

## **The Levels of Strategic Purchasing and Supply Management in Finland and Russia**

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## **Introduction**

The growing importance and strategic role of purchasing and supply management (PSM) is frequently mentioned in supply management research. As Ellram and Carr (1994) have stated, strategically managed purchasing has become a value-added resource to the firm. The significance of supply management has grown lately due to companies' strong reliance on outsourcing. During the last few decades companies have increasingly concentrated on their core capabilities in order to become more specialized. In doing so, they have attempted to focus on a limited set of activities (Gadde and Håkansson, 2001). This, in turn, means that they rely more on external resources. According to the resource-based view of the firm, the differences in firms' performance can be explained by different organizational capabilities, even when the firms operate in the same market and follow similar functional strategies. Organizational capability is defined to be a firm's capacity to deploy its resources by using organizational processes to achieve its goals (Makadok, 2001).

In this study we test whether the status of PSM, collaborative buyer-supplier relationships, and organizational capabilities have a positive impact on the level of strategic PSM. We test the explanatory power of these variables to the levels of strategic PSM and compare the results between Finnish and Russian companies. Despite their geographical closeness, these two neighbouring countries can be seen to represent two different extremes, when their international economic competitiveness and business environment are analyzed.

The paper is structured as follows: first, we discuss the theoretical underpinnings of our study and present the main variables included in the research model; then we continue with comparison of the sample countries concerning our theoretical hypothesis, and finally we discuss the results of the study and propose implications for management and further research directions.

## **Theoretical underpinnings**

The theoretical starting point of this paper comes from the tradition of institutional economics. The main focus is on the transaction cost theory (TCE) and the resource-based view (RBV), which suggest that the rationale for alliances is the value-creation potential of the firms' resources that are pooled together (e.g. Williamson, 1975, Eisenhardt and Martin, 2000, and Blomqvist et al, 2002). We consider a company's interaction with its suppliers as a source of improving the company's competitiveness and overcome environmental trends and challenges. When trying to build a system of long-term cooperation with the suppliers and manage it effectively, firms integrate certain resources in order to coordinate and align the business processes to support joint value creation. By doing this, the firm is challenged to make a strategic choice between internal factors and capabilities and supplier collaboration as an external factor.

It can be assumed that many external (environmental, economic and cultural) aspects influence a firm's desire and readiness to cooperate and be influenced by joint planning. The more rapid the changes in consumer preferences, the higher is the uncertainty of the market development – and the more important it would be to have strong partners, flexible and competent to support the company's operations. At the same time, the more demanding would be the request to build a strong basis of the firm's competences and capabilities to integrate the firm's own vision, the partner's contribution, and impulses from the changing markets.

The transaction cost theory provides a powerful general theory of alliance formation, especially for the choice of an appropriate governance structure (Blomqvist et al., 2002). RBV has been widely used to understand the source of competitive advantage in companies, and it sees companies as bundles of resources (Eisenhardt and Martin, 2000). The resource-based view stresses the internal aspects of a firm. It suggests that the parameters of a firm's competitive strategy are critically influenced by its accumulated resources. Resource heterogeneity can be a source for competitive advantage. If the resources and their related activity systems have complementarities, together they have the potential to

create sustainable competitive advantage (Eisenhardt and Martin, 2000). Cox, (1997) says that sustainable competitive business success is achieved, for individuals or companies, by flexible ownership and/or control of critical value net assets, which cannot be replicated or replaced by existing or potential competitors. This, rather than competitive positioning, is the essence of entrepreneurial activity.

On the basis of existing research literature, we have selected a number of factors to analyze how a firm combines internal and external resources in order to influence its ability to face the challenges of the external environment and competition through contribution to the effectiveness of purchasing and supply management. We assume that the selected factors represent the sources of successful long-term strategy in the field of purchasing, and the level of PSM thus measures the effectiveness of the long-term strategy.

#### *The level and status of strategic supply management - economic and social perspectives*

The evolution of purchasing to a strategic process (supply management) has been well noted in the literature for many years (see e.g. Cousins and Spekman, 2003). The topic of strategic supply management has been developed by several authors. Strategic management can be seen as the area of management studies concerned with decisions that help a company achieve sustainable competitive advantage (SCA). According to Barney (1991), SCA occurs when a company implements a strategy that is not simultaneously being implemented by any current or potential competitors and when these other companies are unable to duplicate the benefits of this strategy.

Carr and Smeltzer (1997) define strategic purchasing to be “the process of planning, evaluating, and controlling strategies and operating purchasing decisions for directing all activities of the purchasing functions toward opportunities consistent with the firm’s capabilities to achieve its long-term goals”. Strategic purchasing needs to be dissociated from the concept of purchasing strategy. In previous studies, orientation towards long-range planning has been used to describe the level of strategic PSM. We follow that approach and use the scales presented in previous studies. As briefly discussed above, we assume that the level of strategic PSM is an indicator of a firm’s success in the organization and integration of internal and external resources to increase the firm’s competitiveness. Long-term planning in the sphere of purchasing can be regarded as a tool to control the purchasing and supplier collaboration on one hand, and on the other hand it can be a tool to enhance flexibility, due to superior planning and forecasting.

The status of the purchasing function is determined by the image it projects to the other functions of the firm, and by how important the purchasing is seen from the management’s point of view (Carr and Smeltzer, 1997; Cousins et al. 2006). However, Carter and Narasimhan (1996) point out that the image and status of purchasing is driven by the impact it has on overall firm performance. According to Cousins et al. (2006) and Paulraj et al. (2006), internal integration between purchasing and the firm’s other functions influence the role and position of purchasing in the firm. Paulraj et al. (2006) characterize strategic PSM by its strategic focus and strategic involvement, and by the status and visibility of the purchasing professionals. They define the supply integration as consisting of relational, process, information integration and cross-organizational teams. Therefore we can imply that the higher the status of PSM in the company, the better are the abilities of the company to coordinate information flows and align the activities of the departments involved in the value creation chain, and thus to predict the development of the situation and the requirements to the level of suppliers’ involvement, joint activities and planning. At the same time, we understand that the nature of the status of PSM in different markets can be different – considering status more as an economic or social perspective. The analysis of the status of PSM from the economic perspective could be a significant indicator of the role of purchasing in leveraging the firm’s performance. The social aspect of the nature of the status of PSM leads us to the perception of the person responsible for the purchasing function – either the top management, head of department or purchasing manager in horizontal organizations. The status of the function and the status of the person in this case can be

correlated, as we assume. Furthermore, the status of PSM can also be linked to some historical factors of the firm's development - previous partnerships and the place of the company in the value chain. The last point is determined by the role of the firm in the value creation chain, and the extent to which the company contributes to the overall value creation in the value chain and business system. Based on above discussion, the following hypothesis is proposed:

H1: The status of PSM has a positive impact on the level of strategic PSM.

#### *Collaborative buyer-supplier relationships - strategic elements of interaction*

One of the primary tasks and responsibilities of strategic purchasing and supply management is to manage its external resources, e.g. suppliers and collaborative partners (van Weele, 2002, p. 94). Carr and Pearson (1999) have proved empirically that a relationship between strategic purchasing and buyer-supplier relationships exists. Firms that manage their purchasing and supply management strategically have higher levels of cooperation with their suppliers (Carr and Smeltzer, 1999). When cooperation and interaction with suppliers increases, the firm's ability to respond to the changing requirements of end customers will also grow. Thus, managing suppliers in a responsive way becomes significant. The ability to influence the suppliers in the supply chain with respect to meeting the requirements of the firm is called supplier responsiveness (Carr and Smeltzer, 1999).

Olsen and Ellram (1997) have developed a three-step portfolio to assist in managing different kinds of supplier relationships. According to the portfolio model, the firm's purchases are first analyzed. Secondly, the current supplier relationships are studied to find out how the supply and purchasing tasks are managed. Thirdly, the current supplier relationships are compared to the ideal situation. The key classification dimensions are the strategic importance of purchasing and the difficulty in managing the purchasing situation. The factors of strategic importance are competence, economics and image. The factors of difficulty in managing the purchasing situation are product characteristics, supply market characteristics and environmental characteristics. They base the categorization of supplier relationship on the relative attractiveness of the supplier and on the strength of the relationship between the buyer and the supplier.

Spekman and Johnston (1986) have assessed the degree of interdependence between buyers and sellers by comparing the control mechanisms and the level of vulnerability of a firm. Control mechanisms are required to achieve the level of coordination needed to gain competitive advantage. Vulnerability means that firms must assess the areas of immediate attention and areas of less urgency. Heide and John (1990) have developed a theoretical model of industrial buyer-supplier ties that presents joint action as a key aspect of closeness. Krapfel, Salmond and Spekman (1991) present a framework regarding the evaluation and management of trading relationships. They classify relationship types with relationship value and interest commonality as parameters. Relationship value refers to the willingness and ability of current exchange partners to provide sufficient demand for both current and expected outputs, in light of the availability and cost of locating, qualifying and establishing relationships with an alternative exchange partner. Interest commonality refers to compatible objectives between the buyers and sellers.

The study of Paulraj et al. (2006) highlights the role of the purchasing function's long-term focus in building strategic and collaborative supplier relationships. According to them, firms pursue long-term relationships even when their PSM is still at a low level of evolution. Collaboration can be understood as measurement of strategic elements of interaction, personal communication and stability in a relationship – in this case collaboration means a logical addition to the level of organizational capabilities in the field of strategic purchasing and the level of PSM. Collaboration can be regarded, as mentioned above, as an external resource for the company, depending on the level and quality of interaction. Based on the above discussion, the following hypothesis is proposed:

H2: The collaborative buyer-supplier relationships have a positive impact on the level of strategic PSM.

### *Organizational capabilities*

In general, capabilities in business research are considered to be knowledge and skills embedded in a certain business process or function. They are also referred to be the abilities of a firm to fulfill its assignments (Axelsson et al. 2005). Teece et al. (1997) enlarge the concept of capability to be dynamic, and define dynamic capabilities as the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Makadok (2001) defines capabilities as a firm's capacity to deploy resources by using organizational processes to achieve its goals. According to Makadok (2001), capabilities are information-based, tangible or intangible processes that are firm-specific and are developed over time through complex interactions among the firm's resources. Organizational capability refers to internal resources and how competitive advantage is achieved by focusing on the internal organization. Eisenhardt and Martin (2002) present that especially dynamic capabilities influence the organizational and strategic routines by which managers change their ways to acquire and protect resources. Heimeriks and Duysters (2007) have studied how differences in sources of alliance capabilities explain performance. They argue that the learning mechanisms, routines and capabilities are inherently linked. In their model is suggested that firm's alliance capability is a mediating variable. This means that the impact of experience on alliance performance is realized via alliance capability.

In this study, the capabilities of managing buyer-supplier relationships are considered as intra-organizational firm-specific knowledge and skills of human resources that are related to the supplier relationship and its management and organizing. Following the view of Makadok (2001), the capabilities are argued to be a firm's capacity to deploy purchasing and supply resources by using organizational processes to achieve the firm's goals. Thus, we hypothesize:

H3: The capabilities of managing buyer-supplier relationships have a positive impact on the level of strategic PSM.

In summary, the literature review suggests that there are three influencing factors that can explain the level of strategic PSM. When analyzing these factors from the buyer's perspective, we propose the following model for further consideration in the frame of this paper (see Fig. 1). The model has been constructed from three selected factors, combining internal (status PSM and capabilities) and external (collaboration) resources of the company, influencing – as we assume – the level of the strategic PSM in the company.

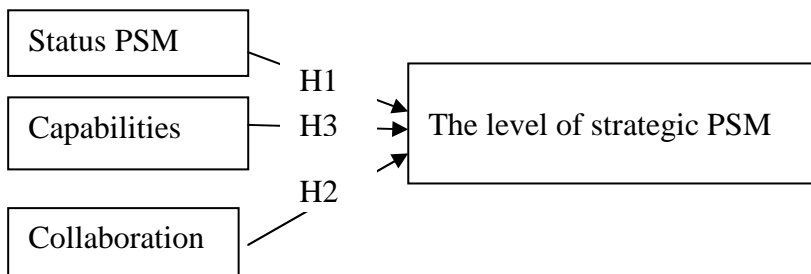


Figure 1. Model for testing

## **Comparative nature of the study**

The hypotheses of the study, based on existing research literature, are tested in our study on the basis of two samples, different in many aspects. However, we claim that there are reasons and arguments to compare our data. We propose that the selected markets – Finland and Russia – have reasons to be studied in the frame of one research project just due to the strong economic cooperation and links among companies – integrating suppliers and customers from different managerial cultures. Finland and Russia can by no means be said to be too similar. The famous value scale created by Hofstede (1984, 1991, 1993) originally included a four-dimension scale (he added the fifth dimension later). Bollinger (1994) tested Hofstede's dimensions in his study of Russian managers and found out that Russia scored a high power distance, low tolerance for uncertainty, high appreciation for collectivism, and general equality between male and female workers. According to Hofstede (1984, 1991, 1993), Finland can be considered quite an individualistic society, the country scored quite high on the individualism scale. On the uncertainty avoidance scale, Finland has a low index (below the average), whereas Russia scores high. Furthermore, Finland and Russia differ on the power distance scale; Finland has quite a low index compared to Russia's high score. On the masculinity scale both Finland and Russia score low.

Czinkota (1997) points out that one should take into account that Russians have not grown up in an environment that constantly offers choices, encourages the taking of responsibility, and focuses on the satisfaction of individual needs. However, he pays attention to similarities with Western institutions and managers, and points out that the list of key business education needs in Russia could easily reflect the learning needs of many Western organizations, including expertise in marketing, strategic planning and international business. Also Kets de Vries et al. (2004) state that both Russian business practices and the Russian labourforce have matured during the past 15 years. There are more individuals with Western business education and experience, and even those with no international experience have been exposed to Western business concepts, which are nowadays included in educational curricula at Russian universities.

In this sense there are no studies at the moment, trying to explain the nature and the level of maturity of strategic PSM in Finnish and Russian companies, which is a certain research gap. We assume that our study will be a starting point for further research on buyer-supplier cooperation and will propose an explanation for the existing differences, as well as implications for managers in both economies.

Russia's economic potential lies in its wide resource base, which includes major deposits of oil, natural gas, strategic minerals, coal and timber. Finland lacks all these resources, apart from timber, though her share of the world's forest resources is very small – 0.5%. For example Russia accounts for 23% of the world's forest resources. However, productivity is the keyword, which has been associated with Finnish performance in international competitiveness rankings.

In economic terms, the GDP in Russia has grown rapidly after the rouble devaluation and economic crisis in 1998, while in Finland the growth has been relatively modest. Since 2000, the Russian GDP has grown by over 40% - two times the growth in Finland during the same period. Despite the recent rapid growth figures, in 2005 the Russian GDP (PPP-adjusted) per capita reached USD 11,000, which was one third of the respective value in Finland. Secondly, even though foreign investors have increased their interest in Russia, the cumulative direct foreign investment stock by the end of 2005 in Russia was USD 132 billion, which is less than one thousand USD in per capita terms. Even though Finland is a limited market area of 5 million inhabitants, foreign companies have invested some USD 53 billion there – ten times more than in Russia if measured per capita terms. Thirdly, the enterprise structure in these countries is very different. The Russian economy is dominated by large enterprises, and small business accounts for some 13% of employment and contributes 26% of the total turnover. In Finland small companies form 98.8% of all enterprises, employ some 44% of all labor force, and their share of the total turnover is 33%. However, it should be kept in mind that the definition of small business in these two countries is different – in Finland small companies are categorized to employ less than 50 people and have a turnover below 10 million euros.

In Finland companies can be characterized to have rather long experience in PSM and managing buyer-supplier relationships. In this respect, Russia provides an interesting basis for comparison – not only in terms of differences in current enterprise structures, but also when taking into account the pace of development. In order to survive in the rapidly changing transitional business environment in the beginning of the 1990s, Russian firms suddenly had to establish reliable supply chains and pay attention to their existing customer base, which were new aspects for them (Hill, 1998). In addition, as foreign investors started to appear with modern organizational ideas, Russian companies had to find new ways to improve their competitiveness.

In their research on Russian retail chains, Tretyak and Sheresheva (2005) concluded that most local companies in Russian retailing still consider selling firms as adversaries, not collaborators, and therefore prefer to emphasize optimizing single transactions instead of building long-term connections. Few managers really understand the role of intangible assets, and relational assets in particular, as an essential factor of their competitiveness and profit-generating capacity. On the other hand, Russian companies have to struggle with foreign competitors, and thus Russian chains have to commit themselves to building long-term exchange relationships with their customers and suppliers. Critical questions are where to find strategic business partners and how to establish relations with them, since the suppliers demonstrate much less readiness to long-term win-win collaboration.

Lorentz (2007) has studied Finnish companies' supply network in Russia and noticed that in terms of supply network cooperation, there is more cooperation with customers in comparison to suppliers. Especially important areas of cooperation are sales administration, distribution and customer relationships management, while IT systems implementation is notably lacking in the integration efforts. Besides, the respondents were cautious in hailing great performance improvements from supply network cooperation – only minor positive effects were reported.

The analysis of buyer-seller interaction in industrial markets is crucial for understanding the main patterns of behavior, potential for value creation through interaction and – finally – opportunity to increase the firm's competitiveness. Investigation on the interaction between sides in terms of value creation through strategic purchasing and customer relationship management requires exact understanding of the nature of the variables used and the factors influencing the interaction. This is particularly important when speaking about comparative studies or specific samples from markets in transition.

Thus, following this approach, and making a conscious limitation to our approach while analyzing only one party of interaction, we investigate the nature of strategic purchasing in Finnish and Russian firms. We assume that when investigating the nature of purchasing, we always face a dichotomy in the sense that we can analyze the strategy of the buyer as an outcome of its own strategic orientation and aligned strategy in cooperation with suppliers.

In the frame of this study we follow the first approach, and propose to analyze the level of purchasing and supply management on the basis of the buyer's own strategy and capabilities. We also investigate the role of supplier collaboration in terms of strategy planning, but regard this as one factor among others, representing the influence from the side of the firm's external resources and potential leverage for the firm's competitiveness. Figure 2 highlights our approach and the frame of our study.

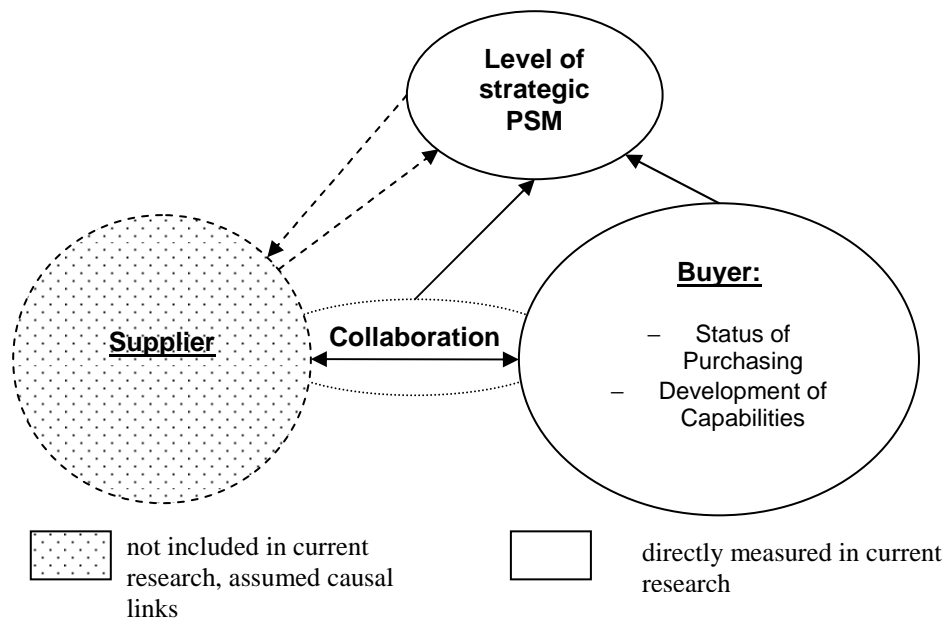


Figure 2. The frame of analysis

## Methodology

### *Samples and Data Collection*

The empirical data was collected through structured surveys in Finland and Russia. The first extensive survey questionnaire was developed and mailed in Finland during the spring 2005. It was aimed at large Finnish firms with a turnover of at least 50 million euros. A total of 612 companies were identified from the company register of Statistics Finland. Of those, 570 were found eligible for the study. These companies were contacted by telephone in order to reach the suitable key informant and to inform the respondent of the questionnaire beforehand. The aim of the telephone contacts was also to increase the response rate. Some of the companies or respondents were not reached in spite of numerous telephone calls. However, the questionnaire, preaddressed postage-paid return envelope, and a covering letter describing the purpose of the research, were mailed to all eligible respondents whether they had been personally contacted or not. Besides a telephone contact, participation in the survey was solicited by means of incentives, such as the offer of a summary report of the results and by assuring the confidentiality of the responses. A reminder e-mail was sent to those who had not answered within two weeks. A total of 100 responses were received, the response rate being 17.5 %. This is considered to be fair and acceptable, given the extent of the questionnaire. Non-response bias was assessed on a number of variables (e.g. size of staff and turnover, market share, market area, year of foundation) by comparing early and late respondents, following the suggestions of Armstrong and Overton (1977). Mann-Whitney test and Crosstabs were used to compare the responses of the first 30 respondents and the last 30 respondents. There was no evidence of non-response bias except that 75.9% of the late respondents operated domestically, when the same rate among the early respondents was 24.1 %. As there were no other significant differences between the respondents and non-respondents, it can be concluded that the data was not biased.

The second survey was conducted in Russia during the autumn 2006 with a similar questionnaire. Because of the cultural aspects and due the low readiness to share knowledge and information in a transition economy, completely structured interviews were chosen to gather the data instead of mailing the questionnaire. Totally 208 structured interviews were conducted.



On average, the turnover of the Finnish respondent companies was 322.8 million euros in 2003. Over half of the respondent firms (65 %) had been established before the year 1991, the oldest being nearly 200 years old. 50 % of the companies had less than 500 full-time employees, and 23 % more than one thousand. Due to the low readiness to share information, it was highly difficult to ask Russian companies directly about the average turnover, indeed the rate of rejection to answer the question was 15 % of the sample. Among those Russian respondents who answered the question, the mean of the turnover was 5.8 million euros in 2005. In the Russian sample the mean of sales growth ratio from the 2003 to 2005 was equal to 47% sales growth, varying from -15% to 800 %. These data indicate the development of the market. In the Russian sample, 58.6 % of the companies were established before the year 1991. The boom of establishing new companies was apparent after the collapse of the centrally led former Soviet Union. Most of the Finnish companies operated internationally in the EU region (15%) or globally (47%), 38% of the Finnish respondents did business domestically. The Russian companies operated in local regions (32%), federal regions (16%), Russia-wide (35%), CIS countries (18%), EU countries (4%), and at global markets (9%). Most of the Finnish responding persons were general executives from the top management and responsible directors of PSM. 76 % of them worked full-time in duties of sourcing, 24 % were managing directors or other leaders. Over half of them (53 %) had more than five years' experience in their present assignment, and 46 % had a university degree. In case of Russian companies, 21% of the respondents were CEOs, 42% worked as directors in purchasing-related fields, the rest being managers of production, marketing, sales, etc. This indicates that the respondents should have fairly good insight into the challenges of the purchasing function. The representing industries from both countries are presented in separate tables (Appendix 2), because of the different structure of the industrial coding. The other basic information of the responding companies is summarized in Appendix 3.

### *Measures*

The measurement items were culled from the literature and earlier studies on the subject. The constructs and scales used in this study are presented in Appendix 1. Multiple items were used to measure the constructs. The respondents assessed the items on a five-point Likert scale from “strongly disagree to “strongly agree”.

For the full sample (Finnish and Russian data), an exploratory factor analysis was conducted in order to test the construct validity and to purify the scales, as the study concerns two sets of data with inherent discrepancies. Items with loadings less than 0.40 were deleted. Four measures were retained for further analysis: Status PSM, Collaboration, Capabilities, and Level of Strategic PSM. The constructs of “status” and “level of PSM” were measured according to the scales adopted and slightly modified from the studies of Carr and Smeltzer (1997), Chen and Paulraj (2004), Kocabasoglu and Suresh (2006), and Paulraj et al., (2006). The items of the construct “collaboration/supplier relationships” were collected and modified from the studies of Monczka et al. (1998), Carr and Pearson (1999), Narasimhan and Das (2001) and Paulraj et al. (2006). Since we could not find a scale to describe the construct of “PSM capabilities”, the scale was developed for this study and is based partly on to the studies of Das and Narasimhan (2000), Carr and Smeltzer (2000), and Sanchez-Rodriguez et al. (2003).

Reliability was tested using the internal consistency, and thus a Cronbach's Alpha was generated for each construct. The item inter-correlation matrix was utilized in determining the items which contributed least to the overall internal consistency. Cronbach's  $\alpha$  is the most commonly used reliability coefficient that assesses the consistency of the entire scale. The generally agreed lower limit for Cronbach's  $\alpha$  is 0.70, although it may decrease to 0.60 in exploratory research (Hair et al. 1998, p. 118). The results in table 1 indicate Cronbach's  $\alpha$  to be acceptable in all the scales, though the “PSM capabilities” had  $\alpha$  value of 0.629 in Finnish sample but exceeded  $\alpha$  value 0.70 in the Russian sample where the sample size was larger. Cronbach's Coefficient Alpha level above 0.60 is sufficient for newly developed scales, here for the PSM Capabilities.

Table 1. Reliability analysis

<i>Construct</i>	<i>Cronbach's Alpha (Finnish sample)</i>	<i>Cronbach's Alpha (Russian sample)</i>
Status of PSM (6 items)	0.858	0.889
Level of Strategic Purchasing (3 items)	0.849	0.789
Collaboration/Supplier relationships (4 items)	0.748	0.746
PSM Capabilities (4 items)	0.629	0.704

### *Hypotheses testing*

The relationships between dependent and independent variables were tested by Multiple Regression Analysis using SPSS 12.1. The results of Regression Analysis show that consistent with our hypotheses H1, H2, and H3, the *Status of PSM*, *Collaboration* and *Capabilities* have a positive impact on the level of strategic PSM, statistically significant at  $p < 0.05$ . The significance of the relationships and the model structure was confirmed on both the Finnish and the Russian data. In the former case, the factors explained approximately 50 percent of the variance in the *Level of Strategic PSM* (the R-square was 0.493). The R-square for the regression model had a lower value in the Russian file (the R-square was 0.266), suggesting the existence of other latent variables which influence the *Level of Strategic PSM*. Furthermore, the analysis revealed that the factor *Status of PSM* has the strongest impact on the dependent variable in both samples (std. coefficient equalled 0.462 in the Finnish sample and had the value of 0.283 in the Russian one). The factors *Capabilities* and *Collaboration* were found to benefit the *Level of Strategic PSM* as well, but to a lesser extent. The Standardized Beta Coefficients are presented in Figures 3 and 4.

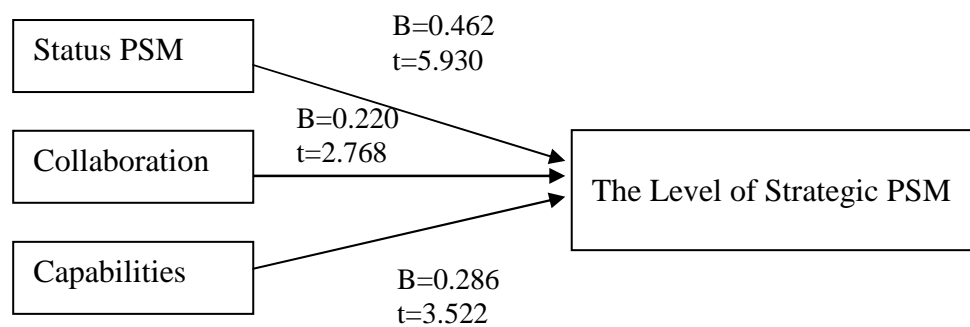


Figure 3. Standard coefficients of the Finnish sample

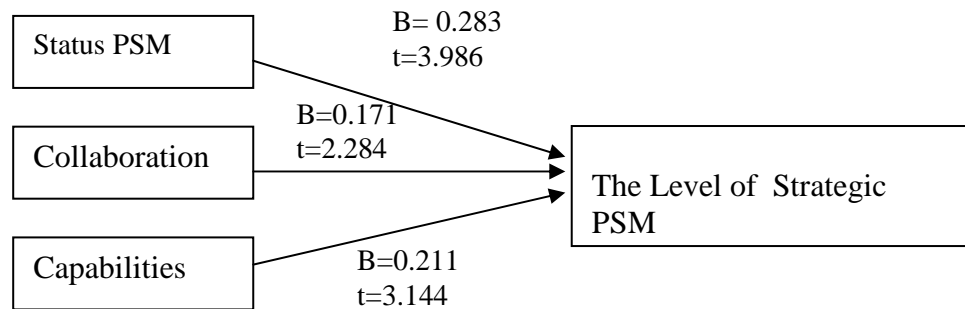


Figure 4. Standard coefficients of the Russian sample

Taking into account the differences in the investigated companies' background (economic, managerial, etc); the convergence of statistical results supports the stability of the model, and thus the validity of the findings of our study.

Mann-Whitney U test was conducted in order to investigate whether there are significant statistical differences among the four constructs in the two samples. Significant differences between the Russian and Finnish companies occurred in the Level of Strategic PSM, Status PSM and Collaboration dimensions (sig=0.000 and sig=0.001), whereas, the scores for Capabilities are statistically comparable in the studied samples (Appendix 4).

Profile analysis (Morris & Pavett, 1992) was conducted on the scores of the four constructs to examine similarity between the response profiles of the two studied samples. The aim was to analyze response set bias by determining whether the profiles of means were parallel. The lack of parallelism suggests that the differences between the two data sets are not caused by a systematic response bias, in other words, the Russian respondents did not systematically mark higher numbers than the Finnish respondents and vice-versa. The graph is presented in Figure 5.

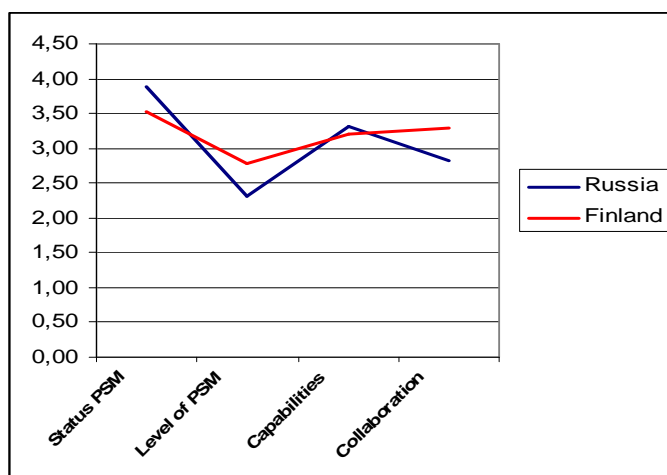


Figure 5. Profile analysis

## Discussion and Conclusions

The aim of this study was to analyze selected factors contributing to understanding strategic PSM and compare them on two samples – Finnish and Russian companies. We based our assumptions on existing research literature and implied the influence of the status of PSM, collaborative buyer-supplier relationships, and organizational capabilities on the level of strategic PSM. We tested the explanatory power of these variables to the levels of strategic PSM and compared the results between Finnish and Russian companies.

### *Theoretical implications*

The results of regression analysis of the two samples – Finland and Russia - supported the approach of the study, revealing a positive, significant impact of the status of the purchasing function within the firm, its organizational capabilities and the collaborative buyer-supplier relationships on the level of strategic PSM, regarded as an indicator of company's performance and success.

Differences between Finnish and Russian PSM in terms of the strength of the relationships between the above mentioned constructs were found. The tested variables had stronger explanatory power in Finnish companies than in Russian ones. The level of strategic PSM was a dependent variable in the tested model. It was measured by items describing the firm's ability to perform long-term planning. Long-term planning indicates a firm's ability to predict and manage the challenges of the market by integrating the market signals with the company's own resources and the resources of the partners in a value chain. Long-term planning exploits internal capabilities. Established business processes, experience in a certain market, and high degree of globalization can be regarded as factors explaining the long-term planning as a sign of a company's experience and well-being, as was the case of the Finnish companies. The results indicated that in Russian companies the ability to long-term planning was lower than in Finnish firms. When drawing together these results and applying TCE, the results support the notion that high frequency of transaction costs, uncertainty and asset specificity guide firms towards hierarchy (Williamson, 1981). In the case of Russian firms, uncertainty and a short-term view are obvious, leading to a hierarchy - preferred governance structure. In Finland efficiency demands drive companies to cut costs and concentrate to their core business. This increases firms' motivation to collaborate and drives Finnish firms towards market change.

The results of regression analysis on the Finnish sample showed that the explanatory power of the variable "status PSM" in Finnish companies was almost twice higher than in Russian ones. Thus, we assume that the selected factors represent a model with better fit to the developed structure of partners' interaction as in the case of Finnish economy. We did not find strong differences between the role of capabilities as a firm's internal resources, and collaboration as a firm's external asset, contributing positively to the level PSM, but to a less expressed extent than the status. Comparing these two factors we found a stronger influence from the side of the company's internal capabilities, which supports the assumption that the company puts more emphasis on its own resources and capabilities to manage the supply chain. This supports the assumptions of RBV that the differences in firms' performance can be explained by different organizational capabilities (Penrose, 1959, Wernerfelt 1984, Barney 1991). The RBV refers to the firm's internal value creation through its resources and capabilities.

In the case of the Russian sample the explanatory power of the model was clearly lower. This indicates that we have to modify our approach and select more factors to explain the level of PSM in Russian companies. Thus, further investigation is needed. Despite the fact that the results are similar in terms of the relative strength of the influence of the factors on the level of PSM, we conclude that the status of PSM has a much lower influence on the level of strategic PSM. The results indicated that we have to come back to the nature of economic interactions in Russia and the possible differences in understanding the nature of the status of PSM. On the other hand, we understand the status of PSM to be purely an economic factor, based on understanding the importance of PSM and its alignment with the overall business strategy. Also, we understand the status of PSM more as social construct. These

insights lead us back to the history and planning economy in Russia, where the differences in the status of top management were not due to economic performance, but due to their status in the firm itself. As a consequence, we cannot completely differentiate between these two understandings, but we can imply that in the case when business performance is declining, the status of PSM based on social components will suffer, contributing less to the level of strategic PSM. Here we come again to a necessity to include more variables in the analysis, and conduct an in-depth qualitative study to comment on these results.

### *Managerial implications*

The overall testing results of two national samples propose some contribution to the explanation of the nature of the level of strategic PSM. We assume that through understanding these factors we can propose a structure for further analysis of influence from the side of the buyer's strategy on interaction development. The strength of the influence of the three factors – status, collaboration and capabilities – can form the internal culture of the company, leading to a specific strategy, readiness to trust a partner and rely on the strategy and strategic decisions proposed by partners in the supply chain.

When comparing the nature of Russian companies and the historical background, we can not speak about long-term history of companies' operations in global economy. This idea was supported by the very limited extent of operations of Russian companies in international markets in our sample. Even when we analyzed companies with a long history, we had to consider that these companies operated with other market principles and in another economic reality. We assumed that under the conditions of planning economy, long-term planning was based not on a firm's internal capabilities and resources (or better said, their effectiveness), but more on the external support of the integrated planning system. This principle contradicts the dynamic principles of market sensing and market orientation, and led us to an opposite perception of the level PSM based on the idea of long-term planning. However, analyzing new Russian companies, founded after 1991, the level of PSM can also mean effectiveness – as was in the case of the Finnish sample. The results of regression analysis on the Finnish sample showed that the status of PSM in Finnish companies had the main role. It gives directions for both the company's own capabilities development, and the development of collaboration with selected suppliers. Stability, long-term reputation of every firm, regulation and other factors give a company a stable basis for long-term development, where the strategy represents the most important power to influence long-term planning and thus the level of purchasing and supply management. These issues will be the central aspects of further research, to uncover the meaning of these factors in Russian and Finnish companies, and comment on the proposed model.

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## **Appendix 1**

### *List of scales*

#### *Status:*

1. Purchasing has a significant role in improving the organization's business
2. Corporate management participates in the planning of purchasing strategy
3. The planning of purchasing strategy is conducted in collaboration with other functions
4. Corporate management emphasizes the strategic role of purchasing
5. Corporate management regards purchasing equally with other functions
6. Purchasing strategy is a component of the business strategy

#### *Level of PSM:*

1. Purchasing has an official long-range plan (5-10 years)
2. The long-range plan of purchasing is revised and adjusted to match the strategic objectives of the whole organization
3. The long-range plan of purchasing includes information of materials and services to be acquired

#### *Collaboration/Supplier relationships:*

1. Issues related to future demand are discussed jointly with suppliers
2. There is a lot of personal communication in the relationships
3. Information and requirements related to deliveries can be completely transmitted electronically
4. Joint strategic planning is included in supplier relationships

#### *PSM Capabilities:*

1. The skills of the purchasing staff are measured and evaluated systematically during employment
2. The organizational purchasing capabilities are plotted and documented
3. The organizational purchasing capabilities influence the financial performance of the organization
4. Other organizations' best practices of purchasing are monitored, benchmarked and exploited

## Appendix 2

### *Represented industries from Finland and Russia*

<b>Finland</b>	<b>%</b>
1. Chemical industry	17
2. Construction	14
3. Transportation and services	10
4. Metal industry	21
5. Wholesale and retail trade	12
6. Energy industry	9
7. Telecommunication	6
8. Forest and other industries	11
Total	100 %

<b>Russia</b>	<b>%</b>
1.Machinery	9.1
2.Transport machinery	1.4
3.Food industry	11.5
4.ICT	7.2
5.Retailing	10.6
6.Whole sale	5.3
7.Forest industry	6.7
8.Construction materials production	7.7
9.Construction	6.7
10. Cosmetics industry	2.4
11. Polygraph industry	7.2
12. Packaging production	2.4
13. Appliance machinery	4.3
14. Light industry	9.1
15. Metallurgy	2.9
16. Chemical industry	1.9
17. Other	3.6
Total	100%

### Appendix 3

*Number of employees, market shares, and overview of the years of foundation of the firms in Russia and Finland*

Basic information of the respondent companies from Russia and Finland		
<i>Number of employees</i>	Russia	Finland
Less than 75	-	6.4%
70-250	45.6%	17%
251-500	21.8%	26.6%
501-1000	12.1%	25.5%
1001-2000	10.2%	11.7%
2001 – 5000	10.2%	8.5%
More than 5000	-	4.3%
Total	99.9 %	100 %
<i>Market share</i>		
less than 5%	18.3%	5.1%
5-15%	21.6%	20.5%
16-25%	21.6%	12.8%
26-50%	14.9%	43.6%
51-75%	9.1%	5.1%
76-100%	3.8%	12.8%
Total	89.3% *	99.9%
* In case of the Russian sample, rejection to answer this question was 10.3%. This can be explained either by lack of information or low readiness to share this data.		
<i>Year of foundation</i>		
before 1900	2.4%	9.8%
1901-1930	5.8%	15.8%
1931-1950	12%	9.8%
1951-1970	10.7%	13.4%
1971-1990	6.3%	15.9%
1991-2000	35.6%	29.3%
2001-2006	23.1%	6.1%
Total	96% *	100%
* Of the Russian sample, 4% of the respondents were not able to answer this question		

## Appendix 4

*Means, standard deviations and correlations for the variables*

### Russian sample

	Mean (SD)	1	2	3	4
1.Level of PSM	2.32 (1.36)	1.00			
2.Status PSM	3.89 (0.89)	0.409**	1.00		
3.Collaboration	2.82 (1.00)	0.362**	0.284**	1.00	
4.Capabilities	3.31 (1.07)	0.411**	0.436**	0.405**	1.00

Notes: \*\* p< 0.01

### Finnish sample

	Mean (SD)	1	2	3	4
1.Level of PSM	2.78 (1.02)	1.00			
2.Status PSM	3.53 (0.87)	0.526**	1.00		
3.Collaboration	3.29 (0.64)	0.183	0.323**	1.00	
4.Capabilities	3.21 (0.84)	0.279**	0.432**	0.218*	1.00

Notes: \*p<0.05; \*\* p< 0.01

*Comparison of means between Finnish and Russian samples*

	Status PSM	The level of strategic PSM	Capabilities	Collaboration
Mann-Whitney U	7618,000	7785,000	9187,000	7246,000
<b>Sig.</b>	,000	,001	,391	,000

*Regression results, dependent variable: Level of PSM*

Variable	Russian sample n=207			Finnish sample n=100		
	Std. coefficient	SE	t-stat.	Std. coefficient	SE	t-stat.
Status PSM	0.283	0.112	3.986	0.462	0.061	5.930
Collaboration	0.211	0.092	3.144	0.220	0.103	2.768
Capabilities	0.171	0.112	2.284	0.286	0.091	3.522
<b>R<sup>2</sup></b>	0.266			0.493		
<b>F-statistic</b>	23.943			29.450		

Notes:  
p<0.05