

Potential Mechanisms for Co-operation between Transportation Entrepreneurs and Customers: A Case Study of Regional Entrepreneurship in Finland

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Abstract – Nacrtak

The objectives of this study were to investigate how to increase co-operation in the regional entrepreneurship approach of wood transportation and facilitate the ongoing outsourcing of wood-procurement responsibilities in the Finnish forest industry. We examined co-operation between transportation entrepreneurs (suppliers) and between suppliers and the forest industry (customers). A questionnaire was sent to wood transportation entrepreneurs working in the wood-procurement network of the customers. The entrepreneurs felt that the most interesting form of consortium between suppliers, which would let them respond better to outsourcing, would be the formation of a joint venture responsible for sales and marketing of their services. Such a company would develop an overall contract with each customer, and then each shareholder in the joint venture would sign their own contracts with the venture to share the work. All transactions would be based on invoicing instead of the current salary-based approach. However, entrepreneurs did not believe that their profitability would increase by expanding their responsibilities in the current entrepreneurial environment. If the aim of co-operation is to outsource the wood transportation function, decision-makers in the Finnish forest industry should modify the current environment so that larger, more organized consortia of wood suppliers would become more profitable than they presently are in the regional entrepreneurship approach.

Keywords: Wood procurement, Outsourcing, Regional entrepreneurship, Networking

1. Introduction – Uvod

Almost all of the wood used by the Finnish forest industry is transported by trucks at some stage of the wood-procurement network, from the forest to the mill. Currently, approximately 850 Finnish wood transportation companies own about 1700 trucks and employ about 2600 drivers. Three-quarters of these wood transportation companies are small; families own one or two trucks, which usually deliver more than 90% of wood to a single customer. Nowadays, three of the largest customers (»Stora Enso«, »UPM«, and »Metsäliitto«) dominate the wood-procurement field, with a combined market share of about 90% of wood that is transported in Finland.

Traditionally, wood-procurement organizations sign direct transportation contracts with each trans-

portation company. These contracts have been used to strictly define the transportation operations that the entrepreneurs are responsible for. Traditionally, most of these contracts have been with employees of the wood-procurement organizations, and specified a fixed salary for the trucker. More recently, the forest industry has begun trying to outsource many of its operations, including wood transportation, in an effort to reduce its operating costs. However, this transition is only partially complete, and the current form of transportation entrepreneurship still retains many features of the traditional system. As a result, the kind of invoice-based (rather than salary-based) entrepreneurship that is typical of outsourced work markets has not yet become possible. In any outsourced business environment, entrepreneurs would invoice their customers for the work that they actual-

ly do, rather than receiving fixed payments as part of an employment contract (Beimborn et al. 2005). However, the current form of co-operation in transportation prevents this kind of invoicing. In the current operating environment, cost-efficiency is based on a large amount of the salary-based work performed by many small-scale entrepreneurs and members of their families. This environment provides relatively low direct transportation costs. However, it prevents the economies of scale that would become possible with large-scale entrepreneurship.

The costs of a Finnish transportation company have increased by 20% from year 2005 to 2010 (Fig. 1), and are shown in the financial statements as four main cost sources: purchases (for example parts, maintenance, fuel) wages (for example wages, pension contributions, indirect employee costs), other fixed costs (for example upkeep, rent, insurances), and capital costs (for example interest, depreciation). If the management costs are considered as an indicator of outsourcing, it seems that nothing has happened since 2005 that could be interpreted as an increase of outsourcing.

In the present study, wood suppliers were considered to be the transportation entrepreneurs, and their customers to be the wood-procurement organizations in the forest industry. Customers incur transaction costs caused by the need to exactly specify the transportation functions. The concept of transaction cost to be used is strictly linked to the idea of the cost of social division of labor (Coase 1998; Demsetz 2003; Bertolini and Giovannetti 2006). In this study, these

transaction costs are described for the wood-procurement organizations that manage and control the transportation function in the wood-procurement network (Fig. 2). According to Williamson (1981), the determinants of transaction costs are frequency, specificity, uncertainty, limited rationality, and opportunistic behavior. Through transaction cost minimization and knowledge exchange, networking can lead to higher performance of organization as a tool of regional and industrial policy (Andreosso-O’Callaghan and Lenihan 2008). Globalization of the forest industry has required steadily increasing efficiency and decreasing staff size in the industry’s wood-procurement network in recent decades. If the wood procurement organizations keep growing leaner, it may become impossible to apply the traditional contracting model because the number of managers of the forest industry is too small to perform the work needed to manage and control the transportation function.

In this changing entrepreneurial environment, the forest industry is attempting to improve its cost-effectiveness by offering transportation contractors extended entrepreneurship agreements that increase their responsibilities (Högnäs 2000; Palander et al. 2006). Actually, extended entrepreneurship is the first stage of ongoing process from contracting model of wood procurement network to outsourcing model of wood supply network. Fig. 2 shows that, after determining internal transaction costs separately in institutions and wood procurement companies, a decision can be made »whether to outsource

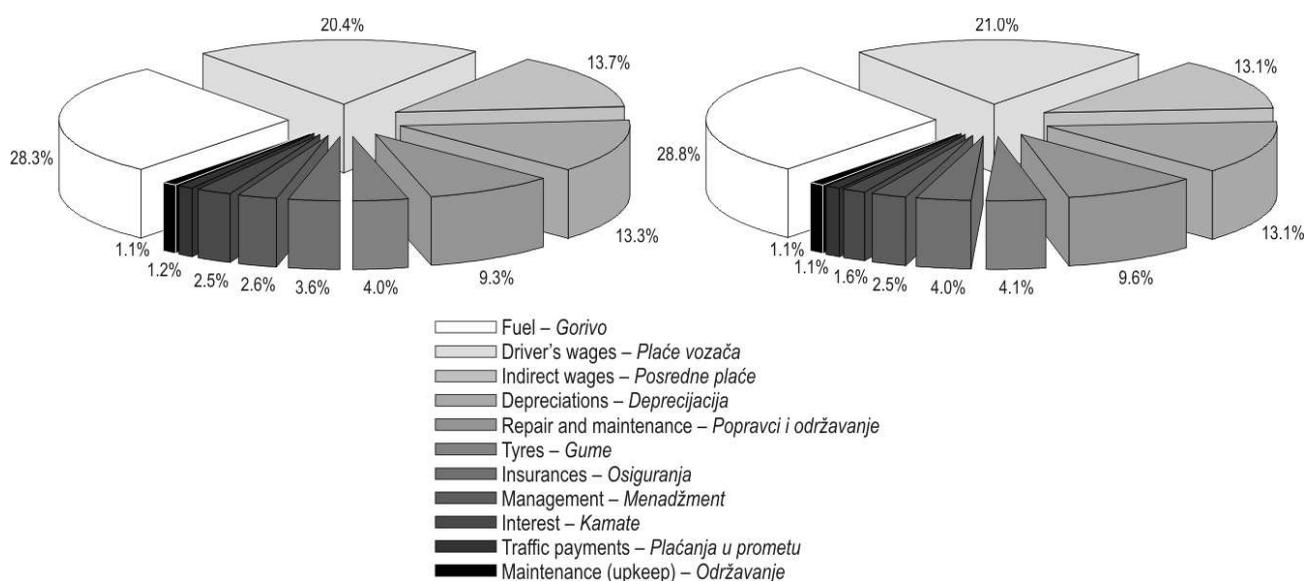


Fig. 1 Change of timber haulage truck's cost index from 2005 (left) to 2010 (right) according to K. Palojärvi (personal communication June 15, 2010)
 Slika 1. Promjena indeksa troškova kamiona za prijevoz drva od 2005. (lijevo) do 2010. (desno) prema K. Palojärvi (osobna komunikacija, 15. lipnja 2010)

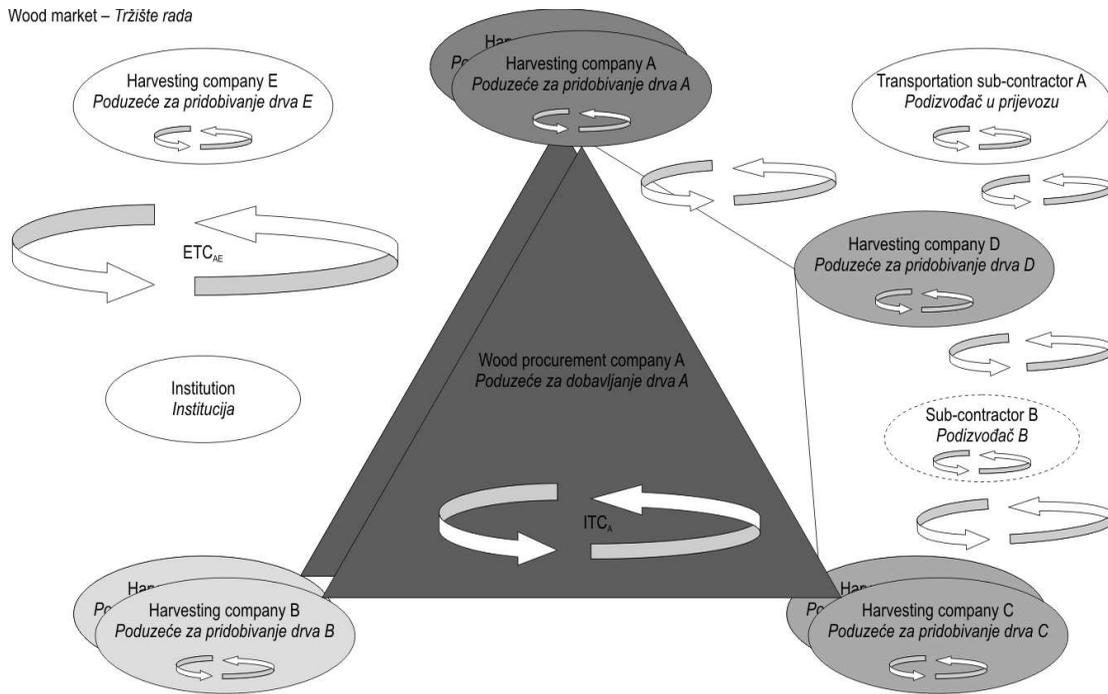


Fig. 2 Transaction model that shows institutions and market as a potential form of outsourcing to organize economic transactions. E.g., when the external transaction costs of the wood procurement company A (ETC) are higher than the internal transaction costs (ITC), the company can grow (left side). If the internal transaction costs of the wood procurement company A are higher than the external transaction costs the company can be downsized by outsourcing (right side)

Slika 2. Model koji prikazuje institucije i tržište kao potencijalni oblik izdvajanja u organizirane ekonomske transakcije. Kada su vanjski troškovi transakcije (ETC) poduzeća za dobavljanje drva A veći od internih troškova transakcije (ITC), poduzeće može rasti (lijeva strana). Ako su interni troškovi transakcije poduzeća A veći od eksternih troškova, transakcija se poduzeća može smanjiti izdvajanjem dijela poslova (desna strana)

or not to outsource wood transportation function« based on external transaction costs of the wood procurement company. For the Finnish forest industry the extended entrepreneurship is a logical consequence of the outsourcing of business functions that is becoming increasingly common in international markets. Based on a theory of transaction costs, outsourcing could potentially reduce the total costs of procuring raw materials at the mill (Williamson 1975, 1985). If the theory is correct, the forest industry's overall cost-effectiveness and international competitiveness would improve.

Regional entrepreneurship is one form of extended entrepreneurship that emphasizes co-operation between the wood supplier and the customer (Palander et al. 2006). In wood transportation sector regional entrepreneurship is a new thing, even though earth-moving and road-construction entrepreneurs have used this approach for decades. In a typical regional entrepreneurship application, the wood-procurement organization would sign transportation contracts with fewer entrepreneurs, each responsible for a larger area (a »region«). These extended contracts would include transportation tasks that are larger and more diverse, and that include more responsi-

bilities, than in conventional contracts. A regional entrepreneur can fulfill their contract commitments either by working alone or by co-operating with other entrepreneurs. The latter form of co-operation can occur via different forms of consortium:

- ⇒ Subcontracting, in which one entrepreneur buys services from other entrepreneurs, acting as sub-contractors,
- ⇒ Joint venture, in which a group of companies (the consortium) jointly signs a contract with a customer, and then consortium members share the payments for the work on a pre-determined basis,
- ⇒ Joint venture for sales and marketing, in which the joint venture signs contracts with customers, and shareholders sign contracts with the joint venture (with all monetary transactions based on invoicing rather than salaries),
- ⇒ Merger, in which the separate companies form a single new company, with the original equipment either transferred or sold to that company; the entrepreneurs then become shareholders in the new company and close the old companies. Shareholders work for this company and select a manager for the merged company,

⇒ Acquisition of another company, in which the seller transfers their equipment to the buyer, and subsequently works for the buyer.

Regional entrepreneurship has been adopted slowly by customers. Although »Stora Enso« is now beginning to investigate extended entrepreneurship contracts, several entrepreneurs working for »UPM-Kymmene« and »Metsäliitto« Cooperative have already signed such contracts. To advance this development, transaction costs can be used as a decision support. However, transaction costs are difficult to calculate, which may cause errors and uncontrolled variation in the data. Recently, Bertolini and Giovannetti (2006) have examined the important role played by the co-operative movement and co-operative firms, which allowed the reduction of transaction costs. Moreover, the networking literature takes a view that co-operation is an essential component of new-firm generation and growth (Jack et al. 2008). Before calculation transaction costs, a survey could be used as a study method to learn the opinions of stakeholders about the co-operation required by the operational environment of consortium, regional entrepreneurship, extended entrepreneurship and outsourcing.

Studies suggest that outsourcing can be promoted by increasing the size of contracts, extending the number of tasks and responsibilities included in the contract, and giving entrepreneurs more freedom of action, as proposed by Högnäs (2000). In wood transportation these actions require co-operation among entrepreneurs to form consortia, which are potentially more profitable. Palander and Väättäinen (2005) and Palander et al. (2006) noted that, based on current trend, there will be fewer, larger transportation consortia in the future, with increased networking among them. Networks can be vital living organisms, changing, growing and developing over time. Therefore, networks will create the entrepreneurial environment as suggested by Jack et al. (2008). The present transportation functions are also becoming differentiated and focused in different ways so that the wood-procurement network will have new actors, including workers who act as coordinators between the current organizations. Furthermore, Bengtsson and Kock (2000) have noted that competition and co-operation can exist simultaneously within a network of organizations.

In the study conducted by Ala-Fossi et al. (2004), service suppliers regarded joint ventures more positively than subcontracting as a co-operation model for the outsourced activities. On the other hand, Palander et al. (2006) found that both service suppliers and customers regarded joint ventures among transportation service suppliers as the weakest organizational alternative. These contradictory results

may have resulted from the fact that many of the entrepreneurs failed to understand the nature or implications of outsourcing. In the previous studies, comparisons of alternatives were therefore based more on images than on the actual knowledge. This lack of knowledge may have occurred because, at that time, the industry was just beginning to gain experience with regional entrepreneurship and had not yet clearly defined its needs.

Entrepreneurs who have signed contracts with extended responsibilities have repeatedly identified deficiencies in current models of regional entrepreneurship. The inability to work through invoicing, because customers have not yet replaced their traditional payment model and disadvantages of the current transportation routing methods were seen as significant obstacles to the development of regional entrepreneurship. The former problem prevents the development of genuine business expertise, since if outsourcing were based on invoicing, theories would provide instruments and methods of coordination that could be applied to improve business practices (Beimborn et al. 2005; Bititci et al. 2005). Currently, it is impossible to apply these tools in Finland because wood-procurement organizations still pay entrepreneurs a piece rate according to the quantity of wood delivered. In a theory of outsourcing, regional entrepreneurship would permit invoicing rather than salary-based work.

The second barrier to efficient regional entrepreneurship relates to the problem of routing. Currently, wood-procurement organizations tell each truck where to go to pick up wood. This leaves entrepreneurs little freedom to organize their own resources (time, trucks, drivers, routes), and often leads to operational inefficiencies if (for example) this prevents an entrepreneur from taking advantage of other opportunities, such as the chance to carry payload during a backhaul instead of traveling empty. For entrepreneurs, it would be beneficial to be allowed to control the volume they transport and the routing of their vehicles. This would provide many benefits both for them and for the wood-procurement organizations they serve. Benefits mentioned by entrepreneurs include group transport (i.e., the ability to group several trucks to haul a roadside inventory too large for a single entrepreneur to handle), a high vehicle utilization rate, backhauling, improved inventory control, improved control of seasonal variation in the wood supply, various synergies, and a better understanding of wood harvesting and the overall wood-procurement logistics chain (Palander and Väättäinen 2005).

To permit the evolution of regional entrepreneurship and make it part of the wood-procurement network, more studies are needed to describe opportuni-

ties for co-operation and the operational environment. Steps should also be taken to prepare for the increased co-operation of transportation entrepreneurs. Understanding the opinions (concerns and priorities) of entrepreneurs would facilitate the development of regional entrepreneurship; at a minimum, it would promote the development of current consortia of entrepreneurs by providing insights into future changes in their operating environment. For example, there may be an optimal company size in terms of profitability, as suggested by Soirinsuo and Mäkinen (2009). The results of another study suggested that transportation entrepreneurs with large company sizes were more interested in regional entrepreneurship than small entrepreneurs (Ala-Fossi et al. 2004). However, the study did not determine why the entrepreneurs of large sized companies regarded regional entrepreneurship more positively than was the case with the other transportation entrepreneurs. We speculate that this attitude may result from the greater resources available to the large companies, and their working experience in larger regions, which make the responsibility of operating on a regional scale seem less intimidating. Further, the fear of incorrect decisions leading to ineffective investments can slow the development of regional entrepreneurship during the amortization period for these investments.

Our review of the research results and theories related to outsourcing and regional entrepreneurship suggests that both should be based on co-operation, but co-operation between actors requires improvement. It has been assumed that regional entrepreneurship will remain uncommon because it is not clear how to encourage co-operation between wood suppliers and between suppliers and their customers in the current changing operating environment. Therefore, the objectives of the present study were to investigate how to increase co-operation in the wood transportation operations and facilitate the ongoing outsourcing of wood-procurement responsibilities in the Finnish forest industry. To support this research, we surveyed entrepreneurs to learn their opinions about the following categories of questions: (1) What factors prevent regional entrepreneurship from becoming more common? (2) How do customers perceive regional entrepreneurship? (3) How prepared are entrepreneurs to develop co-operative agreements, and what possibilities do they see arising from these agreements? (4) Are entrepreneurs willing to form various kinds of consortia, and what are the perceived implications for their profitability? We also focused on the questions of supplier-customer relationships and transportation company size, since these are possible explanatory factors for the different opinions of respondents.

2. Research Data and Study Methods

Podaci i metode istraživanja

The data used in this study was obtained from Finland in 2006 using a questionnaire that was carefully tested and revised before using it to collect the research data. The survey was distributed by mail to wood transportation entrepreneurs belonging to the Finnish Transport and Logistics Association (SKAL). This association represents transportation entrepreneurs in negotiations with customers in work markets. About 410 wood transportation companies are members of the association in the study area.

The target group for our survey comprised entrepreneurs who had not signed regional entrepreneurship contracts ($n = 198$). This group of entrepreneurs had no prior knowledge of co-operation between suppliers or between suppliers and their customers within the wood-procurement network. In total, 84 entrepreneurs returned the questionnaire, and after eliminating incorrect responses, we retained answers from 76 entrepreneurs. Consequently, the final response rate was 39%. We included four regional entrepreneurs in the results because they had just begun working under the new form of environment. Tests for non-response bias were made. According to Director of the Timber Carriers Association, our survey provided a representative sample of Finnish wood transportation entrepreneurs. On the other hand, there were a few entrepreneurs who were not members of SKAL, but their percentage of the total wood transported was sufficiently low to be irrelevant for the survey. In addition, three of these entrepreneurs worked mainly in Russia, so their data were not relevant because the target group in our study was wood transportation entrepreneurs working in Finland.

We divided our questionnaire into three parts. The first part asked entrepreneurs about their current situation and obtained other background information, such as the form of the company, the form of their contract, the size of their company, and their most important customer. We used the last two parameters as the basis for grouping the transportation entrepreneurs. All respondents answered the same questions so that we could compare the answers between groups. We used the number of trucks as an indicator of the size of a respondent's operations; we divided the entrepreneurs into three groups based on the size of their company. Out of the 76 respondents, 44 had only one truck (»small company«). Medium company (16 respondents) had two trucks, and large company (16 respondents) had three or more trucks. The biggest company had 12 trucks. The transportation entrepreneurs supplied wood to a total of eight customers, from which 6 had two

main customers and 70 entrepreneurs identified their most important customer. We divided transportation entrepreneurs into five groups based on their most important customer: »Stora Enso« was the most important customer for 25 entrepreneurs, »UPM« for 16 entrepreneurs, »Metsäliitto« for 10 entrepreneurs, and the Finnish »Forest and Park Service« for 9 entrepreneurs. The remaining 10 transportation entrepreneurs formed a group that worked for Other Customers.

We found no statistically significant differences in the number of years of experience between entrepreneurs with different company sizes. However, owners of the large companies had, on average, been working as transportation entrepreneurs for a little longer (30 years) than entrepreneurs who owned medium (23 years) or small (23 years) companies. The number of working hours per week can vary greatly for entrepreneurs depending on the season, annual holidays, sick leave and time required to repair their equipment. Our survey was distributed in mid-winter and late winter, but the duration of the work week was similar in both cases (an average of 68 hours per week). We found no statistically significant differences in working time between transportation entrepreneurs of different company sizes or with different customers.

In the second part of the questionnaire, we asked entrepreneurs about their attitudes towards the concept of regional entrepreneurship. To do so, we asked entrepreneurs to state their opinions about various statements using a seven-point Likert-like scale, ranging from »I fully agree« to »I fully disagree«. The third part of the questionnaire investigated the co-operation between transportation entrepreneurs by asking them to evaluate a series of statements concerning different forms of consortium, and particularly about whether they perceived these forms of consortia as interesting and likely to be feasible. This part of the survey employed »strategic gap analysis« (Ansoff 1965), and contained statements that were designed to evaluate the preparedness of entrepreneurs to choose different forms of consortium, and opportunities to do so. We also asked the entrepreneurs to estimate the truthfulness of each statement. For many of the questions, we also gave entrepreneurs an opportunity to explain their responses, and some of these responses provide possible explanations for the results.

We analyzed the data using SPSS-X (SPSS Inc (1988) SPSS-X User's Guide, 3rd ed. SPSS Inc., Chicago) in three stages. In the first stage, we summarized the background information using averages for the volume of activity and percentage shares of the response rates. The attitude results, based on the seven-

-point Likert-like scale, were analyzed based on the relative shares of answers and based on a weighted average of the responses. In the second stage, we analyzed the answers using Kendall's rank-correlation coefficient (τ). In the third stage, we studied groups of transportation entrepreneurs using non-parametric analysis of variance (the Kruskal-Wallis test) and compared these groups two at a time using the Mann-Whitney U -test. We used these tests (both based on ordinals) because the variable values (answers) did not show a normal distribution, and the tests let us test whether two independent samples (groups) came from the same population. The former test revealed whether the groups being tested were significantly different, after which we identified specific significant differences using the Mann-Whitney U -test in paired comparisons. Unless otherwise noted, we used the Mann-Whitney U -test and a significance level of $p < 0.05$ for all results.

3. Results – *Rezultati*

The entrepreneurs thought that their most important customers had different opinions of regional entrepreneurship (Kruskal-Wallis). According to the entrepreneurs, »Stora Enso« was most negative about regional entrepreneurship, with a significantly smaller Likert value (3.6) than the average (5.9) for those who reported »Metsäliitto« as their most important customer, which had the most positive attitude towards regional entrepreneurship. The mean Likert value for entrepreneurs who provided wood for »Stora Enso« was also significantly smaller than the average (5.4) for the group that worked for »UPM« and the average (5.0) for the group that worked for the Finnish »Forest and Park Service«. The Likert value for the group that worked for Other Customers (4.2) was significantly smaller than the values for who that worked for »Metsäliitto« and »UPM«.

The entrepreneurs believed that their most important customer should inform them better about the customer's plans regarding regional entrepreneurship. The mean Likert value (2.6) for this statement was the lowest for entrepreneurs working for »Stora Enso« and for entrepreneurs in medium companies (2.9), and the highest for entrepreneurs working for »Metsäliitto« (3.8) and for entrepreneurs in small companies (3.4); however the differences were not statistically significant. There was a statistically significant correlation between the positive attitude of the customer towards regional entrepreneurship and the entrepreneur's desire for more information ($\tau = 0.324$).

Table 1 summarizes the responses of the entrepreneurs to our survey statements about regional

Table 1 Levels of agreement with the statements regarding regional entrepreneurship. 1 = Fully disagree; 2 = Disagree; 3 = Mildly disagree; 4 = Don't know; 5 = Mildly agree; 6 = Agree; 7 = Fully agree. Entrepreneurs were divided into groups based on their company size (Small (1 truck) = S; Medium (2 trucks) = M; Large (3 or more trucks) = L) and their most important customer (»Stora Enso« = A; »UPM« = B; »Metsäliitto« = C; »Forest and Park Service« = D; Other Customers = E)

Tablica 1. Razina slaganja s tvrdnjama u vezi s regionalnim poduzetništvom. 1 = Uopće se ne slažem; 2 = Ne slažem se; 3 = Blago se ne slažem; 4 = Ne znam; 5 = Blago se slažem; 6 = Slažem se; 7 = Potpuno se slažem. Poduzetnici su podijeljeni u grupe prema veličini tvrtke (Mali /1 kamion/ = S; Srednji /2 kamiona/ = M; Veliki /3 ili više kamiona/ = L) i najvažnijim korisnicima (»Stora Enso« = A; »UPM« = B; »Metsäliitto« = C; »Šumska i parkovna služba« = D; Ostali korisnici = E)

	Customer Korisnik					Company size Veličina tvrtke		
	A	B	C	D	E	S	M	L
I understand what regional entrepreneurship means – Razumijem što znači regionalno poduzetništvo	6.0	5.4	5.8	5.0	5.7	5.6	5.9	5.6
Regional entrepreneurship is a favorable development for the wood transportation <i>Regionalno je poduzetništvo povoljan razvoj za transport drva</i>	3.8	3.8	4.0	3.9	2.7	3.5	3.9	3.7
The forest industry is only promoting regional entrepreneurship to transfer their wood-procurement costs on to transportation entrepreneurs – Šumska industrija promovira regionalno poduzetništvo samo radi prebacivanja svojih troškova dobave drva na privatne prijevoznike	6.0	6.3	5.9	6.2	6.9	6.1	6.6	5.9
The bargaining position of a regional entrepreneur is significantly stronger than that of entrepreneurs with a normal salary-based contract – Pregovaračka pozicija regionalnih poduzetnika znatno je jača od poduzetnika s normalnim platnim ugovorom	4.8	4.0	4.5	4.1	3.4	3.9	4.6	4.8
Regional entrepreneurship will lead to overcapacity in the wood transportation <i>Regionalno će poduzetništvo rezultirati prekapacitiranjem u prijevozu drva</i>	4.0	4.2	3.6	4.0	4.6	4.0	4.1	3.9
I have enough ability to negotiate on behalf of a consortium or a joint venture <i>Imam dovoljno sposobnosti da pregovaram u ime konzorcija ili za zajednički pothvat/ulaganje</i>	3.8	4.2	4.5	4.2	3.4	4.2	3.9	3.6
I am willing to expand the area in which I operate and to take on new responsibilities to become a regional entrepreneur <i>Voljan sam proširiti područje rada i preuzeti nove odgovornosti da postanem regionalni poduzetnik</i>	2.7	3.8	3.6	3.4	2.4	3.0	2.8	3.9
A regional entrepreneurship would improve the cost-efficiency and profitability of the whole wood-procurement network – Regionalno će poduzetništvo poboljšati troškovnu učinkovitost i profitabilnost ukupne mreže dobavljanja drva	3.7	3.8	4.1	4.3	3.7	3.8	4.1	4.1
I have enough knowledge of long-distance transportation routing and the planning of backhauls <i>Imam dovoljno znanja o određivanju ruta i planiranju udaljenoga transporta</i>	4.5	4.3	5.0	3.9	4.1	4.3	4.2	4.9
I have enough ability to make additional use of information technology <i>Imam dovoljno sposobnosti za dodatno korištenje informacijskih tehnologija</i>	4.4	4.0	4.4	3.7	4.5	4.5	3.6	4.6
I have enough ability to found a joint venture that would take care of both harvesting and transportation of wood – <i>Imam dovoljno sposobnosti za zajednički pothvat/ulaganje koji bi pokrивao pridobivanje i transport drva istodobno</i>	2.5	3.1	3.3	2.6	3.3	2.7	2.9	3.8
I have enough resources to purchase planning and data systems <i>Imam dovoljno sredstva za kupnju sustava za planiranje i podatke</i>	3.6	3.2	3.6	3.3	3.8	3.4	3.5	4.4
I want more training in the fields of information and communications technology <i>Želim više osposobljavanje u području informacijskih i komunikacijskih tehnologija</i>	4.8	4.9	4.4	4.1	4.0	4.5	4.5	4.6
Regional entrepreneurship will become more common in the future <i>Regionalno će poduzetništvo u budućnosti postati uobičajenije</i>	4.7	4.9	4.5	4.1	4.4	4.5	4.4	5.0

entrepreneurship, grouped by major customer and company size. The entrepreneurs commonly believed that the forest industry was only promoting regional entrepreneurship to pass their wood-procurement costs to the transportation entrepreneurs (mean Likert value = 6.2). The entrepreneurs who worked for »Metsäliitto« and »Stora Enso« were least likely to believe this statement (Likert values of 5.9 and 6.0,

respectively). The entrepreneurs working for Other Customers were most likely to believe this statement (6.9). The differences were statistically significant between »Metsäliitto« and Other Customers and between »Stora Enso« and Other Customers. The entrepreneurs who reported »Stora Enso« as their most important customer were most likely (6.0) to believe that they understood what regional entrepreneur-

Table 2 Entrepreneurs' interest in and perceived feasibility of various forms of co-operation. 1 = Fully disagree; 2 = Disagree; 3 = Mildly disagree; 4 = Don't know; 5 = Mildly agree; 6 = Agree; 7 = Fully agree

Tablica 2. Interesi poduzetnika i percipirana izvedivost različitih oblika suradnje. 1 = Uopće se ne slažem; 2 = Ne slažem se; 3 = Blago se ne slažem; 4 = Ne znam; 5 = Blago se slažem; 6 = Slažem se; 7 = Potpuno se slažem

Form of co-operation - Oblik suradnje	Mean Likert value - Srednja Likertova vrijednost	
	Interest - Interes	Feasibility - Izvedivost
Sub-contracting - Podugovaranje	3.5	3.8
Joint venture - Zajednički pothvat/ulaganje	4.1	4.0
Joint venture for sales and marketing - Zajednički pothvat/ulaganje za prodaju i marketing	4.7	4.5
Merger - Spajanje	3.7	3.7
Company acquisition - Kupnja poduzeća	4.0	4.3

ship means, whereas the entrepreneurs who worked for the Finnish »Forest and Park Service« were least likely (5.0) to share that belief. The difference between the two groups was statistically significant.

Most entrepreneurs were not interested in expanding their company into a regional entrepreneurship (mean Likert score of 3.1). The entrepreneurs working for »UPM« were most interested (3.8) in expanding their company, whereas the entrepreneurs working for Other Customers were least interested (2.4). This difference was statistically significant. The entrepreneurs who had large companies were slightly more interested in expanding their company (3.9) than the entrepreneurs of small (3.0) and medium (2.8) companies, but the differences were not significant. The entrepreneurs who owned four or five trucks believed more often than any other group (small, medium, large) that the growth of their company would increase profitability (3.6), but at the same time, they were more reluctant (3.3) than entrepreneurs of other large companies to expand their company size. The entrepreneurs with four or five trucks regarded regional entrepreneurship more positively (5.1) than any other group.

The entrepreneurs responded negatively (a mean Likert value of 3.0) to the statement that they had enough ability to found a joint venture capable of taking care of both harvesting and transporting wood. The entrepreneurs who owned four or five trucks were the group that was most interested in co-operation with harvesting entrepreneurs (4.2). The entrepreneurs with large companies were more positive (3.8) about this statement than the entrepreneurs with small companies (2.7), and the difference was statistically significant. This was also true for the belief that their company had enough resources to acquire planning and data management systems; the entrepreneurs with large companies agreed with this statement (4.4) significantly more than entrepreneurs with small companies (3.4). Entrepreneurs with small companies were significantly more posi-

tive (4.5) that they had enough ability to use additional information technology than the entrepreneurs with medium companies (3.6). The entrepreneurs with large companies and the entrepreneurs with four or five trucks were even more convinced (4.6 and 4.9, respectively) of their ability. The entrepreneurs with small companies were least likely (3.9) and those with a large company were most likely (4.8) to believe that the bargaining position of a regional entrepreneur would be stronger than under a normal salary-based contract. This difference was statistically significant. The entrepreneurs who worked for Other Customers believed significantly less than the entrepreneurs who worked for »Stora Enso« (3.4 and 4.8, respectively) that regional entrepreneurship would improve their bargaining position.

We investigated the interest of entrepreneurs in various potential forms of co-operation and the perceived feasibility of that form, with the results pooled for all respondents (Table 2). Then we repeated this analysis firstly for entrepreneurs grouped based on their biggest customer (Fig. 3). The mean Likert values ranged from 2.8 (not very interesting or feasible) to 5.3 (quite interesting and feasible). The entrepreneurs who worked for »Metsäliitto« were less interested in a joint venture for sales and marketing of services (3.9) than other entrepreneurs. The differences were significant between »Metsäliitto« and »Stora Enso« (5.2) and between »Metsäliitto« and Other Customers (5.3). The entrepreneurs who worked for »UPM« evaluated company acquisition as less feasible (3.8) than other entrepreneurs. The differences were statistically significant between »UPM« and the Finnish »Forest and Park Service« (5.3) and between »UPM« and »Metsäliitto« (4.9). Entrepreneurs who worked for »UPM« also considered merger to be less feasible (3.1) than other entrepreneurs, and the difference between »UPM« and the Finnish »Forest and Park Service« (4.4) was statistically significant. There was a significant correlation in the interest towards merger and company acquisition ($\tau =$

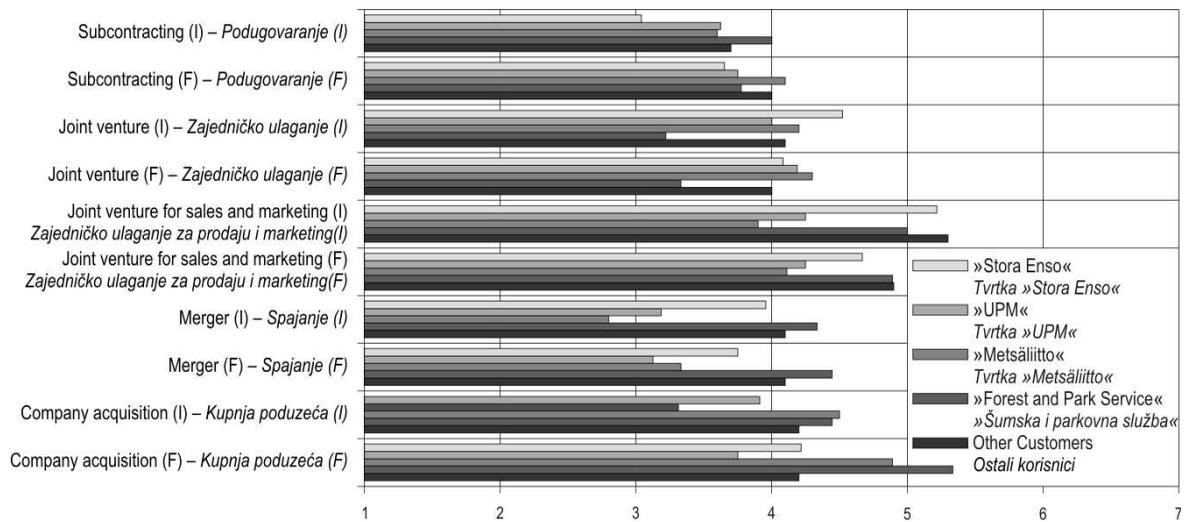


Fig. 3 Attitudes of entrepreneurs towards various forms of consortium. Entrepreneurs were divided into groups based on their most important customer (I = interesting; F = feasible). 1 = Not at all interesting/feasible; 2 = Not interesting/feasible; 3 = Not very interesting/feasible; 4 = Don't know; 5 = Quite interesting/feasible; 6 = Interesting/feasible; 7 = Very interesting/feasible

Slika 3. Stavovi poduzetnika prema različitim oblicima udruživanja. Poduzetnici su podijeljeni u grupe prema najvažnijim korisnicima (I = interesantno; F = izvedivo). 1 = Uopće nije interesantno/izvedivo; 2 = Nije interesantno/izvedivo; 3 = Nije jako interesantno/izvedivo; 4 = Ne znam; 5 = Prilično interesantno/izvedivo; 6 = Interesantno/izvedivo; 7 = Jako interesantno/izvedivo

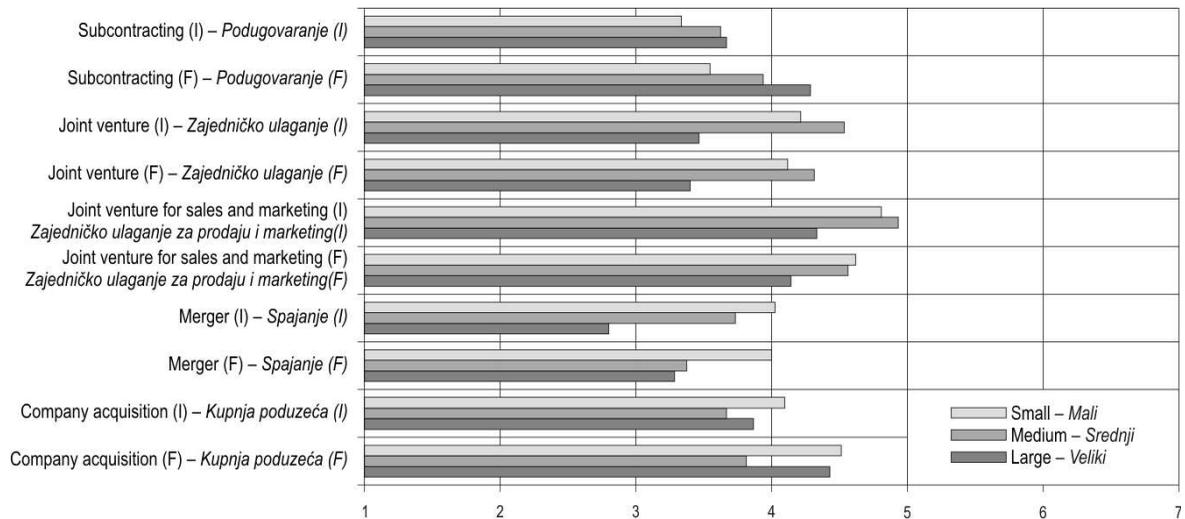


Fig. 4 Attitudes of transportation entrepreneurs with different company sizes towards various forms of consortium (I = interesting; F = feasible). 1 = Not at all interesting/feasible; 2 = Not interesting/feasible; 3 = Not very interesting/feasible; 4 = Don't know; 5 = Quite interesting/feasible; 6 = Interesting/feasible; 7 = Very interesting/feasible

Slika 4. Stavovi poduzetnika u prijevozu drva s različitim veličinom poduzeća prema određenim oblicima udruživanja (I = interesantno; F = izvedivo). 1 = Uopće nije interesantno/izvedivo; 2 = Nije interesantno/izvedivo; 3 = Nije jako interesantno/izvedivo; 4 = Ne znam; 5 = Prilično interesantno/izvedivo; 6 = Interesantno/izvedivo; 7 = Jako interesantno/izvedivo

0.433) and in the feasibility of these alternatives ($\tau = 0.402$).

We performed the same analysis, but this time based on company size (Fig. 4). All company sizes ranked a joint venture for sales and marketing as the most interesting alternative. Small companies also

considered this option to be the most feasible, but large companies ranked it in third place in terms of feasibility, with subcontracting and company acquisition ranked higher. Medium companies thought that joint venture and joint venture for sales and marketing were the most feasible alternatives. Small

companies were more interested in a merger (mean Likert value = 4.0) than large companies (2.8), and the difference was significant.

Table 3 summarizes the underlying factors responsible for the selection of the alternatives for each group of customers. The entrepreneurs working for »Stora Enso« were significantly less interested (mean Likert value = 2.6) in expanding their company than the entrepreneurs working for »UPM« (3.9). The entrepreneurs working for »Metsäliitto« (5.0) believed that they had enough monetary resources to expand their activities significantly more than entrepreneurs working for Other Customers (3.3). Entrepreneurs working for Other Customers believed that expanding their company would require hiring of additional staff for supervision and planning duties (5.9) significantly more than those who worked for the Finnish »Forest and Park Service« (4.8).

Table 3 also summarizes the responses to the same questions, but grouped by company size. Almost all respondents thought (mean Likert value = 6.2) that there will be a shortage of drivers in the near future. Some entrepreneurs noted that this was al-

ready a problem that limited expansion of their company. Respondents were most negative about their willingness to expand their company (3.1) and about whether increasing the company's size would increase their profitability (2.6). The small and medium companies (2.5 and 2.3, respectively) rated this probability lower than large companies (3.3), and the difference was significant between the large and medium companies. The willingness to expand received a mean ranking of 2.9 for the small and medium companies, versus 3.7 for the large companies. The entrepreneurs were neutral about whether they were interested in co-operation with harvesting entrepreneurs (4.0, 3.9 and 4.6 for small, medium and large companies, respectively). However, some entrepreneurs in each size group were very interested in this option. Respondents with medium companies believed that expanding their company would require hiring additional staff for monitoring and planning duties more (5.9) than those with small or large company (5.1), and the difference was statistically significant between the small and medium companies. Those with small and medium companies were less positive that better routing and backhaul planning

Table 3 Levels of agreement with statements that explained the choice of a form of consortium. 1 = Fully disagree; 2 = Disagree; 3 = Mildly disagree; 4 = Don't know; 5 = Mildly agree; 6 = Agree; 7 = Fully agree. Entrepreneurs were divided into groups based on their company size (Small (1 truck) = S; Medium (2 trucks) = M; Large (3 or more trucks) = L) and their most important customer (»Stora Enso« = A; »UPM« = B; »Metsäliitto« = C; »Forest and Park Service« = D; Other Customers = E)

Tablica 3. Razina slaganja s tvrdnjama koje objašnjavaju izbor oblika konzorcija. 1 = Uopće se ne slažem; 2 = Ne slažem se; 3 = Blago se ne slažem; 4 = Ne znam; 5 = Blago se slažem; 6 = Slažem se; 7 = Potpuno se slažem. Poduzetnici su podijeljeni u grupe prema veličini tvrtke (Mali /1 kamion/ = S; Srednji /2 kamiona/ = M; Veliki /3 ili više kamiona/ = L) i najvažnijim korisnicima (»Stora Enso« = A; »UPM« = B; »Metsäliitto« = C; »Šumska i park služba« = D; Ostali korisnici = E)

	Customer - Korisnik					Company size Veličina tvrtke		
	A	B	C	D	E	S	M	L
I have considered selling my company to someone who is expanding their activities <i>Razmatrao sam prodaju svoje tvrtke nekome tko proširuje aktivnosti</i>	3.3	3.8	4.2	2.9	3.6	3.4	4.6	2.8
I am willing to expand my company - <i>Voljan sam povećati svoje poduzeće</i>	2.6	3.9	3.0	2.9	2.7	2.9	2.9	3.7
I have enough monetary resources to expand my activities (savings or ability to obtain a loan) <i>Imam dovoljno novčanih resursa da proširim svoje aktivnosti (ušteđevina ili mogućnost dobivanja zajma)</i>	4.5	4.3	5.0	5.0	3.3	4.4	3.8	4.8
There will be a shortage of drivers in the future - <i>U budućnosti će nedostajati vozača</i>	6.0	6.5	6.4	6.5	6.3	6.2	6.3	6.1
I am interested in co-operation with harvesting entrepreneurs <i>Zainteresiran sam za suradnju s poduzetnicima na pridobivanju drva</i>	4.6	3.8	5.0	4.3	4.1	4.0	3.9	4.6
An increase in the size of the company will also increase its profitability <i>Povećanje veličine poduzeća također će povećati njegovu profitabilnost</i>	2.8	2.4	3.2	2.1	2.6	2.5	2.3	3.3
Expanding my company will require the hiring of additional staff for supervision and planning duties <i>Proširenje će poduzeća zahtijevati najmljivanje dodatnoga osoblja za poslove nadzora i planiranja</i>	5.5	5.1	4.8	4.8	5.9	5.1	5.9	5.1
Improving efficiency will let me hire additional staff <i>Poboljšanje će mi učinkovitosti omogućiti najmljivanje dodatnoga osoblja</i>	4.0	3.8	4.3	3.4	4.3	3.8	4.2	4.1
Better routing and backhaul planning will save money <i>Bolje određivanje ruta i planiranje prijevoza uštedjet će novac</i>	5.1	4.9	5.1	4.6	4.7	4.4	5.3	5.4

would reduce their costs (4.4 and 5.3, respectively) than entrepreneurs with large companies (5.5), and the difference between the small and large companies was significant. The entrepreneurs with medium companies had thought about selling their company more often (4.6) than other entrepreneurs (3.4 for small company and 2.8 for large companies), and the difference between the medium and large companies was significant.

4. Discussion – *Rasprava*

Concerning the main objective of investigation – how to develop co-operation between the transportation entrepreneurs and to facilitate outsourcing in forest industry, the important aims were to learn what factors are preventing regional entrepreneurship from becoming more common. It seemed that nothing happened since 2005 that could be interpreted as increase of outsourcing (Fig. 1). Therefore, this study is timely and relevant. An important obstacle was the lack of information about the plans of the entrepreneur's most important customer with respect to regional entrepreneurship. Some entrepreneurs believed that their customer had kept them poorly informed about the company's plans, and that the customer's attitude towards regional entrepreneurship was unclear. In this context, it is important to remember that regional entrepreneurship is a form of extended entrepreneurship (i.e., increased transportation responsibilities) that is often part of a company's outsourcing strategy. Despite the bad reputation of outsourcing, general attitudes towards this strategy can still be positive if entrepreneurs understand the situation and are confident that their customers will support them through the transition to the regional entrepreneurship.

Transportation entrepreneurs had similar views about many statements regarding regional entrepreneurship. Most perceived that regional entrepreneurship was only a way to transfer the customer's planning duties, management responsibilities, and costs to entrepreneurs without providing adequate compensation. This view is a major, previously unremarked obstacle to the development of regional entrepreneurship because even entrepreneurs whose customers were promoting regional entrepreneurship believed that the goal was to shift these burdens to the entrepreneur. It also seems that wood-procurement organizations that have begun applying regional entrepreneurship are working similarly to how they used to work before adopting this approach; for example, they still define how entrepreneurs should manage their operations instead of leaving the choice to the entrepreneur. Most entre-

preneurs who responded to our survey wanted to manage their routing and inventory control planning as well as negotiating pay rates from a position of more power by forming a bigger consortium. Although materials-related functions related to the flow of wood have been developed by forest industry, our results suggest that the monetary chains and the information chains must be developed further because of their importance to an entrepreneur's business operations. According to Beimborn et al. (2005) the monetary chain is rarely designed and optimized to provide a competitive advantage on its own because it is usually a secondary process to support a material chain.

Another obstacle to the development of regional entrepreneurship involves the difficulty of co-operation between entrepreneurs. Our results suggest that it will be necessary to develop an operational environment in which business networks are in place that let entrepreneurs simultaneously compete and cooperate in dynamic entrepreneurial environment. These aspects of co-operation have been important targets of research, where operating models have been developed to meet the management needs imposed by networking (Bengtsson and Kock 2000; Bititci et al. 2005; Bertolini and Giovannetti 2006; Jack et al. 2008). However, this approach remains unknown in the regional entrepreneurship of wood transportation sector although customers are operating successfully.

Regional entrepreneurship was not expected to improve the bargaining position of wood suppliers. In the current economic situation, with increasing global competition, this form of entrepreneurship was seen as a possible way to survive, although the entrepreneurs were generally more interested in the pay-rate policies of their customers than in regional entrepreneurship. Almost all entrepreneurs mentioned an imbalance between pay rates and transportation costs as a serious obstacle to the development of regional entrepreneurship. In addition, many respondents described their current economic situation as unsustainable. This is quite understandable given that our study was conducted in 2006, when the profitability of the Finnish forestry sector was poor because of rapidly rising fuel prices and a strike that affected many paper mills. In addition, the recession and a delay in the education of truck drivers also reduced profits.

We found that entrepreneurs with four or five trucks were most content with their situation, and this group regarded regional entrepreneurship more positively than any other group. Although differences between this company group and other large companies were not statistically significant, this

group believed more in their skills and opportunities. Entrepreneurs who owned four or five trucks also believed more often than any other group that the growth of their company would increase profitability, but at the same time, they were more reluctant to expand their company size than entrepreneurs of other large companies. These results appear to be contradictory, but the results can be explained by the results of Soirinsuo and Mäkinen (2009), who calculated that the most profitable company size in Finland was five or six trucks, after which the growth of the company did not seem to improve profitability. It is possible that entrepreneurs with four or five trucks saw that growth had been profitable up to their current company size, but feared that future growth would require investments that were bigger than the expected revenues. In theory they would rearrange transportation functions if the costs of internal transactions were less than the value of what is gained by networking as suggested by Coase (1992). On the other hand, it follows that if entrepreneurs can lower internal transaction costs, there will be more rearrangements, and the wood procurement network will become more productive.

Companies with two trucks seemed to be a problematic size. These entrepreneurs were least interested in expanding their company and least likely to believe that growth of the company would improve their profitability. These entrepreneurs believed most commonly that the forest industry was only promoting regional entrepreneurship as a way to transfer wood-procurement costs to the transportation entrepreneurs and that it would become necessary to hire additional staff for management of their operations. Owners of these companies had also more often considered selling their company than other entrepreneurs, and they had more doubts about their abilities and as to whether their resources were sufficient to permit growth. It seems that two trucks are insufficient to provide economies of scale, and that to grow, these entrepreneurs would have had to change their operation models by hiring additional staff. However, this change increases internal transaction costs of the transportation company (Fig. 2). Later it may also increase external transaction costs of wood procurement company, which may be considered as a conflict of outsourcing (Williamson 1975, 1985; Coase 1991). For wood procurement network, it appears to be more difficult to achieve good profitability simply by increasing the workload of the entrepreneur, as can be done in one-truck family enterprises. This became evident from the total volume of wood carried by the transportation entrepreneurs, because the productivity (m^3/h) per vehicle of two-truck compa-

nies seemed to be lower than that of one-truck family enterprises.

Regional entrepreneurship has been applied in wood harvesting of wood procurement network during the last decade. We found that the transportation entrepreneurs were interested in co-operation with wood harvesting entrepreneurs. These were entrepreneurs with large transportation companies. However, most entrepreneurs felt they lacked the skills they would require to manage a company that would take care of both wood harvesting and transportation. This problem could be solved by forming a consortium that combined the talents of an entrepreneur with harvesting skills with the talents of one with transportation skills. Otherwise, wood suppliers' role could even be given to harvesting entrepreneurs who would be responsible for large areas of wood procurement. In this entrepreneurial environment transportation entrepreneurs could operate as sub-contractors of harvesting entrepreneurs as suggested in Fig. 2.

We also wanted to learn how interested entrepreneurs would be in forming various kinds of consortia and their perceptions of how feasible these alternatives would be. The alternatives that we proposed were not especially interesting or perceived as easily feasible to the entrepreneurs, though opinions varied. The best alternative appeared to be a joint venture for sales and marketing of services. This joint venture would sign contracts with customers, and then each shareholder would sign their own contract with the joint venture. All monetary transactions would be based on invoicing for services rather than on salaries. This was the only alternative that was not opposed by any group of transportation entrepreneurs. The result indicated that invoicing encapsulated in the financial chain should be addressed in outsourcing as an autonomous source of competitive advantage, as suggested by Beimborn et al. (2005). There was also a statistically significant correlation between interest towards mergers and interest towards company acquisitions. On the other hand, there was a significant correlation between the interest in and perceived feasibility of the various consortium alternatives. This is obvious, because when entrepreneurs were interested in some form of consortium, they also saw it as a feasible alternative or at least as more feasible than other alternatives in the current working environment. It is good to note that this survey established the current performance status («gap») being provided based on the operational-level entrepreneurs' opinions. In future, this strategic analysis could be continued using the collected benchmarks of SKAL.

It is noteworthy that two groups of entrepreneurs were more interested in forming a joint venture re-

sponsible for sales and marketing of their services than was the case for two other groups of entrepreneurs. One group of entrepreneurs was more interested in a company acquisition and also believed more strongly than other entrepreneurs that they had the financial resources to expand their company. One reason for the lack of interest in forming consortia was the long work week. On average, an entrepreneur worked almost 70 hours per week, and in some cases, more than 100 hours. Clearly, the work week is too long for the well-being of entrepreneurs, and this may explain why most entrepreneurs were not interested in expanding their company: they feared the possibility of further increases in their work week. On the other hand, subcontracting was not an interesting alternative either for the small and medium companies, so it is understandable that selling the company was a more interesting alternative for these entrepreneurs. In the future, more research will be needed to develop an operational environment in which increasing company size is an attractive option.

Opinions about co-operation reflected the views of entrepreneurs who had not yet adopted regional entrepreneurship. These entrepreneurs are the group with the most potential for the development of improved co-operation between wood suppliers and their customers. These entrepreneurs are described as institutions or transportation companies in the transaction model (Fig. 2). The results indicated that only the first steps have been taken towards outsourcing, because practical details about the forms of consortia are still unclear. This was also revealed by comparing the present results with those of theoretical studies of co-operation and its objectives by Högnäs (2000). For example, transportation entrepreneurs whose biggest customer was »Metsäliitto« and those whose biggest customer was »UPM« had different conceptions of the effects of regional entrepreneurship on cost effectiveness of the wood-procurement network and on the profitability of the transportation operation. As they understood co-operation differently, it will be necessary to propose consistent developmental decisions to ensure that both groups of entrepreneurs have the same understanding.

A joint venture that focuses on sales and marketing could be a way to promote the development of outsourcing by awarding larger contracts than are currently awarded and larger transportation functions thereby giving entrepreneurs an incentive to increase their operational capacity and giving entrepreneurs more freedom of action. Before drawing further conclusions about this possibility, more studies will be necessary to confirm, for example, whether this form of organization can be developed and

understood by entrepreneurs, and how the coordinator of such an organization would manage the chains of materials, money, and information required to support transactions of the transportation function (Palander et al. 2006).

5. Conclusions – *Zaključci*

The results of the present study suggest that external reorganization of the truck transportation sector and internal structural changes in transportation entrepreneurship are currently underway, but that the objectives of these changes are unclear for all stakeholders in the wood-procurement network. To facilitate the development of co-operation in the wood transportation, the objectives of co-operation should be determined quickly and communicated to all stakeholders. The challenge for transportation entrepreneurs is to find the best set of interconnected service solutions that meet the strategic needs of wood procurement network. Those who are considering outsourcing of the transportation function must be aware of the linkage between reducing the staff in wood-procurement organizations and reorganizing the wood transportation sector, and the effect of the resulting operating environment on opportunities for co-operation.

For better environment the entrepreneurs felt that the most interesting form of consortium between suppliers, which would let them respond better to outsourcing, would be the formation of a joint venture responsible for sales and marketing of their services. Such a company would develop an overall contract with each customer, and then each shareholder in the joint venture would sign their own contracts with the venture to share the work. All transactions would be based on invoicing instead of the current salary-based approach. However, entrepreneurs did not believe that their profitability would increase by expanding their company size in the current entrepreneurial environment. To conclude, if the aim of co-operation is to outsource the wood transportation function, decision-makers in the Finnish forest industry should modify the current environment so that larger, more organized consortia of wood suppliers would become more profitable than they presently are.

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Sažetak

Mogući mehanizmi suradnje poduzetnika i korisnika prijevoza drva: studij slučaja regionalnoga poduzetništva u Finskoj

Gotovo sve drvo korišteno u finskoj šumskoj industriji u nekoj se fazi, unutar mreže dobavljanja drva od šume do pilana i tvornica, transportira kamionima. Trenutačno otprilike 850 finskih tvrtki za transport drva posjeduje oko 1700 kamiona i zapošljava oko 2600 vozača. Tri su četvrtine od tih poduzetničkih tvrtki za prijevoz drva mala poduzeća; obitelji posjeduju jedan ili dva kamiona, koji obično više od 90 % drva dostavljaju samo jednomu korisniku. Danas, u području dobavljanja drva, s ukupnim udjelom od 90 % drva koje se transportira u Finskoj, prevladavaju tri najveća korisnika (»Stora Enso«, »UPM«, i »Metsäliitto«).

Tradicionalno takve organizacije za dobavljanje drva potpisuju izravne ugovore o prijevozu sa svakom od tvrtki za transport drva. Takvi su ugovori korišteni da se strogo definiraju prijevoznčki poslovi za koje su poduzetnici odgovorni. Uobičajeno, većina je tih ugovora bila sklopljena sa zaposlenicima organizacija za dobavljanje drva i određivala je fiksnu plaću za vozača kamiona. Nedavno je šumska industrija u nastojanjima da smanji svoje operativne troškove započela s pokušajima da mnoge djelatnosti, uključujući i prijevoz drva, izdvoji iz svoga poslovanja. Ipak, taj je prijelaz samo djelomično ostvaren, te sadašnji oblik poduzetništva u prijevozu drva još uvijek zadržava mnoga obilježja tradicionalnoga sustava u transportu drva. U provedenom se istraživanju poduzetnici na prijevozu drva smatraju isporučiteljima drva, a organizacije za dobavljanje drva u šumskoj industriji predstavljaju njihove korisnike, odnosno korisnike usluga transporta drva.

U ovom promjenjivom poslovnom okruženju šumska industrija nastoji unaprijediti vlastitu troškovnu učinkovitost tako da privatnim prijevoznicima drva nudi sporazume o proširenom poduzetništvu kojima se povećavaju njihove odgovornosti. Zapravo, prošireno je poduzetništvo prva faza u započetom procesu prijelaza od ugovornoga modela u mreži dobavljanja drva ka modelu izdvajanja transporta u mreži isporučivanja drva.

Za finsku šumsku industriju takvo je prošireno poduzetništvo logična posljedica izdvajanja poslovnih funkcija koje nisu vezane uz temeljnu djelatnost poduzeća (outsourcing), postupak koji na međunarodnim tržištima postaje sve više uobičajen. Na temelju teorije o poslovnim troškovima izdvajanje prijevoza drva mogli bi se smanjiti ukupni troškovi dobavljanja sirovoga materijala do tvornice. Ako je ta teorija točna, unaprijedila bi se ukupna troškovna učinkovitost i međunarodna konkurentnost šumske industrije.

Regionalno je poduzetništvo jedan od oblika proširenoga poduzetništva u kojem se naglasak stavlja na suradnju isporučitelja drva (poduzetnika) i korisnika prijevoza drva. U sektoru transporta drva regionalno je poduzetništvo relativna novost, iako su poduzetnici na prijevozu zemlje i gradnji cesta primjenjivali takav pristup već desetljećima. U primjeni tipičnoga regionalnoga poduzetništva organizacije za dobavljanje drva potpisale bi ugovore o prijevozu s manjim brojem poduzetnika, od kojih je svaki odgovoran za veće područje (regiju). Takvi bi prošireni ugovori uključivali prijevoznike zadatke koji su veći i raznolikiji, u što je uključeno i više odgovornosti nego u klasičnim ugovorima. Regionalni poduzetnik može ispuniti svoje ugovorne obveze radeći sam ili u suradnji s drugim poduzetnicima. Navedeni se oblik suradnje može ostvariti kroz različite načine udruživanja: sudugovaranjem poslova, zajedničkim poslovnim pothvatima i ulaganjima, spajanjem poduzeća, kupnjom poduzeća.

Regionalno poduzetništvo korisnici prijevoza drva sporo prihvaćaju. Međutim, dok određeni korisnici tek počnu istraživati ugovore s proširenim poduzetništvom, pojedini su korisnici s poduzetnicima već potpisali takve ugovore. Ispitivanja pokazuju da se promicanje regionalnoga poduzetništva i izdvajanje prijevoza može postići povećanjem veličine ugovora, proširujući broj zadataka i odgovornosti uključenih u ugovor, te davanjem poduzetnicima više slobode u njihovim aktivnostima. U transportu drva takvi postupci zahtijevaju suradnju poduzetnika u osnivanju konzorcija, koji potencijalno mogu biti profitabilniji.

Ciljevi su provedenoga istraživanja bili da se ispituju načini na koje je moguće poboljšati suradnju u pristupu regionalnoga poduzetništva u transportu drva i da se olakša započeti proces izdvajanja odgovornosti u dobavljanju drva u finskoj šumskoj industriji. Ispitana je suradnja između poduzetnika na prijevozu (isporučitelji drva) te između poduzetnika i šumske industrije (korisnici prijevoza). Poduzetnicima u prijevozu drva koji rade unutar mreže dobavljanja drva korisnika poslan je upitnik. Poduzetnici smatraju da najzanimljiviji oblik konzorcija prijevoznika drva, koji im može omogućiti bolji odgovor na regionalno poduzetništvo i vanjsko ugovaranje prijevoza (outsourcing), predstavlja formiranje zajedničkih pothvata i ulaganja u prodaji i marketingu njihovih usluga. Takva bi tortka razvila sveobuhvatni ugovor sa svakim korisnikom, zatim bi svaki sudionik u takvu ulaganju/pothvatu potpisao vlastiti ugovor sa zajedničkom tortkom radi raspodjele poslova. Sve bi se transakcije temeljile na fakturiranju umjesto sadašnjega pristupa na osnovi plaća. Ipak, poduzetnici ne vjeruju da će se u postojećem poduzetničkom okruženju proširenjem njihovih odgovornosti povećati njihova profitabilnost. Ako je cilj suradnje izdvajanje transporta drva, donositelji odluka u finskoj šumskoj industriji trebaju promijeniti sadašnje okruženje tako da veći i organiziraniji konzorciji poduzetnika koji prevoze drvo postanu profitabilniji nego što to trenutačno jesu u pristupu regionalnoga poduzetništva.

Ključne riječi: dobavljanje drva, outsourcing, regionalno poduzetništvo, umrežavanje i povezivanje

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