



LIVESTOCK & MEAT MARKETING ARRANGEMENTS

LM-6

November 2007

Authors:

John D. Lawrence,
Iowa State University

Mary K. Muth,
RTI International

Justin Taylor,
RTI International

Stephen R. Koontz,
Colorado State University

Downstream Meat Marketing Practices: Lessons Learned from the Livestock and Meat Marketing Study

Overview

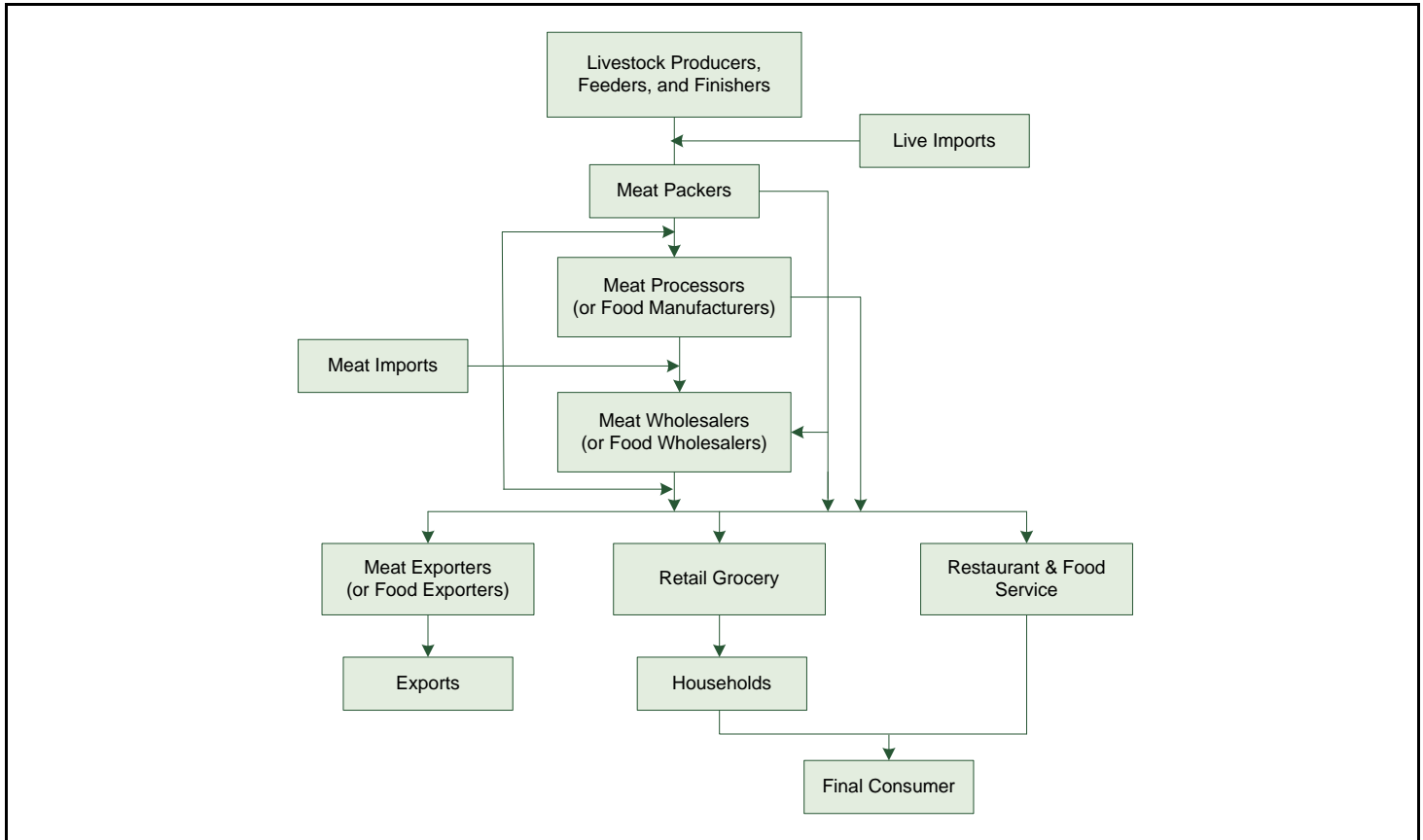
In 2003, Congress mandated a study of the effects of alternative marketing arrangements (AMAs) on livestock and meat markets. This paper summarizes the results of analyses on the distribution and sales of beef and pork products downstream from the packer from Volume 2 (Cates et al., 2007) and Volume 6 (Muth et al., 2007) of the GIPSA Livestock and Meat Marketing Study. The meat value chain is complex and includes several entities, as indicated in Figure 1. 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. Particular issues of interest included whether AMA use at the producer-packer level extends downstream to processors, wholesalers, retailers, and food service operators; why downstream businesses use various marketing arrangements; and whether particular marketing arrangements are used to reduce costs, are used to improve quality, or are required by other participants in the supply chain.

The surveys were designed to represent each segment of the downstream market and included responses from 125 meat processors, 108 food service operators, 136 retailers, and 142 wholesalers. The survey sample was randomly drawn from the Dun & Bradstreet database for each type of operation and was stratified based on company size as measured by annual sales. Survey weights were calculated based on the number of eligible business units and applied to the responses to extrapolate the results to the population of operations that purchase and distribute beef, pork, and lamb products.

Purchase methods for meat products included cash or spot market transactions and AMAs that refer to all possible alternatives to the cash or spot market, such as forward contracts, marketing agreements, and packer-owned livestock. Pricing methods refer to the methods in which prices are determined between buyers and sellers.



Figure 1. General Overview of Meat Product Flows



Meat Processors

Meat processing plants for this analysis are defined as companies that receive meat inputs and produce a variety of products, but they do not slaughter livestock. Most plants responding to the survey were small, independently owned businesses, and 40% had processed meat sales of less than \$1 million. Average sales for beef processing plants were \$15 million for beef products and \$5.5 million for pork products. Of the eight categories provided in the survey, the most common products produced were ground beef or pork and trimmings and processed ready-to-eat products.

The most common purchasing method used by processors was the cash or spot market. As indicated in Table 1, 91% of plants used the spot market for at least some purchases, and 63% used it exclusively. Forward contracting was used by nearly 20% of plants. While forward contracts for livestock are defined as those traded 2 or more weeks prior to delivery, forward contracts for meat products are defined as those traded 3 or more weeks prior to delivery. Finally, 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.

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.

The most frequently cited methods used to price meat purchases (Table 2) were individually negotiated pricing and use of price lists, 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 U.S. Department of Agriculture (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. Given the small sample size and restrictions on reporting to protect confidentiality, it is not feasible to report the use of contracts by type or size of operation.

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

Purchase 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 purchase method.

Processors who used only the cash market to purchase meat products and those that used AMAs were asked to identify the three most important reasons for their choice (Table 3). Those using only the cash market most often indicated reasons related to the respondent’s business philosophy and the ability to adjust to market conditions. 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. While AMA users were as concerned as cash market purchasers about price, if not more

concerned, AMA users also identified plant efficiency, supply management, and product quality as important reasons for using AMAs.

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

	%
What are the <u>three</u> most important reasons why your plant uses only the <i>cash or spot market</i> 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 <u>three</u> most important reasons why your plant uses <i>alternative purchase methods</i> 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 uniformity	43.4
Improves week-to-week supply management	28.1
Secures higher quality meat inputs	23.3

Processors were also surveyed regarding their meat product sales. They reported that 41% of sales were 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, but many also used AMAs. In general, they expect that cash market sales will still be the most frequently used method in 3 years. However, approximately one-fourth of plants still expect to use forward contracts and marketing agreements.

¹ Respondents could indicate multiple responses; thus, percentages sum to more than 100%.

The most frequently cited methods for pricing meat products sold by processors 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. 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 1 month in length. Delivery was scheduled for 3 days or less for one-half of meat sales.

Processors were asked to identify the three most important reasons for using either only the cash market or AMAs for meat sales (Table 4). As with purchases, cash market-only users cited flexibility and independence as the most important reasons, followed by reduces cost of selling products. The reasons for using AMAs are more diverse than the reasons for using only the cash market. These reasons focus on reducing risks, costs, and price variability but also emphasize quality and production management.

In summary, meat processors surveyed represent 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 was 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 3 years from now. Processors using cash markets exclusively for either meat purchases or meat sales identified operational independence and the flexibility to

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

	%
What are the <i>three</i> most important reasons why your plant only uses the <i>cash or spot market</i> 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 <i>three</i> most important reasons why your plant uses <i>alternative sales methods</i> 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

² Pricing terminology is as follows:

- 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

react to market conditions. These plants also believed they could achieve better prices with less risk exposure and that AMAs are costly to initiate and maintain. Although 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 for both purchases and sales focused on reducing operating costs and price risk and improving product quality and production efficiency.

Wholesaler, Retailer, and Food Service Companies

This section focuses on three downstream segments whose function shifts from meat production to distribution of meat products to consumers:

- **Meat wholesalers** purchase and sell meat products but conduct no processing activities at their establishments.
- **Meat retailers** include all type of establishments, such as grocery stores and meat markets, that purchase meat products and sell them to consumers with minimal or no additional cutting or processing.
- **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 on site or takeout consumption by consumers.

Most companies that responded to the survey were relatively small, as indicated by the following responses by segment:

- Meat wholesalers
 - Forty percent did not own a warehouse or distribution center, and 56% owned only one.
 - Annual gross sales of beef, pork, and lamb products totaled less than \$1 million annually for 38% of companies, \$1 to \$5 million annually for 30% of companies, and more than \$5 million annually for 31% of companies.
- Meat retailers
 - Eight-four percent of companies owned one retail establishment, and 12% owned two to nine establishments.

- About 80% of companies had total sales from fresh, frozen, and processed beef, pork, and lamb products of less than \$1 million annually.
- Food service operators
 - About 68% of companies owned one food service establishment, and 20% owned two to nine establishments.
 - Approximately one-third of companies had red meat sales of less than \$100,000 annually, another one-third had sales between \$100,000 and \$499,999 annually, and the remaining companies had sales of \$500,000 or more annually.

As indicated in Table 5, packers supplied 40% of red meat purchases to wholesalers, but wholesalers are a major meat supplier to retailers, food service operators, and even other wholesalers. However, although the vertical positions of wholesalers, retailers, and food service operators may overlap in the supply chain, the purchasing and pricing methods and motivations are similar.

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

Companies were asked to identify the three most important reasons for purchasing meat products from a chosen supplier (Table 6). The most cited reasons for all three segments have to do with product quality: “Has provided good quality product in the past” and “Provides product quality guarantees.” The ability to meet all of a

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

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

customer's product needs or at least the ability to procure a known quality is particularly important for retailers and food service operators. Wholesalers appear to be more price conscious than the other two groups. Food safety guarantees, participation in certification programs, and the ability to meet delivery time and product specifications are also important.

Downstream companies also identified the types of terms included in purchase agreements (Table 7). These terms most often included product quality specifications, delivery lead times, quantities, and volume discounts. Retailers also asked suppliers to comply with retail price maintenance agreements.

The most common type of pricing method used by these downstream companies was flat pricing (Table 8),

followed by formula pricing. For companies using formula pricing, many used a USDA publicly reported price or retail price as the base and the current or previous week's market as the timing for the base.

Wholesalers and retailers that purchased product on an ongoing basis tended to either have a short-term or long-term arrangement and few arrangements of an intermediate length (Table 9). Food service operators had more purchase arrangements between 2 months and 2 years in length. Regardless of the length of the purchase arrangement, the time between scheduling and delivery is generally less than a week and often 3 days or less (Table 10).

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

Terms of Purchase Transactions	Meat Wholesalers	Meat Retailers	Food Service Operators
Product quality specifications	44.0	44.6	57.8
Maximum or minimum purchase quantities	36.1	28.3	27.4
Volume discounts	34.3	27.6	40.2
Delivery lead times	32.1	24.2	31.7
Retail price maintenance	8.3	34.2	N/A
Maximum or minimum pricing requirements	8.8	8.6	14.3
Inventory management	8.6	6.0	14.2
Inventory cost control	6.0	6.8	15.3
Information sharing	7.1	9.4	9.9
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

Note: Survey respondents could select multiple responses.

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

Note: Survey respondents could select multiple pricing methods.

Summary

Analysis of surveys of downstream companies revealed a complex and diverse sector of the meat value chain. Those responding to the survey were smaller than average and were mostly single-establishment companies and, as a result, purchase more product from wholesalers than from packers. Several methods of

buying and selling and pricing products exist, but the cash market predominates.

Common themes arise from the surveys of the downstream companies surveyed in the beef and pork value chain. Quality and reputation of suppliers are important to these companies. The spot market is their predominant market, and flat pricing is the most

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

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

Note: Survey respondents could select multiple responses.

Table 10. For Meat Products Purchased during the Past Year, How Far in Advance of Delivery was the Delivery Scheduled? (% of Respondents)

Timing of Delivery Scheduling	Wholesaler Purchases	Wholesaler Sales	Retailer Purchases	Food Service Purchases
Less than 3 days	55.5	75.6	85.6	78.7
4 to 6 days	41.7	26.1	15.1	16.8
1 to 2 weeks	20.8	31.1	9.5	11.9
3 to 4 weeks	6.0	9.4	6.8	0.1
More than 1 month	9.6	6.2	1.8	0.0

Note: Survey respondents could select multiple responses.

common pricing method. Larger companies are more likely than small companies to use AMAs in each of the sectors. However, nearly 40% of the transactions data analyzed did not indicate a marketing method, suggesting that it is not important enough for some companies to track this information. 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.

A surprising lack of formal coordination appears to occur between firms in the supply chain. However, firms have repeated contacts through the cash markets. Although some arrangements appear to be fairly complex, most arrangements appear to be quite simple. However, larger

firms appear to be more coordinated in their marketing arrangements. Most arrangements appear to be primarily cost reducing, and the connection between quality and coordination through an AMA use is not as obvious based on survey and transactions data.

Finally, much like the producer and packer surveys, two business models appear to exist in the downstream meat industries. The first model, more common among smaller firms, is that of the independent entrepreneur who values flexibility and capitalizes on market opportunities. The second model, favored by larger firms, is that of coordinated team players in which firms create value by working with other members of the meat marketing system.

Acknowledgements

The study described in this fact sheet was conducted under U.S. Department of Agriculture, Grain Inspection, Packers and Stockyards Administration Contract 53-32KW-4-028. All views expressed are those of the authors and not of USDA. The authors thank the expert reviewers for their suggestions on an earlier draft (reviews coordinated by LMIC).

References

Cates, S.C., M.K. Muth, M.C. Coglaiti, M. Fahimi, J.W. Franklin, S.A. Karns, S. Koontz, K.M. Kosa, J. Lawrence, Y. Li, N.R. Paoli, R.J. Squires, J.L. Taylor, and C.L. Viator. "GIPSA Livestock and Meat Marketing Study, Volume 2. Data Collection Methods and Results." Prepared for the U.S. Department of Agriculture, Grain Inspection, Packers and Stockyard Administration, January 2007.

Muth, M.K., J. Lawrence, S.C. Cates, M.C. Coglaiti, J. Del Roccili, S.A. Karns, N.E. Piggott, J.L. Taylor, and C.L. Viator. "GIPSA Livestock and Meat Marketing Study, Volume 6. Meat Distribution and Sales." Prepared for the U.S. Department of Agriculture, Grain Inspection, Packers and Stockyards Administration, Washington, DC, January 2007.