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In 2005, North American Bison Cooperative formed a contractual alliance with North Dakota Natural Beef, LLC. The alliance was formed in order to enable the cooperative to enhance returns from its physical and managerial assets by entering the natural beef market. This case describes the resources shared by the cooperative and LLC, how the alliance was governed, the risk of opportunism by the CEO and associated trust building and control mechanisms, and the benefits cooperative members received. Although the two companies operate under different business principles, cooperative members exercise indirect control over the resources they contribute to the venture.

Introduction

The North American Bison Cooperative (NABC) was formed in 1993 with 330 bison producer members in the United States and Canada. It processes and distributes bison meat products and increases public awareness of bison meat product characteristics. The cooperative was formed for two reasons. First, prior to its formation, a consistent supply of large volumes of bison was not available from a single source. Second, forming a marketing services provider would reduce an individual bison producer's costs.

In 1994, the cooperative opened a bison slaughter and processing facility in New Rockford, ND. The plant was initially designed to process 5,000 head per year, but growing demand for bison led to expansion. By 1999, the plant processed 8,000 head annually and expected to process 10,000 head per year by 2000. However, expanding supplies from other processing companies and declining demand for bison caused market prices to drop. In early 2003, prices remained relatively low, although sales reached US\$22 million (Pates 2003). Furthermore, prolonged low bison meat prices led to an accumulated inventory of frozen bison meat, some of which was more than three years old. Although inventory liquidation efforts

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had started, the cooperative had more than US\$20 million in deferred payments to members with unsold inventory (Associated Press 2004). NABC had also acquired New West Foods, a bison marketer, and Great Plains Food Co. to help distribute its products, but there were no apparent cost savings. The former NABC board chair commented that “much of the co-op’s problems involved the inherent makeup of the board. . . who didn’t have experience running this type of business. They didn’t have the experience to know how to challenge numbers” (Pates 2003). As result, the cooperative board declared bankruptcy in October 2004. By July 2005, with the inventory on its way to being liquidated, the cooperative emerged from bankruptcy, but needed to increase its business volume in order to cover fixed operation costs. The new president/CEO of NABC, Dieter Pape, considered the cooperative’s options.

Pape knew that one way to use the cooperative’s assets more intensively would be to enter the natural beef product market. Consumer preference for food produced with environmentally friendly practices and free of hormones and antibiotics led to an increase in demand for natural and organic products in the previous decade (Shelquist 2002; Smith, Swalla & Ennis 2002; Pirog 2004). Retailers responded to this demand by increasing the number of natural food stores, such as Whole Foods, and mainstreaming natural and organic foods in traditional supermarkets. Pape also knew that consumers were willing to pay a premium for natural beef products relative to conventional beef products (Grannis & Thilmany 2000).

Beef producers in North Dakota were aware of these changes in the market. A 2005 survey of North Dakota beef producers reported that 58 percent of respondents would be interested in implementing a natural beef production program (Cook et al. 2005). At least two factors prevented this, however. First, production costs of natural beef were 10–20 percent higher than conventional production due to the longer time for an animal to achieve ideal market weight. Producers believed, however, that the premiums that consumers were willing to pay for natural beef would offset these higher costs (Boland & Schroeder 2002).

A second factor was a lack of beef slaughtering facilities in the state. North Dakota Beef Producers had discussed opportunities for developing beef slaughter facilities prior to the 2005 alliance. In 1991, for example, a study of costs to export beef cattle to Japan was conducted and specifically mentioned that a beef slaughter facility in North Dakota, designed to meet the specific requirements of beef exported to Japan, would have a positive economic impact on the state (Stearns, Petry & Marchello 1993). In 1993, a group of North Dakota beef producers tried to develop a cooperative beef marketing company named Northern Plains Premium Beef, but failed to commence operations due, chiefly, to lack of capital.

In 2005, a meeting of beef industry stakeholders was held at the North Dakota State University (NDSU) Carrington Research facility to discuss new ideas about

beef product marketing. Among the attendees were Pape and Dr. Ken Odde of the NDSU Department of Animal and Range Science. During the meeting, Pape and Odde discussed starting a natural beef company that could build upon the synergies of harvesting, processing, and marketing natural bison, as well as aid the university in its research and education mission. This idea led to the formation of North Dakota Natural Beef (NDNB), a North Dakota corporation, in October 2005. The company aimed to accomplish three NDSU goals: enhance the growing of cattle feeding and processing in North Dakota; enhance NDSU's research capacity; and provide an educational facility for NDSU students interested in meat careers. The relationship between a public university and a private company enabled the two groups to take advantage of US\$800,000 in funding made available by the North Dakota legislature, as well as a federal grant of US\$1 million. At the start of this venture, Pape wondered how a partnership of a limited liability company (LLC) and a cooperative, linked through a contractual alliance, would affect the cooperative's governance.

Description of the Venture

North Dakota Natural Beef, with total sales of approximately US\$2.7 million between April 2007 and September 2008, processes and markets natural beef products. Naturally raised beef cattle are sourced from three to five feedlots operating in North Dakota. These are shipped for slaughter to the North American Bison Cooperative facility in New Rockford, ND. Although the New Rockford plant operates below capacity today, the NDNB business plan estimates that between the third and fifth year of operation sufficient volume will be achieved to reach capacity. Because no beef slaughter facilities were available in North Dakota prior to the venture, the shorter travel distance reduced transportation costs (formerly to Nebraska or other Midwest states).

After slaughter, beef carcasses are shipped for fabrication, packaging, and distribution to NDNB's renovated 41,000 square foot facility in Fargo. North Dakota's largest city, Fargo provides access to a supply of labor and is a convenient location relative to the nation's interstate freeway system. Its proximity to NDSU also provides access to scientific expertise at the Department of Animal and Range Science.

NDNB received managerial, sales, and administrative staff from NABC. Pape, president and CEO of NABC, became the president and CEO of NDNB. The sales and marketing staff for NABC were the initial sales staff for NDNB. NABC also provided administrative services for NDNB, including use of NABC's chief financial officer, controller, and human resources manager. The NABC staff had worked together for some time and understood the difficulties associated with starting a new company and the amount of time required to establish marketing relationships

with retail and institutional customers. Once the alliance started, NABC's marketing team immediately began working to market natural beef products through its already existing system of retail and institutional customers.

Conceptual Framework

Contractual Alliances

Firms use resources in order to generate a comparative advantage. The strategic alliance literature indicates that the competitive position of each firm in an industry can be "defined by a bundle of unique resources and relationships" (Rumelt 1981). When necessary resources to establish a competitive advantage are lacking, such as when they are imperfectly substitutable, a firm may trade or cooperate with other firms out of "strategic necessity" (Das & Teng 2000).

Resources are imperfectly substitutable when they are property or knowledge-based (Das & Teng 2000). Examples of resources with clearly defined property rights include physical and human resources. Physical resources are imperfectly substitutable because the location of one resource relative to other resources may be unique. Human resources are relatively immobile and the performance of a single employee or group of employees cannot be duplicated unless the whole set is acquired or permission to use them is obtained. Knowledge-based resources are not easily substituted because of information barriers.

Firms may enter into alliances with each other in order to either acquire or retain bundles of unique resources and relationships, such as facilities, personnel, and connections. Alliances are useful for the acquiring company when not all the resources possessed by the target firm are valuable to the acquiring firm. Alliances are useful for the target firm when it seeks, for example, to retain unique resources that are currently under-utilized (Kogut 1988).

If the alliance between two firms is principally characterized by an exchange of property-based resources, a unilateral contract-based agreement is typically used (Mowery, Oxley & Silverman 1996; Das & Teng 2000). These contracts establish a "well-defined transfer of property rights" (Das & Teng 2000). In these alliances, each firm carries out its obligations to the other in relative independence and little collaboration or integration exists between the partners. Because the transfer of property rights for use of physical and human resources is well defined, a complete contract is sufficient for specifying the role of each partner.

Alliances and Corporate Governance

Alliances between companies usually require added corporate governance costs and some loss of organizational control (Das & Teng 2000). Corporate governance

involves managing the strategic and policy decision-making process of the company and distributing profits. Challenges may arise within the alliance when the governance style for each partner differs and leads to incompatible preferences for strategic planning and profit distribution. The alliance partners in this case study are incorporated as a cooperative and as an LLC.

Cooperatives govern themselves based on principles of user ownership, user control, and user benefits. The decision-making process of cooperative businesses is done through a user-elected board of directors that are the user's agents (or representatives) in the management process. Votes for directors or policies are cast democratically, with each user allowed one vote regardless of how much business or equity capital they contribute to the company. Cooperatives obtain capital through lending, direct investment by the users, or retained profits, which are either held as a deferred benefit to be given to the member in the future or kept solely for the company's use. Investment decisions will always be made by a board that represents the current users, so the cooperative structure causes users to be more interested in current income than in making a financial investment in future income. This is because users will be reluctant to bear the certain costs of investment in exchange for restrictions in the transferability of the residual flows from an asset, which will be controlled in part by a future board (Bonin, Jones & Putterman 1993). This problem is traditionally referred to as the horizon problem.

In contrast with cooperatives, LLCs govern themselves based on principles of investor control and investor benefits. The decision-making process is done through a shareholder-elected board of directors who act as the shareholders' agents in the management process. Votes for directors or policies are cast in proportion to ownership. LLCs obtain capital through lending or direct investment from shareholders. In a liquid market for ownership in the company, the relationship between ownership and benefits is clear. A stockholder can sell the expected future stream of benefits to another investor by selling their share in the company. This ease of transfer also facilitates decision-making for the firm because investors who do not favor certain policies can sell their ownership to those who do. Hence, in an LLC, current investors always bear the costs and receive the benefits of investment.

Opportunism in the Governance of Corporate Alliances

In addition to resource management, Das and Teng (1998) consider the importance of risk management to the success of a contractual alliance. One form of risk unique to an alliance is relational risk. Das and Teng define relational risk as the probability that one or more members of the alliance will perform actions out of compliance with the intended spirit of interfirm cooperation. Research indicates that interfirm cooperation is required for strategic alliances in general (Lei &

Slocum 1991; Parkhe 1993). The ability of alliance partners to preserve this cooperation depends on the costs and benefits of cooperation. If both firms act in their own self-interest, “hurting their partners and the joint task” may occur when one party to the agreement decides that benefits from cheating may exceed those from complying with the agreement (Das & Teng 1998). Such behavior, referred to as opportunism, takes many forms, including “shirking, distorting information, [and] stealing the partner’s skills, clients, and personnel” (Das & Teng 1998). Because some of these actions are unobservable to investors, opportunism can be a form of moral hazard.

Various devices are employed to mitigate the risk of harm associated with moral hazard from managers. Commonly used devices in the literature include stringent control mechanisms, contracts, and shared equity ownership. The business literature indicates that a high degree of interfirm trust between partners may eliminate the need for contractual clauses (Das & Teng 1998). Das and Teng also hypothesize that alliance partners may insist on specific roles for the inputs that they contribute to the venture, such as managerial control.

Analysis of the Venture

NDNB and NABC became economically interdependent through a contractual alliance. Their interdependence features an exchange of resources. This exchange may satisfy NABC’s objective to retain its physical and management resources, and NDNB’s objective to obtain resources that allow it to enter the natural beef market at a relatively low cost. Although the boards of directors from the two companies function independently of each other, NABC’s investment enabled the alliance to benefit from the perspective of agricultural producers who had run a business while also removing the investment horizon problem that would have existed had individual cooperative members been asked to invest in NDNB. The interdependence of the two companies remains subject to risk of opportunistic behavior.

The Contractual Alliance

The contractual alliance between NDNB and NABC created a clear transfer of property-based resources between the two firms. NABC made two resources available to NDNB. First, NDNB was able to use the cooperative’s physical resources of the New Rockford, ND slaughter facility and the cooperative’s management team. Second, NABC made available its knowledge-based resources of pre-existing contacts between its sales team and retail outlets catering to health-conscious consumers.

The economic interdependence between the two firms benefitted the stakeholders of both companies. By forming an alliance with NDNB, NABC planned to

increase patronage refunds for the cooperative and reduce associated operations costs. This will occur as the costs associated with starting a new business, which are distributed across all the stakeholders of NDNB, are incurred and profitability is achieved. As NDNB becomes profitable, the percentage of NDNB profits corresponding to its ownership share will be given to NABC, and then allocated to its members. NDNB benefits from the comparative advantage in the natural beef market by acquiring an experienced management staff at a lower cost than if it had purchased its own management team, and obtaining instant access to sales relationships with retailers of healthy meat products.

The alliance demanded little integration or collaboration between companies, making a unilateral contract appropriate. Common management coordinates each step of animal processing at the two facilities. Furthermore, because bison and natural beef are likely to be imperfect substitutes, NABC's marketing knowledge was a knowledge-based asset used by NDNB that cannot be taken away.

Governance

NDNB's stakeholders decided that the business would be structured as an LLC. This decision was motivated by at least two factors related to corporate governance. The first was the recognition by some investors that a beef producer serving on the board of directors might have a conflict of interest between the profitability of his own production activities and that of the firm. Some interviewees suggested that this may have occurred on the NABC board and contributed to its bankruptcy. Investors decided that having a board whose objective was to maximize shareholder, rather than producer, welfare would diminish the likelihood of any conflict of interest. For a summary comparison of NABC and NDNB's governance attributes see Appendix A.

A second factor that led to incorporation as an LLC was the recent experience of agricultural producers with closed membership cooperatives, or "new generation cooperatives," such as NABC. These cooperatives encourage efficient use of physical assets by requiring members to agree to delivery obligations to the cooperative in proportion to ownership. If NDNB were to have incorporated as a closed cooperative, members would have incurred delivery obligations. The limited number of ownership shares, whose minimum number is determined at incorporation, would have made it difficult for new natural beef producers to participate in the venture and restricted beef supply to a limited number of active members.

The NDNB board organized itself differently from the NABC board. The NDNB board has several committees, whereas the NABC board has one committee. The NDNB board has an executive committee, which provides signature power for the chief financial officer and others. NDNB also has a finance committee that reviews

the company's budget. A review committee was also formed to assess the performance of the president/CEO. In contrast, the NABC board addresses company affairs as a single group. NABC board members attribute the difference in board structure to the length of time (approximately four years) that the current group of directors has served together. Also, even though the geography represented by the NABC and NDNB boards is similar, the NDNB board meets every three weeks, either by teleconference or in person; the NABC board meets less often.

Although the LLC business model was selected in order to decouple the interest of the producer and the company, the board benefited from the experience of beef and bison producers. One board member produces natural beef and four directors, including two bison producers who represent NABC, produce agricultural products. Production experience enabled the board to understand why certain breeds of cattle are important for meeting consumer preferences or achieving various cost targets, as well as the importance of timing sales to obtain yield or other characteristics from the cattle.

Even though member control is an important component of cooperative business governance, its influence is only indirectly felt in the governance of NDNB. One way that the cooperative member's voice has been represented is through the two NABC board members who are also members of the NDNB board. In practice, however, these two act as investors to the project, not as the cooperative members' representatives in the governance of an LLC.

Another possible way to include the NABC point of view on the NDNB board has been to give the president/CEO a seat on the board of directors. A common practice in stock-held companies, the manager comes to the board with an understanding of how decisions made by the board will affect company operations. Also, as the tenure of the manager may exceed that of board members due to term limits or election outcomes, the presence of the manager serves as a source of institutional memory for the board.

Having the manager on the board also presents various challenges. Because the purpose of the board is to make decisions for the good of the company, the manager may, in fact, only serve as an employee representative and neglect the interest of shareholders or NABC's members. The expertise of the manager with respect to operational aspects of the company may dominate the board's focus and cause members to ignore strategic planning, performance management, and other policy functions. Finally, because the other members of the board are elected, what would be the rationale for having an appointed position? Or should the manager or another employee be elected by a set of stakeholders, such as employees or producers? Neither of these two methods is used to represent NABC member interests in the LLC, giving the members of the cooperative the same status as other potential investors.

Corporate governance also affects the distribution of profits from a company to those who supply its financial resources. In cooperatives, financial benefits accrue to members in proportion to their use. However, the investment made by NABC was done as a corporation rather than by the membership. This avoided the cooperative business requirement of patronage refunds or other direct member financial benefits to NABC members. Instead, the income from the investment in NDNB is treated as income from any other investment in entities outside the firm. All financial benefits, such as increases in the value of equity shares or stock dividends, accrue to NDNB shareholders, including NABC, in proportion to their ownership share.

Corporate Finance

The decision to form an LLC was also motivated by a factor related to corporate finance. Stakeholders had a desire to allow persons other than beef producers to invest in the company. Equity capital was generated for the LLC through a “private stock offering,” a means of raising capital that is exempt from federal registration. This exemption has the benefit of simplifying the equity collection process. The stock offering is done with a document called a private placement memorandum, which contains an overview of the proposed business plan, opening and closing dates, and other terms. The exemption requires compliance, however, with certain requirements, including not publicly advertising the opportunity to purchase stock and that most stock must be sold to investors meeting certain qualifications. Because the group of investors obtained by this method is typically small, investors are usually contacted directly about the opportunity to purchase stock, and interested parties reply to the company directly. These offerings can be done annually.

By virtue of incorporating as an LLC, the composition of the NDNB board was based on ownership share. Upon incorporation, stakeholders in the company sought equity and debt capital from various sources. A capital campaign was conducted with the objective of raising between US\$3,500,000 and US\$4,500,000. By the end of July 2006, the minimum was raised from 34 investors. Besides the members of the bison cooperative, a total of 33 other investors organized the company, including North Dakota Farmers Union, Dakota Growers Pasta Company, Goldmark Real Estate Partners, and beef ranchers in North and South Dakota, Minnesota, and Washington. Among these investors are producers, agribusinesses, and professional groups headquartered in North Dakota. Each has various levels of ownership. Additional debt capital was provided by the Small Business Association and the Bank of North Dakota. NABC currently owns approximately twenty percent of NDNB and has rights to two seats on the nine-member board of directors.

Opportunism

By virtue of forming an alliance, both NDNB and NABC incurred relational risk. Das and Teng (1998) hypothesize that partners in an alliance with high relational risk will “focus on placing their own people in key positions of the alliance.” In the alliance between NABC and NDNB, NABC supplied firm-specific competence in the areas of planning, operations, marketing, and human resource management by allowing Pape and his management team to split their time between the two firms. Given that NABC devoted its management team to the development of the alliance, it was interested in making sure that its management team was in primary control of the firm.

In such an alliance, the partner not providing the managerial control might be skeptical of the other partner’s intentions. The CEO makes decisions about sharing human resources across the two firms and, to some extent, the flow of returns to both companies. If Pape were to engage in opportunistic use of human resources, it might impair the objective of NDNB to enter the natural beef market, as well as the objective of NABC to enhance returns from its physical and managerial assets. Both firms could have serious problems sustaining the relationship if skepticism leads either partner to not commit itself to cooperation.

Only limited data were provided about specific types of opportunism monitored by the NDNB board. As noted, because NABC and NDNB share a CEO/president, a key source of opportunism could be the distribution of assets and associated input costs. Although a complete description of formal efforts to distribute resources and input costs was not made available, interviewees indicated that three mechanisms have been used to measure the distribution of effort of any NABC employee working for NDNB. First, each employee completes a time slip detailing their effort for each company. Second, Pape is required to keep a daily log of how his time is used. He indicated that, because NDNB is at a very early stage in its lifecycle and NABC is a more established company, a relatively large share of his and his staff’s time is spent operating NDNB. Third, financial statements for aggregate management team expenses are reviewed regularly by NDNB’s board of directors and compared with the expectations of board members. Pape recognizes that the NDNB board is still becoming familiar with him and expects to have to demonstrate his capacity to successfully run the two businesses simultaneously.

Other devices have been used by NDNB to reduce tension created by relational risk. First, equity incentives are used to provide constraints on performance incentives benefitting the cooperative’s members. At the start of alliance operations, the cooperative agreed to own a 10 percent share of the business. However, by meeting established performance standards, it could add another 10 percent every year for two years, for a total ownership of 30 percent. Since operations have started,

this agreement has resulted in NABC gaining a 20 percent ownership share. The cooperative has chosen to limit investment in NDNB to this level.

Another device used by NDNB to reduce relational risk is an auditing firm. The name of the auditing firm was not revealed during the data collection process for this article, nor was the scope of its tasks. A committee comprised of members of the NDNB board selected the auditing firm. At present, the NDNB board meets every three weeks by teleconference or in person and can review information from the auditor during these meetings.

NDNB uses a compensation instrument to share relational risk between the management team and the alliance. Key management personnel, including the CEO, CFO, and vice presidents of sales, marketing, and human resources, receive imaginary shares in the company known as "phantom stock." Although no actual equity in the company is given in this type of compensation program, it does provide some of the same behavioral incentives as employee stock purchase plans. Although the details of the NBNB plan were not provided, these imaginary shares typically represent a promise on the part of the company to pay, on a fixed date, a bonus to employees based on either the value of these phantom shares or a value that follows changes in the value of its actual equity stock.

A final, but difficult to measure device used to reduce relational risk has been the development of trust. A member of the NDNB board indicated that concerns about personnel placement and cost allocation were brought up during negotiations between NDNB and NABC prior to commencement of operations. This person indicated that these negotiations had the effect of establishing trust in communication between the two companies. Another event that contributed to the trust between companies was the fact that NABC presented Pape to the initial supporters of NDNB as a person who had turned around troubled businesses, including NABC. The level of confidence that the NABC board had in Pape's abilities was high at that time. An indicator of NABC's trust in Pape is his statement that he has not had a formal management performance review since being employed by NABC. This trust has, in effect, been transferred through the presence of two NABC board members on the NDNB board. Counterbalancing this trust, however, is the fact that the NABC board holds final approval for adjustments to Pape's salary.

Only time will demonstrate whether these devices sufficiently reduce the incentives for opportunism by the management team. Since the start of alliance operations, members of the board have described the degree and quality of information about resource use and cost allocation exchanged between Pape and the NDNB board as "improving." The risk of economic loss for the alliance remains if the possibility of opportunism cannot be sufficiently controlled to engender trust between the companies. In this case, NABC member returns would decline because it would have been unable to reduce average production costs, and NDNB would have to

replace the physical and managerial resources. The amount of risk, however, may change as NDNB matures. As more stakeholders become involved in relationships with NDNB, it may be possible for the NDNB board to identify managerial resources that are substitutable for Pape and his NABC team.

Conclusions

The contractual alliance between NDNB and NABC has enabled both companies to utilize resources that create a comparative advantage for each in their respective product market. NDNB uses existing marketing knowledge to establish relationships with retailers quickly, has access to experienced management at a relatively lower cost than if they had purchased one hundred percent of the management team's time, and processes cattle produced in North and South Dakota more cheaply through the use of in-state facilities. NABC retains its experienced management team at a lower cost than employing the team 100 percent of the time and, by obtaining profits from its investment in NDNB, increases financial returns to its members. The alliance required little formal interaction between the two companies except to schedule the use of physical facilities. Formal devices are used, however, to reduce the risk of opportunistic behavior by Dieter Pape, the CEO and president of both members of the alliance.

The contractual alliance did increase the amount of complexity for governing NDNB, but the fact that the two companies operate under different business principles does not contribute to this complexity. Although the bison cooperative enjoys the benefits of being governed by a group that understands the complexities of agricultural production, NDNB receives a similar benefit by gaining as board members, agricultural producers who invested in the company. The members of the cooperative indirectly receive financial benefits for sharing their investment in the New Rockford facility with NDNB, as do the shareholders in NDNB.

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Appendix A.**Comparison of North American Bison Cooperative and North Dakota Natural Beef LLC.**

Attribute	Limited Liability Company	Cooperative
Board Committees	Multiple Committees	Committee of the whole
Composition of board	Mostly non-agricultural producers	All bison producers
Homogeneity of board	Represent several sizes of investment	Represent several types and sizes of bison producers
Representation function	Represent investors	Represent bison producers
Primary investors	Financial market participants and banks	Agricultural producers and banks
Investor objective	Maximize returns to investors	Maximize returns to producers
Board familiarity with agricultural production	Generally unfamiliar with beef production	Active bison producers
Director compensation	Zero salary; Mileage and per diem expenses for corporate travel; Deferred compensation available for board members who accept and hold options for five years	Zero salary; Mileage and per diem expenses for corporate travel; Compensation same as financial benefits to all other members, in proportion to use
Director tenure limit and term length	Variable lengths of terms: three, two and one year; Maximum tenure of five years	Three three-year terms are the limit per director
Geographical allocation of directors	None; seats based on ownership share	Two-at-large; Two from Canada; Four from U.S.