

# **Social influences in forest owners' choice between co-operative and investor-owned buyers\***

by

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**ABSTRACT:** This study investigates the role of social networks when producers choose a buyer for their produce – either a co-operative 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. It was expected that the social networks would be more important for forest owners who seek primarily monetary benefits from their forestry, and that forest owners, who are uncertain, are more influenced by social networks. These two expectations get, however, no support from the empirical data.

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This study investigates the role of social networks when producers choose a buyer for their produce – either a co-operative or an investor-owned firm. The empirical basis is personal interviews with ten forest owners, five co-operative suppliers and five IOF suppliers. Two propositions get support: *Forest owners influence each other as to choice of buyer*, and *Social influences are stronger among co-operative members*. Two other propositions are rejected: *Social networks are more important for forest owners who seek primarily monetary benefits from their forestry*, and *Forest owners, who are uncertain, are more influenced by social networks*. The study indicates that social networks are important for producers' choice of buyers.

### **1. Introduction**

This study investigates the extent to which social networks influence producers when they decide which buyer they will sell their produce 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 co-operative members and half of them sellers 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%) 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 co-operative firms. 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 that should 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 belong to the agricultural co-operative sphere, they differ in major respects from co-operatives in other agricultural industries (Berlin and Erikson, 2007). One difference is that forestry has always worked on free and open markets, whereas co-operatives in other agricultural industries may be supposed to have been influenced by agricultural policies. The forestry industry has also always sold to international markets whereas other agricultural co-operatives have historically been oriented towards the national markets or even regional or local markets.

Hence, forestry co-operatives are highly market oriented, whereas co-operatives in the other agricultural industries tend to be more member-oriented and thus have not only business objectives but also social objectives. For example co-operative ideological issues are seldom heard in a forestry co-operative context. Nevertheless, the forestry co-operatives may be influenced by co-operatives in other agricultural industries to encompass social elements

since many forestry co-operative members are also members of other agricultural co-operatives.

Against this background an investigation of forest owners' choice of buyers is an interesting task. One would expect the forest owners to be quite business oriented, i.e. they try to maximise the value of their forests.

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 tradition 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 *socio-economic 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).

An interesting observation is that none of the prior empirical studies include *social influences* as a potential explanatory variable. This study introduces social influences as a potential explanation to producers' choice between co-operative and IOF trading partner.

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. This section ends with the formulation of four propositions. 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.

## **Theoretical framework**

The forest owners' choice of buyer to deliver their timber to is reasonably well deliberated decisions. Such transactions involve large amounts of money, and the forest is normally of great importance to the forest owner. The choice of buyer may also be habitual behaviour as the forest owners may exhibit loyalty to their buying firms. However, even if habitual behaviour may prevail, the forest owners must at an earlier occasion have passed through a deliberate decision process.

The Theory of Planned Behaviour (Ajzen, 1991) tells that well deliberated decision making has a number of components. One is the decision-maker's attitude towards the act of choosing various decisions outcomes. Another component is the decision-maker's propensity to adhere to the social norms that exist among people who are significant to him or her. A third

component is the decision makers' perception of being in control of their own behaviour. Finally, there may be a random element.

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

Many 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 they are to find a buyer. The conditions are, however, more complex in a forestry context than they are 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 should be cut is specific; it is difficult to assess the quality in advance. Hence, the forest owner has difficulties making a rational choice of buyer.

In difficult decision situation humans have a number of 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.

The ownership of a forest also offers a range of non-price benefits, or benefits with indirect monetary effects. Berlin (2007) lists these: 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-price 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. This is the theory's variable *Normative Compliance*. The social network may consist of the family and relatives, but also the neighbours and friends. Other social contacts are 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 entrepreneurs who conduct the cutting work with the help of their huge machineries. These social networks give rise to a question, which has not been previously researched: What importance have the various social relations for producers' choice of buyer?

The theory's variable *Perceived Control* is of a different nature. If the forest owners do not themselves decide about to whom they should sell the timber, the study of their decision making makes less sense. Some external factors must be considered, for example contracts which limit the range of choice.

Prior research about farmers' choice of a co-operative firm as their buyer indicates that economic factors tend to be important. There is no reason to believe that forest owners are less interested in having a profitable business. Likewise, it is likely that the forest owners are in control of the decision about to whom their timber should be delivered. Hence, the focus of this study is directed towards the social networks, i.e. the forest owners' propensity to comply with the social norms that exist among people who are important to them. Nevertheless, also

the economic and non-economic factors that compose the forest owners' attitudes as well as their decision control must be investigated.

Against this background it is possible to state a few propositions. It should be noted that the small number of empirical observations means that these propositions cannot be tested statistically.

1. *Forest owners influence each other as to choice of buyer.* Owning a forest property is 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 others may influence the choice of business partner – a co-operative one or an IOF. They can be expected to make the same choice as their social network does.
2. *Social influences are stronger among co-operative members.* 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.
3. *The forest owners who seek primarily non-monetary benefits from their forests are more prone to sell to a co-operative.* The choice of buyer is not based on price only. There are also non-monetary benefits from owning a forest, such as hunting, wildlife, recreation and mushroom and berry picking. For the forest owner who is mostly interested in getting the highest possible price for his timber, social interaction is due to be less important for the choice of buyer. The non-monetary values, on the other hand, are partly linked to social values, and these forest owners therefore prefer a co-operative trading partner.
4. *Forest owners, who are uncertain, are more influenced by social networks.* Some forest owners have less knowledge about forestry than others. Those who live far away from the property and have another profession may have less expertise in forestry. Due to the lower level of knowledge these forest owners are more prone to be influenced by their social networks when they choose a co-operative buyer. A co-operative firm is likely to be considered a safer trading partner due to less opportunism.

## **Methodological approach**

In order to investigate the above-mentioned propositions data are needed of a type that can be collected only from forest owners. Considering that the desired data may be sensitive it was considered that the data must be obtained through personal interviews. Even though forestry co-operatives are less ideological than other agricultural co-operatives, there are still many feelings which may distort the information. 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 one single parish. 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 to 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, erected by a governmental body. All the identified respondents accepted to become interviewed, and all were available at the agreed-upon hours.

The interviews were conducted in March 2008. They took between fifteen and thirty minutes each. A total of three days were used for the interviews, including travels between the forest owners' homes. All the interviews took place in the forest owners' homes. After permission from the interviewees, all interviews were recorded whereby 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 the work in the forest.

### **The forestry co-operative, Södra Skogsägarna, and the other buyers**

The interviewees may choose to sell their timber to a forestry co-operative or an IOF. These firms are presented in this section. Within the parish where the interviews were conducted there is one co-operative and a number of IOFs.

Södra Skogsägarna (henceforth Södra) is by far the largest of the four Swedish forestry co-operatives. It runs its operations in the southern Sweden. The membership consists of 52,000 forest owners, living at 37,000 farms. In 2007 the turnover amounted to SEK 18,000 millions (EUR 1750 million). The number of employees was 3700 persons. The equity capital was SEK 10,500 million (EUR 1020 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 today in the 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 member 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 even more difficult to calculate what the economic benefits should be. Especially as most members are farmers, who are also members of other agricultural co-operatives, it is difficult to see why Södra should have such different principles and practices.

The Södra model has a great importance for the 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 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.

## 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 the choice of buyer is a deliberate decision, whereby the analyses can proceed.

There are no socio-economic differences between the two groups. In terms of time perspective (column a) and acreage (column 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 same 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, i.e. they have to some extent inherited the parents' view on co-operatives, whether a positive view or a negative view. Therefore, the parents may be said to be an important part of the forest owners' social network when it comes to choice of buyer of the timber.

- *“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)*



**Table 1:** Summary of the interviews with forest owners who are cooperative members

<b>Forest owner</b>	<b>a. Time perspective</b>	<b>b. Acreage</b>	<b>c. Activity level</b>	<b>d. Knowledge in forestry</b>	<b>e. Decision autonomy</b>	<b>f. Price</b>	<b>g. Non-price factors</b>	<b>h. Network, neighbors</b>	<b>i. Network, family</b>	<b>j. Network, buyer</b>	<b>k. Södra's financial model</b>	<b>l. Deliveries</b>
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 neighbor	Quite poor knowledge	He decides himself	Not very essential	Does not mention anything	One neighbor	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 forest owners who are IOF suppliers

<b>Forest owner</b>	<b>a. Time perspective</b>	<b>b. Acreage</b>	<b>c. Activity level</b>	<b>d. Knowledge in forestry</b>	<b>e. Decision autonomy</b>	<b>f. Price</b>	<b>g. Non-price factors</b>	<b>h. Network, neighbors</b>	<b>i. Network, family</b>	<b>j. Network, buyer</b>	<b>k. Södra's financial model</b>	<b>l. Deliveries</b>
6	Family since abt. 1850; owned since 1990	40 hectares	Fairly active	Quite limited knowledge	The couple decide themselves	Uncertain about prices	“Good-looking forest”; environmental certified	Talks tp and collaborates with neighbors	Wife and husband own the forest	Personal relation with the rep.	Very limited knowledge	Loyal to one buyer
7	Family since 1923; ownership since 20 yrs.	20 hectares	Fairly active	Much uncertainty	The couple decide themselves	Economy not essential	Want to have a “nice forest”	No talks to neighbors	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 yrs.	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

As to non-price motivational factors (column g), the members' social networks have no influence. When the interviewees discuss with others, they never do that in connection with non-price dimensions. Walking in the forest for recreational purposes, enjoying nature, hunting elks and deer, and picking mushrooms and berries are private affairs. Moreover, the non-price dimension has limited importance for the choice of buyer, the main importance being that some entrepreneurs are believed to cause damage to the forest when cutting the trees with the help of their huge machines.

It was expected that price and other economic factors (column f) would be a more important criterion for the co-operative members than for the IOF suppliers. On the basis of the interviews it is not possible to either confirm or reject this expectation. 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 but that does not mean that the price at every single sales occasion should 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)*

Another observation is that the forest owners with the very small holdings are less interested in the price. They may even consider the fuel wood for their households to more important than the sales of timber. This holds true for suppliers both to the co-operative and to IOFs.

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 interviewees (IOF suppliers) expressed a critical view of Södra, saying that some of the money arrives very late, i.e., the patronage refunds and the interests. Another 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.

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

A striking observation is that most interviewees seek advice from the local representatives of the buying firms (column j). As seen from the buying firms' perspective, this is an ideal situation as their representatives thereby are able to make even more money. The forest owners do not seem to realise that they and the buyer representatives have opposing interests. Some of the interviewees even talk about the buyers' representatives as if these were close friends, mentioning only their first names.

There is no difference between co-operative members' and non-members' trust in the buyer representative. In both categories four of the five interviewees have much trust in the buyer representative. One would expect the co-operative suppliers to be more inclined to trust the Södra representative as a co-operative would hardly 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)*

One may expect less experienced forest owners (column d) to favour the co-operative more than less experienced owners. 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, but whether this is for rational or ideological reasons is unclear. Likewise, none of the IOF suppliers can imagine themselves selling to Södra.

When the interviewees got the question whether there are influences in the social networks, 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 issue, and therefore this is not a topic of conversation. Another explanation is that they talk about the issue but their pride prevents them from declaring that during the interviews. 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 buyers.

- *“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 or the other type of buyer becomes evident when the interviewees are faced with the question about what could induce them to change buyer. 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 buyer. 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. Among the members there is nobody who 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.

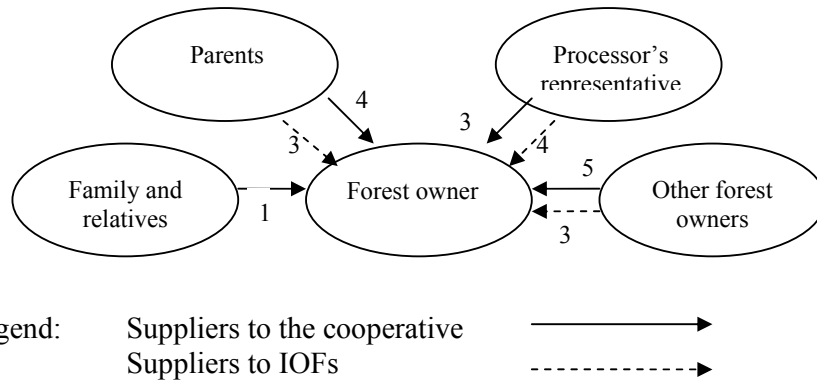
- “The Södra model – it is reasonable.” (Interviewee 5, co-operative supplier)
- “I get the money rather than any capitalist. ... I feel like an owner of the firm.” (Interviewee 5, co-operative supplier)

## Conclusions

Proposition 1 says that *Forest owners influence each other as to choice of buyer*. In one respect this proposition gets strong support; the forest owners’ choice of buyer is often influenced by their parents’ choice. Except for this relation, the interviewees mostly deny both that they are influenced by others and that they try to influence others. On the other hand, they talk to each other about forestry, and of course also their choice of buyers and the prices they get.

Figure 1 provides an overview over how many of the forest owners in the two groups have mentioned social contacts with other forest owners, the buying firms’ local representatives, and relatives and family members, and parents.

An interpretation is that social networks have importance for the decision whether to sell to a forestry co-operative or an IOF buyer but not in the sense that anybody tries to convince anybody else. It is instead so that the forest owners confirm each others’ existing choices. The interaction between the co-operative members make them even more convinced that they have made a good choice, and similarly among the IOF suppliers.



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

This is not to say that co-operative ideology is important. The members' strong loyalty to Södra is instead because they have established social networks with other Södra members as well as various employees within Södra. They have come to consider 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. Therefore, the conclusion is that proposition 1 gets support.

The second proposition, that *Social influences are stronger among co-operative members*, must be considered to be supported by the data. An indicator is that all five co-operative members talk to other forest owners, but only three of the suppliers to IOF buyers 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.

Proposition 3 says that *The forest owners who seek primarily non-monetary benefits from their ownership are more prone to sell to the co-operative*. There is a tendency that this proposition gets empirical support. Not one single of the co-operative suppliers say that price is their most important criterion with exception from respondent (1) who ranks the price to be crucial when he has large fellings. The most important factor is that Södra is a reliable partner. Three of the IOF suppliers consider price to be crucial for the choice of partner.

The data do not support the fourth proposition, *Forest owners, who are uncertain, are more influenced by social networks*. One single of the co-operative suppliers (interviewee 3) expresses uncertainty in his knowledge about forestry. Two IOF suppliers (interviewees 6 and 7) have poor knowledge in forestry. The difference is small.

One indicator of uncertainty might be the fact that forest owners tend to seek advice from the buying firms' local representatives. This may not be alarming for the co-operative members as they probably think that the risk of deceitful behaviour from the co-operative is low, whereas the suppliers to IOFs may have established a close relation to the buyer representatives due to uncertainty. With this interpretation, the proposition must be rejected since the trust in the buyer representatives is strong in both categories.

Even though only propositions 1, 2 and 3 get support from the data, the study has a value to the extent that it confirms that social networks are of great importance when the forest owners choose which buyer they want to deliver their timber to. The uncertainty in the findings is, however, quite large.

The study suffers not only from a small sample but also from the interview technique which does not allow direct comparisons between the respondents. Both these deficiencies are a consequence of the sensitive issues. Forest owners in both categories consider that their way of running the forests are nobody else's business. Hence, these deficiencies are difficult to avoid.

This study indicates that the producers might be influenced by the social networks as to their choice between a co-operative and an investor-owned business partner. Hence, it provides a basis for further empirical research about the importance of social relations in a co-operative decision-making context. In prior empirical research about farmers' behavioural patterns in relation to co-operative businesses – attitudes, loyalty, trust, attitudes, choice, etc – the focus is on either socio-economic variables or on socio-psychological variables, while social influences are missing.

A promising type of study about social networks in connection with farmers' view on co-operatives would be one, where the respondents inform about their specific social contacts. Provided that the sample consists of individuals who have relationships to each other, it would be possible to make a formal analysis based on network theory (Karantininis, 2007).

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