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Alternative Co-operative Structures for the Agri-food Sector: An Exploratory Study

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The Issue

In a context of internationalisation and concentration, bio-foods co-operatives often face problems of capital access and governance. According to Spear (2001), limited access to capital, management structure, governance conflicts, and the local, regional or national focus of co-operatives limit their expansion. Recent events in Canada, such as Agricore going public and Dairyworld being absorbed by a corporation, have reinforced this perception (Thibault and Dupuis, 2003). In this evolving competitive environment, the traditional co-operative model cannot thrive and succeed if static. New hybrid co-operative models are emerging, and an analysis of these models should contribute to an understanding of the trade-off between co-operative values and other attributes necessary for survival in an increasingly competitive environment.

Implications and Conclusions

Three non-traditional co-operative structures are discussed in this article. Co-op public limited companies (PLCs) can be quite successful in creating value for members and in solving capital access problems. The co-operative, which owns shares of the limited company, can still operate according to co-operative principles; it does however face the risk of being marginalized and acting more like a rent receiver than a co-op. The new generation co-op (NGC) is based on strong co-operative values but has a closed membership. Such a structure can be successful in maintaining co-operative values for members and at the same time can improve capital access through its member capital requirement. However, this structure often falls victim to its own success, resulting in the conversion of the NGC into a publicly owned company. Reasons for such a conversion include incentives for members to act like brokers, the aging of the membership and the difficulty in recruiting new members given the significant capital requirement combined with a governance structure that still has the shortcomings of traditional co-ops. The hybrid structure, as exemplified by the New Zealand dairy co-operative Fonterra, is an interesting mix of traditional, NGC and private company structures in terms of governance and capital. This type of structure is fairly new, and it seems to avoid the shortcomings of NGCs and co-op PLCs while improving capital access and governance. Canadian policy makers should pay attention to these evolving models and ensure that Canadian co-operative legislation is competitive with other countries and does not constrain the emergence of hybrid structures.

Background

The increasing concentration of food distributors, the internationalization of food markets and new entrants into domestic markets have increased the capital requirements of co-operatives and challenged their governance structure (Doyon, 2001). At the same time, in the wake of financial scandals, foreign acquisitions and rural area impoverishment, the need is greater than ever for stable structures, both regional and national in scope, that perform well economically and are oriented toward the users and toward the community.

This need demonstrates the appeal of co-operatives, which are more than profit maximizing entities. In this context, emerging co-operative models such as publicly limited companies, new generation co-operatives and hybrid models are analysed in terms of trade-offs between co-operative values or principles and profit maximizing performance. In particular, the focus of this article will be on their competitive performance, access to capital and governance.

Conceptual Framework

The relationship between the competitive environment and co-operatives can be explained by the competitive environment–strategy–structure matching framework illustrated in figure 1.

Organizational contingency theory suggests that strategy and structure should fit the environment and that firms have a reactive role. On the other hand, theories of strategic management present firms as pro-active, looking for the best fit between the competitive environment and the organisational structure (Westgren, 1994). The matching framework

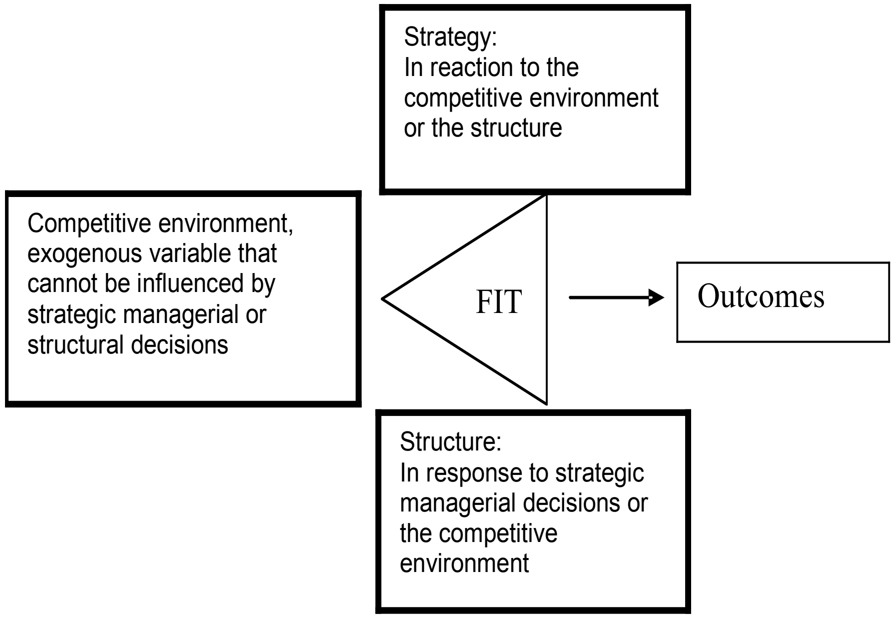

Figure 1 Relationship between the competitive environment, strategic management decisions and structure.

Source: Baltazar and Brooks, 2001; Daft, 1998; and Aaker, 1992

illustrated in figure 1 is derived from strategic management and organization theory literature and "views organization performance as a function of the match among the characteristics of the organization's environment, strategies and structures" (Baltazar and Brooks, 2001, 3). Supporters of this approach argue that the greater the fit, the greater the performance.

It appears that co-operatives have modified their structures and their selected strategies to respond to internal and external pressures, to facilitate access to capital, and to put themselves in a position that enables them to implement desired strategies. According to Van Bekkum et al. (1997) as cited by Thibault and Dupuis (2003):

> For the majority of current co-operatives, it is right to say that their current structure is not optimal given their commercial environment. However, it is difficult to assess what would be the optimal model. A best and universal co-operative model does not exist – it all depends on the specific conditions under which a co-operative operates. In fact, numerous ways to structure a co-operative exist.

Fulton and Gibbings (2000) have identified common structural characteristics for success including the following:

- regardless of size, successful co-operatives tend to deliver substantial and immediate advantages to their members;

- regardless of size, successful co-operatives tend to have a homogeneous membership.

In this article, the relationship among environment, strategy and structure of co-operatives is used to explore co-operative models in terms of trade-offs between co-operative principles[1] and the economic competitive imperative in relation to capital access and governance.

Analysis

Apart from the traditional marketing or input co-operative model, as defined by Goddard (2002), three general models have been identified for discussion purposes: the co-operative holding model, the new generation co-op and the hybrid model. The co-operative holding model is broadly defined as a participative organization (co-operative) that takes, in part or entirely, possession of a capital structure. This would cover the public limited company, where the co-operative owns publicly traded shares of its own assets, as well as traditional co-operatives that share ownership of assets with private companies.[2] The Kerry Group PLC is the co-operative used here to illustrate this model. The new generation co-op is characterized by a closed membership, significant capital contribution from members and the obligation to deliver according to the number of shares owned. Dakota Growers Pasta Company is the co-operative used to discuss this model. The hybrid model contains characteristics of both co-operatives and private or publicly held firms. Fonterra is the organization used to illustrate this model.

Public Limited Company Co-op

In the early 1980s, Irish dairy co-operatives were poorly capitalized; their small capital base had been eroded by years of high inflation and they had to rely on short-term borrowing. This borrowing resulted in little advantage for co-op members, the co-op being unable to deliver higher than average milk prices or significant patronage dividends (Pitts, 2001). Moreover, Garoyan (1991) suggested that Irish co-ops lacked adherence in practice to true co-operative principles while Harte (1994) argued that at the same time there was recognition of the limitation of co-operatives as an organisational form. It was in this context that Kerry Coop created Kerry Group PLC in 1986. Kerry Coop traded its assets for 90 million non-tradable shares (type B), while 60 million tradable type A shares were sold on the stock market. Thus, the co-op had a 60 percent ownership of the company. Moreover, type A shares were first offered at a reduced price to co-op members and staff.

One can argue that subsequent to this change of structure co-operative principles and values have been preserved. Kerry Coop is still organized as a traditional co-op with a usage link based on delivery of milk. Members have one co-op share for each 1,000 kg of milk delivered to the co-op and then sold to Kerry Group. The change of structure has solved the co-op's under-capitalization problem, as the organization receives dividends and capital gains from its ownership of Kerry Group. The dividends can be distributed to members as patronage dividends. In addition, the co-op is able to deliver substantial advantages to its members by offering a better than average milk price to its members (O'Connor and Thompson, 2001). In terms of governance, the Kerry Coop is still organized on the basis of one member, one vote, and the board of directors is democratically elected from among co-op members. The co-op board of directors is then entitled to a say on the board of directors of Kerry Group, given the co-op's significant share of Kerry Group's ownership. At the same time, Kerry Group has the governance structure of a publicly owned company, which, according to Abdill (2000), offers more flexibility and efficiency than a traditional co-op board of directors offers.

Kerry Group has been very successful, sales have increased from €268 million in 1982 to €3.7 billion in 2003. The company has a presence in 120 countries and employs 20,000 people. Shares were initially released in 1986 at €0.66, and in May 2004 they traded at €16.25. The Kerry Group has always paid dividends to stockholders.

Although the Kerry Group was initially a dairy co-operative, dairy products today represent only 10 percent of the company's revenues. Pressure to increase access to capital has led Kerry Coop to reduce its share in Kerry Group over the years. In 2003, Kerry Coop's share of Kerry Group was 31 percent, down from 60 percent in 1986. However, it is estimated that today dairy farmers own roughly 20 percent of type A shares. Events have also shown that conflict can occur in more difficult times, such as when shares on the stock market do not perform well. According to Pitts (2001), institutional shareholders could see that the necessity to maintain a relatively high milk price paid to co-op farmers was the predominant reason for the lack of profitability of their company. This conflict is reduced where milk suppliers have subscribed extra capital and themselves benefit from increased prices. At present, Kerry Group does not have this problem since milk processing is a relatively unimportant part of its total operations and high milk prices can be subsidised from their other operations.

Kerry Coop's capital access problem has been solved and governance has improved with the co-op board of directors also having a say on the company board of directors. Co-operative values such as services to members, usage link and one member, one vote have also been preserved. However, one might question the soul of the co-operative, which might appear to be more like a rent receiver than an active co-op. The co-op PLC model appears to be an interesting solution in cases where, in the words of Garoyan (1991, 1293), "there is a lack of adherence in practice to true co-operative principles", or, as mentioned by Fulton and Gibbings (2000), the co-operative does not deliver substantial and immediate advantages to its members.

New Generation Co-op

Dakota Growers Pasta is a new generation co-op (NGC). The differences between a NGC and a traditional co-op are closed membership, the requirement of a large capital contribution for entrance and a strong obligation to supply (use) predetermined quantities of products (services). As with traditional co-operatives, the one member, one vote rule applies, as well as the rule on election and composition of the board of directors. NGCs are usually marketing co-ops with strong processing components.

At the end of the 1980s, the economic future for North Dakota durum wheat producers was not bright. Prices were below cost of production, most of the wheat was being processed out of state and unemployment was running high in rural areas. It was in this environment that the NGC Dakota Growers Pasta Company (DGPC) was created (Boland and Barton, 2002). The business plan was for a processing plant of three million bushels capacity, with 35 percent of the necessary equity for the project being raised among roughly 1,000 producers.

Each $3.85 invested by producers gave them a delivery share, which is an obligation to supply one bushel of No. 1 hard amber U.S. durum wheat per year. Shares can be negotiated in private, but the transaction requires the approval of the board of directors. The number of delivery shares sold is equal to the processing capacity of the co-op. Moreover, to become a member of the co-op, one has to buy a voting share for $125. One member can only have one voting share, as the shares are neither tradable nor refundable.

Demand for DGPC products grew, so the co-operative expanded its membership and the number of delivery shares in 1996 as well as in 1999. In 1999, current members could buy delivery shares for $7.50 while new members paid $11.

DGPC was successful and well capitalized and respected the co-operative identity regarding the usage link, patronage dividend based on delivery shares, and one member, one vote; as well, the co-operative was able to deliver substantial and immediate advantages to its members. Members received a higher than average price for their wheat, received patronage dividends, saw an increase in the value of their delivery shares and benefited from technical services for wheat production. The co-op also became an important employer for the rural community of Carrington, ND and helped the community to prosper during a time period when most rural communities in Dakota were facing financial hardships.

However, at the end of the 1990s, the pasta market changed drastically. DGPC at that time was the third largest pasta processor in North America following its acquisition of Prima Piatta Inc. in 1998. New market entrants, including some multinational firms, created an oversupply, and prices were reduced by 20 percent from 1998 to 2003, while the price of durum wheat increased by 23 percent over the same period. Concurrently, the demand for pasta in the United States was greatly reduced due to popular low-carbohydrate regimes such as the Atkins diet.

In such a context, it appeared that research and innovations to develop value-added products (such as tasty low-carbohydrate pasta), which would have required significant capital expenditures, was the only route for DGPC. However, it appeared that members were not willing to reinvest massively in the co-op for the following reasons:

- numerous producers had trouble meeting the quality required for delivery shares because of wheat scab disease and bad weather, forcing them to buy wheat elsewhere, thus greatly reducing their profits;
- the co-op did not pay patronage dividends in 2001 and 2002; and
- agriculture revenues were low in general.

Based on these factors, the members voted in May 2003 to convert the co-op into a publicly traded company.[3] The reasons given for the conversion were the significant need for capital and the co-operative structure, which was not judged flexible enough to allow for timely strategic management decisions. According to Hazen (chief executive of the U.S. Co-operative Business Association), other reasons were also at work, such as the desire from members and management to unlock important intangible values, including values associated with brand name. Also important was the fact that hundreds of members were no longer wheat producers and were acting like brokers, buying from durum farmers and reselling to the co-op at profit. This behaviour created heterogeneity among the co-op membership, which, as pointed out by Fulton and Gibbings (2000), can lead to problems for a co-op since broker members do not share the same needs and values as the producer members. Moreover, numerous members were approaching retirement, meaning that new buyers willing to accept the delivery obligation would need to be found.

The NGC format reflects all the traditional co-op values and principles except for open membership. NGCs have better access to capital than traditional co-ops, given the significant capital required of members, and are generally successful in creating substantial and immediate advantages for their members. However, the NGC formula does not offer advantages in terms of governance, and the close membership link and the delivery obligation can create long-term problems. The obligation can encourage members to adopt broker-type behaviour, making the transition from one generation of farmers to another difficult and creating an incentive to convert the co-op into a publicly traded company, as illustrated by DGPC.

Hybrid Model

Following external pressures from World Trade Organisation partners regarding state trading enterprises such as the New Zealand Dairy Board (NZDB) as well as internal pressures such as inter-co-operative competition, in 2001 the NZDB was dismantled and the major New Zealand dairy co-operatives merged to create Fonterra. The co-operative Fonterra processes 98 percent of New Zealand milk, has a presence in 140 countries and accounts for roughly 7 percent of New Zealand's GDP. In terms of capital structure and governance, this co-op has characteristics that make it a blend of co-operative and private company.

At the governance level, for polls or postal ballots, Fonterra's members have one vote for each 1,000 kg of milk of milk solids delivered.[4] This is a departure from the one member, one vote rule and is similar to the voting rules of publicly owned companies.

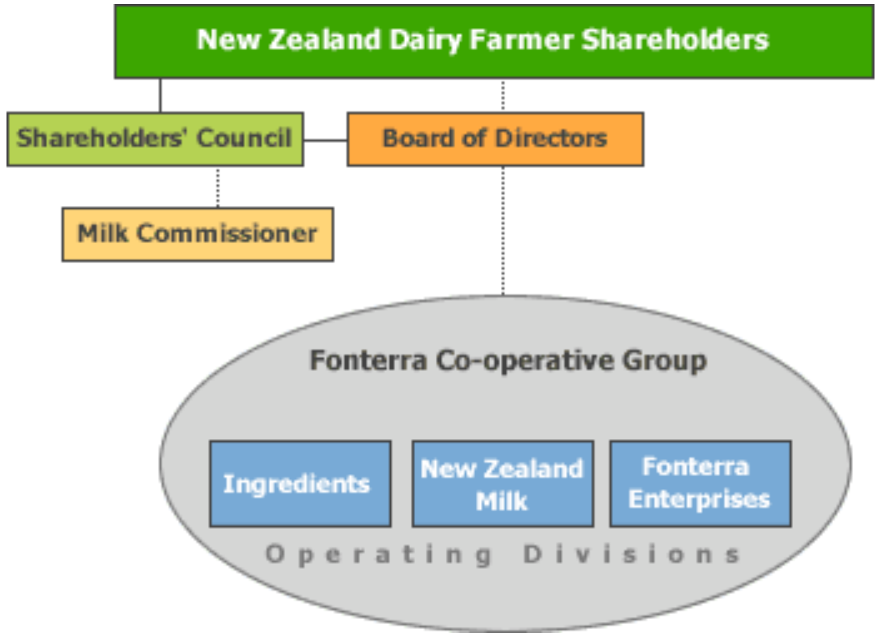

Figure 2 Governance structure of Fonterra.
Source: www.Fonterra.com

However, votes during meetings follow the one member, one vote rule. The board of directors consists of nine elected members, according to co-operative principles, but also includes four external members nominated by the board of directors. The external members might help mitigate some of the criticism of co-op boards of directors with respect to their lack of business management knowledge relative to similarly sized private or publicly own companies (Abdill, 2000). The governance structure of Fonterra (figure 2) also includes a shareholders council that is made up of elected members and acts as a watchdog to ensure that the board of directors respects the co-operative nature of Fonterra. In addition, a milk commissioner acts as a referee in the case of a dispute between Fonterra and its members.

The capital structure of Fonterra shares similarities with the NGC model. Members need to buy co-operative shares for each kilogram of milk solid delivered. Shares are sold at their "fair value", which is estimated each year by Standard & Poor's. The share value reflects the co-op market value, which in 2003/2004 equalled NZ$4.38 per share. As opposed to having delivery shares, which in an NGC contribute to the capital needed by the co-op, Fonterra's membership is open and share-owners must be dairy producers.

Another interesting feature is the use of capital notes; this feature limits, and helps with planning of, capital outflow from the co-op. When members retire or quit production, Fonterra can choose to pay them in capital notes carrying, in 2002, a 7.48 percent interest rate.[5] The member can then either choose to keep the notes and recover the capital at expiration, or to cash them in immediately on the bond market. In either case, Fonterra has to pay the capital only at the expiration date of the note.[6] Finally, Fonterra can release redeemable preference shares, which are basically capital notes carrying a higher interest rate, and which are directly accessible to non–co-op members. This financial tool allows the co-op to improve access to capital, although to date no such non-voting shares have been released.

The Fonterra co-operative model is interesting, since it borrows from the NGC model, the private sector model and traditional co-operative structures, making it a unique hybrid model whose performance will need to be evaluated over the long term.

References

Aaker, D. A. 1992. *Strategic market management.* 3rd ed. New York: John Wiley & Sons.

Abdill, P. 2000. *Evaluation of agri-food enterprises: Moody's point of view*. In Actes de colloque, les outils financiers au service du future, Centre de référence en agriculture et agroalimentaire du Québec, September.

Baltazar, R., and M. R. Brooks. 2001. *The governance of port devolution:A tale of two countries.* Researh report, University of Dalhousie, Halifax, Nova Scotia.

Boland, M., and D. Barton. 2002. *Dakota Growers Pasta: Vertical integration in durum wheat and the pasta manufacturing industry*. Kansas State University, Department of Agricultural Economics, Arthur Capper Co-operative Center Case Study Series No. 02-01, August.

Daft, R. L. 1998. *Organization theory and design.* 3rd ed. New York: West Publishing Co.

Dakota Growers. http://www.dakotagrowers.com/

Doyon, M. 2001. Structural change in the Canadian dairy industry and implications for the co-operatives. *International Dairy Federation Bulletin* 360/2001: 56-64.

Fonterra. 2003. Co-operative Group Limited Investment Statement relating to an offer of Co-operative Shares, Peak Notes, Supply Redemption Rights, Capital Notes and Redeemable Preference Shares. February. http://www.fonterra.com/pdfs/Investment_Statement_17_02_2004.pdf)

Fulton, M., and J. Gibbings. 2000. *Canadian agricultural co-operatives: Critical success factors in the 21st Century*. Prepared for Canadian Co-operative Association and le Conseil Canadien de la Coopération, October.

Garoyan, L. 1991. Review of dairy co-op issues in Ireland. *American Journal of Agricultural Economics* 73(4): 1292-1293.

Goddard, H. 2002. Factors underlying the evolution of farm-related co-operatives in Alberta. *Canadian Journal of Agricultural Economics* 50(4): 473-495

Harte, L. N. 1994. *Perspectives on the emergence of the co-op Plcs in the Irish dairy industry*. Proceedings, Agricultural Economic Society, 1-19.

O'Connor J., and G. Thompson. 2001. *International trends in the structure of agricultural co-operatives*. Report for the Rural Industries Research and Development Corporation (RIRDC), RIRDC Publication No 01/06, January.

Pitts, E. 2001. Structural change in the Irish dairy industry: Growth in scale, new methods of financing and internationalisation. *International Dairy Federation Bulletin* 360/2001: 65-70

Spear, R. 2001. Globalisation et stratégies des co-operatives. In *Les Holdings coopératifs, Évolution ou transformation définitive?* De Boeck University, p.115-138.

Thibault, A., and R. Dupuis. 2003. *Structures coopératives alternatives de l'industrie bioalimentaire: Une analyse préliminaire.* International Biofoods Institute, Research Report, Montreal.

Van Bekkum, O.-F. et al. 1997. *L'Évolution des coopératives agricoles dans l'Union européenne, tendances et questions-clés à l'aube du 21ième siècle*. The Netherlands Institute for Co-operative Entrepreneurship (NICE).

Westgren, R. E. 1994. Reconfiguration of the Coopérative Fédérée de Québec for new strategic directions. In *Competitive strategy analysis for agricultural marketing co-operatives*. Westview Press.

Endnotes

[1] The three important differences between co-operatives and other types of businesses are 1) the orientation toward services to members rather than profit maximization; 2) surpluses are shared according to usage links rather than according to capital ownership; and 3) one member, one vote rule, with the board of directors democratically elected among members. Seven co-operative principles also exist. This analysis will however focus only on the first of these, open membership.

[2] An example not discussed would be the Coopérative Fédérée de Québec, which shares ownership of Olymel with the Société Générale de Financement.

[3] Shares are currently exchanged through two private brokers. The process that will enable the company to be listed on the stock exchange has not yet been completed.

[4] The shareholders council can call a poll for reasons such as election of a councillor to represent a ward (geographical area within NZ), election of a director, removal of a director, or election of the six shareholders members of the directors' remuneration committee.

[5] If a producer reduces production but does not retire, he or she can choose to receive either capital notes or supply-redemption rights. The latter can be exchanged anytime on a one-for-one basis for co-operative shares, even if their price has increased. The supply-redemption right targets temporary supply-reduction situations.

[6] In Canada, poor planning of capital outflow from retiring members contributed to capital problems at the time of the Saskatchewan Wheat Pool's transformation into a co-op PLC.