Changing member loyalty in producer cooperatives

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Abstract

Farmers have different motives for being members of a cooperative marketing their agricultural products. It is often said that cooperative ideology has historically been a major driving force behind cooperative formation, but that this solidarity is gradually fading away. Instead, today’s farmers are increasingly prone to sell to a processing firm, which is able to pay the highest price for the agricultural product. This should be a result of the ever-increasing competitive pressure that causes poor profitability for the farmers. Furthermore, it is commonly believed that the farmers who are strongly motivated by cooperative ideology are the old ones, running smaller farm enterprises, while younger farmers and those with large enterprises are more attracted by processors who pay the highest prices. This study, based on the survey among about 1300 Finnish farmers, indicates that the two types of motives are not to any significant extent related to the farmers’ age or the size of their enterprises. The theoretical basis for the study is social capital theory. Two types of social capital, namely bonding capital and bridging capital are linked to one another to form a factor that is labeled “traditional cooperative values” while the third type of social capital, linking capital, forms its own factor, called “dynamic business relations”.

1. Introduction

Loyalty based on ideology has been regarded as the major motivation for membership and patronage in cooperatives. Mutual trust between the membership and their cooperative has through history enabled both members and cooperatives to survive financially difficult times.

The importance of loyalty may, however, shrink in the future when the competitive pressure is rising as a consequence of the internationalization or even globalization of the economies throughout the world. Both the cooperative processing firms and the individual farmers are subject to intensified competition, internationally as well as nationally. The cooperatives’ response to the increasing competition is most often strategies of vertical as well as horizontal integration (Van der Krogh, Nilsson and Høst, 2009), i.e. moving forwards in the value chain, and expanding the size of operations, respectively. Along this development it has been observed that the members’ loyalty has changed its role, most often diminished. Large cooperatives’ behaviour has become similar to that of investor-owned firms so the members tend to become alienated within the large and anonymous memberships (Nilsson, Kihlén and Norell, 2007).

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The present study aims at exploring to which extent this above reasoning is supported by empirical data under various circumstances. Therefore the study concerns members’ degree of cooperative loyalty depending on the individuals’ different socioeconomic status (age, education, gender, etc.) as well as members in cooperatives with different attributes (size, industry, internationalization, etc.).

Different members are not equally important for cooperative’s successful operation and, thus, different members have different bargaining powers. Kuhn (1972) pointed out that a small member does not plan to exit at all because she/he is afraid of competition outside the cooperative. Do small members explain their behaviour with cooperative ideology? Large members, on the other hand, are always considering exiting, because of their high threat potential (Ollila 1985). What is the role of cooperative ideology and loyalty in this phenomenon?

The aim of this paper is to examine the nature of cooperative membership using social capital paradigm as theoretical framework.

2. The social capital paradigm

Robison et. al. (2002) define social capital as a person or group’s sympathetic feeling for another person or group. Sympathetic feelings may include admiration, caring, empathy that may develop into trust for another person or group as well as loyalty.

Social capital paradigm states that this capital can be created or used through interaction. This means that if one creates sympathetic feelings through interaction, she/he can use this capital for e.g. asking for a favour. However, if those requests for favours continue, social capital diminishes and the interaction turns into exploitation. Investments on social capital create continuation and loyalty in relationships. When something unexpected and negative happens, social capital facilitates a solution (Stickel et. al. 2010, p. 304).

Adam Smith (1759, p.6) defined sympathy as “our fellow feeling with any passion whatever” and calls sympathy as “social capital coefficient”. Smith further says that we can sympathize more readily with friends than with acquaintances, and more easily yet than with strangers. “We sympathize more with persons continuous to us, than with persons remote from us: With our acquaintance, than with strangers” (Hume 1978, p. 581). Researchers have seen the decline of social capital (Robison et.al. 2002).

Putnam (2000) has raised the question of why people do not invest in social capital as much as they used to. One explanation may be that relations, not least in business, have become all the time more impersonal. Business relations that were earlier based on human interaction have been replaced with impersonal market relations.

Similar development can be observed in cooperative enterprises. As cooperatives become all the time larger and many of them operate in several countries, their growth strategies become similar to Investor-Owned Firms (Nilsson and Ollila 2008). Former assumed cooperatives’ competitive strengths such as sense of community, mutual trust, loyalty and long-range exchange relationship are clearly decreasing in large cooperatives.
Over many years cooperative researchers have been interested in members’ various socio-psychological constructs such as loyalty, trust, attitudes and motives (Bravo-Ureta and Lee, 1998; Gray and Kraenzle, 1998; Hansen, Morrow and Batista, 2002; James and Sykuta, 2006; Bhuyan, 2007). Where organizational trust is high, the group’s social capital and risk-taking behaviour should be greater (Davis and Bartkus 2010, p. 321). This indicates that social capital can be measured as the level of organizational trust.

Robison et.al. (2002) distinguish between three kinds of social capital, bonding, linking and bridging capital.

*Bonding social capital* exists in socially close relationships. Bonding capital is based on feelings such as between family members, committed couples, long-range business partners as well as members in ideologically strong groups. Bonding capital is often to a great extent emotionally based.

*Bridging social capital* can be characterized as bridges that connect two asymmetric bodies together. Asymmetric feelings such as between a boss and an employee, or a teacher and a student are examples about bridging capital. Relations between cooperative members and cooperative management can be regarded as bridging social capital.

*Linking capital* is related to semi-socially close relationships. Linking capital can be characterized by moderate-term commitments. Linking capital can include trust, collegiality e.g. with co-workers or performs performing similar tasks. Linking capital can be characterized as normal business relationships.

3. **Empirical study**

Relations between a cooperative and its members can be analysed through examining how bonding capital changes its form into linking capital (Robison et.al. 2002), i.e. how ideology changes into a conventional business relation. Bridging capital describes the role of a cooperative as social organization or a means of maintaining market power. Available data does not allow a dynamic analysis but will give a possibility to see what kinds of characteristics describe various kinds of social capital relations.

The data originates from a survey among altogether 1300 Finnish farmers. Six questions in the questionnaire covered motivation for the respondents’ membership in terms of loyalty, cooperative ideology and similar social capital issues. Furthermore a host of socioeconomic variables as well as the respondents’ choice of buying firms (cooperative or investor-owned firms) were included in the questionnaire.

In the questionnaire there were altogether six questions describing the three forms of social capital described above. The questions were in Likert-scale form ranging from 1= totally disagree to 5=totally agree.

Bonding capital was measured with two statements:

Cooperative ideology keeps me as member in my cooperative (K2601)
Experiences from a long-time cooperation keep me as member in this cooperative (K2602)
Bridging capital was measured with two statements:
A possibility for using power/advance my own interests through the cooperative
keep me as member in this cooperative (K2603)
Membership gives a shelter against large buyers’ market power (K2604)

Linking capital was measured with two statements:
The membership in the cooperative is a pure business relation to me (K2605)
If I get the same advantages through delivering my products to another buyer, I
do not have any problem for switching the buyer (K2606)

4. Data analysis

The six variables were reduced into factor dimensions corresponding three forms of social capital
by using principal component factor analysis. Construction of three factor dimensions from those
variables presented above diminished the number of dimensions into three indicating the three
forms of social capital. The result showed that that factor loadings of the first four variables
describing both bonding and bridging capital concentrated on the first factor, the two variables
describing linking capital having greatest loadings on factors 2 and 3. The situation can also be seen
in figure 1. Variables K2601-2604 are very close to each other. Variables K2605-2606 were close
to each other but far away from the former ones.

The result indicates that bonding capital (interpreted as cooperative ideology and long-term
relationship) and bridging capital (interpreted as cooperative’s internal and external power
relations) belong to the same “cooperative package”, as it has been traditionally.

Because of the structure of factor solutions, the number of dimensions was reduced into two.
The second component’s eigenvalue is 1,147 the third being 0,594. Thus, also Cattel’s Scree
Test (Hair et. al. 1995) conditions are met. The two factors explain 72 per cent of the variance.

Varimax rotated component matrix is presented in table 1. As it can be observed the loadings
of the first four variables concentrate on the first factor dimension and the two last ones on
the second factor dimension.
Table 1: Rotated component matrix.

<table>
<thead>
<tr>
<th>Rotated Component Matrix*</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Coop ideology keeps me as member</td>
<td>.619</td>
</tr>
<tr>
<td>Good experience about long-term cooperation</td>
<td>.629</td>
</tr>
<tr>
<td>Possibility of using power keeps me as member</td>
<td>.652</td>
</tr>
<tr>
<td>Membership is shelter against large producers</td>
<td>.651</td>
</tr>
<tr>
<td>Membership is a pure business relation to me</td>
<td>.003</td>
</tr>
<tr>
<td>I can switch if I get the same advantages from another buyer</td>
<td>-.347</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The first factor dimension can be named as “traditional cooperative values” factor. The second dimension is then called as “dynamic business relation” factor. The traditional cooperative values factor includes both bonding and bridging capital when the dynamic business relation factor consists of variables indicating linking capital.

Component plot in Figure 1 describes graphically the nature of two-factor solution.

Figure 1: Component plot of two-factor solution

Cluster analysis was conducted by using factor scores of two-factor solution. Because of data being relatively large and that factor scores can be regarded as standardized variables, K-Means Cluster method was chosen (Hair et al. 1995, Karhunen et al. 2010). This method also allows the definition of the number of clusters in advance. The result of ANOVA indicates high difference between these two clusters.

Two-cluster analysis produced a solution where cluster 1 has 440 observations and cluster 2 has 484 observations (table 2). Missing cases either contain incomplete information or are farmers that do not belong to cooperatives.
Table 2: Number of cases in each cluster

<table>
<thead>
<tr>
<th>Cluster</th>
<th>1</th>
<th>484,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>440,000</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td>924,000</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td>372,000</td>
</tr>
</tbody>
</table>

Other variables of the dataset were used to describe the two of clusters. Most significant variables explaining characteristics of clusters are described below.

The result of cluster analysis was cross-tabulated with background variables.

Cluster 1 ("Traditional cooperative values")

Among observations belonging to cluster 1 there are more dairy farmers that deliver their milk to a cooperative ($\chi^2 45.852; p \leq 0.01$). Cluster 1 members consider more often that their competitors are farmers that sell to private companies ($\chi^2 9.965; p \leq 0.01$) or who are producers in the same field but in other countries than where the cooperative locates ($\chi^2 3.252; p \leq 0.05$). Farmers in this cluster also think that all producer-deliverers should be cooperative members ($\chi^2 48.060; p \leq 0.01$), also foreign producers delivering to the same cooperative ($F 10.145; p \leq 0.02$). Farmers in this cluster agree that their cooperative gives reliable information to them ($F 78.227; p \leq 0.01$).

Cluster 2 ("Dynamic business relation")

Farmers belonging to cluster 2 think that their competitors are neighbouring farmers ($\chi^2 7.815; p \leq 0.05$). Farmers in this cluster complain more often ($F=15.781; p \leq 0.01$) and also switch more often the buyer for their products ($F=11.649; p \leq 0.01$).

5. Results and conclusions

The purpose of the analysis was to describe characteristics of cooperative membership that is based on bonding, bridging or linking capital. The presumption was that using six variables those three types of social capital could be demonstrated by constructing three factor dimensions, one describing each type of social capital.

The first finding was that, at least in this data, variables describing bonding capital (coop ideology and long tradition) and bridging capital (internal and external power relations) happened to be so close to the same factor dimension that they were not possible to separate. This may indicate that those characteristics are indeed so interrelated cooperative motivations that they cannot be separated. That is why it was decided to combine those variables under one dimension in the analysis as well.

\[^{5} \chi^2 \text{ test was used when variables have been in nominal scale. Means were tested with ANOVA.}\]
However, business-like relations and easy exit according to changed market conditions seemed to concentrate on the same dimension and quite far apart from the above-described dimension.

It was expected that farmers in cluster 1 would have been more traditional, perhaps smaller with an older age and cluster 2 would have consisted more of large, dynamic farms owned by younger farmers. Statistical evidence for those expectations became relatively limited.

Farmers in cluster 1 whose membership is supposed to base on bonding or bridging capital were typically dairy farmers. Perhaps the ideology explains that they see farmers doing business with non-cooperatives as their competitors. Cooperative ideology may also explain that farmers in this group would like to see all the deliverers, including the foreign ones, as members. Trust plays an important role in their relation with the cooperative.

One could expect that members whose membership is based on bonding and bridging capital (cluster 1) could use more voice when they want improvements in their cooperatives. Instead it seems that farmers belonging to cluster 2 use more both voice combining it with the tread and actual exit (Hirschman 1970) when demanding better conditions for themselves. A more business-like relation may explain that farmers belonging to cluster 2 see more often their neighbour-producers as their competitors.

The findings of this study were expected to reveal changes within the structure of the agro-food industries. If, for example, it had turned out that mainly older members have cooperative ideology as motive for their cooperative membership, such cooperatives would have been in trouble in the future. Similarly, if the ideologically motivated members predominantly are members of weak cooperatives, these cooperatives’ future seems bleak. The analysis did not give support to this expectation.

According to this study, social capital keeping producers as patron-members in their cooperatives seems to be a more complex phenomenon than what can be explained with chosen categories of social capital, and with six variables. Nearly 40 per cent of respondents say that cooperative ideology and 60 per cent that long-term experiences keep them as members. At the same time almost 50 per cent state that the cooperative membership is a pure business relation. 60 per cent more or less agree with the statement that they have no difficulty to leave the cooperative if they get the same advantages elsewhere. Either the answers are controversial or producers’ membership is really based on a competitive market alternative.
References


