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

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Lilydale Co-operative Ltd was one of Canada's largest and most geographically diversified co-operative poultry processors. In 2005, Lilydale voted to end its 65-year existence as a cooperative and converted to an investor-owned firm (Lilydale Inc.). The motivations for Lilydale's organizational change are examined focusing on access to capital and using the sustainable growth model as the framework. For sustainable growth, a balance is required between increased actual sales and changes in financial management measures. For much of its history, Lilydale's actual sales growth rate exceeded its sustainable growth rate. The firm may have been making financial decisions without considering all financial commitments, including increasing requirements to distribute equity to retiring members. Long-term debt was very high during the ten years prior to the decision to restructure the cooperative. Although the time period is short, since conversion Lilydale has had more reasonable growth rates.

Introduction

Over the past ten years, Lilydale Co-operative Limited (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.

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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-sourced 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 Lily-

dale 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 conversion; 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 rate⁴ is:

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

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 (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.

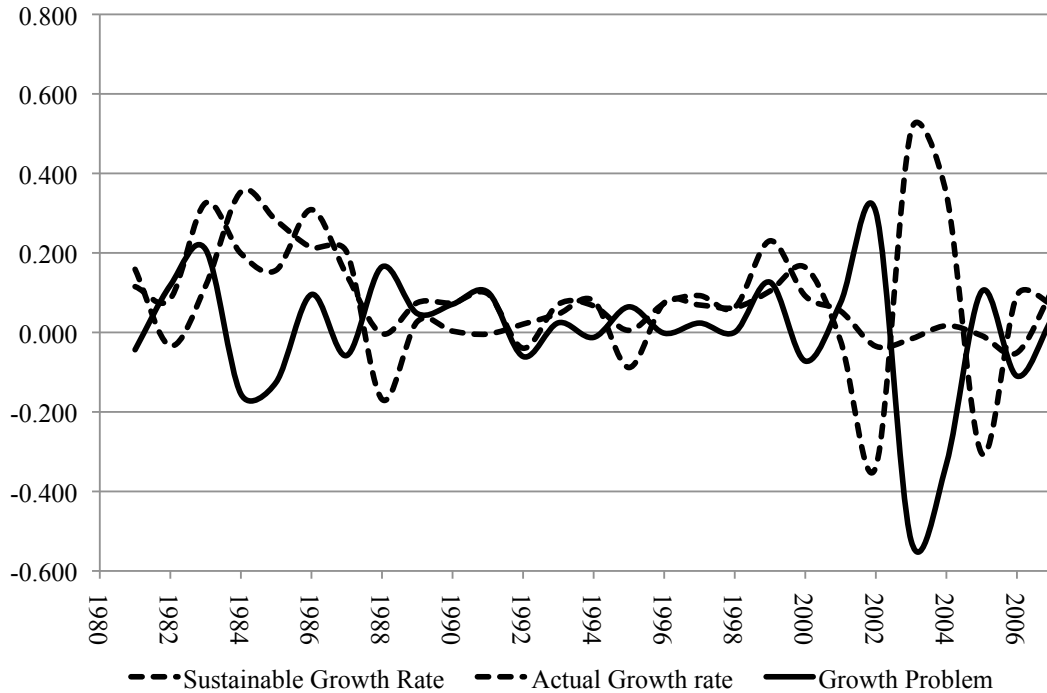
Selling new equity is not an option that a traditional cooperative organization may consider without first changing/modifying its organizational structure. In the case of cooperatives, members may decide to stop patronizing and redeem their equity capital, and instead patronize other cooperatives or 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 cooperatives 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 (increase), or financial leverage must be reduced (increased).

Figure 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.

Figure 1. Sustainable growth rate, actual sales growth rate, and sustainable growth problem for Lilydale (1980–2007)



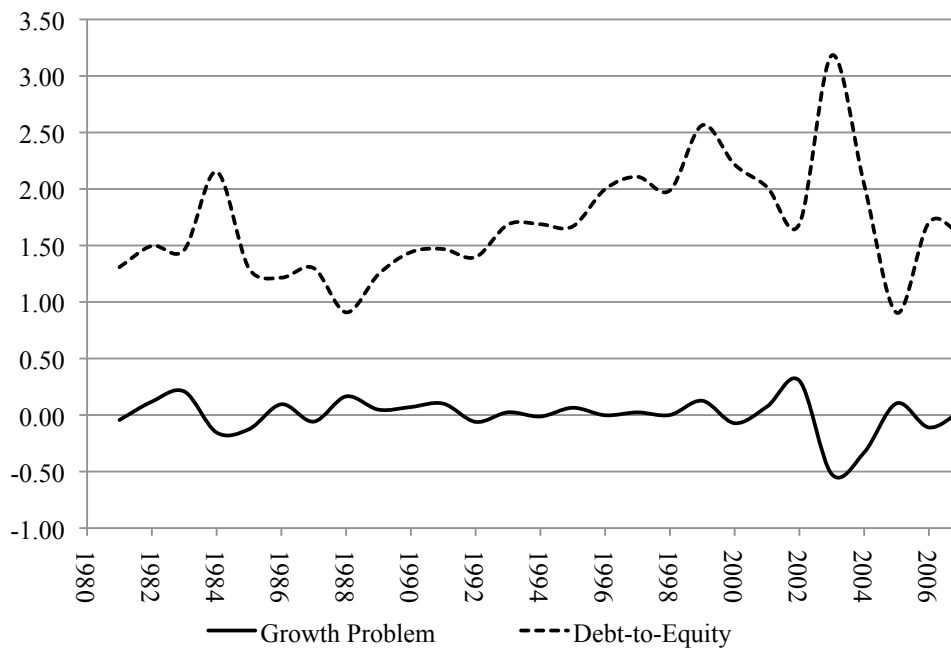
Specifically, Lilydale faced a significant fluctuation in its growth problem. For example, in 2000 its sustainable growth rate was higher than its actual growth rate by about 7.2 percent. That was the year that Lilydale made equity redemptions of C\$1.6 million, paid down its long-term debt by C\$7.0 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 ulti-

mately increased its sustainable growth rate relative to its actual growth rate, and resulted in a negative growth problem.

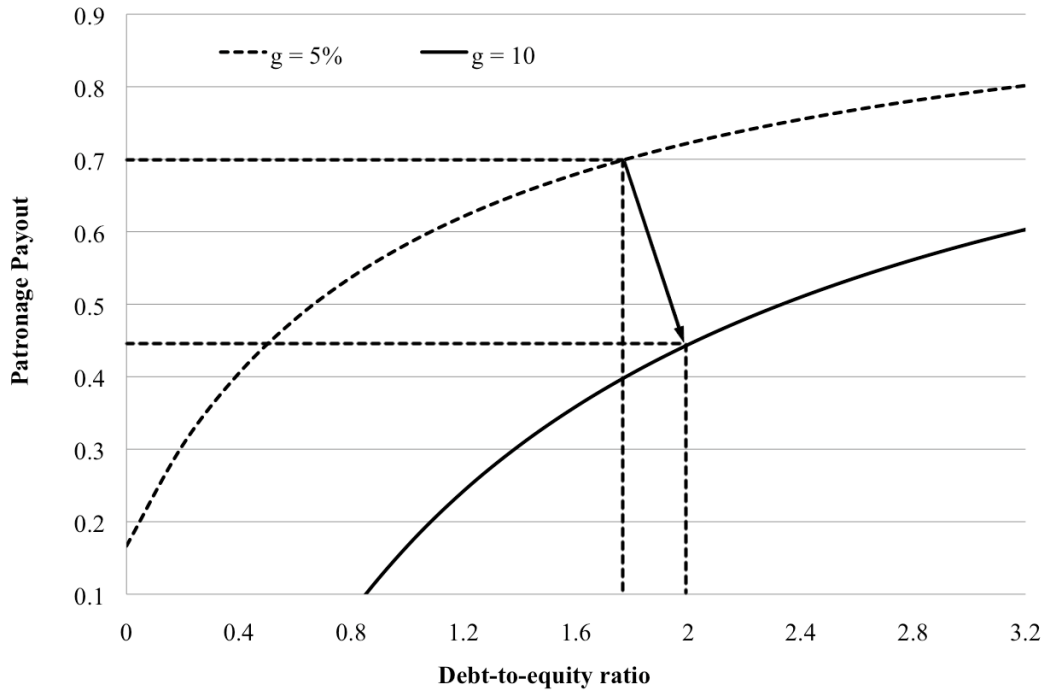
Borrowing has been one the major strategies adopted by Lilydale to finance its target growth rate. Figure 2 shows the debt-to-equity ratio and the growth problem. The growth problem and the debt-to-equity ratio are negatively correlated (correlation coefficient of -0.47). As leverage increases the sustainable growth rate also increases, resulting in a negative growth problem.

Figure 2. Trends in sustainable growth problems and debt-to-equity ratios for Lilydale (1980–2007)



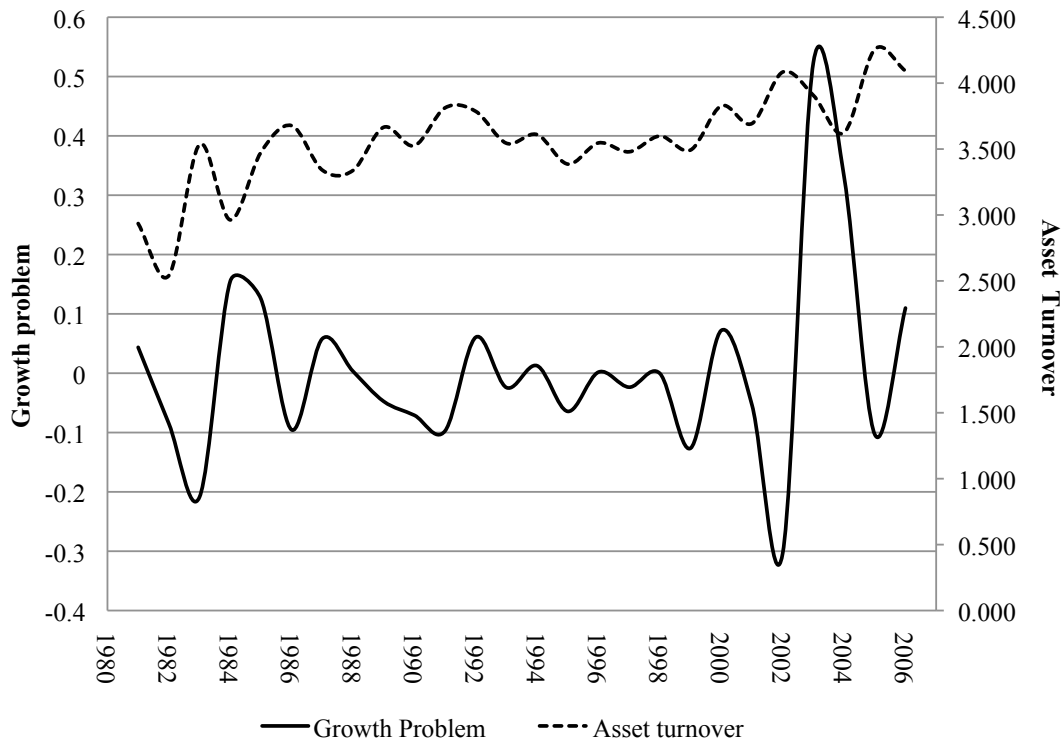
When faced with an excess growth problem, the board/management may decide to cut the patronage payout ratio and/or increase the financial leverage until $g_a = g_{s,max}$. Figure 3 shows the values of the patronage payout ratio and debt-to-equity ratio that are consistent with sustainable growth rates 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 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

Figure 3. Patronage payout ratio and debt-to-equity ratio consistent with sustainable growth rate of 5 percent and 10 percent



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 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 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

Figure 4. Trends in sustainable growth problems and asset turnover for Lilydale (1980–2007)

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 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.

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 cooperative (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 divestiture 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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