



Cases in Strategic-Systems Auditing



U.S. Premium Beef

Strategic Alliances in Agribusiness

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This case was developed under a grant from the KPMG/University of Illinois Business Measurement Case Development & Research Program. Cases developed under this program and other program information can be obtained from the Web site <http://www.cba.uiuc.edu/kpmg-uiuc/>.

Introduction

During the past several decades, agribusiness has seen dramatic changes due to regulation, industrialization in the agricultural sector, population growth, changes in consumer preferences, developments in biotechnology, and health concerns. The influence of these factors is pervasive. Particularly impacted is the beef industry sector of the retail meat market, which consists of red meat- beef, pork, lamb, and veal products- and poultry.

Beef production is the single largest segment of U.S. agriculture with cattle representing about 18 percent of total farm sales.¹ Per capita U.S. beef consumption in 1998 was 64.4 pounds (boneless weight), which was 56 percent of total red meat consumption.² The beef industry, however, has experienced a sharp decline in market share compared to the pork and poultry sectors. In 1975, beef accounted for roughly 48 percent of meat products consumption but by 1997 that share had fallen to 32 percent. The primary reason for this decline is the abundance of suppliers and the stand-alone nature of each step in the process of bringing beef to the retail market. The U.S. cattle industry is made up of more than 1 million individual cattle producers who market 35 million head of cattle per year for beef products. Feedlot operations are numerous with 700 major feedlot companies having 21,000 locations that market cattle to any one of 64 major beef-packing operations. Each year about 25 billion pounds of beef are processed.³ This structure has made it difficult for the beef sector to address the risks threatening the industry.

U.S. Premium Beef, Ltd., a producer-owned beef marketing company and a cooperative⁴ responded to the challenge of changing consumer preferences and the lack of coordination in bringing beef to market by creating a strategic alliance with Farmland National Beef L.P. through an equity investment. Farmland National Beef L.P. is the fourth largest beef processor in the United States and majority-owned by Farmland Industries, Inc. In general, strategic business risks and rewards relating to alliances are multifaceted and variable for each alliance partner. In particular, these initiatives as well as the complexity inherent in the cooperative form of business bring an intricate and unique perspective to the financial reporting and external audit of the above-mentioned respective entities.

¹ *National Cattlemen's Beef Association Cattle and Beef Handbook* (revised 6-99).

² U.S. Department of Agriculture, *Red Meat Yearbook*.

³ *Factsheet* – July 2000 – http://www.beef.org/library/factsheets/fs_supply_chain.htm.

⁴ A cooperative is an organization that is owned and controlled by the people who use its products, supplies, or services.

Agribusiness Industry

Since the introduction of the Freedom to Farm Act in 1996, the complexion of agribusiness in the United States has rapidly evolved. There is a growing trend for agribusiness firms to organize as closed-membership cooperatives designed to operate in the highly competitive and fragmented global agribusiness industry. Agribusiness is the largest and one of the most concentrated segments of the U.S. economy, responsible for 2.5 percent of the Gross Domestic Product (GDP) but employing only 1.6 percent of the U.S. population.⁵ This industry's unsurpassed level of productivity allows it to feed Americans, as well as 70 million persons abroad. Consequently, as a percentage of disposable income, food cost in the United States is the lowest in the industrialized world.

The agribusiness industry consists of various individual producers, cooperatives, and corporations (public and private) engaged in growing, processing, and merchandising various raw agricultural commodities (i.e., grains and other planted commodities or livestock). Livestock is sold to meatpackers and poultry processors for slaughtering and then sold to late-stage processors for further processing. Also included in this category are dairies, who process milk and related products. Entities involved in this sector include ConAgra Inc., Hormel Foods Corp., IBP Inc., and Tyson Foods Inc.

Entities involved in the late stage of producing consumer food products generally are referred to as food manufacturers or food packagers. These entities sell their finished goods to food retailers, which, in turn, sell the products to consumers. Entities involved in this sector include H. J. Heinz Co. and Nabisco Holdings Corp. (See Figure 1.)

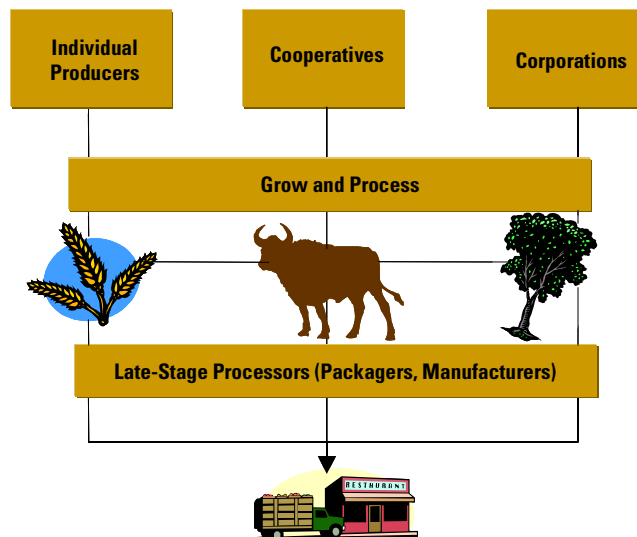


Figure 1: Agribusiness Industry

⁵ U.S. Department of Agriculture Economic Research Service — 1997 and U.S Census Figures — February 1999.

Agricultural Cooperatives

Cooperatives are present in virtually every sector of the economy. As defined in 1996 by the International Cooperative Alliance (ICA),⁶ “a cooperative is an autonomous association of individuals voluntarily united to meet their common economic, social, and cultural needs through a jointly owned and democratically controlled enterprise.”

As in other industries, agribusiness has seen growth in the number and size of cooperatives. Agricultural cooperatives are associations or organizations owned and operated by farmers or producers to process, market, or distribute their crops and livestock. Cooperatives have allowed farmers to share in the benefits of processing, wholesaling, and retailing a food item. They also help beef and pork producers achieve economies of scale, and gain market power through joint marketing, bargaining, processing, or purchasing supplies and services.

Structure of Cooperatives

In contrast with the common forms of profit-generating entities—sole proprietorships, partnerships, and corporations—a cooperative form of business provides goods and services to its members. Cooperatives are different from other organizations in their:

- ownership
- control
- distribution of benefits.

When cooperatives incorporate, the liability of members is similar to corporate shareholders, (i.e., limited to the amount of shareholder investment.) See Table 1 for a comparison of cooperatives with other types of business organizations.

⁶ A ICA’s mission statement contains the following definition: “The International Co-operative Alliance is an independent, non-governmental association that unites, represents and serves co-operatives worldwide. The ICA was founded in London in 1895. Its members are national and international co-operative organizations in all sectors of activity including agriculture, banking, energy, industry, insurance, fisheries, housing, tourism and consumer co-operatives. ICA has more than 230 member organizations from over 100 countries, representing more than 730 million individuals worldwide.”
<http://www.coop.org/ica/ica/ica-intro.html>.

Table 1
Comparison of Cooperatives and Other Types of Business Organizations⁷

Characteristic	Sole Proprietorship	Partnership	Corporation	Cooperative
Purpose	Profit for proprietor	Profit for partners	Profit for shareholders on investment of time or money	Benefits for the members (i.e., service, cost savings and/or profits)
Ownership	By sole proprietor	By partners	By shareholders	By members
Control	Controlled by sole proprietor	Controlled by partners, typically according to time or money invested	Based on the number of voting shares held per shareholder, directly or by proxy	One member, one vote; proxy voting limited
Distribution of Surplus Earnings	Income to the sole proprietor	Allocated among partners, typically according to time or money invested	To shareholders paid in proportion to investment	To members in proportion to use of service
Liability	Unlimited liability of sole proprietor	Unlimited liability of partners	Shareholders limited to share subscription; directors can be liable	Members limited to share subscription; directors can be liable

Benefits of Cooperatives

Cooperatives allow its members to reap many economic benefits including:

- economies of scale
- increased bargaining power
- consistency of product quality.

Simply stated, members of a cooperative benefit from economies of scale by buying in volume and spreading marketing costs among the group. Furthermore, by adopting a cooperative organization structure, large numbers of ranchers and farmers have the ability to coordinate horizontally (i.e., producers coordinate activities at the same stage of the production chain to lower costs, raise prices—or both—and extend their influence along the value chain to capture additional profits generated beyond the ranch or the farm).

With vertical coordination, which can take the form of vertical integration or contracting, a company merges or takes over other companies in the supply chain. In the case of vertical contracting, various companies own different stages of the supply chain but the activities of each company are linked by contract to successive steps in the process. With full vertical integration, a single company owns successive stages of the production chain, which is the case with U.S. Premium Beef.

⁷ *Agricultural Co-operatives, A Start-up Guide*, Section 1, pg. 2, reprinted with permission.

External Forces

The Center for Rural Affairs



... five corporations now control 89% of all beef processing and four corporations control 58% of all pork processing. In the last two years, 24% of all pork producers went out of business. Forty producers now control one-third of all hogs raised in the country. The problem isn't that smaller farmers aren't economically efficient. It's that industrialization leads to closed markets where prices are fixed not by open, competitive bidding, but by negotiated contracts, and where producers who don't produce in large volumes are discriminated against in price or other terms of trade. Under these market conditions, many smaller farmers who don't participate in vertical integration are forced out of business because they have no place to sell their product in a timely manner at a fair price ...

Source: <http://www.cfra.org/>

External forces, such as, industrialization, population growth, trade agreements, and technology are key drivers for change in the agribusiness industry.

Industrialization

Industrial agriculture has changed the overall structure of agribusiness. The traditional agribusiness market consisted of a large number of buyers and sellers who traded agricultural commodities on open spot markets. Today, farms have become much larger and factories and production methods have become technologically advanced, more specialized, and efficient. Therefore, traders in the agribusiness sector rely less on open spot markets and more on contractual methods for buying and selling agricultural commodities. According to the United States Center for Rural Affairs:

Unlike sustainable agriculture, where the strategy is to minimize environmental and economic risks by using management and labor skills to diversify production and conserve natural resources, industrial agriculture encourages large scale, highly specialized farms where uniformity is emphasized over quality, and where many costs are shifted from the farm operation to society.

Increasingly, industrialization has led to vertical coordination and concentration within the various agribusiness sectors.⁷

Population Growth

Increase in global population drives up the demand for agribusiness commodities and food products. Global population,

Of the estimated 3.3 billion acres of agricultural land on the Earth, 13% belongs to the United States, home to only 5% of the world's population. Meanwhile, China, with only 9% of the Earth's arable land, must feed 22% of the world's population.

—January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's

⁷ January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's, pg. 7.

currently estimated at 6.0 billion, is expected to increase from a range of 8.0 billion to 12.0 billion people by the middle of this century. This growth will be more concentrated in emerging and developing nations placing pressure on the demand for food and agribusiness commodities.

Rapid industrialization, modernization, improvements in living standards, rising income levels, and changing consumer preferences in most developing countries also are expected to further increase the demand for food in these nations, especially the demand for higher quality food products. However, given that available land or convertible land for agricultural purposes is limited globally, population growth will most likely lead developing countries to import food to meet the increased demand.

Trade Agreements

Rising global demand for food products has caused principal agricultural exporters (such as the United States, Australia, etc.) to increase trade with other nations. For example, U.S. beef exports to other countries account for 12 percent of U.S. beef production. This escalation in agricultural exports also has

In the past decade, the United States negotiated more than 180 bilateral trade agreements, one-fourth of which have directly affected the U.S. agriculture industry.

Most of the major RTAs formed in the recent years have liberalized most agricultural trade. In the western hemisphere, NAFTA and Mercosur (the common market of South America) have removed nearly all agricultural trade barriers among their members.

—January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's

resulted in an increase in cross-border trade agreements. Bilateral trade agreements, the World Trade Organization (WTO), Regional trade agreements (RTA), etc. directly affect the global agribusiness industry by

reducing trade barriers in international markets. Several RTAs, for example, the North American Free Trade Agreement (NAFTA), Asia Pacific Economic Cooperation (APEC), Asian Free Trade Area (AFTA), have been established and several more are being negotiated.

The opportunities for market diversification have increased dramatically with these new trade agreements. However, the use of growth hormones and genetic engineering of seed stocks has caused much concern in certain markets. In some instances, the WTO has been involved in arbitrating the resulting disputes. For example, during most of 1999 the United States and Canadian trade officers asked the WTO to approve more than \$253 million in retaliatory trade sanctions because the European Union illegally banned U.S. and Canadian beef products from cattle receiving growth hormones. Ultimately, the WTO approved \$125 million in trade sanctions against the European Union for not allowing North American beef into the region. Monetary trade sanctions are evidence of the financial impact that global events have on the beef industry.

Agri-Biotechnology

Agricultural biotechnology refers to a collection of scientific techniques, including genetic engineering, to create, improve, or modify plants, animals, and microorganisms. For hundreds of years conventional techniques—such as selective breeding—worked well to improve the growth of plants and animals.

Scientists are now focusing on developing seeds that provide greater nutritional characteristics. For example, the seeds might be designed to produce crops containing amino acids that speed the development of animals that eat them.

Some of these seeds are already a reality. In the past, it took four pounds of feed to enable a hog to gain a pound in weight, while now it takes only three pounds of soy-enriched feed for a hog to gain that same pound.

—January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's

Today, modern techniques enable scientists to manipulate genes (and therefore create desirable traits) in ways they could not before—and with greater ease and precision.

Biotechnology has helped farmers and consumers to:

- Boost the nutritional value of foods.
- Produce vaccines to combat animal diseases and a vaccine for “shipping fever” in cattle, the chief cause of death of beef cattle in feedlots.
- Fight hunger by resisting plant diseases and increasing crop yields.
- Reduce pesticide use and reliance on insecticides and herbicides that damage the environment.

Given the limited supply of arable land in the world, agri-biotechnology is expected to play a significant role in the development of new agribusiness products that enhance yields and increase nutritional value.

Agri-biotechnology companies primarily are involved in developing genetically engineered plants, seeds, and pesticides. In the United States, the federal government has a well-coordinated system of agencies to ensure that new agricultural biotechnology products are safe for the environment and for animal and human consumption. For example, the United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) is responsible for protecting American agriculture against pests and diseases and the Food Safety and Inspection Service (FSIS) ensures the safety of meat and poultry consumed as food.⁸

⁸ January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's, pg. 11.

U.S. Beef Industry

Beef production, including breeding, feeding, processing, and retailing, is the largest segment of the U.S. agribusiness economy. During the 1990s beef production generated more than \$30 billion in direct annual economic output and almost \$100 billion in economic output from related industries such as restaurants and fast-food retailers. With approximately one million cattle producers, the U.S. beef industry represents the largest segment of the American agribusiness industry.⁹

The U.S. beef industry value chain has eight segments (see Appendix A):¹⁰

Cattle Producers:

- seedstock producers
- cow/calf producers
- stocker operators

Meat Packer/Processors:

- feedlot operators
- packers
- processors
- retailers
- consumers.

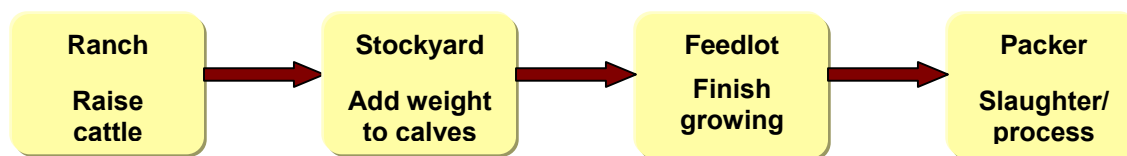
These segments collectively comprise an interdependent system that produces quality beef for consumption. The “cattle producer” segments of the U.S. beef industry are made up of a large number of participants with varying scales of operation. The meat packer/processor segment is highly concentrated. The four major meat packing operations; IBP Inc., ConAgra, Excel, and Farmland National Beef, currently account for an estimated 80 percent of the U.S. beef market.

⁹ *Agriculture Fact Book*, 1996.

¹⁰ *National Cattlemen’s Beef Association Cattle and Beef Handbook* (revised 6-99).

Beef-Production Chain

Within the eight segments in the beef industry, the cow/calf operator, stocker operator, feedlot operator, and packer/processor segments primarily are involved in the beef-production chain.



The cow/calf producers are commercial ranchers who raise cattle that ultimately are shipped to stocker operators and feedlots. Once the calves have matured they are sold to the stocker operator. The stocker operator puts additional weight on the calves before they go to feedlots. The feedlot operators buy cattle and then grow them in feedlots for market. After reaching the required weight, packers/processors buy cattle from the feedlot and then slaughter and process them. Packers/Processors, in turn, sell the carcasses as boxed beef to retailers and foodservice operators for further processing or final preparation for consumers.¹¹

Lack of Vertical Coordination in the Value Chain

The large number of individual ranchers and their wide geographical dispersion along with numerous feedlot choices has resulted in little coordination between the various stages in the beef-production chain. However, the high level of concentration in the meat packer/processor segment of the beef industry has made it possible for entities in that segment to achieve some level of coordination within the value chain. Coordination primarily has been with cattle feeders in the form of marketing arrangements to ensure the constant supply of cattle to the meatpacking plants. Vertical coordination between feeders and packers, however, does not extend to cattle producers or other downstream segments in the beef-production chain.

The lack of coordination between cattle producers, feeders, packers, and retailers has made it difficult to communicate changing consumer preferences from retailers to each link in the value chain. This lack of communication has further reduced the ability to transform beef production from a commodity-driven process to a highly coordinated production process. In a coordinated production process, each step of the production chain is aimed at producing a final consumer product at a competitive price.

In comparison, the poultry and pork industries, through vertical coordination in the production chain, have been able to develop products that meet the demands of consumers at competitive prices. Even back in the 1960s, broilers were produced under contract. Recently, however, full vertical integration has

¹¹ Factsheet – July 2000 – http://www.beef.org/library/factsheets/fs_supply_chain.htm.

become more prominent with 14 percent of total broiler production being undertaken by fully integrated companies. Vertical coordination in the pork industry was achieved in the past decade. The shift in production techniques allowed the pork industry to produce the lean meat favored by health-conscious consumers. Pork producers also have been able to reap efficiencies by controlling feeding and handling costs.¹²

Other Industry Issues

Most issues that relate to the beef industry are common to agribusiness in general. Unique to the industry, however, has been its inability to integrate the process of beef production to respond to the public's concerns for a healthy diet that does not include fatty meats or red meat.

Inability to Integrate Vertically

The very nature of beef production and the underlying structure of the industry have affected the ability of the various beef industry segments to achieve vertical integration. As previously mentioned, with full vertical integration a single company owns successive stages of the production chain. The primary cattle producer segments comprise a large number of individual competitive operators in the cow-calf sector, a lesser number of operators in the feedlot sector, and very few operators in the processing and packaging sector. These structural differences between the primary segments have made consolidation within the industry difficult to achieve.

Changing Consumer Preferences

Changes in consumer preferences, health concerns, diet, lifestyle, etc., have affected the beef industry significantly in recent years. Increasingly, consumers are becoming more health conscious and are concerned about the fat and cholesterol content in beef. Additionally, when compared to other sources of protein, beef often is more expensive. Furthermore, the demand for pre-packaged, pre-cooked products has increased as consumers spend less time preparing or cooking meals. The beef industry, however, has lagged behind in developing new products to meet these *lifestyle trends* compared with the pork and poultry industries. For example, the poultry industry has successfully developed pre-cut and pre-seasoned products that can be cooked easily in microwave ovens.

¹² Adapted from Lamb, Russell L. and Michelle Beshear, "From the Plains to the Plate: Can the Beef Industry Regain Market Share? – Federal Reserve Bank of Kansas City – Economic Review, Third Quarter 1998.

Grid Pricing¹³

The traditional pricing method (still in use) is the live-animal pricing system, which determines the value of the cattle based on a price per hundredweight (cwt) of cattle on the hoof—usually based on a pen of cattle. However, with this system, all cattle in a pen are assigned the same value regardless of quality. Furthermore, the value of cattle is determined even before the quality of the carcass is known. Given these drawbacks, grid pricing, an alternative pricing system for cattle carcasses, has been developed.

Under grid pricing, cattle carcasses are graded on two dimensions: quality and yield. Quality grades are determined by the amount of marbling, or intra-muscular fat, and the maturity of the carcass. Marbling is a key contributor to the quality because it affects the tenderness, flavor, texture, and taste of beef. Maturity of the animal also is a major factor in the quality of meat produced because older animals generally are thought to be tougher and have a less desirable taste. There are four quality grades for feed cattle: prime, choice, select, and standard.

The yield grade is a number linked to the quantity of meat on the carcass. A yield grade ranges from 1 (greatest amount of meat or cutability) to 5 (least amount or cutability). Carcasses with a yield grade higher than 3 are undesirable because these carcasses yield a smaller percentage of boneless, trimmed, retail cuts. The interaction of yield grade with quality grade provides a two-dimensional scale on which to evaluate carcass value (the grid price). With grid pricing, the base price is determined based on a Choice Yield Grade 3 carcass, with other quality and yield grades priced at premiums and discounts to this base price. (See Appendix B on grid pricing.)

Grid-based pricing does have some drawbacks. The current grading system used in evaluating carcasses actually rewards higher degrees of fat content because it is generally believed to enhance tenderness and taste. (See Appendix B.) However, a higher fat content is not viewed favorably by the health-conscious consumer. Furthermore, the pricing system is complex and requires the reporting of meat prices in a timely manner to obtain the base price, quality, yield-grade spread, and volume of meat traded. (See Table 2.)

¹³ Discussion on grid pricing is drawn from Lamb, Russell L. and Michelle Beshear, “From the Plains to the Plate: Can the Beef Industry Regain Market Share? – *Federal Reserve Bank of Kansas City – Economic Review, Third Quarter 1998.*”

Table 2
Beef Quality Grades

The USDA grades beef quality using an eight category (grade) system. Maturity and marbling are the major considerations in determining the quality of beef. Maturity is an estimation of the physiological age of the carcass. Although chronological age is not necessarily the same as physiological age, it serves as a close approximation and will be used below to illustrate the grading process. Marbling refers to flecks of fat in the lean. It is evaluated visually. Marbling affects the juiciness and flavor of the meat but has little affect on its tenderness.

<u>GRADE</u>	<u>MATURITY</u>	<u>MARBLING</u>
Prime:	9 to 42 months	Abundant
Choice:	9 to 30 months	Small to moderate
	30 to 42 months	Modest to moderate
Select:	9 to 30 months	Slight
Standard:	9 to 30 months	Practically devoid to traces
	30 to 42 months	Practically devoid to small
Commercial:	42 and over	Modest to abundant
Utility:	42 and over	Traces to modest
Cutter:	42 and over	Practically devoid to traces

Based on: Burson, Dennis E., *Quality and Yield for Beef Carcasses*. North Central Regional Extension Publication # 357 (1997).

Cattle producers historically have been concerned that packers have an incentive to report a lower grade for a carcass because doing so lowers the value of the animal. In practice, however, an independent USDA grader determines the grades for all carcasses.

Product Cycle¹⁴

The ability of livestock producers to respond to changing market conditions is largely dependent on the life cycle of each type of livestock product. Poultry has the shortest cycle with only seven months between fertilization, birth and breeding, and maturity. In addition, the ratio of breeding animals to slaughter animals is relatively small, enabling a poultry producer to adjust rapidly to market conditions. The hog cycle is longer, taking 20 months to breed a sow and raise her offspring for slaughter. Keeping a hog for breeding means sending fewer hogs to slaughter, and thus lowers production. However, most sows farrow at least twice a year, and the average litter size approaches nine pigs. Thus, hog producers have a reasonable ability to respond to changing market conditions. In contrast, cattle have the longest cycle reaching maturity in four years. Additionally, each calf retained for breeding generally produces only one offspring annually. Consequently, cattle producers are at a disadvantage to poultry and hog producers because they have to make production decisions many years in advance, which significantly affects the ability of cattle producers to respond to changing market conditions.

¹⁴ Discussion on product cycle is drawn from the *January 20, 2000/Agribusiness Industry Survey*, produced by Standard & Poor's.

U.S. Premium Beef's Strategic Response¹⁵

Mission Statement:



To increase the quality of beef and long-term profitability of cattle producers by creating a fully integrated producer-owned beef processing system that is a global supplier of high quality value-added beef products responsive to consumer desires.

Source: http://www.uspremiumbeef.com/c_mission_statement.html

As discussed previously, alliances and cooperative agreements are strategies used by companies competing in a single industry to gain and/or maintain competitive advantage. Traditionally, strategic alliances have been used to extend a company's core competency by moving along the supply chain. For example, the licensing of patented technology by a research-focused company to one specializing in production may result in competitive advantage to both.

U.S. Premium Beef, Ltd. (USPB), formed in 1996, is a producer-owned beef marketing company created to vertically integrate the beef industry allowing producers to own the beef and by-products they produce all the way through value-added processing. USPB owns every segment of the beef industry, including more than 1,150 producers from 28 states. USPB provides beef producers the opportunity to retain ownership of the beef they produce from the ranch to retail. The producers are paid on an individual animal value basis determined by quality.

USPB was organized with the primary objective of building a production/marketing system that would enable cattle producers to generate high quality beef, add value by further processing, own the product to completion, get paid for the value added, and market branded beef products. A key to achieving that objective was acquiring or partnering with a beef processing company that shared these producers' goals. In December 1997, USPB purchased an interest in Farmland National Beef, L.P. (FNB) and FNB became jointly owned by USPB and Farmland Industries.

Farmland National Beef

Farmland National Beef is the only farmer-rancher owned beef processor in the country, we've taken quality back to the true starting point – the ranches and farms where cattle are raised. From choosing the right genetics for breeding to finishing on a corn-fed diet, and finally processing in our state-of-the-art plants, we manage the entire farm-to-table quality system. This unique farm-to-table system allows us to track and identify cattle and carcasses through our supply chain. By analyzing this data we can continuously improve our beef to provide consistent, high quality products.

Source: <http://www.nationalbeef.com/companyInfo.stm>



¹⁵ Discussion of strategic alliances is drawn from: Kanter, R. (1994) Collaborative advantage: The art of the alliance, *Harvard Business Review*, 72 (4): 96-108; and Thompson, A. & Strickland, A. (1999) *Strategic Management*, 11th edition, Boston, MA: Irwin McGraw-Hill.

The fourth largest beef processor in the United States, FNB was formed in April 1993 as a limited partnership and is majority-owned by Farmland Industries, Inc. FNB's product line includes branded products like Farmland Certified Premium Beef and Farmland Black Angus Beef. FNB's beef processing facilities are located in Liberal, Kansas and Dodge City, Kansas. These facilities function as beef abattoirs (a slaughterhouse) and further process prime cuts into fabricated or boxed beef. During 1999, the two plants slaughtered an aggregate of 2.6 million cattle.

The largest farming cooperative in North America is Farmland Industries Inc. Farmland comprises nearly 600,000 independent family farmers, as well as 13,000 beef and pork producers. Its owners account for approximately 80% of U.S. grain and livestock production. Farmland has \$2.8 billion in assets, which include fertilizer plants, grain elevators, feed mills, and beef-and pork-processing plants

—January 20, 2000/Agribusiness Industry Survey, produced by Standard & Poor's

Farmland Industries, Inc., North America's largest farmer-owned cooperative, conducts business in the input side of the agribusiness industry—as a farm supply cooperative and the output side of the agribusiness industry—as a processing and marketing cooperative. Farmland Industries, Inc. is a highly diversified company with major business lines in crop nutrient and crop protection products, animal feeds, petroleum, grain processing and marketing, and the processing and marketing of pork, beef, and catfish products. Farmland's beef processing and marketing operations are conducted through FNB.

In 1997, USPB purchased a minority interest FNB and the company became jointly owned by Farmland Industries, Inc. and USPB. As of August 31, 1999, Farmland Industries, Inc. owned directly or through its subsidiaries 71.2 percent of FNB.

USPB – FNB Alliance¹⁶

USPB is owned by independent beef producers from all segments of the industry including seedstock breeders, commercial ranchers, and feeders. USPB's alliance with FNB through an equity investment was a strategic move toward achieving vertical coordination between the various segments in the beef-production chain. USPB members can market finished cattle through FNB, their own beef processing company. USPB producer-members not only get paid for their cattle on a grid-pricing basis (as opposed to the traditional pricing system), but they also receive patronage dividends based on USPB's taxable income. The producers, therefore, are encouraged to produce better quality beef because they also benefit from the value added to their cattle at FNB's processing plants.

¹⁶ The contents of this section are drawn from USPB's Web site— <http://www.uspremiumbeef.com/>.

Membership

USPB is a limited membership or closed marketing cooperative that closed its stock offering on January 23, 1998. This type of cooperative, often referred to as a new generation cooperative, brings producers together as investor-owners for the purpose of adding value to their businesses by increasing revenue. Limiting membership allows investors to enhance their profits and increase the value of membership. All producers who market their cattle through USPB must become members of USPB with approval of the board of directors. USPB has three types of membership: associate, lifetime associate, and shareholder. A one-year associate member pays \$100 for the right to deliver cattle for one calendar delivery year and renews each year to continue participation. The lifetime associate pays a onetime \$500 fee for the right to deliver cattle with no need to renew membership. A shareholder is a member that has paid the lifetime associate fee of \$500 and owns stock. There is no obligation to own stock as a lifetime member; however, the lifetime member retains the right to purchase stock. For example, if a producer paid the lifetime fee in 1998 but does not buy shares until 2002, that member does not have to pay a new membership fee of \$500 to become a shareholder. A producer who pays a one-year associate fee (\$100) in Jan 2002 and decides to purchase shares in July 2002 must pay the \$500 lifetime associate fee before being allowed to own stock. Shareholders receive voting rights at USPB's annual meeting and are eligible to sit on the board of directors.

On January 23, 1998, the initial stock price was set at \$55 per share, which gave a shareholder the right and obligation to deliver one finished animal per share per year. Shares can be sold to other eligible producers at prices agreed to by the buyers and sellers. Although the cooperative doesn't set prices, it must approve all stock transfers so that ineligible persons do not acquire shares. Equity shares appreciate or depreciate in value based on the earnings potential they represent. USPB works with new members to help them find shares to lease and/or to buy. Typical lease rates have been between \$10-\$12 per share.

Delivery Commitments

Each shareholder of the cooperative has the right and obligation to deliver one finished animal per share per year. Shareholders, however, are permitted to deliver up to 2 percent under the number of shares they own without penalty each year. Shareholders fall into one of two delivery categories: even slot and odd slot.

Even slot [shareholders] are scheduled to deliver an even number of cattle in each of the 13 four-week delivery periods of the year. However, they are allowed 40 percent flexibility from one period to the next period in meeting those delivery obligations. In other words, if, by period, an even slot deliverer drops below 60 percent of his/her obligation, the USPB non-delivery penalty will be assessed. The maximum number of cattle allowed to be delivered in any one period is 140 percent of the period obligation—unless that

[shareholder] leases additional shares to deliver more cattle in that period. For example, an even slot deliverer has a commitment to deliver 1,000 head per period. He/she can deliver between 600 and 1,400 head within any period without a non-delivery penalty or obligation to lease delivery rights. [Shareholders] who cannot meet their delivery commitments will either incur a non-delivery penalty or are obliged to seek the assistance of USPB in leasing their delivery rights to another producer.

Odd slot [shareholders] are those who deliver smaller numbers of cattle once, twice, or several times throughout a year. At the end of each year, they complete a delivery schedule for the following year that assigns their cattle to be delivered in periods they choose (subject to USPB approval). Odd slot [shareholders] can on a case-by-case basis request changes in their delivery schedules at any time throughout the year (also subject to USPB approval). If an odd slot deliverer is unable to fulfill his/her obligation, a request can be made to USPB for assistance in leasing shares to another producer. If a [shareholder] does not request a delivery schedule adjustment before the end of a delivery period, the non-delivery penalty will be assessed on the unused shares from that period. For example, if a [shareholder] has 100 shares that must be used by the end of delivery period 2 but he only uses 40 shares, he will be assessed the non-delivery penalty on the unused 60 shares. He cannot, after the end of period 2,¹⁷ request a delivery schedule change to move those unused shares to a later period.

Producers who lease stock delivery rights to market their cattle through USPB have the right and obligation to deliver one finished animal per share. They also receive all the benefits of the program including the right to be paid using USPB's quality-based grid and eligibility to receive earnings from USPB in the form of patronage. All patronage, whether cash or retained, goes to the individual producer delivering cattle, regardless of whether shares are leased or owned.

Operations

As noted previously, the price USPB's members are paid for their cattle is determined by the quality-based grid pricing system. USPB issues a cash advance the day cattle are delivered to FNB's processing plants in Liberal or Dodge City, Kansas. The initial cash advance is equal to 85 percent of the weighted average live-cattle price for the week prior to delivery *less* a unit retain of \$12 per head of cattle. The unit retain normally is paid back with interest to the member one year from the date of withholding. Closed marketing cooperatives usually retain or withhold a portion of the commodity payment to build capital. The unit retain is held with the intention to pay back annually, if the cash distributions from FNB are sufficient to meet USPB's financial obligations and operating expenses. In the event FNB is not able to pay sufficient earnings to USPB, the unit retain allows USPB to meet its financial obligations. To date, USPB has paid back all unit retains as intended.

USPB has a qualified custom feed-yard list. However, producers have the option of finishing their cattle at any feedlot they choose prior to delivery to the processing plants. Currently, USPB is in the process of

¹⁷ http://www.uspremiumbeef.com/c_how_market.html.

developing a production verification program to define USPB's preferred production practices from the ranch to the plant.

Cattle once delivered to FNB's plants are processed, chilled for approximately 36 hours, and then graded by a USDA grader for pricing. Although the pricing system is nonbreed specific, there are premiums awarded for carcasses that excel in marbling (desirable quality grade) and cutability (desirable yield grade). (See Appendix B.) During the week following delivery, beef value is determined and a settlement check for the balance (after considering the initial cash advance and unit retain) is issued to the producers. The producers also receive a settlement sheet, showing exactly how the value was determined, and a detailed carcass grade report listing each carcass individually, its weight, quality grade, yield grade, and value.

USPB and FNB also have an electronic identification program (EID) at the processing plants. The EID system improves the efficiency and accuracy of collecting and transferring data to members. By providing producers with individual carcass data at no cost, USPB works with its members to improve production efficiencies as well as improve the quality of the beef it produces. This service ensures more quality beef is delivered to FNB's processing plants. Consistency in quality enables FNB to produce its value-added, branded product lines.

At the end of each fiscal year, FNB will determine its net taxable profit. USPB, after receiving its share of profits from FNB, will determine the patronage dividend to be paid to producer-members based on USPB's taxable income. Patronage dividends are made to producers on a per-head basis for cattle delivered during the fiscal year. Members who deliver cattle under a lease agreement also qualify for patronage dividends.

During fiscal year 1999, members earned an average of almost \$14 per head over the cash market by selling their cattle through USPB. In addition, members also realized approximately \$18 per head in dividends from FNB's earnings for the fiscal year 1999. (See Table 3.)

Table 3

U.S Premium Beef Facts*

- USPB has paid out more than \$16.5 million in premiums above the cash market on the more than 1.3 million cattle that have been sold on the company's quality-based payment grid.
- USPB has paid out more than \$13 million, more than \$28 per-head delivered, in dividends to its shareholders based on its taxable income.
- The value of USPB stock has increased more than 55 percent from the original \$55 per-share price in 1997 to more than \$85 per share in May 2000.
- USPB has received cattle from more than 625 feedlots in 14 states.
- USPB premiums have averaged approximately \$12.75 per head on all cattle delivered since the program began in 1997.
- The top 25 percent of USPB member cattle averaged \$34.58 per head above the cash market in 2000.

Source: http://www.uspremiumbeef.com/c_memberdrive.html

*Data are current as of 2000.

Retail Segment

USPB member produced beef also is marketed direct to consumers through the Kansas City Steak Company, which USPB owns in partnership with Farmland Industries, Inc. The Kansas City Steak Company specializes in providing steaks to steak houses throughout the United States and also has a mail-order catalog business that markets high quality steaks direct to consumers.

USPB members share in the profits of FNB and Kansas City Steak Company. According to USPB, the primary difference between it and other marketing alliances in the beef industry is that USPB has ownership of the company that processes and markets its members' product all the way to retail and, in some cases, to consumers. This participation assures its members that they receive a significant portion of the value added to the beef they produce.

Concluding Comments

The strategic alliance between USPB and Farmland Industries, both producer cooperatives, was formed to meet the challenges faced by the beef industry. This alliance and joint marketing strategy creates the vertical coordination necessary for USPB to provide the seamless delivery of beef products. The effectiveness of strategic alliances in the beef industry will depend on the ability of the various industry segments to coordinate across the value chain. Coordination in the value chain should reduce production costs and facilitate effective communication of rapidly changing consumer preferences across the production chain. In doing so, the beef industry could develop products to meet current lifestyle trends, establish brand value, and consequently transform the age-old structure of beef production and recapture market share in the agribusiness sector.

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Appendix A

Cattle and Beef Marketing Channels

Source: Extracted from *NCBA Cattle and Beef Handbook* (Revised 6-99) (Reprinted with permission.)

America's beef industry represents a dynamic example of free enterprise with individual businessmen part of an interdependent system that creates a wholesome, economic beef product for domestic and international consumers. While segments depend most on the segments closest to them, each is affected by the decisions and performance of all other segments in the system. The most dramatic impact, of course, is created by consumer decisions.

Seedstock

Also referred to as the purebred segment, these producers build the genetics that will be utilized as breeding stock that is marketed to the cow/calf segment. While there are more than 50 different breeds in the U. S., only a handful — 10 or so — contribute a significant volume of genetics to the industry. Genetics are originated based on their ability to serve the beef system through efficient production, as well as the consumer through creation of the highest quality beef possible.

Cow/Calf

Also known as commercial cattlemen, these producers may cross as many as four different breeds together to produce the bulk of cattle that will ultimately be grain-fed for harvest. Commercial cattlemen sell weaned calves (usually 6 to 10 months old weighing 300 to 600 lbs.) to stocker operators or feedlots. Some may retain ownership of their calves through the finishing phase.

Stocker

Cattlemen in this segment purchase weaned calves, then graze them until they weigh as much as 900 lbs. (usually when they're around 12 months old, or "yearlings"), then market them to a feedlot. Adding weight to cattle through grazing transforms natural resources — many of which have no other use — into food humans can utilize. This means beef can be produced more economically.

Feedlot

Feedlots may purchase weaned calves from the cow/calf segment or cattle from the stocker segment, finishing them to harvest weights of 900 to 1,400 lbs. Normally, cattle are on feed anywhere from 110 to 250 days, depending on purchase and targeted harvesting weights. These animals are then marketed to packers.

Packer

Beef packers harvest finished cattle purchased from feedlots, fabricating the beef carcasses (typically 600 to 800 lbs.) into boxes of "subprimal" cuts, such as the top round, tenderloin or sirloin. The boxed beef is then marketed to purveyors/processors or retailers, who cut the beef into products and sizes appropriate for consumers today.

Appendix A (continued)

Processor/Purveyor

This segment fabricates boxes of subprimal cuts into the cuts familiar to consumers. Often this segment will market to the hotel, restaurant and institution (HRI) trade, which has no production capabilities. Many grocery stores that in the past have purchased directly from packers and done their own meat cutting, now are buying further-processed cuts and beef items for direct sale to consumers.

Retailers and Foodservice Operators

The segment closest to the consumer is the link in the chain buying from purveyors, processors or packers, and then presenting products to consumers for their purchase. Because they directly depend on consumers, these marketers watch for trends and styles that may affect consumer demand for beef.

Consumer

When domestic and international consumers purchase American beef, either in the retail meat case or as part of a meal away from home, they influence subsequent decisions made by every other segment in the beef system.

Appendix B

Extracted from Lamb, Russell L. and Michelle Beshear, "From the Plains to the Plate: Can the Beef Industry Regain Market Share?" *Economic Review*. Federal Reserve Bank of Kansas City, Third Quarter 1998, reprinted with permission.

Grid Pricing

With grid pricing, the base price is typically determined based on a Choice Yield Grade 3 (Choice Y3) carcass with other quality and yield grades priced at premiums and discounts to this base price.

Premiums are paid for cattle with yield grades of Y1 or Y2, and for animals, which have a quality grade of Prime.

Discounts are incurred on carcasses, which have less desirable yield grades of Y4 and Y5, and quality grades of either Select or Standard.

The USDA Choice-Select spread typically determines the discounts for carcasses with a Select quality grade. Standard quality grade carcasses receive a more significant discount than Select carcasses, as they are considered nonconforming by meatpackers. Additional nonconforming discounts for under- or oversized carcasses, advanced maturity carcasses, or those carcasses with bruising or unusually dark color are also incurred.

Table A-1 is an example of a pricing grid.

Note that yield grades can be divided into subgroups such as YG-2A and YG-2B or 3A and 3B.

For example, a Select Yield Grade 1 (SE-YG1) carcass weighing 975 would be valued at \$95 per hundredweight of carcass with this example grid (\$105 base -\$5 for Select +\$3 for Yield Grade 1 - \$13 for oversize = \$95).

DISCOUNTS AND PREMIUMS FOR PACKER PRICING GRID

	Adjustment per (cwt)
<i>Quality grade:</i>	
Prime	+\$6.00
Choice	Base
Select	-\$5.00
Standard	-\$15.00
Dark Cutter	-\$32.00
<i>Yield grade:</i>	
1	+\$3.00
2A	+\$2.00
2B	+\$1.00
3A	Base
3B	-\$2.00
4	-\$12.00
5	-\$18.00
<i>Carcass weight:</i>	
> 1,000 lb.	-\$17.00
950-999 lb.	-\$13.00
551-949 lb.	Base
500-550 lb.	-\$15.00
< 500 lb.	-\$20.00

Note: Base price is \$105/cwt for Choice YG-3A in 551-949-lb. range.

Source: Smith, Rod. "Pricing Grids Should Encourage, Reward Producer for High-Value Cattle," *Feedstuffs* (October 1997).