From Transaction Cost Containment to Relationship Commitment: An Integrative Perspective of Buyer-Supplier Relationship Governance

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Abstract. Based on transaction cost economics (TCE) and social exchange theory (SET), we investigate the significance of economic (i.e. contract completeness and symmetric dependence) and sociological (i.e. trust and communication) control mechanisms in minimizing transaction cost and enhancing relationship commitment in buyer-supplier relationship. The integrated research model is accessed using quantitative data from 170 buyer-supplier relationships established by Finnish SMEs. Structural equation modelling approach is utilized to analyse the data and results show that governance mechanisms have more effective role in minimizing transaction cost whereas sociological mechanisms enhance relationship commitment more effectively. Further, intriguing findings emerged regarding the interplay effects of economic and sociological governance mechanisms in relation with transaction cost and relationship commitment.

Keywords: transaction cost, relationship commitment, buyer-supplier relationships, governance mechanisms

1 Introduction

Transaction costs mitigation and relationship commitment development in inter-firm relationships have become an important research topic. Prior studies suggests that, to handle the issues of transaction cost and relationship commitment, firms need to erect appropriate governance mechanisms (e.g., Jap & Anderson, 2003; Liu et al., 2009; Poppo & Zenger, 2002). Two different research streams have emerged on governance mechanisms of buyer-supplier relationships. First stream, embedded in transaction cost economics (TCE), majorly deals with investigation of the underlying economic governance mechanisms and second stream, based on social exchange theory (SET), focuses mainly on the investigation of the underlying sociological governance as an explanation for minimizing transaction costs and enhancing relationship commitment.

Research on exchange relationship governance has highlighted the combined role of economic and sociological governance factors in attenuating opportunism and improving relationship performance (e.g., Poppo & Zenger, 2002; Jap & Anderson, 2003; Liu et al., 2009). Researchers present opposing opinions on whether economic and sociological governance factors function as complementary (Poppo & Zenger, 2002) or substitutes (Wuyts & Geyskens, 2005). However, prior research has not attempted to investigate the combined role of economic and sociological governance mechanisms in minimizing transaction costs and maximizing relationship commitment. Further, the varying roles and relative effectiveness of governance mechanisms in minimizing transaction costs and maximizing relationship commitment has yet to be addressed. Based on above mentioned opposing views and limited research, an interesting query is whether the combine use of economic and sociological governance factors is more effective in minimizing transaction costs and bolstering relationship commitment than using individually.

Thus, the objective of this research is to develop and empirically test a combined model of economic and sociological governance mechanisms that reduce transaction cost and enhance relationship commitment. This empirical study attempts to achieve the above-mentioned research objective by integrating TCE and SET. Economic governance mechanism of contract completeness and symmetric

dependence are important factors that can reduce transaction cost and enhance relationship commitment (e.g., Dyer, 1997; Artz, 1999; Dahlstrom & Nygaard, 1999; Jap & Ganesan, 2000). Sociological governance mechanisms of trust and communication are considered crucial factors to minimize transaction costs and enhance relationship commitment (e.g., Dyer, 1997; Morgan & Hunt, 1994; Zaheer et al., 1998; Dyer & Chu, 2003). The major contribution of this research is that it integrates TCE and SET to study the role of economic and sociological governance mechanisms in minimizing transaction cost and maximizing relationship commitment in buyer-supplier relationship. Secondly, this study investigates the interaction between these governance mechanisms to minimize transaction cost and maximize relationship commitment. Thirdly, we also examine the relative effectiveness of economic and sociological governance mechanisms in relation with transaction cost and relationship commitment.

2 Theoretical background and hypotheses

2.1 Economic governance mechanisms, transaction cost and relationship commitment

Contract functions as a comprehensive tool (i.e., explaining rules and regulations, rights and obligations of both parties) in developing relationship quality to control predicted and unpredicted future circumstances (Liu et al., 2009; Liu et al., 2010). Therefore, contract completeness can enhance the relational performance by cooperating with the partner and safeguards specific investments from opportunistic behaviour (Luo, 2002). In buyer-supplier relationships, contracts are made to mitigate relationship exchange hazards (assets specificity, measurement difficulty, and uncertainty) and minimize transaction cost (Dahlstrom, & Nygaard, 1999). Several previous empirical studies have highlighted the importance of contractual safeguards to avoid the conflicts and opportunistic behaviours (e.g., Luo, 2002; Wuyts & Geyskens, 2005; Liu et al., 2009). Therefore, complete contracts clarify the rules of the business and function as control safeguards to reduce the operational risks and opportunism in buyer-supplier relationship. It is a useful governance mechanism to enhance potential collaboration (Artz, 1999; Wuyts & Geyskens, 2005) thereby, maximizes relationship commitment (Woolthuis, Hillebrand & Nooteboom, 2005; Liu et al., 2009).

Symmetric dependence (i.e. equal relationship-specific investments) entails both buyer and supplier to invest in the relationship in order to enhance the interdependence and commitment to the relationship (Anderson & Weitz, 1992; Jap & Anderson, 2003; Liu et al., 2009). Interdependence prohibit the market mechanism deployment in the relationship and critical for improvement in exchange relationship performance and learning (Chang & Gotcher, 2007). Kohtamäki et al. (2012) argued that relationship-specific investments reduce the transaction cost and empirically found a significant positive impact to improve relationship exchange performance (i.e., Productivity, product quality, delivery accuracy etc.). Dyer (1997) empirically found that transaction cost does not necessarily increase with an increase in relationship-specific investment. Based on these empirically significant previous studies, this study argues that such relationship specific investments from both partners create a mutual hostage between partners and prevent from opportunistic behaviours that help to reduce the transaction cost and maximize the relationship commitment (Dyer, 1997; Liu et al., 2009). This is why this study hypothesizes that:

H1. There is a negative relationship between the use of economic governance mechanisms of (a) contract completeness and (b) symmetric dependence, and transaction cost.

H2. There is a positive relationship between the use of economic governance mechanisms of (a) contract completeness and (b) symmetric dependence, and relationship commitment.

2.2 Sociological governance mechanisms, transaction cost and relationship commitment

Sociological governance mechanisms (i.e., trust and communication), according to SET, have been defined as socially embedded organizational measures in economic activities that help in managing,

monitoring and organizing successful relationship exchange (Blau, 1964; Heide & John, 1992). Trust is a significant factor for developing and sustaining long-term relationship exchange and emphasizes a cooperative atmosphere (Liu et al., 2009; Liu et al., 2010). Level of trust between buyer and supplier holds a central importance in developing long-term relationships. Low level of mutual trust between relationship partners enhances the possibilities to draw hierarchical control mechanism in order to resolve the conflicts, which in return increases the transaction cost and vice versa (Dyer, 1997; Zaheer et al., 1998; Liu et al., 2010; Dyer & Chu, 2011). Similarly, we conceptualize inter-partner trust mainly based on the strong confidence one partner has for another's reliability, truthfulness and integrity (Morgan & Hunt, 1994), which becomes a useful tool replacing the formal control and minimizes transaction cost. Empirical studies are also evident that trust is significantly related with social factors and have a positive impact on relationship commitment (Morgan & Hunt, 1994; Nyaga, Whipple & Lynch, 2010) and performance (e.g., Anderson & Weitz, 1992; Zaheer et al., 1998).

Communication refers to the bilateral expectation of information exchange between buyer and supplier and "can be explained as formal and informal sharing of meaningful and timely information between relationship partners" (Anderson & Narus, 1990, p. 44). Building on SET, we conceptualize that communication strengthen the confidence of both parties in a relationship about the availability of particular information timely, frequently and informally, which might help in fostering trust by aligning prospects with perceptions (Heide & John, 1992; Morgan & Hunt, 1994), and thereby minimizes transaction cost. Furthermore, communication significantly influences the relationship commitment. Based on trust placed between buyer and supplier, effective communication is crucial in knowledge sharing and cohesion, and leads towards resolving the conflicts, which enhances relationship commitment (Anderson & Weitz, 1992; Morgan & Hunt, 1994). Similarly, several empirical research has found significantly positive relationship between communication, trust and relationship commitment that in turn lowers the uncertainty level and build a trusted relationship between exchange partners (e.g., Hartley, 2000; Kwon & Suh, 2004). We derive the following hypothesis:

H3. There is a negative relationship between the use of sociological governance mechanisms of (a) Trust and (b) communication, and transaction cost.

H4. There is a positive relationship between the use of sociological governance mechanisms of (a) trust and (b) communication, and relationship commitment.

2.3 Interaction effects of relationship governance mechanisms

Several studies have provided some empirical evidences about the complementarity and/or substitutive nature of these governance mechanisms (e.g., Poppo & Zenger, 2002; Wuyts & Geyskens, 2005; Liu et al., 2009; Li et al., 2010; Nyaga et al., 2013). Previous studies have mainly used both economic and sociological governance mechanisms together in a focus to hinder the opportunism factor and to enhance relationship performance (e.g., Dahlstrom & Nygaard, 1999; Poppo & Zenger, 2002; Wuyts & Geyskens, 2005). As discussed earlier, both governance mechanisms are useful safeguards in mitigating opportunism and transaction cost, they function as harmonized set of factors accordingly. Poppo & Zenger (2002) found a complementary nature of formal contracts and relational governance factors (i.e., communication, trust, dependence and cooperation) improving exchange performance (i.e., overall cost and quality of service and vendor's responsiveness). Similarly, Jap & Ganesan (2000) found the similar complementary nature of formal contracts, relationship specific investments and social norms. In case of mutual investments (symmetric dependence) in a relationship, a competitive relationship becomes cooperative (Anderson & Weitz, 1992) and influences significantly positive on relationship quality. On the other side, when trust and communication have already developed in a relationship, the possibility to behave opportunistically and to distort symmetric dependence becomes obsolete. Blome et al. (2013) found ambidextrous (i.e. contractual and relational) governance mechanisms beneficial for cost and innovation performance and confirm the notion of complementarity of these mechanisms. Furthermore, Liu et al. (2009) empirically found that economic

governance factors offer an institutional structure for sociological governance factors, while sociological factors influence positively in implementation of economic governance factors. Therefore, synergetic effect of economic and sociological governance mechanisms in inter-firm relationship will influence more effectively than employing them separately. Thus, we hypothesize that:

H5: The synergetic impact of economic and sociological governance mechanisms will be more effective in minimizing transaction cost than employing them in isolation.

H6: The synergetic impact of economic and sociological governance mechanisms will be more effective in maximizing relationship commitment than employing them in isolation.

2.4 Relative significance of relationship governance mechanisms

We further predict that economic governance mechanisms are comparatively more effective than sociological governance mechanisms in mitigating transaction cost. Contractual coordination governance positively affects the use of a cooperative negotiation strategy (Lumineau & Henderson, 2012) and thereby reduces transaction cost (Zaheer et al., 1998). Because economic governance mechanisms provide structural and systematic frameworks in curbing opportunism and transaction cost in a relationship exchange, sociological factors remain comparatively less effective. Although trust clearly matters in relationship exchange and can significantly reduce transaction cost (Zaheer et al., 1998) but only trust or sociological/relational governance mechanisms do not completely provide a framework because of their unsystematic nature. Therefore, the risk of relationship partner's high level of trust to be exploited becomes higher. Therefore, we hypothesize that:

H7: Economic governance mechanisms are more effective than sociological governance mechanisms in minimizing transaction cost.

Moreover, we predict that sociological mechanisms are possibly to be more effective than economic factors in maximizing relationship commitment. Previous studies have found strong positive impact of sociological governance mechanisms on relationship commitment (Morgan & Hunt, 1994; Krause et al., 2007). These studies have empirically found the significance of trust and open communication in buyer-supplier relationships. Sociological factors share social platforms and facilitate increased knowledge sharing, problem solving efforts and learning within the relationship (Morgan & Hunt, 1994; Krause et al., 2007). Sociological mechanisms are more effective in enhancing commitment than economic governance mechanisms because they overcome the adaptive boundaries of complex contracts. Commitment flourishes and develops when factors like trust, norms of flexibility, solidarity, and communication placed well in a relationship (Poppo & Zenger, 2002). Based on the above-mentioned reasons that prevails social logic behind the relative effectiveness of sociological governance factors we hypothesize that:

H8: Sociological governance mechanisms are more effective than economic governance mechanisms in maximizing relationship commitment.

3 Methodology

This study consists of Finnish SMEs involved in buyer-supplier relationships operating with key suppliers from a variety of countries from Europe, USA and Asia. A list of 892 potential SMEs was generated from the database of Collector Finland. A financial services provider operates in Nordic countries and offers cost-effective and innovative solutions to private and corporate customers. This database includes basic information of Nordic buyer-supplier relationships. To obtain the requisite level of detail on buyer-supplier relationship management issues, we decided to collect primary data from potential officials from Finnish SMEs. The respondents' names and their emails were identified from this database. Most of the potential respondents from Finnish SMEs were CEOs, CFOs and board directors. Pre-testing was executed among research group members in order to determine whether the respondents apprehend the questions as offered. In spring 2015, an online questionnaire

was designed and sent to 892 Finnish SMEs. In total, we received 170 responses, yielding a response rate of 19.06 % (170 of 892).

To operationalize the constructs, this study follows the existing literature. We adapted four items (CR 0.83) for transition cost from Zaheer et al. (1998). Relationship commitment was measured using four items (CR 0.92) based on Anderson and Weitz (1992) and Tellefsen (2002). Trust was measured by adapting seven items (CR 0.93) from Morgan and Hunt (1994). We drew from Heide and John (1992) and Young-Ybarra and Wiersema (1999) to develop our four items of the communication construct (CR 0.95). Contract completeness was measured using six items (composite reliability .95) based on Luo (2002; 2009). Symmetric dependence represents the degree to which both relationship partners invest equal level of relationship specific investments. We divided symmetric dependence into buyer dependence and supplier dependence in order to measure the construct. Buyer's dependence is based on two statements; first, how large is buyer's investment in the relationship, and, second, the degree to which buyer firm's investment in the relationship is sunk (e.g., Reuer & Arino, 2002; Young-Ybarra & Wiersema, 1999). The scale anchored with these both questions is from 1 = very low to 7 = very high. Furthermore, we collapsed both of these statements into one in order to determine the dependence of the buyer firm. Similarly, supplier's dependence was also calculated by following the above-mentioned approach.

4 Analysis and results

4.1 Measure validation

Partial least square structural equation modelling (PLS-SEM) was utilized to analyse the data (Ringle et al., 2005). Although PLS evaluates both measurement model and structural model concurrently, we analysed and interpreted the estimated model in two steps. Firstly, the calculation and reliability of the measurement model, and secondly, testing the structural model. Assessment of individual item reliabilities, convergent and discriminant validity confirm and validate the measurement model (Chin, 1998; Hair et al., 2011). Loading values between the indicator and its latent variables first assess the individual item reliabilities. All indicators loaded on their respective latent variables were above the suggested level of 0.7, which indicates the higher level of item reliability. Furthermore, the means of composite reliability calculated the construct reliability for every latent construct and the composite reliability was higher than the suggested level of 0.6, which indicates a good construct reliability (Gotz et al., 2010). Table 1 presents the average variance extracted (AVE) and correlation between the constructs. In order to evaluate the convergent validity of the reflective block of the model, AVE was recorded above the suggested value of 0.5 and all variables comply with the suggested minimum level of 0.5 indicating the satisfactorily validity of variables. Moreover, this AVE also support in evaluating discriminant validity of the research and it is proven when square roots of the AVE of the constructs are higher than the correlations amongst the latent variables (Chin, 1998; Gotz et al., 2010).

Table 1: Correlations, AVE, and square roots of AVE

Constructs	AVE	1	2	3	4	5	6	7	8	9
1. Communication	0.83	0.91								
2. Trust	0.78	0.47	0.88							
3. Contract completeness	0.77	0.20	0.12	0.88						
4. Symmetric dependence	1	0.04	0.02	0.04	1					
5. Age of the company	1	0.19	-0.01	0.06	0.06	1				
6. Relationship length	1	0.23	0.04	0.08	0.07	0.52	1			
7. Size of buyer firm	1	0.02	-0.06	0.08	-0.07	0.32	0.28	1		
8. Transaction costs	0.79	-0.31	-0.17	-0.29	-0.12	-0.04	-0.12	0.04	0.89	
9. Relationship commitment	0.80	0.47	0.36	0.28	0.10	0.09	0.16	0.00	-0.35	0.89

4.2 Structural estimates

The R^2 (i.e. coefficient of determination) presents the assessment of the main effects of the structural model, for dependent variables, beta values, and significance levels (Gotz et al., 2010; Hair et al., 2011). The R^2 for transaction cost in Model 3 and Model 6 is 0.29 and 0.32 respectively, suggesting that independent variables explain 29% of the variance in the dependent variable of transaction cost and 32% of the variance in the dependent variable of relationship commitment. A bootstrapping method of sampling was used to generate t-values (Chin, 1998). Table 2 indicates the results of the structural model. From the results of Model 3, significant negative relationships were found between contract completeness and transaction cost (β = -0.40, $p < 0.01$) and between symmetric dependence and transaction cost (β = -0.13, $p < 0.1$). These results support H1. Further Model 7 depicts that contract completeness (β = 0.19, $p < 0.05$) exerts a significant and positive effect on relationship commitment. However, symmetric dependence does not significantly relate to relationship commitment. These results partially support to H2. Further from Model 3, significant negative relationships were found between communication and transaction cost (b = -0.30, $p < 0.1$) and between trust and transaction cost (β = -0.18, $p < 0.1$). These results support H3. Further results in model 7 depict that communication (β = 0.33, $p < 0.01$) and trust (β = 0.17, $p < 0.1$) exert a significant and positive effect on relationship commitment. These results support H4.

Table 2: PLS results

Constructs	Transaction cost				Relationship commitment			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Contract completeness	-0.28 ***		-0.40 ***	-0.24 ***	0.28 ***		0.19 **	0.27 ***
Symmetric dependence	-0.16 *		-0.13 *	-0.12 *	0.11		0.09	0.07
Communication		-0.31 **	-0.30 *	-0.22 *		0.37 ***	0.33 ***	0.30 ***
Trust		-0.19 *	-0.18 *	-0.16 *		0.18 *	0.17 *	0.16 *
Communication* Contract completeness				0.06				-0.20 *
Communication* symmetric dependence				-0.15 *				0.13 *
Trust* contract completeness				0.19 **				-0.16 *
Trust* symmetric dependence				-0.17 *				0.14 *
R^2	0.25	0.21	0.29	0.35	0.19	0.25	0.32	0.43

*** $p \leq 0.01$, ** $p \leq 0.05$, * $p \leq 0.1$

Model 4 and Model 8 in Table 3 are respectively used to examine the interaction effects between economic and sociological governance mechanisms. We mean-centred and multiplied the indicators of economic and sociological governance mechanisms to obtain the interaction effects. Results in Model 4 depict that interaction between communication and contract completeness is not significant in relation to transaction cost but the interaction between communication and symmetric dependence is significant (β = -0.15, $p < 0.1$). Meanwhile, interaction between trust and contract completeness (β = 0.19, $p < 0.05$) is significant but positive. Further, interaction between trust and symmetric dependence (β = -0.17, $p < 0.05$) is significant and negative. These results partially support H5. Results in model 8 show that interaction between communication and contract completeness (β = -0.20, $p < 0.1$) in relation to relationship commitment is significant but with negative sign. Meanwhile, interaction between communication and

symmetric dependence ($\beta = 0.13$, $p < 0.1$) in relation to relationship commitment is significant and positive. Further, interaction between trust and contract completeness ($\beta = -0.16$, $p < 0.1$) in relation to relationship commitment is significant but with negative sign. While, interaction between trust and symmetric dependence ($\beta = 0.14$, $p < 0.1$) in relation to relationship commitment is significant and positive. These results partially support H6.

We compared the relative powers of economic and sociological factors to test the hypotheses H7 and H8. For transaction cost', ΔR^2 is acquired as follows from the results of Model 1, 2 and 3:

$$\Delta R^2_{\text{Model 3-Model 1}} = R^2_{\text{Model 3}} - R^2_{\text{Model 1}} = .29 - .25$$
$$= .04$$
$$\Delta R^2_{\text{Model 3-Model 2}} = R^2_{\text{Model 3}} - R^2_{\text{Model 2}} = .29 - .21$$
$$= .08$$

Here $\Delta R^2_{\text{Model 3-Model 1}}$ signifies the proportion of the variance of transaction cost that sociological factors can explain. $\Delta R^2_{\text{Model 3-Model 2}}$ denotes the proportion of the variance of transaction cost that economic factors can explain. Since $\Delta R^2_{\text{Model 3-Model 2}}$ is greater than $\Delta R^2_{\text{Model 3-Model 1}}$, it endorses that economic factors are stronger in influencing transaction cost than sociological factors. These findings support H7.

Further, for relationship commitment, we get ΔR^2 as follows from the results of Model 5, 6 and 7:

$$\Delta R^2_{\text{Model 7-Model 5}} = R^2_{\text{Model 7}} - R^2_{\text{Model 5}} = .32 - .19$$
$$= .13$$
$$\Delta R^2_{\text{Model 7-Model 6}} = R^2_{\text{Model 7}} - R^2_{\text{Model 6}} = .32 - .25$$
$$= .07$$

Here $\Delta R^2_{\text{Model 7-Model 5}}$ signifies the proportion of the variance of relationship commitment that the sociological factors can explain. $\Delta R^2_{\text{Model 7-Model 6}}$ denotes the proportion of the variance of relationship commitment that economic factors can explain. Since $\Delta R^2_{\text{Model 7-Model 6}}$ is smaller than $\Delta R^2_{\text{Model 7-Model 5}}$, it endorses that sociological factors are stronger in influencing relationship commitment than economic factors. These findings support H8.

5 Discussion and conclusion

The findings confirm the TCE reasoning and empirically demonstrate that complete contracts prevent the possibilities of negotiations between relationship partners and minimize the opportunistic behaviour and thereby, transaction cost (Williamson, 1985; Dahlstrom & Nygaard, 1999). Similarly, a complete contract keeps the relationship partners committed by providing a convincing signal, minimizing uncertainty about behaviours and functioning as deterrence against exploitation. Thus, contract completeness found a significant governance factor that maximizes the relationship commitment between buyer and supplier. This finding corresponds to the prior research (Woolthuis et al., 2005; Liu et al., 2009). Furthermore, our findings reveal that symmetric dependence significantly minimize transaction cost, which is consistent with Dyer (1997). Unexpectedly, in relation with symmetric dependence and relationship commitment, we did not find a significant positive relationship as hypothesized. This finding is contrary to the argument advanced by prior researchers (e.g., Dyer, 1997; Anderson & Weitz, 1992; Jap & Ganesan, 2000), who posit that increase in asset-specificity enhance relationship commitment. One possible explanation for this may be that equal relationship-specific investments by buyer and supplier creates barriers through minimizing flexibility and bounds the both parties for a huge non-redeployed investments, and thereby squeeze the relationship commitment.

Among the sociological governance mechanisms of SET, our findings also confirm some major reasoning. The present study demonstrates that trust and communication are effective governance factors in minimizing transaction cost and maximizing relationship commitment in relationship exchange. These findings are congruent with prior research that suggests trust (e.g., Dyer, 1997; Zaheer et al., 1998; Dyer & Chu, 2003; Liu et al., 2010) and communication (e.g., Dahlstrom & Nygaard, 1999; Yigitbasioglu, 2010) minimize transaction cost. Therefore, trust, timely information sharing and open communication emplaced in relationship exchange lower the level of transaction

cost. Likewise, our findings suggest that both sociological governance factors enhance relationship commitment in buyer-supplier relationship. This notion is consistent with prior research, which suggest that based on trust emplaced between buyer and supplier, effective communication is crucial in knowledge sharing and consistency, and leads towards resolving the conflicts, thereby enhances relationship commitment (e.g., Anderson & Weitz, 1992; Morgan & Hunt, 1994; Kwon & Suh, 2004). Finally, the findings of this study partially confirm the complementarity view of economic and sociological governance mechanisms in minimizing transaction cost and maximizing relationship commitment. This interactive view suggests that economic and sociological governance mechanisms can function as complements (Poppo & Zenger, 2002; Liu et al., 2009; Blome et al., 2013) and generate high rents to develop buyer-supplier relationship. Particularly, results show that when communication and trust interact with symmetric dependence, transaction cost is minimized and relationship commitment is maximized. Interestingly, interaction between trust and contract completeness provides adverse results as hypothesized which posit that by employing both contract and trust alongside will complicate the understandings of relationship. One possible explanation for this can be that drafting complex contract between buyer and supplier may signal distrust, thereby encourage opportunism (Wuyts & Geyskens, 2005).

5.1 Managerial implications

Developing business networks of buyer-supplier relationships have become crucially important for the firms to sustain competitive advantage. Governing such relationships need relationship executives to show their willingness and commitment with this key task. For the reason, firms should consider the simultaneous use of economic and sociological governance mechanisms in order to minimize transaction cost and improve relationship commitment. By employing economic governance mechanisms (i.e., structural approach), firms can get transaction cost advantage and sociological governance mechanisms (i.e., relational approach) are useful for the firms to enhance relationship commitment. Further, the negative impact of contract completeness on transaction cost and positive impact on relationship commitment reveal to the firms that drafting an explicit complete contract prevents additional negotiations between relationship firms and thus minimize any possible opportunistic behaviour. Similarly, the findings of symmetric dependence in minimizing transaction cost suggest to the firms that symmetric dependence between buyer and supplier inhibits any possible exploitation and opportunistic behaviour due to equally invested resources and thus minimizes transaction cost. A trustworthy relationship provides both relationship partners a certain level of confidence where they align their business objectives accordingly, to get transaction cost and relationship commitment advantage. Similarly, communication has a significant social value in buyer-supplier relationship when transaction cost needs to be minimized to enhance relationship commitment. Firms are required to ensure a quality of communication system emplaced that reduces the possible information asymmetries, allows buyer and supplier to share enough knowledge for internal operations and external market conditions. This information sharing will prevent relationship exchange from behavioural uncertainty and opportunism, and mitigate transaction cost, thereby keep the firms committed.

5.2 Limitations and further research

This study has some limitations as well as further research suggestions that need to be considered. Drawing from the theories of TCE and SET, this study investigates only four governance mechanisms to derive the impact on transaction cost and relationship commitment. Further study may incorporate some other governance mechanisms, such as conflict resolution strategies, relational norms, uncertainty and reputation of buyer and supplier. Interesting results can be found by employing interaction and individual impact of these additional governance mechanisms on opportunism, satisfaction and overall buyer-supplier performance. Further, this study consists of only Finnish small

and medium buyer-supplier relationships operating with the key suppliers in Europe, USA, and Asia. Future efforts may extend similar inquiries to the Nordic SMEs' sample in order to generalize the findings for the whole Nordic region. Because this study represents cross-sectional approach where only buyer's perspective was probed in relation with governance mechanisms, it would be interesting to know how supplier in a longitudinal setting, perceive the impact of governance mechanisms and the outcomes. Finally, this study is confined to a single key informant. Future research should collect data from multiple but different respondents for measuring the independent and dependent variables to minimize the common method bias.

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