts (34%), and delivery lead times (32%). There were also a large number of transactions with no other terms (33%). The variety of terms illustrates the flexibility the processors use in procurement.

[3] The percentage of retailers that reported purchasing USDA Process Verified meat is high relative to the amount of meat that we believe is USDA Process Verified; however, USDA does not track process verified product volume. Some respondents may have been confusing this with USDA inspection.

The most common type of pricing method (Table 8) used by wholesalers was flat pricing (56% of total dollar purchases), followed by formula pricing (27%), and then or-better pricing (12%). The purchase price in ongoing agreements was usually benchmarked relative to a market reported price. For companies using formula pricing, many (61%) used a USDA publicly reported price as the base and the current market (82%) or an average of the previous week (24%) as the timing for the base price; relatively few companies received premiums or discounts in formula price agreements. Of those that did, the premiums or discounts most often were based on brand name, USDA quality grade, or availability or timing of product. For companies that purchased meat products under an ongoing arrangement, 35% had agreements that were less than one month in length, 35% had agreements that were more than 10 years or evergreen (Table 9).

Sales by wholesalers most often were to domestic HRI and to retail food stores (e.g., grocery stores, meat markets, and warehouse clubs), representing 46% and 39% of sales, respectively. Direct to consumers (6%), foreign buyers (4%), and other wholesalers (4%) were other lesser markets for wholesalers. While wholesalers reported purchasing 38% of their meat needs from other wholesalers, they reported selling only 4% of their meat products to other wholesalers, thus suggesting the survey responses tend to represent smaller wholesalers. The ongoing arrangements used to sell meat products varied widely in length. Forty-two percent of companies had agreements that were less than one month, and 30% had agreements that were more than 10 years in length or evergreen.

Flat pricing was also the most commonly used method for pricing meat sold by wholesalers, used for 63% of meat sales compared with 24% for formula pricing. Relatively few wholesalers made an adjustment to flat pricing agreements that reflected market conditions. When formula pricing was used, companies most often used USDA-reported prices (52% of companies) or retail prices (36%) as the base price.

Retailers

Meat retailers include all type of establishments, such as grocery stores and meat markets, which purchase meat products and sell them to consumers with minimal or no additional cutting or processing. Of the retailers surveyed nearly 84% of companies owned one retail establishment, and 12% owned two-to-nine establishments. More than 62% had total sales of all products of less than $1 million and about 80% had total sales from fresh, frozen, and processed beef, pork, and lamb products of less than $1 million. Based on these characteristics, most respondents to the retailer survey represent relatively small establishments.

Eighty-two percent of beef and 79% of pork purchases were fresh products. Only 15% each beef and pork purchases were case-ready product. More than 70% of retailers purchased meat products that were certified. The two most cited types of certification programs were USDA Process Verified (38%) and CAB (38%). Other third-party certification of livestock breed or quality (15%) and organic certification (12%) were used by fewer companies. Eighty-five percent or more of meat products purchased by retailers were a branded product of some type. National or regional brands were 81% of beef and 85% of pork purchases and the remaining was split between private-label brands and commodity products (i.e., no brand) with 9% each.

Because most respondents represented mostly small establishments, more than 80% of meat purchases by retailers were from wholesalers or distributors (Table 5). Purchases directly from packers represented only 13% of purchases with the remainder being from dealers, processors, and importers.

The three most cited reasons (see Table 6) given by retailers for selecting their chosen suppliers were (1) "Has provided good quality product in the past" (63%), (2) "Provides product quality guarantees" (46%), and (3) "Can meet all meat product needs" (45%). Retailers specified or were required to include a variety of terms in purchase transactions for meat products. The most common terms (see Table 7) were product quality specifications (45%) and retail price maintenance (34%). These terms require the supplier to meet product specifications and help the retailer manage price risk on the product supplied.

The most common pricing method (Table 8) for purchasing meat by retailers was flat pricing (53% of purchases). Formula pricing was used for 21% of purchases, and or-better pricing and floor and ceiling pricing were each used for 12% of purchases. Formula-priced meat purchases were most often based on retail prices (62% of companies) or USDA-reported prices (35%) and the majority used current market prices. Relatively few retailers had ongoing arrangements with their suppliers. For those that did about 41% of companies had agreements that were more than 10 years, or were evergreen, and 35% of companies had agreements that lasted less than one month.

The retailers surveyed were predominately small, independent stores where fresh sales of red meat made up a large portion of their gross sales. The product sold is mostly under a national or regional brand typically belonging to a packer or processor. More than 80% of retailer purchases were from a wholesaler or distributor, and only 13% were directly from the packer. Retailers purchased meat from their chosen suppliers because the suppliers had a history of good quality product and offered product quality guarantees. Common terms of purchase transactions included product specifications and retail price maintenance (Table 7). There were relatively few marketing agreements. Flat pricing was the most common pricing method used by retailers to purchase meat. When formula pricing was used, it was more often tied to retail prices and, to a lesser extent, to USDA-reported prices.

Food Service Operators

Food service operators represent the broad array of restaurants and other types of food service establishments that purchase meat inputs and prepare meat products for onsite or takeout consumption by consumers. Most respondents to the food service operator survey represent relatively small establishments. About 68% of companies owned one food service establishment and 20% owned 2-to-9 establishments. Approximately one-third of companies had red meat sales of less than $100,000 in the past year. Another one-third had sales between $100,000 and $499,999, and the remaining firms were larger. Nearly 80% of companies purchased meat that was certified under some type of program. The most cited types of certification programs were the USDA Process Verified (49% of companies) and CAB (39%) programs. National or regional brands were the dominate types of products, with 69% and 81% for beef and pork

purchases, respectively. The source of the national or regional brand was most often a packer or processor.

Food service companies responding to the survey purchased 81% of their beef and pork from a wholesaler or distributor and 11% of purchases were directly from a packer (Table 5). Companies' reasons for choosing the suppliers they did were relatively diverse, but mostly related to product quality (see Table 6). The most cited responses were (1) "Has provided good quality product in the past" (57%), (2) "Provides product quality guarantees" (48%), and (3) "Can meet all meat product needs" (34%). The terms specified in purchase transactions for food service operators were diverse (see Table7). Product quality specifications (58% of companies), volume discounts (40%), delivery lead times (32%), and maximum and minimum purchase quantities (27%) were the most cited terms. A large portion also stated there were no terms to the transaction (17%).

Flat pricing was the most common method of pricing method (see Table 8) among food service companies, making up 48% of the product purchased. Or-better (21%), floor and ceiling (16%), and formula (14%) were the next most common pricing methods. For companies that purchased products under an ongoing arrangement, most benchmarked the price relative to a market-reported price. Prices were also benchmarked relative to other bids and internal rates of returns, and still others did not benchmark the price. Formula pricing was used by few food service companies; for most of these companies (61%), the base price was tied to a retail price. From a timing standpoint, most companies (79%) used the current market price.

Relatively few food service companies had ongoing purchasing arrangements. Of those that reported having ongoing arrangements, nearly 60% of companies had agreements that were less than one year and 29% were more than 10 years or evergreen (Table 9).

Food service companies purchased most of their product from wholesalers or distributors, and only slightly more than 10% of product was purchased from packers. Product quality history and guarantees were the primary motivators for food service companies choosing their suppliers, and product specifications and volume discounts were often written into purchase agreements. There were relatively few ongoing arrangements, but the ones that existed tended to be longer than in other downstream segments, with 10 or more years representing nearly 30% of these agreements. Flat pricing was the most common pricing method identified, and many transactions included market adjustment terms. Formula pricing was used less often, but was typically tied to retail prices.

In summary, common themes arise from the surveys of downstream firms in the beef value chain. Those responding to the survey are smaller than average and were mostly single establishment firms and as a result purchase more from wholesalers than packers. The reasons for choosing a supplier were similar and include: "Has provided good quality product in the past", "Provides product quality guarantees", and "Can meet all meat product needs". These suggest that quality and reputation are important to these firms. Regional and national brands from a packer or processor are widely recognized. The spot market is their predominate market and flat pricing is most common pricing method for these firms. And, though not widely used, marketing agreements differ greatly in length from a few weeks to over 10 years.

Meat Processor Transaction Data

Based on the sales transactions data for beef packers and pork packers, approximately 15% of beef packer sales pounds and 21% of pork packer sales pounds are to meat processors and food manufacturers. Unlike the survey data that represented primarily smaller firms, the transaction data were from a few relatively large firms. We obtained usable meat purchase data from 32 meat processing plants (17 beef and 15 pork) and comprised 73% pork products and 27% beef products. Usable meat sales data were from 11 meat processing plants (6 beef and 5 pork) and comprised 64% beef and 36% pork products. Sales data were only requested from plants that produced products containing at least 50% meat by weight; thus, 21 of the plants produce further processed foods that contain less than 50% meat.

Meat processors play an important distribution role in the meat value chain by purchasing large lots from a few sources and selling small lots to many firms. Transaction purchase data included 53,831 records from 32 firms, averaging 22,800 pounds per transaction. Sales transactions from 11 firms included 848,295 records, averaging 771 pounds per transaction, and these were all case ready or ready-to-eat (RTE). Meat processors typically bought processed products and sold more highly processed products. Pork processors' purchase records were primarily for subprimal cuts (31%), RTE product (24%), and ground pork and trimmings (19%). In contrast, beef processors' purchase transactions were primarily for processed RTE product (39%) and ground beef and trimmings (22%). The processors reporting sales produced only two product types – case ready and processed RTE.

Meat processor buyers' mix and match purchase and pricing methods in their procurement activities. Formula pricing was used as the pricing method for cash market, forward contracts, and marketing agreements. Likewise, individually negotiated prices were more common in forward contracts than in cash markets. Transactions data on meat processor purchases indicate a much larger use of AMAs than do the survey data. Based on transactions data, only 21% of beef and pork products were purchased on the cash market. Internal transfers were a large factor for pork but were virtually nonexistent for beef. Forward contracts were 28% of beef purchases, but less than 1% of pork purchases. The type of purchase method used is either not important to meat processors or they did not understand the meaning of the categories, because 39% of beef and 32% of pork purchase methods were listed as "other or missing".

Approximately 99% of pork and 55% of beef product pounds that were priced using formula pricing used a USDA-reported price as the base. The other base used for purchased beef was a subscription service. Although nearly all pork pricing formulas are based on USDA-reported prices, it is worth noting that wholesale pork, while reported by USDA, is not covered under Mandatory Price Reporting (MPR).

The Relationship between AMAs and Beef Quality

Two reoccurring themes among the cattle producers and packers interviewed for the study and the survey responses of those participants using AMAs were that AMAs: 1) helped them market high quality cattle and 2) AMAs helped them meet expectations of downstream buyers. We conducted a simple cross-tab evaluation of packer transaction data to address these questions.

We first used branded beef sales as a proxy for beef quality and compared it to cattle purchase methods. We also compared cattle purchase and beef sales methods to determine if downstream AMAs are association with cattle purchase AMAs.

Although AMAs may be important to individual firms, we found no relationship between aggregate cattle purchases and branded beef sales transactions data. Plants that sold 0% to 20% of their beef as branded product purchased approximately the same percentage of their cattle on the spot market as did plants that sold 21% to 40% of their beef as branded product. Although the differences were small, the 21% to 40% plants used more forward contracts and less packer ownership than did the 0% to 20% plants. Shares of marketing agreement cattle were nearly identical across the two groups. In addition, 60% of the meat purchased on the spot market by processors was branded product compared with none through marketing agreements and internal transfers.

Although potentially important to some beef industry firms, downstream marketing arrangements have little or no relationship to cattle purchase methods. Beef plants were divided into two groups based on beef sales methods–0% to 50% and 51% to 100% cash or spot market beef sales. Transactions from both groups indicated that they each bought 60% of their cattle through the spot market and 40% using AMAs. The 0% to 50% cash sales group used more marketing agreements, and the 51% to 100% cash sales group had more packer-owned cattle. There is a modest relationship between meat buyer type and cattle purchase methods. Packers that sold more beef to meat processors bought fewer cattle on the spot market but about the same number of cattle through AMAs (with the difference resulting from a larger percentage of other purchases or missing information). Packers that sold a larger amount of beef to retailers and food service operators bought a larger percentage of their cattle on the spot market and a slightly lower percentage of cattle through AMAs.

If meat product quality is being enhance or maintained through AMAs then the quality signal is being communicated through the firms' reputation or the personal relationship between buyer and sellers. The linkages are not being communicated through the transaction data that are maintained by packers or processers.

Summary

Analysis of surveys, interviews, and transactions data with processors and downstream firms revealed a complex and diverse sector of the meat value chain. Several methods of buying and selling and pricing products exist but the cash market predominates. An average across these methods may not be representative of any one firm as individual have a dominate method that differs from their competitor. Larger firms are more likely to use AMAs than are small firms in each of the sectors, but nearly 40% of the transactions did not indicated a marketing method suggesting that it is not important to firm to track this information. Processors surveyed indicated that the spot market is important as 91% of processors used the spot market to purchase meat and 63% used it exclusively.

Meat processors face similar challenges because they buy from the same packers and sell to similar customers. In some cases, they indicated similar reasons for using only cash markets or

using AMAs. The priorities are different for each plant and the cost and benefit of AMAs are perceived differently by each plant and in relation to the cash market. The survey results suggest that meat processors have found a combination of cash markets and AMAs that meets their needs, and they expect little relative change in marketing methods during the next 3 years.

Figure 1: General Overview of Meat Product Flows.

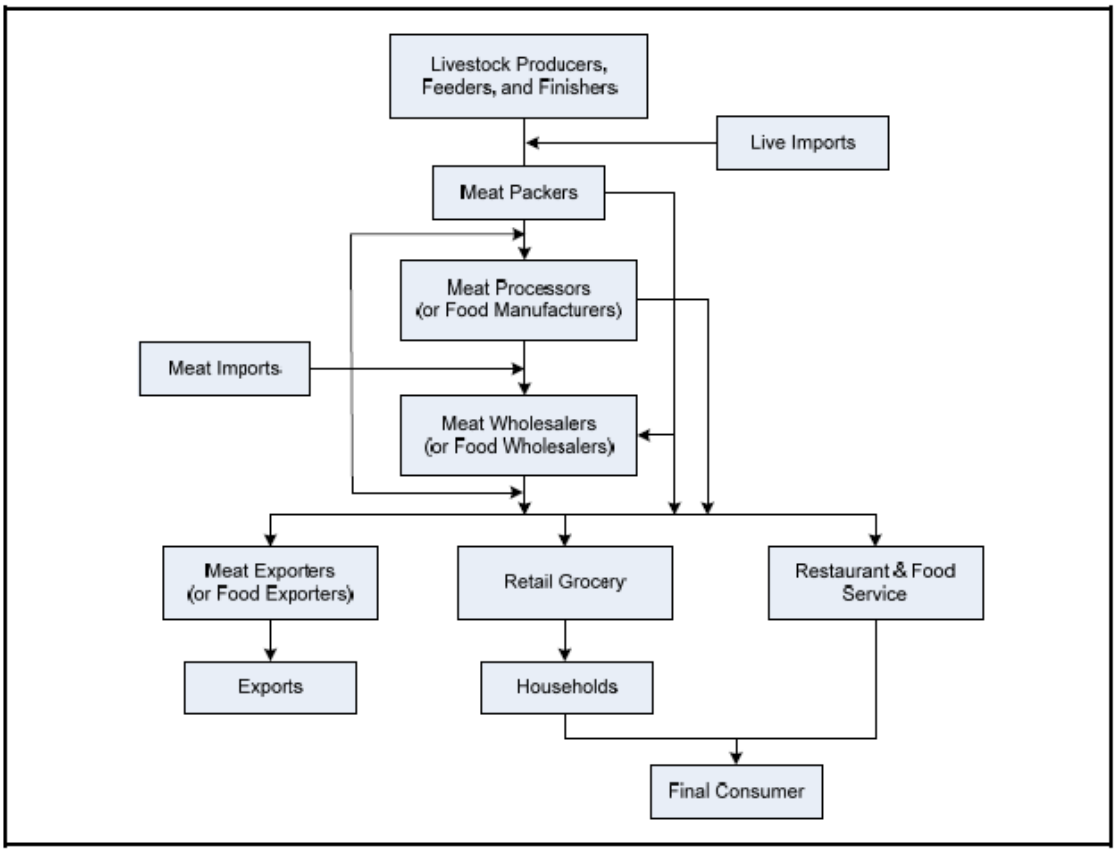

Table 1. Methods Used by Plants for Purchasing Meat Inputs

Purchase Method	% of Plants
Cash or spot market (less than 3 weeks forward)	90.7
Forward contract	19.5
Marketing agreement	13.3
Internal company transfer	13.6
Other	2.8
Establishments that only reported cash or spot market purchases	62.8

Note: Survey respondents could select more than one purchase method.

Table 2. Types of Pricing Methods Used by Plants for Purchasing Meat Inputs

Pricing Method	% of Plants
Price list	59.8
Individually negotiated pricing	61.3
Formula pricing (using another price as the base)	31.6
Sealed bid	1.8
Internal transfer	13.3
Other	0.0

Note: Survey respondents could select more than one pricing method.

Table 3. Top Five Reasons Processors Listed for Using Only the Cash Market or Using AMAs for Meat Purchases (%)

What are the three most important reasons why your plant uses only the cash or spot market for purchasing meat inputs?	
Allows for independence, complete control, and flexibility	50.7
Allows for adjusting operations quickly in response to changes in market conditions	47.8
Can purchase meat inputs at lower prices	46.4
Enhances ability to benefit from favorable market	33.3
Does not require managing complex and costly contracts	26.1
What are the three most important reasons why your plant uses alternative purchase methods for purchasing meat inputs?	
Can purchase meat inputs at lower prices	68.6
Reduces price variability for meat inputs	59.0
Improves efficiency of operations due to product	43.4
Improves week-to-week supply management	28.1
Secures higher quality meat inputs	23.3

Table 4. Top Ten Reasons Processors Listed for Using Only the Cash Market or Using AMAs for Meat Sales (%)

What are the three most important reasons why your plant only uses the cash or spot market for selling meat products?	
Allows for adjusting operations quickly in response to changes in market conditions	50.9
Allows for independence, complete control, and flexibility of own business	39.1
Reduces costs of activities for selling meat products	29.3
Does not require managing complex and costly contracts	29.3
Reduces risk exposure	27.6
Can sell meat products at higher prices	23.7
Does not require identifying and recruiting long-term contracting partners	21.5
Reduces price variability for meat products	19.6
Allows for sale of higher quality meat products	19.6
Enhances ability to benefit from favorable market conditions	17.6
What are the three most important reasons why your plant uses alternative sales methods for selling meat products?	
Reduces risk exposure	40.3
Allows for sale of higher quality meat products	31.2
Improves week-to-week production management	29.0
Reduces price variability for meat products	28.6
Can sell meat products at higher prices	27.7
Increases flexibility in responding to consumer demand	27.3
Reduces costs of activities for selling meat products	24.2
Secures a buyer for meat products	20.3
Increases supply chain information	19.5
Facilitates or increases market access	12.5

Table 5. What Was Your Company's Percentage of Total Dollar Purchases of Beef, Pork, and Lamb Products during the Past Year by Type of Supplier?

Meat Supplier Type	Meat Wholesalers	Meat Retailers	Food Service Operators
Packer	40.1	13.0	10.8
Further processor	8.9	1.6	4.5
Wholesaler or distributor	37.9	82.1	80.7
Dealer or broker	9.1	2.0	2.7
Importer	1.2	0.2	0.2
Other	2.8	1.0	1.2

Table 6. What Were the Three Most Important Reasons for Purchasing Meat Products from Your Chosen Suppliers during the Past Year? (%)

Reasons for Using Chosen Supplier	Meat Wholesalers	Meat Retailers	Food Service Operators
Offers portion cut product for repackaging	2.4	4.2	20.9
Has product traceability system in operation	9.3	7.6	8.3
Is in electronic procurement system	0.8	0.0	0.0
Provides product quality guarantees	33.3	46.3	47.9
Provides food safety guarantees	25.6	21.0	23.0
Has provided good quality product in the past	63.5	62.9	57.2
Offers lower prices for given product specs	32.2	26.8	24.1
Offers products from specific packers/processors	22.4	15.9	11.4
Offers case-ready product	3.2	6.0	8.3
Meets exact product specifications	16.8	9.3	17.9
Offers products with certifications	6.6	20.2	14.6
Offers products from U.S. sources	9.6	5.9	6.2
Is on approved list of suppliers	5.0	5.0	3.2
Meets delivery time requirements	22.4	18.5	19.7
Can meet all meat product needs	30.1	45.4	34.3
Other	6.6	0.8	0.0

Table 7. Which of the Following Terms Were Specified in Purchase Transactions for Meat Products Made by Your Company during the Past Year? (%)

Terms of Purchase Transactions	Meat Wholesalers	Meat Retailers	Food Service Operators
Retail price maintenance	8.3	34.2	N/A
Volume discounts	34.3	27.6	40.2
Maximum or minimum purchase quantities	36.1	28.3	27.4
Maximum or minimum pricing requirements	8.8	8.6	14.3
Delivery lead times	32.1	24.2	31.7
Product quality specifications	44.0	44.6	57.8
Information sharing	7.1	9.4	9.9
Slotting fees	1.0	1.8	N/A
Inventory management	8.6	6.0	14.2
Inventory cost control	6.0	6.8	15.3
Advertising requirements	4.1	11.3	4.4
Other	0.8	0.0	2.2
None of the above	32.5	24.7	17.3

Table 8. What Types of Pricing Methods Did Your Company Use during the Past Year for Purchasing Meat Products (% of total dollar purchases)?

Type of Pricing Method	Wholesaler Purchases	Wholesaler Sales	Retailer Purchases	Food Service Purchases
Flat pricing	55.6	63.4	53.2	47.6
Formula pricing	26.7	23.5	20.7	14.3
Or-better pricing	12.2	8.7	12.4	21.1
Floor and ceiling pricing	3.1	2.0	12.3	15.9
Other	2.3	2.4	1.4	1.1

Table 9. For Meat Products Purchased Under an Ongoing Arrangement (Oral or Written) during the Past Year, What Was the Length of the Arrangement? (%)

Length of Arrangement	Wholesaler Purchases	Wholesaler Sales	Retailer Purchases	Food Service Purchases
Less than 1 month	34.8	41.9	35.1	17.4
1 to 2 months	11.8	16.5	8.8	14.8
3 to 5 months	6.9	5.1	0.1	14.8
6 to 11 months	5.7	3.7	3.1	12
1 to 2 years	8.2	11.6	9.1	24.1
3 to 5 years	3	5.2	0	0.1
6 to 10 years	6.1	1.7	8.7	5.8
More than 10 years or evergreen	35.2	29.6	41.3	29.1

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