# Financial performance and efficiency of consumer co-operatives and limited companies - agency theoretical approach

Pasi Syrjä (corresponding author)

main rule is that the surplus of the co-operative may not be distributed directly in money among the members, the Finnish Co-operative Act allows any surplus to be distributed to the members only if so stipulated in the rules of

they are supposed to mediate to management" (Tuominen et al. 2009, p. 29). In these cases growth through investments may become emphasized at the expense of refunding the membership.

In sum, due the various reasons presented above it seems that for co-operatives "the agents (managers) have more freedom of action than in conventional enterprises and will not be under pressure to perform according to member interests" (Spear 2004, p. 49). Therefore it is interesting to analyse whether there are differences between the financial performance and efficiency of co-operatives and limited companies in order to ascertain whether the co-operative actually operates as it

Table 1 –Descriptive statistics

| Variables | Mean | Std dev | Min | Max | Median |
|---|---|---|---|---|---|
| [illegible] | | | | | |
| sales of 2009 (million Euros) | 25.2 | 9.3 | 15.4 | 48.9 | 21.5 |
| sales of 2008 (million Euros) | 25.0 | 10.6 | 14.3 | 58.3 | 21.5 |
| total assets of 2009 | 6.1 | 4.0 | [illegible] | | |

Table 2 reflects correlations based on the financial statement measures of 2009. The correlations in Table 2 show that sales is statistically significantly positively related to the measures total assets / sales and personnel expenses / sales

## Analysing Differences Between Co-Operatives And Limited Companies

The descriptive information is shown separately for regional co-operatives and limited companies in Table 3. An independent-samples T-test was applied to test for differences between these two groups.

Table 3 – Differences between co-operatives and limited companies

| Financial statement information of co-operatives and limited companies | Co-operatives | Limited companies | t-values |
|---|---|---|---|
| [illegible] | | | |
| mean | 53.7 | 23.5 | 11.25*** |
| std. dev. | 9.1 | 9.7 | |
| [illegible] | | | |
| mean | 50.2 | 23.6 | 9.84*** |
| std. dev. | 7.8 | 10.6 | |
| 2A) Cash and receivables / total assets of 2009 (%) | | | |
| mean | 15.9 | 40.6 | -6.66*** |
| std. dev. | 7.7 | 16.0 | |
| [illegible] | | | |
| | 17.1 | 40.3 | -7.26*** |
| mean | 8.2 | 13.1 | |
| std. dev. | | | |
| [illegible] | | | |
| | 55.4 | 55.2 | .039 |
| mean | 17.1 | 20.7 | |
| std. dev. | | | |
| [illegible] | | | |
| | 56.2 | 49.7 | 1.20 |
| mean | 17.1 | 20.5 | |
| std. dev. | | | |
| [illegible] | | | |
| | 80.2 | 95.7 | -3.12*** |
| mean | 15.5 | 18.8 | |
| std. dev. | | | |
| [illegible] | | | |
| | 80.1 | 95.6 | -3.11*** |
| mean | 15.4 | 18.8 | |
| std. dev. | | | |

| | | | |
|---|---|---|---|
| [illegible] | | | |
| mean | 1.6 | 8.2 | -5.33*** |
| std. dev. | 1.7 | 5.6 | |
| [illegible] | | | |
| mean | 1.7 | 14.4 | -2.72*** |
| std. dev. | 1.5 | 21.8 | |
| [illegible] | | | |
| mean | 1.3 | 7.8 | -5.60*** |
| std. dev. | 1.4 | 5.3 | |
| [illegible] | | | |
| mean | 1.3 | 13.4 | -2.77*** |
| std. dev. | 1.3 | 20.4 | |
| 7A) Profit margin of 2009 (%) | | | |
| mean | 3.3 | 3.8 | -.71 |
| std. dev. | 1.1 | 3.5 | |
| [illegible] | | | |
| mean | 3.8 | 3.4 | .15 |
| std. dev. | 3.5 | 3.6 | |
| [illegible] | | | |
| mean | | | |
| std. dev. | | | |

the value of the company or derive benefits by raising the value of the company in the same way as it is possible in limited companies overall and especially in owner-managed companies. An interesting finding is that even though variables 9A and 9B differ statistically significantly, variables 7A and 7B do not differ between co-operatives and limited companies. This result may indicate that the S-group (and regional co-operatives), as a large actor and purchaser, gets greater discounts from suppliers and that its supply chain works efficiently. But they lose this cost benefit due to higher personnel expenses and therefore profit margins in co-operatives and limited companies are equal.

Variables 3A,B and 8A,B do not differ statistically significantly. This result may indicate that the management in co-operatives and in limited companies are equally ready to take risks and finance investments also with debt.

Variables 5A,B and 6A,B differ statistically significantly between co-operatives and limited companies. This difference is logical: according to the Co-operative Act the primary task of the co-operatives is to produce services for its members whereas the primary task of the limited companies is to maximize their owners' wealth, and one way to execute this task is to distribute dividends to owners.

Between co-operatives and limited companies

Table 4 – Linear regression results, measure dividends or distributed surplus / profit for financial year of 2009 (%) as dependent variable

| Model fit | All firms | Co-operatives | Limited companies |
|---|---|---|---|
| N | 50 | 22 | 28 |
| R square | .248 | .058 | .254 |
| F | 2.766** | .172 | 1.501 |
| **Model estimates** | b (std.err.) | b (std.err.) | b (std.err.) |
| Constant | -17.557 (15.133) | 4.267 (26.897) | 4.069 (23.673) |
| Cash and receivables / total assets (%) | .157 (.185) | -.178 (.681) | -.178 (.288) |
| Profit margin (%) | 2.444** (1.158 | .955 (6.106) | 2.584* (1.279) |
| Shareholders´ equity / total liabilities (%) | -.860 (1.025) | .572 (1.823) | -.623 (1.450) |
| Equity ratio (%) | .983 (1.066) | -.454 (2.033 | .892 (1.478) |
| Total earnings / shareholders equity (%) | .256 (.188) | .066 (.304) | .125 (.267) |

*** p< 0.01, ** p< 0.05, *p<.10, b: estimated regression coefficient

Table 5 – Linear regression results, measure dividends or distributed surplus / profit for financial year of 2008 (%) as dependent variable

| Model fit | All firms | Co-operatives | Limited companies |
|---|---|---|---|
| N | 50 | 22 | 28 |
| R square | .317 | .237 | .225 |
| F | 3.523*** | .872 | 1.043 |
| Model estimates | B (STD.ERR.) | B (STD.ERR.) | B (STD.ERR.) |
| Constant | -17.103 (23.533) | -9.307 (17.127) | 14.193 (45.590) |
| Cash and receivables / total assets (%) | .565* (.318) | .048 (.376) | -.028 (.652) |

(Cont.)

| | | | |
|---|---|---|---|
| Profit margin (%) | 4.497** (1.727) | 3.093 (3.167) | 4.484* (2.461) |
| Shareholders´ equity / total liabilities (%) | .198 (1.913) | .307 (1.049) | .261 (4.471) |
| Equity ratio (%) | -.589 (2.003) | -.168 (1.190) | -.687 (4.621) |
| Total earnings / shareholders equity (%) | .406 (276) | .028 (.193) | .400 (.505) |

*** p< 0.01, ** p< 0.05, *p<.10, b: estimated regression coefficient

Tables 4 and 5 show the effects of our financial performance measures on the percentage of by their owners' (members') demands. Nevertheless, even though the quality and range of services provided may create debate and conflict among members (Tuominen et al., 2009) and it may be justifiable for the co-operatives to expand their businesses within their operating regions in terms of securing the services (Jussila et al., 2007), in our view a careful consideration should be made in order to ensure a proper balance between that kind of operation and the creation of consumer surplus.

Tuominen et al. (2009) stated that markets do indeed control consumer co-operatives through owners' behaviours as customers. However, it seems that in Finland the markets are not truly competitive because the market share of S-Group and its largest competitor (K-Group) in 2009 was almost 80 per cent. Such a market situation is closer to duopolistic markets than truly competitive markets and in that case, market control via members' buying behaviour is significantly impeded. Thus, if co-operatives promote their members advantage in the best possible way, co-operatives should ensure that they also provide "the best deal" for their members in markets which are not truly competitive.

In many co-operatives members are satisfied with the nature of the member benefits they receive. But at the same time members should also remember that they have the right as members of co-operatives to influence the decision-making of management. This means that members have the power affect how the management of co-operatives use assets and at how high a level the return of assets will be. This increased power of members is one of the most important ways to reduce agency costs and opportunistic behaviour by management. Thus we suggest that in the future co-operatives should concentrate on making their membership democracy more effective.

To conclude, we believe that our study has provided implications for the governance and management of co-operatives and limited companies and also for policy-makers. However, the study also has some limitations. For example, the sample of our study was quite small and only from one country. Thus, in the future it would be interesting and fruitful to investigate agency costs and financial efficiency to compare different types of co-operatives as well as co-operatives operating in different countries■

## References

Fairbairn, B., Bold, J., Fulton, M., Hammond-Ketilson, L. & Ish, D. (1991) Co-operatives and Community Development: Economics in Social Perspective. Centre for the study of co-operatives, University of Saskatchewan

Hirschman, A. (1970) Exit, Voice and Loyalty. Responses to Decline in Firms, Organizations and States. Cambridge, Massachusetts and London: Harvard University Press.

Abbasi, M. Z. (2009) Legal analysis of Agency Theory: an inquiry into the nature of corporation. International Journal of Law and Management, 51(6): 401-420.

Ang, J. S., Cole, R. A. & Lin, J. W. (2000) Agency costs and ownership structure. The Journal of Finance, 55(1): 81-106.

Borgen, S. (2004) Rethinking incentive problems in cooperative organizations. Journal of Socio-Economics, 33: 383-393.

Byrd, J., Parrino, R. & Pritsch, G. (1998) Stockholder-manager conflicts and firm value. Financial Analysts Journal, 54(3): 14-30.

Chen, C. R. & Steiner, T. L. (1999) Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. The Financial Review, 34(1): 119-136.

Cornforth, C. (2004) The governance of cooperatives and mutual associations: A paradox perspective. Annals of Public and Cooperative Economics, 75(1): 11-32.

Davis, P. (2001) The governance of co-operatives under competitive conditions: Issues, processes and culture. Corporate governance, 1(4): 28-39.

Fulton, M. (1999) Cooperatives and member commitment. The Finnish Journal of Business Economics, 4: 418-437.

Jussila, I., Saksa, J-M. & Tienari, J. (2007) Dynamics and tension in governance: evidence from Finnish co-operatives. International Journal of Co-operative Management, 3(2): 29-39.

Jussila, I., Kotonen, U. & Tuominen, P. (2007) Customer-owned firms and the concept of regional responsibility: Qualitative evidence from Finnish co-operatives. Social Responsibility Journal, 3(3): 35-43.

Easterbrook, F. H. (1984) Two agency-cost explanations of dividends. American Economic Review, 74(4): 650-659.

Eisenhardt, K. M. (1989) Agency theory: an assessment and review". Academy of Management Review, 14(1): 57-74.

Hansmann, H. (1999) Cooperative firms in theory and practice. The Finnish Journal of Business Economics, 4: 387-403.

Jensen, M., J. & Meckling, W., H. (1976) Theory of the Firm: managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4): 305-360.

Jussila, I., Tuominen, P. & Saksa, J-M. (2008) Following a different mission: where and how do consumer co-operatives compete. Journal of Co-operative Studies, 41(3): 28-39.

Rozeff, M. S. (1982) Growth, beta and agency costs as determinants of dividend payout ratios. The Journal of Financial Research, 5(3): 249-259.

Ruiz-Porras, A. & López-Mateo, C. (2011) The separation of ownership and control and investment decisions in Mexican manufacturing firms. International Business Research, 4(1): 51-61.

Saxena, S., & Craig, J. (1990) Consumer co-operatives in a changing world: A research review. Annals of Public and Cooperative Economics, 61: 489-517.

Spear, R. (2004) Governance in democratic member-based organisations. Annals of Public and Cooperative Economics, 71(1): 33-59.

Tuominen, P., Jussila, I., & Kojonen, S. (2009) Overcoming challenges to governance of consumer co-operation: Analysing reports of key representatives. International Journal of Co-operative Management, 4(2): 22-35.

Neto, B., Barroso, S. Marcelo, F. G. & Rezende, A. M. (2010) Co-operative governance and management systems: an agency costs theoretical approach. Available at SSRN: http://ssrn.com/abstract=1599208.

www.s-kanava.net: accessed June 9th 2011