

Members' Readership of Annual Reports - a Cross-National Comparison of Supply Co-operatives

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This study investigates differences between supply co-operatives' memberships as concerns readership of the annual reports. Two co-operatives are examined: Ravensdown, New Zealand, and Lantmännen, Sweden. As Lantmännen is larger, has integrated far downstream, and has a sizeable unallocated equity, it is expected that Lantmännen members are less involved than Ravensdown members. A postal survey was conducted among Lantmännen members, while information about Ravensdown was obtained from a secondary source. The results indicate that Lantmännen members read the annual report less than the Ravensdown members, express more ignorance when explaining their low readership, and consider annual reports to be less important.

Introduction

The attributes of co-operative firms have in previously studies been shown to be important for the way co-operatives work and the way members behave (see for example Kyriakopoulos, 2000; van Bekkum, 2001; Nilsson and Ohlsson, 2007). The focus here is on a specific type of member behaviour, namely members' readership of their co-operative's annual report. It is expected that the members' reading of the annual reports is affected by the co-operative's ownership structure, ie whether the ownership is highly collectivist or more individualised.

This supposition is analysed through a comparison between memberships in two supply co-operatives, one in Sweden and the other one in New Zealand. The Swedish data are collected for the purpose of this study while the New Zealand data originate from an earlier study (Shanahan et al, 2007). The analyses show some differences between the two memberships' reading of the annual reports, which may depend on differing ownership structure – though also other explanations may be imaginable.

The article is structured as follows. The next section presents earlier empirical studies about the readership of firms' annual reports, both shareholders in investor-owned firms and members of co-operative societies. On this basis the aim of the study is stated in the subsequent section, which also presents the theoretical framework and four propositions. After the methodological issues concerning the empirical study have been presented, a section about the empirical results follows. The last section presents some conclusions.

Earlier Studies about Readership of Annual Reports

Annual report readership among investor-owned firms' shareholders

Since Lee and Tweedie (1975a; 1975b; 1977) in their pioneering study investigated shareholders' reading of firms' annual reports, numerous other studies about annual report readership have followed (Jones and Shoemaker, 1994). In recent years the research on annual report readership has become increasingly specialised, focusing on issues such as the perceived value of the "financial highlights" section (Chatterjee, 2007), managers' tactics in relation to the shareholders, the relationship between the writing style of the annual reports and the firms' financial results, and the readability of the financial statements' footnotes (Li, 2008). Chatterjee (2007: 167) says: "Researchers have mainly given attention to financial graphs ..., use of different languages ... and management commentary ..."

On the whole, the studies indicate that private shareholders read the annual reports to a limited extent, and those who actually read do often not care about financial data. The narrative sections of the annual reports, or the first half, are generally read more than the financial statements, or the second half. When asked about technical terms, respondents tend to exaggerate their knowledge and understanding.

The shareholders should have an interest in the annual report, having invested in the firm and being concerned about their investment. A tentative explanation for the poor readership is that many small shareholders own shares in a number of firms and they have insufficient time to keep informed about all firms. They therefore

look mainly at the stock rate, selling and buying as the stock market fluctuates, ie they resort to “exit” rather than to “voice” (Hirschman, 1970).

Annual report readership among co-operative firms’ members

The studies mentioned in above concern investor-owned firms (IOFs). For co-operative firms the conditions differ. There are strong reasons for separating IOFs and co-operatives regarding readership of annual reports.

A large part of the agricultural co-operative movements worldwide adhere to the principles that W F Raiffeisen put forward in the 1840s. Hence many co-operatives are to a large extent owned collectively by the membership. The remainder of the co-operatives’ capital is held individually by the members. Upon gaining membership the members are obliged to buy shares from the co-operative. The shares of traditional co-operatives are, however, not freely tradable.

Because the members of traditional co-operatives can not buy and sell their shares on any market, it has been claimed that they are less motivated to monitor the co-operative, and thereby also to analyse the annual reports. This is claimed by authors who have applied agency theory on the co-operative business firm (Jensen and Meckling, 1979; Fama and Jensen, 1983; Vitaliano, 1983; Hansmann, 1988), and empirical studies of co-operatives indicate that such a relationship exists (Chaddad, 2001; Österberg and Nilsson, 2009; Nilsson et al, 2009).

The members might want others to control the board and the management, ie be free-riders. Alternatively, the members may trust fellow farmers who have been elected into the board as well as the chief executive officer (CEO). If so they are less motivated to analyse the annual report. The situation is the same in IOFs, which are listed on a stock exchange. The small shareholders tend to trust fellow investors if these are well known and respected.

There are, however, other differences between the two types of business firms. Co-operative members would be expected to be keener to monitor their co-operatives as they are often locked into their co-operative. Shareholders of an investor-owned firm – at least the small shareholders – have the possibility of selling their shares if dissatisfied, ie they may choose the exit option. Co-operative members often have a limited exit option. If they were to

leave their current co-operative business partner, there may not be another good partner (Anderson and Henehan, 2005). The fact that co-operatives are often market dominating actors would suggest that farmers are more interested in monitoring the co-operative strictly. If they are to use their voice option, they should read the annual reports. The co-operative members could be expected to have a long-term interest in the co-operative, wanting the co-operative to be strong even after they have retired. Thereby they can sell their farm property at a higher price as the agricultural commodities will have a good buyer or there is a possibility to purchase farm inputs at good conditions.

The shareholders of an IOF have invested in the firm because of expectations as to capital returns while the members of a co-operative are involved in the co-operative to get profitability in their proprietary farm businesses. While it may be difficult to assess whether the ownership of shares in an IOF will be a good business, it is even more difficult to estimate the value of a membership in a co-operative society (Cobia et al, 1989).

It is difficult to predict what consequences this difference in investment motives will have for the propensity to keep informed about the firms’ financial development. On the one hand the members should be keen to monitor the co-operative as they often depend on this firm. On the other hand the difficulties in assessing the financial information may imply that they read less as they cannot assimilate the information. Thus they may resort to free-rider behaviour or to trusting the directors and the CEO.

It is unclear which of the two above-mentioned tendencies is the strongest, ie whether co-operative members read the annual report more than IOF shareholders, or vice versa. Reading the annual report probably depends on the characteristics of the co-operative. In accordance with property rights theory one may presume that large co-operatives with a complex business structure have members who are more likely to be ignorant about how their co-operative fares.

Prior research about co-operative members’ reading of annual reports

A few studies on co-operative organisations contain some analyses of the annual reports (Westerdahl, 2001; Hyndman et al, 2004). The

most focused research about co-operative members' reading of their co-operatives' annual reports has been conducted by a group of three New Zealand researchers. They have reported four such studies, published in three articles. The same questionnaire was used in all four studies, and is almost identical to that constructed by Lee and Tweedie (1975a; 1975b). Hence good comparisons are possible.

Lord, Shanahan and Robb (2005) conducted a study among food retailers, who are members of a New Zealand retailer co-operative (Foodstuffs) that supplies the retailers with goods and services. The results indicate that the members read the co-operative's annual report quite thoroughly – much more than the IOF shareholders that Lee and Tweedie investigated. When interpreting this finding, one should bear in mind that the Foodstuffs members are businessmen and that the co-operative plays a decisive role in their businesses. Moreover, only the 109 A-members, who have voting shares, took part in the survey, and these seem to have on average larger businesses than the other 1,263 retailer-members, who have no voting power.

The second and third empirical investigations of members' reading of annual reports are presented in Robb, Shanahan and Lord (2006). Both co-operatives are UK consumer co-operatives. Questionnaires were sent to 600 elected representatives of the Co-operative Group (Co-operative Wholesale Society, CWS) and 80 members of Chelmsford Star Co-operative, who had asked to get a copy of the annual report. The findings show that both groups of respondents are very interested and very knowledgeable, and that most of them read the annual reports fairly thoroughly. It should, however, be noted that the respondents were not consumer-members at large. Because the Chelmsford respondents had expressed a wish to receive a copy of the annual report, it is only to be expected that their reading should be thorough. For the elected representatives of CWS it is rather surprising that only 29% say that they read the annual report thoroughly.

Shanahan, Lord and Robb (2007) investigated how the members of a New Zealand agricultural co-operative in the farm supply industry, Ravensdown, read the annual report. Ravensdown is a dominant firm in the New Zealand industry for farm inputs. Together with

another co-operative firm, Ballance Agri-Nutrients, it has 90% of the market for fertilisers in New Zealand. A questionnaire was sent to a random sample of 1,000 members, which resulted in 34% usable responses. Probably because the respondents were rank-and-file members, the findings indicate quite low interest. Only 3% read the annual report thoroughly, 75% read briefly, and 22% do not read it at all. The reason for not reading was primarily "lack of interest", whereas every tenth farmer said that they do not need to read the report because they trust the leadership. When the farmers were asked to explain various accounting concepts "[t]here was a critical lack of understanding of most terms" (Shanahan et al, 2007: 167).

Aim, Theoretical Framework and Propositions

Aim of the study

The four empirical studies conducted by the group of New Zealand researchers indicate that there may be large differences between co-operatives as concerns members' readership of the annual reports. The studies do, however, not lend themselves to the identification of any patterns. More studies are needed, especially those concerning co-operatives, working under more similar conditions, at least within the same industry.

The study among members of the New Zealand supply co-operative Ravensdown (Shanahan et al, 2007) serves as the basis of comparison to the present empirical study, which is conducted among members of a Swedish supply co-operative, Lantmännen (Swedish Farmers' Supply and Crop Marketing Association). As the co-operatives work in the same industry comparisons could reveal some patterns, which could be elucidated. At the same time, the two co-operatives are sufficiently differently organised so that some explanatory variables can be identified. The fact that comparisons can be made only on dimensions, which are reported in a secondary source, the scope of analyses becomes limited and also more uncertain.

The aim of this study is to investigate whether different organisational setups may explain differences between supply co-operatives' memberships as concerns their readership of the co-operatives' annual reports. Hence the next task is to identify differences between the

organisational structures of Lantmännen and Ravensdown.

Differences between the two co-operatives under study

The differences between the annual report readership of the Ravensdown members and the Lantmännen members may be explained in various ways. The explanations sought for here are based on the characteristics of the two co-operatives. They are different in a number of respects – see Table 1. The information presented in Table 1 is the most recent when the survey among Lantmännen members was conducted. In both firms major changes have since taken place.

It is seen that Lantmännen is considerably larger. One reason is that Lantmännen's operations comprise not only sales of farm inputs to the members but also purchases of grain from the members. Another difference is that Lantmännen has expanded downstream by adding value to the grain through mills, bakeries, etc, and is involved in non-related diversification. Lantmännen has also entered many foreign markets.

Other differences concern the ownership. Lantmännen is to a large extent owned collectively and its equity is much larger than that of Ravensdown. The allocated equity is less than 30% in Lantmännen, while the share is more than double in Ravensdown. If Lantmännen's total equity were to be split up among the members, the equity per member would be more than five times larger than that of Ravensdown. Whereas Ravensdown pays the co-operative's profits to the members unabridged the Lantmännen members receive less than half of the profits – the rest goes to the unallocated reserves.

These differences may affect the members' propensity to monitor the co-operatives. On the one hand, Lantmännen members may be proud of belonging to a large and successful co-operative. If so, they may be more interested in informing themselves about the financial results of the co-operative than Ravensdown members. On the other hand, the Lantmännen members may feel alienated since most of the co-operative's business operations are unrelated to the members' farming operations. That Lantmännen is such a wealthy firm may have

	Lantmännen (as of 31 December 2006)	Ravensdown (as of 31 May 2007)
Co-operative organisation model	Traditional	Traditional
Membership, number	42,000	26,000
Turnover	GB£ millions 3,120 (SEK millions 36,989)	GB£ millions 200 (NZ\$ millions 489)
Countries with operations	19 (Sweden, Denmark, Norway, Germany, UK, Estonia, Latvia, Lithuania, Belgium, Poland, etc)	1 (New Zealand) (A merger with a Western Australian co-operative took place after the study was conducted)
Total equity capital	GB£ millions 800 (SEK millions 9,483)	GB£ millions 109 (NZ\$ millions 267)
Allocated equity as share of total equity	29%	78%
Total equity per member	GB£ 15,600	GB£, 3,000
Allocated equity per member	GB£ 4,500	GB£, 2,400
Equity share, %	34	69
Return on equity, %	6	1.4
Share of profits paid to members	48%	100%
Member related business, %	23	100
Employees, number	21,830	650
Business operations	Farm inputs (including a retail chain), grain handling, grain milling, bakeries, energy, broiler slaughterhouse, pet foods, cereal manufacturing, plant breeding, agricultural machinery, heavy duty machines, energy production, etc	Sales of farm inputs: fertilisers, veterinary medicine, pesticides, insecticides

Table 1: Characteristics of Lantmännen and Ravensdown. Sources: Annual reports from 2007 (<http://www.lantmannen.com/en>; <http://www.ravensdown.co.nz>).

little importance to the members as their individual ownership is constrained.

Hence, the problems of so-called vaguely defined property rights (Cook, 1995) may be quite large in Lantmännen. A recent study indicates that Lantmännen has had such problems (Nilsson et al, 2009). The members had little trust in the leadership, were fairly uninvolved in the firm, and were not satisfied.

Theoretical framework

The vaguely defined property rights imply that the members become less interested in monitoring the activities of the co-operative (the follow-up problem). Thereby the leadership gets a possibility to act more autonomously (the decision-making problem). These two problems are related to agency theory, ie the power balance between the principal and the agents will be skewed in favour of the former actor. In cases of collective ownership the agency problems tend to increase (Nilsson, 2001).

Another effect of vaguely defined property rights is that the members have weak incentives to invest in the co-operative. Their ownership for their invested money is at the best circumscribed, or they get no ownership whatsoever (the horizon problem). Further, as the members have minute ownership of the collective capital, they will try to be free riders, reaping advantages without paying accordingly (the problem of common ownership). Under such circumstances, the co-operative will either be underfinanced or the leadership will force the members to finance the co-operative. Further, the investments will not be optimal for any single membership category (the portfolio problem).

The follow-up problem is the one that provides the theoretical ground for this study. It is supposed that the differences in the two co-operatives' ownership structure may create larger follow-up problems in Lantmännen compared to Ravensdown, such that Lantmännen members pay less attention to the annual report than Ravensdown members. Moreover, the fact that Lantmännen's business activities to a dominating extent are not related to the members' own farming activities will make the members less interested in the co-operatives annual reports. Hence four propositions are stated, all indicating that the Lantmännen members are less involved in the co-operative's annual report than the Ravensdown members:

1. Members of Lantmännen read the co-operative's annual report less than members of Ravensdown.
2. When explaining their non-reading behaviour Lantmännen members express disinterest more than Ravensdown members.
3. Lantmännen members have a stronger propensity to focus on the narrative sections of the annual report than Ravensdown members.
4. Lantmännen members attach less importance to the role of annual reports.

Methodological Issues

While the results presented in Shanahan et al (2007) may provide the empirical data from New Zealand, corresponding data must be collected from the members of Lantmännen. To obtain comparability with Ravensdown the same questionnaire as in Shanahan et al (2007) is used. The questionnaire is found as an appendix to Shanahan et al (2007)¹. The translation into Swedish and the adaptation to Swedish circumstances and to Lantmännen means, however, some problems in connection with the coding of responses to some questions (explained in the section "Results").

As agricultural production differs throughout Sweden, it was considered desirable to ensure that the respondents come from different parts of the country. Therefore the sampling procedure took place in two steps. First, four regions were selected; south, north, east and west. The member relations office of Lantmännen supplied the researchers with a membership list within each of the four regions. Second, 300 members in each region were selected according to a random sampling technique. Questionnaires were sent to the 1,200 members in the fall of 2007. The respondents who did not answer within two weeks got a reminder. After another two weeks 490 completed questionnaires arrived, corresponding to a response rate of 41%.

In order to increase the response rate the respondents were promised that the researchers would conduct a lottery among the members who answered the questionnaire. The premiums consisted of five present cards of SEK 1,000 each (GB£85). It is not possible to determine whether this premium increased the response rate.

The data were compiled in a way so as to enable easy comparison with the results of

Table 2: Percentage of respondents who declare themselves to read the annual reports thoroughly, briefly or not at all.

Thoroughness of reading	Lantmännen	Ravensdown
Number	489	386
Read thoroughly	4%	3%
Read briefly	64%	75%
Do not read at all	32%	22%

Shanahan et al (2007). Hence descriptive statistical techniques were used. It should be added that the empirical material is too limited to allow a formal testing of the propositions.

Results

The findings are structured according to the five propositions. The results reported by Shanahan et al (2007) are consistently compared to the findings from the Lantmännen study. This is the source for all the data in the columns "Ravensdown" in Tables 2-6.

Proposition 1 says that "*Members of Lantmännen read the co-operative's annual report less than members of Ravensdown*". The calculation of figures for readership is done in the following way, which is identical with the procedure of Lee and Tweedie (1977) and later used in all the studies conducted by the three New Zealand researchers as described in Lord et al (2005: 9).

The respondents were presented with a table, where all the sections of the annual report are listed along with three columns for each: "Do not read at all" (rating 0); "Read briefly for interest" (rating 1), and "Read thoroughly" (rating 2). The ratings for each respondent were summed for the parts of the annual report. Respondents, whose scores were at least three-quarters of the maximum score were categorised as "thorough readers". Further, for respondents to be classified as "thorough readers", they were also to have read at least

three-quarters of the financial reports. Respondents below that figure were classified as "less interested readers". A third category consists of those who stated that they do not read any part of the annual report.

Table 2 seems to support the proposition. The figures for thorough readers are almost identical, though very low. There are larger differences for the other two options. Those who read briefly are two-thirds of Lantmännen respondents and three-quarters of Ravensdown respondents. About one-third of the Swedish respondents say that they do not read the annual report at all, while the figure for the New Zealanders is almost one-quarter.

Proposition 2 says that "*When explaining their non-reading behaviour Lantmännen respondents express uninterest more than Ravensdown respondents*". Table 3 shows the same pattern with two exceptions. First, the option "Lack of interest" indicates a major difference between the two groups of respondents (46% versus 36%). It is plausible that "Lack of interest" by most respondents is equivalent to ignorance. The opposite interpretation, "Lack of interest because of trust in the directors", is less probable but can not be excluded completely. This uncertainty does, however, not change the conclusion. The other difference is that the New Zealanders have more difficulties understanding the annual report compared to the Swedes (24% versus 12%). One possible reason might be found in the appearance of the

Stated reason	Lantmännen	Ravensdown
Number	252	82
Lack of interest	46%	36%
Lack of time	27%	26%
Difficulty in understanding	12%	24%
Trust in the directors	9%	10%
The annual report is "irrelevant"	7%	9%

Table 3: Percentage of respondents who give various reasons for not reading the annual report

Table 4: Percentage of respondents who rate the various sections of the annual reports as most important and second most important.

Legend: (L): Lantmännen; (R): Ravensdown

Section of the annual report	Lantmännen	Ravensdown
Annual report (L); Statement of financial position (R)	27% (# 1)	24% (#3)
The group in brief (L); Financial highlights (R)	14% (# 2)	36% (# 1)
Chairman's comments, President's comments (L); Chairman and CEO's report (R)	14% (# 3)	36% (# 2)
Goals and strategies (L); New products (R)	11% (# 4)	23% (# 4)
Financial benefits to members (L); Finance at a glance (R)	10% (# 5)	12% (# 5)
Group overview (L); Finance at a glance (R)	10% (# 5)	12% (# 5)

annual report. Another reason might be that Lantmännen members try to understand the annual report less.

Proposition 3 says: *"Lantmännen members are more likely to focus on the narrative sections of the annual report than Ravensdown members"*. A comparison is found in Table 4. This should, however, be interpreted cautiously because the sections in the two firms' annual reports are not identical. The authors have attempted to find sections with similar contents in the two annual reports. The most striking difference is that Lantmännen respondents rate most parts to the annual report lower. This may be a consequence of the respondents being less involved in the annual report. As concerns the ranking the two groups of respondents are remarkably similar.

The sections of the annual report that are read most thoroughly are the financial pages, comprising balance sheets and revenue and cost accounts (27%). After that follow a number of narrative sections – "The group in brief", "Chairman's report" and "President's report", "Goals and strategies", "Financial benefits to members", and "Group overview". Shanahan et al (2007: 161) say that "The most thoroughly read sections were: new products, chairman and CEO report, and innovation plus research and development". Hence, although

the findings are similar, it is not possible to accept or reject the proposition because the two annual reports are differently structured.

When the respondents express their desires for further information to be included in the annual reports, they may want more or less narrative information. Lantmännen members mention predominantly narrative information with profit forecasts and budgets as an exception. As can be seen in Table 6, Shanahan et al (2007) do not report all the response options but budgets and profit forecasts are included. The considerable difference is that Lantmännen respondents emphasise the subsidiaries but this must be because many Lantmännen's business operations are run within downstream subsidiaries, which are only briefly mentioned in the annual report. It is true that the narrative sections of the annual reports are given most attention among Lantmännen respondents, but it is not possible to make a fair comparison with Ravensdown respondents. Hence the conclusion remains that it is not possible to confirm or reject proposition 3.

The fourth proposition says: *"The Lantmännen members attach less importance to the role of annual reports"*. This proposition gets support from the data as can be seen in Table 6. Five of the six options presented to the respondents have lower and often considerably

Desired information	Lantmännen	Ravensdown
Strategies	30%	no info
Profit forecasts	24%	13%
More information about the subsidiaries	14%	no info
Environmental issues	13%	12%
Budgets	13%	12%
Details about the employees	7%	no info

Table 5: Percentage of respondents who express desires about additional information to be included in the annual reports.

Table 6: Percentage of respondents who rate various aims of the annual report to be the most important and second most important.

Purpose of the annual report	Lantmännen	Ravensdown
To make directors accountable to members	52% (# 1)	78% (# 1)
To give an indication of the value of the firm	49% (# 2)	67% (# 2)
To give members an indication of the value of the firm	44% (# 3)	56% (# 4)
To justify prices and patronage refunds	27% (# 4)	57% (# 3)
To give members data useful for investment decisions in their farm enterprises	27% (# 4)	26% (# 6)
To provide information for tax authorities	13% (# 6)	27% (# 5)

lower figures for Lantmännen respondents than for Ravensdown respondents, the only exception being that both memberships attach the same importance to the annual reports' role as a basis for investment decisions in the farm enterprises. A remarkable observation is that the various motives for annual reports are ordered almost identically in the two studies.

Conclusions

Three of the four propositions are supported by the data: (1) "Members of Lantmännen read the co-operative's annual report less than members of Ravensdown", (2) "When explaining their non-reading behaviour Lantmännen respondents express uninterest more than Ravensdown respondents", (4) "Lantmännen members attach less importance to the role of annual reports".

Proposition 3 does not get support from the data: "Lantmännen members have a stronger propensity to focus on the narrative sections of the annual report than Ravensdown members". The differences between the two groups of respondents were not large enough to warrant a confirmation of the proposition 3.

The results indicate that the theoretical point of departure for this study is reasonable. Vaguely defined property rights may cause ignorance among the members of a traditionally organised co-operative, especially if it is large and wealthy and has complex business operations. The Swedish co-operative Lantmännen is considerably larger and has a more complex structure as well as has less individual ownership. This may explain that the members have lower involvement, also concerning readership of the annual reports.

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References

- Anderson, B L and Henehan, B M (2005) What Gives Agricultural Cooperatives a Bad Name? *International Journal of Co-operative Management* 2 (2): 9–15.
- Chaddad, F R (2001) *Financial Constraints in US Agricultural Cooperatives – Theory and Panel Data Econometric Evidence*. PhD Thesis from University of Missouri–Columbia.
- Chatterjee, B (2007) Highlights in Annual Reports: Its Perceived Usefulness. *International Journal of Commerce and Management* 17: 166–177.
- Cobia, D W, Royer, J S and Ingalsbe, G (1989) Equity Redemption, in Cobia, D W (Ed) *Cooperatives in Agriculture*. Prentice-Hall. Englewood Cliffs, NJ, pp267–286.
- Cook, M L (1995) The Future of US Agricultural Cooperatives. *American Journal of Agricultural Economics* 77: 1153–1159.
- Fama, E F and Jensen, M C (1983) Separation of Ownership and Control. *Journal of Law and Economics*, 26, 301–325.
- Hansmann, H (1988) Ownership of the firm. *Journal of Law, Economics, and Organization*, 4: 267–304.
- Hirschman, A O (1970) *Exit, Voice and Loyalty. Responses to decline in firms, organizations, and states*. Harvard University Press, Cambridge, Mass.

- Hyndman, N, McKillop, D, Ferguson, C and Wall, T (2004) The Financial Accountability of Irish Credit Unions: An Initial Empirical Study. *Financial Accountability & Management* 20: 253–279.
- Jensen, M C and Meckling, W H (1979) Rights and Production Functions: An Application to Labor-Managed Firms and Codetermination. *Journal of Business*, 52: 469–506.
- Jones, M J and Shoemaker, P A (1994) Accounting Narratives: A Review of Empirical Studies of Content and Readability. *Journal of Accounting Literature* 13: 143–184.
- Kyriakopoulos, K (2000) *The Market Orientation of Cooperative Organizations*. van Gorcum, Assen.
- Lantmannen (2007) *Lantmannen Annual Report 2007*. Lantmännen, Stockholm (<http://www.lantmannen.com/en>).
- Lee, T A and Tweedie, D P (1975a) Accounting Information: An Investigation of Private Shareholder Understanding. *Accounting and Business Research* 5: 3–13.
- Lee, T A and Tweedie, D P (1975b) Accounting Information: An Investigation of Private Shareholder Usage. *Accounting and Business Research* 5: 280–291.
- Lee, T A and Tweedie, D P (1977) *The Private Shareholder and the Corporate Report*. The Institute of Chartered Accountants in England and Wales, London.
- Li, F (2008) Annual Report Readability, Current Earnings, and Earnings Persistence. *Journal of Accounting and Economics* 45: 221–247.
- Lord, B R, Shanahan Y P and Robb A J (2005) Annual Report Readership and Understanding: A Co-operative Perspective. *Journal of Co-operative Studies* 38:2: 5–21.
- Nilsson, J (2001) Organisational Principles for Co-operative Firms, *Scandinavian Journal of Management* 17: 329–356.
- Nilsson, J, Kihlén, A, and Norell, L (2009) Are Traditional Cooperatives an Endangered Species? About Shrinking Satisfaction, Involvement and Trust *International Food and Agribusiness Management Review* 12: 103–123.
- Nilsson, J and Ohlsson, C (2007) The New Zealand dairy cooperatives' adaptation to changing market conditions. *Journal of Rural Cooperation* 35: 43–70.
- Österberg, P and Nilsson, J (2009) Members' Perception of their Participation in the Governance of Cooperatives: The Key to Trust and Commitment in Agricultural Cooperatives. *Agribusiness. An International Journal* 25 (2), 181-197.
- Ravensdown (2007) *Ravensdown Annual Report 2007*. Ravensdown, Christchurch (<http://www.ravensdown.co.nz>).
- Robb, A J, Shanahan, Y P and Lord, B R (2006) Annual Report Readership and Understanding: An International Comparison. *Journal of Co-operative Studies* 39:1: 24–34.
- Shanahan, Y P, Lord, B R and Robb, A J (2007) Annual Report Readership: A Study of an Agricultural Supply Cooperative. *Journal of Rural Cooperation* 35: 157–180.
- Van Bekkum, O-F (2001) *Co-operative Models and Farm Policy Reform – Exploring Patterns in Structure-Strategy Matches of Dairy Co-operatives in Protected vs Liberalized Markets*. Van Gorcum. Assen.
- Vitaliano, P (1983) Cooperative Enterprise: An Alternative Conceptual Basis for Analyzing a Complex Institution. *American Journal of Agricultural Economics*, 65, 1078–1083.
- Westerdahl, S (2001) Between Business and Community: A Rural Co-op and its Accounting Practice. *Financial Accountability & Management* 17: 59–72.

Footnote

- 1 The following questions, reported in the appendix of Shanahan et al (2007) are used in the present study: #4 (propositions 1 and 3), # 6 (proposition 2), #7 (propositions 3 and 7), # 7 (proposition 6), #8 (proposition 3 and 5), # 13 (proposition 4).