



Beef Industry Alliances and Vertical Arrangements

Clement E. Ward

Oklahoma State University

Strategic alliances and various types of vertical arrangements have been controversial topics in the beef industry. Some believe these arrangements are the beef industry's answer to a long-term decline in beef demand, unclear price signals, and lack of adequate profitability. Some industry participants are looking at alliances as *the* quick solution for increased returns and higher prices. Others believe alliances contribute further to industry problems, especially captive supplies. This fact sheet discusses some of the motivations and characteristics for these arrangements and explains their growth and development.

Strategic Alliances and Vertical Coordination

Vertical coordination encompasses many broad and varied methods of harmonizing or synchronizing farm-level supplies with retail-level demand. Vertical coordination via market prices is one extreme on a continuum of vertical coordination methods, while vertical integration is the other extreme. Between the two extremes are numerous vertical cooperation arrangements, including various types of contracts, joint ventures, cooperatives, partnerships, and alliances.

Vertical cooperation is defined as the relationship between individual firms or organizations in two or more adjacent stages of the production-marketing channel without full ownership or control by individual firms (den Ouden et al.). This broad but useful definition seems applicable to vertical arrangements in the beef industry. In essence, vertical cooperation participants maintain their independence but share information to effectively price products and improve the flow of products and information among the vertical production-marketing stages. This definition generally describes many of the alliances and vertical arrangements in the beef industry, though some organizations do not classify themselves as a strategic alliance. They might use cooperative, partnership, program, or another term to describe their organizational structure and operation. The term "strategic alliance" is used here in a broad sense to encompass many types of vertical arrangements.

Motivation for Strategic Alliances

The vertical production-marketing channel for beef from seedstock producers to consumers is segmented and complex, with numerous product ownership exchanges. This segmentation potentially creates impediments to the efficient

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flow of information up and down the production-marketing channel.

Alliances reduce segmentation by closely linking stages in the vertical production-marketing channel. Participants work jointly for mutual benefits. One reason for creating alliances is to share information among participants that may or may not be exchanged in cash market transactions. With better information, producers, who find themselves situated at one end of the vertical value chain, can more accurately respond to consumer demand at the other end of the vertical chain. By sharing information about products and markets, in addition to market prices, information flow should be more efficient, and alliance participants respond more quickly and correctly to clear market signals.

Alliances are helping the beef industry move towards value-based pricing. This involves improving the price signaling function between stages in the vertical production-marketing channel. Overall, alliances are attempting to reduce the amount of adversarial tension between vertical stages in the marketing channel, thus increasing understanding and cooperation in the beef industry.

Growth and Dynamics of Alliances

Twenty-seven alliance organizations provided information on selected characteristics which were requested by researchers at Oklahoma State University (OSU) (Ward and Estrada). The list of alliances was compiled from industry organizations and trade publications. *Beef* magazine reported in 2000, selected characteristics for thirty-one consumer-based alliances or programs as part of their "Alliances 2000: The Yellow Pages" section. Ten alliances in the OSU study were not part of the *Beef* list, and fifteen alliances in the *Beef* list were not part of the OSU study. This provides anecdotal evidence to support the notion that alliances and vertical arrangements are still changing and evolving. Some may no longer exist or have changed, and new ones have been created and replaced others.

Of the alliances included in the Beef listing, thirteen began between 1996-2000 and another eleven began between 1991-1995. The remaining seven began over the preceding fifteen years (1976-1990). Again, this provides evidence of the increased interest and growth in beef industry alliances in recent years.

Characteristics of Alliances and Vertical Arrangements

The OSU study compiled information from participating alliances during 1998-99 on nine characteristics. The nine characteristics, grouped under four broader categories, are as follows.

- Organizational characteristics – stated objectives; stages of cooperation; commitment
- Input requirements – breed specifications; source verification; management practices
- Marketing programs – branded beef programs; pricing method
- Information exchange – carcass data

Information from the *Beef* magazine survey provides somewhat of an update for 2000 regarding some overlapping characteristics. The following includes a brief rationale for the characteristics in the OSU study and a general summary of findings for each characteristic.

Organizational Characteristics: Stated Objectives

The objectives for a successful strategic alliance must be beneficial to both participants. Thus, specific and clear wording of objectives can enable producers to match their goals with the goals of the alliance. It was believed that an organization with a long-term focus would contribute more to vertical coordination than one with a short-term focus, because organizations with a long-term focus are more likely to change and adjust over time. Also, long-term goals demonstrate to a producer that the alliance has interest in improving the industry and benefiting all partners involved, not just the organization itself.

Objectives in over half of the alliances mentioned a customer focus, improved communication between stages, the exchange of information, value-based marketing, beef industry improvement, or product enhancement. The remaining alliances had objectives that did not specify a customer focus or mention improved communications. Objectives may have only mentioned the exchange of data, a focus on one or two production stages, breed improvement, or increased revenue.

Organizational Characteristics: Stages of Coordination

One basic presumption was that the greater the number of production-marketing stages included in an alliance, the more valuable would be the information shared among the participants. It was thought that information would flow more efficiently through the vertical channel because the adversarial relationships between each stage would be dissolved through mutual agreement and understanding. The stages of the production-marketing chain used for this study included: (1) seedstock or cow/calf producer, (2) feeder or feedyard, (3) packer, and (4) retailer/food service distributor.

Over three-fourths of the alliances spanned three or four stages of the production-marketing process. Thus, while some alliances were primarily concerned with the seedstock or cow/calf producer, most encompassed the entire production chain, including retail and/or food service.

Organizational Characteristics: Commitment

Commitment was believed to be important because it contributes to the stability and longevity of the alliance. Parties in a strategic alliance must invest significant time and commitment to build and maintain beneficial relationships. Stability and longevity are necessary for strategic alliances to be successful. For example, if producers are willing to become certified or licensed, they likely have a greater incentive to ensure the alliance is successful. The same holds true if producers must make capital investments or are willing to be subject to non-performance penalties. The level of commitment was derived from: (1) formality of arrangements, (2) quantity commitment, and (3) capital requirements for participation.

Formality was seen as a continuum. On one end was an informal arrangement, essentially a verbal agreement. On the other end was a very formal arrangement, such as licensing agreements or some form of certification. Included in the middle group were written membership and participation agreements.

Quantity commitment was considered to be important in three ways. First, if an alliance is linked with a processing outlet, volume may be important to reduce costs. Second, if an alliance is targeting a specific branded meat program, quantity commitments allow enhanced control over the supply of the product. Lastly, producers willing to make a quantity commitment to one outlet have an increased interest in the success of that outlet.

The analysis of capital requirements was based on monetary requirements for participation. Most alliances require some fee for producers to receive information about the cattle marketed. The fees in this category consisted only of payments made either to be a member or participate in the alliance. The greater the capital requirement, the greater the incentive for producers to help the alliance be successful.

About one-third of the alliances had various forms of licensing agreements, non-participation penalties, exclusive participation statements, certification requirements, and/or required investment/membership fees. The remainder had oral or written membership or participation agreements with small or no membership fees.

The *Beef* article provided some additional information on commitment. Of the alliance programs that indicated how much it cost to participate, two-thirds charged either no participation fee or less than \$5/head. Charges for the remainder ranged from \$6-12/head. Smaller and larger producers can participate in many alliances. Nearly half of the alliance programs required only 1 head to participate. At the other extreme, one-fourth of the alliance programs required load lots or more to participate.

Input Requirements: Breed Specifications

Identifying many of the desirable performance traits and predicting the interaction among traits in commercial cattle operations is difficult. Some argue that a broad genetic base combined with inadequate knowledge of genetic outcomes has contributed to inconsistency in fresh beef products. Thus, breed specification was thought to be potentially important

because it represents one step towards attempting to reduce end-product variability. But the correlation between reduced breed variability and improved consistency is not known. Breed specification also helped establish mutual interest among alliance participants. Cattlemen who produce cattle of the same breed have a mutual interest in the success of the alliance.

Over half the alliances identified a specific breed or breed group in the OSU study, while the remainder had little or no breed specification. Required genetics were required in three-fourths of the alliance programs in the *Beef* article, whereas about one-fourth of the alliance programs required no specific genetics.

Input Requirements: Source Verification

There is increasing interest and importance for identifying animals from conception to consumption. Source verification can increase the amount of information being exchanged in the alliance. It may also be a means of marketing identity-preserved beef products and providing food safety assurances for consumers.

In the OSU study, just over half the alliances had some type of requirement for source verification, though the degree of information required varied considerably. Source verification was required in just under two-thirds of *Beef*'s list of alliance programs. Similarly, just under two-thirds of the programs required the capability of using some type of electronic identification for the cattle.

Input Requirements: Management Practices

Producers are expected to have an advantage in production, and retail/food service marketers in understanding consumers. Sharing information means improving management practices to produce animals that more accurately and consistently meet consumers' demands. Improved management should be beneficial for all alliance participants. Specified management practices *may* reduce variability in production outputs. There appears to be evidence of that in the poultry industry where genetics and management are tightly controlled by the integrators. Certainly another motivation involves food safety. It is not certain how important production control is in the beef industry. Adhering to specified management practices may demonstrate a higher degree of commitment because producers are required to place alliance objectives ahead of their personal objectives.

A few alliances in the OSU study required specific products and practices, such as vaccination programs, feeding regimes, particular feedlots and packers, quality assurance programs, growth promotant programs, and antibiotic restrictions. With a few exceptions, alliances were about evenly divided between those with optional or general management practices and those without specified management practices. One-fourth of the alliances in the *Beef* list required no specific management practices. About 40% had requirements relating to weaning and/or preconditioning. One-fourth placed restrictions on use of antibiotics and growth promotants, since they were natural beef programs.

Marketing Programs: Branded Beef Programs

The beef industry has learned that there are several consumer markets for beef products. Some require tight control over quality. A branded beef program serves both as a goal and a direct link to consumer preferences. The value of the information producers receive is arguably higher and the probability of being able to make changes to meet consumer demands for specific target markets is increased.

Over three-fourths of the alliances in the OSU study either targeted a single retail brand or packer brand program or more than one branded beef program. Only a few alliances had no direct link with any branded beef program. Information in the *Beef* magazine update corresponded with the OSU findings. There, too, just over three-fourth of alliances were tied to a branded beef program. Thus, alliances appear to be providing a closer coordination linkage between producers and consumers.

Marketing Programs: Pricing Method

Prices send production signals to producers from buyers. In recent years, there has been increased interest and use of grid pricing systems in the beef industry. Grid pricing enables pricing fed cattle on individual carcass merit, thereby improving pricing accuracy (Ward, Feuz, and Schroeder). Each grid (or matrix) consists of a set of premiums and discounts for quality attributes relative to a base or standard set of quality attributes. Premium-discount grids enable rewarding better quality cattle and penalizing poorer quality cattle. Premiums and discounts are stated relative to some base price.

Nearly all alliances in the OSU study utilized grid pricing. However, both the base price used and the premium-discount schedules differed across alliance programs. Base prices may be plant average prices (costs) for cattle purchased by the slaughter plant for the week prior to or the week of slaughter. Base prices also may be tied to cash market reports, such as the highest reported price for a specified geographic market for the week prior to or week of slaughter. Over three-fourth of the alliances either used a formula base price tied to an average live or dressed weight price, plant average, or other reported price, or used another type of base price or pricing method. Base prices tied to plant average prices have several potential problems (Ward, Feuz, and Schroeder). They do not contribute to price discovery, change across plants as the quality of cattle slaughtered changes, and may not be representative of the cattle being marketed with grids.

Alternative base price methods can alleviate some of the concerns with base prices tied to plant averages and cash market prices. Other base prices can be negotiated dressed weight prices or formula prices tied to the wholesale beef or futures markets. Formula prices tied to wholesale boxed beef cutout values link fed cattle prices to wholesale prices that packers have an economic incentive to increase. Formula prices tied to futures market prices link the cash market to another arena for price discovery.

The *Beef* survey asked what type of grid the alliance program used. Some grids favor high quality grade carcasses; some, high yielding carcasses; and some both quality and yield grade. Nearly two-thirds of the alliances said they used

grids that target both high quality and high yield grades. The remainder were split nearly equally between those targeting high quality grades or high yield grades.

Information Exchange: Carcass Data

One key to increased vertical coordination is sharing information among alliance participants. Information differs from data. Data are raw numbers, and information is generated after the data are analyzed and interpreted. Thus, accumulating numbers alone, such as kill sheet or carcass data, will not necessarily help producers or the industry. Rather, the entire production-marketing chain should understand what the carcass data mean, so appropriate production-marketing changes can be made. Alliances that help producers interpret data are sharing information, not just providing access to data.

According to information obtained in the OSU study, essentially all alliances provided some assistance in interpreting carcass data. However, the extent of assistance and interpretation seemed to vary widely though no measure of the variation was possible.

One of the most significant benefits of alliances and formal vertical arrangements is using information not generally available to improve decision-making. Those decisions begin with genetic selection and breeding programs, continue to cowherd and calf management programs, stocker management, feeding management, and fed cattle marketing decisions. They extend further to include beef and byproducts processing and wholesale, retail marketing, and merchandising. While there are independent stages from seedstock production to retail and food service distribution, the transmission of key information and finding ways to work together are critical to the success of the entire chain (Tronstad and Unterschultz).

Evidence of Economic Benefits

The *Beef* survey asked participating alliance programs to indicate participants' returns in terms of the premium received. For the sixteen that responded, average premiums were \$34/

head and ranged from about \$10 to \$65/head. Six reported premiums less than \$20/head; four reported \$21-40/head; four reported \$41-60/head; and two, more than \$60/head. Given participation costs discussed above, average net premiums were about \$30/head. Thus, the economic advantages to participate in alliance programs appear to be substantial.

Conclusions

Alliances appear to be moving the beef industry in the direction of improved vertical coordination. There are several alliance organizations and programs with considerable differences among them. Producers interested in joining an alliance have several alternatives. Some are likely to match their objectives and their production system more effectively than others. Some may require more commitment and more changes than others. Alliances and vertical arrangements are dynamic; some will flourish and grow, others will struggle and ultimately disband.

References

- "Alliances 2000: The Yellow Pages." *Beef*. August 2000.
- den Ouden, M., A. A. Dijkhuizen, R. B. M. Huirne, and P. J. P. Zuubier. "Vertical Cooperation in Agricultural Production – Marketing Chains, with Special Reference to Product Differentiation in Pork." *Agribusiness*. 12(1996):6 453-63.
- Tronstad, R. and J. Unterschultz. "Looking Beyond Value Based Pricing of Beef." Department of Agricultural and Resource Economics, University of Arizona.
- Ward, C.E., and T.L. Estrada. "Vertical Coordination and Beef Industry Alliances." *Visions*. 72(1999):2 16-21.
- Ward, C.E., D.M. Feuz, and T.C. Schroeder. *Formula Pricing and Grid Pricing Fed Cattle: Implications for Price Discovery and Variability*. Research Institute on Livestock Pricing, Research Bulletin 1-99, Virginia Tech, Blacksburg, VA, January 1999.