Cooperative Conversions, Failures and Restructurings:

Case Studies and Lessons from U.S. and Canadian Agriculture

edited by Murray Fulton
and Brent Hueth

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Knowledge Impact in Society
Centre for the Study of Co-operatives
University of Saskatchewan
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University of Wisconsin Center for Cooperatives
230 Taylor Hall
427 Lorch Street
Madison, Wisconsin 53706-1503
www.uwcc.wisc.edu

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Murray Fulton and Brent Hueth

Introduction

Cooperatives are an enduring institution in the farm and food economy. Yet, the beginning of the 21st century appears to mark an important period in the history of agricultural cooperatives. Starting in 2000, critical structural changes began to occur among agricultural co-ops in the United States and Canada. A number of large co-ops filed for bankruptcy or converted to investor-owned firms (IOF) to remain financially viable.[1] Conversions and restructurings also occurred for other reasons, including the need for the co-op to obtain additional capital, the need to reduce members' production and price risk, and the desire by members to be able to access their equity or realize the market value of the co-op. Are these isolated events or an on-going trend? What can be learned from these events that can be useful to other cooperatives?

The cases considered in this book were assembled to shed light on these and other questions. The case studies are the work of twenty-two researchers from across the United States and Canada with a keen interest in offering explanations as to why some agricultural cooperatives have failed while others have persevered and thrived through the various challenges that the agricultural industry has faced over the last decade.

While the included cases represent only a portion of the co-ops that were involved in some kind of restructuring, they do capture many of the types of restructuring that occurred and address many of the factors involved. As we will outline in this overview, a number of common themes and issues appear throughout the cases. The identification and illumination of these common themes through in-depth case studies was one of the objectives of this book.

To ensure that common themes were identified, the case studies were conceived of as research cases, rather than decision cases. Thus, instead of presenting the details of a case and asking – "What should the manager do when confronted with this

situation?" – the approach taken was to identify a conceptual framework through which the case could be examined and understood. These conceptual frameworks are drawn from the economics of cooperatives literature and include property rights issues, life cycle theories, agency problems, market power, free rider issues and horizon problems. A comparison of the conceptual frameworks used to analyze the various cases allows common themes to be identified. This comparison also allows at least two bigger issues to be examined regarding the stability of the cooperative business form.

The first of these involves one of the key questions that runs through economics, namely the nature of the optimal form of business structure. For the economic analysis of cooperatives, the issues are specifically whether the co-op business form is efficient and whether this form will be eventually replaced by the the investor-owned business form. By explicitly examining the restructuring of co-ops to other business forms (and vice-versa), the articles in this book are uniquely placed to assist in addressing this long-standing question of interest. While all the case studies implicitly consider this question, a number of them explicitly raise the question of whether the cooperative failure or restructuring was due to unique co-op features, or whether these changes in business form occurred because of what could be called business factors – i.e., problems such as poor management which can occur in any firm.

The second, and related, question that a comparison of the elements found in the conceptual models can shed light on is whether something structural has happened to agriculture in the last 20 years to make cooperatives less organizationally stable. The obvious source for a structural change is the so-called "industrialization of agriculture." Numerous authors have speculated that agricultural industrialization will, by removing what has historically been the foundation of agricultural cooperatives, namely the independent farmer, create a situation where co-ops are not required to solve the market failures and informational problems that they had previously addressed. As we will argue below, the structure of agriculture does appear to have played a role, although perhaps not in the way that has traditionally been argued.

Conceptual Framework Themes

Among the co-ops examined in the case studies, there are four examples of failure (defined as bankruptcy, start-up failure, or business closing), five examples of conversion to investor-owned companies, and four examples of significant restructuring (alliances, innovations in capitalization, and chapter 11 restructuring). One way to classify the cases is to group them into three broad groups: (1) those that went into bankruptcy or converted to an IOF because of poor financial performance; (2) those that converted to an IOF because of a need to acquire additional capital or a desire to access market value; and (3) those that were in the process of forming or were re-engaging in the market (for example, after bankruptcy). Table

1 provides a list of the co-ops examined in the case studies and the group to which they belong.

As will be seen, these groupings are useful in examining the factors that appear to be at work in the cooperative restructurings that were examined. Not all of the factors, however, lined up with the groupings – there were a number of factors that cut across the groupings. The next three subsections examine insights that emerge from considering the factors that correspond with the groupings, while the remainder explore those issues that cut across groups.

Management and Oversight

Not surprisingly, all the co-ops that belong to the first group were identified as suffering from poor management and/or a failure to modernize their operations (this includes relocating geographically as production and marketing patterns shifted) – after all, poor financial performance is almost by definition the result of poor management. Rather than re-focus on core values in response to tight markets, the managers of the cooperatives in these cases sought refuge in bold new strategies that were sold as significant new investment opportunities. It is intriguing that in two of these cases, Rice Growers Association (RGA) and Tri Valley Growers (TVG), the failing firms were survived by sister cooperatives – Farmers' Rice Cooperative (FRC) and Pacific Coast Producers – within the same industry who managed to survive by maintaining a focus on service to members. These instances suggest that poor management may simply reflect a normal business outcome, and not the outcome of some flaw in the cooperative business model.

It is interesting to note that most of the co-ops that were identified as having poor management were also identified as having significant agency problems (e.g., lack of effective oversight by the board). This latter observation is important because it may shed some light on the reasons behind the poor management decisions and the consequent reduction in financial viability.

While most of the case studies only hint at why poor management may go hand in hand with problematic agency relations, the case study on the Saskatchewan Wheat Pool (SWP) suggests one reason – management overconfidence and hubris. The SWP case sketches out a complex relationship between management overcon-

Table 1. Co-op Case Groupings

Group 1	Group 2	Group 3
Tri Valley Growers	Dakota Growers Pasta Co.	West Liberty Foods
Rice Growers Assoc.	Agricore United	Amer. Native Beef Co-op
Lilydale	Diamond Walnut Growers	N. Amer. Bison Co-op
SK Wheat Pool	Pro-Fac	United Producers Inc.
	FCStone	

fidence and lack of board oversight, with overconfidence affecting oversight and vice-versa.

A useful avenue for future research would be to dig more deeply into the various behavioral relationships that exist in cooperative management and governance and to try and identify the root causes of poor management decisions and a lack of oversight. Regardless, however, of the mechanisms by which lack of oversight and management performance are connected, the case studies make it clear that this is an issue to which cooperatives need to pay particular attention if they wish to remain financially viable.

Cooperative Benefits and Objectives

It would seem self evident that a cooperative that converts to investor ownership (either with the support of management or via a hostile offer from investors directly to members) with full member support is furthering the economic interests of members. But is it? If members are treated differently as a result of conversion and, in particular, if over the long run markets become less competitive, then perhaps not. Just as investors considering the purchase of a given set of assets will carefully examine their long run earnings potential under investor ownership, cooperative members should attempt to value those same assets from a patron perspective when they are used by a cooperative. Unfortunately, little is known about "cooperative valuation"; most work on corporate finance and valuation presumes an investor focus.

The case studies that comprise group 2 shed some light on these issues. Specifically, the cases nicely point out the issues that emerge when cooperatives reorganize to access additional capital or to realize market value.

First, it needs to be pointed out that reorganizing to access additional capital and reorganizing to realize market value, while conceptually distinct, are closely related and can often not be separated. It is for this reason that the various cases in group 2 have been grouped together. While it is perhaps clear in the FCStone (FCS) case that the members undertook a conversion to realize the considerable value that was present in the company, even here the desire to access additional capital to fully capitalize on the market opportunities available was identified as a factor behind the conversion. In the other cases considered, however, the separation cannot so easily be made. For instance, in both the Dakota Growers Pasta Company (DGPC) case and the Diamond Walnut Growers (DWG) case, the conversions occurred in part to provide older members with access to their accumulated equity. The value that could be realized for this equity, as well as the capital that was available for the co-op, depended critically on the financial structure chosen by the co-op.

Although conversion did allow the co-ops to access additional capital and current members to access their equity more easily (and, in some cases, to realize a significant capital gain on their equity investment), these were not the only impacts of the conversion. As an example, the DWG conversion resulted in some former

co-op members facing a potential monopsonistic processor in the post-conversion period. The FCS case also examines what happened post conversion, concluding that the market for risk management services remains competitive and thus the former co-op members are not disadvantaged on that score. While the issue of post-conversion market performance was not explicitly identified for the other cases in this group, it could nevertheless emerge as an issue in these other co-ops. Indeed, there is evidence that Pro-Fac explicitly recognized this issue and negotiated long-term contracts that would reduce the opportunities for opportunistic behavior by buyers with which they are now contractually obligated to deal. As pointed out in the DWG case, however, the determination of future market structure may be difficult to do at the time of conversion.

Even without the emergence of a monopolistic market structure *ex post*, the question arises as to what should be the driving principle when producers make decisions about companies that they own. As the Agricore United (AU) case argues, continued member control, rather than the maximization of share value, is a legitimate objective and one that members should be able to pursue.

Cooperative Structure

The case studies in group 3 – by focusing on co-ops at the time they are forming or re-engaging with the market – provide insights into some of the key problems that have to be addressed in the architecture of co-ops. These problems include free rider issues (United Producers Inc. (UPI)), agency problems (managerial opportunism in the case of North American Bison Cooperative (NABC) and overall operational performance in the West Liberty case), and the inability of members to supply sufficient capital (American Native Beef Cooperative (ANBC)).

As the cases make clear, finding solutions to these problems affects the organizational structure chosen by the cooperative. In the UPI case, the co-op introduced a federated voting structure and altered membership rights and responsibilities to deal with free rider problems. Agency problems in the West Liberty case were partially dealt with through the production contracts used by members, and management monitoring is evolving in the NABC case to address potential opportunism. The NABC case illustrates how the failure to recognize capital constraints resulted in the lack of co-op formation and how a different financial structure may have allowed a producer-driven organization to develop.

In addition to providing insights regarding problems with cooperative architecture, the cases in group 3 also point to sources of cooperative advantage. In particular, although in the next section we discuss difficulties that cooperatives have in accessing capital for business operation, the West Liberty Foods case in group 3 describes how cooperative formation can be necessary to secure access to capital. In particular, by assuming ownership responsibilities (investment, risk, and managerial oversight), growers secured the capital (both from member growers

and lenders) needed to continue operations for a processing facility that previous investor owners had intended to shut down.

Capital

The ability of cooperatives to access sufficient capital for their operations is, of course, one of the most discussed issues among co-op leaders and researchers. Thus, not surprisingly, this issue cut across all the groups and was explicitly discussed in many of the cases. However, although the issue was common, its manifestation was different across the cases. Since the role of capital for the co-ops in groups 2 and 3 was discussed above, the focus of this section is on the role of capital for the co-ops in group 1.

For co-ops in the first group, the capital issue emerged explicitly in terms of a rising debt-equity ratio, which eventually resulted in financial difficulties. It would be incorrect to conclude from this evidence, however, that access to additional capital would necessarily have solved the problem. As the SWP case illustrates, even with access to large amounts of capital from its share conversion, the SWP still became too heavily leveraged; indeed, the access to relatively easy capital was one of the factors that allowed overconfident managers to take control of the co-op and to spend with virtually no restrictions.

With that caveat in place, what can be gleaned from a number of the cases – this includes TVG, RGA, and Lilydale – is that a shortage of capital, combined with a willingness by the board and management to heavily leverage their co-ops, were the factors responsible for the co-ops getting into financial trouble. As these cases illustrate, management believed that the changes occurring in their industry required them to redefine their business operations and to integrate further along the value chain. The case studies also make clear that these co-ops were unable to access sufficient capital from their members to allow the cooperative to undertake this integration. Nevertheless, management leveraged their co-op's operations so the co-ops could participate in these additional activities. The result of this strategy, however, was that the co-ops were unable to survive financially and they either declared bankruptcy or were acquired by or converted to an IOF.

The Pro-Fac case is interesting because it describes a co-op that took a different path. Pro-Fac concluded that its best strategy was not to participate in the value added processing and marketing segments of its industry, but instead to retrench and focus its activities much nearer the farm level. DWG also pursued a different strategy, opting to convert to an IOF when they had troubles raising capital through their membership for a shift into more value-added activities (e.g., the snack food sector). In contrast, the TVG, RGA, Lilydale, and SWP cases all illustrate situations in which management tried, unsuccessfully, to push their operations into areas further away from the farm gate. Further evidence for this view is also provided by FRC (it is described in some detail in the RGA case), which emerged as a strong

player in the California rice industry by focusing its activities on bulk handling and processing.

The pattern described above suggests that a structural shift may have indeed taken place in agriculture, one with which it is increasingly difficult for cooperatives to deal. As agriculture becomes more industrialized, the need for capital at the processing and marketing levels increases. The question raised by the case studies assembled in this book is whether cooperatives are able to access sufficient capital from their members to be able to effectively compete in these market levels.

It has long been noted that co-ops are typically located near the farm gate level and that they have had trouble moving up and/or down the supply chain. Indeed, this inability has been seen as problematic, since it indicates that co-ops may be unable to integrate to the point in the supply chain where market power is an issue. Nevertheless, some co-ops have been able to move beyond the bulk handling of commodities and into processing. The interesting thing about the case studies assembled is that there is now some indication that even those co-ops that had been able to successfully adopt this strategy in the past (e.g., TVA, RGA, Pro-Fac, DWG) are now finding it difficult to do so.

Property Rights and Portfolio Problems

The cases also highlighted the various property rights problems that have been argued to affect cooperative structure and performance. Included among the problems that were discussed were the horizon problem, the free rider problem and cross-subsidization through price pooling arrangements. The portfolio problem was also discussed in a number of cases. As has been often argued in the literature and as is seen in the case studies, one of the important impacts of these problems is on capital availability.

The horizon problem was explicitly identified in the DWG case, where it was argued that one of the factors leading to DWG's conversion was the significant member resistance to the increased crop retains that were required when DWG entered the snack food market. The horizon problem in this case may have been exacerbated by a board that represented older growers. Similar concerns were hinted at in other cases. In the Lilydale and the SWP case, for instance, it was argued that older members held a significant share of the equity, and that numerous co-op decisions were designed to ensure that these members were able to access their equity.

The DWG case also provided an example of the free rider problem – in this case, the new members were able to free ride on the investments made by the existing members. The result, particularly when combined with the horizon problem, was a reluctance by the existing members to making investments in the co-op. The free rider problem was also identified in the UPI case, where, as was discussed above, a federated voting structure and altered membership rights and responsibilities were introduced to deal with the problem.

Cross-subsidization across commodities was identified as a problem in the TVG case where tomato and olive growers received higher payments than they would have received in stand-alone pools (fruit producers, in turn, received a lower price). Although cross-subsidization often has the effect of lowering member commitment among those members who produce the product whose returns are being siphoned off, in the TVG case this effect was relatively small (because of few outside options, the fruit growers stayed with the co-op). Instead, the problem that emerged was that TVG continued to invest in tomato processing, even when this market segment was not doing well financially. Thus, cross subsidization served to mask market signals and to keep TVG in an operational rut that eventually bankrupted the co-op.

Finally, the portfolio problem was viewed as being important in the TVG, DGPC, West Liberty and ANBC cases. Contracting with the co-op exposes members to various degrees of both production and price risk, while investment in the co-op results in investment risk. The ability or inability of producer members to take on these risks was identified as being an important factor in the co-op's organizational structure decision.

Discussion and Concluding Comments

The cases assembled in this book provide a rich setting for examining both the details of a number of cooperative conversion and restructurings, and general lessons on the some of the larger cooperative problems and questions. They also provide the jumping off point for additional research and investigation.

One of the questions that has long intrigued cooperative researchers is the question of the efficiency and efficaciousness of the cooperative business model. The cases that have been assembled shed light on this question. They suggest that some of the conversions and restructurings are due to what can simply be called poor management, something that is not unique to co-ops, but is in fact common to all business enterprises regardless of their structure.

At the same time, the cases also acknowledge that the common structural problems associated with cooperatives – namely lack of capital, property rights problems, and portfolio problems – do have an impact on the structure chosen by cooperatives and their members. In this regard, the conversion examples arguably are the most illuminating about the unique challenges that face cooperative businesses.

Cooperatives can be viewed as symptomatic of an underlying problem with investor ownership. They exist in the economy to fill gaps in the provision of goods and services, and to counteract market power. According to this view, the cooperative business structure is a corrective measure, but also a costly one to be avoided if it is not needed. They are costly because they must be financed and governed: just as there is no need for consumers to form a cooperative to purchase (or possibly produce) pins and needles, neither should we expect farmers

to form a cooperative to buy or sell goods and services that are conveniently and competitively available from investor-owned firms.

This view suggests at least two potential causes of pressure to convert from cooperative to investor ownership. First, the existence and structure of any given market evolves over time with changes in technology, consumer preferences, the institutional framework supporting the market (e.g., antitrust enforcement), and relevant state, federal, and international policy that may affect supply and demand conditions. If the underlying problem with investor ownership is, to some extent, remedied by these changes, a cooperative operating in this market may lose its relevance. The conversion at Lilydale and DGPC, and perhaps to a lesser extent, the hostile takeover of AU, fit this category of cause for conversion. Where at one time early in their history these cooperatives each were a source of competitive pressure in strongly oligopolistic markets, they each had become just another buyer in increasingly competitive world markets for poultry and grain, respectively.

Second, once a cooperative is in place with physical assets and operating capital, it is natural for its management team to pursue growth in scale and scope of operation. In a canonical setting for cooperative emergence where there is clearly an absent market or severe market power abuse, managing a cooperative profitably and sustainably is a matter of competent administration, logistics, and accounting. However, as markets evolve and cooperatives find themselves competing intensively for member patronage, management is apt to take a more proactive and offensive approach in setting strategy. With a good management team, and some luck, it is possible to generate significant firm value in following whatever strategy is put place.

Paradoxically, success of this sort can be the downfall of a cooperative. As soon as a cooperative tries to provide members with liquidity through some form of earnings distribution, it is inevitable that members seek and expect continued earnings. With a focus on "earnings," a cooperative loses its essential character to focus on patron value. Additionally, without carefully designing equity management policies that maintain primary control and equity stake in the hands of current patrons, it is easy to end up with an intergenerational conflict, where members who are nearing retirement want to cash out their ownership stake. Alternatively, if the market value of a cooperative's assets exceed book value by a sufficient amount, it may be feasible to get near unanimous support for conversion. The Diamond Walnut, DGPC and FCStone cases seem to fit this description.

The case studies also shed light on a related question of interest to cooperative researchers, namely whether the structure of agriculture might affect the structure and nature of cooperatives. The inference to be drawn from the cases is that, yes, there may be a relationship. One of the hypotheses to emerge from the cases is that the capital requirements of industrialized agriculture have increased to such a degree that it is becoming increasingly difficult for co-ops to operate much beyond the farm gate. One of the implications of this hypothesis is that co-ops may find

themselves increasingly unable to integrate up to the point of the key market failures (e.g., overly concentrated markets). If this is the case, then the ability of co-ops to provide the "yardstick of competition" may be in jeopardy. The loss of such a role could have a myriad of implications, including lessened support for an exemption from antitrust rules.

At the same time, the case studies also suggest another link between the structure of agriculture and the structure of co-ops. As the West Liberty case illustrated, the formation of a co-op was associated with a significant shift in the structure of the contract between the grower and the processing facility. Further work is required to determine if this linkage holds in the other direction – i.e., if shifts in the nature of the contractual relationships in agriculture, as seen in agricultural industrialization, have impacts on the structure of co-ops.

The case studies also suggested other areas of fruitful research. Understanding the motivations of managers, for instance, as they increasingly leverage their operations, would appear to be important. Was such behavior due to overconfidence and hubris, as suggested in the SWP case, or was it due to other factors such as a need to satisfy the needs of particular member groups?

One issue that did not receive mention in the discussion above is fraud and financial misreporting. As the cases make clear, cooperatives are not immune from this problem – this was an issue in at least three of the co-ops examined (RGA, TVG, UPI). To date very little work has been done on this issue in co-ops, although it has been receiving attention in the business literature. This lack of research may be particularly significant at the international level, where co-ops in developing countries (and even in some developed countries) are known to be focal points for corruption and government intervention.

To conclude, we would like to thank the authors for their work on these cases. When the idea of a collection of case studies on cooperative conversions, failures and restructurings was first proposed, the interest by authors was immediate and overwhelmingly positive. The authors shared our view that the case histories of a number of the co-ops had to be completed while key individuals associated with the co-ops were still available for interviews and while events were still relatively clear in participants' minds. A special thanks is due those individuals who participated in interviews.

The authors' initial enthusiasm was followed up with a commitment to getting articles written and reviewed – the deadlines that were set were all met and the book came out on time. We were also pleased that many of the authors were able to present their cases at the November 2009 NCERA-210 Annual Meeting in St. Paul, MN. The conference discussion was very useful in shaping the form of publication and in providing the authors with feedback.

Chapter 1

The Restructuring of the Saskatchewan Wheat Pool: Overconfidence and Agency

Murray E. Fulton and Kathy A. Larson

Introduction

On 30 August 2007, the Saskatchewan Wheat Pool (SWP or Pool) officially became known as Viterra, thereby formally severing all links to its cooperative roots. The real loss of its cooperative structure, however, occurred earlier. A number of dates vie for the honor: April 1996, when Pool shares began trading on the Toronto Stock Exchange, making the cooperative at that time one of but a handful in the world with publicly traded shares; January 2003, when, as part of a massive C$405 million debt restructuring plan, the number of farmer-member directors was reduced from twelve to eight and four independent directors were added, one of whom was designated as the lead director with responsibility for managing the board; or February 2005, when the SWP's board of directors approved a recapitalization plan that transformed the Pool from a cooperative to a business corporation.

During the period marked by the dates above, the Pool went through a number of major transformations. In the early 1990s, the Pool was the dominant player in the grain handling business in Western Canada, with a market share in its home province of nearly 60 percent and a major voice in Canadian agricultural policy. Through the 1990s, the Pool diversified, investing heavily offshore and in the domestic grain processing and hog industries, all the while undertaking a massive restructuring of its grain elevator system. By the late 1990s, the Pool had lost a large percentage of its market share, major financial losses were being incurred, and debt was rapidly mounting. In 2000, a new CEO was hired and the company began

selling off assets in an effort to stay solvent. After narrowly escaping bankruptcy in January 2003, the company began to turn its financial position around. In late 2006, the Pool announced a takeover bid for Agricore United. The bid was successful and the Pool once again became the dominant player in the Canadian grain-handling industry. In 2009 Viterra moved to become more multinational in scope with a takeover bid for Australia's ABB Grain Ltd.

The purpose of this article is to examine the factors behind the events at SWP in the 1990s. During this period, the Pool's dramatic loss of market share and accumulation of debt placed it on a trajectory that resulted in it eventually losing its cooperative structure. Although the events after this period are fascinating and worthy of study, they are not examined because they are the result of a different set of dynamics driven by the Pool's attempts to deal with problems created during the 1990s. While many forces contributed to the decisions made during the 1990s, this article concentrates on two key factors: the hubris and over-confidence of senior management and a lack of effective oversight by the board of directors.

The rest of this article is structured as follows. The next section provides a brief history of the Canadian grain handling system and the Pool's role within it. The section following that provides details on the Pool's market and financial performance during the mid-1980s to early 2000s timeframe. The article then presents the two conceptual frameworks used in the case study—cognitive theory and agency theory. These frameworks are followed by the presentation of evidence from personal interviews conducted with Pool senior management and elected officials to support the hypothesis that hubris among senior management and a lack of oversight by the board led to poor investment decisions at the Pool. The article concludes with a brief summary and discussion.

Overview of SWP and the Canadian Grain Handling System

Saskatchewan Wheat Pool was one of three "wheat pool" co-ops that formed in the 1920s in Manitoba, Saskatchewan and Alberta to collectively market wheat on behalf of their farmer-members through a jointly owned Central Selling Agency (CSA).[2] Through pooling accounts, each farmer received the same price regardless of the time of year they sold their grain.

The Pools were successful for several years until a poor quality wheat crop in 1928 and falling grain prices beginning in 1929 (which resulted in an overpayment to farmers and mounting margin calls) led the federal government to step in and dissolve the CSA (Fowke 1957, p. 248–251). After the dissolution of the CSA, farmers pressured the government to continue grain pooling through a state enterprise, the Canadian Wheat Board (CWB).

With the CWB marketing wheat, the Pools (along with the United Grain Growers (UGG)) operated as farmer-owned grain handling companies. (For further information on the Alberta and Manitoba Pools, and UGG, see Earl 2009.) Although SWP's core business activity was grain handling, it was diversified in other agri-business

areas. By the 1990s, the Pool's five operating divisions were: grain handling and marketing; agri-products; agri-food processing; livestock production and marketing; and publishing and other.

Rail deregulation, trade liberalization and challenges to the CWB prompted a major restructuring of the Canadian grain industry in the 1990s (for more details, see Lang 2006). In 1995, the long-standing subsidy on grain transportation—the Crow Rate—was removed due, in part, to the World Trade Organization (WTO) agreement and a move to cut federal government spending. The railways were allowed to set their freight rates (subject to a revenue cap) and to close branch lines. In reaction to a more liberalized trading environment created by both the WTO agreement and NAFTA, as well as a belief that the CWB might disappear, a number of the multinational grain companies entered the Western Canadian market. In response, the Pools and UGG consolidated their grain handling operations, built large inland terminals on the main lines, and modernized their grain handling systems. The SWP, in particular, began to diversify its operations towards value-added activities.

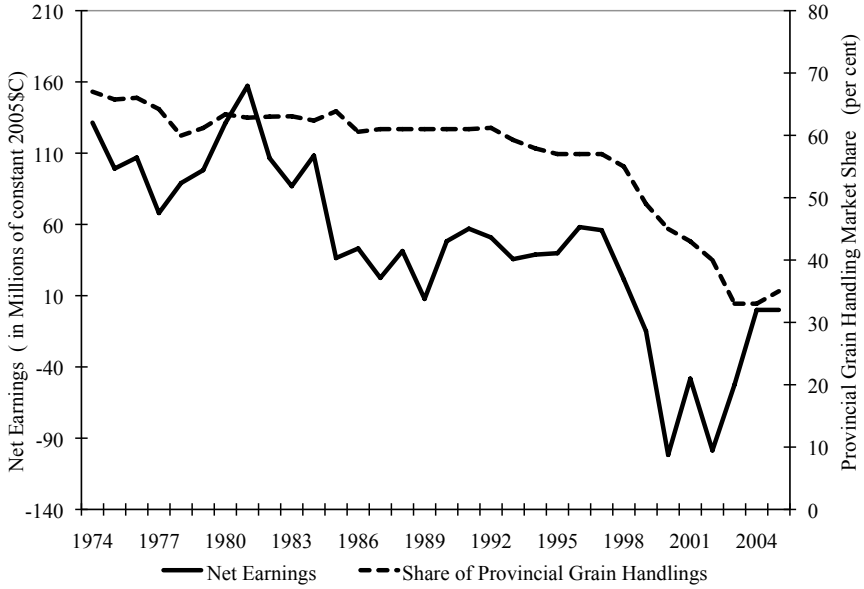
The Share Conversion and Subsequent Events

As early as the mid-1980s, it was apparent that the Pool was facing a major financial hurdle. With nearly half its membership approaching retirement, the Pool required more than C$100 million to make patronage equity payouts (Saskatchewan Wheat Pool [SWP] Equity Conversion 1995).[3] That hurdle, coupled with declining net earnings (see figure 1.1) and the co-op's desire to rebuild its elevator network and to diversity its operations, drove the Pool to consider new financing options. In 1994, delegates approved a dual A-B share structure under which the B shares would trade on the Toronto Stock Exchange.

In the A-B share structure, the Pool used the A shares to leave control in the hands of the farmer membership, and converted retained member equity into tradable B shares. The B shares were viewed as a permanent source of equity (in comparison, traditional member equity is typically considered by banks as debt because it must be repaid to members upon their retirement or exit from farming). With the new financial structure, the problem of redeeming member equity was solved and financial institutions greatly expanded the money that they were willing to lend to the Pool for its elevator rebuilding and business expansion programs.

Under the conversion, farmer-members each received one A share worth C$25. This share gave each farmer-member the right to one vote when electing delegates and the right to participate in Pool committees. The remainder of a farmer's equity was converted to B shares at a rate of C$12 per share; these shares could then be bought and sold on the Toronto Stock Exchange.[4] Investors were able to purchase B shares up to a maximum of 10 percent of the total issued and outstanding shares, a limit that was intended to keep ownership of the Pool diffuse. An amendment in 2002 allowed for a higher ownership limit to be granted in special

Figure 1.1. SWP net earnings and grain handling market share in Saskatchewan, 1974–2005



Source: Saskatchewan Wheat Pool Annual Reports

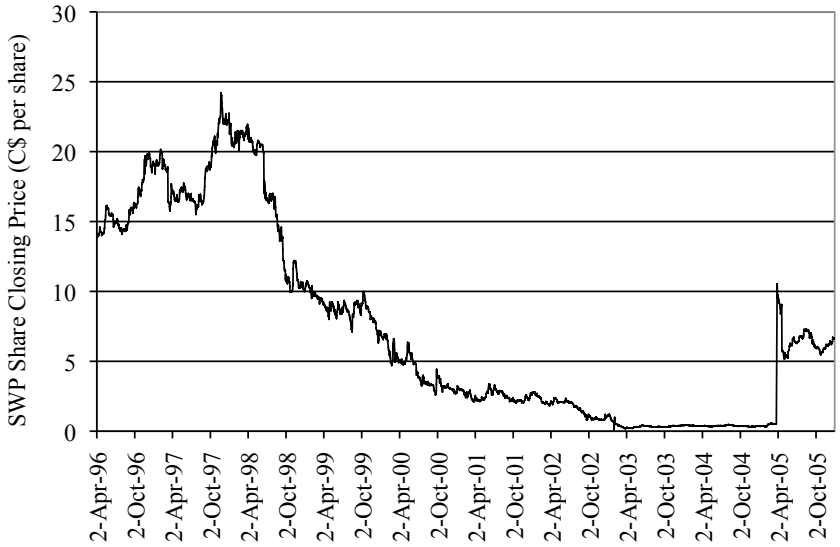
circumstances. The ownership limit was removed in 2005 when the Pool became a business corporation.

Trading started on 2 April 1996 with shares opening at C$12.00. They rose quickly, peaking at C$24.20 in November 1997, and then steadily declined (see figure 1.2). The share price fell below C$12.00 in late September 1998 and reached a low of C$0.18 per share in March 2003.

Although the share conversion did not immediately provide the Pool with access to any more equity capital (a subsequent share offering in 1998 added C$110 million in equity), the new financial structure meant that financial institutions were willing to make available a significant amount of additional debt capital that the Pool used to pursue new business lines and rebuild its elevator system. Based on the increase in long-term debt that occurred, the Pool likely had access to at least C$400 million in extra credit.

In 1997, the Pool announced both Project Horizon and its first foreign direct investments. Project Horizon was the Pool's elevator rebuilding initiative, which entailed building twenty-two facilities at a cost of C$270 million at locations across Saskatchewan, Manitoba, and Alberta. The foreign direct investments included ter-

Figure 1.2. Price of Saskatchewan Wheat Pool B shares on the TSE, 1996–2004



Source: CFMRC TSE Database

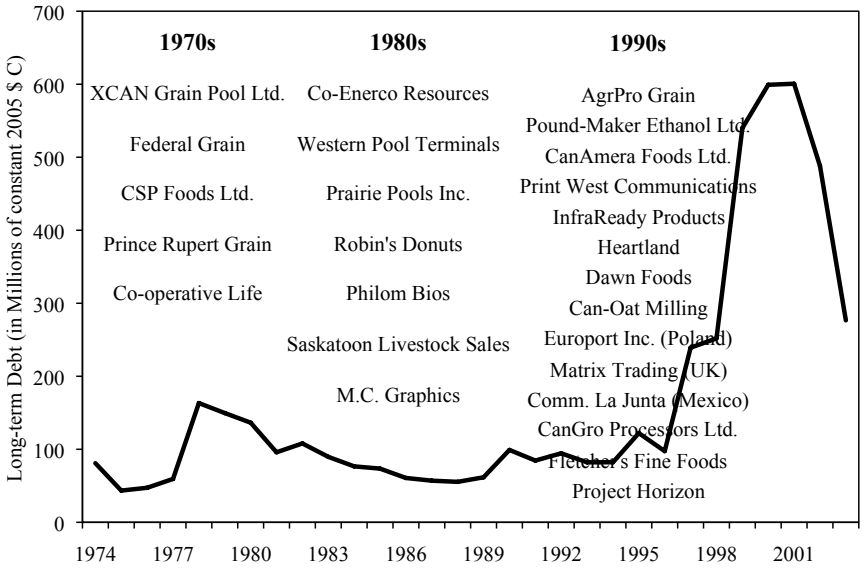
minal construction in Poland and Mexico, ownership in an England-based trading company, and a joint venture terminal with General Mills in North Dakota.

The Pool also made other investments and acquired other operations. Included among these investments and acquisitions were an oats processing facility, a hog processing facility, a farm input supply business, a number of hog production units, and several food processing businesses. As a result of an unparalleled number of acquisitions and investments (see list of acquisitions by decade in figure 1.3), long-term debt rose from C$97.4 million in 1996 to more than C$539.9 million in 1999 (all figures in 2005$C) (see figure 1.3).

In addition to a rising debt, both market share and net income declined sharply (see figure 1.1). Net losses began in the 1998–99 crop year, the Pool's 75^{th} year of operation, and persisted for the next six crop years. From 1993 to 2003, the SWP's grain handling market share in Saskatchewan fell from 61 percent to 33 percent. As a result of the poor financial showing, both Chief Executive Officer Don Loewen and Chief Operating Officer Bruce Johnson were asked to resign in 1999. A new CEO, Mayo Schmidt, was hired in 2000. Schmidt's efforts to slash debt through massive divestment were unsuccessful. In early 2003, the Pool was forced into a C$405 million debt restructuring plan and further divestment of major assets.

As the Pool's financial problems grew, it began shedding its co-op identity. The ownership limit on shares was revised in 2002, which opened the door for

Figure 1.3. SWP long-term debt and acquisitions by decade, 1974–2003



Source: Saskatchewan Wheat Pool Annual Reports

companies to buy a major position in the Pool. The board makeup went through a series of changes. The first change was the addition of two outside advisors in 1998. The board size was then decreased from sixteen to twelve members in 2000, with two of the twelve board members being external. As part of the 2003 refinancing obligations, the number of external members was increased to four, leaving eight farmer board members. Two years later the Pool became a federal corporation under the Canada Business Corporations Act, which altered the board makeup to seven appointed directors, four elected farmer-board members and the CEO. Legally, the Pool was no longer a co-op. The shares were re-evaluated and traded under the symbol SWP.[5]

As a corporation, the Pool further pared its elevator network to 44 primary elevators in 2006. In late 2006, the Pool entered a bidding war with James Richardson International (JRI) for Agricore United. SWP won the bidding war, with Agricore United accepting the takeover bid in early 2007.[6] The amalgamated company, known as Viterra, is the largest grain handler in Canada, with 30 percent of the primary elevators, 39 percent of the port terminal capacity, and 36 percent of the licensed storage capacity (Canadian Grain Commission 2007).[7] In May 2009, Viterra announced a proposal to purchase ABB Grain Ltd of Australia.

Conceptual Framework

Two conceptual frameworks are used to examine the decisions made by the SWP during the 1990s: cognitive theories of hubris and overconfidence, and agency theory. Both theories provide explanations for why the Pool's investment decisions were unsuccessful. Other factors, of course, were also at work. For instance, a significant drop in member commitment has been identified as an important factor in explaining the poor performance of Project Horizon and the Pool in the late 1990s (Lang & Fulton 2004; see also Lamprinakis 2008). The focus on overconfidence and agency in this article is undertaken to explore more fully these two factors and their interrelationship.

Overconfidence and Hubris

Business executives are generally thought to be overconfident (Brown & Sarma 2007). This over optimism can be linked to selection bias (Gervais, Heaton & Odean 2006), as well as a number of cognitive errors—mistakes in the way that information is processed—that executives routinely make (Lovallo and Kahneman 2003).[8] Among these errors or biases is the propensity for people to overstate their ability—i.e., to see themselves as above average in their abilities and skills. Closely related to this problem are attribution errors, the inclination that people have to attribute positive outcomes to things that they have done, while attributing negative outcomes to outside events. One of the consequences of these cognitive errors is hubris; managers believe they can do anything, even in situations where others have not succeeded.

Over-optimism in business settings also springs from the manner in which business plans are developed. Most business plans start with a proposal. By their very nature, proposals accentuate the positive. However, starting with a proposal that is tilted towards the positive virtually ensures that the final plan shares the same tilt. The reasoning for this is anchoring, the cognitive tendency to put too much emphasis on initial positions and not enough on subsequent information. Furthermore, information acquired to test the assumptions and claims in the proposal will often be chosen to support the initial beliefs that underlie the proposal, a result of the so-called confirmation bias (Lovallo et al. 2007).

Competitor neglect can also be a source of over-optimism. Business plans developed without considering what competitors are planning can easily result in over-capacity, price wars, or product duplication.

The best evidence for overconfidence and hubris comes from an examination of business acquisitions (Malmendier & Tate 2005; 2008). This evidence is particularly applicable to the SWP given the large number of investments it undertook in the 1990s. The empirical literature shows that firms generally overpay for acquisitions, and that the shareholder wealth of the acquiring firm either falls or remains constant after the takeover.[9]

There are two underlying reasons cited for this overpayment, overconfidence and hubris, and agency problems.[10] Hubris means that CEOs have an overwhelming presumption that their high valuation of a takeover target is correct, even when it is not. Hubris and overconfidence play a particularly important role when considered in conjunction with the investment funds to which a CEO has access. If CEOs have excess cash available, they will tend to invest it in new ventures or acquisitions. As outlined above, CEOs will tend to overpay for these acquisitions, and so the investments will often be unsuccessful.

The relationship between CEO hubris and acquisition premium is greater when board vigilance is lacking—i.e., the less oversight by the board, the greater the overpayment. Indeed, it is widely understood that agency problems can also lead to overpayment and poor investments.

Agency theory and oversight

An agency relationship occurs when a principal hires or appoints an agent to carry out a task on the principal's behalf. Because the principal and the agent differ in their objectives and because the agent typically has more information than the principal about the environment in which decisions are being made, opportunity exists for the agent to behave in a manner not in the principal's interests (Eisenhardt 1989). This means that the principal has to provide appropriate incentives to the agents to get them to behave in the principal's best interest. In the best-case scenario, the principal's goals are more or less achieved, albeit at a cost. In the worst-case scenario, only the agent's goals are met.

A number of agency relationships exist in agricultural co-ops. In a traditional co-op, the farmer-members are the ultimate principals with the elected board members serving as agents. However, a second agency relationship also exists between the board and the co-op's senior management. This cascade of agency relationships offers substantial room for the agency problem.

Agency theory has been frequently applied to business acquisitions and investments. Jensen (1986) argues that agency problems are likely to be greater in firms that have excess cash available for investment and acquisition purposes. Managers who have access to internal funds do not have to subject themselves to the monitoring that external capital markets provide. As a consequence, they are better able and more likely to make investments that benefit them personally rather than add shareholder value. Accordingly, Jensen argues, firms should ensure that excess cash is paid out to shareholders because doing so results in greater oversight.

Staatz (1987) notes that cooperatives can reach a point in size and complexity that makes it impossible for the board to fully monitor managerial behaviour, regardless of the board members' talents. Quarterly board meetings, which are often the only contact the board has with management, make it difficult, if not impossible, to ascertain if management has exercised proper due diligence on investment proposals. Farmer-elected board members also may not have the knowledge nor

business skills that senior managers possess (Ernst and Young Corporate Finance Inc 2002). If board members lack business acumen and simply trust that management provides accurate projections and assumptions, they may end up granting approval to nonviable investments. Thus, if information asymmetry is grouped with board inexperience, an inability to monitor management and an implied trust in management, the agency problem could become quite severe.[11]

In the case of SWP, the agency relationships that existed after the 1996 share conversion were more complicated than those in traditional co-ops. Because the co-op's shares were owned in part by shareholders that were not farmer members, both the farmer members and the class B shareholders could be classified as principals. The board, which was appointed solely by the farmer members, was expected to act as an agent on behalf of both of these groups in its dealings with senior management.

Conceptually, this more complicated agency relationship can be expected to make the agency problem more severe. Because the goals of the farmer members and the investors are likely to differ, and thus some compromise is needed between them, the board and senior management are in a position to claim to both groups that circumstances require that they meet the goals of the other group, all the while undertaking actions that meet only management's goals. And with two groups of principals in place, the incentive to fully monitor the actions of the board and management is likely to be reduced. The result is that the board and management may have more leeway to pursue their own objectives.

In summary, co-ops that are large and diversified, are publicly traded, have highly confident leaders, and have excess internal funds available for investment are likely to be at greatest risk of overinvesting and having investments turn out poorly. SWP possessed all these characteristics, and the result, at least in retrospect, was predictable—the investments made by SWP in the 1990s were largely unsuccessful.

Analysis

This section uses evidence collected from published material and 21 personal interviews conducted with former SWP management and board members to illustrate how overconfidence and hubris resulted in a number of poor investments, which resulted in the Pool losing customers and incurring an ever-increasing debt. Further analysis of these interviews, conducted from September 2004 to April 2005, as well as additional details on the quotes presented below, can be found in Lang (2006).

Overconfidence and Hubris

From 1996 to 1999, the Pool invested in approximately 25 acquisitions and long-term debt grew five-fold. This spending stemmed from a belief of urgency. The Pool believed that it needed to "move rapidly to beat [the] U.S." and it needed to "become more of a global player and expand beyond Saskatchewan borders."

There was a conviction that if the Pool did not "stay at a significant size…[it would] become one of two things: irrelevant or sucked up." Interviewees recalled how Pool management and board members arrogantly believed the Pool could become "the ConAgra of the North" and become "one of four or five top grain companies in the world." A June 1997 *Canadian Business* article quoted CEO Don Loewen as saying "if we don't become a strong, global force, we will just be eaten up by the American [multinationals]. Quite frankly, they'll eat our lunch" (Casey 1997).

The 1996 share conversion, by enabling access to greater debt, provided the capital for rapid expansion. As one interviewee described it, the Pool felt like it had a "bottomless pit of money." With the "capital from the public markets, not only could [the Pool] make a lot of decisions quickly, they felt they were expected to."

A sense of confidence permeated the board and management. The Pool believed it was "well positioned for the changes rapidly transforming the once highly regulated and stable industry" (1997 SWP Annual Report, p. 14). Other grain industry participants expressed confidence in the Pool as well, which, in turn, served to validate management and board members' beliefs. Scott Schroeder of Dominion Bond Rating Service (DBRS) said the industry changes would "leave few survivors. Saskatchewan Wheat Pool and Cargill will be the only ones—it's a pretty safe bet." (Casey 1997). At the Fourth Agricultural and Food Policy Systems Information Workshop, Barb Isman, Cargill's Assistant Vice President of Corporate Affairs, stated that to gauge the "future of the western agricultural industry,…policy analysts might use their time and resources most wisely if they simply talked to three companies: SWP, Cargill and…Monsanto." (Loyns, Knutson, & Meilke 1998, p. 149).

Loewen was seen as the right individual for the job. Investments that he had orchestrated—specifically Robin's Donuts and CSP Foods—had turned out well for the Pool, so the board "didn't think he could do anything wrong." One board member explained that Loewen was hired because "he was [the] type of individual who moved fast" and the board knew it had to "keep the reins on this individual because he [would] be very aggressive."

Loewen was "absolutely driven by the thought that [the Pool] had to move very quickly." He had everybody "hooked on this idea of being the biggest and the best." One board member described the Pool as feeling "invincible and that was driven by Don Loewen's personality and a number of people around him that just felt [the Pool] couldn't be stopped." Loewen's power and leadership style was reflected in the investment decision-making. An interviewee described Loewen's decision-making as "shoot from the hip" based on good gut feelings.

The need to move quickly to diversify and invest affected the analysis and the decision-making process. "Ideas did not get…proper and adequate evaluation, if Loewen wanted to do it everyone would find a way to make it happen." As one board member explained "the argument that was being made was that if [the Pool]

did it first, no matter what we paid for it, we would prevent our competition from doing it and then we would be successful."

Some interviewees were of the opinion that people "in very senior operational positions [had] no outside experience" and "the board did not have the makeup or people on it…that would occur in a company somewhere else." One management employee used the words "naïveté and arrogance" to describe the corporate culture. The Pool was considered to be lacking the experience and background in its management and board to say, "No, this doesn't make sense."

The quotes and examples presented above provide evidence of significant overconfidence and hubris by the senior management and board. This overconfidence and hubris appears to have stemmed from a number of cognitive errors. Senior management, along with the rest of the organization, clearly saw itself as above average in business acumen. Success was believed to have stemmed from the actions and decisions that management made, rather than due to outside events or good fortune. Anchoring and the confirmation bias were both at work—business proposals and investment analyses were constructed to be optimistic, which in turn appears to have bred further optimism. Finally, competitor neglect seems to have been important. Because the Pool felt it could keep out competitors if it moved quickly, the decisions of these competitors were almost certainly not being considered (see the next section for additional examples).

When the overconfidence and hubris were combined with easy access to additional debt capital, the result was a major spending spree. And this spending extravaganza was indirectly encouraged by an apparent unwillingness and/or inability of the board to question and challenge the expenditures being made.

Lack of Oversight

The lack of oversight and its connection to an agency problem at the SWP is best captured by a former employee:

> I think after that, in the 80s and 90s, that is when the quintessential struggle between the board and management started. This is an issue for every organization that has boards, whether appointed, elected, …you have the board and then have your senior management. Senior management is always in a better position information wise, the management staff were usually higher-trained educated people with all sorts of skills, everything from being able to do social research to accounting to all those things. …You could see the gradual change where the board became almost dependent as opposed to being the final decision-making body. They basically became dependent on management to tell them, 'Here's what you should do and here's why you should do it.' At the board level there probably wasn't the capability …but in terms of being able to make some of these major decisions

> around [Project Horizon], they pretty much had no choice but to go with what management put before them and as best as they could make decisions on it.

The relatively complex agency relationships that existed in the Pool after the conversion greatly influenced the decisions that were made. For the most part, senior management was able to bring the board on side with respect to its view of the SWP's future path. All interviewees agreed that, given the deregulation occurring in the 1980s and early 1990s, the grain industry was evolving into a new system with new players. They also agreed that the Pool had a strategy to remain a dominant player, although to achieve this goal they would have to move quickly. A senior manager recalled that "as all the regulations fell away from the grain side [the Pool] simply had no choice but to become much more market-driven and market influenced." A diversification strategy was so important that both the board and management believed that the Pool would not survive if it did not diversify.

The acceptance of management's vision likely reduced the board's incentive to monitor management's actions. The investments and activities proposed by the Pool were clearly associated with a diversification strategy, and the agreed upon need to move quickly meant that the board's ability to hold up investment decisions for sober second thought and analysis was greatly reduced.

There was also no strong incentive for either of the two main principals—farmers and investors—to monitor the actions of their agent, namely the board. Patronage payments ended with the share conversion, so farmers lost their incentive to ensure that investments were properly undertaken. And because investors (the B share owners) could not vote, and therefore could not influence the board, they too lacked an incentive to monitor the decisions being made. This lack of incentive from both principals was likely a contributing factor in why the board failed in its oversight role.

Other factors, however, were also at work. The "need for confidentiality increased when [the Pool] went to a share offering." The Pool had to become less specific about where it had business interests because of the risk of insider trading. This lack of information sharing was part of a larger pattern observed by board members. As one board member saw it, "There were a lot of things shared with the president that never got adequately shared with the rest of the board. Getting things done became more important than sharing information."

Senior management, however, saw the situation differently. As senior managers remarked, "the amount of information we supplied was information overload at times," and "it was more that the board did not know the questions to ask." In a similar vein, the comment was made that, "[t]he board of directors did not have the makeup or the people on it that would normally have served that check and balance to senior management." At the same time, "as the business got more sophisticated, and more complicated, and moved further away from the farm gate it

got tougher" for board members to assess proposals. The volume of proposals and expected promptness for decisions to be made "would have been difficult even for a competent board to stay abreast and do a fair job of assessing what was coming in."

As the Pool expanded, it became increasingly difficult for board members to provide expertise. Some senior managers said "there wasn't the person [on the board] who would do the homework" because, for board members it was "stepping way beyond your comfort zone," and "when it came to managing an entity that was worth close to a billion dollars in assets they were a little out of their league." A board member admitted that "as we got more external, we had to rely more and more on our CEO and CFO and others to provide us with the types of insights and analysis we needed to make decisions."

Overconfidence and Lack of Oversight – Impact on Investment Decisions

To further understand how overconfidence and lack of oversight affected investment decisions, this section examines three investments that were mentioned during nearly every interview: (1) Project Horizon; (2) Humboldt Flour Mills; and (3) the foreign direct investments.

Project Horizon began with an announcement of the location of all twenty-two elevators. Construction also began more or less simultaneously on all the high throughput elevators. The Pool "firmly believed they were going to stop the competition literally by tying up all the construction capacity for these high throughput elevators in the short-run." This "move quickly" approach did not work. Board members were astonished that companies would build facilities just a few miles down the road from a SWP high throughput location. The competition's response negatively affected the Pool's revenue projections from grain handling, as the Pool had "explicitly included in their assumptions that their producers would go to their high throughput elevators."

The revenue shortfall was also likely a result of falling member commitment. As Lang and Fulton (2004) argue, member commitment fell, in part, because the members no longer saw the Pool as operating in their best interest. This belief was partially a consequence of the investment activities pursued by the Pool and the manner in which they were carried out, as the example of Humboldt Flour Mills shows.

Even though Humboldt Flour Mills was not the Pool's largest investment, it "was the bellwether that told everybody else in rural Saskatchewan [that the Pool] was out of control." One senior manager described the 1998 acquisition of Humboldt Flour Mills as "a bidding war with Agricore." When Alberta Wheat Pool expressed interest in the company, the Pool "didn't want Alberta Wheat Pool in farm supplies in innermost Saskatchewan," so the Pool "ended [up] paying C$16 million for Humboldt Flour Mills." A range of managers and board members saw

the acquisition as "keep[ing] Agricore out" even if that meant paying "far more than what made economic sense."

On the foreign investment side, the Pool made investments in grain handling terminals in Poland and Mexico in 1997, and in a grain-marketing firm in England in 1998. All of these investments were unsuccessful. Interviewees lay part of the blame for these failed investments on "unscrupulous partners" and data from a consulting company that "did not come to fruition." There were interviewees who partly blame the Pool because these were areas where the Pool had no traditional operating knowledge. One board member was highly critical of the terminal investments: "I think whether it was bad analysis or it was a lack of insight into the changing environment, I guess not fully appreciating the strategic influences in those respective countries and unstable environments."

These examples further illustrate the underlying errors that were made in the analysis of investment projects, the over-optimism that was present in the organization, and of the lack of effective oversight. Anchoring, the confirmation bias, and competitor neglect were present. Hubris was also a factor—management had a belief they could make investments in virtually any area, regardless of whether they had any experience.

Discussion and Conclusions

Looking back at what transpired at SWP in the 1990s, it is not surprising that the investments made during this period were largely unsuccessful. Both agency problems and overconfident leaders were present in the Pool. The agency problem was exacerbated by three factors: (1) ownership and control were separated via the A-B share structure, leading to a situation where neither the farmer members nor the investors had an incentive to carefully monitor the activities of the CEO and senior management; (2) the sheer volume of the investment and acquisition activity that was undertaken made it virtually impossible for a board to stay on top of what was happening; and (3) as a result of the change in financial structure, the senior management had available to it a large amount of debt capital. This easy access to funds also exacerbated the overconfidence and hubris that the CEO and senior management exhibited—new investments could be undertaken without being be subjected to the scrutiny of the capital market.

In short, SWP succumbed to the two classic problems associated with financial investment activity, agency problems and management overconfidence. The result was as expected—the Pool overinvested and made poor investments, the consequence of which was that its financial viability was severely challenged. What started as an attempt to keep the SWP competitive in a rapidly changing market ended with SWP making bad business decisions, which in turn resulted in the loss of the Pool's cooperative structure.

What lessons does the SWP case provide to other cooperatives? Given their relatively complex agency problems, cooperatives must ensure that someone has

an incentive to oversee the board. In traditional co-ops, the members often play this role. If members become less connected to the cooperative—perhaps because of increased size or increased variety of activities—it is important that the board remains independent and accountable. This point is particularly important if the sources of financing for the co-op become increasingly diverse, which in turn means that the incentive for any group to monitor the actions of senior management is reduced.

Oversight by the board is also important. Agriculture co-ops must ensure that board members have the necessary support and skills to undertake their fiduciary responsibilities. Many co-ops have changed their board makeup to include appointed members with specialized knowledge and expertise in the fields of finance, marketing, and accounting. It makes sense to provide finance and management training courses for the board to ensure that they can analyze projections and assumptions behind the decisions being made. A board with strong knowledge and business skills will help alleviate the risk of information asymmetry.

These suggestions are means of dealing with the long understood problem of information asymmetry. The case presented in this article suggests that cognitive asymmetry is also important. It is critical that a board find ways of getting at the cognitive errors that they and their senior management are likely to make. There are ways, for instance, of dealing with overconfidence and the cognitive errors that underpin it, and cooperative boards need to embrace these techniques. One technique that has been suggested is the use of reference classes, a set of analogous situations to which the current decision can be compared. This technique can be combined with a process that explicitly accounts for bias (Lovallo & Kahneman 2003). While boards should not be expected to actually carry out an analysis of proposals using this technique, they can ensure that it or something similar is used as a part of all decision-making. A board, for instance, could establish a policy whereby it would not approve a proposal without a report on the results of such exercises.

In summary, cooperatives are likely to face an increasing number of governance problems as they adapt to rapidly changing economic environments and adopt increasingly complex forms of financing. As the SWP example illustrates, problems of agency and cognition can be particularly troublesome for cooperatives. Special attention to these problems will be necessary if cooperatives are to retain their cooperative nature.

Notes

1. Included in this group were Tri Valley Growers (TVG), Rice Growers Association (RGA), Agway, and Farmland Industries Ltd in the United States, and Saskatchewan Wheat Pool (SWP), Agricore, Dairyworld, and Lilydale in Canada. TVG and RGA filed for

bankruptcy in 2000, followed by Agway and Farmland Industries in 2002. In 2001, Agricore was acquired by United Grain Growers and Dairyworld was purchased by Saputo. Both SWP and Lilydale converted to IOFs in 2005.

2. See Fowke (1957) for a history of the Prairie grain industry from 1900–1950. For a history of the Saskatchewan Wheat Pool prior to the 1980s, see Fairbairn (1984).

3. While the Pool was under no legal obligation to repay member equity, there was a strong expectation by the membership that repayment would occur.

4. A trading period prior to the share opening allowed farmers to trade shares amongst each other. At the start of trading on April 2, 1996 Saskatchewan farmer-members owned just over half (53 percent) of the Pool's capital. There were 29.6 million Class B shares issued; 15.7 million to farmers; 6.4 million to non-Saskatchewan investors; 6.1 million to Saskatchewan investors; and 1.1 million to SWP employees (Briere 1996).

5. As a publicly traded cooperative from 1996 to 2005, the SWP's ticker symbol was SWP.B.

6. For an examination of Agricore United's decision to accept the Pool's takeover bid, see Earl (2009).

7. To satisfy the federal Competition Bureau, the Pool and Agricore United were required to turn over ownership of 24 elevators and nine farm service centres to JRI and Cargill (Ewins 2007a). Without this turnover, Viterra would have controlled 68% of the licensed storage capacity in Western Canada (Ewins 2007b).

8. In explaining the role of overconfidence and hubris on business strategy, Lovallo and Kahneman (2003) are followed closely.

9. Using evidence from 1973–1998, Andrade, Mitchell, and Stafford (2001) present evidence that the stock value of the acquiring firm falls with an acquisition, although this result is not statistically significant at the five percent level. A review of numerous earlier studies is also provided in this paper.

10. See Brown and Sarma (2007). Roll (1986) was one of the first to demonstrate that hubris is responsible for overbidding. Heaton (2002) discusses the interaction of optimism and excess cash on investment decisions. Hayward and Hambrick (1997) conclude that the relationship between CEO hubris and acquisition premium is greater when board vigilance is lacking.

11. The problem is argued to be particularly acute in cooperatives because they lack a publicly traded share that serves as an indicator of financial health (Cook 1995; Vitaliano 1983). A test of the agency problem in agricultural cooperatives using the Jensen (1986) framework is presented in Featherstone and Al-Kheraiji (1995) and Hailu (2005).

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Chapter 2

Lessons for Cooperatives in Transition: The Case of Western Canada's United Grain Growers and Agricore United

Paul D. Earl

Introduction

United Grain Growers (UGG) was formed in 1906 as the Grain Growers Grain Company (GGGC), but altered its name in 1917 after a merger with the Alberta Farmers Cooperative Elevator Company (AFCEC). It operated as UGG until 2001, when it merged with Agricore, which had been formed by a merger between Alberta Wheat Pool (AWP) and Manitoba Pool Elevators (MPE), and became known as Agricore United (AU). In November 2006, it was subject to a hostile and ultimately successful takeover bid from the Saskatchewan Wheat Pool (SWP), which, by this time, had converted from a cooperative to a shareholder-controlled Canada Business Corporation Act (CBCA) company. The takeover was completed in June 2007. The story of AU is therefore inseparably connected to the story of the three pool organizations. Between 1997 and 2007, all four companies, after a century of farmer control of grain handling, disappeared. This article focuses on the forces that came into play in the last six months of AU's existence, and which, in the end, were responsible for its demise. The material in this article is based on approximately 50 interviews and conversations with grain industry directors and management, public documents issued by the four companies, and archival material lodged in the University of Manitoba Archives and Special Collections.

Background

The History

When the GGGC was formed, farmers were predominantly classic liberals and free traders who felt that they suffered from a lack of effective competition among railways, grain companies, and manufacturers. During the 1920s, however, they developed a more radical critique of laissez faire—a critique which became the philosophical basis on which the three provincial wheat pools were founded in 1923 and 1924 (Earl 1992). While UGG retained the classic liberal attitudes of earlier critics, the Pools' generally negative view of the private sector led them to favor centralization and regulation of grain handling, marketing, and transportation.

The Pools were enormously successful until 1929, when, in part because of their reluctance to use the Winnipeg Grain Exchange for risk protection, they nearly went bankrupt and survived only through loans from the three prairie provincial governments.

The Great Depression called free enterprise into question throughout most of the world, including Western Canada, where the concept of a "100 Per Cent Pool by Legislation" (Hull 1931) led to the creation of the Canadian Wheat Board (CWB) in 1935, albeit without its current monopoly powers. These were added in 1943 as a result of wartime conditions, and were retained after the war to implement a series of international wheat agreements (Morris 1987; 2000).

By the end of the Second World War, therefore, the industry had attained the institutional configuration and ideological divisions that persisted until the early 1990s. Grain handling was dominated by the Pools and UGG, which by 1950 owned 48 percent of the country elevators. (There were five companies larger than MPE, the smallest of the four co-ops, that collectively owned another 38 percent. None was as large as SWP. The remaining 14 percent were owned by about 40 smaller companies (Canadian Grain Commission 1955/56).) The CWB had responsibility for marketing wheat, oats, and barley, which accounted for over 90 percent of grain production. The industry was highly centralized and regulated, with most of the grain marketing, transportation, and logistics functions managed by the CWB. Freight rates were legislated at 1899 levels (the Crow's Nest Pass Rates), branch line abandonment was virtually impossible under the Railway Act, and grain handling tariffs and licensing were controlled by the Board of Grain Commissioners (Canada Grains Council 1973). As discussed below, this heavy centralization and regulation had profound effects on the grain handling and transportation system, and was a major factor leading to the disappearance of the co-ops.

Ideologically, the grain industry was sharply divided, with the CWB, the Pools, and most farm organizations supporting the status quo, and the private grain companies and the railways wanting a more commercial system. UGG occupied a middle ground between these two. By the 1960s, however, a paradigm shift had begun to develop throughout the western world, characterized by a declining faith

in the public sector and an increasing acceptance of market-based solutions to economic problems (McBride 2005). In Canada, the 1967 National Transportation Act (NTA), counterpart to the American 1980 Staggers Rail Act, was a key development in the resulting trend to deregulation. Regrettably for some, and happily for others, the Act retained legislated rates for grain movement.

From the late 1960s on, criticism of the highly regulated regime grew, with claims that the grain industry had stagnated under heavy regulation and control. In 1973, a new farm organization, the Palliser Wheat Growers Association (later the Western Canadian Wheat Growers Association) became a vigorous proponent of this view, and thus a new constituency took shape that wanted a more market-oriented handling, transportation, and marketing system to emerge. There followed twenty years of often bitter debate, focused primarily on transportation, which culminated in the end of tightly regulated grain freight rates in 1994. This debate was accompanied by some changes in marketing, with domestic feed grains, barley exports to the U.S. (temporarily), and oats all removed from CWB control.

Critics of the status quo were correct in their claim that the long period of regulation had brought significant inefficiency. By 1970, the country elevators were old and outdated, too many in number, spread over a dispersed rail network, and decreasingly capable of handling large modern trucks. Grain moved predominantly in boxcars until 1973, when, faced with a near-crisis in rail capacity, the federal government made the first of a series of hopper car purchases for grain movement (Earl 2000).

Between 1970 and 1990, progress towards modernizing and consolidating the country elevator and branch line system was slow, but by 1990 modernization could no longer be delayed. The outdated system needed a huge injection of capital to modernize, but the grain companies' financial returns were impaired by the cost of the widely dispersed and inefficient elevator system (Earl 2007).

The Conversion and Demise

The following major events occurred between 1990 and 2007:

1. Faced with a near crisis with their country elevator systems, all four grain co-ops began a massive re-investment and renewal process, replacing old elevators with large "high throughput," or "inland terminal" facilities, thereby reducing the number of country elevators from 1578 in 1990 to 336 by the end of 2007 (Canadian Grain Commission 2008).

2. UGG entered the equity market, issuing public shares in 1993. Three non-farmer directors were added to its 15 member board, while the other 12 continued to be farmer-elected. The company then operated under new federal legislation, the 1992 United Grain Growers Act.

3. SWP followed UGG by issuing public shares in 1996, but kept a fully farmer-elected board.

4. MPE and AWP primarily financed their investments through debt.

5. All four companies' balance sheets deteriorated, and the financial results were worsened by poor crops in 2000 and 2001 (Earl 2007).

6. MPE and AWP almost went bankrupt and, following a failed takeover attempt of UGG in 1997, merged to form Agricore in 1998. To fend off the hostile bid, UGG sought a so-called "white knight," Archer Daniels Midland (ADM), which then acquired about 40 percent of the company and occupied two of the non-farmer director positions.

7. Agricore itself continued toward bankruptcy, and in 2001 was finally forced into a merger with UGG to form Agricore United. This diluted ADM's ownership to about 25 percent. AU continued to operate under the 1992 UGG legislation.

8. SWP made some major errors and almost went bankrupt. By 2003, it had abandoned farmer control and was largely controlled by its debt holders. In 2005, it became a CBCA corporation (Fulton & Lang 2007).

9. From 2004 to 2006, SWP slowly improved its financial situation, and its shares rose from about C$2 to about C$6. AU worked on reducing its debt load, and its share price remained largely unchanged (approximately C$7).

10. On 7 November 2006, SWP mounted a hostile takeover of AU. AU rejected SWP's first bid on grounds that it was too low, and by 12 December had begun to explore whether other parties might be interested.

11. A rival offer by James Richardson International (JRI) led to a bidding war that ended with SWP acquiring all outstanding shares at a price of C$20.50.[1]

In just over a decade and a half, therefore, the long-delayed modernization of grain handling and transportation was finally accomplished, but it was accompanied by a near revolution in ownership and control. During this period, most of the country elevators extant in 1990 were replaced by a network of inland terminals, while the four large and seemingly successful co-ops had been replaced with one publicly traded company.

The story of UGG and AU over these years breaks into two parts. The first—which stretched from 1992 to 2006 and included conversion to a publicly traded, but farmer-controlled, company and the merger with Agricore—was largely a success. The second, from November 2006 to June 2007, which encompassed its takeover by SWP, was arguably a failure.

The Operative Factors

The following description of the operative factors underlying these changes emerged from, and was repeatedly confirmed in, the interviews conducted for this study.

- The first factor was the 20-year, ideologically driven debate over transportation policy as described above. This delayed the modernization that was so urgently needed, and improvements that should have evolved over the preceding decades were done quickly. Because capital had not been set aside over previous decades, new monies had to be raised, and the consequent concentration of investment weakened the balance sheets of all four companies.

- At the same time, farm sizes increased, rural populations declined, and farming became more a business and less "a way of life." Younger farmers, reflecting the paradigm shift alluded to above, were more comfortable than their forebears with free enterprise, and had less empathy for a co-op philosophy. Neither the Pools nor UGG responded effectively to these changes. The governance and policy activities of the companies did not change with the times, and so it was not only difficult to interest younger farmers in co-operative ideals, but also to engage them in what appeared to be outdated procedures.[2]

- Farm populations were also aging, creating a looming "bubble" of member equity redemptions for all four companies. Capital was needed, not only for reconstruction but also to retire these obligations.

- Virtually all interviewees for this study also noted an inherent weakness of co-op boards. Except for three members of the UGG board, the directors of all four companies came from the farm community, and all with the same skills and background. Moreover, the director election process meant that directors ultimately gained their position from local support and, to some extent, were bound by local concerns. Less charitable observers spoke of the "parochial" outlook of board members who lacked the experience, knowledge, and outlook required to direct large modern corporations (see also Hoyt 2003).

- The weakened balance sheets resulting from the massive investment of the 1990s came on the heels of a long period of declining profitability. For the Pools, this was identified in a study conducted in the late 1980s (Touche Ross 1988; see Earl 2007 for an examination of a longer time frame).

- AU failed to address properly the implications of its conversion for the relative rights and responsibilities of shareholders and members. In the end, the company acted as if it were fully governed by the CBCA, and hence

members, notwithstanding their status in the UGG Act (see below), had no say in the takeover. This was arguably the most important factor contributing to AU's final demise. (See Hansmann 1999 for a discussion of the way that the interests of shareholders and other stakeholders can conflict.)

- Personalities also played a part. Prior to about 1990, the CEOs of all four companies had generally been promoted internally. Later, new incumbents entered these positions from a variety of backgrounds. The CEOs of AWP and SWP were both strong personalities with their own ideas for their companies and the industry, and they were widely reputed to have clashed. This clash was one of several factors preventing the Pools from merging, a step that might have led to preserving the three companies as a single cooperative (see Fulton and Larson 2009).

- Within UGG, the new CEO appointed a number of new senior managers whose commitment to, and empathy with, farmer control was less than that of the farmer directors. Interviewees from the company identified tension between the board and management as a significant factor in the way that events unfolded. The AU board did not act as decisively or as proactively as they should have to address this issue.

- A number of interviewees also identified the company's relations with investors as a critical issue, some claiming that a co-op style of governance was a "hard sell" with investors, and others suspecting that management had never properly presented the benefits of member control to the investment community. Fulton and Larson (2009) point out, for example, that a membership structure with farmer control tends to create a core customer base that is committed to the company, and that customer commitment is a key factor in commercial success. These were important points to make with shareholders.[3]

Some of these factors were controllable, and AU's fate might have been different had the board of directors managed the company—and responded to the SWP bid—differently than they did. A close analysis of events from November 2006 to June 2007 yields lessons for other similar organizations that might consider entry into the equity market but are concerned about finding themselves the target of hostile takeovers that could threaten the member control that is one of the essential features of cooperative enterprise.

Conceptual Framework

The primary issue before the AU board when the SWP bid was received was the relative rights of shareholders and members. While most interviewees from the company (directors and management) claimed that the members' rights were

considered, they provided few details as to precisely how this was done. Overall, the board apparently believed that their ultimate responsibility was to maximize returns to shareholders. The importance of the board's duty to shareholders grew as the bidding process drove up share price, ultimately making it impossible to resist the takeover. The rights of members eventually vanished from the calculus and the board saw itself merely as an auctioneer whose sole duty was to advise the shareholders that the offered price exceeded the value of the company as a stand-alone enterprise, and to recommend acceptance of the highest bid. Moreover, the board believed that they would have faced legal action from aggrieved shareholders had they either resisted the takeover or acted to reduce shareholder value.

There is a lively debate as to whether the principle of shareholder primacy should govern mergers and acquisitions (Bakan 2004; Greenwood 1996; Kelly 2001; Lee 2005; Mintzberg, Simons, & Basu 2002). This article, however, does not engage that normative debate. Rather, it compares the AU board's understandings as outlined above with a several legal commentaries on the role of a board of directors during a takeover initiative, and identifies a number of discrepancies between them.[4]

The Canada Business Corporation Act requires that directors of a corporation, in exercising their "duty of care," to "act honestly and in good faith with a view to the best interests of the corporation" (p. 122). Legal authorities confirm that the directors' duties are to the corporation, not to any one stakeholder. Stikeman (2008), for example, writes: "The fundamental duty of a director of officer is to the corporation he or she serves" (p. 5). At the same time, the "shareholder primacy norm" means that the interests of shareholders and the interests of the corporation are normally identical. According to Bakan (2004), serving the interests of the corporation "generally means to maximize the wealth of shareholders." In an accompanying footnote, Bakan quotes Dr. Janis Sarra, director of the National Centre for Business Law at Simon Fraser University: "In North America, the best interests of the corporation have been defined as the best interests of shareholders" (p. 37). Legal scholar Gordon Smith (1998) has traced the evolution of the "shareholder primacy norm" and goes so far as to say that, from the early nineteenth century onward, it was assumed that "shareholders collectively became the corporation" (p. 297).

In AU's case, however, this identity between shareholders and the corporation seems to have been challenged by the provisions of the special legislation under which the company operated. In the first place, sections 6 and 9 of the UGG Act explicitly defined AU's members as part of the corporation. These sections read, respectively, as follows: "The corporation continues to consist of members and shareholders," and "The corporation is a combined membership and share capital corporation." Moreover, the Act's preamble mandated that "it is desirable to maintain" the company's "historic connection with the farmers." Arguably, farmer control of the organization was part of that "historic connection." The Act also

specified that where there was a conflict between it and the CBCA, the former would prevail.

By all accounts, the farmer members of the AU board were not happy with the outcome of the takeover process, and felt that preservation of the company as an independent entity would have been beneficial for its members, for farmers in general, and for the grain industry. Some also reported vigorous opposition from members who shared these views. Although this dissatisfaction represents a prima facie case that the members thought it was in their interests to preserve the company, they were never consulted about the takeover. According to some interviewees, the takeover process offered no way of measuring the relative value of farmer control and shareholder returns.

The conclusions drawn at the end of this article turn on this distinction between AU and a "normal" CBCA company. If the AU board, in its collective view, did not fully understand its position and its duties, then it follows that: (1) the principle of shareholder primacy might have been tempered by the rights of members; (2) members might have been given a voice, and a way might have been found to weigh shareholder and member interest; (3) the threat of legal action might have been overrated; and (4) in the end, the takeover bid might have been successfully resisted and the company retained as an independent, farmer-controlled enterprise.

An Analysis of the Takeover

The following analysis examines five elements of the AU board's understandings on the basis of Baxter (1988), Stikeman (2008), and Nicholls (2007).[5] Each of these three sources is a summary of the rights and responsibilities of a target company's board in the event of a takeover bid from, respectively, an academic, professional, and pedagogical perspective.

Was the board's primary responsibility to shareholders?

The Supreme Court of Canada 2004 case of *Peoples Department Stores Inc (Trustee of) v. Wise* provides one of the most recent rulings on the issue of shareholder primacy. According to Stikeman (2008), it showed, as discussed above, that "fiduciary duty is owed to the corporation…rather than to its shareholders" (p. 9). However, the Peoples judgement is controversial and went beyond this already established principle (Lee 2005). The judgement says, the "phrase the 'best interests of the corporation' should be read not simply as the 'best interests of the shareholders'," and "[t]he interests of the corporation are not to be confused with the interests of the creditors or those of any other stakeholders" (*Peoples Department Stores Inc. (Trustee of) v. Wise* 2004, paragraphs 42, 43). Baxter (1988) reached this same conclusion in 1988: "Canadian corporate law [rejects the view] that directors should only be concerned with profit-maximization to the exclusion of" non-investor interests (p. 103).

Nicholls does not address the question of shareholder primacy directly, but he does state, unequivocally, where the directors' duties lie. "A corporation's directors and officers must, at all times, discharge their duty to act 'honestly and in good faith with a view to the best interests of the corporation.' This very language is found in many Canadian law statutes, and the essential principle existed in common law as well" (p. 175).

None of these three authorities, therefore, supports the position that shareholder rights trump all others. All suggest that directors owe their duty to the corporation, not shareholders, and given the status of members under the UGG Act, it is reasonable to infer that their arguments would have applied with greater force to AU.

Did the board have a right or responsibility to oppose the deal?

According to Baxter (1988), "directors have a right, as well as a duty, to oppose takeovers which they believe…are not in the best interests of the corporation and its shareholders," and they "are entitled [to this right] in the exercise of their business judgement" (pp. 98, 104). Stikeman (2008) says that directors need not "abandon a deliberately conceived corporate plan for a short term shareholder profit" (p. 92), while Nicholls (2007) cites *Teck Corporation Ltd. v. Millar* (1972) (which he calls "an important part of the Canadian corporate law canon") stating that directors may oppose "a takeover that they honestly believe is not in the corporation's best interests." This position is based on what he calls "the fundamental principles of directorial responsibility." Directors, he says, are "at times…positively obligated to resist potentially harmful bids," and in a footnote he quotes *First City Financial v. Genstar Corp et al.* (1981): "The right *and indeed the obligation* of directors to [act] in the interests of the company and its shareholders…in respect of a take-over bid, is perfectly clear and unchallenged" (pp. 180, 183; emphasis in original).

If, as suggested above, the legislation's "historic connection with farmers" included farmer control of the board, then farmer control was arguably also the core of AU's "corporate policy and effectiveness." It would appear, therefore, that the board may have had a duty to resist the bid.

Was AU obliged to seek other bidders?

Stikeman (2008) says that, under what is called the "Revlon duty," directors are mere "auctioneers" whose duty is to maximize shareholder value. The publication also points out, however, that the Revlon duty only applies "[w]here a sale or change of control is 'inevitable'," and so a takeover bid "does not necessarily require target directors to solicit higher third party bids" (pp. 187; 91–93). Although the "Revlon duty" is an American concept that Canadian courts have not imposed, Nicholls (2007) argues that there are corresponding duties under Canadian law, but that these duties only apply when a company is "in play." Precisely what "inevitable" and "in play" mean is, therefore, a critical question. Nicholls seems to reject the

idea that an initial bid puts a company in play, an assumption, he says, that would go "well beyond…*Revlon* and its progeny" (p. 193). Moreover, "a company with a controlling shareholder cannot be said to be in play if there is some legal bar (such as a statutory provision) that makes it impossible for a single shareholder to obtain control." He quotes the *Airline Industry Revitalization Co. v. Air Canada* (1999) ruling, which stated that "Air Canada argues that it is protected from being a target of a takeover bid by an Act of Parliament which remains in full force and effect and which means that Air Canada is simply not 'in play"' (p. 192). The kind of arguments advanced by Stikeman and Nicholls did not, apparently, influence AU since, within a little over a month, it had "initiated contact with…a number of third parties [regarding] an alternate transaction" (Agricore United 2006, p. 11).

It seems reasonable to infer that: (1) AU was not, in fact, "in play" in December 2006; (2) it might have followed Air Canada in arguing that its legislation precluded it from being "in play;" and, accordingly, (3) on either count, it was not obliged to explore "an alternate transaction," at least as early as it did, and possibly not at all.

Was it AU's sole responsibility to advise shareholders whether the bid was fair and, if so, to recommend the sale to them?

Although Baxter (1988) suggests that Canadian Securities regulation "places the target company permanently on the auction block," he argues that this position is not "appropriate" if directors honestly believe that the corporation (which, in AU's case, would have included members) would be "better served" "by the company remaining independent." He further states that the position of Securities Administrators "is inconsistent with both the existing Canadian case law and the fundamental premise of corporate governance that the directors' role is to manage the company" (p. 100). Stikeman (2008) is even more direct: "The Securities Acts allow boards of directors to decline to make a recommendation with respect to a take-over bid, provided that they state their reasons for doing so" (p. 90).

Again, the understanding of the AU board seems to have been incomplete.

Would the board have been sued if they had resisted SWP?

The following factors are relevant:

- Disgruntled shareholders may pursue what is called "an oppression remedy" if a board does not maximize shareholder value. However, according to Stikeman (2008), "In alleging oppression, a complainant must generally demonstrate that it had a 'reasonable expectation' that the interest in question would be protected" (p. 37). Evidently, AU shareholders did not have such expectations because, allegedly, they had continuously complained about their lack of control under AU's governance system. They had, however, acquired their shares in full knowledge of that situation and were free to dispose of them if they did not like it.

- Legal action by shareholders would not result in altering a board's decision. The "business judgment rule," Stikeman (2008) argues, "is essentially a policy of judicial deference to board decisions that are reasonable, well thought-out and taken in good faith, whether or not in hindsight they turned out to be the best possible decisions" (p. 89). Another authority noted in 1993 that Canadian "courts have rarely held directors responsible for breaches of the corporate law duty of care" (Daniels & Hutton 1993, p. 216).

The question, therefore, is not whether disgruntled shareholders might have sued, but whether AU could have successfully defended itself against legal action. It would appear that litigant shareholders would have been up against the issue of "reasonable expectation," the competing rights of members under the AU legislation, and the courts' "deference" to the board under the "business judgment rule." In making their case for a remedy, they also would have had to show why, given their own repeatedly expressed concerns about AU's governance, they suddenly had a "reasonable expectation" that shareholder interests would completely eclipse the interests of members.

It seems reasonable to infer from these comments, therefore, that concern over legal action may have been exaggerated and possible defences not fully considered.

Conclusions

Lessons for Co-ops in Transition

AU's choice to issue public shares placed it one step away from "Investor Owned Firms" in Chaddad and Cook's (2002) seven-stage typology of ownership rights models. This position allowed the company to access badly needed capital, and in comparison with AWP and MPE, which faced the same need, this seemed to be a sound policy. It did not, however, allow it to survive the SWP takeover bid despite: (1) the desires of farmer-directors and members; (2) the interpretation of mergers and acquisitions law outlined by Baxter (1988), Stikeman (2008), and Nicholls; and (3) the provisions of the UGG Act, which seemed to provide a basis on which to mount a defence. The experience of UGG and AU provides a number of lessons for organizations like the Western Canadian grain co-ops that need to access capital and see equity markets as the obvious source.

1. Governance procedures must be regularly reviewed and must reflect the values and lifestyles of the membership.

UGG and AU failed to do this, with the result that the governance process (local committees, delegates, annual meetings, and director elections) becoming no longer compatible with lifestyles of modern farming.

2. On entering the market, the relative rights and obligations of members and shareholders must be clearly defined, and directors must have clear guidelines for resolving conflicts between the two groups.

In AU's case, even though members were a legislated part of the company, it seems from the collective responses of interviewees that precisely what rights this provision conveyed in the event of a takeover bid were never clearly defined.

3. Senior management must be fully committed to the board's vision for the company, and particularly to the core policies of corporate governance.

In AU's case, the tension between board and management was longstanding and severe.

4. Management and board must actively "sell" the vision of member control of the corporation to the investment community.

There remains considerable doubt, in the minds of at least some senior former AU people as to whether the benefits of the governance structure were convincingly represented to investors.

5. A regular "SWOT" analysis of the environment is essential, including a careful assessment of who potential buyers of the firm might be and their financial capability of completing a purchase.

AU significantly underestimated the danger of a takeover, believing that there was no company interested or capable of executing such an action.

The foregoing five points all represent steps that must be taken long before any threat of a takeover appears, but they also constitute an essential foundation for resisting a takeover bid should it arise. The most important lesson that comes from the AU experience, however, is this:

6. The company should ensure that it has a "game plan" to deal with a hostile takeover bid—one that focuses on member control as the fundamental component of the company's "corporate policy and effectiveness" and includes defensive mechanisms designed to defeat any hostile takeover.

What AU Might Have Done

In AU's case, the literature reviewed for this study suggests that their game plan might have entailed responding to the initial bid with the following points:

> We do not believe an acquisition of AU shares by SWP is in the interests of this corporation. We believe that our "corporate strategy and effectiveness" is inextricably linked to the continuation of member-control of AU.

> We cite the provisions of our legislation as the fundamental basis for our rejection of the SWP bid, which clearly mandates that "it is desirable to continue our historic connection with farmers," which we construe to mean preserving the essential features of our governance system. That historic connection would be severed if this bid were to succeed.
>
> We further maintain that our legislation makes our members more than merely "stakeholders" (like customers, debtors, employees, society at large) and, indeed, gives our members an equal voice with shareholders in deciding the future of this company.
>
> We recognize that if 75 percent of shareholders wish, they "may, by resolution, authorize the directors to apply for the continuance of the corporation…under" the CBCA (UGG Act, s. 24(1)). However, we believe that such a step is not in the interests of the corporation and our "intrinsic value" (see Baxter 1988, pp. 99–100) is much higher than indicated by the current price of our shares, and would be destroyed by the success of this takeover.
>
> We cannot, therefore, prevent SWP from continuing to purchase our shares and acquire 75 percent of same from existing shareholders. If, however, they continue to do so, it is our intention to solicit and weigh the opinions of our members regarding the takeover, and will consider following the procedures discussed in *Teck Corporation Ltd. v. Millar* (1972; see Nicholls 2007, pp. 179, 180) and issue a second class of shares ("member shares") to our members to provide them with a formal vote on the issue of converting to a CBCA company.

This statement would have been issued as a directors' circular, and would have been much longer than this, explaining why the Act read as it did, and would have built a case around the "corporate strategy and effectiveness" that the company was pursuing.

If AU had taken the foregoing steps, both over the decade or so prior to its demise and when the SWP bid was first made in November, 2006, it might have survived as an independent entity "meeting farmers' business needs."[6]

Can Hybrids Succeed?

What can be inferred from the UGG/AU experience as to the future of "hybrid" organizations that seek to access equity capital while retaining member control? Do they represent a viable alternative for a co-op whose capital needs cannot be effectively met by the traditional means open to co-ops of debt and member equity? Or does AU's experience suggest that hybrids cannot survive in today's world?

On the con side, it may be that a cooperative governance structure is no longer needed. The large agricultural cooperatives were born under very different circum-

stances than those that prevail today, notably the massive informational imbalances of the first quarter of the twentieth century when farmers did not know the price of their grain until they arrived at their local elevator by horse and wagon. These circumstances led to the perception, and perhaps the reality, of abuses by private grain companies to which farmer-owned grain companies seemed an appropriate answer. Since these circumstances no longer exist, perhaps the need for farmer control has likewise disappeared.

Over against this argument, however, lies the discomfort of AU's farmer board members with the takeover, and the support they received from members. It stretches the imagination to attribute this discomfort to century-old abuses, particularly in the case of UGG, which was only partly motivated by the early twentieth-century abuses of market power and very early had accommodated itself to the open market. UGG occupied what Ian MacPherson (1979) called the "pragmatic" wing of the co-op movement (p. 46), whose underlying philosophy was summed up in 1922 by Edwin Nourse (1922) as "the new 'coöperation American style,' along the lines of big business bargaining and ruthlessness. …Taking the essential facts of the market as he finds them, [the farmer] seeks merely to put himself in the most effective position with reference to it"(pp. 585–586). Former UGG President Mac Runciman implicitly agreed, summarizing his own view of cooperativism as doing "the things a farmer wished to have done to improve his lot, and the essential part of it was the marketing of grain because that improved his lot the most and the soonest," and supporting "the guy out there on the farm who puts his life and his bucks into farming [and who] should make the decisions [and] have an absolute controlling input into how his business is handled" (Earl 2000, pp. 127, 141). Arguably, unless the directors' dissatisfaction is attributed to "agency theory" (and some interviewees among management were quick to do so), then it was the loss of this vision, which continues to have contemporary relevance, that caused the directors and at least some members to wish for the preservation of the company.

It might also be argued that member governance is unnecessary because of antitrust legislation. This factor is mentioned by Hansmann (1999, p. 401) and was cited by a number of interviewees—although not by company directors—as a reason why it was not necessary to preserve AU in order to protect its members against market abuse.

However, this proposition ignores the fact that engaging legal or quasi-legal processes of this nature takes a level of resources and organization that is not readily available to all potentially aggrieved parties, not to mention the fact that the outcome of such initiatives is always uncertain.[7] In the transportation area, legal remedies against abuses of market power are available to shippers through the Canada Transportation Act, and these were utilized by the Canadian Wheat Board in 1997 to charge the railways with violating their "level of service" commitments to the grain industry. This case illustrated the immense effort that is required to utilize legal remedies to alleged abuses of market power. If farmers by themselves

lack the organization and resources to initiate an action with antitrust regulatory bodies, who would do so on their behalf? A shareholder-controlled company is highly unlikely to initiate action on behalf of its customers, whereas a member-controlled organization, whose directors are both responsible and accessible to members, would have both the resources and motivation to do so.

Does the actual disappearance of both AU and SWP point to the non-viability of a hybrid structure? It would seem not. For both companies, there were factors unique to the Western Canadian grain industry that bulked large in their demise, including the destructive effects of the long period of ideological disputation that delayed the needed reinvestment and two years of almost record poor crops that reduced their revenues while that reinvestment was underway. In AU's case, neither the tension between management and board over farmer control, nor the apparent lack of preparedness for a takeover bid in the belief that there was no imminent threat, nor the board's apparent lack of awareness of opposing legal views on the principle of shareholder supremacy, were attributable to its hybrid status. Moreover, SWP's success in taking over AU was enabled by world financial markets that were awash in liquidity, and was not particularly aided by AU's hybrid nature.

There are, of course, a number of factors, some discussed in this article, that militate against the continued existence and success of cooperative style organizations, whether they are traditional co-ops or hybrids: the weakness of member dominated boards; society's increasing comfort with the marketplace and the corresponding decline in empathy for co-op ideals; and the increasing propensity to see farming as a business rather than a way of life. Hansmann (1999) also notes the potential conflict of interest that exists between shareholders who want maximum returns and members who are contributors to those returns. As noted earlier, UGG and AU felt these tensions and received negative feedback from shareholders on their governance structure. Arguably, too, farming in Western Canada no longer has the heavy dependence on wheat production that it did in the 1920s. Today, canola, and to a lesser extent so-called "specialty crops" like lentils, peas, and beans, all of which trade through the open market, has increased farmers' comfort with the market and reduced the perception that cooperative enterprise is a necessary defence against market power. (See also Hansmann 1999 regarding the negative impact of "heterogeneity" on co-op organizations.)

Despite these factors, both SWP and AU achieved some significant success. AU's aim, in 1993, was to raise much needed capital, both for re-investment in its outdated country elevator system and to redeem its looming member equity obligations. Both these goals were met, and on balance it did better than its cooperative competitors, absorbing two of them and emerging larger and stronger than the third (the one that, a decade earlier, had been the largest and healthiest of the four). SWP, immediately following its share issue in 1996, was also seen by shareholders as a valuable investment, advancing their value from C$12 on issuance to almost C$25 by 1998 (Fulton & Lang 2007). The subsequent fall was not initially attributable to its hybrid

status, but to some questionable investments and the two near-crop failures that impaired its financial viability.

The evidence from AU as to the viability of hybrid organizations is therefore mixed, but what is certain is that, with the factors that militate against the success of cooperative style organizations today, if a co-op wishes to access equity markets for capital, it must have a clear game plan in mind, and AU's experience does provide some guidelines as to what such a game plan must include.

Notes

1. Note that SWP had made an overture to AU in 2005. After the AWP/MPE hostile bid in 1997, and the 2005 approach by SWP, AU arguably might have begun to prepare for a new takeover bid from a third party. However, the interviewees said that they did not think anyone would be interested or equipped to try, particularly SWP, which, circa 2005, was by far the weaker company. Note, too, that SWP's ability to raise capital for the purchase was aided by a financial market that was highly, if self-delusionally, awash with liquidity. AU's unpreparedness and the high levels of liquidity in world financial markets could be added to the list of "operative factors" discussed below.

2. A personal note may be illustrative. When I first worked for UGG in the mid-1970s as a young man from Eastern Canada, and attended my first of the company's annual meetings, I felt as if I had stepped back about 30 years or more in time. My reaction was similar to my first visit to a country elevator some years earlier when I felt that I had stepped into a living museum (see Earl 2000, p. 177).

3. Another personal anecdote illustrates this point. Around the time that UGG issued its first public shares (1993), the company hired a team of marketing consultants to examine a number of company practices. I was working for UGG at the time, and one of the consultants said that most companies "would kill" to have customer advisory groups like UGG's local member committees (called "local boards" in the company's lexicon). Despite this advice, many in management were not favorably disposed to the local board structure and viewed it as a relic of the past. See the previous bulleted point.

4. It must be stressed that this article is not intended, nor is the author qualified, to provide legal advice.

5. Discussions with legal experts suggest that this analysis, and the conclusions that follow, look only at corporate law, not securities law. The duty of securities administrators in Canada is to protect target company shareholders, and their policies tend to favour takeovers (Condon, Amand, & Sarra 2005). However, these same discussions suggest, and a review of standard works confirms (Condon, Amand, & Sarra 2005; Gillen 1998), that nothing therein negates either a board's duty to consider the best interests of the corporation or its discretion to recommend rejection of, or not to make a recommendation on, a bid if they believe that it is not in the corporation's interest.

6. "Meeting Farmers' Business Needs" was UGG's, and subsequently AU's, corporate slogan.

7. Charles Dickens' comment that "the law is a ass" (usually slightly misquoted as "the law is an ass") is well known. Rather less well known is his humorous observation in *The Old Curiosity Shop* (1841): "Lawyers are shy of meddling with the Law on their own account, knowing it to be an edged tool of uncertain application, very expensive in the working, and rather remarkable for its properties of close shaving, than for its always shaving the right person."

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Chapter 3

The Conversion of Diamond Walnut Growers

Shermain D. Hardesty

Introduction

On 1 July 2005, members of the walnut-marketing cooperative Diamond Walnut Growers (DWG) voted to convert into a publicly traded stockholder-owned corporation. The cooperative's history can be traced back to 1912, when chaotic marketing conditions led to the formation of the California Walnut Marketing Association. Its structure, however, changed substantially over its lifetime. As a federation of local walnut packing cooperatives, the California Walnut Marketing Association provided economic stability, but, in response to changing market conditions, in 1956 it became a centralized cooperative, changed its name to Diamond Walnut Growers, and built processing facilities in Stockton, CA to expand its production of shelled walnuts.

In the late 1990s, DWG became a more competitive supplier to American grocery chains by broadening its product line of culinary and in-shell nuts. Headquartered in Stockton, its 550,000 square foot processing facility was described at the time as the largest and most modern walnut processing facility in the world (Diamond Walnut Growers 2002). It also operated three smaller shelling plants in the San Joaquin Valley. At the time of its conversion to a publicly traded corporation, DWG was the leading marketer of culinary and in-shell nuts, with a 38.5 percent dollar-volume market share (Diamond Foods 2005a).

DWG's Member Services department included a vice president and six regional field representatives. The cooperative utilized extensive quality control measures, paying shelling bonuses for deliveries with low levels of insect damage and off-grade nuts. Members were paid premiums for early deliveries of qualified in-

shell varieties. The membership agreement included an exclusive marketing clause, whereby all walnuts produced by a DWG member had to be delivered to the cooperative. The cooperative maintained a strong government relations program, both at state and federal levels.

Description of the Industry

English walnuts are the major commercial type of walnuts grown in the United States, and California accounts for over 99 percent of the nation's commercial production. Between 1982 and 2007, walnut acreage in California increased 23 percent and production rose 39 percent (Pollack & Perez 2008). In 2006, over 4,000 walnut growers in five counties in the San Joaquin and Sacramento Valleys accounted for 63 percent of the state's total production (California Walnut Board 2007).

DWG's share of the state's walnut crop peaked at 58 percent in 1983, but then dropped sharply into the mid-40 percent range due to poor returns. When the conversion occurred, DWG's deliveries represented 46 percent of the state's walnut crop (Diamond Foods 2005a). Currently, there are 59 walnut handlers in California. Half of them provide only basic services, marketing only in-shell and shelled walnuts (California Walnut Board 2008a). Twenty-four have value-added products, such as vacuum packing, walnuts in consumer-friendly canisters, and walnut oil. Diamond Foods is the only handler that offers all these products. Only three other handlers have the canister packing capacity.

Between 2003 and 2007, walnut crop prices doubled, from US$1,160 per ton to US$2,320 (United States Department of Agriculture-National Agricultural Statistics Service 2008). Between 1997/98 and 2006/07, per capita consumption of walnuts in the U.S. rose from 0.36 pounds to 0.53 pounds (Pollack & Perez 2008). One of the major factors contributing to the strong demand is recent findings regarding the health benefits of walnuts. They are one of the most nutrient-dense whole food sources of alpha-linolenic acid (ALA), an essential omega-3 fatty acid that may help reduce the risk for heart disease, cancer, stroke, diabetes, high blood pressure, obesity, and clinical depression (California Walnut Board 2008b).

Walnut imports have been minimal, accounting for less than 1 percent of the total U.S. supply in 2006/07 (Pollack & Perez 2008). Conversely, walnut exports have been rising. For most of the 1980s, they comprised about 25 percent of the utilized crop production. During the last five marketing years, however, they have accounted for 45-65 percent of the utilized crop production. The leading export markets are Canada, Germany, Japan, Korea, and Spain (California Walnut Commission 2008). During the 2003/04 marketing year, DWG's exports (excluding Canada) accounted for 27 percent of its net sales (Diamond Foods 2005b). All the growth in California's walnut exports is attributable to shelled walnuts, rather than unshelled walnuts. In 2006, shelled walnuts accounted for 30 percent of California's walnut exports (California Walnut Commission 2008).

Two mandated commodity programs support the industry. The California Walnut Board was established through a federal marketing order in 1948. It is responsible for maintaining product quality through grades and standards, providing supply and domestic market information, managing crop production research, and directing generic domestic market promotion. The California Walnut Commission, established by the California legislature, is responsible for export market development. Both groups are comprised of walnut growers, handlers, and a public member. Since DWG's conversion, the only cooperative remaining in the walnut industry is the California Walnut Bargaining Association. However, it has maintained a low profile and possesses only a small membership (California Walnut Bargaining Association 2005).

Description of the Conversion

DWG's Changing Structure

Michael Mendes was hired by DWG in 1991 and served in various sales and marketing positions before becoming DWG's president and CEO in 1998 (Diamond Foods 2005a). Shortly thereafter, the cooperative began making changes that moved it away from the traditional cooperative structure. One major change occurred in 1998, when the board dropped its policy to retain 3.5 percent of members' annual proceeds. Typically, these retained funds were revolved to members after five years. At the time, crop retains totaled US$14.6 million, along with US$16.2 million in working capital retains (repaid within 15 months) and US$7.6 in unallocated earnings for a total member equity of US$38.4 million. DWG replaced member equity capital by creating a wholly owned subsidiary, Diamond Walnut Capital Trust, that issued US$15.0 million in cumulative securities at a 7.2 percent cumulative preferred dividend rate to an institutional investor (Diamond Walnut Growers 1998). Mandatory redemptions of the cumulative securities and loans were scheduled for 2009, 2010, and 2011 at US$5 million each.

DWG engaged in extensive brand-building efforts. In 2002, DWG introduced its line of Diamond glazed nut products, such as apple-cinnamon glazed walnuts and pecan pie glazed pecans. Between 1999–2000 and 2004–2005, DWG's consumer retail sales rose from US$95 million to US$186 million (Diamond Foods 2005b). In August 2004, DWG launched its Emerald of California snack nut line nationally, with flavors such as glazed chocolate brownie walnuts and mixed nuts (the latter requiring the purchase of other nut varieties). With this move, DWG became a competitor in the snack nut industry. As DWG noted in its filings with the Securities and Exchange Commission (SEC), the snack nut market has historically had one leader, Planters, and a fragmented group of regional and national competitors, such as Fisher Nuts (Diamond Foods 2005a).

DWG's financial performance data during its last five years are displayed in table 3.1. DWG's members earned a premium over the independent handlers' average

Table 3.1. DWG's financial results, 2000–2004 in US$

	Fiscal Year Ending July 31					Average
Measure	**2000**	**2001**	**2002**	**2003**	**2004**	**2000–2004**
Member deliveries (million lbs)	257.4	218.8	279.0	252.1	297.4	260.9
Net proceeds/lb	$0.471	$0.618	$0.596	$0.600	$0.605	$0.578
Average independent price /lb	$0.408	$0.623	$0.569	$0.555	$0.565	$0.544
DWG's premium /lb	$0.063	($0.005)	$0.027	$0.045	$0.040	$0.034
Diamond's advertising expenses ('000)	$6,327	$9,720	$9,105	$8,744	$14,673	$9,714
Diamond's advertising expenses/lb	$0.025	$0.044	$0.033	$0.035	$0.049	$0.037
Nonpatronage earnings ('000)	$1,229	$2,491	$2,072	$1,827	$40	($6,545)

Source: Diamond Foods 2005a; Diamond Walnut Growers 2005b.

price during eight of its last ten years as a cooperative. After DWG began broadening its product mix in 1999, its annual price premium averaged US$.034/pound. Its returns to members were lower than the average price paid by independents only once—a US$.005/pound shortfall in 2001, which followed the highest premium paid (US$.063/pound) in 2000. These premiums occurred despite DWG's sizable advertising expenditures.

The Conversion Process

Diamond Foods was created on 14 February 2005, when it filed for incorporation in Delaware as a wholly owned subsidiary of DWG. During its 22 March 2005 meeting, DWG's board unanimously approved the conversion of DWG into a stockholder-owned corporation by merging with and into Diamond Foods. Two days later, Diamond Foods filed a preliminary prospectus for an initial public offering (IPO) of its common stock with the SEC as part of its proposed conversion to a stockholder-owned corporation. The key aspects of the proposed conversion and stock offering were:

- A maximum of 8,060,207 shares of Diamond Foods common stock would be issued to DWG members, allocated in proportion to each member's patronage during the two crop years with the highest value for the member out

of the previous six crop years. Up to US$18.6 million (1.3 million shares, based on the estimated IPO price of US$15 per share) would be paid to DWG members who elected to receive cash in lieu of stock, for an estimated total compensation of US$119.7 million. The stock would be freely tradable on the NASDAQ after a 360-day holding period.

- DWG members would receive their working capital retains (US$41.7 million) in cash and Diamond Foods would retain US$17.5 million in unallocated earnings, less the US$6.5 million loss during 2004–2005.
- Diamond Foods expected to sell 5,333,333 shares of common stock in an IPO and raise an estimated US$70.9 million in net proceeds. Approximately US$17.1 million of these funds would be used to pay off a long-term loan. The balance of the proceeds from the IPO would be used primarily to develop and market value-added products and install new equipment to gain processing efficiencies.
- Three of the 13 members of DWG's board would be appointed to Diamond Foods' nine member board, as companies listed on the NASDAQ are required to have a majority of outside directors on their boards. The other "inside" director would be DWG's president and CEO, Michael Mendes. A Grower Executive Council would be comprised initially of the ten members of the DWG board who did not transition to the Diamond Foods board. It would provide input solely in an advisory capacity regarding walnut grading and overall grower support and service.
- Independent of their vote whether to keep or sell their Diamond Foods stock, DWG members would be offered marketing agreements for their walnuts (Diamond Foods 2005a).

Communications made by DWG to its members regarding the proposed conversion included:

- On 24 March 2005, Chairman Gilbert and CEO Mendes sent a letter notifying members of the proposed conversion. Gilbert and Mendes stated that the conversion would strengthen Diamond financially and convert members' interests into marketable stock shares.
- During mid-April 2005, DWG held three regional grower meetings.
- DWG's spring/summer 2005 member magazine, Diamond News, included a one-third-page article about the proposed conversion (Diamond Walnut Growers 2005a).

- On 16 June 2005, Chairman Gilbert sent a letter with voting materials, a disclosure statement (114 pages, plus financial statements), and the Walnut Purchase Agreement.
- On 17 June 2005, the DWG board sent a letter reiterating the importance of reading the disclosure statement and the need for additional capital resources.
- On 23 June 2005, Chairman Gilbert replied to a letter sent by Concerned Diamond Walnut Growers on 15 June (described below).
- From 28 to 30 June 2005, DWG held three regional meetings (Diamond Foods 2005b).

In accordance with DWG's recently revised bylaws, votes for the conversion proposal were allocated to members based on their share of total walnut deliveries during the two preceding crop years. There were 1,735 members entitled to cast a total of 284,781 votes, with DWG's board members holding 11 percent of the votes.

On 1 July 2005, over 80 percent of DWG members voted to approve the conversion at a special meeting. On 20 July 2005, Diamond Foods announced an IPO of 6 million shares of its common stock at a price of US$17 per share. During the first week of trading, share prices ranged between US$20.50 and US$22.10.

Key Individuals in the Conversion

DWG's CEO was a key individual in the conversion. Sam Keiper, vice president for grower relations and corporate affairs, and the board chairman, John Gilbert, had significant interaction with members during the conversion voting process. Additionally, DWG hired Seth Halio in January 2005 to serve as executive vice president and chief financial officer and work closely with the external agents involved in the preparation of the public stock offering. Halio had previously worked with Steven Neil, who was appointed to the Diamond Foods board. External agents included a San Francisco-based legal firm, Fenwick & West, LLP, and three investment banker underwriters, with Merrill Lynch as the lead.

Forty DWG members, identifying themselves as Concerned Diamond Walnut Growers and led by Jay Columbini (brother of a DWG board member), sent a mailing to DWG's membership on 15 June 2005. Their concerns about the proposed conversion included:

- Loss of member control. Although DWG members would initially hold at least 60 percent of Diamond Foods' stock, they would be a minority on the new board.
- Significant financial gains for DWG's management and directors. They would receive over US$14 million in stock grants and options.

- An inferior marketing contract. If DWG members signed the marketing contract, they would provide working capital to Diamond Foods without interest, but the market price that they would be paid would be determined approximately six months after they delivered their walnuts.

- Shift in focus from grower returns to shareholder returns (Concerned Diamond Walnut Growers 2005).

Conceptual Framework

Property rights theory provides the conceptual framework for analyzing the conversion of DWG from a cooperative into a publicly traded stockholder-owned corporation. Three aspects of property rights are particularly relevant when evaluating cooperative conversions: the horizon problem, the principal-agent problem, and the free rider problem. Compared to investor-owned firms (IOFs), cooperatives have ambiguities in the structure of their property rights that can create these problems, which, in turn, may cause some cooperatives to transition into other organizational forms. Porter and Scully (1987) examined the impact of these problems on the efficiency of agricultural cooperatives, while both Cook (1995) and Fulton (1995) extended the property rights framework to analyze structural changes in cooperatives.

Investors in IOFs are entitled to dividends generated by an asset, and the residual earnings are capitalized into the value of their stock. The horizon problem occurs in a cooperative because the members are both the users and owners of the firm's assets. They have a residual claim to the earnings generated by an asset only as long as they are patrons of the cooperative, although the asset may have a longer productive life. A cooperative's net earnings are distributed to members in proportion to their patronage, rather than as a return on their investment. Claims on its assets cannot be capitalized and transferred by members. Thus, members seek to maximize their proceeds from the cooperative in the current period rather than invest to increase their net cash flows in the future. The horizon problem leads to underinvestment in assets, particularly intangible assets, such as brand development and market development (Porter & Scully 1987).

The free rider problem occurs when property rights are not transferable or unassigned. Cook (1995) notes that the free rider problem can emerge when new members (or even non-members) are entitled to the same patronage and residual rights as existing members. This effectively reduces the rate of return of existing members' investment and creates a disincentive for them to invest further. Thus, new members are able to act opportunistically by under-investing in their cooperative.

Porter and Scully (1987) note that in a cooperative, the decision-control and risk-bearing functions rest with the members, while decision-management rests with the management. As principals, the members incur transaction, decision, information, and contract monitoring and information costs. This relationship can result

in a principal-agent problem if the agent's decisions are not easily observable and the agent has more information. Because producer-members govern most cooperatives exclusively, this is more likely to occur when a cooperative goes beyond being a commodity supplier and engages in marketing value-added products (Hardesty 2005). Without any publicly traded stocks, there is no information available to the principals (the members) to evaluate the performance of the agent (the management). This information asymmetry creates a governance problem. Furthermore, Fulton and Lang (2006) note that the principals and agents may have divergent interests. Typically, the membership's objective is to ensure grower returns, while the interests of the management could be to pursue their own goals, such as high compensation levels and perks.

Analysis of the Conversion

The horizon problem, free rider problem, and principal-agent problem are all applicable to the conversion of DWG. These problems motivated DWG's members and/or the management to favor conversion.

The horizon problem was particularly significant in influencing the conversion of DWG. It was not especially relevant when DWG was a marketer of commodity nuts. However, after DWG experienced large decreases in its domestic sales of consumer shelled walnuts during the 1980 and early 1990s, it addressed this situation by providing a full line of culinary nut products to strengthen its competitive position with retailers (Diamond Foods 2005a). When it entered the higher-margin snack food market by launching the Emerald brand of glazed nut products and savory nut mixes, DWG incurred significant expenses in advertising and "slotting fees" to gain distribution. It needed capital for these intangible assets.

However, DWG cited two financial factors leading up to its proposed conversion that demonstrate the presence of a horizon problem:

- Significant member resistance to crop retains caused DWG to seek sources to finance its growth.
- "Because the cooperative requires annual distribution of net proceeds of the business, and there is no ownership interest to reward long-term appreciation in the value of the enterprise, cooperative members have an incentive to encourage maximum cash distributions each year and have no incentive to encourage investment for future growth" (Diamond Foods 2005a, p. 6).

Given the presence of a horizon problem, cooperative members approaching retirement age or planning to change crops would be particularly likely to undervalue long-term investments. No data were available regarding the age distribution of DWG's membership, but SEC filings indicate that the ages of DWG's board ranged from 42 to 78, with an average age of 58. Thus, it would not be inappropriate to state that the DWG board would have found the conversion to be financially

attractive because it enabled them to capitalize the value of DWG's recent and anticipated investments in market development. This is consistent with Fulton's (1995) assertion that a cooperative conversion indicates that members are seeking benefits only as investors, rather than as users.

The free rider problem is also related to members' reluctance to invest in their cooperative. For example, DWG could attract new members if its market development efforts were successful in increasing member returns. The new members would benefit from the investments made in intangible assets by existing members. DWG did not have a mechanism, such as tiered delivery rights, that would have required new members to purchase delivery rights to participate in the earnings for DWG's higher margin products.

The principal-agent problem relates to DWG's increasing complexity, particularly with its financing and marketing activities. As previously noted, members of cooperatives do not have the external exchange of information to assess management's performance and proposals. Most members, including some board members, did not have the expertise to assess the soundness of management's proposals regarding preferred trusts and marketing programs.

It is also likely that most members did not have the expertise to assess the long-term implications of the proposed conversion of DWG. This manifestation of the principal-agent problem was compounded by the fact that they had only 100 days to consider the conversion proposal. Members voted on the conversion without knowing how much compensation they would receive for their current ownership in Diamond Walnut because of the uncertain value of the common stock they were to receive. The estimated IPO price of US$15 per share used in the preliminary registration filings yielded US$119.5 million in compensation. But the IPO could have occurred with a share price as low as US$5, in which case members would have received only US$40.3 million for their ownership interest in Diamond Walnut (Diamond Foods 2005a). (Based on the actual IPO price of US$17, the aggregate value to members for the shares and cash paid in the conversion totaled US$154.3 million, thus exceeding expectations.)

DWG's members also needed to determine whether the estimated payment of US$119 million in stock and cash was a fair offer for losing their rights to price premiums for their future walnut deliveries. That 95 percent of DWG members signed marketing agreements with Diamond Foods for an average term of five years (Van Konynenburg 2008) suggests a principal-agent problem. Members were sent copies of the marketing agreement along with the SEC filing documents. They had the option to extend their existing DWG marketing agreement by three, five, or ten years, and were required to deliver their entire crop to Diamond Foods for the duration of the contract. No set price was offered. Instead, the agreement specified, "Each March (following the harvest), Diamond Foods will determine a purchase price based on market conditions, quality, variety and other relevant factors" (Diamond Foods 2005a, pp. 36–37). The agreement's four-payment schedule, the last one

occurring 15 months after delivery, was very similar to DWG's historical payment structure.

Members who signed the marketing agreement placed themselves into a monopsonistic situation. The contract offered no price protection or guarantee to pay market prices. Instead, the monopsonistic relationship made the contracting growers vulnerable to price manipulation. When attending a grower meeting organized by University of California Cooperative Extension farm advisors in May 2005, some growers made comments that indicated that they did not understand that the marketing agreement was a separate decision from their conversion vote and/or that they would no longer be receiving the firm's net proceeds. The conversion caused Diamond Foods' mission to shift from "delivering annual net proceeds to members to maximizing long-term shareholder value" (Diamond Foods 2005a, p. 18). While DWG members who became shareholders of Diamond Foods could benefit from dividends and stock appreciation, they could also be adversely impacted as suppliers by Diamond Foods' strategy to maximize shareholder value by improving gross and operating margins.

Conclusions

Four years have passed since DWG's conversion. Diamond Foods has consistently paid a quarterly dividend, which started at US$0.03/share and has since risen to US$0.045/share. Its share price has fluctuated considerably, but has trended upward in 2008 and traded between US$24 and US$30 during the past quarter. However, some DWG members who signed marketing agreements are dissatisfied with the outcome. In September 2007, 42 former members organized to consider filing a lawsuit based on a belief that they were underpaid by at least 13 percent for their 2005 and 2006 walnut crops (Van Konynenburg 2008).

DWG's conversion appears to have been beneficial for members who were approaching retirement age. It enabled them to capitalize their investment in building DWG's branded program and line of value-added culinary and snack nut products. However, DWG's horizon problem, as well its free rider problem, could both have been addressed by issuing or selling tiered delivery rights to members while maintaining the cooperative structure. For example, members with the highest value delivery rights would be entitled to earnings from the "snack nut" pool, while members holding the second highest value delivery rights would be entitled to earnings from the value-added "culinary nut" pool. New members would have to purchase delivery rights to participate in the earnings from these pools. When members retired or changed crops, their delivery rights would be sold to other members, with the price reflecting the pool's past and projected performance. Delivery rights would protect the investments that members made in advertising and other market development efforts.

The principal-agent problem is less easily addressed. Assessing marketing strategy and complex financing proposals requires specialized expertise that most wal-

nut growers are not likely to have. DWG's principal-agent problem did not surface overnight, but rather evolved over many years as members became less involved in the governance of their cooperative and had minimal interaction with their board members, particularly when the cooperative undertook more complex strategic issues. It may be necessary for boards of cooperatives engaged in marketing value-added products and other complex business strategies to hire technical advisors to assess such arrangements from the members' perspective and share their opinions with members. The financial audit firms hired by cooperative boards do not serve in such a proactive capacity. Some cooperatives' boards have one, even two outside directors. They need to have a stronger commitment to membership than to management in order to maintain a healthy tension between principals and agents.

As strategic issues faced by cooperatives have become more complex, new mechanisms need to be developed to resolve the imperfect property rights inherent in the cooperative structure. Strong member participation and leadership, as well as close working relationships with university academics knowledgeable about cooperatives, marketing, and finance, would be beneficial to fostering such innovations.

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Chapter 4

Serving Member Interests in Changing Markets: A Case Study of Pro-Fac Cooperative

Brian M. Henehan and Todd M. Schmit

Introduction

Since its inception in 1960, the Pro-Fac Cooperative (PF) has undergone significant structural and organizational changes. The PF case presents a unique opportunity to examine the changes in the processed fruit and vegetable industry and the strategies adopted by a producer-owned cooperative to best represent member interests in the face of industry structural changes over the past 50 years.

PF is an agricultural cooperative that markets crops primarily grown by its grower members, including fruits (cherries, apples, blueberries, and peaches), vegetables (snap beans, beets, peas, sweet corn, carrots, cabbage, squash, asparagus, and potatoes), and popcorn. As of 30 June 2008, there were approximately 486 PF members, located principally in the states of New York, Delaware, Pennsylvania, Michigan, Washington, Oregon, Iowa, Nebraska, Florida, and Illinois. Only growers of crops marketed through PF (or associations of such growers) can become members.

Each producer approved for membership must purchase common stock that carries voting rights in proportion to expected deliveries as well as enter into a marketing agreement with the cooperative. Commodity committees represent the interests of members for each of the major crops marketed, and work jointly with PF customers in determining the Commercial Market Value (CMV) for each crop. CMV represents the price that other processors would pay for raw product of similar quality and use. It is an industry-weighted average value for each commodity, with adjustments based on grading, compensation of services, and other differences

in costs. To provide a fair and equitable distribution of net proceeds, members participate in a single, multi-commodity payment pool that combines expenses and revenues generated during each fiscal year. Members' shares of patronage proceeds above CMV are distributed based on a pro-rata share of total production for each commodity.

The portion of after-tax net income from non-PF member business is assigned to equity as unallocated, tax-paid retained earnings. The non-cash portion of PF earnings generated through member patronage is generally allocated to each member's account as retained earnings (retains). Capital retained from earnings is converted to Class A preferred stock after each series of retains has been outstanding for five years. As of February 2009, PF's Class A cumulative preferred stock is listed as PFACP on the NASDAQ market.

History

For ease of exposition, PF's history can be generally broken down into three distinct time periods, each representing a significant phase of restructuring. Particular attention is focused on the decision to enter into the most recent and current phase of operations.

Phase One: Formation and Integrated Agreement

The Pro-Fac Cooperative was founded in 1960 in western New York State. The post-World War II period resulted in significant changes in the food processing industry, as well as in the status of farmer-owned fruit and vegetable marketing cooperatives. Many small, family- and farmer-owned processors who relied on government contracts during the war years lost a key market. There were also major developments in food processing and packaging technologies that required large investments in plants and equipment to stay competitive.

During this period, the number of fruit and vegetable processing and marketing cooperatives greatly shrank, as cooperatives consolidated or went out of business and the number of producers declined. The number of fruit and vegetable marketing cooperatives in the U.S. declined from 825 in 1951 to 438 in 1971. By the end of 1994, less than 300 cooperatives remained (U.S. Department of Agriculture 2008). However, real gross sales (deflated by the U.S. Producer Price Index for processed food commodities) continued to increase, reaching US$8.4 billion by the end of this time period.

The Cooperative Grange League Federation (GLF), which later became Agway, was the dominant supply and input cooperative operating in the northeastern U.S. in 1960. GLF members in western New York expressed concern over the potential loss of several family-owned processing firms coming up for sale, so GLF acted as a catalyst to effect the merger of two family-owned canning businesses, Curtice Bros. and Burns-Alton, to form Curtice-Burns, Inc. (CB). Concurrently, GLF helped to

form and initially capitalize Pro-Fac (the name is a contracted melding of producers and facilities).

As part of the arrangement, PF purchased CB's plant facilities, then leased them back to their previous owner. GLF/Agway assisted in creating, financing, and managing the integrated agreement between CB and PF, while the Springfield Bank for Cooperatives provided critical financing. Many initial PF members were members of the GLF/Agway cooperative as well. Two interlocking boards of directors were established to govern each of the integrated agreement partners, with GLF/Agway maintaining controlling interest in CB. In 1973, CB became a publicly traded company, listing its common stock on the American Stock Exchange (AMEX).

The integrated agreement spelled out the role and responsibilities of each entity in the areas of finance, management, marketing, and supply of member crops (table 4.1). In general, PF was responsible for providing agricultural services to members, including coordinating planting, harvesting, and crop delivery, while CB was responsible for food manufacturing, sales and marketing, and consumer product distribution. The founders were very careful in constructing the agreement to avoid some of the major pitfalls that they observed in previously failed marketing cooperatives. The PF founders deliberated over the terms of the agreement to improve the chances of success, as described by Morton Adams, the first PF manager and president of CB:

> The history of fruit and vegetable marketing cooperatives is littered with failures and very few successes. The originators of Curtice-Burns and Pro-Fac studied these histories. They became convinced that there were several basic needs which had to be provided. They include management of the cooperatives by experienced professionals who are kept at arms-length in daily operation, product diversification, financing the total operation through commercial as well as the Bank for Cooperatives borrowing, and the opportunity for public investment through trading on one of the stock exchanges. CB and PF have remained successful by emphasizing the policy that they limit their activities to the marketing of products that are profitable to both companies (Pro-Fac Cooperative, Inc. 1986).

Many elements of the agreement created new organizational innovations not typically used by traditional, farmer-owned cooperatives at the time, but rather were more aligned with so-called "new generation cooperative" elements. In contrast to "open" membership and deliveries, clearly defined equity and delivery requirements were established, including up-front equity in proportion to the volume of crops delivered. The management of marketing functions was separated from the overall management of the cooperative, while still assuring that annual crop production plans fit with marketing plans for the associated products. With a variety of commodities and a heterogeneous membership, a single, multi-commodity pool

Table 4.1. Summary of Curtice Burns and Pro-Fac Cooperative integrated agreement

Area	Curtice Burns	Pro-Fac
Finance	Net proceeds derived from total sales; shared with PF 50/50; Common stock listed on AMEX, 1973	Financed ownership of plants, leased to CB; Equity loaned to CB; seasonal and term loans from Bank for Cooperatives; Sold delivery rights based on common stock to members
Marketing	Conducted all marketing activities; Owned brands, made acquisitions; Developed new products	Recruited members from new acquisition farming areas; Reserved first right to purchase brands upon dissolution; Farm products provide basis for new products
Management & Governance	Supervised and managed business and properties of PF; Maintained relations with lenders, kept books for joint venture; One PF director on CB board	PF and Agway had access to books and financial information; 1 CB and 1 Agway director on PF board
Supply Agreement	Payment for crops based on CMV; As CB operations expanded, PF given first right to supply new plants; Developed sales plan that determined volume produced for each commodity	Committee for each commodity; Committees determine CMV in concert with PF management and approve crop agreements; Payments made from a single, multicommodity pool

for member payments was established. Non-member directors served on the board of directors and capital was generated from public markets via the CB common stock listing on the AMEX.

The integrated arrangement in place during this period provided an organizational foundation for generating a number of economic benefits for members, including: increased market security; enhanced prices for member crops; a financially strong value-added business; and relatively good returns on member equity. The integrated operations also provided valuable information and market data to PF members. PF used sales and market intelligence from CB for crop production planning. Related information on processing industry trends and inventories proved valuable to PF members for determining crop selection and planting plans.

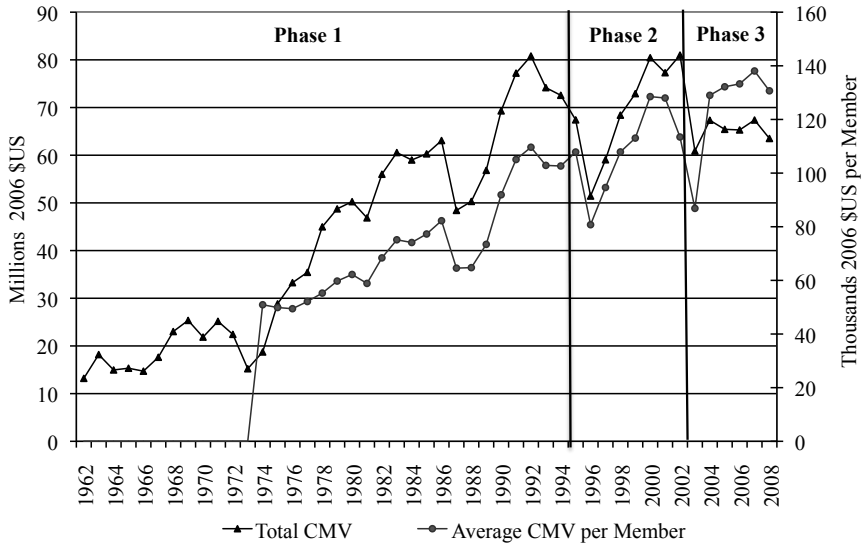
The number of fruit and vegetable commodities, as well as snack and food products, increased considerably during this phase. PF membership expanded geographically in alignment with CB's aggressive growth and diversification strategy. PF membership grew from 368 in 1974 to its peak of 819 in 1982. The aggressive growth was reflected in strong increases in real CMV from the 1960s to the mid-1980s, exceeding US$63 million (in 2006 dollars) by 1986 and over US$80 million by the end of 1994 (figure 4.1). While increased productivity and technological advancements on farms contributed to softening membership (625 members) by the end of Phase One, both the average CMV received and deliveries per member continued to increase.

The aggressive growth through acquisitions by CB was also evident in Pro-Fac's combined operations balance sheet data (table 4.2). During this phase, the combined operations showed significant growth in assets, increasing from nearly US$400 million in 1983 to over US$950 million by 1990 (evaluated at nominal levels). However, subpar financial performance prompted the sale of poorly performing operations, and total assets were reduced to US$819 million by the end of 1994.

Phase Two: End of Joint Venture and Additional Acquisitions

During the late 1980s and early 1990s, Agway experienced poor financial performance culminating in two years of net losses (1990 and 1991) (Anderson & Henehan 2003). Under a new CEO in 1992, the company began a major reorganization, including a renewed focus on Agway's core businesses and divesting non-core businesses. In 1994, Agway announced the potential sale of Curtice Burns Foods (CBF; renamed in 1987). In September of that year, after a long, protracted, and expensive change of control, PF acquired CBF from Agway and public shareholders. The transaction was historic in the sense that PF became the first farmer cooperative to acquire a publicly traded company and take it private. In 1997, CBF changed its name to Agrilink Foods (AF), and by March 2000 PF effectively began doing business as AF, creating an overall holding company for its processing and marketing assets. The new name signified PF's role in linking the agricultural and marketing segments of the business.

Figure 4.1. Commercial Market Value (CMV) of raw product deliveries, total and per member, 1962–2008.



Source: Pro-Fac, Curtice Burns & Agrilink Annual Reports; Pro-Fax SEC 10-K Filings

While AF was a wholly owned subsidiary of PF, each entity retained its own board of directors, with AF's board being appointed by the PF board. The boards met jointly and coordinated activities, and business structures and operations were centralized and streamlined to reduce costs and inefficiencies. The acquisition allowed PF to become the first farmer cooperative with securities listed on a major stock exchange when its Class A cumulative preferred stock was listed on the NASDAQ in 1995 so as to provide increased liquidity for member equity.

Similar to the previous agreement, PF supplied crops and additional financing to AF. In return, AF provided a market (CMV of products supplied) and management services to PF. Pro-Fac shared in the profits and losses of AF, and reinvested at least 70 percent of any additional patronage income back into AF.

Acquisitions and joint ventures with smaller companies and regional brands continued to grow during this phase. PF's most significant move came in 1998 when AF acquired Dean Foods, a frozen and canned vegetable business, for US$400 million, along with its Birds Eye, Freshlike, and Veg-All national brands. The Dean Foods acquisition effectively doubled the branded operations proportion of the business, a decision that was consistent with AF's strategic direction at the time. According to Dennis M. Mullen, AF president and CEO,

> Our strategic plan has called for growth, and, with this transaction, we are taking a significant step forward in growing our cooperative which also expands sourcing opportunities for our Pro-Fac owners.…Together with our own strong workforce, we will collectively enhance our overall position as a leader in food processing. The addition of Dean's branded products to our portfolio is consistent with our strategy to balance our private label business with our own strong brands. This balance is critical to our success as an agriculturally-driven business (Quick Frozen Foods International 1998).

In addition to increased debt, acquiring a large, national brand brought intense competition from related brands (e.g., Del Monte, PepsiCo., Nabisco) and required a significant investment in research and development to continue to introduce new and innovative products (Amanor-Boadu et al. 2003).

With the acquisition of CB and formation of AF, PF was now the owner and operator of processing facilities and responsible for marketing. Through the AF subsidiary, PF became responsible for providing agricultural services to members, coordinating planting, harvesting, crop delivery, food manufacturing, sales, and marketing, and consumer product distribution.

After decreases in real CMV in 1995 and 1996, total CMV (inflation adjusted) increased later in Phase Two (figure 4.1). This period saw continued decline in total members as farm numbers dropped but per member deliveries increased. CBF's higher leveraged position meant that the acquisition significantly increased PF's debt position and level of member equity capitalization. In 1993, prior to the acquisition, PF's member equity level was approximately 34 percent of assets. By 1996, this figure dropped to under 20 percent (table 4.2). On average, returns were relatively good, but more variable. However, substantial draws from earned surplus were required in 1996, 2001, and 2002 to offset negative earnings and maintain dividend payments.

Moreover, the acquisition of a large, national branded company increased PF's leveraged position tremendously, resulting in a debt ratio of nearly 100 percent and a reported equity percentage of less than 3 percent by 2002 (table 4.2). The reduced equity position was also a result of a non-cash, goodwill impairment charge of US$179 million (US$137.5 million net of taxes) charged as negative income for fiscal year 2002. As discussed in Amanor-Boadu et al. (2003), this charge was due to a number of factors, including: worsening general economic conditions in the industry; reduced asset valuations from market declines; and the valuation reached in the agreement with Vestar Capital Partners, a private equity firm, in 2002.

Table 4.2. Pro-Fac balance sheet data, selected fiscal years ending 30 June (nominal, million US$)[a]

Year	**1983**					**1993**	**1996**
Entity	PF	CB	PF+CB	PF	CB	PF+CB	PF Agrilink
Assets	$137.6	$260.1	$397.6	$324.9	$493.7	$818.6	$637.3
Liabilities	$82.9	$215.4	$298.2	$215.0	$403.6	$618.6	$510.6
Equity	$54.7	$44.7	$99.4	$109.9	$90.1	$200.0	$126.7
% Equity	39.8	17.2	25.0	33.8	18.3	24.4	19.9
Year	**1999**		**2002**	**2003**	**2005**	**2007**	**2008**
Entity	PF Agrilink		PF Agrilink	PF	PF	PF	PF
Assets	$1,196.5		$836.2	$31.5	$23.9	$25.3	$52.4
Liabilities	$1,004.4		$811.7	$12.1	$12.7	$20.5	$22.5
Equity	$152.1		$24.5	$24.3	$11.2	$4.4	$29.4
% Equity	12.7		2.9	77.3	47.0	17.3	56.1

[a]Following 2002, balance sheet data do not include PF investment in Birds Eye Holdings, LLC (BEH), 321,429 Class B common equity units, original value of US$32 million.

Source: Pro-Fac Cooperative, Inc. (1985–1997); Curtice Burns Foods, Inc. (1987–1994); Agrilink Foods, Inc. (1997–2002); U.S. Securities and Exchange Commission (1994–2007).

During this phase internal sources of equity capital reached their limit, with average per member capitalization in excess of US$250,000—a nearly 50 percent increase over a six-year time horizon and tighter profit margins. The higher debt load grew problematic and strategic efforts to minimize debt became a priority.

Phase Three: Outside Equity Infusion and Restructured Operations

The increased debt servicing requirements and need for increased capital investment grew beyond the means of the membership. Outside equity investment was required to ameliorate these financial constraints. Following a detailed review of all the strategic options, the PF board of directors arrived at a decision, which members approved, to enter into an agreement with a private equity firm, Vestar Capital Partners, LLC (Vestar).

In August 2002, after an outside equity infusion by majority investor Vestar was secured, Agrilink Holdings (AH) was created. PF contributed all shares of its AF common stock (valued at approximately US$32 million) for Class B common units of AH, which represented 40.72 percent of the common equity ownership. Vestar contributed a total of US$175 million in cash. Of that total, US$137.5 million was invested in a preferred stock instrument, while US$37.5 million was invested in Class A common units, which represented 56.24 percent of common equity ownership. Selected management of PF and AF acquired US$1.3 million of Class C and D common units, or the remaining 3.04 percent of common equity interest. In 2003, AF and AH changed their names to Birds Eye Foods (BEF) and Birds Eye Holdings (BEH), respectively.

As specified in an agreement with Vestar, PF received annual payments of US$10 million for five years, and could utilize a US$1 million line of credit in each of those five years. Furthermore, an amended marketing and facilitation agreement was created that identified PF as the preferred supplier of crops under a 10-year supply agreement. BEF would continue to pay CMV for all crops supplied by PF, as well as continue to provide PF members services related to planning, consulting, sourcing, and harvesting crops. With an eye towards reducing debt and improving member equity position, the Vestar transaction was consistent with the financing needs of the cooperative, as explained by Dennis Mullen, AF president and CEO: "De-leveraging our balance sheet with these investment proceeds will strengthen the company's position in the highly competitive food industry" (Refrigerated & Frozen Foods 2002).

Vestar restructured the BEF business by trimming payroll expenses, changing the management team, and selling off selected brands and assets. In 2006, BEF elected to concentrate its resources on its branded business and increase its focus on new products and marketing. As a result, BEF put its non-branded frozen facilities up for sale, including plants in New York, Georgia, and Wisconsin. PF was no longer interested in owning the processing side of its operations nor did it have the

financial resources to support such assets or operations, as indicated by then-Board President Peter Call:

> Any opportunity must be economically beneficial to growers and consider the well-being of the communities where these facilities are located. Pro-Fac's expertise lies in producing raw products, not in operating processing facilities, so a partnership between the Cooperative and an operating entity is an option that will actively be pursued (Pro-Fac press release, 25 July 2006).

In November 2006, Allen Canning Company (now Allens, Inc.) acquired substantially all the operating assets of BEF's non-branded frozen vegetable business, including the five plants in New York, Georgia, and Wisconsin. As part of the transaction, BEF assigned to Allens the portion of the supply arrangements under the marketing and facilitation agreement with PF. While PF continues to sell products to BEF—primarily fruit products—its private label business and non-branded vegetable business were transferred to Allens.

Conceptual Framework

An accepted definition of a cooperative is a "user-owned and user controlled business that distributes benefits on the basis of use" (Cobia 1989). As such, members of a marketing cooperative can derive economic benefits from their cooperative in various ways: as a supplier of raw products (prices, services); as an owner of assets (return on equity, strategic value of assets) that are related to cooperative operations; and through control exerted by member-based governance structures (market security, strategic direction). The decision to enter into the Vestar agreement will be viewed here in light of the potential member benefits generated from the transition for members as both suppliers and equity holders. Management theory will be used to review the pros and cons of each potential strategic option open to PF and how the board of directors evaluated various alternatives.

The development of alternative cooperative structures is often pursued to ameliorate financial constraints while attempting to maintain member control. The evolution and restructuring of the PF cooperative can also be described using an ownership control rights typology framework (Chaddad & Cook 2004). Drawing from the property rights and incomplete contracts theories of the firm, Chaddad and Cook argue that alternative cooperative models differ in how ownership rights are defined and assigned to agents of the firm (i.e., members, patrons, managers, and investors). They use a broad definition of ownership rights, including both residual claims (i.e., who has first claim to the net income) as well as control rights (i.e., who "owns" and controls assets).

Within this framework, the traditional cooperative and the investor-owned firm are identified as polar organizational forms. Chaddad and Cook (2004) argue that

the "vaguely defined" property rights associated with the traditional cooperative imply constraints to investment and governance. New generation cooperatives, structured similar to the original PF operational and governance features, relieve some investment constraints, whereby delivery rights are acquired on the basis of expected patronage and the required equity capital investment. This structure within PF helped reduce the free-rider problem inherent in traditional cooperative structures when property rights are not transferable or unassigned (Cook 1995). Furthermore, when ownership rights are not restricted to member-patrons, outside equity capital may become available to support increased capital requirements. In Phase Three, investors acquired ownership rights in a separate legal entity that is partly owned by the cooperative (i.e., a cooperative with capital seeking entities) (Chaddad & Cook 2004).

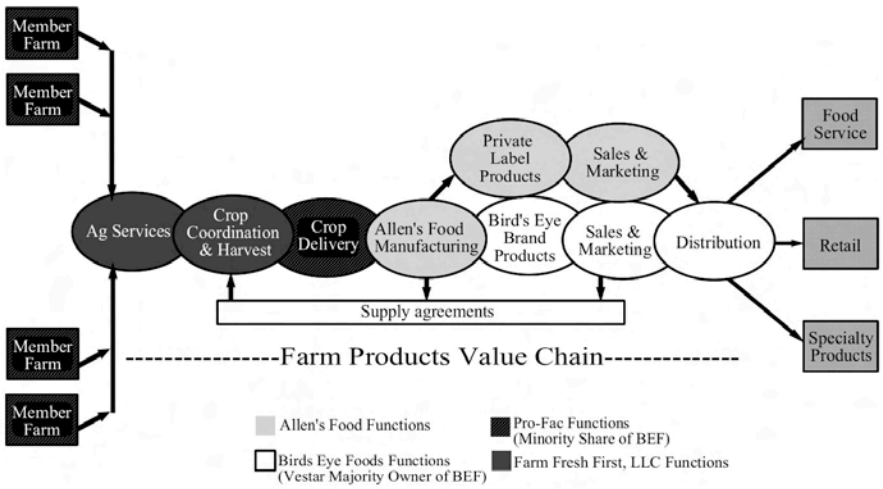
The principal-agent problem within a property rights theoretic approach is also evident in most cooperative forms as member-boards of directors (the principals) and management (the agent) can have differing interests. Typically, member-directors act to improve member returns, while management may pursue their own goals, such as compensation and bonuses (Fulton 1995). As such, asymmetries in information arise and the agent's decisions and motivations are not fully observable.

Analysis of the Decision to Restructure with Outside Equity Investment

PF's debt position under the integrated agreement was relatively stable during the 1970s and 1980s. However, more aggressive expansion in the latter stages of Phase One resulted in increasing debt ratios from around 40 percent in the mid-1980s to over 60 percent by 1993 (table 4.2). Total member equity investment grew considerably over this period, with average per member equity/capitalization growing from less than US$24,000 in 1974 to over US$180,000 by 1992. By 2002, PF found itself burdened with a higher level of debt and the associated interest expense that limited access to needed capital. During this time, growers experienced several years of low crop prices and limited farm income. PF members already had significant levels of equity invested in the cooperative and were not in a position to invest more. The board of directors found it necessary to explore other sources of capital to maintain viable operations and address financial challenges.

The options that PF's management and board explored included the following six alternatives: increase public stock offering; seek a strategic investor; find a synergistic partner to enter into a LLC; secure a private equity infusion; "tough it out;" or sell the company (Wright 2003). A summary of the pros and cons for each option is presented in table 4.3. The board chose to pursue a capital infusion from a private equity firm. A request for proposals was issued to seek responses from various equity investment firms. The board decided to enter into an agreement

Figure 4.2. Current Pro-Fac integrated operations with national firms and outside equity partner.



with the firm that offered the best terms, including a supply agreement, termination payments that supported continued dividend payments, transition services required for management and staff, a line of credit, and a good cultural fit. The board selected Vestar Capital Partners, a decision that was overwhelmingly approved in a vote by PF members.

Along with the decision to seek financing from a private equity firm, PF made significant changes in its operations, basically shifting from an operating and marketing cooperative that owned processing assets and branded products to a bargaining cooperative that became a supplier to key processing firms. PF withdrew from processing and marketing activities to focus on crop supply coordination and delivery (figure 4.2).

While BEF and Allens are currently PF's two major customers, PF serves multiple firms, both big and small, across the country in relation to its major commodity production areas. Regional agreements, such as PF's membership interest and agreement with Farm Fresh First, LLC in New York State, provide PF with agricultural, marketing, and administrative services for the sale of agricultural products grown by PF members that are not otherwise subject to supply agreements. Farm Fresh First is also responsible for providing agricultural services to members and non-members, such as coordinating planting, harvesting, and crop delivery. BEF, Allens, and other PF customers are responsible for manufacturing, sales, and marketing, as well as consumer and food service product distribution.

Table 4.3. Pros and cons of various outside equity options for Pro-Fac restructuring

Outside Option	Pro	Con
Public Offering	Potential to raise needed capital; Previously utilized public markets; Diversify sources of capital	Strong emphasis on short-term performance; Driven by quarterly earnings results; Market volatility; High costs of listing; SEC and Sarbanes-Oxley compliance; Dilute member control
Strategic Investor	Potential to raise needed capital; Might find investor with compatible goals for business	Limited pool of potential investors; Dilute member control; Could have goals conflicting with members
Synergistic Partner	Potential to raise needed capital; Might find partner in similar industry with compatible goals for business; Create synergy that brings mutual benefits	Limited pool of potential partners; Dilute member control; Could have goals conflicting with members
"Tough it Out"	Avoid bringing in outside investors; Maintain higher level of member control	Creditors could lose patience; Dim outlook for future success and perhaps bankruptcy; Could result in significant erosion of the value of member equity and other stock holders
Private Equity Firm	Ability to select firm of choice from a large group of interested firms; Identify firm with compatible goals and management culture; Bring additional management talent into operations; Negotiate supply agreement	Dilute member control; Could have goals conflicting with members; Incompatible management culture; Impatient and too anxious to sell business
Sell the company	Generate immediate revenues from sale; Get out from under high debt load	Low valuation of company based on current EBITDA and debt; Uncertainty about future owner; Lose any member control

PF's total membership and the CMV received have remained relatively stable during this phase, and the outside equity infusion has not altered members' ability to receive competitive prices for their products (figure 4.1). Strategies to invest in national brands also remain, but are now under the ownership control of Vestar. Management of these operations, along with the processing facilities associated with them, has been shifted to outside parties with the available equity capital.

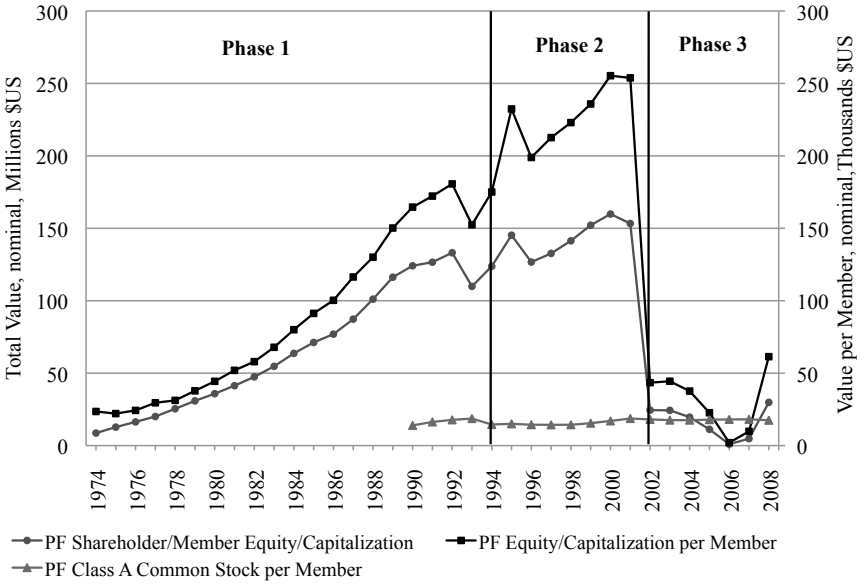
Reporting and access to information from BEH, now a private company, are restricted. The loss of ownership rights can limit access to information that might be valuable to members or was previously available in earlier phases. In considering the principal-agent problem, this is particularly relevant. Reduced information can enhance the principal-agent problem, particularly in this instance where an additional agent is involved outside the cooperative organization and with controlling interest in marketing and sales operations. BEH's actions are clear in terms of enhancing returns to stakeholder investment. However, it was also clear to cooperative members that management expertise and access to sufficient capital in the highly competitive branded processed fruit and vegetable market were needed even though principal-agent issues might arise.

As specified in an agreement with Vestar, PF received annual payments of US$10 million for five years, and could utilize a US$1 million line of credit for each of the five years. Furthermore, an amended marketing and facilitation agreement was created that identified PF as the preferred supplier of crops under a 10-year supply agreement. BEF would continue to both pay CMV for all crops supplied by PF and provide PF member services related to planning, consulting, sourcing, and harvesting crops.

Due to changes in reporting procedures and accounting methods, direct comparisons across phases are problematic. However, general changes from the shift in ownership control can be highlighted. While net income was supported by termination payments for a specified time, these proceeds largely supported the maintenance of dividends on preferred stock. Reported balance sheet data now reflect only PF operations, with no reporting of (minority-owned) assets, liabilities, or equity holdings under BEH (table 4.2). Even considering the initial US$32 million PF investment in BEH, the outside equity infusion has ameliorated PF's debt servicing requirements and substantially reduced PF member equity and capitalization levels (figure 4.3).

Annual distributions from BEH to PF are made at the discretion of Vestar and are not controlled or predicted by PF. This is reflected in the minimal net proceeds available to members early in Phase Three. In fact, equity income losses from BEH in 2005 and 2006 resulted in additional draws from earned surplus accounts. However, in July 2007 (FY2008), BEH distributed approximately US$120 million to PF as an investor in BEH. PF used the distribution to redeem selected shareholder equity and pay dividends on selected securities, in some cases retroactively. This interim distribution does not affect the PF share of ownership in BEF. PF used a

Figure 4.3. Pro-Fac shareholder and member capitalization and investment, 1974–2008.



portion of this distribution to redeem all retained earnings allocated to its members, repay principal and interest owed under its credit agreement with BEF, and redeem all its retained earnings, non-cumulative preferred stock, and 64 percent of its Class A cumulative preferred stock. An additional 22 percent of Class A cumulative preferred stock was redeemed on 31 October 2008 (FY2009).

It remains to be seen what the future holds for the strategies adopted in the latest phase of operations. Typically, private equity firms hold onto firms that they have invested in for a limited number of years to improve profitability and earnings, and then sell their interest to achieve a capital gain. When (and if) BEH is sold, PF and its members would receive a share of any gain from the sale proportionate to their share of total common equity invested in BEH at that time. It remains difficult to project what return on equity to members might derive from such a sale.

Conclusions

There are a number of common issues that cut across each of the three phases discussed above. Each phase used various strategies to attempt to address the issues for the benefit of members. These issues or performance areas include: financing;

market security; relationships with processors; management; and governance. This case has looked closely at the first three evolving issues.

Adequate financing of operations and value-added enterprises were dominant foci over all three periods and each phase involved a different approach. A variety of strategies were also used to enhance the market security for products produced by members. Initially, PF was formed to help preserve the fruit and vegetable processing industry in New York State. At that time, owning the processing facilities was a logical strategy. As time progressed and economic conditions changed, PF members and the cooperative have increased their capacity to serve as a preferred supplier to those firms that can afford to own and operate plants.

The current situation for most members is positive. Prices for most crops rose in 2008, although the costs of inputs also increased. Processors for many crops are increasing projected deliveries or anticipating greater volumes. The recent US$120 million distribution created a more viable future for PF, as well as generated a high short-term return on equity for individual members. It should be noted that the situation for growers varies. For example, cucumber producers in the northwest have lost a key buyer. However, most members are deriving economic benefits both as suppliers (relatively high prices and increased deliveries) and investors (improving return on equity). As can be the case in agricultural businesses, prosperity may unfold in cycles. It remains to be seen how long this period of higher prices and a relatively secure market will last.

The PF story presents a unique case in the world of agricultural cooperatives, including the first farmer cooperative to mount a leveraged buyout of a publicly traded company and take it private, and the first agricultural cooperative to have a security listed on a major exchange. PF has continued to adopt and redesign in a world of ever-changing markets. PF was an early adopter of a number of innovative strategies to overcome potential constraints to agricultural cooperative success, including transferable delivery rights, a multi-commodity single earnings pool, conversion of member equity to publicly traded securities, and partnering with successful marketing firms and private equity groups. The next phase in PF history remains to be written. However, Steve Wright (2008), the current general manager and CEO, summarizes the expectations rather well:

> Pro-Fac Cooperative has produced many "firsts" in the Cooperative world and successfully weathered the storms of dramatic external and internally driven change. We firmly believe that when the final chapter is written about our Cooperative, it will reveal that Pro-Fac members derived great benefit from their Pro-Fac affiliation in terms of supply, crop valuations and returns on equity.

Other cooperatives struggling to finance value-added operations may benefit from the lessons learned by PF. A cooperative may avoid conversion to an investor-

oriented firm and retain its member-oriented structure through restructuring operations and entering into a creative relationship with a private equity firm.

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Chapter 5

A Study in Cooperative Failure: Lessons from the Rice Growers Association of California

Jennifer K. Bond, Colin A. Carter, and Richard J. Sexton

Background

In August 2000, after nearly 80 years of operating in California's Central Valley, the Rice Growers Association of California (RGA) closed its doors. Once a dominant cooperative that handled more than 70 percent of California's total rice crop (23% of the U.S. total in 2000), RGA's market share dwindled to just five percent in its last year of operation (Kruger 1993).

RGA's performance and market share began to decline in the early 1980s. At the same time, the cooperative's primary competitor and occasional ally in the California rice industry, the Farmers' Rice Cooperative (FRC), grew steadily in size and significance. These circumstances provide a unique opportunity to investigate how cooperatives that once competed in the same geographic area experienced both success and failure at the same time. To help determine the origins of RGA's problems and FRC's relative success, members and management of the failed RGA and the surviving FRC were interviewed, historical and financial documents were analyzed, and a survey of former RGA affiliates was conducted. From the collected information, a joint history of RGA and FRC is reconstructed to provide an ex-post evaluation of the business decisions made by both organizations.

Shared History

In the spring of 1912, the U.S. Department of Agriculture (USDA) sent agriculturalist Ernest L. Adams to California's Central Valley to develop a commercial

rice variety (Wilson 1979). By 1915, a strain of short-grain rice was being grown profitably in California and regional rice growers formed a marketing cooperative known as the Pacific Rice Growers Association (PRGA). Fractionalization of the membership eventually led the PRGA to reorganize in 1921 as the Rice Growers Association (RGA) of California. In its first year of operation, RGA marketed 43 percent of the California rice crop. This figure grew to nearly 75 percent just five years later (RGA 1922; 1927).

After the Great Depression, RGA experienced several years of good sales and membership growth that eventually prompted the board to cap the cooperative's membership (RGA 1945). In response to these restrictions, a group of RGA members left and formed the Farmers' Rice Cooperative (FRC) in 1944, with other Central Valley rice growers (Wilson 1979).

Through the 1950s, RGA built or purchased a number of rice-processing facilities. Then in 1960 it bought the S.S. Rice Queen vessel, marking the cooperative's integration into the shipping industry. The S.S. Rice Queen was the first of three vessels the cooperative was involved with. The last vessel RGA would operate was the Valerie F., later renamed the CalRice Transport or CRT, a large and allegedly modern vessel that unfortunately experienced an engine fire on her maiden voyage. Although the vessel never ran as efficiently as promised, for many years the CRT jointly ferried both RGA and FRC rice to foreign ports (Kenward *pers. comm.*).

RGA did not originally own the CRT, the vessel that ferried the co-op's rice from Sacramento to Puerto Rico. But, RGA agreed to make all payments on the CRT should the original owners, Intercoastal Bulk Carriers (IBC), fail to do so (*RGA v. First National Bank of Minneapolis* (FNBM)). Thus, when IBC declared bankruptcy in 1977, the co-op was contractually obligated to take on all expenses of maintaining the frequently troubled vessel, in addition to making semi-annual lease payments.

Rumors of a possible RGA/FRC merger first surfaced in the mid-1970s. Informal conversations between management and board members of each organization reportedly occurred and a joint statement released by the management of both cooperatives initially seemed to express a favorable view: "[f]or some years we have been making shipments of rice in the same vessels and, by arrangement, have been using the same loading and unloading facilities. As a result of this close association, it is only natural that some thoughts should be directed towards merging operations" (Grundmand 1970). In addition to sharing facilities and shipping expenses, RGA and FRC routinely brokered their rice through the same agent, Grover Connell, of Connell Rice & Sugar (Cook *pers. comm.*; Huffman *pers. comm.)*. However, no merger occurred and the two cooperatives remained separate entities.

In 1975, the elimination of U.S. domestic acreage controls under the Farm Bill resulted in an estimated surplus of 18-23 million cwt. of rice in California, or more than 50 percent of annual U.S. medium-grain rice production (Halprin 1975). Five years later, the surplus was gone and in 1980 RGA's members were enjoying

such good returns that one manager was compelled to describe them as "the best we've had, the best in the industry, the best in the world" (Kirk 1981). But high prices ultimately resulted in large surpluses of rice and lower returns in the early 1980s. RGA entered this critical decade by warehousing rice in whatever space was available, including a vacant Safeway shopping center and a retired Libby's canning plant (Conner 1983).

Large stocks of U.S. rice in the early 1980s contributed to an international marketing scandal that became known as "Koreagate." The incident began when Comet Rice, a private mill in Colusa County, contracted with the South Korean Government to deliver 370,000 tons of medium-grain, 1981 crop rice, when the firm had just 120,000 tons available. The only other mills with sufficient stocks of this type of rice were RGA and FRC who refused to sell rice to Comet unless Grover Connell of Connell Rice & Sugar was allowed to act as their agent (Cox 1983). Because Connell had earlier accused a high-ranking Korean official of bribery (a charge that would later be confirmed), the Korean Government rejected the agent's brokering services (Conner 1985).

A two-year stalemate ensued, ending in 1983 when Ralph Newman, the newly hired president and CEO of FRC, issued a public apology to the Korean Government and brokered a deal through a third party (Malone 1983). By breaking ranks with RGA and negotiating the sale of rice without the involvement of Connell Rice & Sugar, the tradition of collaboration between FRC and RGA ended and a new era of competition began.

Description of RGA's Failure

Soon after the "Koreagate" scandal was resolved, RGA sought to purchase the facilities of Pacific International Rice Millers Inc. (PIRMI) in Woodland, California (Shallit). This action prompted the U.S. Department of Justice (DOJ) to file an antitrust suit in order to prevent RGA's acquisition of the PIRMI rice-milling facility and other assets. The U.S. DOJ argued that PIRMI and RGA represented two of the five largest rice mills in California and that the purchase would "substantially increase concentration in the purchase of paddy rice in California" (USA *v.* RGA). Ultimately, RGA lost the case on the grounds that it had violated Section 7 of the Clayton Act (USA *v.* RGA).

While RGA dealt with the fallout from antitrust violations, including divesting itself of the PIRMI facilities, FRC developed a new strategic direction that focused on providing higher returns to its membership (Long *pers. comm.*; FRC 1983-84). To meet this goal, FRC's management implemented new programs in marketing, finance, accounting, manufacturing, field services, and communications. The co-op also ended "costly and ineffective discount programs", increased its emphasis on medium- and short-grain rice production, and "established direct sales relationships with all international trading firms and major foreign buyers of U.S. rice" (FRC

1983-1984). As part of the renaissance at FRC, the cooperative also eliminated its dependence on the CRT shipping vessel.

FRC's joint lease of the CRT was essential to RGA's ability to cover its cost of operations. In order to justify the expense of operating the ship, RGA was also dependent upon a phosphate backhaul and strong demand for rice via the PL-480 "Food for Peace" foreign aid program and the Puerto Rican consumer market. When all sources of demand for the CRT's services declined significantly in the early 1980s, the vessel became a source of tremendous financial losses for the RGA.

Over the next few years, FRC prospered and was compelled to limit its membership in 1985 as "any significant additional volume will potentially have to be allocated to lower return markets: it could also require additional plant capacity" (FRC 1985-1986). In contrast, RGA closed a large mill in Biggs and, as a result of poor sales; bills were issued in lieu of a final pool return to growers for their 1985 crop (Cox and Shallit 1985). Recognizing a need for significant change, in 1987 RGA's management announced it would shift the co-op's focus away from bulk shipments and pursue a domestic-oriented, value-added strategy centered on creating packaged consumer rice products featuring the patented Zip-pack technology, new rice varieties, and recipes (Gardner 1987).

Despite the existence of several appealing arguments in favor of entering the table rice market, two primary weaknesses prevented its success. First, RGA lost several hundred members after management issued bills in lieu of a final return in 1985 (Cony 1986). The loss of members made it more difficult to cover fixed costs and, to avoid losing additional members; management felt pressure to provide competitive returns despite market realities. On net, the need to pay existing expenses while appeasing remaining members resulted in small monetary reserves at a time when the co-op needed large capital outlays to finance the differentiated products strategy (Gardner 1987).

Second, the U.S. domestic table rice market was still relatively small, using an estimated three million cwt. of medium-grain rice annually. By comparison, RGA's annual throughput at the time was estimated at seven million cwt., indicating that the value-added market would likely never absorb all of RGA's medium-grain production (Dodson *pers. comm.*; RGA 1985). In addition, the market was crowded with established and well-known competitors such as Uncle Ben's, Mahatma, Near East, and others (Gardner 1987). Many of these brands were owned by large food companies with significant advertising budgets while RGA planned to rely on a small advertising campaign and a "grass roots effort" to get the word out about their new branded products (Long *pers. comm.*; Hardesty *pers. comm.*).

Not long after the new and expensive strategy was implemented, RGA defaulted on a US$1.4-million lease payment on the CRT shipping vessel, initiating a series of costly lawsuits (Gardner 1989). By 1989, RGA's deteriorating financial condi-

tion and shrinking membership numbers obliged it to mothball or sell facilities in Williams, West Sacramento, Westside, and Willows (Cony 1989).

While RGA struggled to compete, FRC gained ground by following a bulk-oriented business strategy. Instead of pursuing shelf-space in the tight consumer marketplace, FRC became a high-quality supplier to domestic food processors, brewers, and re-packaging firms. Investments in state-of-the-art milling equipment further differentiated FRC from RGA and other competitors while also allowing the co-op to cultivate a reputation as a customized rice processor.

In contrast to FRC's success, the early 1990s continued to be a time of struggle at RGA. As the last CRT-related lawsuits were being resolved, PIRMI sued RGA for trademark infringement and Cal Rice Bran Inc. sued the co-op for contract violations. The following year, RGA was nearly forced into receivership when the cooperative's primary lender, CoBank, moved to close the firm stating, "[w]e believe it would be better to have an outside party assume control of the company" (Martin 1990). RGA's line of credit was cut off, preventing it from paying dozens of employees and leading to a protest outside the Sacramento CoBank offices (Burnham 1990). CoBank alleged that RGA owed US$42 million in overdue debt and interest and to stave off imminent closure, RGA sold some of its remaining assets in Puerto Rico, Biggs, Cheney, and a second West Sacramento facility.

Two years after replacing Michael Cook as President, David Long was released and Bill Ludwig assumed the presidency of RGA in 1993. Recognizing the need to take dramatic action to save the cooperative, Ludwig moved quickly to substantially cut RGA's unionized workforce and streamline all operations. At this time, the struggling co-op controlled only five to ten percent of California's rice crop, down from 70 percent just 10 years earlier (Kruger 1993). RGA's membership now numbered 250, compared to 2,200 in early 1986. In contrast, FRC's membership had grown over time from an initial base of 60 members in 1944 to 1,350 in the cooperative's 50th year.

RGA tried to stay alive by exploiting niche-marketing opportunities. In February 1997, RGA announced it would form a business, Ap-Rice, with Applied Phytologics Inc. (API) of Sacramento. As part of the agreement, some RGA growers would produce genetically modified (GM) rice that would be milled and malted so proteins could be extracted for industrial and medical use (Glover 1997). Amid controversy, RGA ended the agreement for undisclosed reasons.

Over the next three years, RGA's membership base further declined and by May 2000, just 120-150 members remained (Schnitt and Ferraro 2000). Marketing efforts continued to focus on pursuing high-cost, low-volume niche channels rather than exploiting opportunities in bulk markets. The niche strategy was somewhat successful in mid-2000 when the cooperative announced it had made a series of novel trade agreements with the Philippines (Schnitt 2000). Despite some success, the benefits of the trade agreement were not realized quickly enough to salvage RGA. In August 2000, the organization missed payments to employees due to

credit-line problems and, later that month, Bill Ludwig announced that the cooperative was going to be dissolved and restructured as a "for profit" company (Ferraro 2000a). According to Ludwig the cooperative was "simply unable to compete in the marketplace" and aimed to re-open in November 2000 (Ferraro 2000b).

Before RGA could proceed with restructuring, several lawsuits had to be resolved. Among the pending suits were claims by L&S Distributors, RGA's largest California distributor, that the co-op owed US$51,000 for services rendered (Ferraro and Schnitt 2000). The California Rice Commission also alleged that it was due more than US$100,000 in back assessments from the 1995-96 crop years and Takenaka and Co., an investment-consulting firm from Los Angeles, sued the cooperative for US$15,000 in unpaid expenses (Ferraro and Schnitt 2000).

In November, Pacific Basin Rice Products LLC agreed to buy RGA's one remaining mill in Woodland and rights to the Hinode brand name. The sale of RGA's processing facility and flagship brand indicated that RGA would not be restructured as planned; instead, the 79-year-old co-op would cease operations (Ferraro 2000b). Upon the dissolution of the cooperative he had run since 1993, Bill Ludwig summed up RGA's struggles stating, "[t]here is no future and no ability to truly make a profit in the rice industry in California" (Ferraro and Schnitt 2000).

Conceptual Framework

Outcomes of the very different goals and business strategies pursued by the RGA and FRC boards and management are especially evident when financial records of the two cooperatives are compared. A number of other cooperative studies (e.g., Parliament, Lerman, & Fulton 1990; Royer, Wissman, & Kraenzle 1990; Babb and Boynton 1981; and Schrader, et al. 1985) have used financial analysis methods to evaluate individual and relative co-op performance. A similar approach is followed here and includes values indicating the relative liquidity, solvency, activity, and profitability of the two cooperatives.

To complement the financial investigation and collect information on RGA's internal and external business environment, a survey and analysis were also conducted. The survey findings further serve to distill opinions on strategic choices made by RGA's managers and board.

Financial Analysis

Liquidity

To provide insight into RGA and FRC's relative liquidity, we present a current ratio calculated as current assets over current liabilities. According to Bragg (2002), a current ratio of two indicates a "healthy" mix of debt and assets. Although RGA's current ratio was never above two, the ratio was steady between 1964-1988 with an average of 1.15 and a standard deviation of 0.13. However, between 1988-1989 RGA sold assets to raise funds to support its differentiated products strategy and to

pay off legal debts and settlements, resulting in a dramatic drop (-25% and -31%) in the co-op's current ratio. A sharp decrease in current liabilities in 1991 resulted from an infusion of long-term debt financing that was used to pay off numerous short-term obligations, thus improving RGA's current ratio and working capital position. Nevertheless, from 1980 to 1991, RGA's average current ratio dropped to 1.01 with a 0.18 standard deviation.

In contrast, FRC's current ratio improved by nearly 20% from 1980 to 1991 (1.04 to 1.26), with a fairly low standard deviation of 0.08 over this period. This indicates that the cooperative had a relatively healthier, more stable, current ratio than RGA. Only in more recent years has FRC's current ratio changed dramatically. Specifically, in 1998, a small crop and strong export demand resulted in high prices that allowed FRC to retire some current liabilities (FRC 1998-99). In 1998, FRC also sold a former packaging and processing plant in Puerto Rico, the proceeds of which helped further reduce short-term debt (FRC 1998-99). As a result, the co-op's current ratio reached 1.95 in 1999 and rose to an even healthier 2.28 by 2000.

Profitability

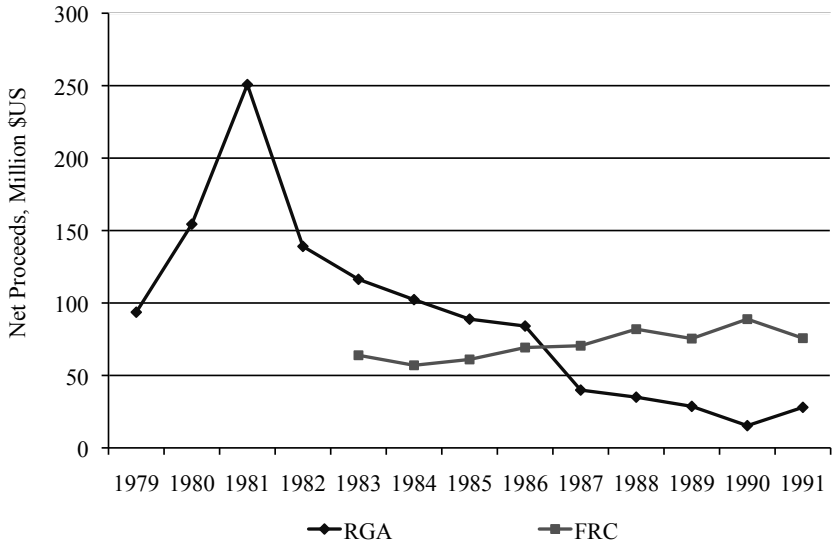
Net proceeds are regularly used to evaluate and compare cooperative performance. Frequently calculated as sales less cost of goods sold, interest expenses, and any taxes, net proceeds are similar to business profits in that they represent a bottom line measure of profitability but, because cooperatives operate on a "service-at-cost," basis, profits or "net proceeds" are returned to members unless they are retained as permanent equity. In figure 5.1, total nominal net proceeds (the sum of both patron- and non-patron-attributed proceeds) for FRC and RGA are compared from 1979 to 1991.

RGA's net proceeds were maximized just prior to the Korean rice scandal that began in 1981. It is generally accepted that the resolution of the Korean rice scandal in 1983 signified FRC's rise in prominence over RGA. This notion is supported when viewing the co-ops' net proceeds from 1983 forward: RGA's net proceeds declined steadily over the next eight years, while FRC's net proceeds increased annually by an average of 10.8 percent. By 1990, RGA's net proceeds were 1/16th the size of a decade earlier.

Agency theory and oversight

RGA's declining net proceeds were also facilitated by the co-op's decision to change course and pursue an expensive differentiated products strategy. Managers told members that the new focus was designed to "phase-out dependence on the government, domestic and export bulk sales, and concentrate on high profit margin, value-added packaged products" (Cony 1987). In the midst of modest commodity rice prices, growers reacted positively to the plan and the prospect of earning higher returns on at least part of their deliveries.

Figure 5.1. RGA and FRC net proceeds, 1979–1991



Source:RGA and FRC Annual Reports, 1979–1991

Board and grower support for the plan was further strengthened by the belief that, unlike stagnant and declining export prospects, the domestic table rice market was in a period of growth. According to Childs et al. (2002) per capita consumer demand for table rice increased fivefold, from five pounds in 1970 to 26.5 pounds in 2000. Grower uncertainty about entering a new market channel may have been further eased with the hiring of Michael Cook as President. Prior to his installation as RGA's president and general manager, Cook gained experience implementing a differentiated products strategy at Farmland Industries (Cony 1987; Cook *pers. comm.*).

As the cooperative attempted to overcome the roadblocks and gain a foothold in the competitive value-added marketplace, revenues declined while expenses increased, resulting in the ongoing drop in net proceeds. Multiple asset sales eased the financial strain somewhat, but the value-added strategy itself failed to deliver competitive returns to the co-op's shrinking membership. Retrospectively, the change in strategic focus from bulk to table rice stands out as an expensive and unwise decision that firmly set RGA on a path of slow but steady decline.

Activity

The inventory turnover ratio is calculated as the cost of goods sold, divided by the average value of inventory, and it gives an indication of the share of a firm's assets that are tied up in inventory (Harrington 1993). Inventories are a relatively liquid asset; therefore, having a high inventory turnover ratio is generally positive while a relatively (compared to same-industry averages) low inventory turnover ratio implies poor sales and/or excess inventory (Harrington 1993).

RGA had a more variable inventory turnover ratio relative to FRC over the period reported. RGA also appeared to have a higher average inventory turnover ratio (2.98), which is usually viewed as a positive. However, this measure may have been unusually large, due to members leaving the cooperative. As producers left RGA, the cost of processing rice and maintaining RGA's facilities was spread over a smaller volume of rice, hence the cost of processing each unit of rice increased, resulting in a higher cost of goods sold, and thus a higher inventory turnover ratio.

A dramatic decline in the inventory turnover ratio in 1985 and 1986 may be partly due to RGA's effort to divest itself of expensive fixed assets, which resulted in a decline of costs of goods sold. In addition, the average value of RGA's inventory increased significantly due to value-added processing. The net effect of these changes was a significant drop in inventory turnover.

In 1990, the cooperative's inventory turnover ratio again declined, but this time the root cause, according to auditor Peat Marwick and Associates, was a US$9 million inventory overvaluation (Marysville AP 1990). The overvaluation inflated the average value of the inventory and thus helped lower the inventory turnover ratio. This scheme, combined with other problems at the cooperative, caused the auditor to express "substantial doubt about RGA's ability to continue as a going concern" (Marysville AP 1990).

While FRC experienced less volatility in its inventory turnover ratio than RGA did, it also had a lower average measure during this period (1.77). In an interview FRC management, it was stated that the cooperative had an annual throughput goal that maximized the use of the co-op's fixed assets (Huffman *pers. comm.*). Having a known supply base no doubt made it easier for the co-op to meet market demand for its product and hence develop stable retail relationships that served to smooth inventory levels and sales across years; this resulted in steady, though perhaps not high, inventory turnover ratios.

Solvency

The debt/equity ratio measures how much the company is leveraged by comparing what is owned to what is owed, and is calculated as total liabilities divided by total equity. A high debt/equity (D/E) ratio indicates that a firm may be over leveraged while a low D/E ratio may indicate an opportunity for the cooperative to grow through the use of debt financing (Harrington). According to one financial service,

a D/E ratio of less than 0.5 is "ideal" (McClure 2003). From 1964 to 1974, RGA's average D/E ratio was 1.08 with a standard deviation of 0.18. However, from 1975 to 1988, RGA's average D/E increased to 2.42, indicating that RGA took on a relatively large amount of debt without commensurately increasing its equity base.

A sharp increase in the D/E ratio occurred in 1989 when RGA divested itself of valuable assets in Colusa County and West Sacramento without using the proceeds to reduce liabilities (Cony 1989). In addition, a number of unplanned expenses were incurred as a result of courtroom loses. The most expensive judgment against the co-op required RGA to pay US$4.8 million dollars to settle the CRT-related suit (Gardner 1990). These asset divestitures, legal fees, and judgments coupled with the US$9 million inventory overvaluation resulted in dramatic fluctuations of the debt equity ratio from 1988 to 1991.

By comparison, FRC's D/E ratio remained relatively consistent over the same period, reminiscent of RGA in earlier years. In general, FRC's D/E ratio declined over the long-run with an average of 2.22 from 1983 to 2002 and a standard deviation of 0.71. FRC's declining D/E ratio was driven primarily by a more than 50 percent decline in total liabilities and increases in total equity (FRC 1983-2002).

Financial Analysis Summary

This investigation of relative financial performance has provided affirmation of RGA's post-Koreagate decline and FRC's steadily improving financial position. In particular, the detrimental impacts of RGA's decisions to enter the shipping business and to pursue a differentiated products strategy are confirmed. These, and other choices taken by the executive team and directors, made the co-op vulnerable to legal action. By comparison, our analysis shows that FRC that received greater financial benefits from pursuing a business strategy that focused on the cooperative's strength and core competency as a high-quality bulk rice processor.

Survey Analysis

To complement the financial analysis, former RGA members and management were surveyed to provide additional perspective on what factors contributed to RGA's failure. The survey targeted former affiliates of RGA located in the eight largest rice-growing counties of the California Central Valley. Membership lists were available for all but the last 10 years of RGA's operation, thus a systematic random sample of Central Valley rice growers was performed to provide the best coverage of the population in the target region. The total number of usable responses was 412, resulting in a response rate of 24 percent. Seventy-four percent of responses came from the four largest rice-producing counties in California: Yuba, Glenn, Sutter, and Colusa, with the balance of responses coming from the smaller rice-producing counties of Yolo, Placer, San Joaquin, and Stanislaus. An expanded discussion of the survey methodology and results is available in Keeling Bond (2008).

Reasons for Joining and Causes of Failure

Former members were asked to identify their reasons for joining the cooperative, to outline RGA's relative strengths, and to describe what factors contributed to the failure of RGA. In order of importance, the top five most important reasons for joining RGA were increased agricultural income, benefits from price pooling, reduced marketing risk, appealing differentiated products strategy, and an increased voice in agricultural issues. Few respondents indicated that prestige or investment opportunities were reasons for joining RGA.

Several of the noted top reasons for becoming an RGA member are directly related to what affiliates perceived to be the causes of RGA's failure (Table 5.1), indicating that a gap may have existed between what members expected and what was borne out in reality. For instance, some growers responded that RGA had an appealing differentiated product strategy, yet affiliates cited poor decision making by management, including the decision to pursue a differentiated products strategy, as a chief contributor to RGA's failure. The high cost of maintaining the cooperative's shipping vessel, the CRT, was also identified as an important factor in RGA's failure. Expenses of maintaining the troubled CRT and later, from legal battles and judgments related to the vessel, diminished the higher-than-industry average returns that initially attracted members to RGA.

Lack of attention by the board of directors was reported as another important contributor to RGA's decline. In interviews, former managers and members supported this survey finding, frequently stating that the board was passive and ill equipped to scrutinize the business decisions it was charged with overseeing. The survey results also indicated that lay affiliates perceived the board to lack adequate governance and business analysis skills.

Numerous factors can be identified as having contributed to RGA's decline. However, many positive attributes aided in the cooperative's survival through years of financial struggle and weak commodity markets. Over 90 percent of respondents agreed that RGA's brand name, the volume of rice handled, and RGA's access to markets were all important assets.

In contrast, very few members identified the skill of RGA's management team and its attention to members' needs as relative strengths. Unfortunately, many members may simply have felt there was little need to interfere with management or lend oversight to a cooperative that had been successful for decades and had overcome numerous other struggles.

Conclusions

This chapter reviews the life cycle of a once dominant and now defunct cooperative, the Rice Growers Association of California. The cooperative's failure is set against the backdrop of former California competitor Farmers' Rice Cooperative's growing success in the same regional market, making it possible to examine how

Table 5.1. Factors contributing to the failure of RGA

	—-%—-				
Reason	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Changing competitive environment	4.6	4.6	9.1	59.1	22.7
Increased cost of rice production	13.6	40.9	13.6	31.8	0.0
Increased environmental constraints	8.7	23.1	34.8	17.4	13.0
High cost of maintaining assets	0.0	13.0	4.4	39.1	43.5
Poor decision making by management	4.4	0.0	0.0	17.4	78.3
Negative influence of competitors	8.7	13.0	30.4	26.1	21.7
High cost of contract with CalRice Transport	4.4	0.0	8.7	17.4	69.6
Lawsuits and legal action	0.0	0.0	17.4	17.4	65.2
Change in level of govt' support of rice growers	8.7	8.7	43.5	21.7	17.4
Lack of grower involvement	4.4	4.4	43.5	13.0	34.8
Lack of attention to coop issues by Board	4.4	4.4	13.0	4.4	73.9

*All responses calculated as percentage of valid responses.

Source: Former RGA Affiliates Survey

two separate management teams, guided by divergent business philosophies, dealt with similar market circumstance and experienced opposite outcomes.

Collectively, the various components of this case study offer historical and financial insights, as well as insider perceptions on why the cooperative failed. Survey respondents and interviewees claimed RGA's initially passive approach to shrinking international demand and increasing domestic supply, in part a result of U.S. government incentives reduced the co-op's competitiveness in the global marketplace. RGA's Board of Directors was characterized as lacking both necessary financial expertise and the ability or will to direct management. Furthermore, former management teams were accused of making a variety of poorly timed and financially questionable business decisions. Additional financial analysis indicates

that some of these choices (e.g., defaulting on the CalRice Transit vessel, refusing to sell rice to Korea, pursuing a differentiated products strategy) resulted in significant financial stress which reduced membership and hastened the cooperative's closure.

Other cooperatives may learn from RGA's failure and avoid the same fate by being proactive in the area of cooperative governance. Boards of directors should strengthen their financial and strategic management skills, while also familiarizing themselves with the legal obligations associated with a directorship. When critical junctures are reached, managers and the board need to focus on the co-op's core competencies and consider how possible strategies may strengthen or weaken the firm's competitive position.

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Chapter 6

The Rise and Fall of Tri Valley Growers Cooperative

Himawan Hariyoga and Richard J. Sexton

Introduction

The members of the board of directors of Tri Valley Growers (TVG) faced a difficult decision. Established value (EV) was a term used by the cooperative to describe the market value of the products its members delivered. TVG had failed to pay full EV on the fiscal year (FY) 1997 crop and was facing losses upward of US$100 million in FY 1998. As a grower-owned cooperative, these losses accrued to the growers. The simplest solution was to charge them against the FY 1998 crop proceeds, guaranteeing that the growers would again receive far less than EV. But these were hard times for the growers, and any payment short of full EV would drive some into bankruptcy and cause others to flee the cooperative in favor of other marketing options. With such erosion in its member base, how could TVG hope to survive? The only other option, however, involved carrying the loss forward on the cooperative's books, further eroding its precarious equity position towards the precipice of bankruptcy. The expression "damned if you do, damned if you don't" could have been coined to describe this dilemma.

Background

Formed in 1963 through a merger of Turlock Cooperative Growers and Tri Valley Packing Association, Tri Valley Growers was a California agricultural cooperative association owned by more than 500 member-growers who delivered tomatoes, peaches, pears, olives, apricots, grapes, and cherries to the cooperative for processing and marketing. TVG's organization consisted of the cooperative association as

parent company and its wholly owned subsidiaries: Tri Valley Growers Container Division, Inc.; S&W Fine Foods, Inc.; Redwood Food Packing Company; Valley Forklift Company, Inc.; Redpack Foods, Inc.; and International Agribusiness Management Corporation. TVG operated nine processing plants in California through the mid-1990s, and a tomato reprocessing plant in New Jersey. In FY 1998, it had total assets of more than US$700 million, its sales revenue reached US$782 million, and its members' equity was US$125 million. TVG hired more than 9,500 seasonal and 1,500 annual employees. In its heyday, TVG was a leading firm in the American food processing industry and commanded substantial shares in the national market (e.g., more than 50 percent for canned peaches and 10 percent for canned tomatoes).

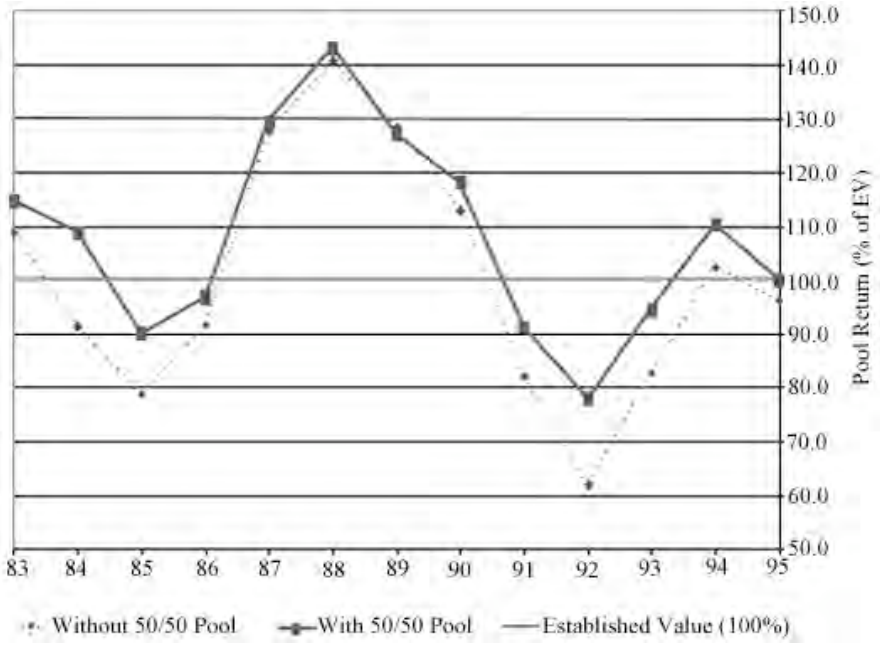
In its early years of operations, TVG faced intense competition and financial difficulty, but survived by diversifying its business and integrating vertically into can manufacturing, cold-storage, and trucking. In 1970–1971, a combination of tomato and fruit products oversupply, general financial crisis, and operational problems led to financial losses. In 1974, CEO and President Bill Allewelt established a ten-year cost-plus contract to supply tomato paste to a national processor/marketer, followed by the construction of a paste plant in Volta, CA to meet the long-term supply commitment. This long-term contract protected TVG from adverse impacts of input cost increases, helped to raise capital for expansion, and relieved TVG from direct competition. The failures and subsequent acquisition by TVG of two cooperatives, Glorietta Foods and California Canners and Growers, further secured its position as the state's largest and most diversified canner.

TVG traditionally operated a single (general) pool for all crops delivered by its member-growers, enabling them to share the risks and rewards, and mitigate the effects of periodic downturns in individual commodities. In June 1983, the pooling practice was modified. One-half of the return from each commodity was allocated to the general pool, while the remaining half was allocated to a separate, commodity-specific pool. The net proceeds from both pools were allocated to the members in proportion to the EV of the products delivered by each member relative to the EV of all products in that pool. Proceeds from non-member business were allocated to retained earnings. Tomato and olive growers were consistently subsidized by TVG's fruit operations in the 50/50 pooling system, earning higher returns than achievable in stand-alone pools. Figures 6.1 and 6.2, respectively, illustrate actual tomato and peach payments for FY 1983–95 relative to what would have been earned in commodity-specific pools.

Prior to restructuring as a new generation cooperative (NGC), TVG operated a base capital plan, with each member's equity requirement set as a percentage of the member's most recent eight-year-average EV. The equity percentage remained quite stable over time, in the range of 140–145 percent. Equity requirements were fulfilled either through annual retains or purchases from other equity holders. When

a member's cumulative equity was greater than the requirement, the surplus was subject to refund or saleable to another member.

Figure 6.1. TVG's tomato pool performance: Returns to members as a percentage of established value, 1983–1995

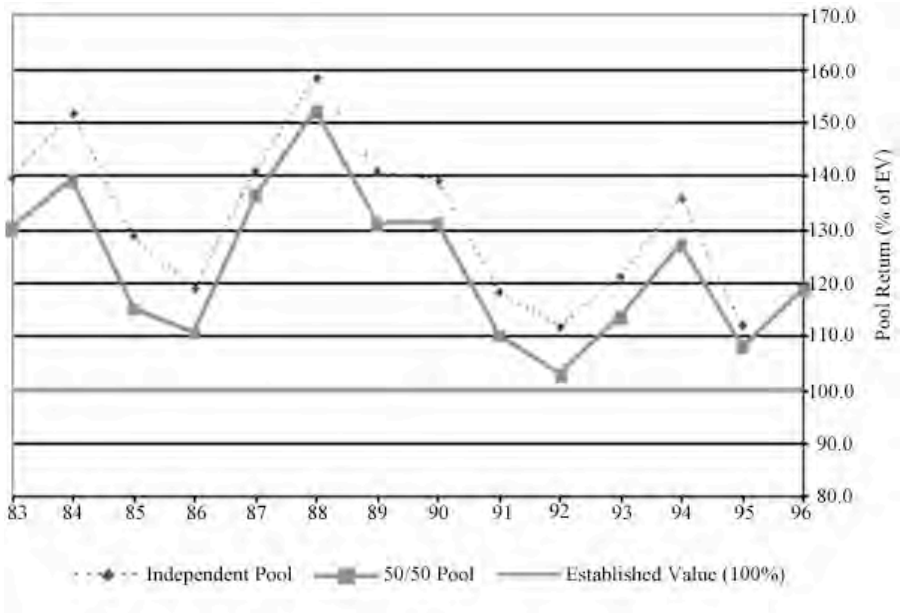


Description of the Failure

In July 2000, severe financial difficulties forced TVG to file a voluntary petition for reorganization under Chapter 11 of the U.S. Bankruptcy Code. TVG relinquished its cooperative structure after a group of private buyers bought the company in February 2001.

Many opinions have been expressed concerning the causes of TVG's failure, including: (1) poor management and wrongful conduct by a former CEO; (2) lax financial controls; (3) industry-wide oversupply of tomato products; (4) declining long-term demand for processed fruits; (5) financial constraints that impeded TVG's ability to reduce production costs through modernization of processing plants; and (6) adverse impacts from restructuring as a NGC. The downfall of TVG is analyzed here with the goal of sifting through the various explanations that have been posited for TVG's demise and understanding the lessons to be learned

Figure 6.2. TVG's peach pool performance: Returns to members as a percentage of established value, 1983–1995



from its failure. Those seeking an even more detailed discussion should consult Hariyoga (2004).

Conceptual Framework

This analysis of TVG's failure blends a variety of analytical approaches. It utilizes, for example, the tools of market analysis to study TVG's position in its key product markets. Although TVG undeniably faced considerable market adversity, the role of TVG's leaders—CEOs and the board of directors—in causing or failing to prevent the failure is a subject of considerable controversy and disagreement. Thus, this analysis must also consider principles of management and organization behavior. Finally, TVG's situation must also be studied within the prism of the economic theory of cooperatives. As many have pointed to the demise of TVG and other cooperatives as evidence of shortcomings of the cooperative organizational form, it is key to determine which of TVG's difficulties can be traced back to its status as a farmer-owned cooperative.

Analysis of TVG's Failure

TVG's members in 34 California counties supplied produce to nine processing plants located throughout California's Central Valley. Although the market for fruit and tomato products became increasingly global in the latter half of the twentieth century, TVG served mainly domestic buyers. Improved distribution of fresh fruits and vegetables led to increased competition between fresh produce and canned fruits and vegetables on a year-around basis. TVG's sales were diffuse. Customers included retail private label (27 percent of 1995 sales), branded retail (22 percent), food service (28 percent), government (2 percent), and industrial and contract (17 percent). TVG's retail brands included S&W Fine Foods, Oberti Olives, Libby and Libby Lite Fruit, Redpack and Tuttorosso Tomatoes, and Sacramento Tomato Juice. The diverse market outlets and mostly weak branded products, however, evinced a lack of focus on core competencies. In tomatoes alone, TVG produced 435 product items or labels.

Conditions in TVG's Key Markets

Tomato products represented TVG's largest product, contributing an average of 39 percent to annual revenue during 1990–95. However, the market for tomato products is characterized by large cyclical fluctuations in production and prices, and prices of tomato products, particularly tomato paste, have been in secular decline since 1981. Three periods of oversupply—1985–88, 1991–92, and 1995–96—caused inventories to increase and prices to decline considerably. Financial distress caused consolidations in the industry, but the number of active firms still remained relatively large (22 in 2001), and so the industry remained fiercely competitive.

Improved processing, storage, and transportation technologies enabled tomato manufacturers to extend processing beyond the harvest season and to remanufacture bulk tomato paste more economically into various consumer products at locations closer to the consumption point. The California tomato processing industry thus evolved to focus on high-volume bulk paste production, with reprocessing done elsewhere. Tomato paste became the largest single processed tomato product in California, with more than 50 percent of the processing tomato crop packed as bulk paste annually since 1991. TVG was ultimately unable to compete in this segment and redirected focus to its branded products. Its brands, however, were weak and brought TVG into direct competition with stronger rivals.

As production shifted into California's Central Valley, a geographical mismatch of production and processing facilities stimulated interregional competition among processors to procure tomatoes. This led to tomatoes being hauled long distances at high cost. The industry gradually shifted plant locations from urbanized coastal regions to Central Valley locations so as to better align plant locations with available production.

While its competitors invested much in plant upgrades and relocation, product innovation, and promotion, financial constraints handcuffed TVG. It had little ability to obtain additional internal capital from its members because they, too, were suffering financially from poor market conditions. TVG itself was already highly leveraged, making it difficult to obtain additional debt capital. Thus, TVG's tomato production remained poorly aligned with its plant locations relative to the competition. And its plants had higher operating costs than rival plants. TVG was also unable to overcome problems of under-utilization of processing capacity in its tomato operations due to insufficient volume of raw product.

TVG was better positioned in its fruit processing operations. TVG, Del Monte Foods, and fellow cooperative Pacific Coast Producers dominated the fruit processing industry in California. Together, they accounted for more than 90 percent of the state's processed fruit production, with TVG having the largest share (about 40 percent). On average, fruit products generated approximately 55 percent of TVG's annual revenue during 1990–1995, with peaches the largest fruit category, followed closely by fruit cocktail. TVG sold fruit under its S&W and Libby brands, but sold most (53 percent) under private labels. TVG's brands were weak relative to the dominant Del Monte brand.

TVG also competed with foreign and domestic competitors in the market for ripe olives. Olive products generated six percent of TVG's annual revenue during 1990–1995, but were a constant problem for the cooperative because they produced the lowest sales as a percentage of production of any TVG commodity and caused a cash drain due to wastewater treatment issues at the Madera processing plant.

Per capita consumption of canned peaches and pears was in long-term decline due to increased availability and consumption of fresh fruits. Between 1974 and 1990, real FOB prices per standard case of canned peaches and canned pears, as well as grower real prices and the average processor margin, declined, which caused some growers and processors to exit the industry. As in the tomato processing industry, TVG's competitors in the fruit processing industry invested heavily in cannery modernization to reduce processing costs. TVG's attempts to follow suit were constrained by the severe losses in the tomato business that drained much of the cooperative's financial resources. Instead, additional capacity took the form of aging infrastructure in canneries acquired from defunct competitors. TVG was also at a cost disadvantage relative to northwest processors in the production of grade-pack pears.

These difficulties notwithstanding, TVG also had key strengths in the processed fruit business. Fruit operations yielded a higher margin than tomato products, and most of the fruit business was conducted on a membership basis. Fruit growers had considerably fewer outside options than tomato growers, and consequently demonstrated greater loyalty to TVG. Indeed, TVG was able to use fruit (mainly peach) revenues to subsidize its tomato business without adversely affecting its fruit grower membership. A question that will never be answered is whether TVG

could have survived solely as a fruit processing cooperative (i.e., if it had chosen early enough to jettison its tomato and olive operations).

Organizational Upheaval

Long-time CEO and President Bill Allewelt retired in 1985, and his successor, Travis Mullenix, served for less than two years before being replaced in 1987 by James Saras, previously the chairman of the board of directors. Saras' ascendancy was controversial. Some viewed it as part of his vision to make the cooperative more oriented toward the peach business. Conflicts occurred and led to the replacement of experienced executives with less experienced and, arguably, less qualified albeit loyal ones. Operational problems began to emerge and questionable decisions followed, including a US$40 million lease on a long-obsolete canning facility in Sacramento. TVG also faced external adversities during this time, including the 1989 earthquake that damaged TVG's warehouses in Hollister at a cost of US$6.2 million, and a sharp decline in tomato product prices that resulted in a US$30 million loss in revenue in FY 1992. On 31 January 1992, TVG recorded a US$12 million liability that reflected the estimated cost of retrofitting its Madera olive processing facilities to comply with California's newly enacted standards for wastewater ponds.

Saras retired as CEO/president in March 1994, and control reverted to Chairman of the Board James A. Cooley. Saras subsequently claimed that he was tricked into resigning by Cooley and other board members, and subsequently sued the board. Despite instability in its upper management and the buffeting that it had received from external shocks, TVG's market share in its major commodities remained relatively high and stable (55.1 percent in peach processing, 48.6 percent in pear processing, and 8.9 percent in tomato processing). However, its outstanding debt had risen to US$417 million in FY 1995, with a debt-to-equity ratio of about two. Moreover, as operating and net earnings declined from 1991 to 1994, pool proceeds paid to members also declined. In pool years 1991–93, tomato growers received less than 100 percent of EV (see figure 6.1).

During 1990–1995, 29 tomato growers exited the cooperative. Other growers elected to convert their business with the cooperative from a membership basis to a cash contract basis. As the number of member-growers declined, the proportion of TVG's purchases from non-members increased rapidly from 1990 to 1996, from 17.5 to 45.7 percent for tomatoes, 2.0 to 71.5 percent for olives, 21.4 to 39.4 percent for peaches, and 20.7 to 24.0 percent for pears. The cooperative was losing its membership basis. Under the existing equity structure, the exit of members or the switch from supplying raw product on a membership basis to supplying on a cash-contract basis would have reduced the cooperative's equity.

The New Generation Restructuring

In April 1995, Joseph P. Famalette was recruited as CEO/president. He proposed a restructuring plan that encompassed reorganization, recapitalization, and a new marketing concept. TVG's organizational problems were reflected in high overhead costs. Revenue per employee was just US$78,000—markedly lower than the industry average of US$200,000. Famalette's cost-cutting actions reduced the number of employees, but also likely had negative impacts on the cooperative's ability to generate sales and revenues.

Famalette also proposed restructuring TVG as a NGC. The new structure was expected to reduce the exodus of members, create a more stable equity base, enable management to better control the supply of raw product, and facilitate the raising of additional equity. Members approved the arrangement on 12 July 1996. It was accomplished through the conversion of revolving equity into permanent equity in the form of common stock, equity stock, and preferred stock. TVG authorized (1) 2,000 shares of common stock, which represented membership in the cooperative and a member's voting rights; (2) 1.8 million shares of Class T (tomatoes) equity stock; (3) 50,000 shares of Class O (olives) equity stock; (4) 1.5 million shares of Class F (fruit) equity stock, which consisted of different series (peach, pear, apricot, and grape); (5) 1.0 million shares of undesignated Class A equity stock; and (6) 1.0 million shares of undesignated preferred stock. Each share of equity stock carried with it the right and obligation to deliver one ton of a commodity for processing. Common stock and equity stock were transferable among current member-growers and other growers who met eligibility criteria for membership set by the board of directors.

Upon the conversion, TVG's issued and outstanding stock consisted of: (1) 502 shares of common stock; (2) 781,998 shares of Class T equity stock; (3) 6,497 shares of Class O equity stock; and (4) 313,645 shares of Class F equity stock. The amount of stock issued relative to what was authorized suggests that the cooperative's equity, membership, and business volume were still below optimal levels, as expected by the restructuring program. The Class A equity stock, which would have represented the cooperative's entry into new business, and the preferred stock, designated for outside investors, were never issued. In essence, the NGC restructuring failed to achieve the base of stable equity capital that Famalette had envisioned.

Famalette attempted to shift TVG's focus from a "grow, pack, sell" approach to one of "market, grow, pack." Instead of packing everything that grower members delivered and then try to find a "home" for what was packed (i.e., the traditional cooperative concept), the new approach sought to determine what the customer wanted and then provide it (the NGC concept). The strategy also involved introducing a new price structure that provided quality incentives, introducing new products such as high-quality peaches packed in a glass jar, creating an international marketing alliance with Del Monte Group Ltd., and brand advertising.

Acreage-based contracts were replaced by tonnage-based contracts, and a new pooling arrangement consisted only of separate pools, each of which was associated with one class of equity stock. A "profitability target," set annually by the board, now determined the allocation of returns among the pools. Net returns up to the profitability target were allocated to each of the pools in proportion to the established values of the commodity in each pool. Any net returns in excess of the profitability target were to be allocated among pools to the commodities that generated the excess amounts.

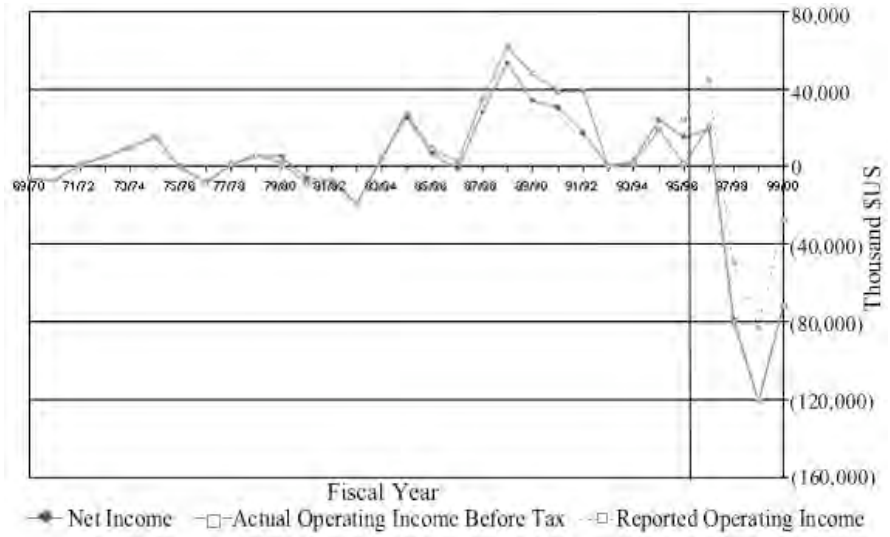
An operating income (before interest and taxes) of US$43.9 million was reported in FY 1997, nearly double the preceding year, and total pool proceeds paid to members increased from US$86.9 million in FY 1996 to US$98.1 million in FY 1997. Nevertheless, the FY 1997 payments were less than 100 percent of established value. Despite the higher recorded surplus, the member-growers were worse off relative to the market than in the previous year. In addition, more borrowing caused the outstanding long-term debt to increase substantially from US$30.1 million in FY 1996 to US$145.6 million in FY 1997, resulting in an increase in the ratio of long-term debt to members' equity, from 0.15 in 1996 to 0.74 in 1997. The ratio of total bank debt to equity increased from 1.21 to 1.51, well in excess of TVG's long-range goal of 0.67. Inventories also rose substantially, from US$347.7 million in 1996 to US$393.1 million in 1997, mostly in terms of canned and finished goods.

The situation was actually direr than these numbers revealed. TVG's auditor, Deloitte & Touche LLP, warned of an increased risk of inaccurate financial reporting, noting that TVG did not (1) have a single individual overseeing the accounting activities for several months, which led to inadequate supervision; (2) sufficiently staff its collections departments; (3) accurately account for its inventory; and (4) adequately monitor its cash account.

This was not the first warning signal sent by Deloitte & Touche to TVG. In December 1995, it had warned TVG of a lack of controls that would prevent a double recording of sales, one when the order was submitted and another when payment was received. Despite the warning, this problem had not been properly resolved. Indeed, double recording of sales happened in 1997 and resulted in overstating TVG's 1997 sales revenues (figure 6.3). The drastic turnaround of the reported net earnings, from a US$19 million surplus in FY 1997 to a US$78.3 million loss in FY 1998, reflected, in part, a correction of the mistake.

Other factors also likely contributed to the FY 1998 loss, including: (1) a larger than expected crop that led to EVs set too high relative to the marketplace; (2) pack planning that did not match the marketplace; (3) significantly lower market prices for packed products due to oversupply; (4) numerous personnel and leadership changes; (5) an erosion of interdepartmental coordination; (6) laying off experienced staff in a drive to reduce overhead; (7) the vacancy of the chief financial

Figure 6.3. TVG's operating income and net income, FY 1970–2000

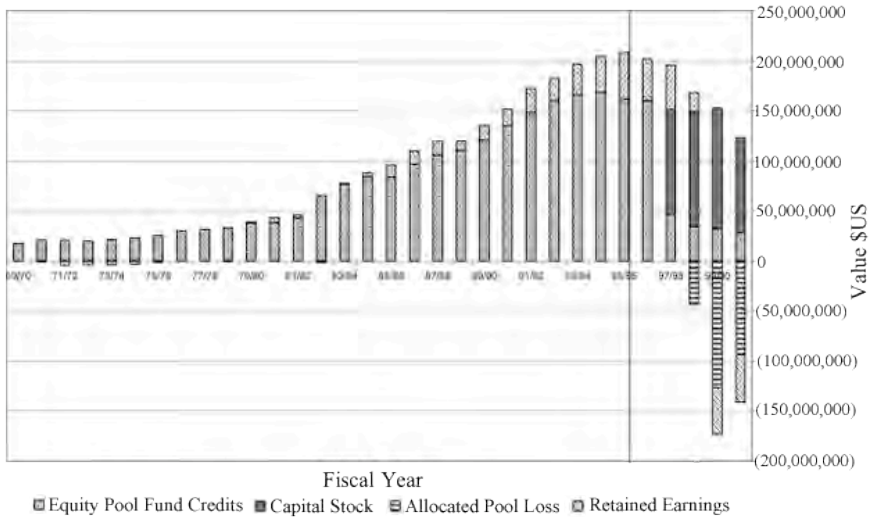


officer position for a large portion of the year; and (8) the distraction of senior management from the core business.

Despite the operating loss in FY 1998, members were not immediately affected because, instead of being charged for their contribution to the loss, they enjoyed patronage refunds in addition to receiving full EV on raw product delivered to the cooperative. Instead, TVG carried the loss forward, causing the cooperative's equity to decrease and total bank debt to increase. This, in turn, caused the debt-to-equity ratio to increase sharply from 1.51 in 1997 to 3.50 in 1998. Had the cooperative allocated the deficit to the members by imposing a charge or paying less than the EV for the raw product, the financial deterioration of the cooperative would have been prevented. In defending their decision, board members noted that charging the loss against current grower payments might have led to a massive exodus of members, thereby threatening the cooperative's viability. However, the NGC restructuring should have helped to deter member exodus due to the delivery requirement and creation of a permanent equity base.

In August 1998, following the announcement of the cooperative's loss, the board of directors terminated Famalette and attempted to stabilize the company by retaining Robert Cook as interim CEO and Timothy Barron as interim president, working on a new financing agreement, initiating a comprehensive search for a full-time CEO, implementing cost-cutting initiatives, and undertaking a communication program with members. In September 1998, a class-action lawsuit was filed

Figure 6.4. TVG members' equity, FY 1969/70–1999/2000



on behalf of TVG's 500 grower-owners against Famalette and Deloitte & Touche. Both were accused of concealing the losses and "manufacturing" profits to keep up the appearance that the restructuring plan was succeeding and justify management bonuses.

In March 1999, TVG hired Jeff Shaw as the new CEO/president, who served until the cooperative was purchased in 2001. TVG formed an alliance with Bell-Carter Foods in September 1999 to handle the olive business. Nonetheless, FY 1999 closed with a recorded loss of US$86.2 million (later revised to US$120 million), and members did not receive full EV for the raw product delivered. The financial problems made it difficult for TVG to fulfil its obligations under its debt agreements. TVG attempted to deal with the financial crisis by: (1) restructuring its obligations; (2) extending the payment terms of the existing contract with its can supplier; (3) extending grower obligations; (4) developing further cost-reduction plans; and (5) selling some olive inventories to a third party. TVG also tried to consolidate its West Coast tomato operations from four to two plants, and shut down its olive processing plant and exited the olive business. Despite the restructuring efforts, TVG continued to experience cash flow and liquidity problems. Indeed, by this time the cooperative had no net equity (see figure 6.4) and was insolvent, although not yet technically bankrupt.

TVG's losses continued throughout FY 2000, and on 10 July 2000 it filed a voluntary petition for reorganization under Chapter 11 of the Bankruptcy Code. In

January 2001, the court approved the sale of TVG to John Hancock Insurance and other buyers, who operated the fruit business through Signature Fruit Co., a John Hancock subsidiary. Del Monte bought TVG's S&W brand, and California Olive Growers, a grower-owned cooperative, bought TVG's olive business, including the Oberti brand.

Conclusions

The failure of TVG was due to a confluence of factors, some internal, some market-related, and others due to the cooperative's inability or unwillingness to adapt to a changing environment. Market adversities stemmed from the highly cyclical nature of the fruit and tomato product market, and were therefore not unique to TVG. That TVG survived a number of hardships caused by poor market conditions in the 1970s through to the middle of 1980s, and that peer cooperative Pacific Coast Producers survives to this day, demonstrates that the failure was not due to an inherent inability in a cooperative to respond appropriately and survive such situations.

Nonetheless, the success factors during TVG's earlier years were due in part to unique events, such as the cost-plus tomato contract. Likewise, the seeds of TVG's subsequent structural problems may well have been sown prior to the 1990s, including high processing/marketing costs caused by scale and technical inefficiencies in its processing operations and high shipping costs due to the geographic mismatch of production and processing. TVG also carried a relatively high debt-to-equity ratio—an average of 2.6 from 1985 to 1991—into the 1990s. By comparison, the average ratio of Pacific Coast Producers for the same period was 0.7. TVG's indebtedness raised its fixed costs of debt service relative to its competition and seriously constrained its ability to generate additional external capital, which, in turn, limited its ability to undertake programs to reduce costs and/or generate revenues.

External events, such as the earthquake damage and the wastewater problem in its olive plant, were unique problems to TVG and had cost implications. Lack of member loyalty was an additional issue, particularly among tomato growers. The weak performance of TVG's tomato pool, even with its subsidy from peaches, and the availability of alternative marketing outlets for tomato growers led to an exodus of tomato members and a restructuring of tomato contracts, from member contracts to non-member cash contracts. Given TVG's cost disadvantage in the tomato business, the only way its cash contracts could be made marketable was through subsidies from the fruit business.

Famalette's new generation restructuring should be viewed as a response to the problems inherited from previous leadership. Nevertheless, the restructuring plan, particularly orienting marketing towards branded products, was too ambitious because TVG did not have competitive advantages over its major branded competitors. TVG's strength was in retail private-label products. Focusing on branded products only drained the company's resources without generating additional revenues. On the other hand, a diet based mainly on private-label products promised

to be a thin gruel, given the emerging dominance of retailers in the food chain and their power to extract cost concessions from private-label manufacturers.

Famalette's equity-restructuring plan also proved to be unsuccessful because its principal goal, to increase the company's equity, was not achieved. Capital was not obtained from outside investors because the preferred stock was never issued and likely would have held little appeal. Increased common and equity stock shares were also never realized. Indeed, the equity continued to erode and eventually disappeared completely.

In the end, the NGC structure offered members few advantages over the old structure. Some of the features of a typical NGC, such as engaging in value-added processing and restricted membership, had already been part of the old structure. Although the stock shares were potentially transferable, the transfer was subject to restrictions and the market was limited, particularly when the commodity pools performed poorly, which was true for tomatoes and olives through much of the 1990s. Ultimately, the success story of Famalette's leadership in implementing the restructuring plan, as painted by a Harvard Business School case study (Carter 1997), proved to be a myth, based on hype and erroneous accounting reports. Although the new generation structure offers several potential advantages relative to traditional structures in terms of ensuring stable product deliveries and base of equity, the lesson of TVG is that it is unlikely to be successful in rescuing a cooperative in distress because potential members are unlikely to make the degree of commitment that an NGC structure demands.

Finally, the board's response to pay members the full EV (and more in some cases) while the cooperative was operating at a loss gutted the cooperative's equity. The laudable goal of such payments, to retain and enhance member loyalty, was unlikely to be successful because the members' exodus was tied to chronic structural problems that could not be solved through a single year's crop payment.

Consensus as to which factors were pivotal and which were ancillary in causing TVG's downfall may never be achieved. TVG's market position was undoubtedly not strong at the beginning of the 1990s. It carried a heavy debt burden and it was not a low-cost competitor in one of its major markets, tomatoes, and held little hope in the short-term of addressing its cost deficiencies. Its other major market, processed fruits, was stagnant due to changing consumer habits and a proliferation of fresh produce. Would TVG have weathered the storm, as it had done previously, if not for the series of managerial mishaps that subsequently unfolded? Or did those actions just hasten a decline that had already been set in place? Could TVG have survived as a fruit-processing cooperative had it jettisoned the tomato and olive operations in a timely fashion?

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Chapter 7

Producer Cooperative as Monitored Credit? The Case of West Liberty Foods

Brent Hueth, Phillipe Marcoul and Roger Ginder

Introduction

The principal economic motivation attributed to cooperative activity in agricultural markets rests on some notion of bargaining or pro-competitive effect in an oligopolistic market (e.g., Helmberger & Hoos 1965; Sexton 1990). In markets where cooperatives exist among private firms, and where there is a potential behavioral response of private firms to cooperative activity, the pro-competitive rationale seems compelling. Additionally, however, it is not uncommon for agricultural cooperatives to form to provide "unmet services" (Torgerson, Reynolds, & Gray 1998), and, similarly, to purchase and operate cooperatively the assets of abandoned private firms (Hetherington 1991, pp. 182–186).[1] In these instances, cooperatives emerge not in response to the absence of competition, but rather to the absence of a market.

Combining this observation with the fact that highly successful cooperatives often "demutualize," or sellout to a private firm, yields a clear pattern of sustainability in environments that cannot support investor-owned activity, but also susceptibility to transformation when economic conditions are strong.[2] Note well what typically is not observed—private investors purchasing and maintaining operations of an abandoned cooperative firm, or a group of farmers financing the buyout of a highly successful private firm. Can these observations be reconciled within the existing body of theory on cooperative and private firm governance? Yes and no.

A number of authors (e.g., Miyazaki 1984; Ben-Ner 1984) have studied the cooperative "life cycle," which is summarized empirically by the stylized facts noted above. These authors argue that the cooperative firm is inherently unstable given

the substitutability of non-member for member input. This argument is insightful, but not descriptive of the structural differences between investor-owned and cooperative firms. Ultimately, in these models the cooperative firm is defined in terms of an unobservable objective function, which is to maximize net income per member, rather than aggregate profits. This contrasts with the legal and practical definition of a cooperative firm, which addresses the source of equity capital (no passive shareholders) and the nature of managerial oversight (democratic control by members). Specifying a different objective function, relative to an investor-owned firm, is one reduced-form way to model these underlying structural differences. However, this approach ignores the internal structural features that distinguish cooperative enterprise, treating the cooperative firm as a "black box," and limits the scope of testable hypotheses to the outcome or external expression of a firm's decision-making (e.g., survival rates; input and output decisions). A deeper understanding of the cooperative firm can be gained by direct consideration of its internal organization.

In a companion paper (Hueth & Marcoul 2008), we develop a "monitored credit" theory of cooperation (outlined informally below). Our theory is based on a financial-contracting view of the cooperative firm (e.g., Holmström & Tirole 1997; Tirole 2001), where members play two roles—they produce an intermediate output and they monitor management. To the extent that rewards for performing well in either capacity depend on ultimate firm performance, there will be some incentive to perform well in both capacities. In the context of an investor-oriented firm, different types of individuals (e.g., workers and directors) perform these two activities. When market frictions exist, like information frictions and limited liability, satisfactory firm performance is only achieved through the payment of rents to each type of individual. Unlike an investor-oriented firm, a cooperative firm allocates these tasks to a single type of individual, the member. Hence, in the cooperative firm the individual will view these activities as complementary. Put simply, diligence in one activity is not useful if negligence in the other compromises overall firm performance (and the rents attached to it). As shown formally in Hueth and Marcoul (2008), an intuitive consequence of this complementarity is that rents distributed in the cooperative firm are less than the sum of rents paid in the investor-oriented firm. Overall, a cooperative needs less surplus to operate and thus can still survive in adverse economic conditions. Although investor-oriented firms and cooperatives can both operate in better economic conditions, only investor ownership can realize the benefits due to worker and board specialization. This will naturally incite successful cooperatives to transform into investor ownership if economic conditions are strong.

Our theory generates predictions that are consistent with the characteristic life cycle of cooperative firms. However, other theories have similar predictions, and thus are also consistent with the evidence. The key difference between our view of cooperation and other theories is a focus on contracting between both the firm and its patrons on the one hand, and the firm and its investors on the other. While other

theories are silent on these latter dimensions of cooperation, they are the center of discussion in ours. Thus, while there may be more than one theory that can explain organizational transition in response to economic aggregates, we believe that ours is the only theory that also explains changes in structural features of the organizations themselves. In this article, we document these structural changes for a specific transitional event and compare them with the predictions of our theory. Our objective is to provide an illustration of our "monitored credit" view of cooperation and to show how it can account for the organizational changes that have taken place in this particular context.

Briefly, in 1996 Louis Rich Foods announced the imminent closing of its West Liberty, Iowa turkey processing plant. Area growers organized a buyout in response, forming the West Liberty Foods (WLF) of Iowa turkey cooperative. The WLF conversion resulted in three broad changes. First, farmer members pledged many of their farm and personal assets to participate in the cooperative. Second, the production contract with growers became more highly powered. Growers faced far greater price and production risk than they did when contracting with the private firm, and also stood the risk of losing a substantial portion of their personal wealth in the event that the firm failed. Moreover, growers capitalized on their information regarding production possibilities to eliminate opportunities for over-reporting input requirements from the firm. Third, growers assumed responsibility for turkey production activities that were once provided by the firm, and substantially increased their involvement in turkey processing and marketing operations.[3] Although we argue that many of the changes at WLF are indeed consistent with our monitored credit theory, the descriptive nature of our data, admittedly, do not permit formal hypothesis testing. Thus, we see our contribution as one of suggesting, based on observations from the WLF transition and from our companion paper, a new hypothesis that seems consistent with empirical observation, and identifying possible avenues for additional empirical work.

The Producer Cooperative as Monitored Credit

A cooperative firm is defined by its restriction on who invests in the firm and how board control is exercised. The restriction on outside ownership implies that members alone must satisfy the firm's capital requirement. In principle, this can occur without members also exercising managerial oversight through control of the board. However, the second defining feature of the cooperative firm is a bundling of input supply and oversight responsibilities. In other words, members of a producer cooperative play two roles in the firm: they provide an intermediate input, and they monitor management. Both activities are costly and require motivation.

In Hueth and Marcoul (2008), we build a model of a generic firm composed of farmers, management, investors, and monitors. Farmers and management provide labor in a stochastic production process and must be motivated either with explicit incentives or costly monitoring. In short, there is a moral hazard problem between

the firm and its "workers," who include both farmers and management. Investors provide the capital needed for operations and monitors are hired by investors to ensure that management behaves. Crucially, however, monitoring is costly and unobservable. We view the activities of the board as an important input in the ultimate success of the firm, but without adequate incentive the board will exercise insufficient oversight, leading to an increased chance of firm failure.

In this environment, a cooperative firm is distinguished from an investor-owned firm by allowing farmers to take on the responsibilities of investor and monitor simultaneously. We show that even when farmer capital is costly relative to the capital of private investors, and farmer monitoring is costly relative to private monitoring, this form of cooperation can extend the range of feasible economic activity. The reason comes precisely from the bundling of investor, monitor, and farmer roles in the firm. A farmer whose livelihood depends on a firm's success will be motivated to provide a high-quality input and to monitor managerial performance. In effect, ownership results in a "double dividend" with respect to incentives within the firm. However, if cooperative monitoring is costly relative to its private-firm counterpart, it is always dominated when there is sufficient surplus to pay all parties their respective outside options (or information rents when outside options are sufficiently low). The cooperative firm only emerges when there is insufficient surplus to go around. This can be viewed as a form of organizational "belt tightening." While cooperatives generate less surplus than a comparable investor-owned firm, their specific organizational character reduces the motivation costs that the organization must incur to operate. In effect, this trade-off between feasibility and profitability is central to our story.[4]

We now turn to the description of the formation of the West Liberty Food growers' cooperative, and use these observations as an informal test of our monitored-credit theory.

Turkey Production Contracts

Producing Turkeys: From One-Day-Old Turkeys to Sliced Luncheon Meat

At WLF, it takes approximately 20 weeks to obtain a young adult turkey ready for slaughter. This process is usually carried out in specialized facilities where growers begin feeding turkeys when they are one or two days old. Turkeys are fragile and their growth is constantly monitored to optimize feed-to-meat conversion ratios.

Besides specialized facilities and labor, other essential inputs for growing turkeys include feed, "litter", and liquid propane. The composition of turkey feed is a mix that evolves over the production process. It is composed mainly of corn, soybeans, and a cocktail of vitamins and minerals necessary for bird growth. The turkeys are raised on a floor covered with litter that absorbs turkey excrement. The litter is removed periodically and used as fertilizer in crop production, thus becoming a valuable by-product of turkey growing. Finally, liquid propane is used to heat the

facility and dry the feed. When the facility is too cold, the birds burn calories to generate warmth, which reduces the rate of weight gain.

When turkeys arrive at maturity, they are promptly slaughtered and processed. A crucial aspect of processing, and one not unique to turkey production, is having a constant turkey supply at the plant. The plant has high fixed costs and can incur huge losses if supply drops or is not constant over time.

Structure of Procurement Contracts and Bird Ownership Before Buyout

Before the formation of the WLF cooperative, Louis Rich, a subsidiary of Kraft Foods Corporation, operated the West Liberty plant. Louis Rich relied on two different means of procuring turkeys, reflecting two relatively distinct populations of growers: one from southeastern Iowa and the other from the central region of the state.

In the central region of Iowa, contracts were structured to allow for heavy involvement of Louis Rich in growers' operations. Louis Rich contracted for purchase of young turkeys through a third party, who also arranged for delivery to growers. These turkeys remained the property of Louis Rich through the entire growing and harvest period. Aside from providing the facility itself, growers' only responsibility was to care for the turkeys. Louis Rich was responsible for the other significant inputs, such as food, litter, and veterinary services. The contract usually took the form of a "take-it-or-leave-it" offer to growers, with a flat fee paid at delivery for each turkey, and a bonus/penalty provision contingent on feed-conversion ratios and bird mortality.[5]

In southeastern Iowa, Louis Rich was far less involved in growers' operations. The number of birds and the unit price were specified beforehand, but growers were in charge of the entire growing process, including acquisition and management of the production inputs. In both regions, contract conditions were uniform across growers.

Central Iowa growers faced much less risk than those in the southeast. Most importantly, central growers were completely insulated against price variation in the cost of feed. Furthermore, Louis Rich provided the litter, although growers were subject to an allowance in relation to the number of birds that they raised. This restriction seems to be explained by the potential for moral hazard in the use of litter, which, as emphasized earlier, generates valuable fertilizer. The central Iowa contract also seems to have been less demanding, for the effort required to source feed and procure veterinary services in the southeast involved significant extra cost.

There are two differences in the characteristics of growers across these regions that may help explain the different types of contracts that were used. First, growers in the southeast operate at a much smaller scale and are more diversified. This latter fact may lower the cost of risk bearing, thereby lowering the cost of using the "lighter" contractual apparatus. Second, growers in the southeast mostly come

from a community of Mennonites, and there is anecdotal evidence of informal group risk sharing in these communities.

The Costs and Benefits of Ownership

In the next section, we begin our description of changes that occurred as a result of cooperative formation, including the financial position of growers, the contractual apparatus for turkey procurement, and communication requirements. We start by discussing two ways in which the cooperative organizational structure seems to offer an advantage relative to the prior structure. We then discuss a number of costs that provide a counterweight to these advantages.

Cooperative Formation: "Pledging the Farm"

In mid-1996, Louis Rich officially announced to its contract producers that it would stop turkey processing at the end of the year and close the West Liberty plant. The market for turkey meat was depressed at the time, and Kraft Food eventually decided to withdraw from the processing business. After some initial uncertainty, it became clear that no private investor was willing to buy out Louis Rich and assume operations of the West Liberty plant.

The growers were conscious that there was no alternative to this plant and that they would have to quit growing turkeys. Therefore, a group of 47 growers formed with the objective of creating a growers cooperative that would own and operate the West Liberty Plant.[6] Several major problems needed to be solved before the cooperative could be formalized: the group of growers needed money to buy the plant; they needed expertise to run the plant; and they needed customers for the turkey meat.

In November 1996, a management team was formed and hired by the growers. The newly hired CEO was a specialist in turkey processing and had extensive experience working in a cooperative setting. During this time, negotiations with Louis Rich were underway regarding the terms of a buyout.[7] By continuing operations and not releasing the plant employees, Louis Rich could save severance payments worth several million dollars. In exchange, Louis Rich was willing to commit to purchase no less than 50% of the meat produced by the cooperative during the first years of operations. This initial deal solved part of the problem of finding customers.

The last important problem for the growers was to find the up-front equity necessary to purchase the plant. The cooperative generated much of this capital through private loans extended to growers by local banks.[8] This financial effort was considerable and resulted in most growers having at least some of their land or other personal assets collateralized. Such loans were especially difficult to obtain for those who had few physical assets.

During the first years of operation, the cooperative went through three consecutive recapitalizations. These recapitalizations were triggered by liquidity shortages

due to depressed turkey prices and high input prices.[9] The processing operations were losing money. In the initial financial set-up, members were asked to add US$1 in equity for each turkey they would deliver. Then, one year later, the board decided to add another dollar per member for each bird, doubling the initial commitment. Finally, in a third round, members were required to contribute an additional US$1.50 per turkey. These consecutive demands for cash precipitated the exit of several, mostly older, members.[10]

Two results of these recapitalizations bear remark. First, the members who chose to stick with WLF saw much of their wealth transferred from their farms into cooperative equity. Second, more than one interviewee remarked that successive recapitalizations acted like a self-selection mechanism in which only the relatively "good" growers decided to stay within the cooperative structure.

Implementing the Cooperative Contract: Learning and Efficiency

Although the cooperative could have replicated the contractual terms that Louis Rich had with its growers, it seems that this possibility was never seriously considered. The growers were conscious that the financial structure of the cooperative was equivalent to them being residual claimants for the cooperative output. As argued before, nearly all growers had transferred a substantial portion of their wealth into cooperative equity. Thus, failure of the cooperative was simply not an option for most growers.[11] As a result, the board set up a contractual structure for all growers that closely resembles the contract used by southeastern growers, which is significantly more "arm's length" than the central Iowa contract used by Louis Rich.

In the current procurement contract, grower members own the turkeys grown on their farms and the unit delivery price is specified in advance. The contract is thus close to a pure fixed-price contract.[12] In this contractual relationship, the cooperative no longer shares the input costs; the growers have to purchase all the input necessary to grow the turkeys. This contract is a high-powered incentive scheme and is undoubtedly less demanding for the firm in terms of monitoring and administrative costs than the agreement that Louis Rich had with its central Iowa growers. Nevertheless, some members saw this contract as too risky. Ultimately, the cooperative had to introduce risk sharing into the contract by making the delivery price contingent upon the future price of key inputs, such corn and soybeans. This removed some of the risk that members would face as truly independent growers.

The cooperative spent considerable time budgeting costs in order to arrive at a fair price for grower members. Our interview with the chairman of the board revealed that growers' experience was crucial in evaluating input costs. Growers were asked to organize meetings to study every major component of cost. One interviewee noted that, during these meetings, they discovered that what was budgeted by Louis Rich for inputs, such as litter, was much higher than necessary. This anecdote

arguably demonstrates how a private processor had less information about grower costs than the cooperative was able to obtain.

The new contract was not much of a change for the southeast Iowa members, who had similar contractual terms with Louis Rich prior to the buyout. This is in contrast to the growers of central Iowa, who had to adapt themselves to these new contractual conditions. When asked about their perceptions of their situations now and then, central Iowa growers indicated that they unambiguously regard it as "less comfortable" now. They also mentioned that their workload has increased substantially.[13]

The transition between these two contractual relationships has been rough for some growers. However, our inquiry does not show that the cooperative has had major problems with enforcement of the contract. Rather, whenever a member is struggling to honor his delivery duties, the cooperative always attempts to solve the problem on a one-by-one basis. For instance, to the best of our knowledge no expulsion of a WLF member has ever occurred. Given the lack of a formal written delivery contract, it appears that the WLF cooperative relies on a substantial up-front equity requirement to align growers' interests with those of the cooperative. This demonstrates how a strong financial contract—particularly the large financial penalty that a grower faces in the event the firm fails—complements and allows for the smooth functioning of the procurement contract. This effect is the central feature of our monitored-credit theory of cooperation.

Communication, Oversight, and Decision-making

With all its members having a large financial interest in cooperative success, it is natural that there will be demand by growers to participate in the decision-making processes of the cooperative, something confirmed in our interviews. This demand can be detrimental to the organization if it does not manage information flows effectively. On the one hand, members have a right to be informed and to participate in strategic decisions. On the other hand, however, it can be difficult to respond fully to every demand for communication and involvement made by individual growers. Our analysis reveals that the cooperative board of directors is an essential instrument used to achieve this balance.

In any traditional corporation, the board represents the interest of the firm's capital providers, whereas in a cooperative the board represents the interests of both capital providers and grower members who deliver a key production input. The WLF board makes several types of decisions. Our interviews revealed at least two major potential sources of conflict among members in these decisions. First, there is tension between recent members and senior (or initial) members. As argued above, the early period of cooperative formation was difficult because there were successive recapitalizations in response to market crises. Recent members, on the other hand, have never been exposed to this kind of financial stress. The equity contribution required of new members is nowhere near that made by founding

members. The pricing of the turkeys explicitly accounts for this difference, with recent members effectively receiving a lower net price (they earn the same price for their turkeys, but get much smaller unit shares on patronage refunds). This unequal pricing scheme is cause for conflict when turkey prices are low, and our interviews revealed that more recent members have difficulty earning positive margins.

Another source of conflict is the distribution of profit within the cooperative. This tension usually arises between growers of differing cost efficiency. Profits are distributed through two distinct channels. The firm can increase the price offered to members for their turkeys, or raise the level of equity-based refunds. Producers who are production efficient tend to prefer output-based pricing, while producers that are production inefficient prefer dividend-based pricing (which is divorced from output).

The composition of the WLF board has evolved over time and reflects the evolution and growth of the organization. When the cooperative was created, the board was entirely composed of grower members. The number of votes a member can carry depends on the quantity of delivery rights. In 2005, for instance, Stock A provided one vote for each 100,000 birds. Recently, the cooperative has created Stock B to allow outside sources of equity. Stock B does not carry delivery rights, but allows persons to invest in WLF, such as members' family or institutions (e.g., local banks). Members who do not want to expand their operations, but who do want to invest more in the cooperative can also hold B stock. This stock carries voting rights. The board is currently composed of 13 persons. The CEO is not on the board, although he does attend board meetings. The executive committee, which has full board power and is composed of four persons, with one stock B representative, usually makes decisions.

At the beginning of the cooperative's operation, a crucial design task was to allow for necessary communication between grower members and processing operations management. Our inquiry suggests that the first CEO largely handled this task. In his interview, he told us that a major part of his time was devoted to communication with growers, especially at the beginning of operations. This can be explained partly by his personality, but also due to the growers sitting on the board at that time lacking expertise in processing operations. Over time, however, it seems that the board has played a more important role in communication with growers, especially after the first CEO left in 2004.

A major challenge for the board is to explain concretely to the grower base the consequences of the board's decision for farming operations. As the chairman puts it, "You have to be able to read a financial statement, and put it in total farmer language." The chairman commented to us that to accomplish this objective he needed to be surrounded by experts on the board, and so growers who possess useful expertise are usually suggested as candidates for a board slot. For instance, one of the growers of the executive committee is a certified public accountant. This aspect underlines one of the main differences between a private and cooperative

undertaking. The board of a private firm is typically composed of individuals with some degree of expertise, if not in the firm's specific industry then at least in a related industry or in business management issues in general. This contrasts with a cooperative board, whose members can fairly be characterized as amateurs.

Additionally, a private processor cares primarily about firm profits; growers matter only to the extent that they contribute to a firm's profits. In a cooperative setting, growers are the owners of the processing plant and, as such, any decision concerning processing operations will reflect the interest of growers as both investors and farmers. This additional constraint, which all cooperatives face, is at the core of arguments by Hansmann (1996), who documented the importance of heterogeneity in collective decision-making as an additional cost of cooperative activity.

Another challenge that the board faced was to restrict communication channels between individual growers and operations management. Initial experience showed that such direct communications were a nuisance for the whole organization. To address this problem, the cooperative implemented a strict chain of command that every member has to follow when they have major complaints about processing operations. Complaints between members and operations are now handled exclusively by the board, which tries to solve the problem in collaboration with management. Thus, there is a definite effort from the board to "isolate" operations from grower complaints, although the chairman conceded that members are still permitted to call management directly for "minor" problems.

Finally, the board also needed to put an end to information leaks. Here again, the board decided to restrict the communication of marketing information because, as the chairman emphasized, "too much was going out." As a result, the amount of strategic information to which members have access is now substantially reduced relative to earlier years.

It is clear that these successive adaptations have caused regular members to feel less in control of their cooperative. To mitigate this effect, a part of the board meetings is opened to the growers, who can come and ask questions about board decisions. Although we lack data on attendance at these meetings, our general feeling is that most growers are satisfied delegating the supervisory role of the board to member directors. One grower revealed to us that he was not going to these meeting as much as he would like because he did not want to give the board the impression that he was constantly looking over their shoulder. Such an attitude suggests both a legitimate desire to know and a trust in the board's integrity and expertise. This trust is only possible if directors, who are also growers, have well-aligned interests with the grower base, a condition that, we think, is largely met in the WLF case.

Conclusion and Further Discussions

This case study of WLF possesses several interesting features. First, our inquiry contrasts two different organizational modes for arranging turkey production and

processing, one in which a privately owned processor contracts with growers, and one in which turkey processing is performed in a cooperative firm owned by turkey growers. Second, our description of the contractual relationships between growers and the processor reveals that, in the cooperative setting, the growers take on greater responsibility and are subject to more highly powered incentives. Specifically, the farmer retains ownership of the birds, organizes the supply of necessary inputs, and is subject to considerable additional price and production risk. This situation is not typical in the poultry industry.

WLF appears to have been successful in transforming an apparently low-return enterprise into a sustainable cooperative organization. Although part of this success may be the result of luck and skilled management, it also seems that grower ownership of the processing facility fundamentally transformed production incentives at the farm level. Arguably, this transformation is the result of the large cost that each grower would have to bear if the firm failed. However, this risk is costly to bear, and the growers we interviewed clearly indicated that life in the cooperative is "less comfortable." Growers are working harder and face substantially more risk than when they were producing for a private processor. In other words, although growers may be receiving higher net monetary returns—because they are now receiving a share of processing profits, in addition to a payment for turkey production—it seems that "agency rents" or net returns may have fallen.

This observation is consistent with the monitored credit view of cooperation developed formally in Hueth and Marcoul (2008), where the bundling of input supply and board functions generates higher work effort by growers and a reduction in agency rents. Of course, if this were the only implication of organizing production cooperatively, we would expect to never see a private firm. Thus, there are likely costs from cooperative organization that balance these benefits. Our study is consistent with the view of Hansmann (1996) and others, that the "cost of democracy" (i.e., decision-making with heterogeneous preferences) is one likely source of such cost. Additionally, we note that farmers' cost of capital is likely high relative to that of private investors, and that training farmers to be board members is costly.

We can think of at least two directions to further explore the nature of the cooperative firm. First, although our monitored credit theory nicely accounts for the bundling of farmer ownership with control rights (in the form of managerial oversight), it is silent on the reason for imposing a restriction on passive ownership. One hypothesis is that such a restriction encourages ex ante investment from cooperative members by guaranteeing control ex post. Of course, it remains unclear why such guarantees cannot be implemented contractually. Recent efforts to modify the legal definition of a cooperative by relaxing restrictions on outside investment are apparently attempts to implement just such a contractual guarantee (Frederick, 2002).

Second, there is very little formal empirical work on the internal structure of cooperative firms. In this paper, we provide case study evidence that broadly supports

a general set of predictions. The obvious next step is more formalized empirics. For example, predictions that distinguish our monitored credit theory of cooperation from other theories include those associated with internal structure. In particular, differences in board-CEO relations, CEO and board pay, and cost of capital are all potential objects of study (see Hueth and Marcoul 2009 for recent work on CEO pay practices in cooperative firms).

Notes

1. Cooperative activity of this nature is not unique to agriculture. Zeuli and Cropp (2004, p. 32) describe how rural utility cooperatives in the United States were initially established to provide services to rural residents that were not being offered by the private sector. Similarly, Guinnane (2001) demonstrates how credit cooperatives in late nineteenth century Germany were able to service low-quality borrowers who could not obtain funds from private lenders.

2. Recent prominent examples in agriculture include Diamond Foods, Dakota Growers Pasta Company, Calavo, and Goldkist. Although we focus on cooperative activity in agriculture, similar sorts of transitional phenomena are observed in the context of the labor-managed firm. See Bonin, Jones, and Putterman (1993, pp. 1312–15) and Dow (2003, Chapter 10).

3. These observations are based on interviews with key individuals of the cooperative, including the current and former CEO, the chairman and another member of the current board of directors (both growers), and six additional grower members. All interviews lasted between 45 and 120 minutes, and were tape recorded and later transcribed. Each subject was paid US$50 for participating in our study.

4. To the extent that the firm provides on-going operating credit to the farmer, it may be reasonable to expect a further monitoring advantage in the other direction. The board, which is made up of farmers, is in a better position to evaluate the quality of its member population.

5. This type of contract seems standard in the poultry industry. For instance, see Martinez (2002).

6. There is no evidence that Louis Rich threatened a retreat and intended to negotiate a better contract with growers (e.g., by bargaining for lower turkey prices).

7. Besides the West Liberty plant, the growers also purchased a feed mill in Ellsworth, Iowa and the Louis Rich Company farms located in the state.

8. State and federal governments also provided substantial grant and guaranteed loan support. The USDA guaranteed 70 percent of a US$7 million loan from a private lender, the Iowa Department of Economic Development contributed a US$900,000 grant and loan package, and approved US$875,000 in forgivable loans using the city of West Liberty as a sponsor (Perkins, 1997). In exchange for the latter, the cooperative agreed to pay 425 workers at the plant an average US$9.66 per hour.

9. Our interviews with senior members revealed that falling prices and the gloomy prospect of the cooperative at the time discouraged potential new members. It also increased the burden on existing members who had already made large initial commitments.

10. The chairman of the board revealed to us that, in the last round, some members decided to borrow against their life insurance because it was their only remaining uncollateralized asset. Some declined to do so and chose instead to exit, thus losing their delivery right. Later on, these former members were given the opportunity to buy back their membership under preferential conditions.

11. In our interview with the chairman of the board, he recognized this aspect by saying that "the cooperative is the grower's money." He concluded, "That makes the difference. Your butt is on the line 24-7." Emphasis in original.

12. The chairman of the board insisted that "there is no contract" and that growers are "independent." We concur, in the sense that there is no written contract periodically signed by both parties. However, growers have delivery duties that are understood by all. We choose to label this relationship as a contract.

13. The increase in the workload, compared to the Louis Rich period, is also due to the increased involvement of growers in the processing and marketing operations. We will come back to this issue later.

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Chapter 8

Sustainable Growth and Capital Constraints: The Demutualization of Lilydale Co-operative Ltd.

Getu Hailu and Ellen Goddard

Introduction

Over the past ten years, Lilydale Co-operative Ltd. (or Lilydale) has been one of Canada's largest and most geographically diversified poultry processors, with approximately 2,700 employees across Western Canada and Quebec and annual revenues of more than C$500 million. Lilydale was established in 1940, when a group of farmers established the Alberta Poultry Producers Ltd. to provide better quality poultry products (e.g., fresh and frozen chicken and turkey products and a variety of deli and further processed poultry products) to a wider consumer base. It is a respected supplier of branded fresh poultry products across the country, both under its own name and others that it distributes. As of 2005, Lilydale had 1,403 member-owners holding equity accounts. Forty-five percent of the members were active participating members engaged in poultry production with Lilydale.

In 2005, Lilydale voted to end its 65-year existence as a cooperative and converted to a conventional investor-owned firm. The purpose of this article is to examine the possible motivations for Lilydale's organizational change via the access to capital theory. Given the importance of cooperatives in agriculture over a long period much of the 20th century, conversions such as Lilydale's are receiving much attention from regulators, investors, members, and taxpayers. The results of this study seek to add to the analysis of why conversions have occurred and to better inform cooperative members, regulators, investors, and taxpayers.

Although a number of theoretical reasons (e.g., free cash flow theory, access to capital market theory, expropriation theory, and inefficiency theory) have been offered to explain why cooperatives and mutual organizations demutualize, this study argues that the primary motivation for Lilydale's conversion was access to capital. In particular, because product innovation and development was occurring so rapidly in the poultry industry, access to capital was increasingly important if the company was to continue to introduce new products and expand/grow into other regions.

Background to the Conversion

Across the Canadian cooperative sector, an increased pace of consolidation and concentration coincided with sharp increases in capital investment during the 1989–2002 period. This increase in real capital investment was accompanied by an increased dependence on debt financing, as the sector increased its debt-to-equity ratio from approximately 1.13 in 1963 to 2.08 in 2000.[1] Over the period 1963–2002, equity capital increased at a rate of 7.7 percent annually, while long-term debt increased at approximately 13 percent annually.

The high debt-to-equity ratio for the cooperative sector suggests a sustained dependence on debt for investment to finance growth. In general, when facing capital constraints and in the absence of equity injections from members, cooperatives are forced to choose among a number of quite different strategies—borrow more capital from creditors, demutualize, or sell to investor-owned companies.

The debt and equity pattern for Lilydale was not dissimilar to that of the overall cooperative sector. Lilydale's debt-to-equity ratio rose from approximately 1.17 in 1990 to 2.23 in 2000; the ratio then fluctuated from 3.06 in 2003 to 0.86 in 2004 (after the sale of significant assets) to 1.74 in 2005.

The events of the period 2002–2005 period are particularly important for understanding how Lilydale came to the demutualization decision in 2005. In 2002, Lilydale closed a processing plant and an egg facility in Edmonton. It also moved to Edmonton some of its Abbotsford, British Columbia turkey processing operations. Without the benefit of those asset sales, Lilydale did little better than break even (Lilydale Food Annual Reports).

In 2003, the company ran an advertising campaign in the Ottawa Valley to increase brand awareness, followed by additional national advertising activities. This effort helped secure a deal to supply fresh poultry to Costco throughout the country. Nevertheless, Lilydale suffered a C$16.3 million loss in that year, which triggered the departure of former CEO Frank Burdzy in September 2003. The loss was blamed on low wholesale poultry prices, overproduction, and loss of market share to competitors. Lilydale's operating losses and overstretched balance sheet put the co-op in a bind with its banker, Scotia Bank. The bank promptly cut the firm's operating credit line from C$45 million to C$10 million, and insisted that Lilydale take decisive steps to cut its C$65 million long-term debt. One requirement was a

more aggressive infusion of equity from members. In response, Lilydale created the Member Investment Program. However, lack of success of the Member Investment program (other than the check-off portion) led to a necessity to consider alternate structures.

Lilydale continued to expand into eastern Canada with the 2004 purchase of a processing plant in Mirabel, Quebec. For the fiscal year ending 31 January 2004, Lilydale reported a profit of C$17.5 million. By the end of fiscal year 2005, it had over C$60 million of equity and about C$35 million of long-term debt. According to new CEO Ed Rodenburg, Lilydale had cut its debt by more than half in 2003 and 2004, and its balance sheet seemed to be solid (*Edmonton Journal* 2005).[2]

Description of the Conversion

At the 2004 annual meetings, delegates authorized Lilydale's directors and management to explore new capital structure options to meet future capital required for growth, while concurrently meeting equity redemption demands from members as they retire or otherwise leave the poultry production business. Under the cooperative business structure, the sources of capital are limited to retained equity, member-sources debt (e.g., member check-off indebtedness and subordinate debentures), and bank financing. There are, however, difficulties with these traditional sources of capital. For example, in 2005 members aged 60 years or older held approximately 35 percent of Lilydale's equity, which entailed an obligation to repay a significant amount of member-sourced debt and equity redemption to retiring members.

Based on the valuation of Lilydale provided by PriceWaterhouseCoopers, the board of directors concluded that conversion was in the best interests of Lilydale and its members. The conversion process started with months of consultations by the board of directors with the membership via regional delegates.[3] In May 2005, Lilydale sent its members detailed information circulars about the restructuring proposal, followed by a week-long senior executives road show. If the conversion were accepted, farmers were told, members would have the right to convert their Lilydale membership equity into common shares or subordinated debentures of the new corporation. The conversion was expected to improve the future financial flexibility of Lilydale and its members.

Some of the reasons for conversion included: 1) creation of a permanent equity base; 2) creation of new options for members to manage their equity investment; 3) creation of a stronger financial structure; 4) the possibility of accessing new sources of (equity) capital for growth; and 5) an opportunity for Lilydale employees to invest in the company, resulting in improved employee performance and retention. The conversion required approval from regional delegates. Prior to the delegates' decision, meetings were held to provide information and answer questions related to: the proposed structural change; the benefits of the new organization; conversion timelines; implementation procedures; what members should do before the con-

version; problems with the current organizational structure; how members would receive their shares or subordinate debentures in the new organization; what percentage of the new organization would be farmer-owned; the tax implications of the proposed organizational change; and other details of the conversion.

Post-conversion, Lilydale would become a private corporation, with the board of directors retaining control over share transfers. Lilydale intended to implement a share sale and repurchase program to give farmers greater flexibility in managing their investment. Rodenburg said that the change would encourage new investment from both existing shareholders and new poultry suppliers. The board and shareholders felt that they had the ability to consider a full range of options for growth or business opportunities, including external and/or employee investment (*Edmonton Journal* 2005).

In June 2005, Lilydale voted to end its 65-year life as a cooperative, and converted to a conventional corporate structure under the *Canada Business Corporations Act* pursuant to a court-approved plan of arrangement. The Alberta Court of Queen's Bench granted the final order in respect of the arrangement on 22 June 2005.

At the time, Rodenburg saw continued growth in the future. Since the reorganization, however, times have been difficult for Lilydale because of competition from new processors in some traditional base markets, extra costs associated with the Avian flu outbreak in British Columbia in 2005, and a product recall in March 2007 due to potential salmonella. The company has also continued to invest in product development, advertising, and new packaging technologies (The News 2008). Concerns about the company's long-term financial picture led to the sale of the Mirabel plant in January 2009. While the major motivation for Lilydale's conversion from cooperative to privately held investor-owned firm was the potential for access to new capital, mostly from members, the firm continues to have relatively high levels of debt-to-equity.

Demutualization and Capital Constraint Theory

In cooperatives, access to capital can be a severe problem because cooperatives do not have publicly traded ownership rights. By statute, cooperative firms are limited in their capital-raising activities, while corporate firms can attract funds through a variety of stock and debt offerings.

Access to capital market theory states that issuing stock provides a firm with the ability to grow, diversify, and acquire other firms because the additional shares provide capital when needed (e.g., Carson, Forster & McNamara 1998). A cooperative's conversion to a publicly traded or private corporation to gain access to capital needed for growth suggests that its managers believe that the ability to issue stock will provide access to new sources of financing and, in turn, allow positive net present-value projects. Thus, demutualization may provide cooperatives with access to capital markets to sustain the high growth rates they enjoyed before conversion.

This article uses a finance-based sustainable growth model (Higgins 2007) to explain the possible motivation for Lilydale's demutualization by examining the relationship between sustainable growth, changes in operating efficiency, and financing policies. A firm is said to exhibit balanced growth if its sustainable growth rate and actual sales growth rate are equal. The sustainable growth rate provides useful insights into the financial leveraging process by decomposing returns to equity into profit margin, patronage payments, asset turnover, and financial leverage.

The sustainable growth rate can be determined by equating annual capital uses with annual capital sources. To put some structure on the analysis, let π be profit margin ($\pi = NI/S$); NI, net income; S, sales; R, the board determined target earning retention ($(NI-PAT)/NI$); A/E_{BOP}, the target asset to equity ratio; A, the level of assets; E_{BOP}, beginning-of-period equity; PAT, patronage/dividend payout; (S/A), the target asset turnover that measures the operating efficiency; S_0, sales at the beginning of the year; and ΔS, the target increase in sales during the year.

With this background, the total capital generating potential of a firm is given by $\pi(S_0 + \Delta S) \cdot R + \pi(S_0 + \Delta S) \cdot R \cdot (A/E_{BOP})$, where $\pi(S_0 + \Delta S) \cdot R$ is earnings retention and $\pi(S_0 + \Delta S) \cdot R \cdot (A/E_{BOP})$ is debt potential at a target A/E_{BOP} ratio. In contrast, the total capital required to support an increase in sales is given by $\Delta S \cdot (A/S)$, where (A/S) is the inverse of asset turnover. Equating the annual total capital generating potential to the total capital required, and solving for $\Delta S/S_0$, the maximum sustainable annual sales (revenue) growth rate[4] is:

$$g_{max} = \left(\frac{\Delta S}{S_0}\right)_{max} = \frac{\pi R(A/E_{BOP})}{\frac{A}{S} - \pi R(A/E_{BOP})} = \frac{\pi R(1 + D/E_{BOP})}{\frac{A}{S} - \pi R(1 + D/E_{BOP})} \quad (8.1)$$

The actual sales growth rate is defined as $g^a = \Delta S/S_0$.

The sustainable sales growth rate increases with an increase in debt level (relative to equity), an increase in profitability, and an increase operating efficiency. The profit margin can be linked to market competition, technological changes, and scale of operations through sales revenue and processing and marketing costs.

Note that sales revenue depends on firm size, productivity, and output price. With high commodity prices, an increase in revenue may translate into an increase in sales growth if there are sufficient economies of scale to ensure that profit margins increase (Escalante & Turvey 2005). In the presence of economies of scale, there will be gains from efficiency in asset management, leading to higher asset turnover. However, during low commodity prices, the reverse effect happens, where lower profit margins reduce the sustainable growth target. An increase in market competition because of an introduction of new processing firms, for example, will necessarily involve some poultry producers shifting their deliveries from an existing plant to the new plant. As a result of competitive rivalry, processors may

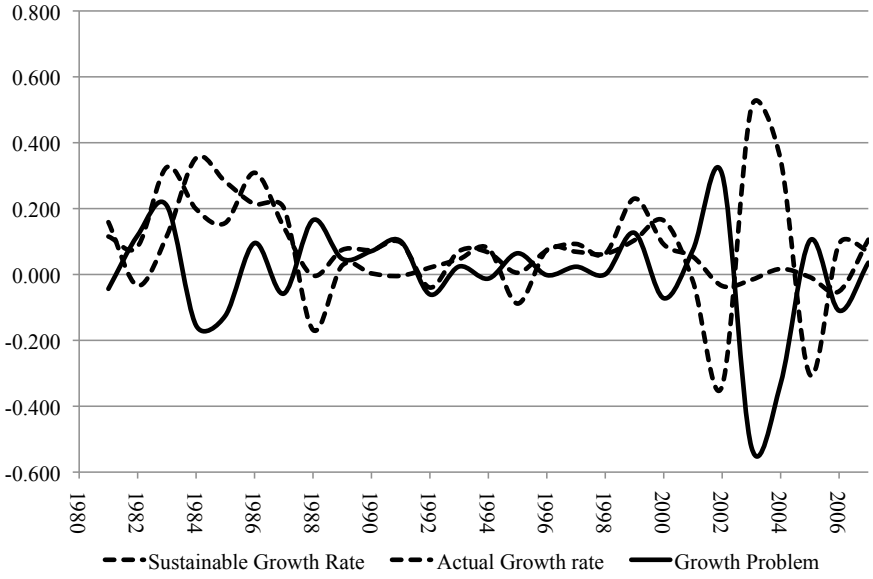
face a reduced supply of raw materials and lower prices for their outputs, resulting in lower profit margins and lower sustainable growth rates.

From equation 8.1 it is clear that sustainable growth depends on the operating performance of a business (i.e., profit margin and asset turnover) and its financial policies (i.e., dividend/patronage payouts and financial leverage). The difference $g_a - g_{s,max}$ between the actual growth in sales and the sustainable growth rate is referred to as the sustainable growth problem (Higgins 1977; 2007). The sustainable growth problem emerges when actual and sustainable growth rates diverge. If the actual growth rate in sales, g_a, deviates from $g_{s,max}$, one or some combination of R, A/E_{BOP}, π, and S/A must change or the firm must seek new shares (Higgins 1977; 2007). An actual growth rate, g_a, below $g_{s,max}$ suggests that the firm has more than enough capital to meet its investment needs, which therefore calls for increases in liquid assets, a reduction in leverage, or an increase in dividends. Because the financial problems posed by lower actual growth are less common in cooperatives than those in the reverse situation, the following discussion will concentrate on the principal means by which a cooperative's management or board can cope with an actual growth in excess of $g_{s,max}$. When a co-op's actual growth rate is in excess of $g_{s,max}$ (i.e., too much growth), the firm may need to improve operating efficiency (i.e., an improvement in production and cost efficiencies), alter its financial policies through a decrease in patronage payout ratio or an increase in financial leverage, or establish publicly/privately owned subsidiaries.

Given the technology, operating efficiency, financial policies, and market conditions, the question is what should a firm do when actual growth is in excess of its sustainable growth rate? In general, when a firm is faced with long-term excessive growth problems ($g_a > g_{s,max}$), Higgins (2007) suggests some combination of the following strategies: 1) sell new equity; 2) increase financial leverage; 3) reduce dividends (patronage payout); 4) prune away marginal activities; 5) outsource some or all production; 6) increase prices; 7) merge with a cash cow; or 8) revise market growth targets.

Selling new equity is not an option that a traditional cooperative organization may consider without first changing/modifying its organizational structure. In the case of cooperatives, members may decide to stop patronizing and redeem their equity capital, and instead patronize other cooperatives or investor-owned firms. Members of a cooperative organization can surrender their claims by ceasing to patronize the organization (Vitaliano 1983). The decision by a member to withdraw his/her claim from a cooperative is a form of partial takeover or liquidation that deprives management of control over assets (Fama & Jansen 1983). This follows from the fact that cooperative residual claims are partially redeemable on demand based on a predetermined policy (Fama & Jensen 1983). Further equity withdrawals by retiring members depress the equity base and result in a lower sustainable growth rate. Thus, to maintain balanced growth, a cooperative's management/board must look for other financing options. Some of the widely used options by agricultural coop-

Figure 8.1. Sustainable growth rate, actual sales growth rate, and sustainable growth problem for Lilydale (1980–2007)



eratives are an increase in leverage (strategy 2), a decrease in patronage payouts (strategy 3), and/or a merger with other businesses (strategy 7).

Analysis of the Conversion

This section discusses results from applying the sustainable growth model to actual historical accounting data of Lilydale's activities for the years 1980–2005 (i.e., balance sheet and income statement information). Recall that the sustainable growth problem is defined as the difference between growth in actual sales and the sustainable growth rate (Higgins 1977; 2007). Note that if the value of growth problem is negative (positive), it suggests that actual sales growth is lower (higher) than the sustainable growth rate. To get back to balanced growth, cash surpluses must increase (decrease) plus either sales must decrease (increase), owner withdrawals must increase (decrease), asset turnover must decrease (increases), or financial leverage must be reduced (increased).

Figure 8.1 depicts Lilydale's sustainable growth rate, actual growth rate, and sustainable growth problem over the period 1980–2007. The results show that during the study period, Lilydale showed a tendency towards a positive mean growth problem (0.3 percent) with a standard deviation of approximately 16 percent. This

result suggests that, on average, actual sales growth rates tended to be greater than sustainable growth rates. This result is a direct indicator of a shortage of equity/cash capital for financing growth experienced by most cooperatives.

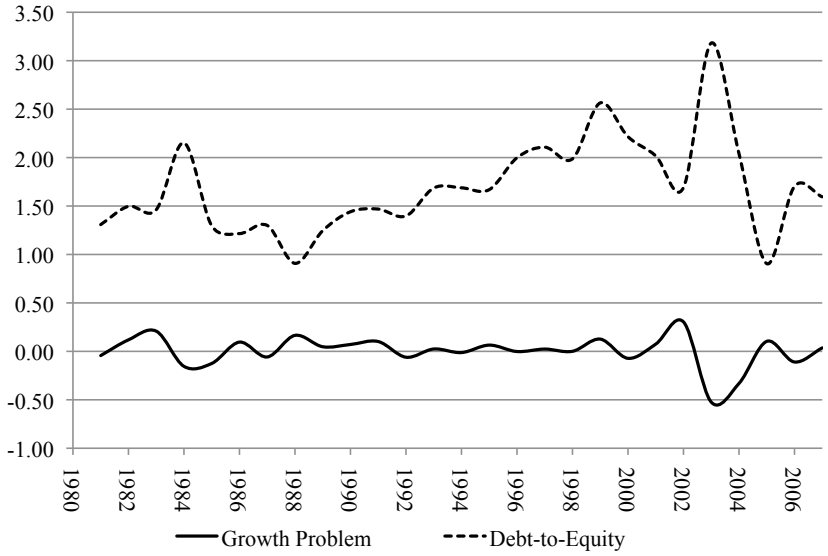
Specifically, Lilydale faced a significant fluctuation in its growth problem. For example, in 2000 its sustainable growth rate was higher than its actual growth rate by about 7.2 percent. That was the year that Lilydale made equity redemptions of C$1.6 million, paid down its long-term debt by C$7.0 million, and made capital expenditures of C$6.9 million. By definition, an increase in equity redemption, a decrease in financial leverage, and an increase in the asset base results in a decrease in the sustainable growth rate.

At the same time, the actual growth rate was down to 9 percent from the previous year's rate of 23 percent. Furthermore, in 2003 and 2004 the growth problem was negative, suggesting lower realized growth rates as compared to a sustainable growth rate. In 2003, the cooperative sold its farm production operation and egg division, and closed a hatchery plant to pay down debt, all of which might have resulted in the sales decline. In the same year, the cooperative raised C$1.5 million in equity through its check-off program, which might have resulted in a rise in its sustainable growth rate relative to its actual growth rate. In 2004, the cooperative raised about C$5.4 million in equity through the check-off program, which ultimately increased its sustainable growth rate relative to its actual growth rate, and resulted in a negative growth problem.

Borrowing has been one the major strategies adopted by Lilydale to finance its target growth rate. Figure 8.2 shows the debt-to-equity ratio and the growth problem. The growth problem and the debt-to-equity ratio are negatively correlated (correlation coefficient of -0.47). As leverage increases the sustainable growth rate also increases, resulting in a negative growth problem.

When faced with an excess growth problem, the board/management may decide to cut the patronage payout ratio and/or increase the financial leverage until $g_a = g_{s,max}$. Figure 8.3 shows the values of the patronage payout ratio and debt-to-equity ratio that are consistent with sustainable growth rates of 5 percent and 10 percent. For exposition purposes, suppose the company's sustainable growth rate in a particular year is 5 percent, but that based on an expansion plan following the market potential in the rest of Canada, the company wishes to expand sales by 10 percent per year. Based on Figure 8.3, the board may decide on a new combination of debt-to-equity ratio and patronage payout ratio on the 10 percent sustainable growth rate curve. One feasible combination would be to cut the patronage payout ratio from 70 percent to 45 percent and increase the debt-to-equity ratio from 1.8 to 2.0. Note that the obvious problem with relaxing financial constraints through an increase in debt and a decrease in payout is that it either increases the risk borne by the cooperative or reduces cash flow to members. Thus, relaxing financial constraints through an increase in debt or a reduction in payout alone may not solve the growth problem. Much of Lilydale's growth was financed with debt. The lack of

Figure 8.2. Trends in sustainable growth problems and debt-to-equity ratios for Lilydale Foods (1980–2007)

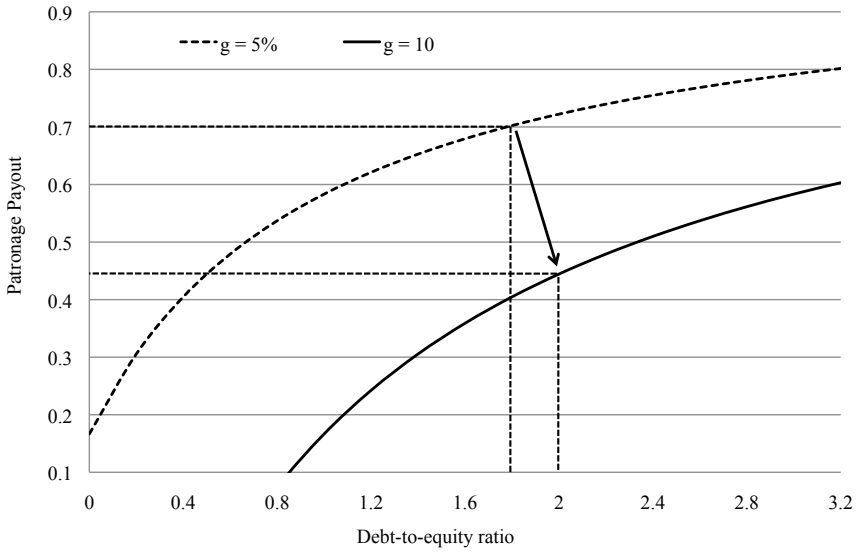


redemption of members' equity generated some dissatisfaction in certain periods, and further periods of no redemptions were not likely to be a successful long-term strategy (Lilydale Co-operative Ltd. 1992–1995).

Another way to achieve the desired sustainable growth is to improve the operating efficiency of a firm's resources, S/A, and/or increase profitability. Figure 8.4 provides the trends in asset turnover (efficiency of resource use) and the growth problem. Asset turnover and the growth problem tend to be correlated negatively (correlation coefficient of -0.4), suggesting that an increase in the efficiency of resource use would result in an improvement in the sustainable growth rate and a decline in the growth problem. An improvement in operating efficiency can be achieved through an increase in price or a reduction in accounts receivable and inventory, among other possibilities. However, an increase in price and a reduction in customer services through a reduction in trade credit may cost a company both market share and competitive edge against competitors. There is some evidence that this has occurred, since in the past, Lilydale's local and national market shares have been in flux (*Edmonton Journal* 2005).

Furthermore, the supply management structure imposes limits on growth within a particular market for a particular poultry-processing firm. Growth in production in each province is directly related to growth in national consumption for each product

Figure 8.3. Patronage payout ratio and debt-to-equity ratio consistent with sustainable growth rate of 5 percent and 10 percent

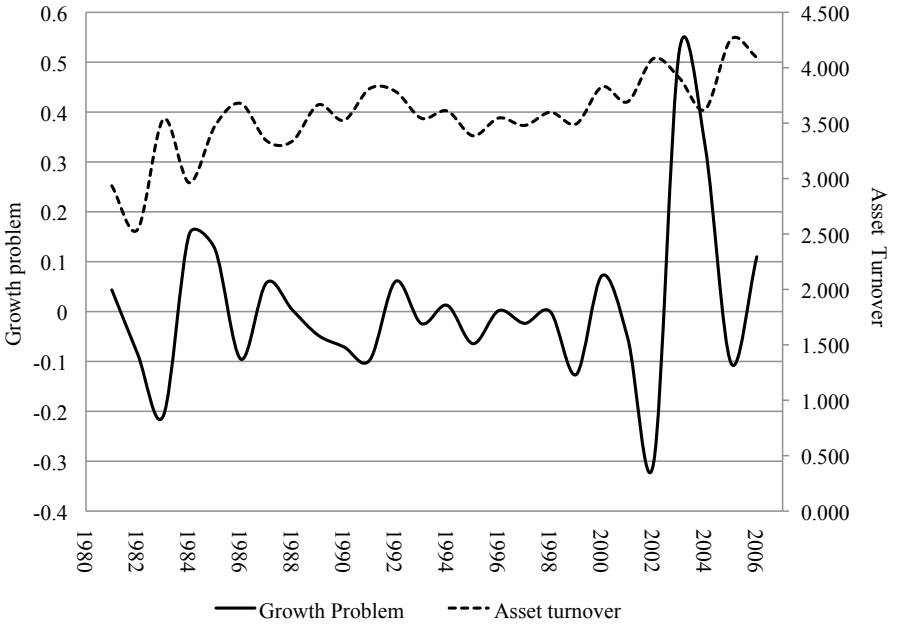


category, and normally does not vary much from one province to another. Increased competitive rivalry within a province due to the introduction of a new processing facility/firm, for example, will necessarily involve some producers shifting their deliveries to the new plant. Since early 2005, Lilydale has faced such competition in Alberta, due to the establishment of a new Sunrise Poultry processing plant near Lethbridge (*Calgary Herald* 2005), and in Saskatchewan from Prairie Pride Natural Foods Ltd. in Saskatoon (*Saskatoon Star-Phoenix* 2005). In fact, notification by chicken producers of their decision to ship birds to the new plant in Saskatchewan caused Lilydale to layoff 100 employees in anticipation of reduced processing requirements.

Summary

The sales growth or market share growth target to be achieved by a firm is a key aspect of its corporate strategy. However, it is important that the growth strategy adopted by many cooperative firms to build or maintain market share needs to pay considerable attention to the cash flow implications and sustainability and consistency of the targeted sales growth of a firm's established financial policies and operating efficiency.

Figure 8.4. Trends in sustainable growth problems and asset turnover for Lilydale (1980–2007)



The sustainable growth model provides insights into the interdependencies between Lilydale's market share growth strategy and its financial policies and operating efficiency. The sustainable growth model requires a balance between increased actual sales and changes in financial management measures such as profit margin, patronage payments, asset turnover, and financial leverage. For much of its history, Lilydale's actual sales growth rate exceeded its sustainable growth rate. Decisions could have been made in the absence of serious considerations of all financing issues, including requirements to distribute equity to retiring members. Long-term debt was very high during the ten years prior to the decision to restructure the co-operative (long-term debt-to-equity ratios over 1.5). Although the time period has admittedly been short, since conversion Lilydale has had more reasonable growth rates.

In addition to financial constraints, other factors that may influence sustainable growth are market size and competitors' reactions. A closer examination of the sustainable growth model indicates that a firm's expected growth is dependent upon market or industry conditions, in addition to operating efficiency, financial

leverage, and patronage policy. Historically, Lilydale has operated in a highly regulated environment (i.e., supply management) that has affected the size and number of firms in the industry. One important question to ask is: For a given industry sales growth rate or market size, what is the rate at which Lilydale's sale would sustainably grow? The actual growth that Lilydale could attain is dependent upon the growth of the markets in which it operates and the actions and reactions of its competitors.

Given constraints to the growth of its markets and competitive rivalry, harvesting shares from competitors or acquisition of competitors may represent the only way for Lilydale to maintain its sustainable growth rate. The recent expansion of Lilydale into eastern Canada, for example, may be a means to realize its sustainable growth. If, however, the acquisition of the Mirabel facility in 2005 only increases Lilydale's size without a corresponding increase in sustainable growth, the acquisition should lead to a decrease in returns to members or shareholders, and an ultimate divesture of the acquired firm (which is what happened when the Mirabel plant was sold in January 2009).

In conclusion, cooperatives that wish to remain so must operate in a manner that generates enough capital to meet their equity redemption needs and debt associated with asset acquisition. This study's findings provide evidence that financial leverage is one of the crucial factors in the growth of cooperatives. Over-reliance on debt necessitated a change in business structure for Lilydale. Over much of the period under analysis, Lilydale was not operating at a sustainable growth level. Additionally, cooperatives need to consider whether external market forces such as a trend towards industry consolidation allow managers to maintain or increase a firm's sustainable growth.

Notes

1. Debt-to-equity ratio is a company's total liability expressed as a percentage of members' equity. The debt/equity ratio (D/E) measures the proportion of risk supported by creditors compared to investors (members). Larger ratios indicate higher risks as the majority of the assets are financed with debt, while smaller ratios indicate that equity finances the majority of assets. Theoretically, there is no upper limit, but any business with too much leveraged capital certainly runs the risk of "loss." The desired value of the ratio depends on business type, the resulting income variability of the business, as well as other factors, such as the risk associated with production and prices. Businesses with high-income variability may seek a lower ratio.

2. Rodenburg joined Lilydale on 24 June 2004. He has over 25 years of successful leadership experience, most recently having served as CEO of GROWMARK FS Inc. and Seedway Inc., both subsidiaries of GROWMARK Inc. in the United States. Prior to that, he held senior management roles as general manager of the grain division and general manager of agribusiness with Agricore and the Alberta Wheat Pool in Calgary.

3. When it was a cooperative, Lilydale delegates were elected by a majority vote of active members on a regional basis. In 2005, there were 49 delegates.

4. Higgins (2007) provides an alternative form of a sustainable sales growth rate, g, model as:

$$g_{s,max} = R\frac{NI}{E_{BOP}} = \left(1 - \frac{PAT}{NI}\right)\left(1 + \frac{D}{E_{BOP}}\right)\left(\frac{NI}{S}\right)\left(\frac{S}{A}\right)$$

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Chapter 9

United Producers Inc. Chapter 11 Restructuring

Frayne Olson

Introduction

United Producers Inc. (UPI) is a livestock marketing cooperative headquartered in Columbus, Ohio and has approximately 45,000 members. The cooperative owns and operates 42 facilities in Ohio, Illinois, Indiana, Missouri, Kentucky, and Michigan that serve as sites for weekly livestock auctions, collection points, and direct movement of livestock. It provides local market outlets for approximately 3 million head of beef cattle, dairy cattle, replacement heifers, hogs, sheep, and goats. The cooperative also provides farmers access to price risk management and production consulting services, and maintains a direct producer loan portfolio of over US$50 million through Producers Credit Corporation, a wholly owned subsidiary.

UPI was created in September 1999 through a merger of Producers Livestock Association (PLA) and Missouri Farmers Association (MFA) Livestock Association. The original parent cooperative, Producers Livestock Credit Association, was formed in 1932 to provide financing to farmers and ranchers for operating expenses and the purchase of breeding and feeder livestock. PLA was formed in 1934 as a marketing cooperative, and Producers Livestock Credit Corporation became its subsidiary.

Dennis Bolling became PLA's president and chief executive officer in 1989, and quickly realized that the cooperative needed to grow geographically and increase its market presence to remain a viable organization. PLA was involved in a high volume, low margin segment of the livestock industry. The livestock industry, as well as the structure of the marketing system, was changing rapidly. The meat packing sector of the industry was consolidating and seeking reliable access to

larger lots of livestock with consistent quality attributes. This initiated a transition towards an increased use of marketing and production contracts, as well as put pressure on the traditional marketing channels to streamline operations.

The merger of PLA and MFA Livestock Association allowed the newly created UPI to expand and diversify geographically, increase its membership base, and expand the services offered to members. One important position taken within the merger process was that UPI would not own livestock directly, but rather would serve as a marketing outlet, provide risk management and consulting services, and supply needed financing for livestock producers.

In early 2000, Interstate Producers Livestock Association (IPLA), based in Peoria, Illinois, approached UPI to explore the potential of a second merger. UPI began relations with IPLA through a management agreement concerning IPLA facilities. The resulting operations suggested that a merger of the two organizations would not create the efficiencies desired by UPI. Instead, UPI chose to purchase selected assets from IPLA rather than pursue a full merger. This allowed UPI to once again expand its membership base and geographic reach without taking on under-utilized assets. It also allowed UPI to expand its hog contracting division.

In June 2000, UPI began discussions with Southern States Cooperative (SSC) to operate the latter's livestock marketing division. In 1998, SSC merged with UPI-competitor Michigan Livestock Exchange, which had facilities in Michigan, Indiana, Ohio, and Kentucky. UPI leased selected assets from SSC in December 2000 before purchasing them in early 2001.

In approximately 18 months, UPI had doubled its size, significantly increased its geographic coverage, and expanded its membership base. The core business strategy was working, but the expansion pace was greater than expected.

The George Young and Kathleen McConnell Fraud Problems

Before the merger of PLA and MFA Livestock Association, the latter passively owned 75 percent of MFA Livestock Services, LLC (limited liability company). Professional Business Services, Inc. (PBS), jointly owned by George Young and Kathleen McConnell, owned the remaining 25 percent and was the managing entity of the LLC. After the merger that created UPI, the name of the LLC was changed to United Livestock Services, LLC. UPI remained a passive investor and was not involved in United Livestock Services' regular business operations. In August 2001, PBS closed abruptly and subsequently filed for Chapter 7 bankruptcy protection.

Young and McConnell had been involved in fictitious transactions and had certified to their clients and lenders that their business owned 343,000 head of cattle, when in reality the business owned only 17,000 head. The scheme collapsed in 2001 when cattle prices declined and loan payments came due. Young and McConnell were indicted on several changes of fraud. They later pleaded guilty to these charges and cooperated with government agencies that were investigating the activities. The scheme cost individual investors approximately US$147 million

and lenders approximately US$36 million. Approximately US$16 million was recovered through the sale of PBS assets and distributed to the fraud victims (*United States of America v. Young* 2005).

As a result of their passive ownership interests, UPI sustained losses from unpaid cattle sales to the LLC, as well as the basic investment losses. Furthermore, UPI was named in several subsequent lawsuits that claimed it should be held accountable for Young and McConnell's actions, even though UPI was but a passive partner and sustained its own losses due to the fraudulent activities. Attempts were made to settle the lawsuits out of court to save litigation costs, even though there was little legal grounding for the claims. However, these attempts failed. The legal expenses for fighting current and pending lawsuits were growing rapidly and placing a financial strain on UPI. In April 2005, the decision was made to file for Chapter 11 bankruptcy to protect the cooperative's remaining assets and allow time to reorganize.

The Reorganization Plan

After the decision was made to file for bankruptcy, the board of directors and senior management were confronted with the challenge of simultaneously maintaining business operations and developing a reorganization plan. A major effort was also made to keep employees informed about the source of the problems and the steps being taken to address the issues. UPI members were updated on a regular basis through newsletters and direct mailings, with extra attention paid to former MFA Livestock Association members who may have been directly or indirectly affected by the fraud activities.

UPI had been working closely with CoBank, its primary lender, and the bankruptcy court to ensure that regular business dealings with farmers would proceed smoothly immediately after the initial bankruptcy filing. However, how would the membership respond to the news of the Chapter 11 filing? Would members continue to patronize the cooperative, especially given that a large percentage of the current patrons had become members of UPI as a result of the preceding mergers and acquisitions? The first critical week of operations after the bankruptcy filing went better than expected and there was little change in gross business volume.

The next major step was to develop a restructuring plan. There were three central questions that the board of directors and senior management had to address: 1) is UPI a viable business entity if the legal issues can be resolved successfully; 2) what should UPI look like after the reorganization; and 3) how can the company rebuild its equity base?

Both an internal review and an external evaluation by a business-consulting firm indicated that UPI's core business would still be viable if the legal issues were successfully resolved. The next question concerned the structure of the business. A wide range of ideas were considered and a variety of business models were evaluated. This included converting to a corporation, a limited liability company,

an employee-owned firm, a new generation cooperative, or maintaining the existing Section 521 cooperative status.

There was little doubt in the minds of the board of directors and senior management that the current membership base placed "value on the cooperative's presence in the marketplace," and that members were asking themselves what would happen if UPI were not there.[1] Feedback indicated that members recognized the value that UPI created through its ability to serve local needs and provide a competitive outlet for their livestock. Therefore, a decision was made to retain the existing cooperative structure, but reevaluate the cooperative's bylaws and membership policies. What changes could be made to members' rights and responsibilities to rebuild the cooperative's equity base?

Conceptual Framework: Cooperatives as a Form of Collective Action

Agricultural cooperatives have often been cited as examples of successful collective action efforts (Olson 1965; Staatz 1987; Hansmann 1996; Holmstrom 1999). Farmers and ranchers have utilized a wide variety of bargaining associations and alternative cooperative business structures in an attempt to create mutual and/or shared benefits. Although cooperative business objectives can and do vary, one frequently cited objective is to function as a competitive yardstick (Nourse 1922; LeVay 1983; Sexton 1986; Staatz 1987).

Producers Livestock Association, the parent cooperative of UPI, was originally formed to "provide livestock producers access to competitive markets" (*In re United Producers, Inc.* 2005). This objective continues today and is consistent with the competitive yardstick motivation for organizing cooperatives, as introduced by Nourse (1922). Nourse argued that a cooperative's primary function is to act as a competitive yardstick and ensure that local markets for agricultural inputs and production remain as close to a perfectly competitive market as possible. Under this rationale, the competitive pressure from the cooperative eliminates any potential economic rents from the local market. More competitive local markets are one example of the benefits from collective action with public goods attributes. They are non-rivalrous in consumption, difficult to exclude, and the benefits accrue directly to the individual rather than accumulate at the organizational level and re-distribute to members.

However, the public goods nature of more competitive local markets combined with the voluntary open membership policies of most cooperative business structures makes the free rider problem a significant issue for many cooperatives (Staatz 1987; Cook 1995). As local markets become more competitive, there is less incentive for individuals to patronize and/or invest in the cooperative. If a significant number of the cooperative's patrons switch their dealings to competing firms, the viability of the cooperative may be jeopardized.

Confronting the Free Rider Problem

Olson (1965) is credited with initiating a paradigm shift in the study of the challenges facing collective action organizations. Olson argued that group benefits that are difficult or impossible to exclude allow individuals to access these benefits, even though they have not contributed their proportional or appropriate share of the resources needed to supply the benefits. And, if an individual decides to contribute resources, everyone within the group would share any additional benefits resulting from these contributions. These combined conditions create weak direct incentives for individuals to contribute required resources towards group action, or provide individuals an incentive to free ride on the contributions of others.

Olson (1965) went on to argue that the dynamics within large groups were different from those of small groups. In small groups, a greater portion of the total group benefits is available to each individual, it is easier for group members to observe and/or detect changes in resource contributions relative to a large group, and it is less expensive to organize and coordinate the activities of a small group.

However, large collective action groups face a different set of conditions. In large groups, a very small portion of the total group benefits go to each member, and it is difficult, if not impossible, to detect when a group member alters their resource contributions or stops contributing. The costs of creating a large group are also greater than those for a small group. As a result, it is either very difficult or, at times, impossible for large collective action groups to organize and/or sustain the provision of difficult to exclude collective benefits.

Olson (1965) proposed three general strategies for mobilizing large collective action groups: 1) coercion; 2) a federated organizational structure; and 3) selective incentives. Coercion refers to a required or mandated contribution that could be administered by an external force, like the state, or internally by the organization. A common example of coercion within agriculture is the mandatory check-off process used by many commodity organizations for general market promotion and research activities.

A federated organizational structure divides a large group into smaller subgroups, which increases the visibility of individual actions and enables the subgroups to use social inducements to enhance participation. Many agricultural cooperatives, commodity groups, general farm organizations, and civic groups utilize a federated structure to keep local chapters or sub-groups small while still capturing potential economies of scale at the larger state, regional, or national levels.

Selective incentives include additional or supplemental incentives used to reward collaboration or punish non-collaboration, and target individuals who do not work towards the common interests of the group.[2] Olson (1965) provided two examples for the general concept of selective incentives. The first are social incentives available to small groups, such as prestige, respect, and friendship. These incentives are especially viable for small groups because of the close interaction of the partici-

pants. Social incentives are less effective for large groups because it is difficult for each member to know all other members.

The second example is "by-product" benefits used by large lobbying organizations or professional associations. The by-product theory points to a "joint offering or 'tied sale' of a collective and noncollective good that could stimulate a rational individual in a large group to bear part of the cost of obtaining a collective good." (Olson 1965, pg. 134). In this instance, a separate excludable private good is offered as a reward for contributing resources towards the supply of the non-excludable collective good. One specific example is access to a trade magazine or professional journal as a reward for paying membership dues to an association that emphasizes lobbying activities.

The Joint Products Model

Cornes and Sandler (1984; 1994) provided a model of consumer behavior that captures the concepts contained in the by-product theory. Within this model, an individual has a choice between purchasing either a pure private good or a commodity that generates a dual output (i.e., a public good output and a private good output). The purchase of this second commodity results in a joint product. This model is a generalization of the basic public goods model that contains a single pure public good and a single private good.

The joint products model integrates two attributes important for private collective action organizations like cooperatives. First, an individual's contribution towards the provision of a collective good can provide joint products in the form of a private good output and a pure public good output. Second, the individual's utility maximizing decision is still dependent upon the actions of others because the total provision of the public good results from the combined contributions of many individuals. The interdependence in the supply of the public good, then, is maintained. The free rider problem continues to be a concern because an individual can still access the public good output without contributing appropriate resources. However, given the assumptions of the model, the presence of joint products does enhance the provision of resources and mitigates the influence of free riding.

The joint products model has similar characteristics to Olson's (1965) by-product theory. The broader by-product theory proposes tying access to a private good with resource contributions needed to supply non-excludable collective goods. The more specific joint products model suggests that an individual's purchases or resource contributions will simultaneously generate a public good and private good output. The key difference seems to be the underlying assumptions regarding the production relationship between the collective good and the private good.

Multiple Benefits Available to UPI Members

Attributes from both the joint products model and Olson's (1965) propositions for large groups can be found in adjustments made to UPI's bylaws and membership

policies. First, there are multiple member benefits realized from UPI's business activities. Some of these are analogous to pure public goods, such as more competitive local markets for livestock, while others are private goods. Even these private goods can be separated into those that accrue directly to a specific individual member, such as reduced transportation costs through delivery to local receiving stations rather than delivery to competing facilities farther away, and those that accrue at the cooperative level, such as the margins gained by pooling deliveries from several producers to create larger lots that can be supplied to a processor at a premium. The cooperative level benefits are retained by the cooperative for a time and then returned to members based upon a measure of patronage.

Access to private benefits that are either joint and/or tied to a benefit with public goods attributes can provide an incentive great enough to encourage member patronage and resource contributions. Peterson (1992) demonstrated this by presenting a net cash flow investment analysis framework and decision making rules for member investment in cooperatives. Peterson argued that both the cash flows generated from the cooperative's assets (e.g., patronage allocations) and the cash flows from farm assets as a result of doing business with the cooperative must be included when estimating the total value from cooperative membership. The discounted value of the combined cooperative membership cash flows are compared to the discounted cash flows from an investment in other assets plus the farm level cash flow as a result of patronizing a non-cooperative firm. If the combined cash flows from cooperative patronage and investment are greater than the combined cash flows from non-cooperative patronage and other investment alternatives, an individual will have an economic incentive to become a cooperative member.

However, this framework does not distinguish between member level benefits that are unique to the individual (a private benefit) and those that have public goods attributes and are available to everyone. Individuals may or may not place full value on those benefits that have public goods attributes.

Adjustments to Member Rights and Responsibilities

Two major changes were made to the existing set of UPI member rights and responsibilities. The first was the addition of a per unit capital retain for every head of livestock sold through one of UPI's auction facilities or receiving stations. A per unit capital retain is a fixed fee that is withheld from the sales check as a member's contribution to the cooperative's equity capital. A US$0.75/head capital retain for cattle, US$0.25/head for swine, sheep, and goats, and US$0.50 head for any other species marketed was incorporated. This equity contribution does not bear interest or receive a dividend. After a five-year period, retained equity, both per unit capital retains and allocated retained net income, is returned to the member at book value on a revolving basis.[3] An upper limit of US$2,500 per member (U.S. dollars) was also included on total accumulated retained investment at any time during the five-year period.

The accumulation of per unit capital retains, in addition to the existing policy of allocation and distribution of annual cooperative net income, increased the level of available equity capital and provided the opportunity to rebuild UPI's financial base. This can also be viewed as a form of coercion (enforced by the cooperative), as Olson (1965) proposed. If a farmer or rancher sells livestock through one of UPI's facilities, a portion of the sales price is automatically withheld as a contribution to equity. The member does not have the discretion to determine how much will be withheld or when it will be redeemed.

The second major change introduced a second class of membership called a preferred member (as opposed to a general member). To become a preferred member, a producer must pay an annual US$20 preferred membership fee.[4] Preferred membership allows access to: 1) a discount on tariff schedules at auction facilities; 2) direct, or non-auction, marketing services; and 3) management and consulting services, risk management services, producer training and certification, and financial services. Additional fees are charged to perform the marketing, management, and training services, but they are only available to preferred members. The preferred membership fee is automatically subtracted from the first livestock sales check of the year. If a producer does not want to be a preferred member, they must formally request a refund.

This is an example of linking resource contributions used to create group benefits (e.g., preferred membership fee and minimum sales volume) with access to private benefits (e.g., discounted tariff fees, direct marketing and related services). Initiating the annual US$20 preferred membership fee for each of the approximately 45,000 members generates an additional US$900,000 in gross revenue.

Voting rights within UPI are also limited to preferred members who have marketed a minimum of 20 head per fiscal year through the cooperative. Eligible members can elect and serve as district delegates, who are the legal voting members of the cooperative. The district delegates, who represent defined trade areas, have the authority to elect the cooperative's board of directors and vote on changes to the cooperative's articles of incorporation and bylaws. Both district delegates and the board of directors serve three-year revolving terms and maintain a one vote per member policy.

This district voting structure establishes a federated voting configuration. So, while UPI does not have a formal federated business structure, where individuals are members of independent cooperatives, which are, in turn, members of a larger federated cooperative, there is a federated representation system.

An Emerging Program

In late 2008, UPI introduced a pilot intuitive in Michigan called the Community Markets program. This program allows a member to invest directly through preferred stock in their local auction facility to improve facilities, reduce debt, and provide a working capital buffer for the local facility. In return, the member gains

the opportunity to receive dividends on the preferred stock that accrue from the facility's profits and benefit from the enhanced efficiency of their local auction. This program initiates an alternative form of federated structure. The member can directly invest in the specific local auction facility that will generate the greatest individual member benefits rather than invest in the parent cooperative as an integrated entity.

The Community Markets program is still under development and has not yet been fully implemented. However, the concept is an important component of UPI's long-term strategy, and will be expanded to other states if successful in Michigan.

Conclusions

Although there were initial concerns about member response to instituting per unit capital retains and a preferred membership structure, the changes did not generate a significant amount of negative feedback. UPI has been able to rebuild the member equity base and enhance member commitment to the cooperative. The Chapter 11 reorganization progressed rapidly and was approved by the bankruptcy court, without the assignment of a creditors committee, approximately six months after the initial filing. The outstanding legal proceedings were eventually dropped and UPI was neither connected to nor held accountable for the actions of Young and McConnell.

The two major changes to membership rights and responsibilities are consistent with the conceptual framework discussed above. First, combining per unit capital retains and patronage allocations diversifies the equity sources for the cooperative and ensures that each patron contributes some equity capital towards the provision of group benefits. Second, preferred membership links access to private benefits with essential resources needed by the cooperative, and these resource contributions simultaneously produce both public and private benefits to members. While the linkage of resource contributions with access to private benefits does not completely eliminate the incentive to free ride in the provision of collective benefits, it does significantly reduce free riding activities.

In addition, the district delegate voting system and the pilot Community Markets program introduce elements of a federated structure. These are intended to strengthen the tie to the local facility while offering an ability to capture economies of scale from a larger cooperative organization.

The challenge facing UPI's board of directors and senior management was to continue to provide their members access to competitive local markets and desired services while creating appropriate incentives for members to provide essential resources needed by the cooperative. This challenge is shared by many cooperatives around the world. The recognition that cooperatives can be a successful form of collective action with multiple member benefits created, with both public and private goods attributes, may provide insights into the design and implementation of

member rights and responsibilities that provide stronger incentives for participation and contribution.

Notes

1. Personal correspondence with Dennis Bolling, president and CEO of United Producers, Inc.

2. Selective incentives were defined as "an incentive that operates, not indiscriminately, like the collective good, upon the group as a whole, but rather selectively toward the individuals in the group. The incentive must be 'selective' so that those who do not join the organization working for the group's interest, or in other ways contribute to the attainment of the group's interest, can be treated differently from those who do." (Olson 1965, pg. 51, emphasis in original).

3. According to UPI's bylaws, the only time that per unit capital retains and retained allocated patronage are not returned at book value is when net business losses are in excess of the unallocated reserves and member equity is required to offset the loss.

4. The preferred membership fee was recently increased to US$35 per year.

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Chapter 10

The Restructuring of Dakota Growers Pasta Company

Michael Boland and Gregory J. McKee

Introduction

Durum wheat is produced by growers in North Dakota, eastern Montana, and the Prairie provinces. Producers are price takers in this industry and the wheat is shipped to demand points (including exports) where pasta production occurs. Prior to the late 1980s, there was no vertical integration for grinding durum wheat into semolina flour, which is used to manufacture pasta. The pasta manufacturers were primarily regional competitors who purchased semolina flour. Since the 1990s, however, vertical integration has occurred in this industry on a broad scale.

Dakota Growers Pasta Company (DGPC) organized as a cooperative in 1991 and is generally recognized as one of the first to use the new generation cooperative structure (Cook & Iliopoulos 1998). This new structure clarified the property rights issues identified by Cook and Iliopoulos (2000) and helped account for members' willingness to make original and resulting investments in DGPC. The users were the voting members who control the co-op, the owners who provided the equity capital, and the patrons who received the benefits of use, including: (1) a market or buyer for their durum wheat; and (2) a share of the profits based on use or patronage. Profits or net income were usually distributed as patronage refunds per bushel. In DGPC's case, durum wheat producers were the users.

In 1991, producers paid US$125 to join the cooperative as a member and US$3.85 (par value) per share, which represented an obligation to deliver one bushel of durum wheat. The US$3.85 price was based on the historical per bushel average for North Dakota durum wheat. Producer-users or members were required to purchase one share of stock for each bushel of durum wheat that they want to sell annually

to DGPC (Cook & Iliopoulos 1998). Each share conveyed a right and an obligation to deliver durum wheat as specified in the Growers Agreement. The total number of shares sold matched the capacity of the semolina mill owned by DGPC.

If members could not supply the wheat with the desired quality from their own production, DGPC purchased the wheat on behalf of that member and charged them the current market price. Quality is a significant concern with durum wheat, as noted by Troccoli et al. (2000), because pasta manufacturing requires semolina flour made from disease-free durum. Members were exposed to price risk because they had to purchase durum wheat to be delivered to the company on their behalf. Growers agreements gave DGPC a competitive advantage because it allowed them to source high quality durum wheat.

Holding stock was important to the members not only because of the delivery right, but also because it was an asset. The stock could be traded or exchanged between members at a privately negotiated price. This meant that the stock price could appreciate or depreciate in value from the initial issue price or subsequent exchange price. However, DGPC always carried the stock on its books at its nominal issue or book price.

Dakota Growers Pasta Company became successful in a very short time as seen in tables 10.1 and 10.2 (U.S. Securities and Exchange Commission, n.d.). Members received patronage refunds (sometimes called patronage dividends) from 1996 to 2000. In addition, a three-for-two equity stock split was declared in July 1997. The company had been relatively profitable over time by increasing the value that members received for their durum wheat relative to non-members in North Dakota who did not invest in DGPC.

This rapid change resulted in the grower's original investment significantly appreciating in value. However, under the DGPC's cooperative structure, it was not possible to realize this value. Some members who were also leaders of DGPC recognized this issue and ultimately voted to convert the cooperative into a limited-liability company. The objective of this case, then, is to apply Cook's (1995) taxonomy of a cooperative life cycle to DGPC.

Table 10.1. Selected income statement data for Dakota Growers Pasta Company for year ending 31 July, in thousand dollars.

	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Net revenues	280,199	191,062	171,509	155,619	144,679	136,806	152,465	135,921	136,862	124,869	119,621
Cost of Goods Sold	246,709	165,575	148,904	136,179	132,245	125,160	130,502	124,811	116,890	106,062	100,229
Gross profit	33,490	25,487	22,605	19,440	12,434	11,646	21,963	11,110	19,972	18,807	19,392
Marketing, general and administrative expenses	17,450	12,973	14,190	16,507	8,345	9,816	9,382	9,631	9,713	7,866	6,754
Loss on asset impairment					704					0	0
Operating income	16,040	12,514	8,415	2,933	3,385	1,830	12,581	1,479	10,259	10,921	12,638
Other expense-net		(2,199)	(2,143)	(1,817)	(2,835)	(2,364)	(3,365)	(3,574)	(3,929)	(2,434)	(3,264)
Non-controlling interests	202	52	894	3,003							
Income(loss) before income taxes	14,671	10,367	7,166	4,119	550	(534)	9,216	(2,095)	6,330	8,487	9,374
Deferred taxes charge							6,105				
Net income (loss)	9,291	6,608	4,373	2,513	336	(429)	1,834	(1,784)	7,628	7,988	9,374

Continued on next page.

Table 10.1. Selected income statement data for Dakota Growers Pasta Company for year ending 31 July, in thousand dollars. (Continued from previous page.)

	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Inventory valuation adjustment†										(3,429)	
Dividends on preferred stock	283	113	451			3	10	15	4	143	15
Net earnings(loss) on common/equity stock	9,008	6,495	3,922	2,513	336	(432)	1,824	(1,799)	7,624	4,559	9,374
Weighted average common/equity shares outstanding	10,192	12,501	13,169	13,169	12,265	12,355	11,382	11,253	11,166	8,603	7,356
Net earnings(loss) per common equity share outstanding	0.88	0.52	0.30	0.19	0.03	(0.03)	0.16	(0.16)	0.68	0.53	1.27
Cash dividends declared		0.14	0.04								

*Charge to record deferred taxes upon conversion from a cooperative to a corporation.

†Cumulative effect on prior years of changing to a different inventory valuation method. Source: U.S. Securities and Exchange Commission

Conceptual Framework

Ownership structure determines whether businesses can be identified as cooperatives. In the case of new generation cooperatives such as DGPC, users serve as owners. Owners contribute equity by participating in an initial sale of equity stock and then periodically purchase common stock as it is made available. Cooperative owners, therefore, are primarily responsible for providing equity capital.

DGPC, as originally incorporated, is characterized as a Sapiro II Cooperative. Cook (1995) developed a taxonomy to describe the life cycle of a cooperative. While Cook did not have any data to provide evidence for his life cycle theory, his taxonomy is useful for explaining the behavior of DGPC over the first ten years of its existence.

Cook hypothesizes that a cooperative's life cycle can be explained in six stages. Stage One in Cook's life cycle taxonomy of cooperatives involves durum wheat growers seeking to bypass an investor-owned firm, enhance prices, increase margin, and avoid market power. In Stage Two, the cooperative sustains itself economically as opposed to exiting quickly due to an inadequate business model. In Stage Three, Cook argues that members more closely scrutinize the cooperative's transacting costs. In this stage, the members begin to consider all transactions with the cooperative and analyze the associated benefits and costs.

In table 4 of his article, Cook (1995, p. 1157) shows that the portfolio problem and control problem are the two major transactions costs issues with a Sapiro II cooperative like DGPC. The portfolio problem is that a member's investment decision is tied to their patronage decision. Vitiliano (1983) suggests that this issue results in a further fractioning of commonality of interest and a general tendency to favor decisions that reduce risk. The control problem is that the members have a divergence of interests between members and the board of directors. Vitiliano argues that this control problem results in decisions that seek to reduce the value of residual claimants in the cooperative. These residual claims tend to be exchanged for capital resources whose owners, in turn, bear the financial risk.

During Stage Four, cooperative decision makers become more aware of the unique property rights issues associated with owning the capital resources of the cooperative and conclude that there are three options available for enhancing returns from their investment: exit, continue, or transition. In Stage Five, the cooperative leaders choose between these three options. Cook and Chaddad (2002) provide more information on these options. Hendrikse and Bijman (2002) show that, in certain cases, the more important the investment for the processor relative to the farmer's investment, the greater the likelihood that the cooperative may not be an efficient ownership structure.

Table 10.2. Selected balance sheet data for Dakota Growers Pasta Company for year ending 31 July, in thousand dollars.

	2008	**2007**	**2006**	**2005**	**2004**	**2003**
Cash	125	89	343	229	589	5
Working Capital	21,351	20,800	23,273	20,156	16,586	13,429
Total Assets	162,698	143,166	134,249	135,130	119,415	122,390
Long term debt*	31,174	40,681	28,545	25,385	21,087	28,263
Redeemable preferred stock				7	20	33
Stockholders' equity	56,687	49,150	64,592	61,132	58,619	53,818
	2002	**2001**	**2000**	**1999**	**1998**	**1997**
Cash	2,866	3	1,725	3,425	182	5
Working Capital	23,013	14,420	25,089	31,065	22,813	6,329
Total Assets	125,541	128,658	131,857	135,873	124,537	68,739
Long term debt*	38,274	47,594	51,626	59,116	66,056	27,131
Redeemable preferred stock	54	113	126	53	253	453
Stockholders' equity	56,090	54,267	60,533	58,982	36,875	29,956

*Excluding current maturities.

Source: U.S. Securities and Exchange Commission

Description of the Conversion

The late 1990s saw changes that affected durum wheat production in eastern and central North Dakota. Wet weather enabled scab to spread from eastern North Dakota to central North Dakota. Changes in U.S. agricultural policies also enabled growers to change their portfolio of crop mixes. Some chose to produce less durum wheat and increase their production of soybeans and corn. This meant that many of the producers who owned DGPC were physically unable to deliver high quality durum wheat, as required by their Growers Agreement. These changes jeopardized DGPC's status as a cooperative because its members were no longer patronizing the cooperative with their durum wheat (Nelson and Olson 2002)

Financial constraints associated with being a cooperative corporation also affected the membership (U.S. Securities and Exchange Commission 2002). Restricting the sale of ownership shares to members of the cooperative sometimes made it difficult for members to sell their stock. Some producers wanted a more liquid market for their shares in DGPC. Additionally, DGPC realized that access to public debt and equity markets was necessary if the cooperative were to expand because the members were no longer able to provide equity capital. Tables 10.1 and 10.2 suggest that DGPC was successful in accomplishing its original mission of increasing the margin on durum wheat. DGPC quickly advanced through Cook's Stage Two and into Stage Three because its benefits far outweighed the growers' costs. Specifically, the original equity that DGPC members contributed provided far greater than that of their farm-level investments in a relatively short period of time.

These production and financial conditions motivated the DGPC board of directors to begin discussing the future direction of the cooperative. This was Stage Four. In late 1999 and early 2000, DGPC's directors considered a report by a large regional investment banking firm concerning various available options for corporate structure and capital sources (Pates 2002). The board began to explore the advantages and disadvantages of remaining a cooperative, converting to a limited liability company (LLC), or becoming a publicly traded corporation. The advantages of remaining a cooperative included being member-controlled and not incurring the transaction costs of conversion. The notable disadvantages of remaining a cooperative included an inability to access capital markets beyond member-owners, a lack of liquidity for stock shares, and an inability of some members to deliver durum wheat.

The advantages of converting into an LLC included producers retaining governance. However, this structure would incur a significant tax liability because the transition would involve liquidating the cooperative and redistributing the assets into the LLC. These assets had appreciated in value, which would result in a tax liability to members. An additional concern was that an LLC structure would not

provide the desired level of liquidity or access to capital as would a publicly traded corporation.

The board of directors recommended that members vote to convert to a publicly traded corporation (Dakota Growers Pasta Company 2002). This structure would allow additional individuals to become equity holders, including non-producers, which would create liquidity for the stock shares. Allowing non-producers to become equity holders would also mean increased access to capital. A third advantage was that members would no longer be required to deliver durum wheat, a requirement of their membership in the DGPC cooperative. The conversion would allow them the privilege, but not the obligation, of delivering the durum wheat. One disadvantage was that there could be an increase in the tax obligation of the equity holder. Conversion meant that both DGPC and the equity holder would pay corporate and personal income tax, respectively, on any distributions.

In December 2001, the DGPC board voted unanimously to initiate the conversion. The producer-members of the cooperative would become shareholders of the North Dakota corporation. The cooperative's equity (membership stock, common equity stock, preferred stock, and non-qualified allocated equity) would be converted into equity in the corporation. Each share of common stock would represent one vote for any issues presented to the stockholders. Each share of common equity stock would be converted into one share of common stock with voting rights and one share of Series D Delivery Preferred Stock. The preferred stock had no voting rights.

The non-qualified allocated equity was non-cash patronage income earned by the members but not yet allocated by the board of directors. Non-qualified meant that the members were not taxed upon receiving notice that this patronage income had been earned but not yet allocated as cash. Each US$7.36 of non-qualified allocated equity would convert to one share of common stock. A mechanism was provided so that, if DGPC announced it was purchasing durum wheat, members could still deliver supplies after the conversion if they so desired. Provisions were also made to protect shareholders in the event of a hostile takeover. A membership vote on 22 May 2002 favored the conversion. This represented Stage Five in Cook's taxonomy.

After the Conversion

The conversion to a publicly traded company addressed the financial concerns of the membership and eliminated the requirement for producer-members to provide durum from their own production. Additional liquidity for the shares has occurred since the conversion, but trading volumes for the stock have been minimal according to DGPC's most current annual report. Two companies, Variable-Investment Advisors and Alerus Securities, facilitate trading of the DGPC common stock. The change, as expected, also improved access to capital as outside investors could now purchase stock in DGPC. MVC Capital of New York provided US$5 million

in equity to DGPC in August 2004 and received common stock shares totaling 6.8 percent of common equity (909,091 shares of stock with a US$5.50 value per share). They also have a representative on the board of directors (Pates 2004).

In 2005, DGPC issued its first dividend since the conversion, paying US$0.04 per share payment to holders of both Series D Delivery Preferred Stock common stock. In 2006, DGPC paid US$0.01 per share dividend to holders of Series D Delivery Preferred Stock and US$0.14 per share to holders of common stock. It also constructed a new short goods pasta line at the New Hope, North Dakota facility in 2005, which increased its pasta-manufacturing capacity to 230 million pounds.

Further increases in capital occurred in February 2007. At this time, DGPC entered into a stock purchase agreement with MVC Capital, Inc. and La Bella Holdings, LLC. MVC acquired one million shares of convertible preferred stock and La Bella acquired one million shares of common stock valued at US$10 per share. The cash was used to tender an offer to DGPC common stockholders. In May 2007, DGPC purchased 3,917,519 shares of common stock from its shareholders at an average price of US$10 per share. Dividends were paid in 2007 and 2008. Furthermore, DGPC purchased all the outstanding shares in DNA Dreamfields, which markets pasta with a low glycemic index and fewer carbohydrates than any other pasta on the market (Pates 2005).

Conclusions

The main questions asked by stakeholders in DGPC centered around three main issues: control, ownership, and benefit. Control issues are linked to the importance of being solely owned and controlled by producers in a certain geographic region, performance of a producer-controlled board vis-à-vis an investor-controlled board, and changes in capital structure due to an investor-controlled board. For example, prior to the conversion, the board of directors represented 2.2 percent of the members and votes. After the conversion, the board of DGPC controlled 11.2 percent of the common stock, which resulted in greater influence on items submitted to the membership for a vote.

Ownership issues were primarily linked to the role of outside equity and its impact on common stock price volatility, costs of debt capital vis-à-vis member capital, and whether it was possible to find outside equity holders to invest in DGPC through preferred stock without voting rights. Benefit issues included changes in tax liabilities due to the conversion and whether the pattern of income distribution would change after the conversion, such as DGPC retaining more earnings rather than pay cash dividends.

Prior to the conversion, only durum wheat producers who patronized DGPC could own common stock with voting rights. After the conversion, anyone who owned common stock gained voting rights. The conversion allowed an outside equity holder to acquire stock and a seat on the board of directors. After the con-

version, dividends were paid on the preferred stock before the common stock. The company incurred a loss in 2003, but in 2005 the board declared a dividend on both common and preferred stock. Furthermore, shares of common stock could be transferred to any person, whereas before the conversion shares could only be transferred to active producers.

There have been no outward signs that the conversion has changed DGPC's long-term strategy. It still uses durum wheat from the region in its semolina grinding and pasta manufacturing plants. However, the external capital has allowed it to expand and DGPC is well-positioned to take advantage of changes occurring in the U.S. pasta industry. In the end, the capital requirements to farmers may have been too large, liquidity too low, and producer delivery rights too risky for the cooperative. As a result, the DGPC membership proceeded through all the stages in Cook's life cycle and followed the sequence of events suggested by Cook and Iliopoulis (1998) to conclude that another form of ownership was required.

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Chapter 11

North American Bison Cooperative and North Dakota Natural Beef LLC: Governance of a Contractual Alliance

Gregory J. McKee

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 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 table 11.1.

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.

Table 11.1. 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.

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 of 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 at 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 NBND 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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Chapter 12

American Native Beef Cooperative

Phil Kenkel and Rodney B. Holcomb

Introduction

The American Native Beef (ANB) project was part of a failed attempt to establish a 100,000 head/year cow and bull slaughter operation in southeast Oklahoma. The effort was initially organized as a new generation cooperative and raised over US$2.5M from area producers. The project had extremely strong grassroots support and a majority of the producers left their funds in escrow for over five years despite numerous opportunities to withdraw their investment. During the project's existence, the business model was restructured several times in an attempt to access equity capital from outside investors. This case provides interesting insights into the linkages between business strategy and business structure. It also raises the question as to whether the project might have been successful were it initiated under its final business model.

Background

Cattle and calves are the most valuable commodity in Oklahoma. Between 1998 and 2008, the statewide annual average was well over five million head. Oklahoma ranks fifth in terms of cattle and calves inventory, trailing only Texas, Nebraska, California, and Kansas (United States Department of Agriculture-National Agricultural Statistics Service [USDA-NASS] 2007). However, unlike these other states, Oklahoma's cattle numbers include considerably fewer feedlot cattle shipped in from other states and fewer large dairies. Most of Oklahoma's cattle and calves are associated with the state's multitude of cow-calf operations or stocker calves placed on winter wheat pastures or summer range pastures.

In search of value-added profits, in the fall of 2000 a group of cattle producers in southeastern Oklahoma began to explore the idea of a culled cow slaughter company. Part of the rationale for the project was the large number of cow-calf operations in the region and a lack of processing facilities. One perceived advantage was reduced transportation costs in cattle procurement. The group estimated that over 150,000 cows and bulls were transported annually out of the Oklahoma region for slaughter. In a *Livestock Weekly* (2001) article, project steering committee member Mason Mungle summarized the project's rationale:

> "As we look at nearly all sectors of the agriculture business—well, really all sectors of the agriculture business—we find that the larger, multinational corporations are the only place we have to market our cattle. What we want to do is provide that extra buyer at the livestock market that'll be able to compete. It looks like, to us at least, we would be better off $3 per hundred weight because of the trucking that they have to margin out" at other plants.

Incorporating the business as a cooperative appeared to have additional advantages. The prospective membership, comprised of cattle producers from the southeastern part of the state, could provide a supply of cattle to the cooperative. Unlike fed cattle, which are supplied from feed yards on a year-round basis, the supply of cull cattle tends to be seasonal, peaking in the fall. It was envisioned that a farmer-owned project could coordinate with producers in scheduling delivery. The group also foresaw opportunities from conditioning cattle (holding cattle on grass) to smooth out seasonal supplies. The availability of funding from grants, tax credits, and the success of similar ventures were also factors in pursuing the cooperative form. The successful equity drive of the Value Added Products (VAP) Cooperative in northwestern Oklahoma and the success of the U.S. Premium Beef (USPB) Cooperative in Kansas City Missouri fueled interest in a cooperative effort. A 30 percent tax credit offered by the state of Oklahoma to producers investing in value added businesses was another positive factor. The tax credit did not place restrictions on the business form, but was initially limited to agricultural producers investing in new value-added ventures in the state.

In early 2000, a steering committee that included a core group of producers applied for a United States Department of Agriculture (USDA) Value-Added Agriculture Market Development Grant, now referred to as the Value-Added Producer Grant program. The group called their potential business American Native Beef. The rationale for the name was to suggest a linkage between farmers and ranchers and to differentiate themselves from imported beef (e.g., Australian or New Zealand). The organizational effort formally began with a meeting of southeastern Oklahoma cattle producers in February 2001, where project organizers discussed the concept of a cull cow and bull slaughter cooperative. Based on a preliminary

review of projects proposed in other states, the group estimated project costs at US$10 million. The meeting concluded with a strong consensus that the feasibility of such a project should be explored.

Industry Background

According to USDA data, in 1997 there were 636 federally inspected plants operating in the U.S. for processing slaughtered steers and heifers (fed cattle) and cow and bull (cull cattle) (USDA-NASS 2008). In that year, the plants processed a total of 33.1 million head of cattle. There were 18 plants processing more than one million head on an annual basis, accounting for 58 percent of all beef slaughter (USDA-NASS 2008). The fed cattle segment of the beef processing industry is the most concentrated, with the top four firms accounting for 80 percent of steers and heifers slaughtered in the U.S. (Barkema, Draberstott, & Novak 2008). Cow and bull slaughter represented 18 percent of total beef slaughter (USDA-NASS 2008). The cow and bull slaughter industry is less concentrated than fed cattle slaughter, and regional or family-owned firms are more prevalent (Mathews et al. 1999).

The American Native Beef business plan reported six major regional or family-owned competitors, including Northern States Packing (ConAgra) in Omaha, NE, with a capacity of 1,800 head/day; Caviness Pack in Hereford, TX; Lone Star Corp. in San Angelo, TX; San Angelo Packing Co. in San Angelo, TX; and Booker Packing Company in Booker, TX, each with a capacity of 600–700 head/day. Western Missouri Packing Co. in Rockville, MO, with a daily capacity of 175 head, was also listed.

In 2006, approximately one million head of cows and bulls were slaughtered in a five-state region of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Total cattle inventory for the same period was slightly over 23 million (USDA-NASS 2007). Based on a 10 percent cull rate, the region would generate over two million head of cows and bulls for slaughter, indicating that a majority of cows and bulls are shipped out of the region for slaughter. Together, these data indicate that incumbent firms would not challenge entry by a producer-owned cooperative.

Conceptual Framework

Hansmann (1988, 1996, 1999) uses a property rights approach to examine the rationale for the structure of ownership in a firm. He notes the cost of ownership, which includes monitoring, collective decision-making, risk bearing, and contracting. Firms with diverse ownership face issues such as asymmetric information, conflicts of interest, and higher costs of oversight. The transaction costs associated with trying to keep highly diversified investor groups satisfied is a major reason why most enterprises have relatively homogeneous investors. In the case of a cooperative corporation, where residual returns flow to the supplier of the commodity, patron investors have a uniform goal for patronage returns. In investor-owned cor-

porations, investor-owners have a uniform goal for investment returns and claim residual profits. Combining ownership groups creates conflict of interests that must be controlled through monitoring and contractual arrangements.

Despite these challenges, a recent evolution of the cooperative business model has involved the development of cooperatives with non-patron equity. This structure provides two classes of ownership: outside equity investors and patron stockholders. The entity returns are split between the two classes, with the outside investors receiving investment-based returns and the patron stockholders receiving patronage-based distributions. This structure is part of a broader classification termed "investor-share cooperatives," which access outside equity through preferred stock, non-voting common stock, and participation certificates (Chaddad & Cook 2003). Baarda (2008) identifies the obligations and tradeoffs of outside cooperative equity from a legal perspective.

A number of states, including Wyoming, Minnesota, Wisconsin, and Tennessee, have enacted legislation enabling cooperative/limited liability company (LLC) hybrids. While there are differences in individual state statutes, this structure mandates control by patron members, but also allows the investor class to receive up to 85 percent of profits (Hensley & Swanson 2003).

The major rationale for hybrid cooperative/investor-owned business models is the firm's ability to access a greater pool of investment capital. For this reason, a hybrid business model may target an institutional investor or venture capitalist. However, there are inherent difficulties in matching venture capital with agricultural projects in rural communities (Freshwater et al. 2008). Venture capital firms prefer to concentrate on projects with high growth rates, that operate in large markets, and that provide ready exit strategies. Because of the hands-on nature of project evaluation, venture capitalists are disinclined to invest in projects that are physically remote from their other activities. Organizers of rural businesses are often unwilling to accept the management and control conditions set by the venture capital suppliers.

In a similar light, Alexander and Alcala (2006) conclude that private and institutional investors typically limit investments to projects with high short-run returns (over 20 percent), proven operating models, and expectations to exit the project within five to seven years. They also discuss the complex structures required, such as multiple classes of stock, differential voting rights, equity cure rights, and mandatory sweeps of excess cash flow.

Collectively, this literature suggests that there are fundamental challenges to meeting the divergent demands of patron and investor owners. The American Native Beef effort illustrates these challenges.

Analysis of the Venture

Key Individuals

Mason Mungle, a southeastern Oklahoma cow-calf producer, was a driving force behind the effort and helped organize the 11-member steering committee of area producers. Faculty from Oklahoma State University's Department of Agricultural Economics and Food and Agricultural Products Center also worked closely with the project. The Samuel Roberts Noble Foundation, a not-for-profit foundation that provides education and assistance to agricultural producers, also assisted with the effort. Dan Childs, an agricultural economist at the Noble Foundation, served as one of the incorporating directors listed in the cooperative's offering document.

The Oklahoma Department of Agriculture, Food and Forestry (ODAFF) also helped coordinate the organizational meeting and strongly supported the project. Department officials had a long-standing goal of attracting a cattle-processing operation to the state. Past efforts had convinced them that industry concentration and scale economies made the processing of fed cattle infeasible for Oklahoma. The ODAFF saw the proposed cow slaughter cooperative as a more realistic chance to create a beef-related value-added business within the state. Gary Bledsoe, an ODAFF business development specialist, described his agency's goals in an August 2001 press release related to the ANB effort:

> "We're somewhat tired of sending all of our raw products out of state to process somewhere else and then haul it back. Out-of-state processors take advantage of all the jobs and rural economic development brought about by processing activities. We'd like to bring those things here."

Formation

In the spring of 2001, the ANB project received a USDA Value-Added Agricultural Product Market Development Grant for US$195,000 and a US$100,000 loan from ODAFF. In order to have a legal entity to receive the funds, the group formed a limited liability company, American Native Beef LLC, on 11 April 2001. The funds were used to contract with a nationally recognized firm for a feasibility study and business plan.

The preliminary report from the feasibility study was delivered in January 2002. The study estimated the annual capital costs for a 100,000 head/year slaughter and fabrication operation at US$13.3 million. The results also indicated that a slaughter and fabricating operation that produced fresh beef would be unlikely to be profitable. Cow and bull prices would either have to decrease by 12–14 percent or meat values would have to increase by 10–12 percent in order for the project to be profitable. The study also examined a combined slaughter and further processing operation. The further processing activities included ground beef products (e.g., beef patties, meatballs, and Salisbury steak), sausage products (hot dogs, summer

sausage, and bratwurst), and whole muscle products (marinated pre-cooked beef roasts and beef jerky). The further processing activities were projected to add US$6.3 million to the project, bringing the total project cost to around US$20 million. The returns for the integrated slaughter and further processing operation were more favorable with a projected return on equity (ROE) of 23 percent.

During the spring of 2002, the project steering committee met on a weekly basis to discuss the proposed company's structure. The coordination of cattle supplies was perceived as a major strategic advantage. However, some committee members were concerned that delivery commitments would deter potential patron investors. The issue of how deliveries would be allocated throughout the year was discussed in depth.

Another structural consideration was the minimum level of investment. Outside advisors recommended a high minimum investment (US$10,000–$25,000) to help the project reach its equity goal. However, some steering committee members were convinced that a high investment level would prevent smaller producers from joining. In the end, the committee set the minimum investment at US$5,000.

The issue of cattle pricing was also contentious. Instead of concentrating on processing returns, some steering committee members focused on cattle sourcing. Alternatives for purchasing based on live or carcass weight were discussed, along with issues relating to condemned carcasses. Like most producer groups, the ANB steering committee had much more interest in issues relating to cattle sources compared to details of plant design and processing. They also had difficulty adjusting from their traditional producer perspective to that of an owner of the processing stage.

In late May 2002, the steering committee requested and received a business plan for an integrated cow and bull slaughter and further processing operation. The capital cost estimate for plant, property, and equipment (PPE) for a 400 head/day (100,000 head/year) operation had increased to US$25 million. The business was described as a Section 521 cooperative. Equity investment was set at US$250/share and each share was associated with a delivery right/obligation of one animal. The minimum investment was 20 shares or US$5,000. The business plan stated that the cooperative would sell 50,000 to 100,000 shares of common stock, which implied equity investment of US$12.5 million–$25 million. This structure would require 2,500 investors at a minimum. The plan showed an ROE of 34 percent.

The Equity Drive for the Project Under a Cooperative Business Model

The equity drive for the cooperative was formally initiated on 31 October 2002. The offering was conducted using the Section 521 cooperative association exemption from registration under the Securities Exchange Act. The offering was scheduled to end on 14 February 2003 unless extended. The document stated a minimum offering of US$12.5 million (100,000 shares at US$250 per share, with each share carrying the delivery obligation of one head of cattle). The members' investment

would be held in escrow until the US$12.5 million threshold was reached. The offering further specified that up to US$5 million of preferred stock could also be sold. The preferred stock was offered with a dividend rate set at 1 percent above prime interest rate, not to exceed 8 percent. The preferred stock was also specified to be convertible into common stock at "the Board's calculation of the fair value of the common stock."

The offering document also described an "expanded" cattle delivery system. In addition to scheduled physical delivery and participation in the conditioning pool, the document indicated that cattle could be delivered through sales at an auction barn at which an ANB buyer was present, using a purchasing agent to buy cattle in the member's name, or assigning delivery rights to an associate member who would undertake delivery. Later, in a 6 March 2003 press release, steering committee chair Mungle stressed these delivery options:

> "But some misunderstanding exists regarding the various methods by which members may satisfy their delivery obligation. A member may deliver his own cattle to the plant; he may deliver purchased cattle; he may instruct the plant to purchase cattle and deliver on his behalf. Annual dividends are earned equally with any method."

While promoting the supply system as a strategic advantage, the group was clearly concerned that delivery commitments might be an obstacle to attracting producer investment. Because of these concerns, the original offering document indicated that the board had not finalized the delivery system and was continuing to study options, including alternatives that would jeopardize the cooperative's Section 521 tax status. The possible loss of Section 521 tax status and the possible conversion of the cooperative to an alternative business form were discussed in the "risk factors" section of the offering document:

> "It is possible that our Members will not be able to deliver sufficient cattle to meet our delivery demands or that the delivery arrangements we have proposed for our Members may not satisfy the Federal tax and other legal requirements for maintaining a cooperative. If this occurs, we may convert from a cooperative to a business corporation or limited liability company."

The offering's discussion of the implications of the possible conversion included a change from patronage to investment-based earning distribution and changes in voting rights from one member-one vote to investment based voting.

Despite the mention of possible conversion to a non-cooperative business form and concerns over members' ability to provide sufficient cattle numbers, ANB's public relations efforts strongly enforced the notion that the group was focused on a cooperative business model. The offering document described the operation as a new generation cooperative and included a uniform marketing agreement that

specified delivery commitments. In the section describing "Our Business Strategy," the offering stated, "with Member ownership and sourcing, we will have marketing opportunities not available to other facilities." The document went on to discuss the possibility of labeling beef as "source identified" or "natural," and declared an advantage to marketing the company as "farmer owned" and the products as "farmer produced." In a 13 February 2003 press release, Don Covington, a steering committee member, described the project:

> "This plant will be producer owned, will have value added, and it will be a closed cooperative. We intend that the plant will provide a viable market for our members' slaughter cows and bulls and a means of realizing added value from their beef.…This slaughter/processing plant will succeed for three reasons. One, it is producer owned. Farmers are trusted and the possibility of identify preserved certification. Two, it is a new generation, hygienically superior processing plant. And three, it is in close proximity to Oklahoma and North Texas food companies."

By the end of December 2002, the project team had conducted approximately 75 producer meetings, reaching approximately 2,000 potential members. The equity drive had raised approximately US$2.5 million from slightly over 200 investors (an average of roughly US$10,200/member). Over half the members invested the minimum amount of US$5,000. The total raised, however, was substantially below the US$12.5 million equity goal. Approximately 10 percent of the producers attending an equity-drive meeting ended up investing. However, over 90 percent of investors were located within a 50-mile radius of the proposed plant location. While the investment ratio compared favorably with other producer-owned projects, it implied that to meet the equity goal, equity meetings would have to reach over 10,000 additional producers and expand its geographic focus.

First Restructuring of the Cooperative Business Model

In response to the slow pace of the equity drive, the chairman of the steering committee proposed a number of bylaw changes while retaining the cooperative business form. The chairman perceived a problem in obtaining large patron/investors—only two members had invested more than US$50,000 (200 head delivery rights)—so the proposed changes included board representation for large producers, proportional voting, and differential cattle pricing to reflect size efficiencies in delivery logistics. The proposed structural changes were never enacted because both smaller producer members of the steering committee objected and the group concluded (as the Hansmann model would suggest) that they would be ineffective in generating significantly more patron investment.

As the 14 February 2003 equity drive deadline approached, the project organizers were clearly disappointed with the producer response. In comments later reported in

an article in *Meat and Poultry*, ANB Steering Committee President Mason Mungle discussed his frustration with the fundraising effort:

> We are disappointed because cow-calf producers put the project together.…We tried to sell it in the best possible way to other producers who said they needed it. Yet these producers won't come to the table with any money. …The project is extremely viable so ANB will look for different partners if cow-calf producers don't support it (Kay 2003).

Shortly before the equity drive deadline, the steering committee made the decision to extend the drive until 15 May 2003 (later extended again through 2005). At the time of each extension, investors were given the option of withdrawing their funds. However, over 96 percent of the investors elected to let their funds remain in escrow.

Blended Cooperative and LLC Structures

The steering committee began exploring restructuring the business as a cooperative and limited liability company blend. At that point, the Wyoming Processing Cooperative Law had been enacted, but was still poorly understood. ANB's legal counsel proposed a three-entity business structure of US$5 million patron and US$5 million of non-patron investors. The committee had by this point decided to adjust its business plan and revise the total project cost to US$20 million.

One structural consideration was rooted in a desire to continue to avoid registration with the Securities Exchange Commission (Security Exchange Commission [SEC] 2006). In addition to the cooperative association exemption, a company may sell its securities to what are known as "accredited investors." The SEC definition of "accredited investor" includes a corporation or partnership with over US$5 million in assets and an individual with either US$1 million in net worth or US$200,000 of income in each of the two most recent years and a reasonable expectation of the same income level in the current year (SEC 2006). The proposed new structure assumed that ANB could obtain enough additional equity to reach the US$5 million level needed for a corporation exemption and could identify individuals who met the definition of accredited investors to form the US$1 million investor component.

As the cooperative examined restructuring alternatives, the possibility of obtaining New Market Tax Credits (NMTC) was discussed. The NMTC were initiated in December 2000 as part of the Community Renewal Tax Relief Act (New Markets Tax Credits Coalition 2007). The act was designed to stimulate investment in low-income communities and rural areas. The program works by channeling a 39 percent tax credit (which accrues over seven years) through Community Development Entities (CDE). The CDEs use the capital derived from the credit to help make investments in projects and businesses in low-income areas (New Mar-

kets Tax Credit Coalition 2007). Because of the proposed southeastern Oklahoma location of the ANB plant, the project appeared to qualify for the credits.

The change in business structure was essential for accessing the credit. Tax credits had not been considered for the cooperative because, operating as a Section 521 cooperative, the firm would not be expected to generate taxable income at the business level, which could be offset by the tax credits. ANB's producer members could not obtain the tax credits unless they channeled their investments through a CDE. However, that investment structure would not qualify for the cooperative association SEC exemption and would therefore necessitate a security exchange filing. Under the new combination business structure, it was now assumed that the NMTC could be channeled to the investor partners.

The steering committee and legal counsel completed a term sheet for a new business structure on 13 June 2003. The structure was even more complex and involved the creation of three additional LLCs. The first, Investment LLC, would be owned by both the ANB cooperative, which was to hold US$4 million in common equity, and outside investors, who were to hold US$6 million in preferred equity with a 12 percent cumulative dividend. The cumulative feature implied that if the project were unable to pay a 12 percent dividend in any particular year, the unpaid portion would be added to payments in following years.

Investment LLC would, in turn, invest in Rural Enterprises of Oklahoma Inc. (REI) LLC. REI would be a CDE vehicle for obtaining NMTC. REI would receive a transaction fee for obtaining the tax credits, but would not participate in the profits of the project. REI would own Beef LLC, the entity that would construct and operate the processing plant. The US$4 million producer/US$6 million venture capital structure of Investments LLC was based on the group's assessment of additional patron members. It was not clear how the group planned to avoid security registration given that the ANB cooperative investment was below the US$5 million threshold for an accredited corporate member.

The steering committee began work to identify outside investors and venture capital groups that could provide the investment capital. On 15 November 2003, ANB sent a letter to the membership indicating that the cooperative had a verbal commitment from a venture capital group for US$6 million and were working on a US$10 million government guaranteed loan package. The letter, once again, outlined members' ability to withdraw their investment, but encouraged them to help raise US$2 million of additional patron equity.

Series LLC and New Market Tax Credits

The term sheet for what the steering committee called the "blended cooperative and limited liability company" was publicly released in December 2003. It revealed that the business structure had further evolved. The REI LLC, which was to be the vehicle for the tax credits, would be a Delaware Series LLC. The series LLC is essentially a single umbrella entity that has the ability to partition its assets and

liabilities among various sub-LLCs or series. Each sub-LLC may have different assets, economic structures, members, and managers. The profits, losses, and liabilities of each series are legally separate from the other series, thereby creating a firewall between each series. It also eliminates the administrative burden and expense of forming multiple LLCs (Limited Liability Company Center 2006). In this case, REI had presumably decided to create a series LLC to manage NMTC for a number of projects. The tax credits associated with the ANB project would be in one series of the entity.

In addition to this change, the profit distribution formula was modified. The 12 percent cumulative dividend of the investor partners would be redeemed at the end of the seventh year. The redemption amount was set so that the investor members were guaranteed a 21 percent internal rate of return on their investment. In response to the proposed structure, faculty at Oklahoma State University incorporated a simulation analysis into a feasibility spreadsheet that had been prepared by a business consultant. The simulation analysis used the same average price levels assumed in the business plan, but also used historical variation in live cow and carcass cutout prices to model year-to-year variations. The analysis indicated that there was only a 42 percent likelihood that the project would generate sufficient cash flows to pay the dividends provided to investor partners.

Issues also emerged over delivery rights, which now represented less than one-fourth of the proposed slaughter volume. Venture capital representatives who reviewed the business plan highlighted cattle supplies as a key risk area and asked the steering committee to provide greater detail on their plans for cattle acquisition. This was a dramatic reflection of how the business structure had evolved given that the original strategic advantage had been based on cattle supply logistics. It was also becoming increasingly unclear whether the cooperative leg of the structure could maintain its Section 521 tax status. Venture capital representatives urged the cooperative to scale up the delivery rights so that the anticipated patron investors would provide the number of cattle needed for processing. ANB members were reluctant to scale up the delivery obligations because higher levels would likely exceed the number of cull cattle that the investing producers would have available. Because the cooperative had continued to de-emphasize physical delivery, it was also becoming evident that most members intended to fulfill their obligation by having the cooperative purchase cattle in their name.

Final Search for Capital

Throughout 2004 and after further extension of the equity drive, the steering committee continued to seek venture capital and encourage additional producer investments. The committee also worked to arrange a government guaranteed loan. At the anticipated level of borrowing, the bank originating the loan would receive a 70 percent loan guarantee. The Oklahoma bank that had handled the escrow funds indicated that it was not interested in participating in the loan funding. Operating

under the assumption that the loan commitment would help to convince venture capital and producer investment, the steering committee focused their efforts on identifying a bank willing to serve as the lead on a guaranteed loan.

During the final search for funding, the committee worked with a number of business consultants. ANB paid over US$65,000 to consultants who also worked on a contingency basis and would receive a specified percentage of the total funding if they successfully arranged the debt and venture capital. Because the ANB project had exhausted the USDA Value-Added Grant funds, faculty at Oklahoma State University assisted the team in updating the business plan. Despite these efforts, the committee was unable to secure commitments for venture capital financing. They were also unable to locate a lead bank for a guaranteed loan. In a September 2008 interview, Mungle commented on the difficulties in attracting venture capital: "We discovered that venture capitalists wanted a level of return and a payback time frame that simply exceeded our project's profit potential."

ANB's difficulties in securing financing were not unique in the meat industry. Capital financing for meat processing projects had been drying up for several years. A May 2003 article in *Meat and Poultry* discussed the capital crisis in the meat industry:

> "Given the uncertainties over the war with Iraq, food safety issues, disruptions to exports, drought and feed costs, a possible ban on packer ownership of livestock, and a host of other issues, fewer investors and lenders are prepared to risk financing existing operations, let alone investing in new ones" (Kay 2003).

The article went on to discuss a number of factors that were limiting capital, including low margins, a possible Bovine Spongiform Encephalopathy (BSE) outbreak, and the failure of the Future Beef Operation in Arkansas City, Kansas. The article also indicated that single plant projects were particularly difficult to finance because "zero tolerance food safety regulations" made these projects particularly risky. As the business structure shifted from producer financing to investor financing, the attitude of outside investors toward the beef processing industry became critically important.

End of a Grassroots Effort

The final chapter of the ANB effort was written on 3 June 2006, when the steering committee informed the membership that the effort was being abandoned. Inability to secure debt financing was cited as the chief reason. The group's inability to secure venture capital or additional producer financing was not highlighted.

> "The ANB Steering Committee has been working diligently for five years trying to make this beef processing plant a reality. However, our lead bank, has had a change in personnel and is no longer interested

> in being our lead bank. Without a lead bank we cannot move forward with our project. Therefore, we believe it is time to refund the money we have been holding in escrow for you, our members."

Precise information on the amount of funds remaining in escrow by June 2006 is not available. However, conversations with steering committee members suggest that a high percentage of the original investors, possibly over 80 percent, maintained their investment with the project despite numerous opportunities (available at every extension of the equity drive) to withdraw their funds. Maintaining member financial commitment over the five-year period should be regarded as clear evidence of the deep grassroots support for the project.

Conclusions

The ANB effort presents an interesting example of a project where producer investors could not be dissuaded and outside investors could not be persuaded to invest. ANB's producer members had a strong commitment to the project, primarily because of its potential to improve profitability for their cull cattle. As the project organizers realized that producers would not be able to provide sufficient equity, they restructured the business model to accommodate outside investment. Reflecting this shift in focus, the final business structure was influenced by security exchange issues, new market tax credits, and venture capital advisors. It was quite complex and concentrated solely on venture capital firms to provide the outside investment. A simple categorization of the business restructuring steps and issues is provided in table 12.1.

Table 12.1. Restructuring steps and issues

Organization Form	**NGC**	**NGC with Bylaw Changes**	**NGC/LLC**	**NGC/Delaware LLC Targeting Venture Capitalists**
Basic Rationale	Coordinator of raw material, SEC registration exemption	More attractive to large producer members	Access to outside capital	Defined investor pool, new market tax credits
Homogeneity of expectations	High	High, but raised concerns between large/small members	Non-homogeneous investor versus producer	Extreme differences in goals of producer and venture capital investors
Contracts and monitoring mechanisms	Delivery rights	Delivery rights, differential voting, and volume discounts	Delivery rights for NGC, profits split between NGC and LLC entities	Delivery rights for NGC, guaranteed returns and exit strategy for venture capital investors
Other issues	Few producers willing to exceed minimum investment	Preferred stock not attractive to outside investors	SEC restrictions limited pool of outside investors	Cattle supply now identified as risk factor

As previously discussed, Hansmann (1988) identifies transactions costs and conflicts of interests of heterogeneous owner groups. ANB's restructured business model did not address these issues. The steering committee consisted of cattle producers and advisors. The term sheet for the blended LLC provided board representation for the non-patron investors. However, there were no non-patron investors on the steering committee. The venture capital investors who were being asked to supply 60 percent of the capital may not have been convinced that the project was geared to their interests. The nature of the project—ramping up production of an integrated slaughter and processing facility—also did not provide the short-run returns and clear exit strategy favored by venture capital investors. The decision to focus on venture capital was driven by a need to find accredited investors and thus avoid a registered security offering. In light of the issues raised by Freshwater et al. (2008) and Alexander and Alcala (2006), it is not surprising that the venture capital investment did not materialize.

It is difficult to speculate on how the ANB project would have fared had it begun with a blended cooperative/LLC business form and structured its fundraising to meet the diverging needs of producer and outside private investors. Conceptually, the blended model could capture a cooperative's advantage in supply control meshed with an LLC's flexibility in attracting equity. A successful project would need to involve both producer and investor stakeholders in the steering committee and organizational effort. The level and timing of the projected returns would have to be consistent with the goals of private investors. All the issues that ANB faced in designing a delivery system and allocating returns between producer and investor partners would also have to be successfully navigated. In a September 2008 interview, Mungle commented on the final business model:

> "The new generation cooperative structure was key to at least having a base level supply to the plant. The cooperative model was good. We had a good business plan and the right management team in place. We just discovered too late that we had to include outside equity capital. We also didn't have the knowledge to attract outside investment."

The ANB project demonstrates the complexities of restructuring an emerging cooperative into a blended cooperative and investor firm. A major rationale for hybrid business structures is access to a greater pool of capital, and the ANB project illustrates the difficulties in attracting outside investors. Groups pursuing similar models will need to design both their organizational effort and business strategies to meet the long-term goals of both producer and investor stakeholders.

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Chapter 13

FCStone Conversion to a Public Corporation

David G. Barton

Introduction

FCStone Group (FCS) is a publicly held corporation that converted from a cooperative to a private corporation in 2005, and then converted to a public corporation in 2007. It is an integrated commodity risk management company that provides risk management consulting and transaction execution services to commercial commodity intermediaries, end users, and producers. This case study focuses primarily on the period from the first conversion in 2005 to six months after the public offering in March 2007. Because the financial benefits received by each of the cooperative owners of FCS are dependent on the timing of their sale of FCS stock, stock price information and benefit estimates are provided up to early November 2008.

Background

The primary business objective of FCS is to assist middle-market customers optimize their profit margins and mitigate their exposure to commodity price risk. Middle-market customers who first organized FCS as a cooperative were grain marketing and farm supply local cooperatives in the American Midwest. It was the cooperative member-owners of FCS who voted to convert FCS from a federated regional cooperative—owned and controlled by other cooperatives—to an investor-oriented business.

FCS consists of four primary business segments: (1) commodity and risk management services that help customers use futures, options, and other derivative

instruments through FCS' Integrated Risk Management Program and use of their futures commission merchant standing on the major commodity markets; (2) clearing and execution services that give customers direct access to the trading floor; (3) financial services that assist customers who want to carry commodities through the use of sale and repurchase agreements; and (4) grain merchandising through a subsidiary grain dealer (FGDI), which includes a leased export elevator and leased rail cars.

Organizational history

FCS traces its cooperative origins back to Agri Industries, an Iowa-based regional cooperative whose members were grain-marketing cooperatives. The risk management execution services tied to the Chicago Board of Trade were first provided to member cooperatives in 1968. This business activity was separated in 1978 into a subsidiary known as Farmers Commodities Corporation (FCC). In 1978, net revenue equivalent to gross income was US$500,000. In 1986, FCC was spun off into a separate regional cooperative company with net revenues of US$8 million. In 2000, FCC acquired Saul Stone, an execution services company with a presence in all the domestic commodity exchanges, giving FCC the ability to clear all U.S. exchange-traded commodity futures and options contracts. Net revenue grew to US$42 million. In 2000, the name became FCStone Group, Inc., but the company maintained its cooperative business form until the vote to convert to an ordinary corporation on 1 March 2005.

The journey to conversion may have been inevitable if the objective were to reach FCS' full potential as a business entity, given its opportunities and the constraints of the co-op business model. What has been achieved in size and performance of the company and wealth creation for members and stockholders could not have occurred as a co-op. In hindsight, perhaps the most important question is whether its co-op members have been better off since the conversion.

The journey to conversion had several important mileposts. An important one was the hiring of Paul (Pete) Anderson as CEO in 1999. Anderson pointed out the high growth potential of FCS to the board of directors during his interview for the position. It was expressed in a vision statement that he prepared for the board, which outlined many of the potential growth opportunities and strategies that could and should be pursued. At that point, the vision statementÕs focus was exclusively on members and how the company could best serve their needs.

The success of that growth strategy over the next three years led to new issues. Among them were a natural limit on the growth of equity capital generated from operational profits and a shift in the mix of business from mostly patronage-based to mostly non-patronage-based. The risk management business model that FCS had created was useful to many domestic and global businesses beyond the traditional cooperative members.

Another important milepost was reached in March 2002, when Anderson again addressed to the board the growth potential and constraints, and laid out some capital and structural alternatives. Six alternative structures were described, including continuing the current traditional co-op business model and converting to a publicly held corporation through an IPO. Each alternative was evaluated in terms of advantages and disadvantages to current customer-member-owners, as well as to the company and its employees. The alternatives were refined and further evaluated over the next two years with the help of outside consultants. Based on this information, the board recommended the conversion and IPO alternative to its members.

The FCS conversion came about by a two-stage process. First, it converted from a co-op to a private or closely held ordinary corporation (C-Corp), effective 1 September 2004, based on a membership vote taken on 1 March 2005. This vote explicitly terminated patronage rights as of 1 September 2004, the beginning of the 2005 fiscal year, even though the vote was taken six months after the fiscal year had begun. Including common and preferred shares, 96 percent of the votes cast favored the conversion. Second, it converted from a private to a public corporation on 16 March 2007. In October 2006, FCS filed for an initial public offering (IPO) of common stock. The next stockholder vote, 5 December 2006, approved the IPO and the change from an Iowa corporation to a Delaware corporation. Of the votes cast, 97 percent favored the IPO.

Demand for the new stock was initially strong. It opened at US$24 and closed at US$32. A total of 5.865 million shares were sold, with net receipts of US$129.7 million. This new equity was added to the existing equity of US$72.1 million. The pre-IPO equity consisted primarily of "original" shares converted from co-op equity with a cost basis of US$10, additional "appraised" shares with a cost basis of zero, additional "subscription" shares purchased by existing stockholders at US$10 per share in a supplemental subscription offering from April through June 2005, and Employee Stock Ownership Plan (ESOP) shares purchased in August 2005 by employees using a portion of their 401(k) assets.

Present business

FCS has evolved from a business that provides commodity exchange execution services into a diversified company that focuses on integrated risk management. Their IPO prospectus described the firm as follows:

> We are an integrated commodity risk management company providing risk management consulting and transaction execution services to commercial commodity intermediaries, end-users and producers. We assist primarily middle-market customers in optimizing their profit margins and mitigating their exposure to commodity price risk. In addition to our risk management consulting services, we op-

> erate one of the leading independent clearing and execution platforms for exchange-traded futures and options contracts. We serve more than 7,500 customers, and in the twelve months ended November 30, 2006, executed 50.2 million derivative contracts in the exchange-traded and over-the-counter ("OTC") markets. As a natural complement to our commodity risk management consulting services, we also assist our customers with the financing, transportation and merchandising of their physical commodity requirements and inventories. Our net income increased $8.7 million, or 131.8%, from $6.6 million in fiscal 2005 to $15.3 million in fiscal 2006, and increased $2.9 million, or 85.3% from $3.4 million in the three months ended November 30, 2005, to $6.3 million in the three months ended November 30, 2006.
>
> We began offering commodity risk management consulting services to grain elevators in 1968. Since that time, our business has evolved to meet the changing needs of our customers. In response to these changing needs, we expanded our risk management services from a focus on agricultural futures and options to a wider array of instruments, including OTC ("over the counter") derivatives, and to other commodities, including energy commodities, forest products and food products. We operated as a member-owned cooperative until 2005, when we converted to a stock corporation to improve our access to capital and to facilitate continued growth in our operations.

FCS divides their company into four operating segments:

1. Commodity and Risk Management Services (CRM) is the foundation of the company, and provides the largest portion of net income. Roughly 117 risk management consultants assist customers to mitigate their exposure to commodity price risk and maximize the amount and certainty of their operating profits.

2. Clearing and Execution Services (CES) supports CRM by providing lower-margin clearing and execution services to risk management customers. A wide array of other customers are further served, including commercial accounts, professional traders, managed futures funds, and introducing brokers who provide risk management services to retail customers.

3. Financial Services (FS) helps customers finance physical grain inventories and other commodity inventories.

4. Grain Merchandising (GM) uses a separate company, FGDI, to function as a dealer in and manager of physical grain and fertilizer. FGDI links merchandisers of grain products through a network of industry contacts, and serves as an intermediary to facilitate the purchase and sale of grain. On 1 June 2007,

FCS reduced its ownership in FGDI from 70 percent to 25 percent (Agrex, a subsidiary of Mitsubishi, owns the remaining 75 percent). As a consequence of this reduced ownership, grain sales are not included as revenues in the 2008 fiscal year, as reported in table 13.1.

Operations and financial performance history

From 1999 through 2004, prior to the conversion, FCS grew at a rapid rate in its two most profitable segments, CRM and CES. That growth continued following the conversion. Several key metrics are reported in table 13.1. Net income before taxes for the CRM segment increased from US$7.9 million in 2004 to US$21.9 million in 2006 and US$45.7 million in 2007. The CES segment saw similar improvements, with net income before taxes increasing from US$3.4 million in 2004 to US$11.0 million in 2006 and US$9.6 million in 2007.

Measuring size by total revenues or sales can be misleading because revenues are driven heavily by the buying and selling of commodities, such as grain and fertilizer, which is a high-volume, low-margin business with volatile prices. For example, total revenues in 2004 were US$1.6 billion, but declined to US$1.3 billion in 2007.

A better measure of economic activity is net revenues or sales net of the cost of commodities sold, which increased from US$105.1 million in 2004 to US$181.9 million in 2006 and US$257.4 million in 2007.

Net income for the total company increased from US$3.6 million in 1998 to US$6.4 million in 2004, its last year as a co-op. Patronage income averaged about 42 percent of net income (after taxes and before pension adjustment) and cash patronage refunds averaged about 70 percent in the three years prior to conversion. After converting from a cooperative corporation to an ordinary private corporation, net income increased to US$6.6 million in 2005, US$15.3 million in 2006, US$33.3 million in 2007, and US$33.2 million for the first nine months in 2008.

Table 13.1. FCStone operations and financial performance, 1997–2007

	Co-op Prior to Conversion								Private Corp.		Public Corp.	
in $US millions	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008 3Q YTD**
Revenue	$332.3	$346.6	$399.7	$452.3	$658.4	$858.4	$1,169.3	$1,623.6	$1,400.1	$1,294.8	$1,341.7	$249.3
Net Revenue[a]	$27.5	$29.8	$33.9	$41.8	$56.2	$65.7	$76.1	$105.1	$126.8	$181.9	$257.4	$62.7
Net Proceeds/ Net Income	$.04	$3.6	$4.6	$6.3	$6.0	$3.4	$4.3	$6.4	$6.6	$15.3	$33.3	$33.2
Cash Patronage /Dividends[b]	$4.0	$2.1	$0.7	$1.5	$2.1	$1.8	$0.9	$1.4	$1.9	$2.9	$6.1	
Equity ('000s) Redemptions	$151	$205	$101	$272	$111	$419	$217	$1,436	$613	$0	$40,779	
Total Assets	$92.6	$100.4	$115.4	$234.9	$271.9	$399.5	$504.7	$603.8	$805.5	$1,057.2	$1,420.2	$2,426.3
Total Equity	$21.4	$24.2	$27.2	$31.1	$35.1	$35.2	$35.8	$39.8	$49.7	$58.9	$173.7	$217.2
Equity to Assets	23.2%	24.1%	23.6%	13.2%	12.9%	8.8%	7.1%	6.6%	6.2%	5.6%	12.2%	9.0%
Return on Equity	0.2%	15.0%	17.1%	20.1%	17.0%	9.6%	12.0%	16.1%	13.2%	25.9%	19.2%	15.3%
Shares Outstanding[c]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.8	4.8	27.4	28.0
Return per share	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$1.36	$3.15	$1.21	$1.19
Cash return per share	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0.39	$0.60	$0.22	$0.00
Share Price[d]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$31.16	$20.47
Price to Earnings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25.67	17.26
Market Capitalization	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$854.3	$573.1

[a] Revenues, net of cost of commodities sold; equal to gross income

[b] Cash Patronage amounts in year paid, not earned, for 1997-2005. Cash dividenss declared of $0.60 per share on 25 October 2005 and $0.42 per share on 9 November 2006.

[c] Millions of outstanding shares; three-for-one stock split on 26 February 2007 and three-for-two stock split on 17 September 2007.

[d] As of fiscal year end 31 August 2007 and 2008.

Pre-conversion situation

FCS grew rapidly prior to conversion due to its success in offering risk management services and commodity exchange services through its Integrated Risk Management Program to an expanded set of customers and commodities beyond agriculture and its cooperative members.

Sustaining this growth required reliable access to capital, primarily for meeting the regulatory capital levels required by the Commodity Futures Trading Commission. It also created the potential for cooperative members to capture the market value of the company and receive a bigger portion of the income stream beyond the patronage-based business benefits of cash patronage refunds and equity redemption of retained patronage refunds. Another potential opportunity was the ability to award employees and management, including the board of directors, shares of stock, and stock options.

Conversion Rationale and Proposal Overview

Stated reasons for conversion

Eight reasons for the conversion were identified, based on a set of statements made in the 2005 Registration Statement's letter to members and in the answer to the question, "Why is the company proposing to restructure?" They are:

1. *Improve access to new equity capital*. "The company will need significant capital resources to fund ongoing and future activities to stay competitive. If the business were to continue operating on a cooperative basis, our ability to raise and retain capital would be limited."

2. *Improve liquidity of current allocated equity and unallocated equity to capture the market value of ownership.* "We believe the proposed restructuring will…enhance the value of the ownership interests in the company by converting the existing patronage-based relationship with members into an investment-based relationship."

3. *Improve liquidity of current allocated equity to facilitate equity exchanges among owners*. "We believe that the restructuring may improve the liquidity of your investment in the company. Currently, common and preferred stock (the equity class used for retained patronage refunds) may be transferred only as an incident of membership in the company. After the restructuring, a stockholder may transfer its common shares to (a) any other holder of common shares (unless the transferee would hold more than 5% of the issued and outstanding shares of common stock after the transfer), or (b) any person approved in advance by the board of directors."

4. *Distribute non-patronage income directly to owners.* "The restructuring will allow us to make distributions to our stockholders based on their equity interests rather than their patronage."

5. *Maintain total or majority control by traditional or existing members.* "The restructuring will allow us to retain most aspects of our current system of corporate governance. We intend to limit the transfer of common stock of the company to cooperatives and the ESOP. We will also maintain our existing system of nominating eight Class I board members on a regional basis, with one Class II board member being nominated by the 12 largest stockholders and the ESOP, and one Class III board member being nominated by the other board members. However, after the restructuring, the nominating procedure will only indicate the stockholders' preference for certain nominees. The board of directors will be responsible for selecting all nominees, after consideration of the stockholders' preferred nominees."

6. *Provide the ability to form an Employee Stock Ownership Program (ESOP).* "The proposed bylaws will limit the ESOP to ownership of 20% of the new common stock of the company. Sales of new common stock to the ESOP will be at its appraised value. Sales of shares of common stock to the proposed ESOP will allow us to raise capital while capturing certain tax advantages. In addition, ownership of a percentage of our equity through the ESOP may assist us in retaining and attracting quality employees, and will align the interests of the employees and the stockholders."

7. *Provide a mechanism to compensate current patron-owners for giving up patronage-based rights.* No specific justification was stated but it was implied that patron-owners were giving up past patronage-based earnings already earned in the first six months of the year, as well as future patronage earnings. The mechanism used was subscription rights described above.

8. *Respond to the growth in non-patronage business relative to patronage business.* "Growth of our business with non-members has reduced the significance of our cooperative status and pushed us closer to the boundaries of the definition of a cooperative under applicable law."

Conversion proposal description

The initial conversion was from a traditional or open Iowa cooperative to an Iowa ordinary corporation. The cooperative members were informed of the following stock issues and voting rights in the 2005 Registration Statement.

1. *Common and preferred stock (i.e., retained patronage refunds) will be converted to new common stock with an equivalent par value [referred to as "original" shares].* "Currently, members hold Class A common stock or

subscriptions, Class B common stock, and preferred stock in the company and earn patronage-based rights. We will recapitalize by converting the Class A common stock and subscriptions, Class B common stock, and preferred stock into newly issued shares of common stock ("new common stock"). If the restructuring is effected by approval of the amendments to the articles of incorporation and the plan of conversion, you will receive 500 shares of new common stock issued by the company for each fully paid share of Class A common stock, $5,000 par value, or 10,000 shares of new common stock for each fully paid share of Class B common stock, $100,000 par value, and one share of new common stock for each $10.00 in par value of each preferred share you hold as of the effective date of the restructuring."

2. *Unallocated equity and residual value above book value will be converted to new common stock based on the last three years of patronage business [referred to as "appraised value" shares].* "If the restructuring is approved by the stockholders, the company will issue a total of 4.31 million shares of new common stock. This number of shares was determined by dividing the appraised value of the equity of company, $43.1 million, by $10.00. Each member's existing stock ownership represented by common stock or subscriptions, and preferred stock will be converted by distribution of shares of new common stock at a conversion rate of one share of new common stock per $10.00 in current stock held. The remaining shares of new common stock will be distributed based on each member's pro-rata share of patronage determined by a formula which considers patronage for the last three fiscal years, including the year ended August 31, 2004. In the case of Class A members, the formula utilizes the actual patronage paid during the three-year period. In the case of Class B members, the patronage will be limited to $1.35 per round turn trade, which is less than the patronage paid to those members. The value of the stock to be issued with respect to patronage-based rights will be approximately $26.4 million, which is the $43.1 million appraised value of the equity of the company less the August 31, 2004 common and preferred stock value of $16.7 million. This amount represents approximately 5.4 times the total of all members' three year defined patronage. Each member's share will likewise be 5.4 times its individual three year defined patronage. One share of new common stock will be issued for each $10.00 of such value. If the proposal is approved, the distribution of new common stock and subscription rights is expected to take place on or after March 3, 2005."

3. *Current member-stockholders will be offered the right to purchase additional common stock at the cost of $10 [referred to as "subscription" shares].* A total of 100 shares of nontransferable subscription rights were issued for each 200 shares received in the conversion exchange. Each member had the option to exercise the right to purchase additional shares of new common stock at

a purchase price of $10.00 per share within 60 days after the distribution of new common stock and subscription rights. The closing was 29 June 2005. Out of 553 member-stockholders, 56 exercised this right and purchased 174,372 shares of stock for US$1.7 million out of the maximum that could be purchased of 2.15 million shares for US$21.5 million. Only about 8 percent of the subscription shares were purchased. These new common shares were split 3 for 1 prior to the March 2007 IPO along with all outstanding shares which reduced the cost basis of the shares to $3.33 per share. As it turned out later, the IPO was priced at $24 and the stock price has averaged around $50 (prior to 27 September 2007 3 for 2 stock split), so exercising this right was very profitable.

4. *Voting will shift from one-member, one-vote to voting by shares of common stock.* "Currently, each member of the company is limited to owning one share of Class A or Class B common stock. Following the restructuring, each stockholder will own the number of shares of new common stock distributed in the restructuring and any shares of new common stock acquired upon exercise of the subscription rights. Holders of common stock will continue to vote on matters such as the election or removal of directors, mergers, sales of all or substantially all of the assets of the company, dissolution of the company and amendments to the articles of incorporation. After the restructuring, each share of common stock will continue to carry one vote, but stockholders will be able to vote the number of shares of common stock held. As a result, instead of each member having one vote, stockholders with more new common stock in the company will have greater proportionate voting power after the restructuring."

The membership approved the plan of reorganization at a meeting held 1 March 2005, with 96 percent voting in favor. The reorganization was retroactively effective to 1 September 2004.

IPO proposal description

On 5 December 2006, FCS received 97 percent stockholder approval to convert from a private to a public corporation and change the charter from an Iowa corporation to a Delaware corporation. FCS then issued a prospectus for an IPO scheduled 16 March 2007. The proposal had the following components and results:

1. Issued 5.865 million shares at an initial offer price of US$24.00, which resulted in additional net proceeds of US$129.67 million and total outstanding shares of 18.2 million.

2. Use of proceeds included:

   (a) Redeemed 2.159 million shares, or 15% of existing common stock prior to the offering, at a price of about US$22.32, for a total cost of about US$48.21 million.

   (b) Used the balance to reduce debt and build assets as needed.

3. Notice was made that cash dividends could be paid on stock in the future, although it was expected they would be less than past dividends paid.

4. Notice was made that a three-for-one stock split was being implemented as a stock dividend for prior stockholders. That split occurred as of 26 February 2007.

Economic Justification

Patron-owner-members organize cooperative businesses for one or more well-known economic reasons. Co-ops are converted to another business form when those reasons no longer exist or the advantages of another business form outweigh the original reasons for forming and operating a cooperative. The economic justification of the cooperative business form centers primarily around correcting market failures, including: (1) reducing or eliminating monopolistic pricing by increasing competition; (2) reducing costs through vertical and horizontal coordination or integration and achieving economies of size; (3) providing missing services and information; (4) reducing risk through the pooling of risk; and (5) forming a spatial monopoly operating on a service-at-cost basis. Some co-ops seek to create or increase market power, and thereby increase market failure for other parties. The cooperative predecessor to FCS, Farmers Commodities Corporation, was organized for the first three reasons.

Co-ops convert to another business form for a wide variety of reasons. Five general categories can be identified, with more specific behavioral sub-categories under each. Only the broadest sub-categories are listed. They are:

1. Patron-owner rationale
   (a) Improve access to capital
      i. Replace or redeem current ownership
      ii. Support asset growth
   (b) Improve liquidity of allocated and unallocated equity capital
      i. Facilitate equity exchanges
      ii. Capture market value of allocated equity in exchanges
   (c) Improve income distribution
      i. Distribute non-patronage income directly to owners
      ii. Provide more tax efficient distribution of income to owners

   iii. Address high non-patronage income issues
   iv. Provide returns to owners who no longer use the co-op as customer-patrons

(d) Provide more operating flexibility by eliminating contractual patron-owner delivery requirements

2. Member control rationale
   (a) Maintain total or majority control by traditional or existing members
   (b) Shift control from members to owners
3. Customer access and treatment rationale
   (a) Provide competitive access for products and services to traditional member-patron customer base
   (b) Provide competitive access for products and services to rapidly growing non-member customer base
   (c) Provide more risky multi-year marketing or supply agreements to a heterogeneous customer base
4. Management, employee and director incentives and expertise rationale
   (a) Provide improved management and employee recruiting and retention incentives
   (b) Provide improved flexibility to expand director expertise, diversity and incentives
   (c) Provide employee stock ownership plans (ESOP)
5. Other
   (a) Provide mechanism to switch claims on income from patronage to ownership basis
   (b) Provide mechanism to address unique co-op restrictions such as the majority of business must be with member-patrons

FCS claimed that the primary reasons for conversion were: (1) to gain access to capital to support rapid growth opportunities in non-member business segments; and (2) to allow members to participate in the financial benefits of non-member business. Eight reasons were stated in the 2005 SEC Registration Statement, as previously noted. FCS also said that member customers would still have access to all their traditional customer services in a competitively priced environment and would initially have a controlling interest in the company through voting stock ownership and the board of directors.

Conversions can be made in several ways, including: (1) converting co-op patron-owner rights into investor-oriented firm (IOF) ownership rights through the issue of

stock or (2) purchasing co-op patron-owner rights for cash. FCS was converted using the first method, issuing ownership rights in the successor company to members in exchange for their ceding patron-owner-member rights in the co-op.

Post Conversion and IPO Analysis

Company performance

Up to May 2008, FCS continued to perform at a very high level after the conversion and IPO. Net revenues and net income continued to grow rapidly. Return on equity in the pre-conversion period ranged from a low of 9.6 percent in 2002 to a high of 20.1 percent in 2000. Return on equity in the post-conversion period was 13.2 percent in 2005, 25.9 percent in 2006, 19.2 percent in 2007 and 15.3 percent through the first nine months of 2008, as reported in table 13.1. The return on equity in 2007 and 2008 is higher than it might appear because solvency measured by equity to assets more than doubled from 5.6 percent to 12.2 percent between 2006 and 2007.

Following conversion, total book value of equity increased from US$39.8 million in 2004 to US$49.7 million in 2005. Equity further increased in 2006 to US$58.9 million. After the IPO, total equity increased to US$162.2 million on 31 May 2007 and ended at US$173.7 million in 2007. Total equity grew to US$217.2 million after the first nine months of 2008, as reported in table 13.1.

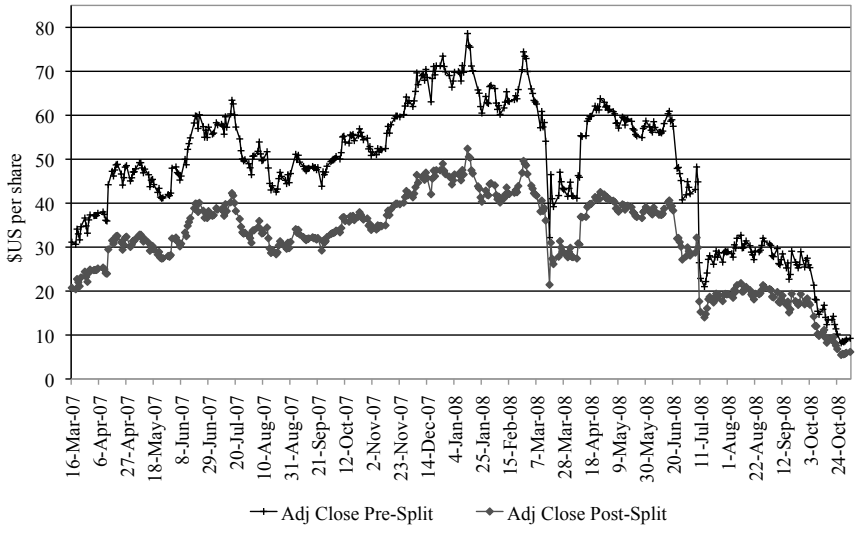
A three-for-one stock split was made in February 2007, prior to the IPO, and a three-for-two stock split was made in September 2007, after the IPO. The post-split stock price increased significantly after the IPO to a high of US$53.25 on 15 January 2008. It ranged from around US$40 to US$50 per share from November 2007 through May 2008, and then trended downward, closing at US$6.16 on 3 November 2008. On 3 November, adverse information about a reported US$25 million dollar loss on a customer's account was announced, and the next day the price dropped to a low of US$2.90, before closing for the day at US$3.69. (See figure 13.1 for a history of prices.)

FCS' market capitalization has varied widely. On 15 January 2008, it was US$1.38 billion, based on 27.4 million shares currently trading at about US$50.55 per share at closing. On 4 November 2008, it was US$101.1 million, based on a closing price of US$3.69, only about seven percent of the highest capitalization value. The financial benefits achieved by the original cooperative owners varied widely based on when and if they sold their stock.

Conversion reasons and achievement

All eight reasons for the conversion (listed above) have been achieved. Access to equity capital has been increased through sales of stock, which has supplemented the previous primary source, net income. There have been several stock sales, including the subscription rights offered to member-stockholders in 2005 and the

Figure 13.1. FCStone Daily Stock Price, 2007–2008



ESOP sales in 2005, and following the IPO in March 2007. Reducing debt and increasing the equity to asset ratio from 5.6 percent in 2006 to 12.2 percent in 2007 has strengthened the balance sheet. A second public offering in August 2007 did not add equity to the FCS balance sheet, but instead was used by existing co-op stockholders to sell some of their stock.

The conversion from a cooperative to a non-cooperative private corporation and subsequent public stock issue has increased the liquidity of allocated and unallocated member equity by capturing the market value of that equity. The conversion distributed the pre-conversion appraised value of the ownership to stockholders at a rate of US$10 per share. The two public stock offerings allowed members to sell all or part of their original, appraised, and purchased subscription stock for a substantial gain.

Non-patronage income can now be distributed to co-op stockholders in the form of dividends on equity. Substantial dividends were paid in 2006 and 2007.

Traditional co-op members have controlled FCS through a significant ownership of voting shares amounting to about 45 percent (as of March 2008). (The level of sales of Series 2 and 3 stock by cooperative owners since that time is not known.) More importantly, the current board of directors is comprised primarily of local co-op managers who have substantial influence on future nominees to the board, suggesting that they may continue to hold greater influence than the proportional share of voting shares owned by local co-ops. An ESOP was formed, an equity

incentive program implemented, and stock option awards made to the leadership team of executives and directors after the conversion to a public company in 2007. These actions may better align the interests of leaders and employees with those of stockholders.

Member benefits

The ultimate test of a conversion is the benefits that it actually provides compared to the benefits that could have been achieved had the co-op business form continued. This is difficult to measure because economic conditions and firm performance are always changing in unforeseen ways, and the basis for income distribution changes from patronage and non-patronage sources to shares of stock owned.

One key metric is the relative ability of co-op member-customers of FCS to obtain risk management and commodity trading services before conversion compared to after. It appears that member-customers did receive, both before and after conversion, roughly the same competitive or market-based access to FCS and its competitors. Therefore, the benefits of being a "customer" of FCS appeared to be about the same, before and after conversion.

A second key metric is the impact on their investment in FCS and the income received. Because the co-op members continue to be the biggest block of owners, measures of interest are (1) the cash dividends received per share (roughly equivalent to the cash patronage refund per unit); (2) the change in stock price; and (3) the cash received by selling some or all of the stock. Some rough indicators are the cash flows reported in table 13.1 and the stock prices reported in table 13.1 and illustrated in figure 13.1.

FCS profitability, as measured by return on equity and absolute net income, has grown since the conversion. Compared to other, similar co-ops, cash patronage rates and redemption rates were relatively high while FCS was a co-op. After conversion to a private corporation, cash distribution was significant, but still a smaller percentage of net income in 2005 and 2006. However, this should be viewed in the context of the move toward an IPO, and so includes the 2007 cash flows paid by FCS directly to co-ops. In 2007, a substantial dividend of US$6.1 million was paid, of which 90 percent could be assigned to co-op owners and the remainder paid to the ESOP.

But more significantly, 15 percent of co-op equity was repurchased or redeemed by FCS in the amount of US$48.2 million, of which US$43.2 million went to former co-op members and the balance to employees and other owners. This alone is several times the cash flow received by members while FCS operated as a co-op. As table 13.2 demonstrates, this first redemption had a net realized gain to co-op owners of US$40.8 million, or about 2.4 times the total book value of all stock (US$16.7 million). All sales after that point increased the multiple of book value received by co-op owners.

After the 15 percent mandatory redemption to all co-op owners, the remaining stock was divided into three equal parts, designated as Series 1, 2, and 3. Each series had its own release date, as noted in table 13.2. However, each co-op had an opportunity to sell any or all of its stock in a secondary offering on 3 August 2007. A surprisingly low number of shares, 1.86 million, were sold at a price of US$48.24, creating an additional net realized gain of US$87.4 million. Some co-ops tendered all their shares, while others tendered none. Hindsight suggests that selling at the secondary offering was highly beneficial compared to selling when each of the three series windows opened.

Stock prices varied widely, but because of the low cost basis of US$0.86 per share, the potential realized gain is substantial, even when shares are marketed at the lowest price on record. Table 13.2 provides an accounting of these transactions, subsequent transactions, and an estimate of total potential net capital gain to co-op members under alternative marketing strategies.

Table 13.2. Member co-op investment in FCStone: Net gain due to conversion and IPO

Original Co-op Stock		Transaction Value	Additional Shares	Cumulative Total Shares	Cumulative Total Value	Book Value[d]	BV/ share based on orig. BV	Net Market Price	Realized & Imputed Net Gain
3-Mar-2005 Original earned stock - at conversion		$16,738,522	1,673,853	1,673,853	$16,738,522	$16,738,522	$10.0000		
3-Mar-2005 Additional appraisal stock - at conversion		$26,361,478	2,636,147	4,310,000	$43,100,000	$16,738,522	$3.8836		
26-Feb-2007 3-for-1 Stock split - before IPO			8,620,000	12,930,000	$43,100,000	$16,738,522	$1.2945		
21-Mar-2007 15% Redemption[a]		$43,289,640	-1,939,500	10,990,500	$40,589,222	$14,227,744	$1.2945	$22.32	$40,778,862
3-Aug-2007 Secondary offering sale[b]		$89,760,988	-1,860,717	9,129,783	$38,180,432	$11,818,954	$1.2945	$48.24	$87,352,198
17-Sep-2007 3-for-2 Stock split			4,564,892	13,694,675	$38,180,432	$11,818,954	$0.8630		
17-Sep-2007 Remaining stock value[c]				13,694,675	$38,180,432	$11,818,954	$0.8630	$48.36	$650,455,505
								Total	**$778,586,565**
If Sold Series 1, 2, and 3[e] on release date									
17-Sep-2008	If sold Series 1			4,564,892	12,726,811	3,939,651	$0.8630	$48.36	$216,818,502
15-Mar-2008	If sold Series 2			4,564,892	12,726,811	3,939,651	$0.8630	$21.44	$93,931,622
11-Sep-2008	If sold Series 3			4,564,892	12,726,811	3,939,651	$0.8630	$18.09	$78,639,236
								Total if sold Series 1, 2, 3	**$517,520,420**
4-Nov-2008	**If sold Series 1, 2 and 3 market low**			13,694,675	38,180,432	11,818,954	$0.8630	$2.90	$27,895,602
								Total if sold at market low	**$156,026,662**

[a] The total shares of common stock held by co-op members and others that were redeemed totaled 2,159,997. Only co-op member stock shown.
[b] Total stock sold during the secondary offering was 1,865,042 which included other stockholders besides co-ops.
[c] 17 September 2007 was the date that the Series 1 were released from restriction. The Series 2 and 3 restriction expiration dates are 15 March 2008 and 11 September 2008, respectively. Valued at market price on 17 September 2007.
[d] Assumed received as a qualified patronage refund distribution.
[e] If sold when series window opened. Valued at market price on 17 September 2007, 17 March 2008 and 11 September 2008.

As noted above, FCS repurchased or redeemed about 15 percent of these shares, as well as other shares, for around US$22.32 per share. This is a multiple of about 17.3 over cost basis and a gain of US$21.03 per share sold. The net realized gain for the co-ops totaled US$40.8 million.

More significantly, the remaining 85 percent of these shares could be sold at market prices. Some co-ops took advantage of the second public offering to sell a part or all of their remaining shares. Over 1.86 million shares were tendered for sale in a secondary offering on 3 August 2007, generating net proceeds of US$48.24 per share. This is a multiple of 37.4 over cost basis and a gain of US$46.95 per share. The total realized net gain from this transaction was US$87.4 million.

On 17 September 2007, there was a three-for-two stock split, reducing the cost basis on these shares to about US$0.86 per share. If all the remaining original stock had been sold on 17 September 2007 at the market price of US$48.36, the total gain would have been around US$650.5 million. Even though only Series 1 stock was available for sale on that date, many co-ops arranged to "sell short" their Series 2 and 3 at a very advantageous net price prior to the release date. The maximum realized net gain for the co-op owners of FCS who employed this strategy was US$778.6 million.

A more conservative strategy is to pretend that each co-op sold their Series 1, 2, and 3 stock on the first day that each block was available for normal sale. As table 13.2 reports, if sold at the closing price on the first day, the total realized net gain would have been US$517.5 million. The worst-case scenario would have been to hold all the blocks and sell at the low of the market on 4 November 2008 at US$2.90 per share. The net realized gain would have totaled US$156.0 million to the co-op community of owners. Even this worst-case scenario is still 9.8 times the original book value of US$16.7 million [(gain of US$156.0 + book value of US$16.7)/ book value of US$16.7 = 9.8 times book value].

The conversion of FCS and its IPO has captured a phenomenal amount of market value compared to cost or book value. Multiples of this magnitude are unparalleled and unlikely to be matched by any future conversion of a co-op to an IOF business form. This conversion has added substantial wealth to the farmer co-op-owners of FCS and, indirectly, to the producer-owners of these co-ops. The funds have been used for a variety of purposes, including adding assets, reducing debt, and increasing to producers equity redemptions and other cash flows. These funds have been made available at a time when the co-op owners are growing rapidly and in need of capital to finance this growth.

A third key metric is governance or control. The ownership of FCS most likely still includes substantial local co-op investment. As of November 2008, the board of directors still consisted of the same ten local co-op CEOs, and the CEO remains the same. Two additional directors were added to the board, FCS' CEO (but not as chairman of the board) and an outside financial expert. The nomination process for

new directors specified in the IPO is designed to keep the board relatively stable and composed of local co-op CEOs, at least for the next few years.

Conclusions

FCStone had overwhelming cooperative member-owner support to convert from a federated regional cooperative to an investor-oriented business. It first converted to a private corporation in 2005 and then converted to a public corporation in 2007. There were two primary objectives in the conversion. The first was to provide substantial financial benefits to its traditional customers, the agricultural cooperative patron-owner members, while maintaining or improving its risk management services. The second was to achieve the full potential of FCS as a risk management service provider to non-cooperative customers in a broad array of industries beyond agriculture and on a global scale.

Members strongly supported the conversion and have achieved substantial financial benefits while maintaining access to the risk management services as ongoing customers. FCS has gained access to substantial additional capital to finance its continued growth into non-member business sectors and regions.

The conversion to a publicly held company has provided significant new challenges to the co-op customer-owners and to the FCS leadership team of executives and board of directors. Co-op owners had to decide when and if to sell FCS stock based on their individual situation and expectation for future dividends and stock price levels. All co-op owners realized a gain of 17 times the book value on the mandatory redemption of the first 15 percent of their stock. With regards to the remaining 85 percent of stock, some chose to cash out as soon as possible while others chose to speculate by holding the stock. Those who immediately sold the remaining 85 percent in the secondary offering in August 2007 realized a gain of about 37 times the book value. Those who may have sold at the high point of the market in January 2008 realized a gain of about 58 times the book value. Those who may have sold at the low end of the market in November 2008 realized a gain of about 3.3 times the book value. However, the actual distribution of sales over this time period, August 2007 to November 2008, is unknown.

The board and management team have had to deal with the responsibilities, expectations, costs, and scrutiny of being a publicly held corporation. Stock prices have been volatile and declined to low levels at the end of 2008. Some shareholders are unhappy with the information provided by the company and the performance of the stock. Several lawsuits were filed against the company in July and August 2008 claiming violations of securities laws. It is not known whether any co-op owners are among the plaintiffs.

About the Authors

Listed alphabetically by surname

David Barton is a Professor and Extension Agricultural Economist in the Department of Agricultural Economics at Kansas State University. In addition, he is Director of the Arthur Capper Cooperative Center. He has conducted cooperative related research studies on financial performance, equity management, loss handling, governance and unification and has prepared several case studies on cooperative agribusinesses. Dr. Barton is frequently called upon to design educational programs, to prepare education materials and to make presentations on cooperative-related topics. High interest topics recently presented are on governance, finance, strategic thinking and business structure.

Michael Boland is a Professor of agricultural economics and Associate Director of the Arthur Capper Cooperative Center at Kansas State University. He received both his Ph.D. and Master's in agricultural economics from Purdue University. Among his numerous teaching awards, Dr. Boland received the 2008 National Association of Land Grant Universities USDA National Agriculture and Food Excellence in Teaching section award; the most prestigious college teaching award in the United States. The majority of Dr. Boland's work involves food and agribusiness firms where he has co-authored more than 60 case studies on agribusinesses.

Jennifer K. Bond is an Assistant Professor in the Department of Agricultural and Resource Economics at Colorado State University. As an applied agricultural economist, Dr. Bond's interests lie primarily in analyzing real-world data to determine ways that individual producers and groups can add value to their market offerings and organizations. Past projects include studies of cooperative governance, distributional effects of generic promotion, welfare impacts of marketing order programs, consumer demand for value-added food products, cooperative case studies, and agribusiness feasibility studies. Selected current projects include an investigation into spillover effects of generic promotion on differentiated products,

consumer demand for specialty produce, and use of cooperatives to coordinate marketing efforts of small and medium-size fresh and specialty produce growers.

Colin A. Carter is a Professor of Agricultural and Resource Economics and is Director of the Giannini Foundation of Agricultural Economics at the University of California–Davis. He obtained his PhD from the University of California–Berkeley in 1980. Dr. Carter's research interests include state trading in agriculture, futures markets, the economics of genetically modified foods, and China's internal grain economy and world market participation.

Paul D. Earl joined the Asper School of Business in 2003, after a 28 year career in the western Canadian grain industry, working for United Grain Growers, the Grain Transportation Agency, and the Western Canadian Wheat Growers Association. He became one of the founding members of the Department of Supply Chain Management in 2004.

In mid-career, he undertook doctoral studies at the University of Manitoba, completing his degree in 1992. His thesis was on the farm movement in western Canada from about 1918 to 1935, examining the formation of the three prairie Wheat Pools, and the Canadian Wheat Board, and the way the ideologies held by farmers shaped those institutions.

Murray Evan Fulton is a Professor in the Johnson-Shoyama Graduate School of Public Policy and a Fellow in Agricultural Co-operation with the Centre for the Study of Co-operatives, University of Saskatchewan.

Murray's research and teaching interests are focused in a number of areas, including industrial organization, agricultural and rural policy, co-operative theory, intellectual property rights, and regulatory compliance. He is the co-author of a number of books and reports, including Canadian Agricultural Policy and Prairie Agriculture and Co-operatives and Canadian Society. Dr. Fulton has also written many articles and papers on industrial organization, co-operatives and agricultural policy. He is interested in the changes that are occurring in agriculture and the response of organizations—including agricultural co-operatives—to these changes. He is the leader of a SSHRC Knowledge Impact in Society project designed to create a dialogue between university researchers and partners in agriculture and rural communities on the challenges facing the agricultural sector (see www.kis.usask.ca). His current research is focused on behavioural economics and its application to business strategy and public policy formation.

Roger Ginder is a Professor in the Economics Department at Iowa State University. He conducts research and outreach programs in agribusiness and cooperatives.His research includes Specialty Grains, Bio-Diesel, Equipment Cooperatives and Cooperative Finance. Outreach includes seminars for boards of farm supply, rural telephone, and regional cooperatives.

Dr. Ginder has served as Chairman of the Editorial Board of the Journal of Agricultural Cooperation. He served on the Land O'Lakes Corporate Board from 1997–2002. He is currently on the West Central Cooperative Board and is Chairman of the WCC Audit Committee.

Ellen W. Goddard holds the Cooperative Chair in Agricultural Marketing and Business at the University of Alberta. She came to Alberta from a position as National Australia Bank Professor of Agribusiness and Associate Dean, Coursework, at the Institute of Land and Food Resources, University of Melbourne. Prior to that Australian appointment Ellen Goddard worked in the Department of Agricultural Economics at the University of Guelph. Over the past 20 years Professor Goddard's current research includes various aspects of food marketing including consumer response to food safety incidents, consumer interest in labels, demand for credence attributes and certification. She also currently leads a national policy research network for Agriculture and Agri-food Canada in Consumer and Market Demand for Food and a major socio-economic research program examining the impact of BSE on Canada.

Getu Hailu is an Assistant Professor in the Department of Food, Agricultural and Resource Economics at the University of Guelph. Getu's research interests include agribusiness finance, productivity and efficiency, food policy and demand analysis, risk management, economics of co-operatives and alternative organizations.

Shermain D. Hardesty is an Extension Economist and Lecturer in the Department of Agricultural and Resource Economics, University of California–Davis, and also serves as Director of the University of California's Small Farm Program. She is responsible for research, education and outreach programs related to alternative food marketing systems, small farms and cooperatives. Prior to rejoining the University of California in 2002, Shermain was principal of a consulting firm, held positions as Director of Financial Planning and Senior Economist at a California rice marketing cooperative and served on the faculty at Michigan State University.

Himawan Hariyoga is the Director for Regional Autonomy at the National Development Planning Agency of the Republic of Indonesia (or Bappenas). He has a

PhD in Agricultural and Resource Economics from the University of California–Davis (2004).

Brian M. Henehan is a Senior Extension Associate with the Department of Applied Economics and Management in the College of Agriculture and Life Sciences at Cornell University, where his applied research focuses on agribusiness management, marketing and cooperative business administration. He serves as program leader for the Cooperative Enterprise Program and is responsible for developing and delivering an educational program for senior management, directors, members, and staff of cooperative businesses. He earned a Master's degree in Agricultural Economics from the University of Vermont where he conducted research on the factors for success in emerging cooperatives. He received his undergraduate degree from Boston College.

Rodney B. Holcomb is a Professor of Agricultural Economics and the Charles B. Browning Endowed Professor of Food Science at Oklahoma State University. His research interests are in value-added manufacturing and marketing. Dr. Holcomb's responsibilities include identifying economically feasible processing alternatives and business structures for adding value to agricultural commodities, along with determining the economic impacts of these activities. His value-added programs have received awards from commodity and industry groups, Oklahoma State University, and professional organizations. He has also received the USDA Plow Honor Award for Exceptional Service, the highest award given by the U.S. Secretary of Agriculture.

Brent Hueth is Director of the University of Wisconsin Center for Cooperatives and Associate Professor in the Department of Agricultural and Applied Economics. Professor Hueth received his Ph.D. in Agricultural and Natural Resource Economics from the University of Maryland, College Park. Prior to joining the University of Wisconsin, Brent spent two years at the University of California Berkeley as a Research Economist, and then eight years at Iowa State University as Associate Professor in the Department of Economics. His research and teaching focus on cooperative organizations and agricultural markets.

Phil Kenkel is a Professor in the Agricultural Economics Department at Oklahoma State University and holds the Bill Fitzwater Cooperative Chair. He teaches an undergraduate cooperative class, and manages cooperative internship and management trainee programs. Dr. Kenkel's recent research activities include feasibility assessment for value-added cooperative ventures, and the development of decision aids that enhance the performance of existing cooperative businesses. Dr. Kenkel

has developed numerous feasibility templates and publications for the Agricultural Market Resource Center. Dr. Kenkel has authored more than 200 research and extension publications, presented over 40 papers at professional meetings and conducted cooperative training sessions in 5 countries.

Kathy Larson has a BSA and MSc in Agricultural Economics from the University of Saskatchewan. Her graduate research was on the financial troubles that the Saskatchewan Wheat Pool faced during the late 1990s and early 21st Century. She has worked for the Canadian Wheat Board and the Western Beef Development Centre. Kathy has been the project coordinator for the Knowledge Impact in Society project since August 2006.

Philippe Marcoul is an Associate Professor in the Department of Rural Economy at The University of Alberta. He received his Ph.D. in Economics from the University of Toulouse, France. Prior to joining the University of Alberta, Philippe spent one year at the University of Southern California as a visiting assistant professor, and six years at Iowa Sate University as assistant professor. He is associate editor of the *Journal of Agricultural & Food Industrial Organization*. His research and teaching focuses on cooperative organizations and Industrial organization.

Greg J. McKee is Director of the Quentin Burdick Center for Cooperatives and Assistant Professor in the Department of Agribusiness and Applied Economics at North Dakota State University. His research and teaching focuses on how market participants coordinate in order to improve their welfare. Dr. McKee teaches a semester-length course on cooperative business management and a course in game theory and strategy for agribusiness management. His recent research has focused on determinants of profitability for North Dakota agricultural cooperatives and credit unions as well as authoring case studies about significant management decisions made by cooperatives headquartered in the Upper Great Plains.

Frayne Olson joined the Department of Agribusiness and Applied Economics at North Dakota State University in September of 2008. He specializes in crop marketing and risk management, with collaborative work in agribusiness management and farm management. Dr. Olson earned his PhD in Agricultural Economics at the University of Missouri in 2007. He worked in the Department of Economics at Iowa State University from January 2007 until August 2008, where he conducted outreach programs for marketing and farm supply cooperatives and agricultural producers. For seven years, starting in 1996, Dr. Olson was the Assistant Director for the Quentin Burdick Center for Cooperatives at North Dakota State University (NDSU). During this time he developed a series of executive training programs for

cooperative directors and management, assisted with research studying cooperative financial management strategies and taught a course in cooperative business management. From 1987 to 1996, he was a state level Farm Management Specialist with the NDSU Extension Service.

Todd M. Schmit is an Assistant Professor in the Department of Applied Economics and Management at Cornell University and Program Leader for the Cornell Program on Agribusiness and Economic Development. Dr. Schmit conducts research in the areas of agribusiness development and agricultural marketing, with current research activities focused on cooperative business structures, local and regional food systems development, and food manufacturing industry competitiveness. Common goals within these areas are to better understand the linkages between agribusiness firm performance, market structure, and agriculture-based industry development, and how various firm, spatial, and market factors can influence agricultural industry growth.

Richard J. Sexton is a Professor of Agricultural and Resource Economics at the University of California, Davis. His research focuses on a wide range of issues pertaining to agricultural markets, including the economics of cooperatives, issues of competition, and the impacts of market institutions.

Cooperatives are an enduring institution in the farm and food economy, yet events in recent years have raised questions about their continued relevance and viability. The last decade has witnessed several significant restructurings within the cooperative sector including conversions to, or purchase by, publicly traded firms, bankruptcy, and other significant ownership realignments. Are these isolated events or an on-going trend? What can be learned from the events that can be useful to other cooperatives?

Cooperative Conversions, Failures and Restructurings seeks answers to these questions through a series of thirteen research case studies on American and Canadian agricultural cooperatives. The case studies are the work of twenty-two researchers from across the United States and Canada with a keen interest in offering explanations as to why some agricultural cooperatives have failed while others have persevered and thrived through the various challenges that the agricultural industry has faced over the last decade.

Murray Fulton has been connected with the cooperative sector for many years, and has worked closely with some of Saskatchewan's largest agricultural cooperatives. He is a profesor in the Johnson-Shoyama Graduate School of Public Policy and is past Director of the Centre for the Study of Co-operatives, both at the University of Saskatchewan.

Brent Hueth is an associate professor in the Department of Agricultural and Applied Economics at the University of Wisconsin–Madison and is the current Director for the University of Wisconsin's Center for Cooperatives.

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