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## Alternative Marketing Arrangements in the Lamb Industry: Definition, Use, and Motives

#### Overview

During the 2002 Farm Bill debate, several pieces of legislation were aimed at restricting livestock purchasing practices of packers. A specific concern focused on marketing arrangements that gave packers control over livestock more than 14 days prior to slaughter, commonly known as "captive supply." As a compromise, in 2003 Congress requested a study of alternative marketing arrangements (AMAs) that are used instead of the cash market. The resulting Grain Inspection, Packers and Stockyards Administration (GIPSA) Livestock and Meat Marketing Study was completed in early 2007 (Brester et al., 2007; Cates et al., 2007). Although concerns about the use of particular marketing arrangements for lambs are not often raised, the lamb industry was included in the scope of the study. However, most of the marketing arrangements common in the cattle and hog industries are also used in the lamb industry. This fact sheet is part of a series summarizing the Livestock and Meat Marketing Study research. It provides definitions of AMAs used in the lamb industry at the time of the study, describes the extent of AMA use, and discusses the reasons why buyers and sellers use the cash market or AMAs.

Lamb operations in the United States are experiencing unfavorable market conditions, such as declining breeding inventories, stagnant domestic lamb consumption, and increasing competition from imported lamb. To more effectively compete, some operations may turn to nontraditional marketing arrangements, such as use of contracts, to purchase and sell lambs.

# Cash Market vs. Alternative Marketing Arrangements (AMAs)

Cash or spot market transactions refer to transactions that occur at a current point in time (or "on the spot") as opposed to agreements for future delivery or pricing. These include auction barn sales; video or electronic auction sales; sales through order buyers, dealers, and brokers; and direct trades. The terms "cash market" and

"spot market" are often used interchangeably. AMAs refer to all possible alternatives to the cash or spot market. These AMAs primarily include forward contracts, marketing agreements, and packer ownership. Custom feeding and custom slaughter are also used by lamb operations and may or may not be used in conjunction with an AMA. Under custom feeding, lambs are either transferred under packer ownership or sold by a producer under one of the other types of marketing arrangements. Under custom slaughter, lambs are not sold until they are transformed into lamb products.

AMAs are also defined by lamb ownership, pricing method, and valuation method. Pricing method is further divided into formula pricing and internal transfer pricing methods if lambs are transferred between operations owned by a single company.

### Description of AMA Characteristics Used in the lamb Industry

AMAs are described by the ownership, pricing, and valuation methods used to buy or sell lambs. A brief summary is provided below; these methods are explained in more detail in Volume 5 of the final report for the Livestock and Meat Marketing Study.<sup>1</sup>

### Ownership Method

The ownership method in a marketing arrangement refers to who owns the animal at the time of the transaction. These methods include horizontal (such as feeder-feeder) and vertical (such as feeder-packer) supply chain relationships as well as sole ownership (producer or packer). The four categories of ownership method included in the study were

- sole ownership;
- joint venture—two or more businesses joining together under a contractual agreement for a specific venture such as use of specific animal genetics or brand names;
- shared ownership—the original owner and the new owner both retain partial ownership of the lambs (i.e., a vertical arrangement); and

 partner arrangement—an arrangement between two parties at the same level of production (i.e., a horizontal arrangement).

#### Purchase Method

The purchase method used in a marketing arrangement describes the nature of the transaction. The purchase method specifies whether any third parties were used to facilitate the transaction, whether the transaction is for single or multiple lots of lambs, and the timing of the transaction relative to delivery. The types of cash market purchase methods included in the study were

- auction barns,
- video/electronic auctions,
- dealers or brokers, and
- direct trade.

The types of AMA purchase methods (often referred to as "captive supply" arrangements) included in the study were

- forward contracts—the future purchase of a specified quantity of lambs through an oral or written agreement that was entered into at least 2 weeks prior to delivery;
- marketing agreement—purchases in which a packer agrees to purchase lambs through a long-term oral or written arrangement with specific terms;
- packer owned—the transfer of packer-owned lambs from either a custom feedlot or packer-owned or controlled feedlot;
- custom feeding—providing feeding services for a fee with lambs subsequently transferred under packer ownership or sold by a feeder through one of the other types of marketing arrangements; and
- custom slaughter—providing slaughter services for a fee with lamb products subsequently sold by the owner.

## Pricing Method

The pricing method used in a marketing arrangement specifies the means for determining prices. Some pricing methods can be used in combination with almost all purchase methods (cash market and AMAs). The pricing methods included in the study were

 public auction pricing—prices are determined by auction bids;

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<sup>&</sup>lt;sup>1</sup>The lamb and lamb meat volume of the GIPSA Livestock and Meat Marketing Study can be accessed at http://archive.gipsa.usda.gov/psp/issues/livemarketstudy/LMMS Vo

- individually negotiated pricing—prices are negotiated between a buyer and seller (excluding negotiated formula pricing);
- formula pricing—using another price as the base for the sale of lambs; formula can include grid or nongrid values. Formula bases used in the lamb industry include
  - individual or multiple plant average price or cost of production,
  - USDA live or dressed quote or boxed lamb price,
  - retail price,
  - subscription service price (for example, Urner Barry), and
  - other market price; and
- internal transfer pricing— prices that are used to account for the value of packer-owned lambs transferred from a feedlot to the slaughter plant. The source of the transfer price may be the price paid for the lambs, the reported market price, or a measure of internal production cost (with or without a profit margin).

#### Valuation Method

The valuation method used in a marketing arrangement specifies how the transaction price was applied to lambs. Valuation methods may indicate average or individual animal pricing, and carcass characteristics considerations. These valuation methods can be used in combination with almost all purchase methods (cash market and AMAs). The valuation methods included in the study were

- per head;
- liveweight purchase; and
- carcass weight purchase:
  - with grid premiums and discounts associated with the quality of the lambs in the lot, or
  - without grid premiums and discounts.

#### Lamb Producers' Use of AMAS

As part of the Livestock and Meat Marketing Study, mail surveys were conducted of lamb producers and feeders and lamb packers. The findings in this section are based on weighted responses from 302 lamb producers and feeders.

The data collection methods for the study are described in more detail in Volume 2 of the final report.<sup>2</sup>

Most lambs are solely owned by individual producers. Eighty-five percent of operations sold all their lambs through cash market transactions during the past year.<sup>3</sup> Producers sold the majority of their lambs through auction barns and direct trade (Figure 1). Producers identified an average of four auctions operating within a 200-mile radius of their location, which has essentially remained unchanged over the past 3 years. The majority of the auctions closest to these operations have sales at least weekly. About 15% of lambs were sold or shipped through some type of AMA. Disaggregating by AMA method shows that 4% of lambs were sold using forward contracts, 3% using marketing agreements, and less than 1% using packer fed/owned or internal transfer. One percent of lambs were custom fed and 5% were custom slaughtered.

Individually negotiated pricing and auctions were the most common methods used to determine sales prices for lambs (Figure 2). Less than 10% of producers used formula pricing for at least some of their sales. Producers using a formula to price lambs used the average price paid by packing plants, USDA reported prices, and retail prices as the base of the formula. The most common method of valuing lambs was on a liveweight basis (75% of producers) (Figure 3).

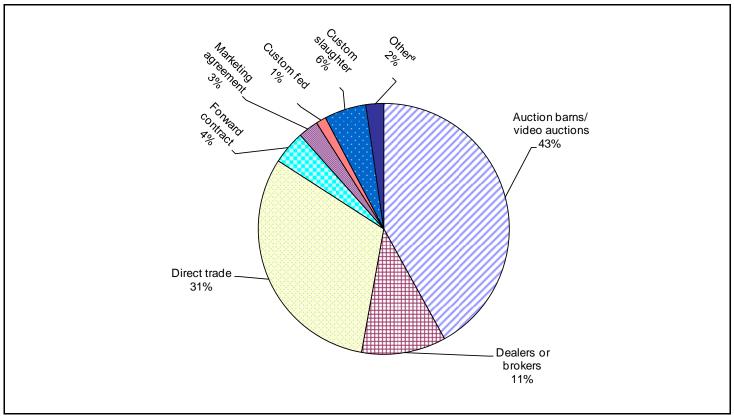
## Regional and Size Differences in the Use of AMAS

Although the survey was national in scope, we also considered regional and size differences. We analyzed use of sales methods, pricing methods, and valuation methods by geographic location, comparing Eastern versus Western states. Western states include Alaska, Arkansas, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Louisiana, Minnesota, Missouri, Montana, North Dakota, Nebraska,

Volume 2 of the final report can be accessed at: http://archive.gipsa.usda.gov/psp/issues/livemarketstudy/LMMS\_Vo 1\_2.pdf.

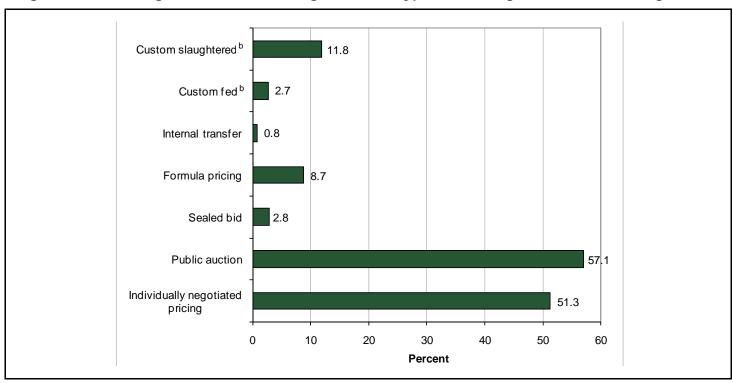
The data collected in this study are not comparable to Mandatory Price Reporting (MPR) data that were collected by USDA's Agricultural Marketing Service (AMS) under the Livestock Mandatory Reporting Act of 1999. MPR data only include data from lamb packers who annually process more than 75,000 head of lamb (i.e., the six largest lamb packers), which are more likely to use AMAs compared with the smaller operations sampled in this study. Further, the level of detail collected and the aggregation of data differ between the two sets of data.

Figure 1. Percentage of Lambs Sold by Producers, by Purchase Method



<sup>&</sup>lt;sup>a</sup> Includes packer fed/owned and internal transfer.

Figure 2. Percentage of Producers Using Different Types of Pricing Methods for Selling Lambs<sup>a</sup>



<sup>&</sup>lt;sup>a</sup> Respondents could select multiple methods used.

<sup>&</sup>lt;sup>b</sup> Payment provided for feeding or slaughter services only.

74.7

80

Lambsa Carcass weight. 7.5 with grid Carcass weight, 14.3 without grid

23.9

40

Percent

20

Figure 3. Percentage of Producers Using Different Types of Valuation Methods for Selling

New Mexico, Nevada, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming. All other states were classified as Eastern states. We also considered differences by size of operation. We defined large operations as those with annual revenue greater than \$200,000 and small operations as those with annual revenue less than or equal to \$200,000. For each transaction characteristic (sales, pricing, and valuation methods), we discuss regional and size differences below.

Liveweight

Per head

0

Both Eastern and Western operations primarily used the cash market to sell lambs, with 80% and 76% using only the cash market, respectively. However, the types of cash methods used differed by region. For Eastern operations, one-half of their lambs were sold using public auctions and one-fourth using direct trade. For Western operations, onethird of their lambs were sold using public auctions and approximately one-third using direct trade. The lower reliance on auction barn sales in the West is likely because these operations have larger flocks, which are easier to sell in larger groups through direct trade rather than in small lots at auctions.

Multiple pricing methods were used by both Eastern and Western U.S. operations in the past year. Corresponding to the higher use of auctions in the East, public auction bids dominate the way Eastern U.S. operations price their

lambs, with 72% using this method for at least some of their sales. In contrast, 47% of Western U.S. operations used public auction bids to price their lambs. In both regions, about one-half of operations used individually negotiated pricing for at least some of their sales (55% of Western operations and 46% of Eastern operations). Formula pricing was slightly more prevalent in the West.

60

In comparing valuation methods among regions, Western operations used carcass weight valuation (with and without a grid) more frequently than Eastern operations (32% and 11% of operations, respectively). Nearly twice as many Eastern operations (31%) used per-head valuation compared with Western operations (17%) in the past year.

Comparing transactions by size of operation, small operations rely more heavily on the cash market (87% of lambs sold) compared with large operations (44% of lambs sold). Nearly 81% of small operations and 36% of large operations sold all their lambs through cash market transactions during the past year. To price lambs, small operations (60% of producers) were more likely than large operations (15%) to use public auction bids, whereas large operations were more likely to use individual negotiations for pricing (61%), followed by formula pricing (21%). Small operations most often used liveweight and per-head valuation methods (76% and 25% of operations,

<sup>&</sup>lt;sup>a</sup> Respondents could select multiple methods used.

respectively), while large operations most often used liveweight and carcass weight (without a grid) (53% of operations for both).<sup>4</sup>

## Motivations for Choice of Marketing Method

Lamb producers have a number of reasons for their choice of sales method. This section presents these reasons based on industry survey data from 302 lamb producers.

Producers **who use AMAs** were asked to indicate the three most important reasons for choosing to use an alternative to cash markets. Table 1 shows the list of reasons why producers use AMAs. The top responses by producers were that AMAs provided higher prices, 66.5%; better market access, 46.0%; and less risk 41.4%. Other reasons commonly cited were the ability to sell higher quality animals and the reduction in price variability. Large operations were more concerned about reducing risk, while small operations were more interested in selling at higher prices.

Table 1. Reasons Producers Sell Lambs Using AMAs<sup>a</sup>

	%
Can sell lambs at higher prices	66.5
Secures a buyer for lambs	46.0
Reduces risk exposure	41.4
Allows for sale of higher quality lambs	37.0
Reduces price variability for lambs	19.3
Reduces costs of activities for selling lambs	16.5
Facilitates or increases market access	10.2
Increases flexibility in responding to consumer demand	9.1
Allows for product branding in retail sales	8.6
Provides detailed carcass data	6.2

<sup>&</sup>lt;sup>a</sup>Respondents were asked to select the three most important reasons.

Producers that used **only spot market** transactions were asked to identify the three most important reasons for using the spot market. Table 2 presents the results of their

responses. The most frequently cited reason emphasized the business philosophy of the manager. More than 60% of the respondents felt that sales through the cash market allow for independence, complete control, and flexibility of the business. Over 40% of operations use the spot market to sell lambs at higher prices, and one-third believe that the spot market reduces their costs of selling and allows them to benefit when market prices are high. Interestingly, operations using only the cash market and those using AMAs both identified selling lambs at higher prices as a reason for using each method, which may indicate that operations choose the optimal marketing method based on their own local market conditions.

Table 1. Reasons Producers Sell Lambs Using AMAs<sup>a</sup>

	%
Allows for independence, complete control, and flexibility of own business	60.7
Can sell lambs at higher prices	44.3
Reduces costs of activities for selling lambs	33.3
Enhances ability to benefit from favorable market conditions	32.7
Does not require identifying and recruiting long-term contracting partners	16.5
Does not require managing complex and costly contracts	16.3
Allows for adjusting operations quickly in response to changes in market conditions	15.9
Reduces risk exposure	15.1
Allows for sale of higher quality lambs	13.5
Facilitates or increases market access	11.1
Reduces price variability for lambs	7.7
Reduces potential liability and litigation concerns	5.8

<sup>&</sup>lt;sup>a</sup>Respondents were asked to select the three most important reasons.

#### Conclusions

Most lambs sold in the United States are sold using cash marketing methods. However, AMAs are a growing segment of lamb producers' selling practices and lamb packers' procurement practices. There are size and regional

<sup>&</sup>lt;sup>4</sup> Respondents could select multiple responses.

differences in the observed patterns of use of AMAs: a stronger reliance on cash/spot markets is apparent among smaller operations and a stronger reliance on AMAs is apparent among larger operations. With larger operations located in the West, it is not surprising that producers in the West use AMAs more than producers in the East.

Using bids from public auctions and individually negotiated pricing are the two most common methods of pricing lambs. Small operations prefer public auctions to price their lambs, while large operations prefer to use individually negotiated pricing. The majority of lambs are valued on a liveweight basis.

Lamb operations have a variety of economic incentives associated with using the cash market and AMAs. The operations that use AMAs do so for improved prices, buyer security, and risk reduction. Despite the advantages that some operations find in using AMAs, others still prefer to use the cash market. These operations value cash markets for the independence, flexibility, and profitable opportunities that they provide.

The Livestock and Meat Marketing Study also examined price differences across marketing arrangements and the effects of the use of AMAs on cash market prices; the costs and benefits of AMAs, particularly as they relate to quality, costs of production, and risk; and the effect of possible restrictions on the use of AMAs. Additional fact sheets in this series describe the results of these analyses.

### Acknowledgements

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#### References

Brester, G., M.K. Muth, J. Atwood, J. Marsh, K. McNew, S.C. Cates, M. Coglaiti, S.A. Karns, J. Taylor, and C. Viator. January 2007. Volume 5: Lamb and Lamb Meat Industries. GIPSA Livestock and Meat Marketing Study. Final report prepared for Grain Inspection, Packers and Stockyard Administration, U.S. Department of Agriculture. Research Triangle Park, NC: RTI International.

Cates, S.C., M.K. Muth, M. Coglaiti, M. Fahimi, J. Franklin, S.A. Karns, S. Koontz, K. Kosa, J. Lawrence, Y. Li, N. Paoli, R. Squires, J. Taylor, and C. Viator. January 2007. Volume 2: Data Collection Methods and Results. GIPSA Livestock and Meat Marketing Study. Final report prepared for Grain Inspection, Packers and Stockyard Administration, U.S. Department of Agriculture. Research Triangle Park, NC: RTI International.