

# Trust-creating Social Networks in Forest Owners' Choice of Trading Partners

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This study investigates the role of social networks when producers choose between selling their commodities to a co-operative firm or an investor-owned firm. The empirical basis is personal interviews with ten forest owners, five co-operative suppliers and five IOF suppliers. The findings indicate that forest owners influence each other as to choice of buyer, and that the social influences are stronger among co-operative suppliers than among suppliers to investor-owned buyers. The influences from the forest owners' parents are very strong. Most remarkable is that the buying firms' representatives have a high level of influence.

## 1. Introduction

This study investigates the extent to which social networks influence producers when they decide which buyer they will sell their commodities to, a co-operative or an investor-owned firm (IOF). The empirical data originate from interviews with ten forest owners in Sweden, half of them selling their timber mainly to a co-operative and half selling mainly to IOFs.

In most literature on agriculture, forestry is not mentioned. In Sweden, forestry is, however, considered to be one of the four major agricultural industries together with grain production, dairying and meat production. The explanation is that in Sweden, like in Finland and Norway, forests to a large extent (50% of the total acreage) are owned by private persons, who often have small lots, on average 60 hectares, whereas forests in most other countries are owned by large corporations or by governments (Digby and Edwardson, 1976). As the forests are owned by thousands of individuals (350,000 in Sweden), most often farmers, it is understandable that these individuals have established processing co-operatives as well as bargaining co-operatives. Half of the country's forest owners are members of forestry co-operatives (Berlin, 2005). The co-operatives buy timber from the members, and they sell services to the members in terms of cleaning, thinning, cutting and final cutting, compiling forest management plans, and all other tasks to be conducted in the members' forests.

The forestry co-operatives compete with various investor-owned firms, which perform all the tasks that co-operatives do. The number of IOF sawmills is large, as many such firms operate regionally. They are often small family-owned businesses. Moreover,

there are some multinational corporations buying timber for their paper pulp production.

Even though forestry co-operatives in Sweden are considered to be a type of agricultural co-operative, they differ in major respects from co-operatives in other agricultural industries (Berlin and Erikson, 2007). One reason is that forestry has always worked on free and open markets, whereas co-operatives in other agricultural industries have been influenced by agricultural policies. The forestry industry has also always worked in international markets whereas other agricultural co-operatives have historically been oriented towards the national markets or even regional or local markets. Even though the different co-operative types have different working conditions the forestry co-operatives may be influenced by co-operatives in other agricultural industries since many forestry co-operative members are also members of other agricultural co-operatives.

Hence a study of forest owners' choice of trading partners could take its point of departure in the literature about farmers' relationships to different types of partnering firms. The issue of farmers' choice between co-operative and investor-owned trading partners has been investigated in a large number of empirical studies. Closely linked to this research are issues concerning farmers' loyalty towards co-operatives, their trust in the leadership, their attitude towards co-operatives, and other behavioural dimensions. The explanatory variables used in those studies are of two kinds.

One type is *socioeconomic factors*, such as the farmers' age, the size of the farm operations and similar factors (Bravo-Ureta and Lee, 1988; Burt and Wirth, 1990; Wadsworth, 1991; Fulton and Adamowicz, 1993; Klein, Richards and Walburger, 1997;

Zeuli and Betancor, 2005; Berlin 2006). The other type is *socio-psychological variables*. The farmers' behaviour is explained by variables such as satisfaction, trust, involvement, attitude and commitment (Jensen, 1990; Robinson and Lifton, 1993; Siebert, 1994; Gray and Kraenzle, 1998; Hakelius, 1996; Borgen, 2001; Hansen, Morrow and Batista, 2002; Lind and Åkesson, 2005; James and Sykuta, 2006; Bhuyan, 2007; Fahlbeck, 2007; Österberg and Nilsson, 2009; Nilsson, Kihlén and Norell, 2009).

None of the prior empirical studies include *social influences* as an explanatory variable. Still, social relationships may be significant, given that the choice of buyer is important to the producers – economically, socially, and psychologically. They are likely to prefer a trading partner, that they have trust in, and trust is a concept characterising social relationships. "Trust is a psychological state comprising the intentions to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt and Camerer, 1998: 395). This study introduces influences in social networks as a potential explanation to producers' choice between co-operative and IOF trading partners.

The paper is structured as follows. The next section introduces a theoretical framework where the focus is directed towards farmers' choice between different types of buyers. The subsequent section presents the methodological approach for the empirical study – interviews with ten forest owners. An account of the types of buyers that the forest owners may choose between is found in the next section. The results from the interviews are reviewed thereafter, summarised in two tables. The final section comprises conclusions.

## 2. Theoretical Framework

The forest owners' choice of trading partner is reasonably a well deliberated decision. Such transactions involve large amounts of money, and the forest is normally of great importance to the forest owner. The choice of trading partner may also be habitual decision-making, for example due to the forest owners' loyalty but if so, the forest owners must at an earlier occasion have passed through a deliberated decision process.

The Theory of Planned Behaviour (Ajzen, 1991) tells that well deliberated decision making has a number of components. One is the decision-makers' attitude towards the act of choosing various decisions outcomes. Another component is the decision-makers' propensity to comply with the social norms that exist among people who are significant to them. A third component is the decision makers' perception of being in control of their behaviour. Finally, there may be a random element. This classification of concepts may provide the theoretical foundation for this study.

*Attitudes* towards choosing a co-operative or an IOF buyer may have many dimensions. One is the monetary consequences, ie the price; a second is services provided by the processor; a third is the reputation of the processor, and so on.

Some researchers claim that farmers focus mainly on the price that the processing firms pay for the agricultural commodities (Karantininis and Zago, 2001, 1266). It may be assumed that forest owners to a large extent consider the economic conditions when choosing a partnering firm. The conditions are, however, more complex in a forestry context than in most other agricultural industries, such as grain or dairy. No two sales occasions are identical. All trees to be cut are different; the terrain where the trees grow is specific; it is difficult to assess the quality in advance. Hence, the forest owners have difficulties making a rational choice of buyer.

In difficult decision situations humans resort to a number of specific behavioural traits. One is that the decision maker is struck by so-called information overload whereby the decision outcomes may become less well deliberated and have an element of randomness. Another trait is that the many complex parameters are merged into a more aggregate one, such as image or reputation. By choosing the option with the best reputation the decision maker reduces the risk-taking. A third possibility is that the decision-maker becomes follows the advice from persons that are considered trustworthy.

The ownership of a forest offers a range of non-monetary benefits, or benefits with indirect monetary effects. Such non-monetary values may affect the forest owners' attitudes to alternative trading partners, for example if these have the reputation of being careless when working in the forest. Berlin (2007) lists

these non-monetary values: hunting, fishing, picking berries and mushrooms, collecting firewood and timber, outdoor life and recreation, residence in nice natural environment, etc. She continues to measure how forest owners appreciate these non-monetary benefits. In general they are extremely important to the forest owners.

According to the Theory of Planned Behaviour decision makers are influenced by the norms that they find in their social environment, especially among so-called “significant others”. This variable is called *Normative Compliance*. The “significant others” may comprise the family and relatives, but also the neighbours and friends. The forest owners also have relationships with parties, which are less likely to constitute “significant others”; with the timber buying firm’s local representative, the staff at the timber buying firm’s office (those responsible for paying for the supplies, receiving the order, etc), and the firms, which conduct the cutting work, etc.

The theory’s variable *Perceived Control* is of a different nature. If the forest owners do not themselves choose their trading partners, the study of their decision making makes little sense. Some external factors must be considered, for example contracts which limit the range of choice. It is likely that the forest owners are in control of the decision about with whom should trade though this issue must be investigated.

Prior research about farmers’ choice of a co-operative as their trading partners has a strong orientation towards attitudinal variables while the influence of the social networks is absent. The present study focuses on the forest owners’ social networks, comprising their willingness to comply with the norms of both “significant others” and other parties. Nevertheless also some attitudes must be incorporated since these factors may have importance for the interaction within the social networks. When the forest owners talk to others about the various partner firms, they talk in terms of prices, services, non-monetary values, etc.

Some conclusions from the account above may be as follows:

*First*, it is believed that the forest owners pay much attention to the opinions of others when they are to choose a trading partner. The owner of a forest property has made a large

investment and so, one may expect the forest owners to be highly involved in their forest. In order for the forest owners to reduce the risk taking, contacts with people they trust may influence the choice of business partner – a co-operative or an IOF. They can be expected to make the same choice as their social network does.

*Second*, one may expect that the co-operative members are more prone to comply with the norms among fellow forest owners. A co-operative member organisation constitutes a forum for members who meet, get to know each other and discuss. There is no similar forum for the suppliers to IOFs.

*Third*, it is likely that there are differences between the different social networks. Most crucial are probably the family, then other forest owners (especially so for co-operative members) and finally the representatives of the trading partners, cutting firms, and other business firms.

### 3. Methodological Approach

Information about forest owners’ decision-making can be obtained only from the forest owners themselves. Considering that the desired data may be sensitive it was considered that the data must be collected through personal interviews. Hence, personal interviews were conducted by two of the authors, both coming from forest owner families and having an education within forestry. This means that they are able to “speak the language” of the respondents, which increases the chances that the interviewees trust the interviewers and answer openly.

Due to resource constraints and the time consuming interview technique the number of respondents must be small. Five members of a forestry co-operative were interviewed and five forest owners who usually sell their timber to other buyers. The small number of interviewees reduces the reliability of the findings, but at least some indications may result.

As this study has a focus on the forest owners’ social networks it was considered desirable to choose respondents who live relatively close to one another so that there would be good chances for social interaction.

Hence all ten respondents live within a single parish. Another motive for this choice is that all the respondents have the same set of potential buyers and similar working conditions. Moreover, the fact that the interviewees live close to one another reduced the travel costs and the time used for the interviews. The parish was selected by the forestry co-operative's member relations officer, the criterion being that the data should originate from a district where co-operative suppliers and IOF suppliers were of about the same number.

The addresses of the five co-operative members were picked randomly from the co-operative's member register for the parish where the interviews were to be conducted. The five other forest owners were randomly selected from the register of real estate owners, compiled by a governmental body. All the identified respondents agreed to be interviewed, and all were available at the agreed-upon hours.

The interviews were conducted in March 2008. All the interviews took place in the forest owners' homes. They took between fifteen and thirty minutes each. A total of three days were used for the interviews, including travel between the forest owners' homes. After permission from the interviewees, all interviews were recorded so that correct quotes can be included. The interviewees were promised confidentiality.

An interview guide was produced, comprising in total 23 questions, including six background variables (acreage, type of forest, owner's living at the property, length of ownership, length of family ownership, capital conditions). Four questions concerned the forest owners' social networks in relation to their forestry. Nine questions concerned the forest owner's knowledge, assessment and choice of the buyers of timber. Finally four questions concerned the forest owners' view of their forest and their work in the forest.

#### **4. The Forestry Co-operative, Södra Skogsägarna, and the Other Buyers**

Forest owners may choose a forestry co-operative or an IOF as their trading partner. Within the parish where the interviews were conducted there is one co-operative and a number of IOFs. These firms are presented in this section.

Södra Skogsägarna (henceforth Södra) is by far the largest of the four Swedish forestry co-operatives. It runs its operations in southern Sweden. The membership comprises 52,000 forest owners, living at 37,000 farms. In 2007 the turnover amounted to SEK 18,000 millions (EUR 1,750 million)<sup>1</sup>. The number of employees was 3,700. The equity capital was SEK 10,500 million (EUR 1,020 million) and the equity ratio was 63%. The return on capital was 15%. Södra has a market share of about 50% of the timber that is cut within its operating area. All figures originate from Södra's annual report 2008.

When Södra was established in 1938 it worked only as a bargaining co-operative, which is a common type of activity also in today's forestry co-operatives. The first production plants were established in 1940 (tar mill), 1943 (sawmill), and 1959 (paper pulp plant). Since then the number of sawmills has increased to nine. The largest investments have, however, been in the paper pulp industry. The paper pulp produced in these plants is sold to paper works all over the world. Södra is the world's largest exporter of paper pulp and the world's third largest producer of sulphate pulp.

Two of the five pulp plants are located in Norway. These are processing Norwegian timber, but the Norwegian suppliers are not members. Likewise, Södra imports large volumes of raw material predominantly from the Baltic countries.

Except for wood processing Södra provides extensive services to its members. The forest owners can get practically all the help they would like – no service at all to those who manage their forestry operations themselves, and complete management of the forest for those who have no knowledge in forestry, no time or no opportunities for these activities. In between these extremes, Södra offers assistance in thinning, planting, cutting, etc. These services are offered to the members according to a service-at-cost principle.

Other business branches are production of building material and energy production, both from the forests (fuel wood and wood chips) and from windmills. If the members want to, Södra may erect wind power plants in their forests.

While by far most other agricultural co-operatives offer the members as high a

commodity price as possible, Södra has another policy. The members' supply of timber is paid at a market price. Hence, Södra has a profit maximisation objective. This has the consequence that Södra normally gets very high profits. One-third of the profits before taxes are paid to the members as capital returns in a variety of ways. On top of that are bonus shares. The rationale behind this profit distribution principle is that Södra at all times wants an even flow of raw material to its paper pulp plants. Given the huge investments in these plants, it is necessary to use the production capacity as much as possible. If the co-operative were to have a price maximisation goal, it would some years have too little raw material to its pulp plants and other years too much.

The profit distribution takes place in various forms. First, the *patronage refunds* are most often quite high; almost 10%. Second, the members receive a *high interest rate* for the shares that they own (8-20% during the last few years). Third, Södra hands over *bonus shares* to the members every year, corresponding to a capital return of 5% per annum. Fourth, Södra has at two occasions emitted *B-shares* to be bought by members and by employees, and also these are awarded a very high interest rate, though depending on the profits. All the three types of shares are freely traded on the market, i.e. also appreciable. Finally, the members have the possibility to voluntarily invest more money in the co-operative, and also these investments give a high interest.

Through this financial model, often called *the Södra model*, the co-operative is able to transfer more money to the members compared to if it were to pay the highest possible price for the timber. It is likely that in most cases the forest owners would get a better deal by selling to Södra, provided that all the future cash flows were included. For many members, not to talk about non-members, the Södra model is, however, difficult to comprehend. It is impossible to know in advance what the economic benefits will be. Many of the members are also members of other agricultural co-operatives, all with a traditional organisational and financial structures, and these members may find it strange that Södra has such different principles and practices.

The Södra model has a great importance

for member involvement. Having a large number of members, spread out over a large area, and having huge investments in widespread and complex business activities, mainly downstream in the value chain, there is a great risk that members become alienated from the co-operative. Other studies of co-operatives with similar attributes indicate low trust in the leadership, low involvement, and low satisfaction (Hogeland, 2006; Österberg and Nilsson, 2009; Nilsson, Kihlén, and Norell 2009). In a forestry co-operative context, the risk is even larger as the members typically deliver timber with several years' interval. Thanks to the Södra model the members have dealings with the co-operative every year, though in their ownership role, not in their supplier role. Experience from Södra indicates that this reasoning is correct.

It should be added that Södra is still a genuine co-operative as the only way whereby the members can get access to the profit-generating shares is through supplies, i.e. a small share of every timber payment is transferred to the members' accounts. Hence, the members have a strong incentive to deliver to Södra.

While Södra is the largest player in the parish, where the interviews took place, it has one-third of the market in that parish. Of similar size is a firm that is owned jointly by the large paper pulp and paper corporations. A third actor is almost of the same size. It is a privately owned firm that runs sawmills in a large part of southern Sweden. Except for these three, several sawmills exist, often family-owned and quite small.

## 5. Results

The results from the five interviews with co-operative members are summarised in Table 1 while Table 2 summarises the interviews with the five forest owners who sell their timber to IOF buyers. All the ten interviewees report that they are in full control of all decisions as to their forestry (column e in the two tables). Hence their choice of trading partners is a deliberated decision, which means that it is meaningful to analyse the responses according to the Theory of Planned Behaviour framework.

There are no socioeconomic differences between the two groups. In terms of time perspective (column a) and acreage (column

**Table 1:** Summary of the interviews with the five forest owners who are co-operative members

Forest owner	a	b	c	d	e	f	g	h	i	j	k	l
	Time perspective	Acreage	Activity level	Knowledge in forestry	Decision autonomy	Price	Non-price factors	Other forest owners	Family and relatives	Buyer's rep	Södra's financial model	Deliveries
1	Fourth generation; has owned it himself for 25 years	125 hectares	Does everything himself	Extensive knowledge; "sufficient"	He decides himself	Most important for large fellings	Small felling: not the price	To some extent only; "too little"	No	Seeks advice	Appreciates the high interest rates, but does not understand the model	To Södra and one IOF buyer
2	Since many generations; has owned it himself for 15 years	130 hectares	Does everything himself	Very good knowledge	He decides himself	A secure relation is more important than money	A secure and stable relation with Södra	Yes, this happens	Yes, a cousin is an expert	Seeks advice	Has deep knowledge; supports the model strongly	Only to Södra
3	50 years in the family	20 hectares	Together with a neighbour	Quite poor knowledge	He decides himself	Not very essential	Does not mention anything	One neighbour	No	Does not mention	Positive but poorly informed	Only to Södra
4	Family since 1727; has owned it for 10 years	85 hectares	Does everything himself	Good knowledge	He decides himself	Has no answer to the question	Has no answer to the question	Talks to others but not influenced by them	No	Seeks advice, trusts the buyer rep	Positive but not well informed	Only to Södra
5	30 years	100 hectares	Does everything himself	Good knowledge	He decides himself	Does not seek highest possible price	Rather a secure partner	Talks to others but not influenced by them	No	Seeks advice, trusts the buyer rep	Positive and well informed	Only to Södra

**Table 2:** Summary of the interviews with the five forest owners who are IOF suppliers

Forest owner	a	b	c	d	e	f	g	h	i	j	k	l
	Time perspective	Acreage	Activity level	Knowledge in forestry	Decision autonomy	Price	Non-price factors	Other forest owners	Family and relatives	Buyer's rep	Södra's financial model	Deliveries
6	Family since about 1850; owned since 1990	40 hectares	Fairly active	Quite limited knowledge	The couple decide themselves	Uncertain about prices	"Good-looking forest"; environmental certified	Talks to and collaborates with neighbours	Wife and husband own the forest	Personal relation with the rep	Very limited knowledge	Loyal to one buyer
7	Family since 1923; ownership for 20 years	20 hectares	Fairly active	Much uncertainty	The couple decide themselves	Economy not essential	Want to have a "nice forest"	No talks to neighbours	Wife and husband own the forest	Trust the rep and seek advice	Negative, limited knowledge	Loyal to one buyer
8	Ownership since 1992	340 hectares	Employed people do the practical work	Very good knowledge	He decides everything himself	Economy is crucial	Nothing else is important	Very little; does not trust them	Brothers	The rep is almost a personal friend	Sceptical	Various IOF buyers
9	Ownership since 1995	15 hectares	Does everything himself	Good knowledge	His own initiatives	Economy the overriding issue	Fuel wood for personal use	Frequent contacts but is not much influenced	No	Only business relation	Has no knowledge and no interest	Loyal to one buyer
10	Fourth generation; Ownership for 40 years	50 hectares	Does everything himself	Good knowledge	His own initiative	By far most important	Not important	Often discussions, but no influence	The couple owns the forest	Appreciate the rep, who is their consultant	Very poor knowledge; negative	Loyal to one buyer

b) there is a within-group spread, but it is not possible to claim that systematic differences exist. The same is true for other background data.

Forest ownership is loaded with traditions. Many of the interviewees grew up at the property that they now own, and their ancestors have often owned the forest (column a). The most extreme in the sample is from a family that has owned the forest since 1727. Due to the traditional values in forestry, some forest owners want to manage their forest in the same manner as their parents (father) did. Several interviewees refer to their parents. This also applies to their choice of buyers, ie they have to some extent inherited the parents' view on co-operatives, whether a positive view or a negative view. During their upbringing they have become socialised into being pro-co-operative or anti-co-operative. Therefore, the parents may be said to be a crucial part of the forest owners' social network when it comes to choice of trading partner.

- Daddy was a member, too, and that is fun. (Interviewee 4, co-operative supplier)
- We are doing business with [name of one IOF buyer]. So did Daddy too. (Interviewee 7, IOF supplier)
- I conduct the thinning in the same manner as my father did. (Interviewee 10, IOF supplier)

Social influences have little importance when it comes to the forest owners' evaluation of prices and other economic factors (column f). This observation is remarkable as the economic factors are important for the forest owners, equally for the co-operative members and IOF suppliers. No forest owner says that the economic return is of no or little importance, but several have qualifications to the question. Two of the co-operative members say that long-term profitability is crucial, which means that the price at every single sales occasion does not need to be the highest possible. None of the IOF suppliers says the same while three of them stress the price for the single offers.

- I sell to the one who pays the best, but of course also good service matters. (Interviewee 1, co-operative supplier)
- It may be that I could find another buyer

who is willing to pay a higher price at specific occasions, but Södra is the best in the long run. (Interviewee 2, co-operative supplier)

The IOF suppliers' stress on the price is surprising as the co-operative actually pays the same price, and on top of that the members receive a good return on the capital that they have invested in the co-operative. A couple of the IOF suppliers express a critical view of Södra, saying that some of the money is paid very late, ie the patronage refunds and the dividends. One explanation may be that the Södra model is complicated, which also implies that the members do not always consider the capital returns when they make their choice of buyer; another one that the IOF suppliers have an anti-co-operative attitude.

- It is strange that there is not more debate about the Södra model. (Interviewee 4, co-operative supplier)

As to non-monetary motivational factors (column g), the forest owners' social networks have no influence. When the interviewees discuss with others, they never do that in connection with non-monetary factors. Walking in the forest for recreational purposes, enjoying nature, hunting elks and deer, and picking mushrooms and berries are private affairs. Moreover, the non-monetary factors have limited importance for the choice of buyer, the main exception being that some cutting firms are claimed to cause damage as they are careless with their huge machinery, and cutting firms are contracted by the buyer of the timber.

One would expect less experienced forest owners (column d) to have a stronger preference for a co-operative than more experienced owners. This is, however, not possible to verify. There does not seem to be a connection between forestry skills and the choice of trading partner. In the group of co-operative members only interviewee 3 admits poor knowledge of forestry, but this person relies heavily on a cousin, who is an expert in forestry as well as on the buyer representative. Among the IOF suppliers both interviewees 6 and 7 declare themselves to be only slightly knowledgeable, leaning towards the buyer representative. The forest owners' degree of practical work in their forest



may serve as an indicator of knowledge and experience (column c). However, almost all of the ten interviewees report themselves to do most of the thinning, cleaning and other tasks on their own.

Most interviewees talk to other forest owners often (column h). It is not possible to discern any differences between co-operative suppliers and IOF suppliers. There seems, however, to be a pattern such that the co-operative members talk to each other and the non-co-operators talk to each other. The co-operative members are more or less convinced that the co-operative is the best buyer. Likewise, none of the IOF suppliers can imagine themselves selling to a co-operative.

When the interviewees got the question whether there are influences by other forest owners, all but one denied that. They talk to each other but they neither try to influence another forest owner as to choice of buyer nor are they influenced by others. The choice of a co-operative or an IOF buyer is a sensitive matter, and therefore this is not a topic of conversation. The issue of a co-operative or an IOF supplier is loaded with sentiments. The forest owners do not even care about informing themselves about optional trading partners.

- I don't know the business principles of other timber buyers. I am a member of Södra. (Interviewee 2, co-operative supplier)
- Most forest owners around here deliver to Södra. (Interviewee 5, co-operative supplier)

The high degree of loyalty to one type of trading partner becomes evident when the interviewees are faced with the question about what could induce them to change partnering firm. The question is almost hypothetical in the eyes of the forest owners.

- If I were to abandon Södra because another firm sometimes offers a better price? That would not be a good idea. (Interviewee 3, co-operative supplier)
- A huge price offer. (Interviewee 5, co-operative supplier)
- I would change buyer if Jerry [the IOF's representative] died. (Interviewee 8, IOF supplier)
- No! I don't care about Södra. I am independent. (Interviewee 10, IOF supplier)

Another expression of loyalty is whether the forest owners sometimes deliver to various buyers (column l). Södra's bylaws do not require delivery obligations so also the co-operative members could deliver to any other buyer. The data reveal, however, that such behaviour is extremely rare. Only one Södra member says that he sometimes has delivered to an IOF, and nobody in the other group has ever delivered to Södra, though they have sold to different IOFs. Nevertheless, the IOF suppliers appreciate the co-operative.

- If we hadn't had Södra, we would not have any good prices. (Interviewee 8, IOF supplier)

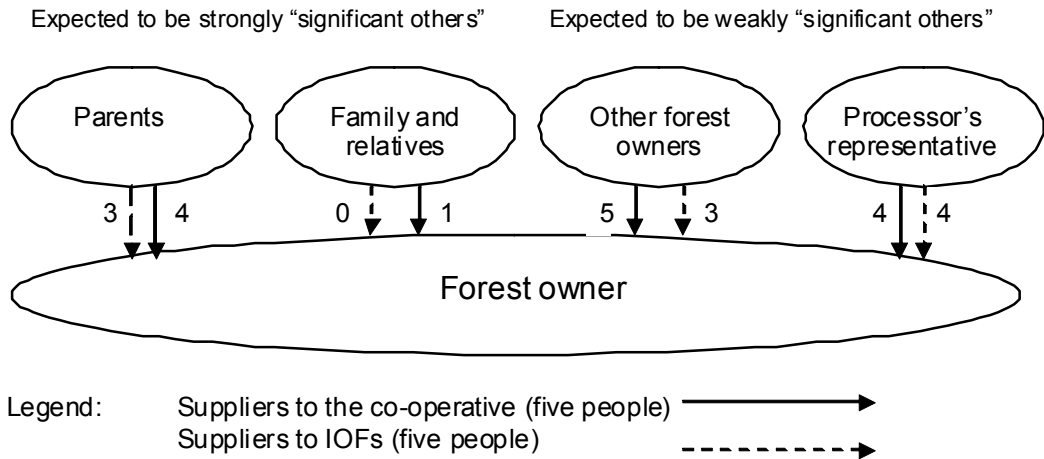
There is a clear difference between the two groups as to understanding of the Södra model and the appreciation of this (column k). All non-members dislike the model but they are poorly informed about it. None of the members objects to the Södra model – they are instead quite positive. The most remarkable observation is that the knowledge about this model is not very widespread among the members.

- The Södra model – it is reasonable. (Interviewee 5, co-operative supplier)
- I get the money rather than any capitalist ... I feel like an owner of the firm. (Interviewee 5, co-operative supplier)

A striking observation is that most interviewees seek advice from the local representatives of the trading partners (column j). As seen from the partnering firms' perspective, this is an ideal situation as their representatives thereby are able to make more money. The forest owners do not seem to realise that they and the representatives have opposing interests. Some of the interviewees even talk about these representatives as if they were close friends, mentioning only their first names. An explanation for this high degree of trust is that the forest owners meet the partnering firms' representatives fairly often so personal relationships may evolve; another one that these representatives are very knowledgeable in forestry issues.

There is no difference between co-operative members' and non-members' trust in the trade partners' representative. In

**Figure 1:** Social networks for co-operative and IOF suppliers as concerns choice of buyer (figures express the number of interviewees who mention the specific type of contact)



both categories four of the five interviewees have much trust in the representatives. One would expect the co-operative suppliers to be more inclined to trust the Södra representative as a co-operative is less likely to act opportunistically towards its members. The risk for deceitful behaviour would be higher in the IOF case. Such behaviour will, however, be reduced to the extent that the firm has been on the market for many years and plans to stay there for many more years, and that the opportunistic behaviour may be discovered by the trading partners. The firms' reputation is of vital importance.

- When we sold some timber last time we sold to [name of one of the IOF buyers] because we know him. (Interviewee 6, IOF supplier)
- We do not sell at highest possible price – it is also a matter of personal relations. (Interviewee 7, IOF supplier)
- We sell to [name of one of the IOF buyers] and Jerry. He is good, I think. (Interviewee 7, IOF supplier)
- I have a very good representative in Jerry at [name of one IOF buyer], a person you could really trust. (Interviewee 8, IOF supplier)

## 6. Conclusions

The study suffers from a small sample and from a data collection technique, which does not provide hard data. Both these problems are a consequence of sensitive issues and they are thereby impossible to avoid. Forest

owners consider that their way of running the forests is nobody else's business.

Figure 1 provides an overview over how many of the forest owners in the two groups have mentioned social networks – parents, other family members and relatives, other forest owners, and the buying firms' representatives. The figure indicates that one may expect these four categories to form a scale of closeness. Parents and family members are likely to constitute "significant others" which is to say that the decision-makers' propensity to comply with the norms are strong, while the opposite is true for the other end of the scale.

Based on the theoretical overview it was expected that the forest owners would be influenced by their social networks when they are to decide about which trading partner they should collaborate with. Even though the contacts are not very strong and frequent, a conclusion must be that the forest owners are clearly affected by others. Especially in one respect the influence is strong, and that concerns the influence from the parents.

The interviewees generally deny both that they are influenced by other forest owners and that they try to influence others. This holds true no matter if the forest owners assess the economic aspects of forestry or the non-monetary. They talk to each other about forestry, and all the forest owners know which trading partners others have chosen. The reason why the forest owners refrain from influencing each other is probably that they want to preserve good relations with their neighbours and colleagues – talking about a

sensitive issue like the choice of trading partner might be interpreted as offensive.

A second expectation is that the co-operative members are more likely to be influenced by each other. This seems to be the case. All five co-operative members talk to other forest owners, but only three of the suppliers to IOFs say that they do so. One explanation for this difference might be that the co-operative's member democratic system is organised with local wards at the grass root level, and these wards are often quite active. The IOFs do not have any similar organisation. In a forum like this the co-operative members tend to confirm each others' existing choices.

This is not to say that co-operative ideology is important. The members' loyalty to Södra is due to the social networks that the members have with other members as well as with various employees within Södra. They have come to perceive themselves as co-operative members. Co-operative ideology was not mentioned once during the interviews with the co-operative members. The suppliers to IOFs have rather an anti-co-operative ideology. They can not imagine themselves as suppliers to any co-operative.

The third expectation was that there should be a stronger influence from persons who are expected to be important for the decision-makers. The findings do, however, not indicate

that. The parents' choice of trading partner is certainly important, but with one exception the interviewees do not mention their family and relatives to be important. One interpretation is that such an influence exists, but it is so self-evident that the interviewees do not mention it.

The most remarkable observation is that the trading partners' local representatives are very important and so for both categories of forest owners. These representatives enjoy much trust, probably due to their knowledge and skills. Thereby they have come to be considered as "significant others" by the forest owners. The forest owners do not realise that these representatives' interests are opposed to their own interests.

This study indicates that trust is important in the producers' choice of trading partner. The social networks are crucial for their choice between a co-operative and an investor-owned business partner. The forest owners' trust in their family, especially their parents, and in the buying firms' representatives play a decisive role. The influences between different forest owners are less important, possibly because the forest owners want to preserve a good relationship with their friends and colleagues by not talking about the sensitive issue of trading partners.

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## References

- Ajzen, I (1991) The Theory of Planned Behavior, *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Berlin, C (2005) Collective Decision Constraints in Cooperatives. Theory and Application on Swedish Forest Owner Associations. Umeå, Sweden: Department of Forest Resource Management, Swedish University of Agricultural Sciences.
- Berlin, C (2006) Forest Owner Characteristics and Implication for the Forest Owner Cooperative. Umeå, Sweden: Department of Forest Resource Management, Swedish University of Agricultural Sciences.
- Berlin, C and Erikson, L O (2007) A comparison of characteristics of forest and farm cooperative members, *Journal of Cooperatives*, 20, 50-63.
- Berlin, C (2007) How do the Swedish Forest Owners organizations cooperative with their membes? Historical track and future roads, Umeå, Sweden: Department of Forest Resource Management, Swedish University of Agricultural Sciences.

- Bhuyan, S (2007) The people' factor in cooperatives: An analysis of members' attitudes and behavior, *Canadian Journal of Agricultural Economics*, 55, 275–298.
- Borgen, S.O (2001) Identification as a trust-generating mechanism in cooperatives, *Annals of Public and Cooperative Economics*, 72, 208–228.
- Bravo-Ureta, B E and Lee, T C (1988) Socioeconomic and technical characteristics of New England dairy cooperative members and non-members, *Journal of Agricultural Cooperation*, 3, 12–27.
- Burt, L and Wirth, M E (1990) Assessing the effectiveness of a farm supply cooperative: A comparison of farmer and manager viewpoints. *Journal of Agricultural Cooperatives*, 5, 17–26.
- Digby, M and Edwardson, T E (1976) *The Organization of Forestry Co-operatives*, Oxford, UK, The Plunkett Foundation.
- Fahlbeck, E (2007) The horizon problem in agricultural cooperatives – only in theory? In K Karantininis and J Nilsson (Eds), *Vertical Markets and Cooperative Hierarchies. The Role of Cooperatives in the Agri-Food Industry*. (pp255–274). Dordrecht, Netherlands, Springer.
- Fulton, J R and Adamowicz, W L (1993) Factors that influence the commitment of members to their cooperative organization, *Journal of Agricultural Cooperatives*, 8, 39–53.
- Gray, T W and Kraenzle, C A (1998) Member participation in agricultural cooperatives: A regression and scale analysis. RBS Research Report 165. Washington DC: US Department of Agriculture, Rural Business – Cooperative Service.
- Hakelius, K (1996) *Cooperative values. Farmers' Cooperatives in the Minds of the Farmers*, PhD Dissertation, Uppsala, Sweden, Swedish University of Agricultural Sciences.
- Hansen, M H, Morrow Jr, J L and Batista, J C (2002) The impact of trust on cooperative membership retention, performance and satisfaction: An exploratory study, *International Food & Agribusiness Management Review* 5, 41–59.
- Hogeland, J A (2006) The economic culture of US agricultural cooperatives. *Culture & Agriculture*, 28, 67-79.
- James Jr, H S and Sykuta, M E (2006) Farmer trust in producer- and investor-owned firms: Evidence from Missouri corn and soybean producers, *Agribusiness. An International Journal*, 22, 135–153.
- Jensen, K (1990) Factors associated with the selection of cooperative vs. proprietary handlers of milk in Tennessee. *Journal of Agricultural Cooperation*, 5, 27–35.
- Karantininis, K and Zago, A (2001) Endogenous membership in mixed duopsonies. *American Journal of Agricultural Economics*, 83, 1266–1272.
- Klein, K K, Richards, T J and Walburger, A (1997) Determinants of co-operative patronage in Alberta, *Canadian Journal of Agricultural Economics*, 45, 93–110.
- Lind, L W and Åkesson, E (2005). Pig producers' choice of slaughterhouse – co-operative or investor-owned? *International Journal of Co-operative Management*, 2 (2), 40–46.
- 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.
- 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, 181–197.
- Robinson, L and Lifton, D (1993) Convincing growers to fund cooperative marketing activities: Insights from the New York wine grape industry, *Agribusiness. An International Journal*, 9, 65–76.
- Rousseau, D M, Sitken, S B, Burt, R S and Camerer, C (1998) Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23 (1), 393–404.
- Siebert, J B (1994) Co-ops: What farmers think! Berkeley, University of California, Department of Agricultural and Resource Economics, Center for Cooperatives.
- Wadsworth, J J (1991) An analysis of major farm characteristics and farmers' use of cooperatives, *Journal of Agricultural Cooperatives*, 6, 45–53.
- Zeuli, K and Betancor, A (2005) The effects of cooperative competition on member loyalty. Paper presented at the NCERE-194 2005 Annual Meeting, Minneapolis, MN, November 8–9.

## Notes

1 Currency exchange rates as of 11 November 2008.