TAHIR ALI

An Integrative Perspective of Social Exchange Theory and Transaction Cost Theory on the Antecedents of Trust and Trust-Performance Relationship in International Joint Ventures

Evidence from Nordic Multinational Firms

Reviewers   Professor Bo Nielsen
Copenhagen Business School
Department of Strategic Management and Globalization
Solbjerg Plads 3
DK–2000 Frederiksberg
Denmark

Professor Tuija Mainela
University of Oulu
Oulu Business School
P.O. Box 4600
FI–90014 University of Oulu
Finland

Julkaisun nimike

Luottamuksen synty ja vaikutus menestykseen kansainvälisissä yhteisyrityksissä sosiaalisen vaihdantateorian ja transaktiokustannusteorian näkökulmasta: Empiirinen analyysi pohjoismaisista monikansallisista yrityksistä

Tiivistelmä

Kansainvälisten yhteisyritysten (international joint venture, IJV) menestyminen ja siihen vaikuttavat tekijät ovat olleet keskeinen mielenkiinnon kohde kansainvälisen liiketoiminnan tutkimuksessa. Kirjallisuudessa luottamusta on usein esitetty yhdeksi keskeiseksi menestystekijäksi. Tästä huolimatta empiirinen tutkimus koskien luottamuksen ja menestyksen välistä suhdetta on toistaiseksi ollut suhteellisen vähäistä ja tulokset ovat olleet ristiriitaisia. Tämän työn tavoitteena onkin tutkia tekijöitä, jotka vaikuttavat luottamuksen syntyyn sekä selvittää luottamus–menestys-suhdetta kansainvälisissä yhteisyrityksissä.

Työn käsitteellinen viitekehys perustuu sosiaaliseen vaihdantateoriaan (SET) sekä transaktiokustannusteoriaan (TCT). Viitekehys koostuu viidestä SET:n sosiaalisesta tekijästä: yrityksen aikaisempi allianssikokemus partnerin kanssa, partnereiden välinen kulttuurinen integrointi, paikallisen partnerin maine, osapuolten välinen kommunikaatio sekä yhteisyrityksen odotettu elinikä; ja kahdesta TCT:n strukturaalisesta tekijästä: partnereiden välinen riippuvuus sekä omistusosuusjakauma partnereiden kesken. Kaikkien edellä mainittujen tekijöiden voidaan olettaa vaikuttavan luottamuksen tasoon. Työn viitekehyksessä oletetaan, että partnereiden välinen luottamus johtaa parempaan menestymiseen yhteisyritystoiminnassa ja että partnereiden resurssien täydentävyys moderoi luottamuksen ja menestyksen välistä suhdetta. Tutkimusaineisto koostuu 89:stä pohjoismaisten yritysten vuosina 2000–2011 Aasiassa, Euroopassa ja Amerikassa perustamasta yhteisyrityksestä. Tiedonkeruumenetelmänä käytettiin verkkopohjaista kyselylomaketta, joka lähetettiin yhteisyritysten pohjoismaisille johtajille. Analysoinnissa käytettiin rakenneyhtälömallia PLS estimointitekniikalla.

Tutkimustulokset osoittavat, että luottamuksella on positiivinen vaikutus kansainvälisten yhteisyritysten menestykseen. Tulokset osoittavat myös, että partnerin maine, partnereiden kulttuurinen integrointi, kommunikaatio, sekä yhteisyrityksen odotettu elinikä vaikuttavat positiivisesti ja opportunismi negatiivisesti luottamuksen tasoon. Odotusten vastaisesti tasaomistus sekä symmetrinen riippuvaisuus eivät vaikuta positiivisesti luottamuksen tasoon. Lisäksi tasaomistus lisää partnereiden opportunistista käyttäytymistä. Tulokset myös osoittavat, että partnerin maine, partnereiden kulttuurinen integrointi, kommunikaatio ja keskinäinen riippuvuus ovat tekijöitä, jotka vaikuttavat vähentävästi opportunistiseen käyttäytymiseen. Sen sijaan partnereiden resurssien täydentävyyden moderoiva vaikutus luottamus–menestys-suhteeseen ei ollut tilastollisesti merkittävä. Työn tulokset ovat merkittäviä kansainvälisiä yhteisyrityksiä muodostaneille tai niitä suunnitteleville yritysjohtajille.

Asiasanat

luottamus, kansainväliset yhteisyritykset, yhteisyritysten menestys, sosiaalisen vaihdannan teoria, transaktiokustannusteoria, vaikuttavat tekijät

Title of publication

An Integrative Perspective of Social Exchange Theory and Transaction Cost Theory on the Antecedents of Trust and Trust-Performance Relationship in International Joint Ventures: Evidence from Nordic Multinational Firms

Abstract

A great deal of attention has been paid to the performance of international joint ventures (IJVs) and trust has been suggested as a key determinant of it. However, limited empirical evidence exists to substantiate a positive relationship between trust and performance of IJVs. Also, there is a limited understanding of the antecedents of trust. Thus, the purpose of this study is to investigate the antecedents of trust and to examine the trust–performance relationship in IJVs.

The conceptual framework of the study is drawn from social exchange theory (SET) and transaction cost theory (TCT). The framework consists of five social factors from SET (i.e. prior alliance experience with partner, partner's cultural sensitivity and reputation, quality of inter-partner communication, and expected longevity of IJVs) and two structural factors from TCT (i.e. interdependence, and ownership share) that are considered as potential antecedents of trust. Further, the framework proposes a positive linkage between inter-partner trust and IJV performance and it is suggested that inter-partner resource complementary moderates the trust-performance relationship. The developed framework is tested by using a sample of 89 IJVs established by Nordic firms during 2000–2011 in Asia, Europe, and America. A web-based questionnaire is used to collect data from the Nordic managers of the IJVs. The collected data is analyzed by using the structural modeling approach with PLS estimation technique.

The results of the study suggest that trust has a positive effect on the performance of the IJVs. The findings also indicate that partner's cultural sensitivity and reputation, quality of inter-partner communication, and expected longevity of IJVs enhances, while partner's opportunistic behavior reduces trust. Surprisingly, equivalent ownership share and symmetric interdependence are found to be unrelated to trust, and further equivalent ownership share increases the partner's opportunistic behavior in IJVs. Findings also indicate that partner's cultural sensitivity and reputation, quality of inter-partner communication, and symmetric interdependence are the factors which attenuate opportunism. Contrary to expectations, the moderation effect of inter-partner resource complementary on trust-performance relationship is not significant. These findings have important implications for managers planning to form and manage IJVs in foreign markets.

Keywords

Trust, international joint ventures, performance of international joint ventures, transaction cost theory, social exchange theory, antecedents

ACKNOWLEDGEMENTS

For me writing of this dissertation has been a challenging yet rewarding experience. It is challenging in the sense that writing a dissertation is often synonymous with loneliness, hard work, and patience. You stay in office in between the piles of books and articles and do not know about time until the birds start singing, but you stay focus. Henceforth, reaching the ultimate completion is really a self-rewarding outcome of all the months and years of hard work. This sinuous and lengthy way to complete the doctoral dissertation is the "ritual" process that ensures that enough learning has been made by grappling with literature of interest, choice of methodology, scientific ways of writing, and this makes sure that resulting knowledge meets the rigors of the academic world's requirements. During this long process, I came across many people who left a trail of advices and encouraged me to finalize it. I would like to thank them for their support and encouragement.

First of all, I would like to particularly thank my PhD supervisor Professor Jorma Larimo, who has been indeed instrumental in bringing out the researcher out of me. While accepting me as a PhD student, he took a great leap of faith in my ability and intention to conduct PhD research and gave me the opportunity to become a member of research community. Throughout the years of doctoral research, I have benefited tremendously from his knowledge, insight, hard work, and experience. As Hazrat Ali said; "*You have been shown, if you only care to see; you have been advised if you care to take advantage of advice; you have been told if you care to listen to good counsels*" (Nehjul Balagha, p 156). So, without the persistent mentoring, coaching and guidance from Professor Jorma Larimo, this dissertation would have not been completed. I hope that one day I could be as energetic as Professor Jorma Larimo and be able to work as hard as he does. Thank you very much Professor Jorma Larimo for all the valuable guidance and support that I could ever have wished for.

I am also highly grateful to the pre-examiners of my dissertation Professor Bo Bernhard Nielsen (Copenhagen Business School, Denmark) and Professor Tuija Mainela (Oulu University, Finland). Their input was very useful in further developing my dissertation, and also was a learning experience and a quality control process to mature me as an academic. I am especially thankful to Professor Bo Bernhard Nielsen who accepted to act as the opponent for my doctoral defense. I also sincerely thank Professor Tuija Mainela who took time from her busy schedule to read my work and offered useful suggestions for its improvement. I also owe many thanks to Professor Amjad Hadjikhani (Uppsala University) and Pro-

and reminders to achieve the objectives; it all had its purpose. Thank you for your love, support and prayers for me. I would also like to thanks my sister Asmara Liaqat and my brother Turab Ali for their continuous support, and I wish for a day of reunion to share our childhood memories. Finally, my deepest and most heartfelt gratitude goes to my wife and soul mate Nazish Ali. She always helped and inspired me to focus on my research with her endless patience and emotional support. I am very fortunate that I got married to such a caring person. Thank you for the support during my PhD!

Tahir Ali
9th September 2013
Vaasa, Finland

Contents

Figures

Tables

1 INTRODUCTION

This chapter provides an overview of the dissertation. Firstly, the background of the study is discussed stressing the importance of the research phenomenon under consideration. Then the chapter points out the important research gaps in the literature that provides the rational of this study. Based on the research gaps, research questions and the study objectives are constructed. Next, the chapter addresses the positioning of the study in relation to previous studies, and the potential contributions of the study. In order to offer readers a realistic view about the study context and applications of the study findings, the scope and limitations of study are also discussed in this chapter. The chapter concludes with providing definitions of the key terms used as well as explaining the structure of the dissertation.

1.1   Background of the research

During the last two decades, the economies around the world have become integrated through the reduction of barriers to the movement of trade, capital, technology, and people (Daniels, Radebaugh & Sullivan 2009). These trends of globalization have forced the companies to pursue business opportunities aggressively in other countries in order to remain competitive in this fast-paced global market. At the same time, companies lacked all need resources to effectively pursue business opportunities in global arena and found it expensive to develop all kind of sophisticated technologies in house and solely develop distribution channels in numerous countries around the world. These challenges posed a continuous pressure on the companies to find and implement new ways of organizing their business activities around the world (Parkhe 1998a; Kauser & Shaw 2004).

As a means of meeting these business opportunities created by globalization, many companies realized that they must find partners to gain access to needed resources and share the risk of international expansion. Hence, cooperation through international strategic alliances (ISAs) became a key trend (Silva, Bradley & Sousa 2012). ISAs are the generic form of cooperation between companies that range from relational contracts to international joint ventures (IJVs) (Contractor & Lorange 2002). An IJV is a special case of ISAs, where cooperation between two or more companies is cemented by ownership sharing through equity holdings in the form of both shared greenfield and partial acquisition (Hennart 1988, 2008). Over the past thirty years, IJVs have been an important means of doing business across national boundaries (Beamish & Banks 1987; Madhok 1995a, 1995b; Robson, Leonidas & Katsikeas 2002; Luo 2007a; Hsieh, Rodrigues

& Child 2010). It is this importance of IJVs, very much discussed by academics, which constitute the subject matter of present dissertation.

However, despite the attractiveness of using IJVs as an important means of conducting international business, they are not always seen as a panacea for firms' competitive woes (Madhok 1995a, 1995b, 2006). It should be stressed here that IJVs have been characterized by a high rate of failure, ranging from 34% to 50% in previous research (Steensma et al. 2008; Pak, Ra & Park 2009). According to international business literature, one of the biggest reasons behind these failed IJVs is the lack of attention towards the management of IJV relationships between IJV partners (Boersma, Buckley & Ghauri 2003; Brouthers & Bamossy 2006; Madhok 1995a, 2006). Entering in an IJV means that two or more partners are going to work together for deciding the strategic direction and operational issues of the IJV. To successfully manage these IJVs, partners should know how to work with each other, to each other and through each other. They should know what to expect, how to get what they expect, and how to tackle foreseen and unforeseen circumstances during the life span of an IJV. Therefore, establishing a good inter-partner relationship is a prerequisite and major contributor to the performance of IJVs (Boersma, Buckley & Ghauri 2003; Silva 2007).

In IJV literature, one relational element that has received an utmost importance is trust between IJV partners (e.g. Inkpen & Currall 1998; Buckley & Glaister 2002; Nielsen & Nielsen 2009). Prior research suggests that trust between IJV partners increases the quality of inter-partner relationships (Arino, de la Torre & Ring 2001), broadens the band of tolerance (Madhok 1995b), improves inter-partner flexibility (Madhok 1995b; Young-Ybarra & Wiersema 1999), lowers transaction costs (Zaheer, McEvily & Perrone 1998; Dyer & Chu 2003), reduces conflicts (Zaheer, McEvily & Perrone 1998), and facilitates learning, innovation (Nielsen & Nielsen 2009) and competitive advantage (Barney & Hansen 1994). Thus, not surprisingly, literature on IJVs places great emphasis on the importance of creating trust between IJV partners (e.g. Beamish & Banks 1987; Madhok 1995a, 1995b; Inkpen & Currall 1998; Parkhe 1998a, 1998b; Nielsen 2001; Buckley & Glaister 2002; Boersma, Buckley & Ghauri 2003), and looks at it as the chief determinant of IJV performance (e.g. Madhok 1995b; Inkpen & Currall 1998; Cullen, Johnson & Sakano 2000; Ng, Lau & Nyaw 2007; Nielsen 2007).

Although trust has become a central concept in the JV literature (Madhok 1995a, 1995b; Inkpen & Currall 1998; Buckley & Glaister 2002), there is limited understanding of antecedent factors by which firms build and maintain a relationship characterized by trust, and limited empirical examination of trust-performance relationship in IJVs. Several studies on trust in IJVs call for more systematic re-

search on the antecedent factors of trust, and trust-performance relationship in IJVs (Madhok 1995b; Inkpen & Currall 1997; Silva, Bradley & Sousa 2012). This is also the main focus of this dissertation. It examines IJVs as a form of cooperative strategy, and in light of this, discusses the antecedent factors of trust, and trust-performance relationship in IJVs.

1.2   Research gaps

Despite the much appreciation of importance of trust in the management of IJV relationships, gaps remain in our understanding of the antecedents of trust and trust-performance relationship in IJVs. **Firstly**, there is a general consensus among trust researchers that *"trust arises when the parties are willing to 'increase one's vulnerability to another whose behavior is not under one's control"* (Zand 1972 referred in Hennart & Zeng 2005: 113). This exposure to vulnerability may hinder the development of trustful relationships in IJVs. Because of this vulnerability, roots of trust must be deeply grounded. This means that what builds a trusting relationship should be known and nurtured. However, the available literature on the antecedents of trust, though limited, is highly fragmented with very little cumulative learning. There is no comprehensive framework on the antecedents of trust as previous researchers focus on a limited set of antecedents, and identify different antecedents of trust. Empirical studies on the antecedents of inter-partner trust in IJVs have examined factors such as risk, prior inter-partner relations, decision making and forbearance (Inkpen & Currall 1997), distributive fairness and partner similarity (Robson, Katsikeas & Bello 2008), goal congruence, cultural similarity, resource complementary, fairness, flexibility, and communication (Kwon 2008), collaborative know-how and knowledge protectiveness (Nielsen & Nielsen 2009), resource complementary (Deitz et al. 2010), shared values, communication, and opportunism (Silva, Bradley & Sousa 2012). These different antecedents of trust reflect that there is a limited understanding of what explains trust in IJVs.

Further, the empirical work on the antecedents of trust mainly focuses on the social antecedents of trust (e.g. Inkpen & Currall 1997; Kwon 2008; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012). This mainly focus on social antecedents of trust downplays the importance of structural factors of IJV. This may be a serious omission especially where interest is on trust in IJVs. As Hennart and Zeng (2005: 113) argued that *"this willingness to be vulnerable (i.e. trust) will obviously be greater if the partners have the same goals, or if the structure or the contractual stipulations of the joint venture limit the extent to which they can be opportunistic"*. This idea is in line with the work of Parkhe (1998a,

1998b) who claims that in addition to social factors, structural factors of IJV are also important antecedents of trust. The underlying logic is that the chosen structural characteristics of IJV limits the perceived opportunistic behavior of partner and engenders trust (Parkhe 1998a, 1998b). Unlike to this reasoning, there is also another interpretation of structural antecedents of trust. Some studies suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009). Although, the structural characteristics of IJV are subject to different interpretation, it is important to investigate their relationship with trust. However, our understanding of structural antecedents of trust is very limited and remains at theoretical level (e.g. Parkhe 1998a, 1998b; Nielsen 2001; Hennart & Zeng 2005).

The above discussion suggests that previous research on antecedents of trust in IJVs, although very limited, has produced somewhat divergent social antecedents of trust and has largely ignored the structural antecedents of trust. The first attempt to study the structural and social antecedents of trust was by Parkhe (1998a, 1998b). These studies, however, were theoretical and empirical evidence is still lacking. Therefore, a comprehensive framework that explains structural as well as social factors as antecedents of trust within an integrated theoretical and empirical model is warranted. This integrated framework of social and structural antecedents of trust in IJVs will help the managers to better understand the importance of structural and social antecedent factors necessary to establish a trustful relationship with their IJV partners.

Secondly, the central concern in the IJV literature has been the parent's dissatisfaction with IJV performance. Madhok (1995b) is one of the first authors, which criticized the-then existing IJV literature as putting too much emphasize on "hard issues of ownership and control", and ignoring the relational element of trust that better explains the performance of IJVs. He posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). The focal logic in his argumentation is that trust affects IJV performance by increasing the quality of inter-partner relationships, because trust fosters inter-partner cooperation and coordination, broadens the band of tolerance for temporary periods of inequity, reduces conflicts and perceptions of relational risk, and heightens the flexibility within the IJV relationship (Madhok 1995b; Nooteboom, Berger & Noorderhaven 1997).

Though previous theoretical research (e.g. Beamish & Banks 1995; Madhok 1995b; Inkpen & Currall 1998; Parkhe 1998a, 1998b) provides general support for the idea that trust is important to achieve superior IJV performance, empirical work on trust-performance relationship is limited and presents contradictory re-

sults. Some studies find that trust improves IJV performance (e.g. Chen & Boggs 1998; Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010), some others reveal the absence of a significant direct link between trust and IJV performance (e.g. Inkpen & Currall 1997; Muthusamy, White & Carr 2007), some studies reveal the conditions under which trust matters more to IJV performance (e.g. Luo 2002b; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012), and one study points out that under some circumstances, trust may even negatively affect the IJV performance (e.g. Krishnan, Martin & Noorderhaven 2006). Such discordant findings about trust-performance link have also been pointed out by Robson, Katsikeas and Bello (2008) and Silva, Bradley and Sousa (2012). Specially, Silva, Bradley and Sousa (2012: 294) concluded that "*such discordant findings suggest not only that trust's relationship to performance is complex and poorly understood but also that trust may not improve outcomes under all circumstances*". Many studies suggest that further evidence is necessary on the impact of trust on IJV performance (Inkpen & Currall 1997; Ng, Lau & Nyaw 2007).

Further, Robson, Katsikeas and Bello (2008) and Silva, Bradley and Sousa (2012) suggest that future research should identify the conditions under which trust impacts IJV performance. However, there is no general theory regarding the conditions under which trust facilitates or hinders IJV performance. But, prior research while discussing the importance of trust for IJV performance has largely ignored the importance of structural characteristics of IJV. This criticism closely follows the one proposed by Hennart and Zeng (2005: 113), who suggest that "*while there is no doubt that process variables are an important determinant of the performance of alliances, process-based explanations of alliance dynamics often underemphasize structural explanation. Some (but not all) process variables seem also to be repackaged structural variables. The prime example is trust, which has been extensively used as an independent variable to explain alliance performance*". Madhok (1995b: 122) also share the view that trust is not sufficient in and of itself to hold IJV performance for long time until structural bases of IJV are strong. Robson, Skarmeas and Spyropoulou (2006: 603) also suggest that "*empirical attempts combining the behavioral paradigm (e.g. trust from social exchange theory) with other, dissimilar theoretical perspectives (e.g. structural characteristics from transaction costs economics) are to be encouraged in future research as they can expedite the development of richer, more complete explanations of IJV performance*". Therefore, studying the impact of structural characteristics of IJV on trust-performance link will help the managers to understand the importance of structural characteristics of IJV under which trust facilitates or hinders IJV performance.

The above discussion suggests that previous research on trust-performance relationship in IJVs, although limited, has produced somewhat contradictory results and has largely ignored the role of structural characteristics of IJV in explaining trust-performance relationship. Considering the manager's high dissatisfaction with IJV performance, it is important to investigate the trust-performance relationship in IJVs and identify the structural characteristics of IJV under which trust matters more to IJV performance.

1.3   Research questions and objectives of the study

The preceding discussion about the research gaps on trust research in IJVs steers the course of the present dissertation. The basic objective of this dissertation is to investigate the antecedents of trust and to examine the trust–performance relationship in international joint ventures. Accordingly, the main research question is:

What are the antecedents of inter-partner trust in IJVs and what is the impact of inter-partner trust on the performance of IJVs?

The main research question is approached and addressed by the following two sub-questions:

(1) What are the social and structural antecedents of inter-partner trust in IJVs?

(2) What is the impact of inter-partner trust on IJV performance, and does the resource complementary moderate the impact of trust on IJV performance?

In order to answer the research question and to achieve the objective, this dissertation has both theoretical and empirical objectives. These objectives are:

(1) To develop a comprehensive framework by integrating social exchange theory and transaction cost theory to investigate the social and structural antecedents of trust, the impact of trust on IJV performance, and the moderating role of resource complementary in trust-performance relationship

(2) To empirically test the developed research framework to analyze social and structural antecedents of trust, the impact of trust on IJV performance, and the moderating role of resource complementary in trust-performance relationship in the context of Nordic firm's IJVs in Asia, Europe, and America.

1.4 Positioning and potential contribution of the study

Research on IJVs has received an increasing attention in international business literature during the last three decades, reflecting the importance of IJVs in conducting international business (Beamish & Banks 1987; Hennart 1988; Madhok 1995a, 1995b; Robson, Leonidas & Katsikeas 2002; Ng, Lau & Nyaw 2007). Earlier literature on IJVs has been occupied with two broad research streams. The first stream has been focusing on the choice of IJVs over other entry modes (e.g. Anderson & Gatignon 1986; Beamish & Banks 1987; Williamson 1985; Hennart 1988; Gulati 1995; Oxley 1999; Globerman & Nielsen 2007), and partner selection issues (e.g. Geringer 1991; Glaister & Wang 1993; Glaister & Buckley 1997; Hitt et al. 2000). The other research stream has been focusing on the IJV outcomes and impact of IJVs on the partner firms (e.g. Beamish 1985; Gomes-Casseres 1987; Kogut 1989; Geringer & Hebert 1991; Reuer & Miller 1997; Reuer 2000, 2001; Kumar 2005). Although, these both streams contributed towards our understandings of IJV formation, partner selection issues, IJV outcomes and impact of IJV on partner firms, but success of IJVs remained mediocre. Researchers point out that IJVs often suffer a high failure rate and a high level of parent dissatisfaction (e.g. Madhok 1995a, 1995b; Steensma et al. 2008; Pak, Ra & Park 2009).

In looking for the reasons behind failed and successful IJVs, researchers turned their focus on the management of IJV. Here researchers focused on structural characteristics of IJV, like ownership distribution between IJV partners (e.g. Killing 1982; Geringer & Hebert 1989; Bleeke & Ernst 1991; Ramaswamy, Gomes & Veliyath 1998; Child 2002; Lu & Hebert 2005), contracts (e.g. Luo 2005, 2009; Gong et al. 2007), co-specialized investments (e.g. Zeng 1998; Das & Rahman 2002; Hennart & Zeng 2005), and nature of resources invested in IJV (e.g. Hennart & Zeng 2005). These researchers suggest that proper structuring of IJV helps to manage IJVs (i.e. reducing opportunism) and leads to superior IJV performance. While there is no doubt that structural factors of IJV are important, but structure based explanations of IJV management often under-appreciate the importance of relationship characteristics. Madhok (1995b) is one of the first authors, which criticized the-then existing IJV literature as putting too much emphasize on "hard issues of ownership and control", and ignoring the relational element of trust that better explains the performance of IJVs. He borrowed the concept of trust from social exchange theory and transferred it to the IJV settings, and posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). His study sparked another research focus in IJVs with the idea that IJV management and IJV performance can better be explained by the relationship factor of trust.

Consequently, recent research in IJVs has well appreciated the importance of trust in IJVs (e.g. Boersma, Buckley & Ghauri 2003; Nielsen 2007; Kwon 2008; Robson, Katsikeas & Bello 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012). For example, Boersma, Buckley and Ghauri (2003) and Silva, Bradley and Sousa (2012) suggest that that entering in an IJV means that two or more partners are going to work together for deciding the strategic direction and operational issues of the IJV. To successfully manage these IJVs, partners should know how to work with each other, to each other and through each other. This all makes trust important for successfully managing the IJV. In the following, we discuss in detail the theoretical roots and important research streams of trust research in IJVs.

As discussed above, Madhok's (1995b) seminal study on trust in IJV settings has utilized the insights from social exchange theory. This theory is a sociological theory, which was initially developed to analyze the people's social behavior in terms of exchange of resources. The basic premise of the theory is that *"self-interested actors need trust to get involve in reciprocal exchange of needed resources, and this trust is further promoted when reciprocal exchange becomes ongoing* (Blau 1964: 94)*"*. Trust is thus considered essential for the stable social relations between exchange actors (Blau 1964: 99). Following Madhok (1995b), researchers recognized that implications of trust in social exchange, as described by social exchange theory, have similarities to those in IJVs (Das & Teng 2002). Therefore, social exchange theory became the most important theory to the study of trust in IJVs (e.g. Inkpen & Currall 1997; Luo 2002b; Muthusamy, White & Carr 2007; Kwon 2008; Lin & Wang 2008; Robson, Katsikeas & Bello 2008). Seppanen et al. (2007: 254) evaluated the used theoretical approaches to the study of trust and found that the most important one is SET. In addition, there are some IJV studies which integrate the concept of trust in TCT (e.g. Boersma, Buckley & Ghauri 2003; Krishnan, Martin & Noorderhaven 2006; Ng, Lau & Nyaw 2007), but in fact borrow the concept of trust from SET. This is understandable, as trust has not traditionally been a focal concept in TCT. All these studies claim that the bond of trust between IJV partners is an important management factor of IJVs. According to SET, IJVs are reciprocal exchanges among partner firms that are characterized by incomplete contracts with long term duration and are governed by trust relationships (Das & Teng 2002: 444). The prior research on trust in IJVs driven by social exchange theory can be divided into two broad areas. These broad areas are the (1) antecedents of trust in IJVs, and (2) the impact of trust on IJV performance (see Table 1).

Table 1. Previous empirical studies on antecedents of trust, and trust-performance relationship in IJVs

Studies	Sample location	Sample size	Data	Data-collection Instrument	Analysis method	Trust antecedents	Trust-performance (T-P) relationship
Inkpen and Currall (1997)	HMC: Japan HSC: North America	35 IJVs	P,C	MS (Q) + interviews	OLS regression	Forbearance promotes while IJV risk hinders trust development. Further, length of prior relations and Japanese partner's IJV control do not impact trust	Trust itself has no effect on IJV performance. However, trust positively affects forbearance, which, in turn, positively affects IJV performance.
Chen and Boggs (1998)	HMC: Foreign firms HSC: China	33 IJVs	P,C	MS (Q) + interviews	Multiple regression	n.i	Trust is positively associated with IJV performance
Jennings et al. (2000)	HMC: US HSC: Australia	One IJV	P, L	Interviews	n.i	Prior relations, reputation, cultural sensitivity, implicit and explicit rules, information exchange, equitable benefits and risk sharing, and commitment promote trust	Trust has positive effect on IJV performance
Lane, Salk and Lyles (2001)	HMC: Foreign firms (DC) HSC: Hungary	78 IJVs	P, L	Structured interviews	Multiple regression	n.i	Trust is not related to learning, but is instead positively related to IJV performance
Luo (2002b)	HMC: Foreign firms (DC) HSC: China	255 IJVs	P (for T), SE (for PM), C	MS (Q) + archival data + interviews	Multiple HR	n.i	Positive T-P relationship is stronger with higher market uncertainty, stronger resource interdependency, commensurate risk sharing, greater reciprocal commitment, and when IJV is younger
Boersma, Buckley and Ghauri (2003)	HMC: Netherland HSC: Europe	Four IJVs	P,C	Interviews	n.i	The following factors promote trust at four stages of IJV development: (1) previous history stage: direct personal contact, reputation, and prior exchange, (2) negotiation stage: cultural sensitivity, judgment, personal relations, (3) commitment stage: contract, financial investment, and long term orientation, and (4) execution stage: friendship and cooperative behavior	n.i
Kauser and Shaw (2004)	HMC: UK HSC: Germany, France, Italy	114 ISAs (IJVs, ICAs)	P,C	MS (Q)	Multiple regression	n.i	Trust is positively associated with ISA performance
Krishnan et al. (2006)	HMC: 21 countries (DC) HSC: India	126 ISAs (IJVs, ICAs)	P,C	MS (Q) + interviews	OLS regression	n.i	The positive T-P relationship is stronger under high behavioral uncertainty, and weaker under high environmental uncertainty
Brouthers and Bamossy (2006)	HMC: West Europe HSC: Romania, Hungary	Eight IJVs	P, L	Interviews	n.i	Cultural sensitivity, communication, and co-operative problem solving promote trust	Greater trust leads to higher IJV performance
Ng et al. (2007)	HMC: Hong Kong, US, Japan, Taiwan HSC: China	298 IJVs	P,C	Field survey (Q)	Multiple HR	n.i	Trust is positively associated with IJV performance

Studies	Sample location	Sample size	Data	Data-collection Instrument	Analysis method	Trust antecedents	Trust-performance (T-P) relationship
Nielsen (2007)	HMC: Denmark HSC: EU, North America and Asia	120 ISAs (IJVs, ICAs)	P,C	Web survey (Q) + interviews	Multiple regression	n.i	Trust is not related to learning, but is instead positively related to ISA performance
Muthusamy, White and Carr (2007)	HMC: US HSC: EU, India, China, Singapore, Malaysia	144 ISAs (IJVs, ICAs)	P,C	MS (Q) + interviews	Multiple regression	n.i	Ability and integrity based trust positively relate to ISA performance, but benevolence-based trust does not significantly relate to ISA performance
Robson, Katsikeas and Bello (2008)	HMC: US, Western Europe, Far East HSC: UK	177 ISAs (IJVs, ICAs)	P,C	Personal interviews	SEM,	Distributive fairness and similarity promote trust	Positive T-P relationship is stronger when alliance size is small
Luo (2008)	HMC: US, EU, Japan HSC: China	168 ISAs (IJVs, ICAs)	P,C	MS (Q) +archival data + interviews	SEM, Multiple HR	n.i	Trust enhances ISA performance
Lin and Wang (2008)	HMC: US, UK, Taiwan, Japan, Hong Kong HSC: China	500 IJVs	P,C	Field survey (Q)	ANCOVA	n.i	Trust positively relates to IJV performance in Chinese-Asian JVs. However, positive trust-performance relationship becomes stronger with the increase in legalism for Western-Chinese JVs
Kwon (2008)	HMC: US, EU, Japan HSC: Korea	94 IJVs	P,C	MS (Q)	OLS regression	Goal congruence, cultural similarity, flexibility, and communication promote trust. Further, resource complementary and fairness do not impact trust	Trust is positively associated with IJV performance
Nielsen and Nielsen (2009)	HMC: Denmark HSC: EU, North America, and Asia	119 ISAs (IJVs, ICAs)	P,C	Web survey (Q)	SEM	Collaborative know-how promotes, while knowledge protectiveness reduces trust	Trust has a positive effect on learning. The positive effect of knowledge tacitness on innovation is stronger with high trust between ISA partners
Bener and Glaister (2010)	HMC: UK, US, Australia, Canada, Europe HSC: N.I	109 IJVs	P,C	MS and E. mail survey (Q)	CR, ANOVA	n.i	Trust has positive affect on IJV performance
Deitz et al. (2010)	HMC: Foreign firms (N.I) HSC: US	201 IJVs	P, C	MS (Q)	SEM	Resource complementary promotes trust	n.i
Silva, Bradley and Sousa (2012)	HMC: Foreign firms (N.I) HSC: Portugal	232 ISAs (IJVs, ICAs)	P,C	Web survey (Q)	SEM	Shared values and communication promote, while opportunism reduces trust	Positive T-P relationship is stronger with higher similarities among ISA partner firms

Notes: Home country (HMC); host country (HSC); developed countries (DC); international joint ventures (IJVs); international strategic alliances (ISAs); international cooperative alliances (ICAs); primary (P); cross -section (C); longitudinal (L); trust -performance relationship (T -P); secondary (SE); performance (PM); mail surve　y (MS); questionnaire (Q); mail survey (MS); secondary (SE); hierarchical regression (HR); correlation (CR); structural equation modeling (SEM); Ordinary least square (OLS); n.i (no information)

First stream of research focuses on the antecedents of trust in IJVs with the logic that what creates a trusting relationship with IJV partner should be known and nurtured. Empirical studies on the antecedents of inter-partner trust in IJVs, through limited, have examined factors such as risk, prior inter-partner relations, decision making control and forbearance (Inkpen & Currall 1997), distributive fairness and partner similarity (Robson, Katsikeas & Bello 2008), goal congruence, cultural similarity, resource complementary, fairness, flexibility, and communication (Kwon 2008), collaborative-know-how and knowledge protectiveness (Nielsen & Nielsen 2009), resource complementary (Deitz et al. 2010), shared values, communication, and opportunism (Silva, Bradley & Sousa 2012). These different antecedents of trust reflect that there is a limited understanding of what explains trust in IJVs. There is no comprehensive framework on the antecedents of trust as previous researchers focus on a limited set of antecedents, and identify different antecedents of trust.

Further the empirical work on the antecedents of trust, though grounded in social exchange theory, mainly focuses on social antecedents of trust (e.g. Inkpen & Currall 1997; Kwon 2008; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012). This mainly focus on social antecedents of trust downplays the importance of structural factors of IJV. This may be a serious omission especially where interest is on trust in IJVs. Especially, Hennart and Zeng (2005: 113) criticize the prior empirical research for merely focusing on social antecedents of trust and ignoring the structural antecedents of trust. They assert that trust between IJV partners will obviously be greater if the partners have the same goals, or if the structure or the contractual stipulations of the IJV limit the extent to which the partners can be opportunistic. This idea is in line with the work of Parkhe (1998a, 1998b) who claims that in addition to social factors, structural factors of IJV are also important antecedents of trust. The underlying logic is that the chosen structural characteristics of IJV limits the perceived opportunistic behavior of partner and engenders trust (Parkhe 1998a, 1998b). Unlike to this reasoning, there is also another interpretation of structural antecedents of trust. Some studies suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009). Although, the structural characteristics of IJV are subject to different interpretation, it is important to investigate their relationship with trust. However, our understanding of structural antecedents of trust is very limited and remains at theoretical level (e.g. Parkhe 1998a, 1998b; Hennart & Zeng 2005).

The above discussion regarding the antecedents of trust in IJVs suggests that previous research on antecedents of trust in IJVs, although very limited, has produced somewhat divergent social antecedents of trust and has largely ignored the

structural antecedents of trust. The first attempt to study the structural and social antecedents of trust was by Parkhe (1998a, 1998b). These studies, however, were theoretical and empirical evidence is still lacking. Therefore, a comprehensive framework that explains structural as well as social factors as antecedents of trust within an integrated theoretical and empirical model is warranted. This integrated framework of social and structural antecedents of trust in IJVs will help the managers to better understand the importance of structural and social antecedent factors necessary to establish a trustful relationship with their IJV partners. Therefore, present dissertation integrates social exchange theory and transaction cost theory with the premise that in addition to social factors (as antecedents of trust from social exchange theory), structural factors from transaction cost theory are also important antecedents of trust in IJVs.

Second stream of research on trust in IJVs, though driven by social exchange theory, focuses on the impact of trust on the IJV performance. Madhok (1995b) is one of the first authors, who posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). The focal logic in his argumentation was that trust affects IJV performance by increasing the quality of inter-partner relationships, because trust fosters inter-partner cooperation and coordination, broadens the band of tolerance for temporary periods of inequity, reduces conflicts and perceptions of relational risk, and heightens the flexibility within the IJV relationship (Madhok 1995b; Nooteboom, Berger & Noorderhaven 1997).

Though previous theoretical research (e.g. Beamish & Banks 1995; Madhok 1995b; Parkhe 1998a, 1998b; Inkpen & Currall 1998) provides general support for the idea that trust is important to achieve superior IJV performance, empirical work on trust-performance relationship is limited and presents contradictory results. Some studies find that trust improves IJV performance (e.g. Chen & Boggs 1998; Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010), some others reveal the absence of a significant direct link between trust and IJV performance (e.g. Inkpen & Currall 1997; Muthusamy, White & Carr 2007), some studies reveal the conditions under which trust matters more to IJV performance (e.g. Luo 2002b; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012), and one study points out that under some circumstances, trust may even negatively affect the IJV performance (e.g. Krishnan, Martin & Noorderhaven 2006). Such discordant findings about trust-performance link have also been pointed out by Robson, Katsikeas and Bello (2008) and Silva, Bradley and Sousa (2012). Specially, Silva, Bradley and Sousa (2012: 294) concluded that "*such discordant findings suggest not only that trust's relationship to performance is complex and poorly under-*

stood but also that trust may not improve outcomes under all circumstances".
Many studies suggest that further evidence is necessary on the impact of trust on
IJV performance (Inkpen & Currall 1997; Ng, Lau & Nyaw 2007).

Further, Robson, Katsikeas and Bello (2008) and Silva, Bradley and Sousa (2012)
suggest that future research should identify the conditions under which trust im-
pacts IJV performance. However, there is no general theory regarding the condi-
tions under which trust facilitates or hinders IJV performance. But, prior research
while discussing the importance of trust for IJV performance has largely ignored
the importance of structural characteristics of IJV. This criticism closely follows
the one proposed by Hennart and Zeng (2005, 113), who assert that there are
many unanswered questions regarding the impact of trust on IJV performance,
and call attention to the need to regard the role of structural characteristics of IJV
in studying the trust-performance relationship. Madhok (1995: 122) also share the
view that trust is not sufficient in and of itself to hold IJV performance for long
time until structural bases of IJV are strong. Robson, Skarmeas and Spyropoulou
(2006: 603) also support this proposal with their assertion that empirical attempts
combining the behavioral paradigm (e.g. trust from social exchange theory) with
other, dissimilar theoretical perspectives (e.g. structural characteristics from
transaction cost theory) are to be encouraged in future research as they can expe-
dite the development of richer, more complete explanations of IJV performance.
However, despite the call attention from these studies (e.g. Madhok 1995; Hen-
nart & Zeng 2005; Robson, Skarmeas & Spyropoulou 2006), the role of structural
characteristics of IJV in studying the trust-performance relationship has not yet
been investigated.

Therefore, studying the impact of structural characteristics of IJV on trust-
performance link will help the managers to understand the importance of structur-
al characteristics of IJV under which trust facilitates or hinders IJV performance.

The above discussion on trust-performance relationship in IJVs suggests that pre-
vious research on trust-performance relationship in IJVs, although limited, has
produced somewhat contradictory results and has largely ignored the role of
structural characteristics of IJV in explaining trust-performance relationship.
Considering these limitations, this dissertation transfers the concept of trust from
social exchange theory to IJV setting to investigate its impact on IJV perfor-
mance. Further, following the suggestion from the studies of Hennart and Zeng
(2005), Madhok (1995b), and Robson, Skarmeas and Spyropoulou (2006), this
study borrows the concept of resource complementary (i.e. an important structural
characteristic of IJV) from transaction cost theory to examine the extent to which
the effect of trust on IJV performance is moderated by resource complementary

between IJV partner firms. Figure 1 presents the focus of previous studies on trust in IJVs.
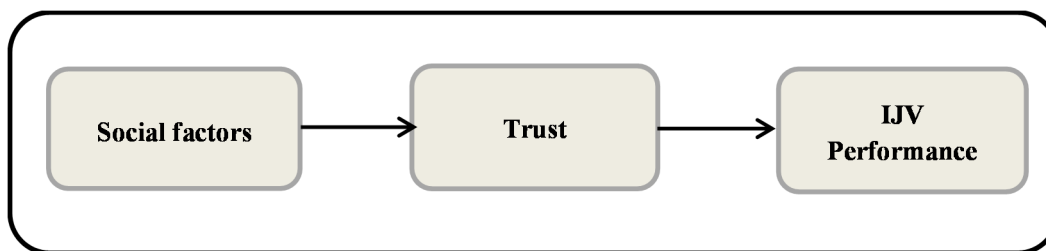
Figure 1.   Focus of the previous studies on trust in IJVs

Figure 2 presents the focus, as well as the potential contribution of the dissertation. This dissertation incorporates social exchange theory (SET) and transaction cost theory (TCT) to develop a comprehensive framework that addresses both the antecedents of trust, and trust-performance relationship in IJVs. In doing so, present dissertation contributes to existing research on trust in IJVs in the following ways.

Firstly, an important contribution of present dissertation is that it utilizes structural factors of IJV from TCT and social factors from SET to provide a more thorough understanding of antecedents of trust in IJVs. It has been suggested by Madook (1995), Parkhe (1998a, 1998b), and Hennart and Zeng (2005) that future research should examine structural and social antecedents of trust. Therefore, hypothesizing and testing a theoretically pluralistic model (i.e. model combing SET and TCT) for the possible structural and social antecedents of trust in IJVs is expected to offer new insights to the existing research on trust in IJVs which is mainly driven by SET, and merely focuses on social antecedents of trust in IJVs.

Secondly, present dissertation also extends the previous research on antecedents of trust grounded in SET by analyzing five social antecedent factors of trust in IJVs (i.e. prior alliance experience with the partner, reputation, communication, cultural sensitivity, expected longevity of IJVs). While importance of these social antecedent factors of trust has been identified by theoretical papers by Parkhe (1998a, 1998b; Nielsen 2001), but a comprehensive model consisting of these social antecedent factors of trust has not been empirically analyzed in the context of IJVs.

Thirdly, present dissertation also extends the previous research on the antecedents of trust grounded in TCT by analyzing two structural antecedent factors of trust in IJVs (i.e. ownership share, and interdependence). While importance of these structural characteristics of IJV to curb opportunism has been identified by

theoretical paper by Hennar and Zeng (2005), but importance of these factors as antecedents of trust has not been empirically analyzed in IJVs.

Fourthly, by unifying SET and TCT, a full set of social and structural antecedent factors of trust is analyzed by two pathways: (1) a direct path to analyze the social and structural antecedent factors of trust, and (2) an indirect path of social and structural antecedent factors of trust by influencing opportunism. As outlined in research gaps section, the structural characteristics are subject to two different interpretations. Some studies (e.g. Hennart & Zeng 2005) suggest that structural characteristics of IJV engender trust by limiting the extent to which partners can be opportunistic. Some other studies (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009) suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust. Therefore, investigating the direct and indirect path of social and structural antecedent factors to trust will contribute to the literature on antecedents of trust by clarifying that which social and structural antecedents directly leads to trust and which indirectly leads to trust by reducing opportunism.

Fifthly, figure 2 also shows an important contribution of present dissertation is that it addresses the interaction effects of trust and structural factor of resource complementary in relation to IJV performance. The trust-performance link in previous empirical research on IJVs, although equivocal, has been widely criticized by Hennart and Zeng (2005) for ignoring the structural factors of IJV. Hennart and Zeng (2005: 113) assert that:

"Researchers in the process tradition have typically regressed performance on variables such as trust, communication, and commitment, often without much control for structural variables. This raises the possibility that much of the variance in performance attributed to process variables may in fact be due to structural conditions".

Therefore, hypothesizing and testing a theoretically pluralistic model (i.e. model combining SET and TCT) for the possible interaction effects of trust and structural factor of resource complementary in relation to IJV performance is expected to offer new insights to the existing research on trust in IJVs where previous research has produced equivocal findings about trust-performance link in IJVs.

Finally, so far the studies addressing the antecedents of trust and trust-performance relationship in IJVs have used sample based on IJVs made by Japanese firms (Inkpen & Currall 1997), United States firms (Muthusamy, White & Carr 2007) United Kingdom firms (Kauser & Shaw 2004); Danish firms (Nielsen 2007; Nielsen & Nielsen 2009), United States, United Kingdom, and Japanese

firms (Kwon 2008; Luo 2008); United States, Western Europe, and Far East firms (Robson, Katsikeas & Bello 2008). This dissertation focuses on Nordic firm's (Danish, Finnish, Norwegian, and Swedish) IJVs operating into Asia, Europe, and America to analyze the antecedents of trust and trust-performance relationship in IJVs. Outward FDI from Nordic region is significantly increasing (e.g. Danish outwards FDI increased from 8206 MD in 2006 to 23413 MD in 2011, and similar trends can be observed for Finnish, Swedish, and Norwegian outward FDI) (UNCTAD 2012). Therefore, this empirical setting will provide new evidence on the antecedents of trust and trust-performance relationship in IJVs.
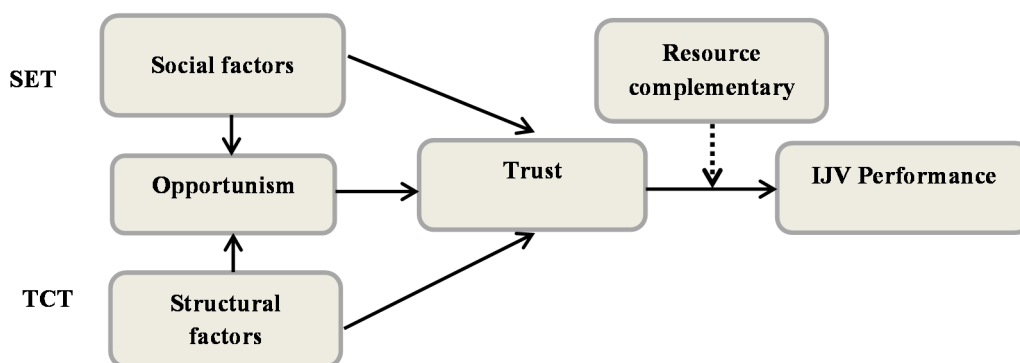
Figure 2.   Focus of the present dissertation compared to prior studies

1.5   Scope and limitations of the study

The scope of this dissertation is to address the antecedents of trust, and trust-performance relationship in IJVs. The conceptual framework of this dissertation is based on the integration of SET and TCT. SET is a sociological theory which was initially developed to analyze the people's social behavior in terms of exchange of resources. Theory puts trust at the center of social exchange and considers it an essential ingredient for the stable social relations between exchange actors (Blau 1964: 99). Madhok's (1995b) seminal study is one of the earlier studies that borrowed the concept of trust from social exchange theory and transferred it to the IJV setting. From SET, there are several social factors (i.e. social antecedent factors) that build trust between exchange partners (i.e. between IJV partners). Parkhe (1998a, 1998b) addressed the importance of 'prior alliance experience with the partner', 'reputation', 'communication', 'cultural sensitivity', and 'expected longevity of IJVs' as primary means of developing trust between IJV partners. Therefore, SET assumes that trust between exchange partners is engendered by social antecedent factors.

However, this logic of developing trust between exchange partners is increasingly viewed as incomplete when transferring it to IJV setting whereby exchange partners are also embedded in the structure of IJV. Specially Hennart and Zeng (2005), and Parkhe (1998a, 1998b) studies claim that in addition to social factors, structural factors of IJV are also important antecedents of trust. Therefore, 'equity ownership' and 'interdependence level' between IJV partners are the important structural factors from TCT that are viewed as an antecedents of trust in this dissertation. However, these structural characteristics of IJV are subject to different interpretations. Some studies (e.g. Hennart & Zeng 2005) suggest that structural characteristics of IJV engender trust by limiting the extent to which partners can be opportunistic. Other studies (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009) suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust. Therefore, we develop two paths: (1) a direct path to analyze the social and structural antecedent factors of trust, and (2) an indirect path of social and structural antecedent factors of trust by influencing opportunism. Therefore, findings will help to resolve the contradictory claims.

Further, SET considers that trust between IJV partners is the main factor that increases IJV performance. Specially, Madhok (1995b) is one of the first authors, who posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). However, this logic of trust-performance relationship is also increasingly viewed as incomplete because it ignores the structural characteristics of IJV. Specially, Hennart and Zeng (2005: 113) suggest that *While there is no doubt that process variables are an important determinant of the performance of alliances, process-based explanations of alliance dynamics often under-emphasize structural explanation. Some (but not all) process variables seem also to be repackaged structural variables. The prime example is trust, which has been extensively used as an independent variable to explain alliance performance*.

By agreeing with criticism, this dissertation incorporates the structural factor of 'resource complementary' as an important moderator of trust-performance relationship in IJVs.

In spite of using an integrated framework of SET and TCT to investigate the antecedents of trust and trust-performance relationship in IJVs, the conceptual framework has an important limitation. The study incorporates only one structural factor of 'resource complementary' as an important moderator of trust-performance relationship in IJVs. However, the other structural characteristics of IJV (e.g. equity ownership and interdependence) could also be incorporated as moderators of

trust-performance relationship. But doing so would make the framework more complex because of overlap between structural antecedents of trust, and the structural factors as moderators of trust-performance relationship. There is also an important empirical limitation. The dissertation concentrates on Nordic firms' IJVs operating into Asia, Europe, and America. Therefore, the results may not be generalizable to the IJVs from other countries or regions.

1.6   Definitions of key terms in the study

The key terms in this dissertation have been identified based on their importance in understanding the research phenomenon under study. These terms include: *International joint venture (IJV), Trust, Prior alliance experience with the partner, Partner reputation, Communication, Cultural sensitivity, Expected longevity of IJV, Opportunism, Ownership share, Resource complementary, Interdependence, and IJV performance.* The definitions of key terms used in this dissertation are summarized and presented in the Table 2 along with the relevant references, so that the reader can follow the conceptualization of these terms in this dissertation.

1.7   Structure of the study

This dissertation is organized into six chapters. The **first chapter** (Introduction) starts with a discussion about the study background and identification of research gaps. This discussion is followed by the research question and study objectives. Next, the chapter addresses the positioning of the study in relation to previous studies, and the potential contributions of the study. Then the scope and limitations of study are addressed in order to clarify the limits of the study context and its applicability to the readers. Finally, the chapter presents definitions of key terms used in this dissertation along with offering discussion about the structure of the dissertation.

The **second chapter** (Theoretical Perspectives on the Formation and Management of IJV Relationships) aims to be a theoretical chapter. The chapter offers an in-depth review of roots of transaction cost theory and social exchange theory, and the logic of IJV formation and management in the light of these two theories. Next, the chapter discusses the key construct used in this i.e. trust in detail. Here, the conceptualization of trust is explained especially by reviewing its different conceptualizations used in past studies. In the next section, the importance of trust in IJVs and the antecedents of trust are discussed in the light of past studies. Finally, the rationale of integrating the social exchange theory and transaction cost theory to study the 'antecedents of trust and trust-performance relationship in IJVs' are discussed.

Table 2.   Definitions of key terms in the present dissertation

Key terms	Definitions	References
International joint venture (IJV)	A joint venture arises whenever two or more sponsors bring given assets to an independent legal entity and are paid for some or all of their contribution from the profits earned by the entity, or when a firm acquires partial ownership of another firm. A joint venture is considered international when the nationality of one or more parents of joint venture is other than the country of residence of joint venture.	Hennart (1988: 361); Brouthers and Hennart (2007: 398)
Trust	Trust is the willingness to accept vulnerability to another party (i.e. to rely) in an IJV relationship based on the positive expectations\believes of counterpart's reliability, fairness, and goodwill.	Dyer and Chu (2003: 58); Krishnan, Martin and Noorderhaven (2006: 895)
Prior alliance experience with the partner	It refers to the previous alliance experience with the partner firm before the establishment of current IJV.	Young-Ybarra and Wiersema (1999: 45); Glaister and Buckley (1999: 134); Nielsen (2007: 349)
Partner reputation	It refers to the cumulative record of partner's past behavior in prior alliances with other firms before the establishment of current IJV.	Boersma, Buckley and Ghauri (2003: 1034): Nielsen (2007: 341)
Communication	Communication refers to the information exchanged between IJV partners and is defined as 'formal and informal sharing of meaningful and timely information between IJV partner firms'.	Young-Ybarra and Wiersema (1999: 445); Silva, Bradley and Sousa (2012: 295)
Cultural sensitivity	Cultural sensitivity refers to a firm's awareness of cultural differences between it and its IJV partners, and effectively dealing and managing these differences.	Johnson et al. (1996: 985); Voss et al. (2006: 613)
Expected longevity of IJV	Expected longevity of IJV reflects a firm's expectations that the IJV relationship with partner firm will continue on a long-term basis.	Aulakh, Kotabe and Sahay (1996: 1011); Muthusamy, White and Carr (2007: 71)
Opportunism	Opportunism is defined as 'self-interest seeking with guile' and is manifested in acts such as withholding critical information, misrepresenting facts, shirking obligations, failing to keep promises, or taking advantage of its partner with little regard for ethics.	Williamson (1985: 47); Hsieh, Rodrigues and Child (2010: 3); Silva, Bradley and Sousa (2012: 296)
Ownership share	Ownership share refers to the ratio of equity distribution between the IJV partners.	Luo (2002b: 681); Hsieh, Rodrigues and Child (2010: 9)
Resource complementary	Complementary is the extent to which IJV partners bring different resources that cover each other weaknesses and provide a better fit to achieve IJV objectives	Donnell (2005: 145); Deitz et al. (2010: 3)
Interdependence	It refers to the extent to which both IJV partners interlock each other in an IJV by investing transaction specific assets that have little value outside the IJV	Williamson (1985: 191); Young-Ybarra and Wiersema (1999: 442); Ybarra and Turk (2009: 66)
IJV performance	It is extent to which the foreign parent of IJV (i.e. Nordic parents of IJV) are satisfied with IJV with respect to overall performance, profitability, market share, and achievement of goals set for IJV	Lane, Salk and Lyles (2001: 1148); Krishnan, Martin and Noorderhaven (2006: 900); Silva, Bradley and Sousa (2012: 303)

Chapter three (Study Hypotheses and Research Model) develops the hypotheses and presents the final research model of the dissertation. Firstly, the hypotheses are developed regarding the social antecedent factors of trust and opportunism from social exchange theory, and structural antecedent factors of trust and opportunism from transaction cost theory. Next, the chapter includes the hypotheses about the trust-performance relationship in IJVs, and the potential moderating influence of resource complementary on trust-performance relationship. The chapter concludes with development of the research model, thereby achieving one of the key sub-objectives of study.

Chapter four (Research Methodology) starts with the philosophical stance followed in this dissertation. The discussion of chosen philosophical stance leads to research methodology, and method of data collection in this dissertation. Next, the chosen method of data analysis is discussed in detail. The chapter concludes with the operationalization of key constructs in the dissertation.

Chapter five (Empirical Analysis and Results) explains the empirical results of the dissertation. The chapter starts explaining the study sample and its key characteristics with the help of histograms and pie charts. Afterwards, the two common sources of error in mail-survey research, that are, non-response biasness and common method biasness are discussed. Next, the chapter describes the results from the measurement and structural model. The chapter concludes with showing the results of hypotheses in the dissertation.

Chapter six (Summary and Conclusions) is the last chapter of this dissertation. This chapter starts with a summary discussion about the key results of this study. The next section refers explicitly to the key contributions of the dissertation both at theoretical and empirical levels. This discussion is followed by the managerial implication based on the findings of the study. The last section refers to the limitations of the study, and the research areas that can be explored in future research. Based on the discussion offered so far, the structure of dissertation is presented in a graphical format in the following Figure 3.

1. INTRODUCTION
- Background of the research
- Research gaps
- Research questions and objectives of the study
- Positioning and potential contribution of the study
- Scope and limitations of the study
- Definitions of key terms in the study
- Structure of the study

2. THEORETICAL PERSPECTIVES ON THE FORMATION AND MANAGEMENT OF IJVS
- Transaction cost theory of IJVs
- Social exchange theory of IJVs
- The conceptualization of trust in IJVs
- Conceptualizing trust for present dissertation
- Importance of trust in IJVs
- Antecedents of trust
- Combining social exchange theory and transaction cost theory to study the antecedents of trust, and trust-performance relationship in IJVs

3. STUDY HYPOTHESES AND RESEARCH MODEL
- Social antecedents of trust and opportunism in IJVs
- Structural antecedents of trust and opportunism in IJVs
- Opportunism and trust relationship in IJVs
- Trust and IJV performance
- Moderation effects- resource complementary
- Research model of the study

4. RESEARCH METHODOLOGY
- Philosophical stance followed
- Choice of quantitative research methodology and method
- Study population, and questionnaire development
- Survey procedure and response rate
- Structural equation modeling with PLS method
- Operationalization of variables

5. EMPIRICAL ANALYSIS AND RESULTS
- Description of the sample
- Two common problems with mail survey
- Validating the measurement model
- Assessment of the overall structural model
- Analyzing the individual structural models

6. SUMMARY AND CONCLUSIONS
- Key results of the study
- Theoretical and empirical contributions
- Managerial implications
- Limitations and suggestions for further research

Figure 3. Structure of the dissertation

2   THEORETICAL PERSPECTIVES ON THE FORMATION AND MANAGEMENT OF IJVS

This chapter starts with the review of two main theories that frame this study: transaction cost theory (TCT) and social exchange theory (SET). Firstly, the TCT is discussed by providing an overview of its historical development, its application to hybrids and IJVs formation, and its structural approach to the management of IJVs. Further on, summary and criticism on TCT's approach to the management of IJVs is presented. Next, the SET is discussed by providing an overview of its historical development and its application to IJVs formation and management. Further on, summary and criticism on SET's approach to the formation of IJVs is presented. The discussion is continued in the next section about conceptualization of trust in different past studies, as there has been a lot of variance in past studies in this concern. This review builds the basis for discussion on the conceptualization of trust in the current study. In the next section, the importance of trust in IJVs and the antecedents of trust are discussed in the light of past important studies. Finally, the rationale of integrating the SET and TCT for studying the antecedent factors of trust and trust-performance relationship in IJVs is discussed.

2.1   Transaction cost theory of IJVs

Transaction cost theory (TCT) was developed by Coase (1937) and further progressed by Williamson (1975, 1985, 1991) and Hennart (1988, 1993, 2008, 2010). However, the logic of the theory to the formation of IJVs substantially differs between Williamson and Hennart. Further, TCT has been applied to the management of IJVs (i.e. reducing opportunism) based on the structural characteristics of IJV (e.g. Zeng 1998; Luo 2002a, 2005, 2007; Hennart & Zeng 2005), but there are substantial differences between TCT scholars the way they identify and categorize the structural characteristics of IJV used for managing IJVs (i.e. reducing opportunism). In the following, earlier development of TCT, application of TCT to hybrids and IJV formation, and structural approach to the management of IJVs is discussed in detail. Figure 4 presents the sequence of discussion about the TCT of IJVs.

| Earlier development of TCT | → | Application of TCT to hybrid formation | → | Extending TCT to IJV formatoin | → | TCT and management of IJVs |
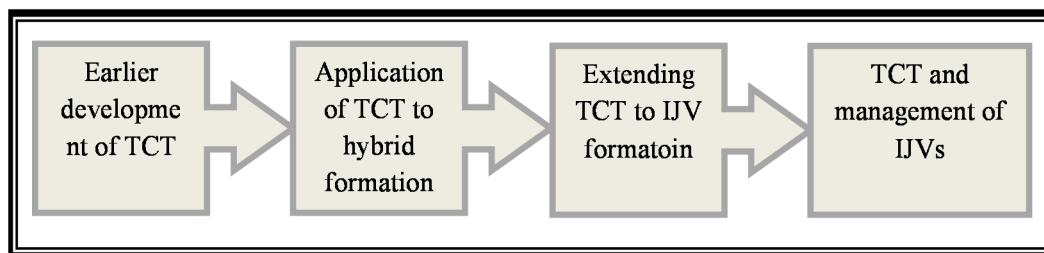
Figure 4. Sequence of discussion about the transaction cost theory of IJVs

2.1.1 Earlier development of transaction cost theory

The early development of the TCT dealt with the question of the 'existence of firms' in relation to 'markets' (Williamson 1993a: 7). In 1937, Coase made two important contributions to economics: distinguishing 'firms' from 'markets', and explaining the 'existence of firms'. He distinguished 'firms' from 'markets' with the arguments: *"evidently there are at least two coordinating mechanisms: within markets the price system signals (decentralized) resource allocation needs and opportunities; but firms employ a different organizing principle, that of hierarchy, whereupon authority is used to effect resource reallocations"* (Coase 1993: 3).

To explain the 'existence of firm', Coase (1993: 22) argued that *"the operation of a market costs something (i.e. costs associated with determining relevant prices, negotiating, and concluding contracts) and by forming an organization and allowing some authority (i.e. an "entrepreneur") to direct resources, certain marketing costs are saved"*. This means that Coase compared transaction costs (i.e. cost of conducting transaction in market) against management costs (i.e. cost of internalizing transaction) to arrive at the formal condition that defines the boundary of the firm. To explain the limits of firm boundary, he concluded that, *"a firm will tend to expand until the costs of organizing an extra transaction within the firm becomes equal to the costs of carrying out the same transaction by means of an exchange on the open market or the costs of organizing in another firm"* (Coase 1993: 23).

However, Coase did not identify the factors which cause transaction cost differences. Williamson concludes that, *"the general comparison of firm (management costs) in relation to market (transaction costs) was the basic concern of Coase. A predictive theory of which transactions would be organized by which mode of organization (i.e. firm and\or market) and why was plainly not Coase's concern in 1937"* (Williamson 1993a: 7). Therefore, the reasons for organizing some transactions in firm and others in the market remained necessary obscure, until the factors responsible for transaction cost differences could be identified (Wil-

liamson 1985: 4). Figure 5 depicts the Coase (1937) explanation of the existence of firm in comparison to market.
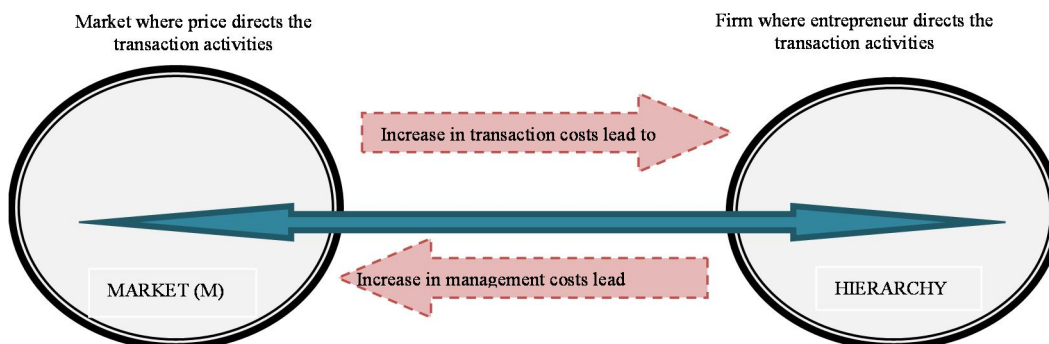
Figure 5.   Firm boundary and market

This comparative logic of firm with relation to market in economizing transaction costs was further led by Williamson (1975). He offered the underlying factors (i.e. the factors that cause market imperfection, and therefore increase transactions costs) that are relevant for the choice between internalizing the governance of transactions within firms as opposed to affecting them through market exchanges. In other words, he explained the choice of efficient governance structure (i.e. firms opposed to markets) by focusing on the underlying factors that cause market imperfection. These underlying factors are; human factors (opportunism, bounded rationality), environmental factors (small number, uncertainty and complexity), and derivative condition of information impactedness. For Williamson (1975), the set of environmental factors (i.e. small number, uncertainty and complexity) lead to market failure, but these factors need not impede the exchange on market until joined with human factors (i.e. opportunism, bounded rationality). He summarized this argument: "*the environmental factors that lead to prospective market failure are uncertainty and small numbers exchange relationships. Unless joined, however by a related set of human factors, such environmental conditions need not impede market exchange. The pairing of uncertainty with bounded rationality, and joining of small number with what I shall refer to as opportunism are especially important*" (Wiliamson 1975: 9).

The above pairing of opportunism with small number, and uncertainty with bounded rationality led Williamson to explain the impediment of market exchange and a reason for internalization. The concept of opportunism, which Williamson (1975: 26) defines as, "self-interest seeking with glue", plays an important role in the choice of governance structure. Williamson does not assume that everyone will behave opportunistically. He argues that: "*since these types*

(i.e. opportunism) cannot be distinguished ex ante from sincere types, relying on such promises exposes sales contracts to hazards during the contract execution and at the contract renewal interval" (Williamson 1975: 27).

For Williamson, opportunism becomes a real threat in the face of small number condition. A situation of small number prevails when a large numbers of qualified bidders at the outset become a small numbers supply at contract renewal (1975: 27). These small numbers enjoy nontrivial cost advantages over non-winners during the contract renewal stage. In a small number situation, Williamson argues that "*it is in the interest of each party to seek terms most favorable to him, which encourages opportunistic representations and haggling*" (1975: 27). Hence, this pairing of opportunism with small number will push the transaction towards hierarchy.

The concept of bounded rationality, which Williamson (1975: 21) defines as, "*human behavior that is intendedly rational, but only limited so*", also plays an important role in the choice of governance structure. Williamson (1975: 9) argues that when market conditions are uncertain and complex, then it is very costly or impossible for bounded rational humans to identify future contingencies and specify, ex-ante, appropriate adaptations thereto. This pairing of uncertainty and complexity with bounded rationality pushes the transaction towards hierarchy. Williamson (1975: 9) summarized as: "*if, in considerations of these limits (i.e. bounded rationality), it is very costly or impossible to identify future contingencies and specify, ex ante, appropriate adaptations thereto, long term contracts may be supplanted by internal organization*".

Finally, the condition of 'information impactedness' exists, "*when true underlying circumstances relevant to the transaction, or related set of transaction are known to one or more parties but cannot be costlessly discerned by or displayed for others*" (Williamson 1975: 31). However, this condition of information impactedness does not impair market exchange if the parties are (1) not opportunistic, (2) an unbounded rationality condition was to obtain, (3) or a large numbers competition condition prevails (both presently and prospectively). However, if all above conditions are violated, a shift of transaction from market to hierarchy is proposed by Williamson (1975: 33). Figure 6 explains the Williamson's (1975) logic of the choice of market or hierarchy based on underlying human and environmental factors.

HUMAN
FACTORS

ENVIRONMENTAL
FACTIORS

BOUNDED
RATIONALITY

UNCERTAINTY\
COMPLEXITY

INFORMATION
IMPACTEDNESS

OPPORTUNISM

SMALL NUMBERS

Increase in human and environmental factors lead

Decrease in human and environmental factors

MARKET
(M)
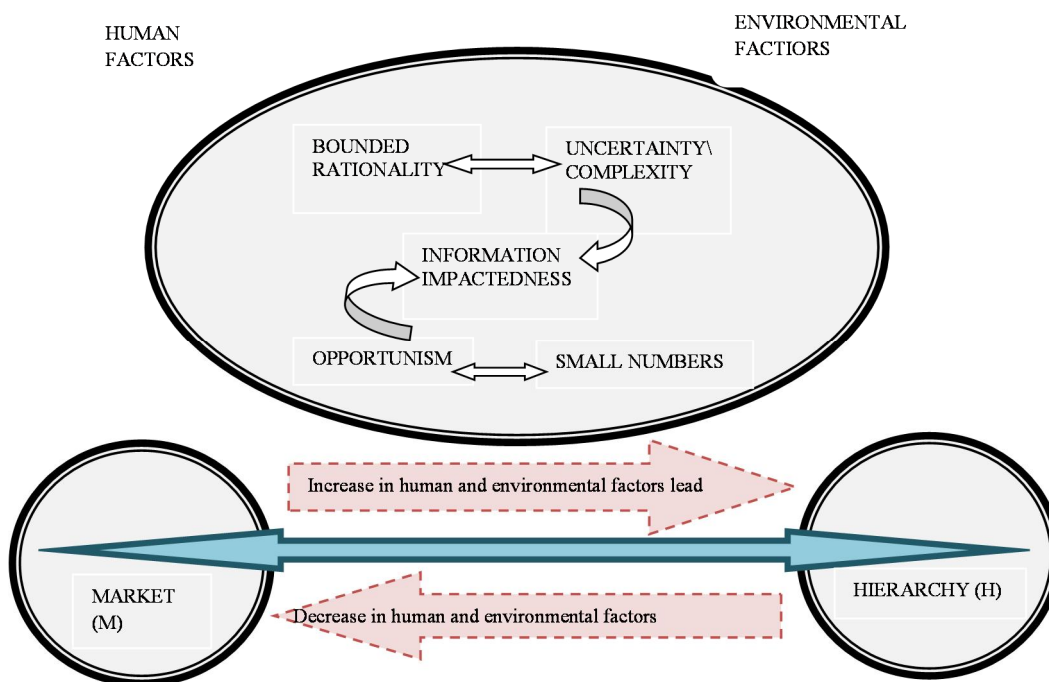
HIERARCHY (H)

Figure 6.   Human and environmental factors leading to the choice of market or hierarchy (Adopted and modified from Williamson 1975: 40)

In conclusion, the core message of Coase's TCT was that the choice of firm over market reflects efforts to economize on transaction costs (See figure 5). Thus, the objective function in TCT is to minimize the transaction costs of the exchange. This insightful contribution to economics by Coase led the Williamson (1975) to identify the underlying factors for the choice of firm over market (see figure 6). These underlying factors comprise of; human factors (opportunism, bounded rationality), environmental factors (small number, uncertainty and complexity), and derivative condition of information impactedness.

2.1.2   Application of transaction cost theory to hybrids formation

Until now, the above discussion depicts that the main focus of Coase (1937) was to explain the rise of the firm in response to market failures, and the same stance was adopted by Williamson (1975), though with more elaboration with factors leading to the choice of firm over market. However, the proliferation of various forms of inter-organizational collaborations in the 1980s was beyond the explanation domain of TCT. Klein, Crawford and Alchian (1978 referred in Coase 1993: 49) say this: "*once we attempt to add empirical detail to Coase's fundamental insight that a systematic study of transaction costs is necessary to explain particular forms of economic organization, we find that his primary distinction between*

transactions within a firm and transactions made in the market place may often be too simplistic. Many long-term contractual relationships (such as franchising) blur the line between the market and the firm".

To make up for this deficiency, Williamson (1985: 16, 1991) extended his analysis to strategic alliances, or what he called the hybrid mode of governance, which he considered to occupy the position between the two ends of the market-hierarchy continuum. These hybrids embody the elements of both market and hierarchy. For Williamson (1985, 1991), hybrids consist of long term supply contracts, licensing contracts, franchising contracts and JVs.

TCT maintains that there are "rational economic reasons" for organizing some transactions one way and other transactions another (Williamson 1985: 52). This is further explained by Williamson (1985: 18) with argumentation that transactions, which differ in their attributes, are aligned with governance structures, i.e. market, hybrid, or hierarchy, in a discriminating (i.e. transaction-cost-economizing) way. In other words, the governance mode (hierarchy, hybrid, or market) that minimizes transaction costs is the preferred option. The principal attributes of transactions, according to TCT, are asset specificity, uncertainty, and frequency (Williamson 1985: 52).

In his 1985 analysis, Williamson gives more attention to asset specificity as a point of reference for choosing the efficient governance structure. Asset specificity refers to "*durable investments that are undertaken in support of particular transactions, the opportunity cost of which investments is much lower in best alternative uses or by alternative users should the original transaction be prematurely terminated*" (Williamson 1985: 55). Asset specificity is thus a particular case of small-number conditions. High asset specificity increases switching costs and makes it possible for the more flexible party to exploit the less flexible one (i.e. opportunism). Therefore, the transactions with medium asset specificity are pushed towards hybrids, because hybrids provide added contractual safeguards and dispute resolution mechanisms, and those with high asset specificity towards firm governance because firms, although they are subject to added bureaucratic costs, are also more adaptive as they can make use of fiat. Williamson (1985: 78) thus predicts that, ceteris paribus, transactions with low asset specificity will be handled by markets, those with intermediate asset specificity by hybrids, and those with high asset specificity in firms.

The second dimension of transaction is uncertainty. The effect of uncertainty on the choice of governance form, however, is conditional (Williamson 1985: 59). When asset specificity is low, market governance should be preferred whatever the degree of uncertainty, since continuity matters little and new transaction ar-

rangements can easily be arranged by both parties (i.e. accommodating uncertainty by switching partners is easy) if necessary (Williamson 1985: 59).

In situations of mixed asset specificity, although, there are benefits to continuing the transaction by hybrids governance as it facilitates adaptation. However, at high levels of uncertainty, the hybrid tend to shrink, and may even disappear (Williamson 1985: 80). This is because hybrid adaptations cannot be made unilaterally (as with market governance), or by fiat (as with hierarchy), but require mutual consent (Williamson 1985: 80). Mutual consent is viewed as being more time consuming, which may lead to failure in the face of high rates of uncertainty. The result is that high uncertainty renders both market governance and hierarchies preferable to hybrids. Hence firm governance is preferred whenever asset specificity and uncertainty are both high, hybrids when asset specificity and uncertainty are both medium, and market governance when asset specificity is low and uncertainty is high and\or low.

Finally, the frequency of the transaction operates in a similar way. Williamson (1985: 75) argues that "specialized governance structures (i.e. hybrids and hierarchy) are commonly devised for recurring transactions supported by investments of mixed and highly specific kinds". Hence, in the presence of mixed to high asset specificity, frequency pushes transactions away from the market and towards hybrids and hierarchy (Williamson 1985: 79).
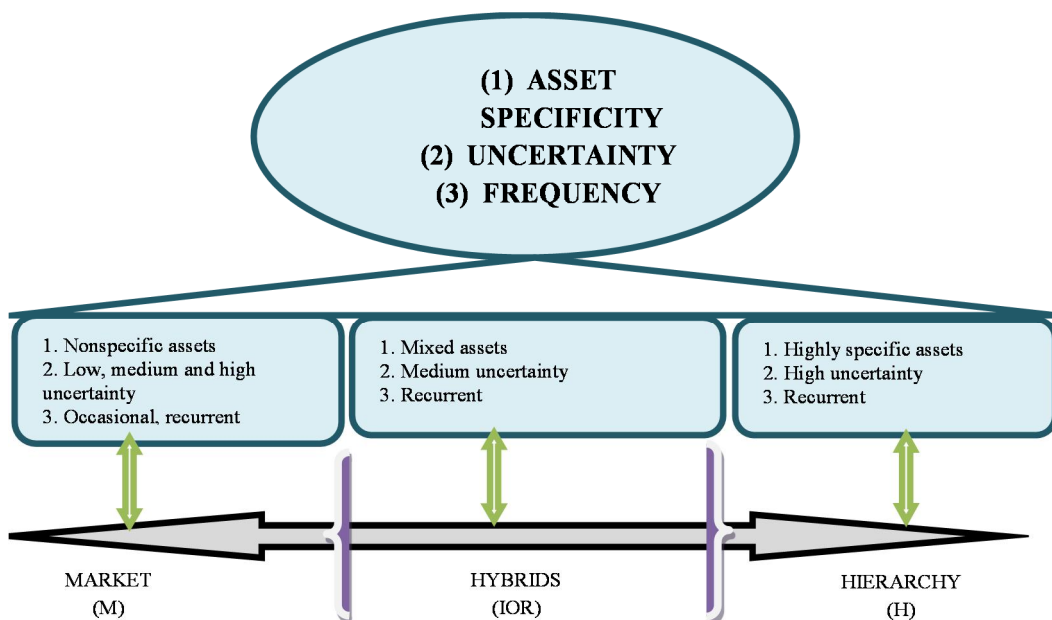
Figure 7.   Principal attributes of transaction and choice of governance structures

In conclusion, TCT argues that the transactions, which differ in their attributes, are aligned with governance structures, i.e. market, hybrid, or hierarchy, in a discriminating (i.e. transaction-cost-economizing) way. The principal attributes of transactions, according to TCT, are asset specificity, uncertainty, and frequency. Williamson (1985) argues that firms are preferred to markets and hybrids in situations of very high asset specificity and uncertainty for recurrent transactions; and markets to hybrids in situation of low asset specificity, low\medium\high uncertainty for all kind of occasional and recurrent transactions; and hybrids optimal when both asset specificity and uncertainty are at intermediate levels for recurrent transactions. Figure 7 explains the Williamson's (1985) logic of the choice of market, hybrids, or hierarchy based on underlying attributes of the transaction.

2.1.3   *Extending transaction cost theory to IJV formation*

Williamson (1985, 1991) offered a precise analysis of the choice of hybrids (i.e. long term supply contracts, licensing, franchising, and JVs) over markets and hierarchy in discriminating (i.e. transaction-cost-economizing) way based on three characteristics of the transactions (i.e. medium uncertainty and complexity, mixed specificity of investment, and recurrent frequency) coupling with two behavioral assumptions of opportunism and bounded rationality. For Williamson (1985, 1991), JVs are hybrids that are considered to occupy the positions between the two ends of the market-hierarchy continuum. However, Williamson (1985: 76) admits that "*hybrids have only recently received the attention they deserve, and their operation is least well understood*". To further explain the logic of hybrids (including IJVS) formation, scholars have used TCT extensively to develop theoretical explanations of hybrids (Hennart 1988, 1993, 2008, 2010). These further developments, although extended TCT, are substantial different from Williamson in the way they describe, categorize, and explain the JVs in comparison to market, hybrids, and firm. The following section is based on Hennart (1988, 1993, 2008, 2010), and Brouthers and Hennart (2007).

For Hennart (1993), there are two distinct organizing methods, i.e. price and hierarchy, and two institutional forms, i.e. market and firm. Although markets predominately use prices and firms rely principally on hierarchy, but markets and firms can be seen as using combination of two organizing methods of price and hierarchy, i.e. hybrids (Hennart 1993: 529).

In market, price system rewards agents for maximizing their output at market prices. Here, it is assumed that value of output produced is perfectly measured by the interacting parties. However, this organizing method (i.e. price) becomes inefficient when output of parties is difficult (costly) to measure. In that case, it is

likely that some agents will take advantage of the fact that measurement is difficult (costly) to undersupply those positive dimensions of output which are difficult to measure and to over supply the negative ones (Hennart 2008: 346). In other words, when output becomes difficult to measure, price system results in costs (i.e. cheating costs), which includes the cost of measuring output plus the residual amount of cheating that will remain due to imperfect measurement. Hence buyers will invest in measurement up to the point where additional measurement efforts are equal to their costs. For example, farmers may surreptitiously add water to milk they sell to dairies, or may sell milk contaminated with pesticides, and yet charge dairies the price of unadulterated milk. The dairy could perform extensive tests on each batch of milk, but the cost is likely to be prohibitive. This inability of price systems in markets, resulting in high cheating costs, pushes the transactions towards hierarchy in firm and JVs.

In firms and JVs, hierarchy reduces the cheating by reducing the incentives agents have to cheat. It does this by breaking the connection between outputs and rewards (i.e. market prices). Here, agents are no longer being rewarded through their output but instead through their obedience to managerial directives. Thus agents have fewer incentives to maximize their output and cheat buyers. However, such a system of rewards independent of output has one unavoidable consequence: while it reduces cheating, it also reduces incentives to work. Now agents have less incentive to generate output, because their reward is no longer directly proportional to that output measured at market prices. In other words, when monitoring behavior of agents in firms and JVs becomes difficult, hierarchy results in costs (i.e. shirking costs), which include the costs incurred to monitor the behavior of employees (i.e. costs to prevent shirking) plus the losses from shirking due to imperfect monitoring (Hennart 2008: 346)

In conclusion, markets are institutions that predominately use price method of organizing, and firms predominately rely on hierarchy. However, because of diminishing return to measuring output in market due to high cheating costs (i.e. inefficient market) pushes the transaction towards firm and JVs. However, because of diminishing return to constraining behavior due to high shirking costs makes firms and JVs inefficient. To solve this dilemma, Hennart (1993: 531) argues that "*however, because of diminishing return to measuring output and constraining behavior, both firms and markets will often use a mix of price and behavior constraints.*" Hence most of transactions exhibit features of both markets and hierarchy and are called hybrids. In conclusion, hybrids (see figure 8) like long-term supply contracts, licensing contracts, franchising contracts, buy-back contracts, distribution contracts, and production sharing are a mix of price and hierarchy organizing methods.
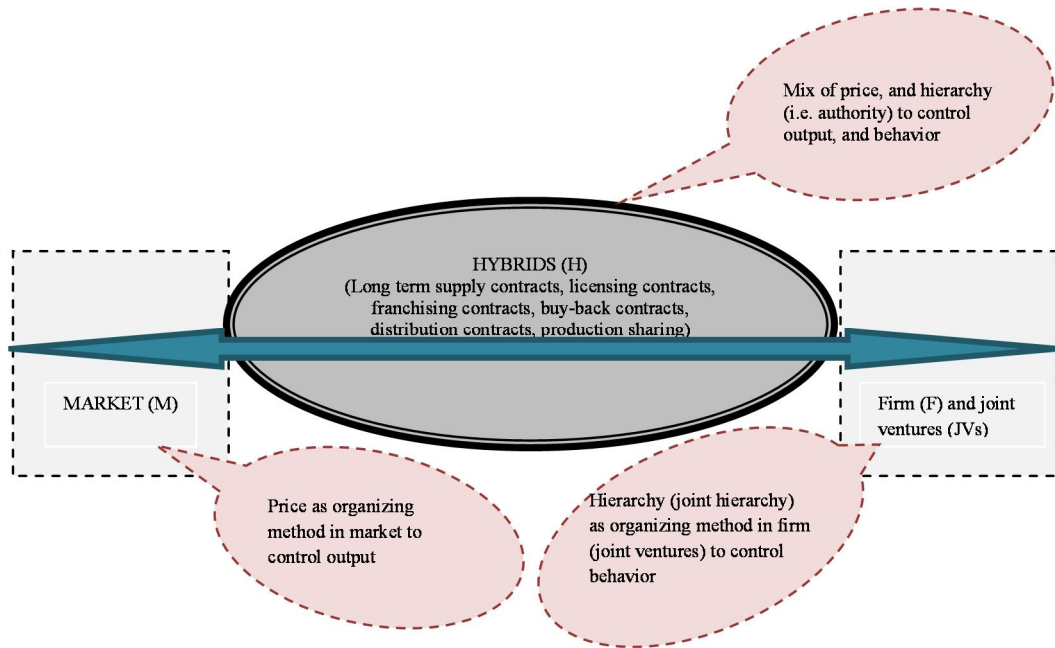
Figure 8. Organizing methods (i.e. price and hierarchy), and institutions (market, hybrids, and firm)

Now it can be seen from above discussion and Figure 8, that JVs are not part of hybrids as they are not mix of price and hierarchy, but are joint hierarchy. In comparison of Williamson (1985); which sees JVs as hybrids and explains the choice of JVs over other modes (i.e. market and hierarchy) based on transaction characteristics of mixed assets and medium uncertainty; Hennart (1988) does not see JVs as hybrids and explains the choice of JVs based on the intermediate inputs (some raw material and components, some types of knowledge, loan capital, and distribution services) that lowers the efficiency of markets.

Hennart (1988: 364) argues that explaining the existence of JVs requires answering the following two questions: (1) why an equity link is sometimes preferred to other means of acquiring intermediate inputs; and (2) why the firm chooses to share the ownership of JV with other parents.

Answering these questions requires distinguishing between two types of JVs, i.e. scale JVs, and link JVs. "Scale" JVs are created when two partners join forces to internalize a failing market to overcome the problems created by economies of scale or scope. Drilling consortia routinely used by integrated oil companies are a familiar example of scale JVs. "Link" JVs are usually used to combine complementary assets by different firms. A typical IJV, in which the foreign partner provides technology and the local partner provides local knowledge, is an example of link JVs (Hennart 1988: 362).

Minimum efficient scale (MES) sometimes differs across successive stages of production. If a large MES exists at an intermediate stage, the supply of these goods and services tends to be monopolized by a small number of companies who have successfully increased their output to the MES level and thus enjoy significant cost advantages. This small-number condition significantly increases the transactions costs for buyers seeking to obtain such goods and services on the open market due to the high costs of bargaining and the potential of holdup by the suppliers. Therefore, it is often efficient for these buyers to internalize this intermediate stage and thus reduce the transaction costs of bargaining these goods. However, given the large differences in MES across stages, it is often not economical for a single firm to obtain full ownership of the relevant assets. Therefore, firms with similar needs often form JVs to internalize the failing market together. In summary, scale JVs arise when parties seek to internalize a failing market, but indivisibility due to scale or scope economies make full ownership of the relevant assets inefficient (Hennart 1988: 372).

On the other hand, "link" JVs are formed to reduce the transaction costs of combining hard-to-measure complementary assets held by different parties that are necessary to achieve a common task (Hennart 1988). Instead of paying a price determined by the market (i.e. contract), equity ownership within a JV arrangements rewards partners' hard-to-measure contributions with a share in the residual of the JV. However, if complementary assets can be purchased on the market, the party with hard-to-measure assets will integrate into a WOS. Otherwise, simultaneously failure of the markets for the service of two or more assets held by different firms will therefore lead to the formation of link JVs.

To explain the existence of the JVs, it is also necessary to explain when such an organization mode is preferred to greenfield investment (developing needed resources internally) and acquisition (acquiring the target firm), two other means of pooling complementary assets. JVs are more effective when required assets are (1) firm-specific and (2) public goods.

If required assets are public goods (i.e. assets that can be shared at low marginal cost), then greenfield is less desirable due to high fixed costs. In that case, it is much cheaper to obtain the use of existing assets through acquisition or JV. A JV will be chosen over acquisition when needed assets make up a small and inseparable part of the total assets held by target firm. It is all because full acquisition of target firm will entail significant management costs because the acquiring firm will end up with a collection of unwanted businesses (Hennart 1988: 371).

In conclusion, JVs are formed to bypass the inefficiencies of intermediate markets with respect to providing raw materials and components, tacit knowledge, loan

capital, and distribution systems, and when there are high fixed and low marginal costs with greenfield investment, and when assets sought are inseparable part of total assets held by target firm. One good empirical example is Oxley (1999: 285) that bases his analysis on TCT and suggests that, in choosing among different types of alliances (equity vs. non-equity JVs) and in the absence of "significant contracting hazards, the "default" low-cost governance mechanism is a simple contract". He tested these predictions on a sample of 727 ISAs by US based firms. His results are consistent with TCT logic, as he found that the US firms opt for equity IJVs rather than relying on contractual arrangements when intellectual property rights are weak in host countries, specification of property rights is difficult, and monitoring is difficult. In the same vein, Globerman and Nielsen (2007) tested the TCT's prediction of opportunism on a sample of 119 ISAs by Denmark based firms. Their results are consistent with TCT logic, as they found that Danish firms opt for equity IJVs rather than relying on non-equity arrangements when threat of opportunism (that basically results from transaction characteristics) is high. Further findings of empirical studies driven by TCT on the choice of IJV can be found in Brouthers and Hennart (2007). Further to the formation reasons of JVs, TCT has also been extended to explain the management of IJVs based on the structural characteristics of IJV (Hennart 2010: 352).

2.1.4 Transaction cost theory and management of IJVs

The structural approach to managing IJV rests on the idea of curbing opportunism in IJVs. So, to proceed on to explain the structural factors for managing the IJVs, it is important to discuss here the concept of opportunism in IJVs.

Opportunism is one of the central behavioral assumptions of TCT, where it is believed that human beings will behave opportunistically whenever such behavior is feasible and profitable. In Williamson (1985: 47), opportunism is defined as "*self-interest seeking with guile*". In further specifying this type of behavior, he pointed at "*the incomplete or distorted disclosure of information, especially calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse*". However, Williamson's assumption of opportunism does not require that everyone be opportunistic or that opportunism be a constant. In his work, Williamson admits that managers want to act on the basis of trust. However, the difficulty on identifying trustworthy agents is so great that organizations have to structure themselves as if all agents cannot be trusted. Williamson (1985: 64) describes it in following words, "*I do not insist that every individual is continuously or even largely given to opportunism. To the contrary, I merely assume that some individuals are opportunistic some of the time and that differential trustworthiness is*

rarely transparent ex ante. As a consequence, ex ante screening efforts are made and ex post safeguards are created".

This assumption of opportunism behavior has been associated with participation in JVs. Although, the formation of JV helps firms to avoid the costs of opportunism and monitoring (i.e. cheating costs) that are inherent in market transactions. But at the same time, partners in JVs are exposed to different types of opportunistic behavior of each other. Luo (2007b: 41) adds that in JVs, opportunism comprises "an act or behavior performed by a party to seek its own unilateral gains at the substantial expense of another party and/or the JV entity by breaching the contract or agreement, exercising private control, withholding or distorting information, withdrawing commitment, shirking obligation, or grafting joint earnings". Hennart and Zeng (2005: 109) put free-riding, spillovers, and holdup as three examples of opportunistic behavior in JVs. Firstly, free riding occurs when partners contribute less than promised in JVs. The partners' contributions to JV are always difficult to describe precisely ex ante. This leaves the partners' contributions vague in JV and there is possibility for parents to come short on their obligations i.e. free ride. Secondly, a spillover arises when one partner diverts the contribution of the other to benefit its own separate wholly owned operations without payment. JVs typically pool inputs with weak property rights; it becomes possible for JV parents to transfer them to their wholly owned operations without payment so as to compete with each other and\or with JV i.e. spill over. Lastly, hold up occurs when a less dependent partner exploits the dependency of the other JV partner.

From TCT perspective, these concerns of opportunism are the fundamental problem in JVs, which needs to be curtailed. Hennart and Zeng (2005) argue that if these types of private gains are not handled effectively, many JVs that would be of beneficial to both parties will not materialize. According to Luo (2007a: 856), "opportunism impairs collaborative effects and synergy creation, hampers interparty confidence, commitment and reciprocity, impedes IJV evolution and growth by increasing uncertainty, and eventually increases the probability of JV failure, dissolution or termination". Collectively, proponents of TCT (Williamson 1985, Hennart 1988, Hennart & Zeng 2005; Luo 2007a) suggest that opportunism is real, is prevalent, is of concern to IJV partners, and is related negatively to performance of JVs.

Structural factors to the management of IJVs

TCT has also been extended to explain the management of JVs based on the structural characteristics of IJV as the structure chosen for JV goes a long way in

explaining the management of IJVs (Hennart 2008: 352). This extended TCT contends that the JVs should be structured in a way to curb opportunism. But, there are substantial differences between TCT scholars the way they identify and categorize the structural characteristics of IJV used to curb opportunism. The four basic structural tools that reduce opportunism in JVs are: (1) contract, (2) interdependence (also called co-specialized assets investments and\or mutual hostages), (3) ownership structure, and (4) nature of partner resources.

Firstly, contract has been argued to play an important role in alleviating or mitigating the potential problem of opportunism. Luo (2005: 209) argues that "IJV contract, if structured multi-dimensionally including (1) term specificity (i.e. the extent to which contractual terms are clearly specified), (2) contingency adaptability (possible contingencies are accounted for), and (3) contractual obligatoriness (i.e. JV parties are legally bound to the contract) can curtail opportunism and guide venture evolution at the same time". Using a sample of 192 equity-based IJVs in the People's Republic of China, Luo (2007a) found that contract completeness reduces the opportunism. Although, parties to a JV may mitigate opportunism by using more complete contracts, but there are, however, good theoretical reasons why contractual restraints are likely to be ineffective in case of IJVs. As JVs are formed to pool intermediate inputs (some raw material and components, some types of knowledge, loan capital, and distribution services) that because of information and measurement costs lowers the efficiency of contracts (Hennart & Zeng 2005: 111). Further, unpredictable future contingencies make the contract incomplete, and this implies that contractual means to prevent opportunism in IJVs is likely to be ineffective. If the complete contracts can be developed, then the transaction should be conducted in market than forming IJVs. Williamson (1985: 73) also argued that contract completeness decreases when contracts change from classical (e.g. sales) to neoclassical (e.g. licensing) to relational (e.g. JV). It is probably for that reason that contract as a mechanism to curb opportunism in JVs has limited role.

Secondly, interdependence has been argued to be an important structural construct in TCT to understand the IJV relationship, as both IJV partners are naturally dependent on each other by investing transaction specific assets (i.e. assets tailored to IJV) that have little value outside the IJV (Hennart & Zeng 2005). Williamson (1985: 191) differentiated between unilateral dependence and bilateral dependence with his discussion about the simple hostage model and the extended reciprocal hostage exchange. In a unilateral dependence (i.e. simple hostage model), only one party becomes dependent on other by investing transaction specific assets, but in bilateral dependence (i.e. the extended reciprocal hostage exchange) there is interdependence between the both parties, in which both parties invest

transaction specific assets. From TCT logic, by investing transaction specific assets in interdependent relationships, both partners interlock each other in alliance and have no other option for pursuing their goals. Therefore in the TCT based discussion, interdependence is mainly understood as the difficulty of each partner to replace the other due to transaction specific assets. According to Williamson (1985: 191) *"The argument here is that reciprocity (i.e. interdependence) can serve to equalize the exposure of the parties, thereby reducing the incentive of the buyer to defect from the exchange-leaving the supplier to redeploy specialized assets at greatly reduced alternative value. Absent a hostage (or other assurance that the buyer will not defect), the sale by A of specialized product to B may never materialize. The buyer's commitment to the exchange is more assuredly signaled by his willingness to accept reciprocal exposure of specialized assets. Defection hazards are thereby mitigated"*.

In JVs, interdependence is considered to have significant impact on the mitigating of opportunism. Hennart and Zeng (2005) argue that bilateral credible commitments (i.e. co-specialized assets) in IJVs mitigate the concerns of either partner's opportunism. This is consistent with Das and Rahman's (2002) argumentation that interdependence between alliance partners diminishes the potential threat of opportunism from either alliance partner. Parkhe (1998b) also argues that interdependence between alliance partners in the form of specific investments lessens the fears of opportunism. Therefore, interdependence can create a self-enforcing structural mechanism in IJVs that reduces opportunism.

Thirdly, the division of equity between the JV partners is argued to be an important structural variable from TCT. Level of ownership share concerns the extent to which "strategic decision making", "risk" and "JV profits" are substantially shared between the parties of an IJV (Hennart & Zeng 2005; Hsieh, Rodrigues & Child 2010). There has been considerable debate about the relative merits of equal versus unequal ownership shares between the parents in IJVs. It is suggested that in the cases where both partners put an equal investment into a JV, their participation in JV decision making is maximized, risk is equally shared between JV partners, and profit is equally distributed between JV partners. Therefore, in JVs with equal ownership split between partners, both partners become equally vulnerable to potential losses from each other and thus show forbearance from opportunism (Bleeke & Ernst 1991; Luo 2007a; Hsieh, Rodrigues & Child 2010). In contrast, when ownership between JV partners is unequal, there is a strong incentive for the minority party to behave opportunistically because of its low switching costs on one hand (Hennart & Zeng 2005; Luo 2007a), and majority partner takes the decisions in such a way that are not in minority partner's interest on the other hand leading to opportunism from either partner (Bleeke & Ernst

1991; Madhok 1995b). Therefore, proper distribution of ownership between IJV partners can reduce opportunism from either partner in JVs.

Finally, an important view in TCE is that IJVs are designed to allow partners to combine complementary inputs (Hennart 1988; Hennart & Zeng 2005). In such IJVs, which Hennart (1988) refers to as link IJVs, the type of knowledge that each partner contributes to the IJV is different. Indeed, Hennart (1988) argues that IJVs are formed when access to the complementary resources cannot be obtained through market transactions, and acquisition of firms owing them would entail significant management costs because required resources are inseparable part of total assets held by target firm. Hence, from TCE, the combination of complementary resources owned by different firms is considered a primary motivation driving IJV formation, and also has a central influence on IJV partner selection (Geringer 1991; Hitt et al. 2000). This complementary of resources between IJV partners is also considered to have important implications for opportunism.

Proponents of TCT suggest that resource complementary results in mutual necessity of each other resources that reduces risk of opportunism by equilibrating it between IJV partners, and aligns IJV partner's incentives for joint value creation (Hennart & Zeng 2005; Puck, Hodl & Wisgickl 2011). Therefore, resource complementary provides a mutual self-interest and a common interest to forbear from opportunism because of necessity of each other resources. Hence, resource complementary can create a self-enforcing structural mechanism in JVs that reduces opportunism.

2.1.5 Conclusions and criticism on transaction cost theory

TCT explains how and why IJVs are preferred to conduct economic exchange over markets (i.e. spot markets and contracts) and firm (i.e. greenfield and full acquisition). Theory assumes the presence of opportunism between IJV partners, and typically suggests for the importance of structural factors for curbing opportunism (i.e. managing IJV relationships). Therefore, what is being modeled in most of the studies driven by TCT is the presence of opportunism and some set of structural characteristics of IJV to curb opportunism (e.g. Hennart & Zeng 2005). The most important structural factors suggested are: division of equity between IJV partners (e.g. Killing 1982; Geringer & Hebert 1989; Bleeke & Ernst 1991; Ramaswamy, Gomes & Veliyath 1998; Child 2002; Lu & Hebert 2005; Luo 2007a), resource complementary in IJV (e.g. Hennart & Zeng 2005), and interdependence between IJV partners (e.g. Zeng 1998; Das & Rahman 2002; Hennart & Zeng 2005). Out of these three structural factors, ownership has received the most attention with many of the studies focusing on the reduction of opportunism. In-

terestingly, limited empirical attention has been paid to interdependence, which according to Williamson (1985), and Hennart and Zeng (2005) is the most important dimension that reduces opportunism in IJVs. Similar to the interdependence, resource complementary has also received no empirical attention largely because TCT has been used selectively to model the management of IJVs (i.e. reducing opportunism). A detailed summary of TCT is presented in below Table 3.

Table 3.   Summary of transaction cost theory

	Transaction cost theory (TCT)
Origins	Law, economics, and organization
Key authors	Coase (1937); Williamson (1975, 1985, 1991); Hennart (1988, 1993); Hennart and Zeng (2005); Brouthers and Hennart (2007); Luo (2007a); Oxley (1999)
Level of analysis	Organization
Managerial philosophy	Minimizing transaction costs
Basic assumptions about humans	Individuals are bounded rational. Some (not all) are opportunists
What are JVs?	**Williamson logic**: Hybrids containing elements of both market (i.e. contract) and firm (hierarchy) **Hennart logic:** Joint hierarchy
JV formation logic	**Williamson logic**: JVs preferred when both asset specificity and uncertainty are at intermediate levels for recurrent transactions **Hennart logic**: JVs are formed to bypass the inefficiencies of intermediate markets with respect to providing raw materials and components, tacit knowledge, loan capital, and distribution systems, and when there are high fixed and low marginal costs with greenfield investment, and when assets sought are inseparable part of total assets held by target firm
JV management logic	The use of various structural mechanisms (e.g. ownerships, contract, interdependence, nature of resources) to deal with opportunism in JVs
Relations to trust	Theory does not appreciate trust between JV partners

Although, TCT assumes the presence of opportunism between JV partners, and typically suggests for the importance of structural factors for curbing opportunism (i.e. managing JV relationships). However, there is another research stream to the study of JVs, which focuses on the soft relationship between JV partners with the

idea that JV management and JV performance can be better explained by the relationship factor of trust (e.g. Boersma, Buckley & Ghauri 2003; Nielsen 2007; Kwon 2008; Robson, Katsikeas & Bello 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012). Specially, Madhok (1995b) is one of the first authors, which criticized TCT logic of JV management for putting too much emphasize on "hard issues of ownership and control", and ignoring the relational element of trust that better explains the performance of IJVs. He posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). In the following, some points about the importance of trust in JVs are discussed.

Firstly, as argued above that it is difficult to develop complete contracts (because of unpredictable future contingencies and information asymmetry) in JVs, and increased efforts to develop complete contracts can increase transaction costs. However, if trust is present between JV partners, the subjective risk of entering into incomplete contract is reduced. According to Nooteboom (1996: 989), trust reduces transaction costs because it ''economizes on the specification and monitoring of contracts and provides material incentives for co-operation''.

Secondly, another distinctive structural characteristic of a JV is shared ownership (Beamish & Banks 1987; Hennart 1988). Shared ownership implies that two or more companies are deciding the strategic direction and operational issues of the JV. It brings decreased flexibility in decision making for each party for the strategic direction and operational issues of JV. Partners can disagree on every decision, and forcing the decision in JVs by the proportion of their ownership can increase transaction costs. Ultimately, this would be a pyrrhic victory that ultimately will lead to JV dissolution (Madhook 1995; Boersma, Buckley & Ghauri 2003). The role of trust can now be seen in clear focus. Presence of trust will reduce the subjective probability of disagreements between JV partners over strategic decision making and hence will reduce the chances of IJV dissolution. Beamish and Banks (1987: 4) approach the importance of trust with argument that "with a foundation of trust, the partner, and particularly the MNE, would be more willing to exercise the tolerance and perseverance necessary to see the JV through its difficult time. Problems could be effectively dealt with by MNE without damaging the long-run viability and efficiency of JV management". By approaching the importance of trust from slightly different angle, Parkhe (1998a: 222) argues that "there exists a control gap" in managing alliances (JVs), as compared to managing hierarchical organizations. Full control is possible in the latter, but only partial control is possible in the former. Trust helps to fill the control gap".

Thirdly, despite the under-appreciation of trust in TCT, trust is emerging as the new "missing factor" in the management of JVs that explains why some JVs succeed and other fail. In fact, it is widely noticed in current studies on JVs that the trust relationship not only exists between JV partners, but also has positive effects on the performance of JVs (e.g. Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010).

Fourthly, although TCT suggests that the chosen structural characteristics of IJV limit the perceived opportunistic behavior of JV partner (Hennart & Zeng 2005: 113). However, the structural characteristics of JV are also subject to another interpretation. Some studies suggest that chosen structural characteristics of JV can be interpreted as a symbol or sign of commitment that leads to trust (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009). Therefore, it is important to investigate these contradictory claims.

Therefore, recent research on JVs acknowledges that it is trust than the structure characteristics of IJV that carries JV's economic performance. Therefore, TCT, where human behavior is viewed as opportunistic, should also answer why trust exists in some JVs and why its presence carries economic value in those JVs. In the following section, the application of SET to the JV formation and management, and the concept of trust are discussed in detail.

2.2   Social exchange theory of IJVs

SET was developed by Blau (1964) and further progressed by Gulati (1995), Parkhe (1998a, 1998b), Das and Teng (2002) and Globerman and Nielsen (2007). Although, theory has straightforward appeal regarding the formation reasons, characteristics and management of IJVs, however, it has been very limitedly used with regard to explaining the choice of IJV relative to other modes of cooperation (i.e. non-equity alliances). In the following, earlier development of SET, application of SET to the formation of IJVs, and SET approach to the management of IJVs is discussed in detail.

2.2.1   *Earlier development of social exchange theory*

SET is a sociological theory which was initially developed to analyze the people's social behavior in terms of exchange of resources. Theory argues that people get involve in social exchange because of a scarcity of resources, thus needing input from other parties (Levine & White 1961 referred in Das & Teng 2002: 441). Blau defines social exchange as "voluntary actions of individuals that are moti-

vated by the returns they are expected to bring and typically do in fact bring from others" (1964: 91). This means that "an individual who needs resources from other (i.e. self-interest behavior), voluntary supplies rewarding services to another and obligates the other to furnish benefits to the first in turn" (Ibid: 89). These expected benefits from the other are not contracted explicitly (i.e. unspecified obligation) and it is left to the other to decide the return (Ibid: 93). This initial supply of rewarding services to another, although is voluntary and self-interested (i.e. motivated by return), carries the risk of rejection of the offer itself and failure to reciprocate and enter into friendly relationship from other (Ibid: 98). Because of this risk, social exchange requires trusting other to reciprocate. Bachmann (2001: 342) describes the importance of risk in trust as:

"Although trust is such a fundamental mechanism in all social reality, it also involves a problem which would be naive to ignore: Trust is a risky engagement (Luhmann 1979). It may be true that trust absorbs uncertainty and diffuses complexity, but, at the same time, it produces risk, as it is inevitable that a social actor who decides to trust another actor extrapolates on limited available information about the future behavior of this actor (Luhmann 1979: 26). In other words, trust can be disappointed and, then, appears to be misplaced, for in business (as well as in other fields of life), one can be betrayed, and overly romantic assumptions can result in considerable losses".

However, if other actors discharge these obligations, they prove themselves trustworthy and a friendly relation starts (Blau 1964: 98). In order to continue the exchange, both supply more of their own services to provide incentives for the other to increase his supply and avoid becoming indebted to him. Thus, social exchange becomes an ongoing reciprocal process in which "one's actions are contingent on rewarding reactions from others" (Ibid: 6). According to Blau (1964: 94), "this gradual expansion of mutual exchange is accompanied by parallel growth of mutual trust". In other words, self-interested actors need trust to get involve in reciprocal exchange of needed resources, and this trust is further promoted when reciprocal exchange becomes ongoing.

Although, the SET is helpful in analyzing people's social behavior in terms of exchange of resources in an incremental way (i.e. process), but the theory itself is very broad. The breadth of the theory is considered as an umbrella for various concepts such as need of resources, reciprocity, rational actors (self-interested actors), trust, interdependence, power, restricted social exchange, generalized social exchange, long-term relations, and cultural similarity. It is a big challenge for researchers who want to use SET to divide these various concepts in meaningful groups. However, a useful starting point may be to divide these concepts into

three groups: (1) factors leading to the formation of social exchange, (2) characteristics of social exchange, and (3) management of social exchange.

Firstly, SET argues that no actor is self-sufficient, actors will have to interface with each other (i.e. to enter in social exchange) to obtain needed resources (Levine & White 1961 referred in Das & Teng 2002: 441). So, the need of resources is the main motive for actors to engage in social exchange. **Secondly**, the concepts of rationality (i.e. self-interested actors), reciprocity, incomplete contracts (i.e. unspecified obligation), long-term relations, interdependence, restricted social exchange and generalized social exchange, and cultural similarity are the characteristics of social exchange. SET assumes that actors: (1) are self-interested motivated by returns from others, (2) enter into ongoing reciprocal exchange of needed resources, (3) entail incomplete contracts (i.e. unspecified obligation), (4) continue social exchange for long time, (5) become interdependent on each other for needed resources, (6) can constitute social exchange between two actors (i.e. restricted social exchange), and between more than two actors (i.e. generalized social exchange), and (7) belong to same culture.

Finally, the concepts of trust and power are used for the management of social exchange. The concept of power has been widely studied by resource dependence theory (which is grounded in SET) on inter-organizational level. The theory suggests that when A needs resources from B, A develops a dependence on B, and consequently B acquires power over A. It follows that B's having power over A means that B can influence the behavior of A to a certain degree. The relative dependence between A and B determines the relative power between them. More power means an ability to influence the other party and to determine the outcome in social exchange (Emerson 1962, referred in Das & Teng 2002: 441). As regards the difference between trust and power in terms of mode of selection of expectations, Bachmann (2001: 350) argues that: "*While in case of trust, the actor who considers to invest trust in his assumptions selects the possibility that the potential trustee will behave the way he prefers, the powerful actor selects a possibility of behavior which he suggests to the subordinate actor as undesirable behavior that should be avoided*".

Therefore, the very existence of power is considered as a source of interpersonal tension (i.e. because of exploitative use) and conflict becomes a natural outcome when one exercises power over other (Das & Teng 2002, 448). In compare to power and exercise of power which is considered as a source of conflict in SET, the presence of trust is considered essential for the stable social relations (Blau 1964: 99). Within the possible management factors of social exchange, this dissertation will focus on the importance of trust.

2.2.2   *Social exchange theory and formation of IJVs*

Although the origins of SET are at the individual level, the theory has been extended to inter-firm alliances including the IJVs (e.g. Mohr & Spekman 1994; Gulati 1995; Aulakh, Kotabe & Sahay 1996; Luo 2002b; Muthusamy, White & Carr 2007; Lin & Wang 2008). The logic of theory, as described here "that no actor is self-sufficient, actors will have to interface with each other to obtain needed resources", has been extended to inter-firm alliances. According to SET, firms resort to various alliances (including IJVs) to gain needed resources from each other (Das & Teng 2002: 444). Further to reasoning of alliance formation, the characteristics of social exchange (as discussed in above section) have been extended to describe the characteristics of strategic alliances including IJVs. SET assumes that IJV partners: (1) are self-interested (but not opportunist) motivated by returns from others, (2) enter into IJVs for ongoing reciprocal exchange of needed resources, (3) form IJV that entail incomplete contracts, (4) continue IJVs for long time, (5) become interdependent on each other for needed resources, (6) can form IJV between two actors (i.e. restricted IJVs), and between more than two actors (i.e. generalized IJVs), and (7) belong to same culture.

While SET has straightforward appeal regarding the formation and characteristics of IJVs, it has been very limitedly used with regard to explaining the choice of IJV relative to other modes of cooperation (i.e. structural choice). Specially, Gulati (1995) studied the choice between equity JVs and non-equity JVs and found that the likelihood of equity JV formation decreases with the increase in trust between partners indicated by repeated alliances between partners. The theoretical argumentation put forward by Gulati (1995) is that repeated alliances between partners breed trust, and trust replaces the equity JVs (and explicit contracts) as a chosen governance mechanism. By using the same theoretical logic, Hoffmann, Neumann and Speckbacher (2010) studied the choice between full acquisitions and non-equity JVs and found that the likelihood of non-equity JV formation increases with the increase in trust between partners. Similarly, Globerman and Nielsen (2007) analyzed the choice between equity IJVs and non-equity IJVs of Danish firms and found that prior alliance experience between IJV partners is associated with a significant lower likelihood of equity IJV. The findings of these above studies depict that non-equity JVs are by default mode that reflects the presence of trust and it is substitute of equity and control (and explicit contracts).

However, Das and Teng (2002: 451) study based on social exchange theory suggest that the importance of trust and relationship is more in equity JVs as compare to non-equity JVs because of intensifying vulnerabilities resulting from investments of highly specific assets. This suggestion contradicts with theoretical logic

and findings of Gulati (1995) that considers trust and equity/control/contract as substitutes. There are some interesting studies that based their theoretical logic based on Gulati (1995) study, but found different findings. For example, Oxly (1999) studied the choice between equity JVs and non-equity JVs between US and non-US firms and found that trust as depicted by repeated alliances between partners does not have a significant impact on the choice of alliance structure. In the same vein, findings of the Poppo and Zenger's (2002) study contradict to the theoretical logic of Gulati (1995) study that trust is substitute for complex contracts and equity JVs. Their study found that rather than hindering or substituting for relational governance of trust, well specified contracts (and JVs as theoretical logic used) promote trusting exchange and they complement each other in enhancing the exchange performance.

In conclusion, SET has been very limitedly used with regard to explaining the choice of IJV relative to other modes of cooperation (i.e. structural choice). Although, studies (e.g. Gulati 1995; Globerman & Nielsen 2007; Hoffmann, Neumann & Speckbacher 2010) evidence in support of a conclusion that low levels of trust encourage a preference for equity JVs. However, findings of some studies (e.g. Oxly 1999; Poppo & Zenger 2002) are contradictory. Therefore, there is need of more empirical research on the role of trust as an important determinant of choice between equity JVs and non-equity JVs. In the following, the role of trust as an important IJV management factor is discussed in detail.

2.2.3 Social exchange theory and management of IJVs

SET has become a popular theory that not only characterizes the IJV relationships and explains trust as an important determinant of governance structure, but it has also been extended to explain the management of JVs (i.e. trust as an important governance mechanism). The logic of theory, as described here *"self-interested actors need trust to get involve in reciprocal exchange of needed resources, and this trust is further promoted when reciprocal exchange becomes ongoing* (Blau 1964: 94)*"*, has been extended to the management of IJVs. SET puts trust at the center of social exchange (i.e. IJVs here) as it considers trust essential for the stable social relations between exchange actors (i.e. between IJV partners) (Blau 1964: 99). For example, it has been argued that trust can increase cooperation and quality of relationship (Arino, de la Torre & Ring 2001), improves alliance flexibility (Young-Ybarra & Wiersema 1999), lowers transaction costs (Zaheer, McEvily & Perrone 1998; Dyer & Chu 2003), reduces conflicts (Zaheer, McEvily & Perrone 1998), facilitates learning, innovation (Nielsen & Nielsen 2009) and

competitive advantage (Barney & Hansen 1994), and improves IJV performance (Nielsen 2007; Silva, Bradley & Sousa 2012).

According to SET, IJVs are reciprocal exchanges among partner firms that are characterized by incomplete contracts with long term duration and are governed by trust relationships (Das & Teng 2002: 444). Hence, SET considers that the bond of trust between IJV partners is an important management factor of IJVs. However, conceptualizing trust as an important management factor of IJVs introduces the possibility that trust may complement rather than substitute for ownership sharing in IJVs. Madhok (1995a: 69) suggests that "trust through the social exchange process in and of itself does not replace other forms of governance, such as makers or hierarchies, but complements them and can be combined with them to govern economic exchange". The same logic has been put forward by Poppo and Zenger (2002) that trust does not replace contracts and hierarchies but makes a complementary relation with them in explaining exchange performance. Empirical studies that consider trust an important governance mechanism that improves IJV performance (e.g. Inkpen & Currall 1997; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012) implicitly verify this logic. However, there are substantial differences between SET scholars the way they conceptualize trust to explain the management of IJVs.

2.2.4 Conclusions and criticism on social exchange theory

The SET explains that IJVs are formed to gain needed resources. In IJV studies, it is common to treat trust either as a determinant of governance structure (e.g. Gulati 1995; Nielsen & Nielsen 2009) or a governance structure in itself (e.g. Inkpen & Currall 1997; Nielsen 2007; Nielsen & Nielsen 2009; Kwon 2008; Silva, Bradley & Sousa 2012). Social exchange theory (Blau 1964) and empirical studies driven by SET (e.g. Inkpen & Currall 1997; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012) suggest that the partners in IJVs should develop trust with each other to manage IJV relationships. However, there are some shortcomings of SET. **Firstly**, the theory is not so explicit in the choice of IJV over other type of alliances, and empirical findings present contradictory results. **Secondly**, the theory simply focuses on the importance of trust between IJV partners to manage IJV relationships and ignores the importance of structural characteristics of IJV. **Further**, a variety of conceptualizations of trust exists in IJV literature. Table 4 presents the summary of SET.

Table 4.   Summary of social exchange theory

	Social exchange theory (SET)
Origins	Sociology
Key authors	Blau (1964); Gulati (1995); Parkhe (1998a, 1988b); Das and Teng (2002); Globerman and Nielsen (2007)
Level of analysis	Individual, group, organization
Managerial philosophy	Building social exchange
Basic assumptions about humans	Individuals are motivated by return from others (i.e. self-interested), but are fair and reciprocal in their actions
What are JVs?	JVs are reciprocal exchanges among partner firms that are characterized by incomplete contracts with long term duration (Das & Teng 2002: 444)
JV formation logic	Firms resort to various alliances (including JVs) to gain needed resources from each other. However, theory is in support of conclusion that lower levels of trust encourage a preference of equity IJVs (Globerman & Nielsen 2007: 453)
JV management logic	The bond of trust between IJV partners is an important management factor of JVs

2.3   The conceptualization of trust in IJVs

There is a widespread agreement among scholars over the importance of trust in exchange relationships like IJVs (Nielsen 2007; Kwon 2008; Robson, Katsikeas & Bello 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012). However, no widely accepted conceptualization of trust has been proposed so far (Li 2007). Despite the existence of vast number of studies on the concept, trust has been called as: "slippery" (Hosmer 1995: 393) and "poorly understood" (Child 2001: 274) phenomenon "with many meanings" (Williamson 1993b: 453) and "with lack of a common definition" (Noorderhaven 1996: 109). More recently, Li (2007: 422) reviewed the definitions of trust by many authors and argued that "despite its increasing importance, trust has no universally definition, and there is no consensus regarding its essential nature and features. At best, researchers only agree to disagree". Given the fact that trust is a complex concept, a variety of conceptualizations of trust exists. Table 5 presents the conceptualization of trust in previous studies on IJVs (this list is by no means exhaustive). The discussion

does not aim at reaching consensus on a single conceptualization of trust, but helps to frame an understanding of the conceptualization of trust suitable for present dissertation.

The table depicts that a common thread that runs through most of these definitions is that trust entails two fundamental aspects. **First**, trust is conceptualized as "reliance\willingness to rely\willingness to be vulnerable" to another JV party (e.g. Mayer, Davis & Schoorman 1995; Inkpen & Currall 1997; Inkpen & Currall 1998; Ramaseshan & Loo 1998; Sako & Helper 1998; Rousseau et al. 1998; Gulati & Sytch 1998; Zaheer, McEvily & Perrone 1998; Child 2001; Fryxell, Dooley & Vryza 2002; Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Muthusamy, White & Carr 2007; Luo 2002b, 2008; Lin & Wang 2008; Robson, Katsikeas & Bello 2008). This component of trust, i.e. "reliance\willingness to rely\willingness to be vulnerable" is used as to express the trusting behavior\intentions of trusting party in IJVs. It implies that under a condition of risk, the trustor willingly accepts to "rely\being vulnerable" to the potential losses caused by counterpart IJV party and these potential losses exceed eventual gains (Parkhe 1998a: 222). Researchers like Mayer, Davis and Schoorman (1995) and Inkpen and Currall (1998) suggest that the risk of negative outcomes must be present for trust to operate, and the trustor must be willing to be vulnerable. The greater the risk, the higher the confidence threshold required to engage in trusting action. Further, Robson, Katsikeas and Bello (2008: 648) explicitly state that "in the absence of vulnerability perceptions and associated uncertainty, a venturing firm's trust is unnecessary because outcomes are inconsequential for the trustor".

Second, trust is conceptualized as "belief\confidence\expectations" about an exchange partner attributes (e.g. Mayer, Davis & Schoorman 1995; Ramaseshan & Loo 1998; Sako & Helper 1998; Gulati & Sytch 1998; Zaheer, McEvily & Perrone 1998; Rousseau et al. 1998; Jennings et al. 2000; Child 2001; Lane, Salk & Lyles 2001; Boersma, Buckley & Ghauri 2003; Dyer & Chu 2003; Krishnan, Martin & Noorderhaven 2006; Lin & Wang 2008; Luo 2002b, 2008; Robson, Katsikeas & Bello 2008; Deitz et al. 2010; Silva, Bradley & Sousa 2012). This aspect of trust is linked with "reliance\willingness to rely\willingness to be vulnerable" to another JV party. The logic behind this linkage is that the trustor willingly accepts to "rely\being vulnerable" to the potential losses caused by counterpart IJV party, but "beliefs\has confidence\expects" about the counterpart's attributes of trustworthiness. These positive attributes of trustee are called different dimensions of trust. The most important dimensions are: (1) integrity\reliability\contractual, (2) competence, (3) goodwill\benevolence\affective \resilient\relational\strong-form-trust, and (4) calculativeness. Table 6 depicts the dimensions of trust in prior studies.

Table 5.   Conceptualization of trust in previous studies

Studies	Definitions of trust
Mayer, Davis and Schoorman (1995: 712)	Willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party
Inkpen and Currall (1997: 312)	An individual's behavioral reliance on another person under a condition of risk
Inkpen and Currall (1998: 3)	Reliance on another JV party (i.e. person, group, or firm) under a condition of risk
Sako and Helper (1998: 388)	Expectation held by an agent that its trading partner will behave in a mutually acceptable manner, including an expectation that neither party will exploit the other's vulnerability
Gulati and Sytch (1998: 167)	Expectation that another organization can be relied on to fulfill its obligations, to behave in a predictable manner, and to act and negotiate fairly even when the possibility of opportunism is present
Ramaseshan and Loo (1998: 447)	Willingness to rely on an exchange partner in whom one has confidence
Rousseau, Sitkin, Burt and Camerer (1998: 395)	A psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another
Zaheer, McEvily and Perrone (1998: 143)	Expectation that an actor can be relied on to fulfill obligations, will behave in a predictable manner, and will act and negotiate fairly when the opportunity for opportunism is present
Jennings et al. (2000: 26)	Mutual confidence that no party to an exchange will behave opportunistically and exploit another's vulnerabilities
Lane, Salk and Lyles (2001: 1140)	Confidence that the other firm will refrain from exploiting your vulnerabilities
Child (2001: 275)	Willingness of one person or group to relate to another in the belief that the other's actions will be beneficial rather than detrimental, even though this cannot be guaranteed
Luo (2002b: 671)	Psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another
Fryxell, Dooley and Vryza (2002: 871)	Willingness to make vulnerable to the actions of others under conditions of risk, based on the characteristics/qualities of specific others, groups, or systems

Studies	Definitions of trust
Boersma, Buckley and Ghauri (2003: 1032)	Expectation that a party can be relied on to keep to agreements (promissory), will perform its role competently (competence) and that the party will behave honorably even where no explicit promises or performance guarantees have been made (goodwill)
Gill and Butler (2003: 545)	Trust is placed in organizations or individuals who can be relied upon to keep verbal or written promises, not to take advantage of the other party and/or be competent, respectively.
Dyer and Chu (2003: 58)	One party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities
Mohr and Puck (2005: 168)	One IJV partner trusts the other if the latter is perceived to: (a) stick to agreements (integrity); (b) be interested in achieving both partners' objectives (benevolence); (c) and have the competences resources that are needed to do so (competence)
Krishnan, Martin and Noorderhaven (2006: 895)	Expectation held by one firm that another will not exploit its vulnerabilities when faced with the opportunity to do so
Nielsen and Nielsen (2009: 1039)	Confidence that another party, not under your control, will refrain from exploiting your vulnerabilities
Muthusamy, White and Carr (2007: 56)	Reliance on another party under conditions of risk
Luo (2008: 32)	Intention to accept vulnerability based on positive expectations of the intentions or behavior of another
Robson, Katsikeas and Bello (2008: 648)	Willingness of venturing firm's management to accept vulnerability based on positive expectations about counterpart's intentions or behavior
Lin and Wang (2008: 343)	Willingness to rely on a partner in whom one has confidence
Deitz et al. (2010: 4)	A generalized expectation regarding an exchange partner's reliability and integrity
Silva, Bradley and Sousa (2012: 294)	Belief, confidence or expectation about an exchange partner's trustworthiness that results from the partner's expertise, reliability, or intentionality

Table 6.   Dimensions of trust in prior studies

Studies	Different dimensions used
Barney and Hansen (1994)	Weak form trust, semi-strong form trust, strong form trust
Ganesan (1994); Johnson et al. (1996)	Credibility, benevolence
Morgan and Hunt (1994); Ramaseshan and Loo (1998); Deitz et al. (2010); Silva, Bradley and Sousa (2012)	Reliability, integrity
McAllister (1995)	Cognition based, affect based
Leewicki and Bunker (1996)	Calculus-based, knowledge-base, affective base
Ring (1996)	Fragile trust, resilient trust
Nooteboom, Berger and Noorderhaven (1997)	Habitualization, Institutionalization
Sako (1998); Sako and Helper (1998)	Contractual, competence, goodwill
Rousseau, Sitkin, Burt and Camerer (1998)	Calculative, institutional, relational
Gulati and Sytch (1998); Zaheer, McEvily and Perone (1998)	Reliability, predictability, goodwill
Child (2001)	Calculative, knowledge, goodwill
Fryxell, Dooley and Vryza (2002)	Goodwill trust
Mollering (2003)	Cognitive, affective, behavioral
Boersma, Buckley and Ghauri (2003); Gill and Butler (2003); Mohr and Puck (2005); Muthusamy, White and Carr (2007)	Integrity (promissory trust), goodwill trust, competence trust
Dyer and Chu (2003); Krishnan, Martin and Noorderhaven (2006)	Reliability, Fairness, Goodwill
Robson, Katsikeas and Bello (2008)	Calculative, goodwill

First, the concept of integrity is used in many studies on IJV trust to explain the trustworthy behavior of trustee (e.g. Morgan & Hunt 1994; Ramaseshan & Loo 1998; Gulati & Sytch 1998; Zaheer, McEvily & Perone 1998; Sako 1998; Sako & Helper 1998; Boersma, Buckley & Ghauri 2003; Dyer & Chu 2003; Gill & Butler

2003; Mohr & Puck 2005; Krishnan, Martin & Noorderhaven 2006; Muthusamy, White & Carr 2007; Deitz et al. 2010; Silva, Bradley & Sousa 2012). Underlying idea here is that trustee possesses the quality of adhering to a set of principles that makes the trustor to rely upon (Mayer et al. 1995: 719). More specifically, integrity is conceptualized as that trusting IJV partner expects\believes\has confidence that the other IJV partner will keep to IJV agreements (Boersma, Buckley & Ghauri 2003; Mohr & Puck 2005).

Second, the concept of competence is used in few studies on IJV trust to explain the trustworthy behavior of trustee (e.g. Sako 1998; Sako & Helper 1998; Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Mohr & Puck 2005; Muthusamy, White & Carr 2007). Proponents of this dimension suggest that trust in social exchange situations not only means that the other party is expected to support or at least not obstruct goal achievement, it also includes the belief that the partner is actually capable of doing so. Underlying idea here is that trustee possesses certain competences and resources that increase the likelihood of achieving the goals for the IJV (Boersma, Buckley & Ghauri 2003; Mohr & Puck 2005).

Third, the concept of goodwill is used in many studies on IJV trust to explain the trustworthy behavior of trustee (e.g. Barney & Hansen 1994; Ganesan 1994; McAllister 1995; Johnson et al. 1996; Leewicki & Bunker 1996; Ring 1996; Sako 1998; Sako & Helper 1998; Rousseau et al. 1998; Gulati & Sytch 1998; Zaheer, McEvily & Perone 1998; Child 2001; Fryxell, Dooley & Vryza 2002; Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Dyer & Chu 2003; Mohr & Puck 2005; Krishnan, Martin & Noorderhaven 2006; Muthusamy, White & Carr 2007; Nielsen 2007; Robson, Katsikeas & Bello 2008). Here, the trusting IJV partner expects\believes\have confidence that the other IJV partner will not act opportunistically, and will behave in a fashion beneficial to both partners in IJV relationships over and above what was explicitly or implicitly promised. This is expressly explained by Boersma, Buckley and Ghauri (2003), and Krishnan, Martin and Noorderhaven (2006). Boersma, Buckley and Ghauri (2003: 1032) state that "the key to understanding goodwill-based trust is that there are no explicit promises which are expected to be fulfilled, as in the case of integrity trust, nor fixed professional standards to be reached, as in the case of competence trust. This (i.e. goodwill trust), then, is a less self-interested, non-egotistic form of trust". Further, Krishnan, Martin and Noorderhaven (2006: 895) maintain that in goodwill trust, "partners commit themselves and make contributions to their relationship that go beyond what was explicitly guaranteed".

Fourthly, the concept of calculativeness is used in some studies on IJV trust (e.g. Leewicki & Bunker 1996; Rousseau et al. 1998; Child 2001; Robson, Katsikeas & Bello 2008). McEvily and Zaheer (2006) consider this dimension of trust as most controversial. It presents a highly rational view of trust that is based on consideration of the costs and benefits associated with making oneself vulnerable to a counterpart (Nielsen 2011). McEvily and Zaheer (2006: 289) argue that "nevertheless, those who advocate considerations of calculativeness as trust maintain that there are conditions under which the evidence of failure to perform can be readily determined, but that there may still be limited or short-term exposure to vulnerability". Figure 9 depicts the definitions of the different dimensions of trust.

What a trustor expects\believes\have confidence in trustee?

To keep to the initial agreements (e.g. to keep to IJV contract)

To perform its role competently

Not to behave opportunistically, and act for mutual benefits even where no explicit promises or performance guarantees have been made

Integrity trust   **Competence trust**   **Goodwill trust**
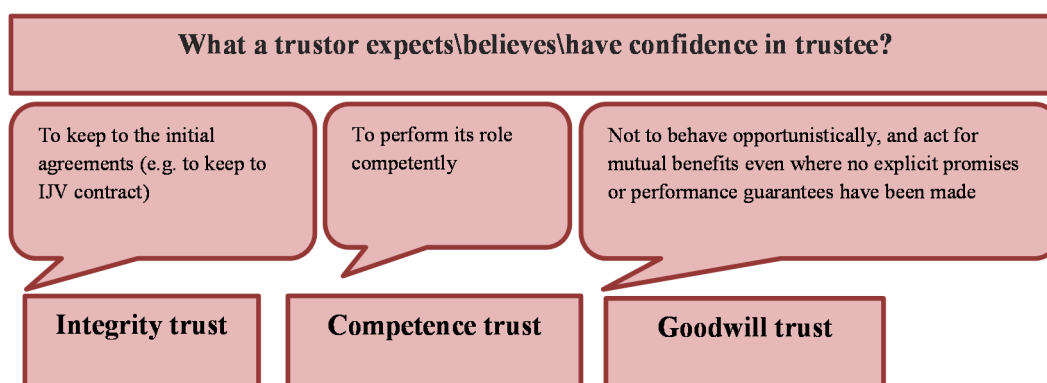
Figure 9.   Dimensions of trust in IJVs

The above analysis depicts that there is no consensus to the dimensions of trust. In a critical review of empirical research on trust, Seppanen et al. (2007) found twenty-one different dimensions of trust. The table 6 validates this abundance. However, the variety of approaches to trust will help us to find a suitable definition of trust that serves the purpose of current dissertation. It is not our intention to evaluate which of these categories is the best. Rather, the available definitions and dimensions of trust can help us to determine the concept that can serve the current research interest. Preferences will be given to some authors while conceptualizing trust for present dissertation in order to pursue the objectives of the dissertation.

2.4   Conceptualizing trust for present dissertation

While the above discussion makes it clear that there is a lack of unity among the IJV scholars in conceptualizing trust. In order to progress in studying the importance of trust in IJVs, and despite the bewilderment that the massive literature has provoked, it is essential at this point to spell out the parameters that frame our understanding of the conceptualization of trust for present study.

Firstly, the phenomenon of trust is mostly addressed as "reliance\willingness to rely\willingness to be vulnerable" to another JV party (e.g. Inkpen & Currall 1997; Inkpen & Currall 1998; Ramaseshan & Loo 1998; Fryxell, Dooley & Vryza 2002; Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Muthusamy, White & Carr 2007; Lin & Wang 2008; Luo 2002b, 2008; Robson, Katsikeas & Bello 2008). We believe that, when trusting, an IJV partner is willing\accepting to be vulnerable to the actions of other IJV partner, whose behavior cannot be controlled, based on the expectations that the IJV partner will not exploit these vulnerabilities.

Second, an important aspect of trust is "belief\confidence\expectations" about an exchange partner attributes (e.g. Ramaseshan & Loo 1998; Jennings et al. 2000; Lane, Salk & Lyles 2001; Boersma, Buckley & Ghauri 2003; Krishnan, Martin & Noorderhaven 2006; Lin & Wang 2008; Luo 2002b, 2008; Robson, Katsikeas & Bello 2008; Deitz et al. 2010; Silva, Bradley & Sousa 2012). As regards the trustee attributes (i.e. dimensions), Krishnan, Martin and Noorderhaven (2006) and Dyer and Chu (2003) propose an interesting conceptualization of the other IJV party's attributes. Thus the other party is believed\expected:

(1) to demonstrate reliability by carrying out their promises (e.g. Morgan & Hunt 1994; Ramaseshan & Loo 1998; Zaheer, McEvily & Perone 1998; Dyer & Chu 2003; Krishnan, Martin & Noorderhaven 2006; Deitz et al. 2010; Silva, Bradley & Sousa 2012) ===> RELIABILITY (it also includes the elements of integrity proposed by Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Mohr & Puck 2005; Muthusamy, White & Carr 2007)

(2) to act fairly when dealing with each other ===> FAIRNESS (has to do with refraining from opportunism (e.g. Dyer & Chu 2003; Krishnan, Martin & Noorderhaven 2006)

(3) to exhibit goodwill over and above what was explicitly or implicitly promised ===> GOODWILL (e.g. Zaheer, McEvily & Perone 1998; Sako 1998; Dyer & Chu 2003; Boersma, Buckley & Ghauri 2003; Gill & Butler 2003; Krishnan, Martin & Noorderhaven 2006; Muthusamy, White & Carr 2007; Nielsen 2007; Robson, Katsikeas & Bello 2008).

Based on the preceding discussion, we may outline our definition of trust as:

Trust is the willingness to accept vulnerability to another party (i.e. to rely) in an IJV relationship based on the positive expectations\believes of counterpart's reliability, fairness, and goodwill.

On the basis of this definition, we present our conceptualization of trust in the next figure (see Figure 10), where we have trusting intentions on the left hand side, bases of trust on the middle, and dimensions of trust on the right hand side.

Trust

Trusting intentions	Bases of trust	Dimension of trust
Willingness to accept vulnerability\reliance	Belief\expectations in IJV partner's trustworthiness	Reliability, fairness, Goodwill
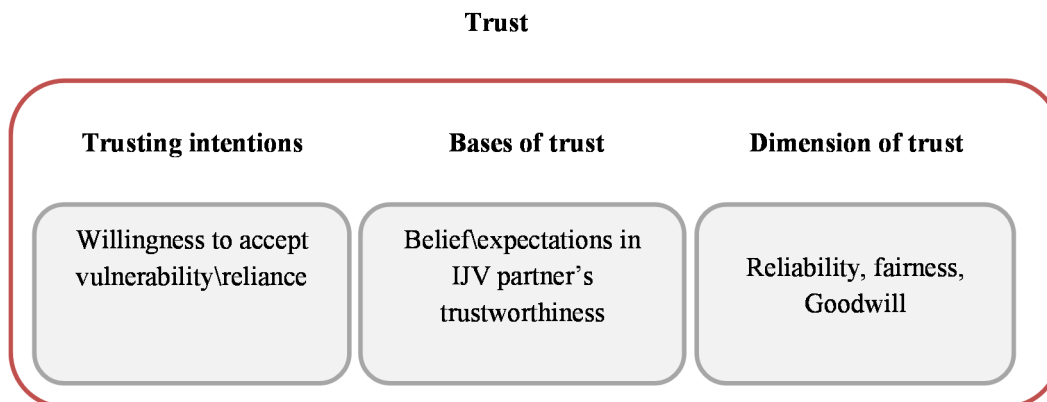
Figure 10.   Trust conceptualization

2.5   Importance of trust in IJVs

The role of trust in inter-organizational and IJV setting has been highlighted by several authors (e.g. Beamish & Banks 1987; Madhok 1995a, 1995b; Zaheer, McEvily & Perrone 1998; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012). The most influential work can be divided into two different groups:

  – Articles that claim the importance of trust based on transaction cost theory and treat trust as a governance mechanism
  – Articles that refer to trust as one of the most important factor in inter-organizational and IJV success

2.5.1   *Importance of trust based on transaction cost theory*

There is a general consensus among academics about one characteristic of trust – it reduces the motivation for opportunistic behavior and therefore reduces transaction costs, as we may see from the example of Table 7. These studies extensively view trust as a key factor for the management of inter-organizational and IJVs that lowers the motivation for opportunistic behavior and therefore reduces transaction costs. For example, it is suggested that where IJVs are established in a spirit of mutual trust and commitment to its long-term commercial success, opportunistic behavior is unlikely to emerge (Beamish & Banks 1987: 4), are therefore resulting transaction costs will be reduced (Boersma, Buckley & Ghauri 2003: 1033).

Table 7.   Trust highlighted through transaction cost theory – some important references

References	Statements
Beamish and Banks (1987: 4)	In situations where joint venture is established in spirit of mutual trust and commitment to its long-term commercial success, opportunistic behavior is unlikely to emerge
Buckley and Casson (1988: 32)	The firm essence of voluntary inter-firm cooperation lies in coordination effected through mutual forbearance, which in turn becomes possible where there is reciprocal behavior and mutual trust
Barney and Hansen (1994: 186)	The level of vulnerability in some economic exchanges may be greater than the ability of any standard governance devices to protect against the threat of opportunism. The only way to pursue these exchanges is thought strong form trustworthiness
Gulati (1995: 93)	Trust counteracts fear of opportunistic behavior and as a result, is likely to limit the transaction costs associated with an exchange. This process in turn should affect the governance structure of the alliance. In other words, trust can substitute for hierarchical contracts in many exchanges
Madhok (1995a: 59)	Where scope for conflict is high, a greater input of trust is required which, if created, reduces the probability of opportunism and results in enhancing the value of the relationship
Madhok (1995b: 120)	Trust is especially important in situations of uncertainty since, in its presence, less stringent contracting can occur in the expectation that social dimensions of the relationship will occasion mutually desirable behavior
Nooteboom (1996: 989)	Trust reduces transaction costs because it economizes on the specification and monitoring costs of the contracts, and provides material incentives for co-operation
Aulakh, Kotabe and Sahay (1996: 1009)	If trust is embedded in the partnership, opportunistic behavior is unlikely to occur because partner firms will pass short term individual gains in favor of the long-term interests of the partnership
Johnson et al. (1996: 1000)	A relationship without trust makes partners tentative in their involvement and reluctant to reveal their true motives or share knowledge. Without trust, partners hold back information or take unfair advantage if given the opportunity
Inkpen and Currall (1997: 309)	With a foundation of trust, JV partners will be more willing to exercise the tolerance and mutual forbearance that allow the JV to overcome problems that could lead to opportunistic behavior
Parkhe 1998a: 220	Trust reduces complex and uncertain realities far more quickly and economically than prediction, authority, or bargaining, and thus improves performance
Zaheer, McEvily and Perrone (1998: 144)	Trust reduces the inclination to guard against opportunistic behavior (i.e. deliberate mis-presentation on the part of the exchange partner)
Nielsen (2001: 3)	If as noted by Williamson (1985: 19), "transaction costs are the economic equivalent of friction in physical systems", then we may conceptualize trust as the behavioral lubricant that can improve a system's (an alliance's) operating efficiency
Boersma, Buckley and Ghauri (2003: 1033)	Trust is a transaction-cost-reducing mechanism that lowers the subjective risk of entering into an agreement. Both ex ante and ex post elements are reduced by trust
Dyer and Chu (2003: 60)	Under conditions of high trust, trading partners will spend less time and resources on monitoring to see if the other party is shirking or fulfilling the "spirit of the agreement"
Kauser and Shaw (2004: 41)	If managers are able to help develop mutual trust between partners, this should reduce the possibility of both partners attempting to take advantage of each other and the possibility of opportunism
Muthusamy, White and Carr (2007: 57)	As fear of opportunism fades because of mutual trust, the coordination and monitoring cost may be reduced
Nielsen and Nielsen (2009: 1039)	Trust is a particularly important aspect of relational quality in alliances because it facilitates social interaction, increases transparency, and reduces transaction costs and uncertainty

2.5.2   Importance of trust for performance

Several scholars have suggested (e.g. Harrigan 1986; Madhok 1995b; Zaheer, McEvily & Perrone 1998; Cullen, Johnson & Sakano 2000) that the reason for this widespread interest in trust lies in the assumptions that trust between partners is an important cause of performance in international cooperative alliances and IJVs. In fact, these assumed positive roles of trust have been empirically validated by scholars in the context of both international cooperative alliances (e.g. Mohr & Spekman 1994; Sako 1998; Zaheer, McEvily & Perrone 1998; Ybarra & Turk 2009; Poppo, Zhou & Ryu 2008), and IJVs (e.g. Nielsen 2007; Robson, Katsikeas & Bello 2008; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010; Silva, Bradley & Sousa 2012). For detail review please see references in table 8.

Cullen, Johnson and Sakano (2000: 226) suggested that trust (and commitment) is central for IJVs for at least, three reasons. First, no contract or other agreement can account for every issue or every contingency that might arise. Therefore, much of what happens between partners in IJVs develops informally in IJV relationship. Ultimately, in evolving or long-term IJVs in particular, managers must fall back on trust (and commitment), the social fabric of the relationship, to fill the gaps in the formal agreement and to keep the relationship running smoothly. Second, companies often differ in strategic goals and objectives, previous experiences with alliances, cultures and management philosophies, policies and procedures, and national cultures. These differences cause misunderstandings and conflicts. Without a sense of mutual trust (and commitment), these differences remain unresolved and therefore result in less than optimal performance and eventual dissolution. Third, when partners do not trust each other, they hold back information or take unfair advantage of each other if given the opportunity. If this happens, the alliance seldom produces all the mutual benefits possible from cooperation. Nielsen and Nielsen (2009) support this view that trust not only directly facilitates learning but also strengthen the potential benefit of knowledge tacitness for innovative outcomes. In the same vein, Madhok (1995b: 126) suggests that trust affects IJV performance by increasing the quality of inter-partner relationships, because trust fosters inter-partner cooperation and coordination, broadens the band of tolerance for temporary periods of inequity, reduces conflicts and perceptions of relational risk, and heightens the flexibility within the IJV relationship.

Table 8. Trust as performance driver – important references

References	Statements
Harrigan (1986: 148)	Managers can be as crafty as they please in writing clauses to protect their firm's technology rights, but JV's success depends on trust
Sherman (1992: 78)	In strategic alliance, the biggest stumbling block to the success of alliances is lack of trust
Barney and Hansen (1994: 188)	Trust in economic exchange can be a source of competitive advantage
Morgan and Hunt (1994: 22)	When both trust and commitment are present, they produce outcomes that promote efficiency, productivity, and effectiveness
Madhok (1995b: 121, 126)	(1). The social aspects (i.e. trust) facilitate the attainment of the objectives of the collaboration through more sustained and higher quality inputs and lower conflict and coordination costs (121) (2). Trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized (126)
Aulakh, Kotabe and Sahay (1996: 1007)	Trust has the potential of enhancing our understanding of the dynamics and performance of inter-organizational relationships
Dyer (1997: 552)	Efficient governance mechanisms (i.e. trust) can simultaneously lower transaction costs and increase relation-specific investments, thereby creating competitive advantage
Sako (1998: 5)	The formal governance structures may act as safeguards against opportunistic behavior, they are, in themselves, not sufficient to ensure the sort of performance… Innovation and learning… Which trust induces
Parkhe (1998a: 219, 220)	(1). In successful alliances, trust is often touted, a necessity, an absolute must (219) (2). Trust reduces complex and uncertain realities far more quickly and economically than prediction, authority, or bargaining, and thus improves performance (220)
Cullen, Johnson and Sakano (2000: 224)	No matter how mutually beneficial and logical the venture may seem at its start, without trust and commitment, the alliance will fail entirely or, at the very least, it will fail to reach its strategic potential
Arino, de la Torre and Ring (2001: 122)	(1). Relational quality is not an end in itself, but a means to an end, that is the satisfactory attainment of the alliance's objectives (122) (2). Keeping the reservoir of trust close to full will contribute to the attainment of the alliance's ultimate goals for both parties (124)
Kauser and Shaw (2004: 41)	As a result of developing mutual trust the partnership can direct its attention towards achieving its long-term performance goals
Nielsen and Nielsen (2009; 1052)	Trust not only increases the sharing of knowledge in ISAs but also strengthens the potential benefits of knowledge tacitness for innovation purposes
Lin and Wang (2008: 344)	The link from trust to IJV satisfaction\performance is universal
Young-Ybarra and Wiersema (1999: 439)	Trust is a magic ingredient in alliance success
Bener and Glaister (2010: 207)	Trust-building as a social process should be viewed as a capital investment in a long-term asset that eventually manifests itself through greater returns
Hoffmann, Neumann and Speckbacher (2010: 106)	A high level of inter-organizational trust enables the cooperating firms to enjoy many of the advantages typically found in hierarchical governance (effective learning, coordination and identification) and, at the same time, more fully exploit the value creation potential (relational rents) presented by a collaborative exchange
Chen and Boggs (1998); Jennings et al. (2000); Lane, Salk and Lyles (2001); Luo (2002b); Kauser and Shaw (2004); Krishnan, Martin and Noorderhaven (2006); Brouthers and Bamossy (2006); Ng et al. (2007); Nielsen (2007); Robson, Katsikeas and Bello (2008); Luo (2008); Lin and Wang (2008); Kwon (2008); Bener and Glaister (2010); Silva, Bradley and Sousa (2012)	There is a positive relationship between trust and performance in international joint ventures
Mohr and Spekman (1994); Smith and Barclay (1997); Sako (1998); Zaheer, McEvily and Perrone (1998); Sarkar et al. (2001); Dyer and Chu (2003); Ybarra and Turk (2009); Poppo, Zhou and Ryu (2008)	There is a positive relationship between trust and performance in international cooperative alliances

Although, the previous theoretical research on trust in IJVs (e.g. Beamish & Banks 1995; Madhok 1995b; Inkpen & Currall 1998; Parkhe 1998a, 1998b) provides general support for the idea that trust is important to achieve superior IJV performance. However, empirical work on trust-performance relationship in IJVs presents contradictory results. Some studies find that trust improves IJV performance (e.g. Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010), some others reveal the absence of a significant direct link between trust and IJV performance (e.g. Inkpen & Currall 1997; Muthusamy, White & Carr 2007), some studies reveal the conditions under which trust matters more to IJV performance (e.g. Luo 2002b; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012), and one study points out that under some circumstances, trust may even negatively affect the IJV performance (e.g. Krishnan, Martin & Noorderhaven 2006). Such discordant findings suggest that trust's relationship to performance is not only complex and poorly understood, but also that trust may not improve IJV performance under all circumstances.

2.6   Antecedents of trust

Trust is not a commodity to be bought or sold in the marketplace, but rather must be developed by partner firms (Kramer & Tyler 1996). Therefore, scholars have identified numerous antecedents of trust in the context of international cooperative alliances and IJVs as can be seen in table 9. In general, the antecedents of trust in international cooperative alliances and IJVs can be grouped into two broad categories:

- Social factors
- Structural factors

Researchers arguing in favor of social factors as antecedents of trust in international cooperative alliances (e.g. Morgan & Hunt 1994; Gulati & Sytch 1998; Sako 1998; Poppo, Zhou & Ryu 2008) and in IJVs (e.g. Jennings et al. 2000; Brouthers & Bamossy 2006; Nielsen & Nielsen 2009; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012) argue that trust formation\development is affected by soft factors at the pre-alliance formation stage and post-alliance formation stage. Among such factors are:

– *Shared values* (Morgan & Hunt 1994; Johnson et al. 1996; Gulati & Sytch 1998; Parkhe 1998a, 1998b; Young-Ybarra & Wiersema 1999; Robson, Katsikeas & Bello 2008; Kwon 2008; Ybarra & Turk 2009; Silva, Bradley & Sousa 2012)

– *Communication* (Morgan & Hunt 1994; Aulakh, Kotabe & Sahay 1996; Sako & Helper 1998); Sako 1998; Young-Ybarra & Wiersema 1999; Jennings et al. 2000; Brouthers & Bamossy 2006; Kwon 2008; Ybarra & Turk 2009; Dyer & Chu 2011; Silva, Bradley & Sousa 2012)

– *Opportunistic behavior* (Morgan & Hunt 1994; Inkpen & Currall 1997; Nielsen 2001; Silva, Bradley & Sousa 2012)

– *Prior alliance experience with partner* (Ganesan 1994; Inkpen & Currall 1997; Gulati & Sytch 1998; Sako 1998; Sako & Helper 1998; Inkpen & Currall 1998; Parkhe 1998a, 1998b; Young-Ybarra & Wiersema 1999; Jennings et al. 2000; Nielsen 2001; Poppo, Zhou & Ryu 2008; Dyer & Chu 2011)

– *Expectations of continuity* (Aulakh, Kotabe & Sahay 1996; Sako 1998; Parkhe 1998a, 1998b; Sako & Helper 1998; Nielsen 2001; Poppo, Zhou & Ryu 2008)

– *Cultural sensitivity* (Johnson et al. 1996; Jennings et al. 2000; Brouthers & Bamossy 2006)

– *Collaborative know-how* (Nielsen & Nielsen 2009)

– *Reputation* (Jennings et al. 2000; Ganesan 1994; Parkhe 1998a, 1998b; Nielsen 2001)

– *Knowledge protectiveness* (Nielsen 2001; Nielsen & Nielsen 2009)

– *Distributive fairness* (Robson, Katsikeas & Bello 2008; Ybarra & Turk 2009)

Researchers arguing in the favor of structural factors suggest that trust formation\development has also origins in chosen structural characteristics of governance form (e.g. Ganesan 1994; Johnson et al. 1996; Parkhe 1998a, 1998b; Young-Ybarra & Wiersema 1999; Sarkar et al. 2001; Nielsen 2001; Boersma, Buckley & Ghauri 2003; Kwon 2008; Ybarra & Turk 2009; Dyer & Chu 2011). Among such factors are:

– *Contract* (Parkhe 1998a, 1998b; Boersma, Buckley & Ghauri 2003)

– *Asset specificity* (Ganesan 1994; Sako & Helper 1998; Dyer & Chu 2011)

– *Balanced asset specificity\interdependence* (Parkhe 1998a, 1998b; Young-Ybarra & Wiersema 1999; Nielsen 2001; Ybarra & Turk 2009)

– *Resource complementary* (Johnson et al. 1996; Sarkar et al. 2001; Kwon 2008)

It is important to note that a substantial number of studies refer to the social antecedents of trust in cooperative alliances as compare to IJVs. In the context of IJVs, there are limited studies on antecedents of trust and they have identified different antecedents of trust.   For example, Nielsen (2001), Parkhe (1998a, 1998b), and Boersma, Buckley and Ghauri (2003) suggest that reputation is an important antecedent of trust. However, this antecedent has been not analyzed in other studies (e.g., Inkpen & Currall 1997; Kwon 2008). Further, most of studies on antecedents of trust in IJVs are either conceptual (e.g. Parkhe 1998a, 1998b; Inkpen & Currall 1998; Nielsen 2001) or case based studies (e.g., Jennings et al. 2000; Boersma, Buckley & Ghauri 2003; Brouthers & Bamossy 2006) that prompt the need of more large scale quantitative studies.

Further, those studies that have analyzed the structural antecedents of trust are mostly in the context of cooperative alliances (e.g. Young-Ybarra & Wiersema 1999; Johnson et al. 1996; Sarkar et al. 2001; Ybarra & Turk 2009). However, in the context of IJVs, only conceptual studies (e.g. Parkhe 1998a, 1998b; Inkpen & Currall 1998; Nielsen 2001) or case based studies (Boersma, Buckley & Ghauri 2003) suggest for structural antecedents of trust. This ignorance of structural antecedents of trust by prior empirical studies prompts the need to study more the social and structural antecedents of trust in the context of IJVs.

Table 9. Antecedents of trust – important references

	Studies	Setting	Antecedents
Cooperative Alliances	Morgan and Hunt (1994)	204 CAs (Supplier-retailer relations) of US firms	Shared values, communication, opportunistic behavior
	Ganesan (1994)	124 retail buyers and 52 vendors	Reputation, transaction specific investment, satisfaction with past outcomes, previous partner experience
	Aulakh, Kotabe and Sahay (1996)	181 ICAs (Manufacturer-distributer/licensee) of US firms	Continuity expectations, flexibility, information exchange, monitoring mechanism
	Johnson et al. (1996)	101 ICAs (Supplier-buyer) of US-Japanese firms	Partner cultural sensitivity, resource complementary, similarity
	Sako (1998)	1415 ICAs (Supplier-buyer) in EU, US, Japan	Expectations of continuity, information sharing, prior relations
	Sako and Helper (1998)	1073 ICAs (Supplier-buyer) in EU, US, Japan	Continuity expectations, reciprocity in information exchange, and customer's assistance, duration of past trading, specific asset possessed
	Young-Ybarra and Wiersema (1999)	132 ICAs (Joint development and research agreements in IT) of US firms	Communication, shared values, balanced asset specificity, hostage, dependence, previous relationship with any partner companies, attachment
	Sarkar et al. (2001)	68 ICAs (contractual relations) of US firms across 18 countries	Cultural compatibility, resource complementarity, operational compatibility
	Gulati and Sytch (2008)	109 ICAs (Supplier – Buyer relations) of US firms	Joint interpersonal history, joint inter-organizational history, inter-organizational similarity
	Poppo, Zhou and Ryu (2008)	137 ICAs (Manufacturer-supplier relations) of US firms	Expectations of continuity, prior history
	Ybarra and Turk (2009)	121 ICAs (Joint development and research agreements in IT) Of US firms	Communication, shared values, and relationship equity, asset specificity, balanced asset specificity, interdependence, duration

	Studies	Setting	Antecedents
Joint Ventures	Dyer and Chu (2011)	453 ICAs (Supplier-automaker) of US, Japan, Korea	Length of relations, prior relations, buyer's assistance, communication, stock ownership
	Inkpen and Currall (1997)	35 Japanese IJVs in North America	Forbearance, IJV risk , length of prior relations, partner's IJV decision making control
	Jennings et al. (2000)	Case study of one United States–Australian IJV	Prior relations, reputation, cultural sensitivity, implicit and explicit rules, information exchange, equitable benefits and risk sharing, commitment
	Boersma, Buckley and Ghauri (2003)	Case study of 4 Netherland-European IJVs	**(1). Previous history stage:** direct personal contact, reputation, prior exchange, **(2) Negotiation stage:** cultural sensitivity, judgment, personal relations, **(3) Commitment stage:** contract, financial investment, and long term orientation, and **(4) Execution stage:** friendship and cooperative behavior
	Brouthers and Bamossy (2006)	Case study of 8 West European IJVs in Romania and Hungary	Cultural sensitivity, communication, co-operative problem solving
	Nielsen and Nielsen (2009)	119 Danish ISAs (IJVs and ICAs) across the world	Collaborative know-how, knowledge protectiveness
	Robson, Katsikeas and Bello (2008)	177 ISAs (IJVs and ICAs) operating in UK	Distributive fairness and similarity promote trust
	Kwon (2008)	94 IJVs operating in Korea	Goal congruence, cultural similarity, flexibility, communication, resource complementary, fairness
	Deitz et al. (2010)	201 IJVs in US	Resource complementary
	Silva, Bradley and Sousa (2012)	232 ISAs (IJVs and ICAs) operating in Portugal	Shared values, communication, opportunism
	Inkpen and Currall (1998)	Conceptual	Prior cooperative relationships, length of interaction in IJVs , individual attachment, organizational fit, assessment of partner competence
	Nielsen (2001)	Conceptual	**(1). Pre-alliance formation factors:** Prior experience with partner, transparency, partner reputation, **(2). Post-alliance formation factors:** Risk of opportunism, protectiveness, interdependence, longevity, cultural distance
	Parkhe (1998a, 1998b)	Theoretical	Prior relations, reputation, long time horizons, cultural sensitivity, interdependence, contract

Notes: International cooperative alliance(ICA), International joint venture(IJV), international strategic alliance(ISA)

2.7   Combining social exchange theory and transaction cost theory to study the antecedents of trust and trust-performance relationship in IJVs

IJV researchers have devoted considerable effort to the study of managing IJV relationships (Madhok 1995a, 1995b; Parkhe 1998a, 1998b; Inkpen & Currall 1998; Boersma, Buckley & Ghauri 2003). Madhok (1995b) is one of the first authors, who borrowed the concept of trust from social exchange theory and transferred it to the IJV settings, and posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). His study sparked an important research focus in IJVs with the idea that IJV management and IJV performance can better be explained by the relationship factor of trust. Following Madhok (1995b), researchers well appreciated the concept of trust in IJVs by identifying the antecedent factors of trust and the impact of trust on IJV performance. Studies on antecedent factors of trust have identified important antecedent factors such as prior relations, and reputation (e.g. Parkhe 1998a, 1998b; Jennings et al. 2000; Boersma, Buckley & Ghauri 2003; Nielsen 2003); cultural sensitivity (e.g. Johnson et al. 1996; Parkhe 1998a, 1998b; Jennings et al. 2000; Boersma, Buckley & Ghauri 2003); communication (e.g. Parkhe 1998a, 1998b; Jennings et al. 2000; Kwon 2008; Silva, Bradley & Sousa 2012); expected longevity of IJV (e.g. Parkhe 1998a, 1998b; Nielsen 2003), and opportunism (e.g. Inkpen & Currall 1997; Silva, Bradley & Sousa 2012).

Further, though Madhok's (1995b) study provides general support for the idea that trust is important to achieve superior IJV performance, empirical work on trust-performance relationship is limited and presents contradictory results. Some studies find that trust improves IJV performance (e.g. Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010), some others reveal the absence of a significant direct link between trust and IJV performance (e.g. Inkpen & Currall 1997; Muthusamy, White & Carr 2007), some studies reveal the conditions under which trust matters more to IJV performance (e.g. Luo 2002b; Robson, Katsikeas & Bello 2008; Silva, Bradley & Sousa 2012), and one study points out that under some circumstances, trust may even negatively affect the IJV performance (e.g. Krishnan, Martin & Noorderhaven 2006). This suggests that trust's relationship to performance is not only complex and poorly understood but also that trust may not improve outcomes under all circumstances. Many studies suggest that further evidence is necessary on the impact of trust on IJV performance (Inkpen & Currall 1997; Ng, Lau & Nyaw 2007).

This approach of SET, although identifies the antecedent factors of trust, and investigates the trust-performance relationship, is widely seen as incomplete for ignoring the structural characteristics of IJV. The research on antecedent factors of trust has merely identified the social antecedent factors of trust and ignored the structural characteristics of IJV that could also be important antecedent factors of trust. Further research investigating the trust-performance relationship has also ignored any role of structural characteristics of IJV which could be potential moderators of trust-performance relationship. Hennart and Zeng (2005) are the first authors which, although studied the structural characteristics of IJV to reduce opportunism, widely criticized the SET approach of 'studying the social antecedent factors of trust and investigating the trust-performance relationship' for ignoring the structural characteristics of IJV.

Regarding the antecedent factors of trust, they argue that *"this willingness to be vulnerable (i.e. trust) will obviously be greater if the partners have the same goals, or if the structure or the contractual stipulations of the joint venture limit the extent to which they can be opportunistic"* Hennart and Zeng (2005: 113). Parkhe (1998a, 1998b) also suggest that in addition to social factors, structural factors of IJV are also important antecedent factors of trust. Regarding the trust-performance relationship, they argue that *"while there is no doubt that process variables are an important determinant of the performance of alliances, process-based explanations of alliance dynamics often under-emphasize structural explanation. Some (but not all) process variables seem also to be repackaged structural variables. The prime example is trust, which has been extensively used as an independent variable to explain alliance performance"* Hennart and Zeng (2005: 113). Madhok (1995: 122) also share the view that trust is not sufficient in and of itself to hold IJV performance for long time until structural bases of IJV are strong. Robson, Skarmeas and Spyropoulou (2006: 603) also suggest that *"empirical attempts combining the behavioral paradigm (e.g. trust from social exchange theory) with other, dissimilar theoretical perspectives (e.g. structural characteristics from transaction costs economics) are to be encouraged in future research as they can expedite the development of richer, more complete explanations of IJV performance"*.

This suggests that research on 'social antecedent factors of trust, and trust-performance relationship driven by SET' is incomplete and need to be integrated with TCT for possible 'social and structural antecedent factors of trust, and the role of structural characteristics of IJV on trust-performance relationship'. This is understandable because different theories are designed to address different types of questions. SET is developed to explain the people's social interaction and resulting trust to manage exchange relationships without focusing on the costs from

an economic perspective. However, transferring the notion of trust to IJV setting requires taking into account the role of chosen structural characteristics of IJVs, which are typically discussed in TCT. The TCT is an economic theory which explains the governance structure of IJV with a focus on cost minimization. Given the fact that SET merely explains the social interaction and resulting trust to manage exchange relationships without focusing on the role of chosen structural characteristics of IJV, it is important that SET should be combined with TCT to include the role of structural characteristics of IJV. As Hennart (1988: 373) points out, "JVs are often the product of multiple factors, and any (single) theory must necessarily abstract from some of them". Therefore, integrating SET and TCT will help to better understand the 'social and structural antecedent factors of trust, and the role of structural characteristics of IJV on trust-performance relationship'.

The most important structural factors suggested from proponents of TCT are: division of equity between IJV partners (e.g. Killing 1982; Geringer & Hebert 1989; Bleeke & Ernst 1991; Ramaswamy, Gomes & Veliyath 1998; Child 2002; Lu & Hebert 2005; Luo 2007a), resource complementary in IJV (e.g. Hennart & Zeng 2005), and interdependence between IJV partners (e.g. Zeng 1998; Das & Rahman 2002; Hennart & Zeng 2005). From TCT point of view, the structural characteristics of IJV limits the perceived opportunistic behavior of partner and engenders trust (Hennart & Zeng 2005: 113). Unlike to this reasoning, there is also another interpretation of structural antecedents of trust. Some studies suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009). Although, the structural characteristics of IJV are subject to different interpretation, it is important to investigate their relationship with trust. However, our understanding of structural antecedents of trust is very limited and remains at theoretical level (e.g. Parkhe 1998a, 1998b; Hennart & Zeng 2005).

Concluding that the framework of 'social antecedents-trust-performance' driven by SET is incomplete because of ignoring the structural characteristics of IJV, researchers (Madhok 1995; Parkhe 1998a, 1998b; Luo 2007a; Hennart & Zeng 2005) propose that SET should be integrated with TCT to investigate the role of IJV structure in 'social antecedents-trust-performance' framework . Therefore, the development of a framework that unifies SET and TCT to study the antecedents of trust, and trust-performance relationship would be an important and timely contribution to the literature on trust in IJVs. In the following chapter, a unified framework is developed to the study the antecedents of trust, and trust-performance relationship in IJVs.

3   STUDY HYPOTHESES AND RESEARCH MODEL

This chapter provides the conceptual model and the associated hypotheses regarding the antecedent factors of trust, and trust-performance relationship in IJVs. Firstly, the hypotheses are developed regarding the impact of social and structural antecedent factors on trust for two pathways: (1) direct path (i.e. social and structural antecedent factors → trust) and (2) indirect path (i.e. social and structural antecedent factors → opportunism → trust). Next, the chapter includes the hypotheses about the trust-performance relationship in IJVs, and the potential moderating influence of resource complementary on trust-performance relationship. Finally, the conceptual model of the study is presented.

3.1   Social antecedents of trust and opportunism in IJVs

SET (Blau 1964) and proponents of SET (e.g. Zucker 1986; Parkhe 1998a, 1998b) suggest that trust is likely to be produced in inter-organizational setting like IJVs through the social processes of backward looking (i.e. prior alliance experience with the partner, reputation), current interactions (communication, cultural sensitivity), and forward looking (i.e. expected length of relationship). In the following, we explore each of these social factors and derive hypotheses.

Prior alliance experience with the partner

Prior research on IJVs suggests that IJVs are not always discrete and independent transactions (Inkpen & Currall 1998; Parkhe 1998a, 1998b). Indeed, on many occasions firms engage in multiple sequential alliances over time whereby a particular IJV may be preceded by a history of alliance cooperation between the IJV partners (e.g. Nielsen 2001; Boersma, Buckley & Ghauri 2003). Social exchange theory posits that this formation of an IJV after having an alliance in past is accompanied by the development of mutual trust between the partners. This suggests that prior alliance experience between IJV partners helps them to deepen their understandings of each other competencies and likely behaviour, and therefore develops trust between them (Parkhe 1998a, 1998b). Therefore, partners with prior alliance experience with each other are likely to trust each other more than other firms with whom they have had no alliances (Gulati 1995: 93).

However, the empirical findings on the impact of prior alliance experience with partner are inconclusive. Dyer and Chu (2011) found that intimate knowledge gained by partners about each other through prior exchanges was an important factor in engendering trust in subsequent exchanges in Korea and the United

States. In Boersma, Buckley and Ghauri (2003) study, it is also found that prior exchange between IJV partners facilitates the development of trust between IJV partners. Inkpen and Currall (1997) and Gulati and Sytch (1998) found that prior alliance experience with partner does not impact trust, a finding contrary to Dyer and Chu (2011), and Boersma, Buckley and Ghauri (2003). Poppo, Zhou and Ryu (2008) also reported similar results that the positive effect of prior history on trust is achieved though expectation of continuity. However, Jennings et al. (2000) found support for Dyer and Chu (2011) and Boersma, Buckley and Ghauri's (2003) findings that prior alliance experience with partner facilitates the development of trust between IJV partners. Nielsen (2001, 2007) suggests that previous alliance experience between the partners facilitates trust and reduces uncertainty regarding partner's behaviour, and therefore justifies them to invest in new IJVs with partner firm.

These previous alliance relations impose constraints on IJV parent's opportunistic behaviour and encourage them to act according to each other's expectations, and to the commonly held values, beliefs and norms of reciprocity (Gulati 1995). Therefore, previous alliance relationship enhances trust between the IJV parents (Inkpen & Currall 1998). It increases the predictability of each other's behaviour, and so constrains the threat of opportunistic behaviour inherent in IJVs. For example, Parkhe (1993) found that perceptions of opportunistic behaviour were reduced for partners with prior relationships. Given the dominant logic that formation of an IJV after having an alliance in past is accompanied by the development of mutual trust (e.g. Inkpen & Currall 1998; Parkhe 1998a, 1998b; Jennings et al. 2000; Nielsen 2001; Boersma, Buckley & Ghauri 2003; Dyer & Chu 2011), we posit that:

> **Hypothesis 1a:** There is a positive relationship between the prior alliance experience with a partner and trust one partner places on the other IJV partner.

> **Hypothesis 1b:** There is a negative relationship between the prior alliance experience with a partner and threat of opportunism one partner perceives in the other IJV partner.

Reputation

Social exchange theory suggests that in lack of prior direct alliance relationship with a partner, trust still can be developed based on partner's reputation for trustworthiness (Nielsen 2001). Reputation represents a cumulative record of a firm's past behavior in alliances with other firms, and therefore its likely future behavior can be ascertained by relying on it. A firm with a reputation of being honest, fair,

and trustworthy gives one the first piece of evidence to take some initial risk (Barney & Hnasen 1994). The stronger the reputation, the greater the tacit assurance of continuing trustworthy behavior in the future, and the high trust is developed between IJV partners (Parkhe 1998a, 1998b). Inkpen and Currall (1997) posit that those parties which are found to forbear in previous relationships may gain a reputation of trustworthiness, which makes them potentially attractive partners for others. This is consistent with Boersma, Buckley and Ghauri's (2003) empirical finding that overall reputation including the reputation of trustworthiness makes the firms attractive for forming IJVs, and therefore develops trust between the IJV partners. Jennings et al. (2000) study also found that parties prefer to form IJV with reputable partners which help them to develop mutual trust. In the same vein, Ganesan (1994) also reported similar result.

A firm's reputation of trustworthiness develops trust between current IJV partners, because partners know more about each other's past behavior and therefore perceived likelihood of opportunism decreases. For example, Bierly and Gallagher (2007) argue that a firm's reputation is a socially constructed concept and reputable firms are viewed as more stable in their behavior and perceived transaction costs will be lower in alliances. This is consistent with Saxton (1997) argument that "positive reputation can lessen fears of "moral hazard" and "adverse selection" by acting as a surrogate for direct experience with a partner". It is therefore advantageous for firms to form IJVs with reputable partners, which lessens their concerns of opportunism and facilitates trust in IJVs. Therefore, we posit that:

Hypothesis 2a: There is a positive relationship between the partner reputation and trust one partner places on the other IJV partner.

Hypothesis 2b: There is a negative relationship between the partner reputation and threat of opportunism one partner perceives in the other IJV partner.

Communication

Communication refers to the information exchanged between partners in an IJV relationship and is defined as "formal as well as informal sharing of meaningful and timely information between partners" (Anderson & Narus 1990: 44). Social exchange theory suggests that communication is an important determinant of trust between IJV partners (Blau 1964; Parkhe 1998a, 1998b) because it aligns the partner's perceptions and expectations, reduces misunderstandings, facilitates close ties, and enables them to cope better with internal processes and external market conditions (Aulakh, Kotabe & Sahay 1996; Silva, Bradley & Sousa 2012).

Therefore, IJV partners having good communication with each other are more likely to have greater level of trust. This importance of communication as an important determinant of trust has been substantially confirmed in prior empirical research. In a study of 94 IJV in Korea, Kwon (2008) found that communication between IJV partners was an important factor in the development of trust. Jennings et al. (2000) also found that communication between the IJV partners facilitates not only the coordination of the IJV activities, but also develops trust between the IJV partners. Further based on 232 foreign IJVs in Portugal, Silva, Bradley and Sousa (2012) also found that communication between IJV partners had a positive effect on trust between IJV partners. Dyer and Chu (2001) found that communication does not impact trust, a finding contrary to the logic of SET. However, substantial studies (e.g. Morgan & Hunt 1994; Aulakh, Kotabe & Sahay 1996; Sako 1998; Sako & Helper 1998; Young-Ybarra & Wiersema 1999; Ybarra & Turk 2009) found support that communication facilitates trust between partners.

In addition, communication is also argued to reduce opportunism in IJVs. For example, Morris and Cadogan (2001: 233) assert that communication between IJV partners enables them to have greater knowledge of each other, lowers information asymmetries, and reduces consequent scope for opportunism and perceived risk. From this discussion, we posit that communication between partners mitigates opportunistic concerns and develops trust between IJV partners. Therefore, we posit that:

Hypothesis 3a: There is a positive relationship between the communication between the IJV partners and trust one partner places on the other IJV partner.

Hypothesis 3b: There is a negative relationship between the communication between the IJV partners and threat of opportunism one partner perceives in the other IJV partner.

Cultural sensitivity

Blau's (1964) notion of "trust required for and promoted by exchange relationships" entails the social or cultural similarity between exchange partners. This perspective suggests that exchanges between culturally similar partners facilitate familiarity with each other's modes of thinking and behaving which creates trust between partners (Zucker 1986). However, IJVs are formed between companies that are usually quite dissimilar in their background characteristics. Two of such characteristics are national and corporate cultures of partner firms (e.g. Pothukuchi et al. 2002). Creating trust in dissimilar cultures, whether organizational or

national, may be harder, since homogeneous expectations and shared assumptions about the alliance may not exist as readily (Nielsen 2001). Clearly, SET justifies the need for minimizing the cultural differences between the parents of IJVs; it however leaves open how this may be achieved.

Parkhe (1998a, 1998b) extends the SET by arguing that the existence of cultural differences, whether organizational or national, does not in itself produce necessarily conflicts. It may be possible for the partners in an alliance to reach some common understanding which can help overcome cultural differences. He suggests for deliberate efforts like investment in intercultural awareness training programs, encouraging informal contact, and improving behavior transparency. The point of these programs is to move from culture shock to culture empathy, so managers understand how their views are colored by their background, how their behavior can impact cross-cultural dealings, and how to recognize cultural influences in others' conduct. Such efforts can pay off nicely in overcoming cultural differences and generating trust between partners. For example, Voss et al. (2006) found that cultural sensitivity helps to neutralize the deleterious effects of conflict and misunderstandings, and facilitate trust between alliance partners. In the same vein, Johnson et al. (1996) found that cultural sensitivity promotes trust in US-Japan alliances. This is consistent with Boersma, Buckley and Ghauri's (2003) findings that cultural sensitivity (i.e. putting oneself in other shoes) helps to reduce behavioral uncertainty and creates trust between IJV partners. Thus, we expect that partner's cultural sensitivity in IJVs can help to create trust and mitigate the concerns of opportunism in IJV. Therefore, we posit that:

Hypothesis 4a: There is a positive relationship between the partner cultural sensitivity and trust one partner places on the other IJV partner.

Hypothesis 4b: There is a negative relationship between the partner cultural sensitivity and threat of opportunism one partner perceives in the other IJV partner.

Expected longevity of IJVs

In the preceding sections, we have discussed the past and current interactions that help to create trust and mitigate opportunism in IJVs. Proponents of SET (e.g. Parkhe 1998a, 1998b; Zucker 1986) also present the concept of "forward looking" in IJVs. The concept of time horizons (i.e. forward looking) has been largely ignored in previous research on IJVs.

Prior research suggests that IJVs are residual sharing contracts, where IJV parties make provisions from the outset for value to be accrued in the future (Hennart & Zeng 2005). Accordingly, IJVs are considered to endure for long period of time, and partners are bound for the stability and success of IJVs (Deitz et al. 2010). The proponents of SET (e.g. Parkhe 1998a, 1998b) suggest that future longer time horizons of interaction in IJVs facilitate trust in IJVs. For example, (Parkhe 1998a) argues that "longer time horizons of alliance, and the expected future gains from the alliance promote cooperative, trustworthy behavior. Through such expectations of cooperation (and the resulting gains from the alliance), the future casts a shadow back upon the present, affecting current behavior patterns". This is consistent with Aulakh, Kotabe and Sahay's (1996) findings that organizational perceptions of inter-firm relationship continuation into future encourage ongoing trust between alliance partners. Heide and Miner (1992) also found that a perception of inter-firm relationship continuation into future creates trust and cooperation between alliance partners. In the same vein, Poppo, Zhou and Ryu (2008) analyzed the U.S alliances and found that expectation of inter-firm relationship continuation into future facilitates trust. Other studies (e.g. Sako 1998; Sako & Helper 1998) have found similar results.

Further, Das and Rahman (2002) and Aulakh, Kotabe and Sahay (1996) posit that the shadow of the future is the consciousness about the duration of the potential relationship between the existing IJV partners, which affects their tendency to either cooperate or to be opportunistic in the present. Therefore, if partners perceive that the time horizons of IJV relationship are long, they will be less inclined towards opportunism in the interest of the long term viability of the IJV relationship. Therefore, the future longer time horizon of IJV facilitates trust and can help to attenuate the concerns of opportunism in IJVs. Hence, we posit that:

Hypothesis 5a: There is a positive relationship between the perceived longevity of the IJV and trust one partner places on the other IJV partner.

Hypothesis 5b: There is a negative relationship between the perceived longevity of the IJV and threat of opportunism one partner perceives in the other IJV partner.

3.2   Structural antecedents of trust and opportunism in IJVs

In addition to social factors of trust, the requirements of structural characteristics of IJV should be satisfied in order to strengthen trust between IJV partners (e.g. Madhok 1995b; Parkhe 1998a, 1998b; Hennart & Zeng 2005). On the basis of the TCT, two types of structural factors are assessed in their relation to opportunism and trust. These include interdependence and ownership share between the IJV partners. In the following, we explore each of these structural factors and derive hypotheses.

Symmetric Interdependence

Interdependence is arguably the most important structural construct in TCT to understand the IJV relationship, as both IJV partners are naturally dependent on each other by investing transaction specific assets (i.e. assets tailored to IJV) that have little value outside the IJV (Hennart & Zeng 2005). Williamson (1985) differentiated between unilateral dependence and bilateral dependence with his discussion about the simple hostage model and the extended reciprocal hostage exchange. In a unilateral dependence (i.e. simple hostage model), only one party becomes dependent on other by investing transaction specific assets, but in bilateral dependence (i.e. the extended reciprocal hostage exchange) there is interdependence between the both parties, in which both parties invest transaction specific assets. From TCT logic, by investing transaction specific assets in an alliance, both partners interlock each other in alliance and have no other option for pursuing their goals. Therefore in the TCA based discussion, interdependence is mainly understood as the difficulty of each partner to replace the other due to transaction specific assets.

In IJVs, interdependence between IJV partners is seen as one of the key structural elements determining the level of trust and opportunism. Hennart and Zeng (2005) argue that bilateral credible commitments (i.e. co-specialized assets) in IJVs facilitate symmetric interdependence between IJV parties and mitigate the concerns of either partner's opportunism. Both, spillover and holdup problems of opportunism are less likely in presence of symmetric interdependence. This is consistent with Das and Rahman's (2002) argumentation that when both partners are symmetrically interdependent on each other by investing transaction specific assets, with both having much to lose, partners are less likely to engage in opportunistic behavior. Thus, symmetric interdependence between alliance partners in the form specific investments lessens fears of opportunism and induces trust

(Parkhe 1998b). Conversely, the existence of asymmetric interdependence between IJV is considered to enhance opportunism and decrease trust between IJV partners (e.g. Parkhe 1998a, 1998b). Empirically, Zeng (1998) conducted the survey of 49 IJVs in United States and found that symmetric interdependence (i.e. co-specialized assets) between IJV partners promotes cooperation between IJV partners (i.e. reducing opportunism) and enhances IJV performance. In the same vein, Young-Ybarra and Wiersema (1999) analyzed 132 information technological alliances of U.S firms and found that balanced asset specificity promotes trust between partners. In a sample of 121 information technology alliances, Ybarra and Turk (2009) found that balanced asset specificity does not impact trust, a finding contrary to Zeng (1998) and Young-Ybarra and Wiersema (1999). However, contrary to Ybarra and Turk (2009), Xie, Suh and Kwon's (2010) study depicts that asymmetric interdependence between alliance partners decrease the level of trust, and increases conflict and opportunism between alliance partners. Further, Woolthuis, Hillebrand, and Nooteboom (2005) also found that presence of symmetric interdependence between ISA partners leads to higher trust and alliance performance, and low conflict. Based on above discussion, we posit that:

Hypothesis 6a: There is a positive relationship between greater level of symmetric interdependence between IJV partners and trust one partner places on the other IJV partner.

Hypothesis 6b: There is a negative relationship between greater level of symmetric interdependence between IJV partners and threat of opportunism one partner perceives in the other IJV partner.

Equivalent ownership equity

In IJVs, another important structural factor is the distribution of equity ownership between the IJV partners. Level of ownership share concerns the extent to which "strategic decision making", "risk" and "IJV profits" are substantially shared between the parties of an IJV (Ramaswamy, Gomes & Veliyath 1998; Hennart & Zeng 2005). There has been considerable debate about the relative merits of dominant versus equal ownership share in IJVs (e.g. Killing 1982; Beamish 1985; Ramaswamy, Gomes & Veliyath 1998; Bener & Glaister 2010). Hsieh, Rodrigues and Child (2010) suggest that in the cases where both partners put an equal investment into an IJV, their commitment to the IJV is maximized, which in turn may bring benefits of higher levels of trust and also provide mutual forbearance from opportunism and bring stability. Ramanathan, Seth and Thomas (1997) also suggest that trust is a function of the structure of the equity arrangement between

IJV partners and equivalent ownership IJVs will exhibit higher level of trust than where ownership is relatively unequal. Empirically, Bleeke and Ernst (1991) found that IJVs with even split ownership had a highest success rate (60 percent) than ventures dominated by one company (31 percent). The reason they put forward is that even split IJVs builds trust by ensuring that each partner has equal stake in mutual success.

In contrast, it is said that in IJVs with uneven split ownership, the minority partner having low potential loss and low switching cost, and with less decision making authority to IJV has greater incentive to be opportunistic (Hennart & Zeng 2005). Contrary to that argumentation, Madhok (1995) and Bleeke and Ernst (1991) argue that dominant partner having greater decision making authority has greater incentive to be opportunistic by putting its own interest ahead of those of IJV and partner firm. Altogether, these researchers believe that uneven split ownership between IJV partners is nettlesome because it leads to conflicts and opportunism that can arise from either partner having majority and minority ownership. However, given the equal sharing of equity by both firms in an IJV, there is likely to be high trust and little incentive for opportunism since partners have equal rights in decision making and profit sharing, and have equal stakes in mutual success (Bleeke & Ernst 1991; Madhok 1995). Thus, even split ownership between IJV partners is considered not only a source of trust, but is also considered to mitigate opportunism. We thus hypothesize:

> **Hypothesis 7a:** There is a positive relationship between the greater level of equivalent ownership share between IJV partners and trust one partner places on the other IJV partner.

> **Hypothesis 7b:** There is a negative relationship between the greater level of equivalent ownership share between IJV partners and threat of opportunism one partner perceives in the other IJV partner.

3.3   Opportunism and trust in IJVs

An important limitation within SET is the negligence of opportunistic behavior between the partners of an IJV. Theory assumes that IJV partners pursue self-interest, but only in an honest way, which rules out the threat of opportunism. The concept of opportunism emanates from TCT and theory assumes that partners will use guile to pursue self-interest whenever such behavior is feasible and profitable (Williamson 1985). Within the context of IJVs, opportunism is manifested in many forms. For example, Luo (2007b: 41) adds that in IJVs, opportunism com-

prises of "an act or behavior performed by a party to seek its own unilateral gains at the substantial expense of another party and/or the IJV entity by breaching the contract or agreement, exercising private control, withholding or distorting information, withdrawing commitment, shirking obligation, or grafting joint earnings". In the same vein, Hennart and Zeng (2005: 109) put holdup (i.e. exploiting the unilaterally dependence of IJV partner), free riding (i.e. contributing less than promised in IJVs), and spillovers (i.e. appropriating specific assets without payment), as three examples of opportunistic behavior in IJVs.

The opportunistic behavior, no matter in what form, has been pointed out as detrimental for the development of trust between IJV partners (Nielsen 2001). For example, Hsieh, Rodrigues and Child (2010: 3) suggest that if an IJV partner perceives that another is behaving in an opportunistic fashion, such perceptions will badly impact the collaborative interactions between IJV partners and will lead to decreased trust in that IJV partner. Empirically, Silva, Bradley and Sousa (2012) conducted the survey of 232 ISAs (also includes IJVs) between Portuguese and international firms and found that opportunistic behavior has a negative impact on trust. In the same vein, Morgan and Hunt (1994) found that opportunistic behavior reduces trust between alliance partners. Further, Inkpen & Currall (1997) surveyed the 35 Japanese IJVs operating in North American and found that forbearance from opportunism develops trust between IJV partners suggesting that IJV partners who observe in the counterpart partners a willingness to refrain from opportunistic behavior are more likely to engage in trusting relationship with them. Therefore, when an IJV partner believes that its counterpart IJV partner is behaving opportunistically, such perception will generate ill will towards that partner, and will hinder the development of trust towards that partner. Therefore, we hypothesize that:

> **Hypothesis 8:** There is a negative relationship between the opportunistic behavior one partner perceives in the other and the trust placed in that partner

3.4 Trust-performance relationship

A prevalent notion in the SET is that trust between exchange partners is an important governance device that results in exchange success (e.g. Blau, 1964). Madhok (1995b) is one of the first authors, which borrowed this stance of SET and transferred it to IJV settings. He posited that "trust has efficiency implications, and its potential cost reduction and value enhancing properties need to be recognized" (Madhok 1995b: 126). The focal logic in his argumentation is that trust affects IJV performance by increasing the quality of inter-partner relation-

ships, because trust fosters inter-partner cooperation and coordination, broadens the band of tolerance for temporary periods of inequity, reduces conflicts and perceptions of relational risk, and heightens the flexibility within the IJV relationship (Madhok 1995b; Nooteboom, Berger & Noorderhaven 1997). Though previous theoretical research (e.g. Beamish & Banks 1995; Madhok 1995b; Parkhe 1998a, 1998b; Inkpen & Currall 1998) provides general support for the idea that trust is important to achieve superior IJV performance, limited empirical evidence exists to substantiate a positive relationship of the trust-performance relationship in IJVs (Silva, Bradley & Sousa 2012).

Prior empirical research found that trust has a positive effect on the satisfaction with achievement of financial objectives and overall IJV performance in IJVs formed between foreign firms and Hungarian firms (Lane, Salk & Lyles 2001) and satisfaction with overall performance in IJVs formed between foreign firms and Korean firms (Kwon 2008). Further, it is found that trust between IJV partners is an important determinant of the satisfaction with financial and non-financial IJV performance in IJVs formed between Danish firms and partners across the world (Nielsen 2007), between foreign firms and Chinese firms (Ng, Lau & Nyaw 2007), and between firms from UK, Europe, North America and Australia (Bener & Glaister 2010). Therefore, it is believed that trust between IJV partners is an important determinant of IJV performance, because it provides a sound and cooperative working relationship characterized by low partner's behavioral uncertainty, low transaction costs, greater flexibility and forbearance, greater assets investment, open information flow, and low dysfunctional conflicts (Beamish & Banks 1995; Madhok 1995b; Nooteboom, Berger & Noorderhaven 1997; Parkhe 1998a, 1998b; Inkpen & Currall 1998). Therefore, we posit that:

> **Hypothesis 9**: In an IJV relationship, there is a positive relationship between the amount of trust one partner places in the other and the performance of the IJV.

3.5   Moderation effects-resource complementary

An important research suggestion emerging from prior reviews of empirical research on trust–performance link (e.g. McEvily & Zaheer 2006; Robson, Skarmeas and Spyropoulou 2006) is identifying and empirically testing the moderators for the effects of trust on IJV performance. The underlying logic for this view is that the trust–performance link may not hold in the same strength in all occasions. Consistent with suggestion, some empirical attempts have been made. For example, it is found that trust-performance link is strong with low market

uncertainty and high behavioral uncertainty (Krishnan, Martin & Noorderhaven 2006), high market uncertainty, strong resource interdependency, commensurate risk sharing, greater reciprocal commitment, and younger IJVs (Luo 2002b), small alliance size (Robson, Katsikeas & Bello 2008), and high similarities between IJV partners (Silva, Bradley & Sousa 2012).

These empirical attempts shed some light on the moderators for the effects of trust on IJV performance. However, current research is virtually silent in identifying the role of resource complementary (i.e. an important structural characteristic of IJV) for the effects of trust on IJV performance. The empirical research on trust-performance link, which is widely driven by SET, is criticized by Hennart and Zeng (2005). They argue that, "*some (but not all) process variables seem also to be repackaged structural variables. The prime example is trust, which has been extensively used as an independent variable to explain alliance performance*" (Hennart & Zeng 2005, 113). Madhok (1995b: 122) also share the view that trust is not sufficient in and of itself to hold IJV performance for long time until structural bases of IJV are strong. Robson, Skarmeas and Spyropoulou (2006: 603) also suggest that "*empirical attempts combining the behavioral paradigm (e.g. trust from social exchange theory) with other, dissimilar theoretical perspectives (e.g. structural characteristics from transaction costs economics) are to be encouraged in future research as they can expedite the development of richer, more complete explanations of ISA performance*". Therefore, to explore further the trust-performance relationship in IJVs, the structural characteristic of IJV, namely resource complementary from TCT that may interact with trust in IJVs is discussed. Knowledge of such moderator for the effects of trust on IJV performance is important, as it will allow the managers to understand the structural characteristics of IJVs under which trust pays off. In the following, moderating variable of resource complementary is discussed and hypothesis is formulated.

Resource complementary as moderator

An important view in TCE is that IJVs are designed to allow partners to combine complementary inputs (Hennart 1988; Hennart & Zeng 2005). In such IJVs, which Hennart (1988) refers to as link IJVs, the type of knowledge that each partner contributes to the IJV is different. Indeed, Hennart (1988) argues that IJVs are formed when access to the complementary resources cannot be obtained through market transactions, and acquisition of firms owing them would entail significant management costs because required resources are inseparable part of total assets held by target firm. Hence, from TCE, the combination of complementary resources owned by different firms is considered a primary motivation driving IJV

formation, and also has a central influence on IJV partner selection (Geringer 1991; Hitt et al. 2000). This complementary of resources between IJV partners has been identified as an important determinant of IJV performance (Nielsen 2007). The moderating effect of resource complementary on the impact of trust on IJV performance has so far, however, not been examined. We suggest that resource complementary between IJV partners is crucial in amplifying the positive effects of trust on IJV performance.

Prior research suggests that resource complementary is subject to two interpretations. First, resource complementary provides the basis for value creation in IJVs, thus enhancing competitive viability of the IJV (Madhok 1995b; Nielsen 2007; Kwon 2008). Second, resource complementary implies mutual necessity of each other resources, and therefore results in mutual forbearance from opportunism and hence reduced transaction costs (e.g. Inkpen & Currall 1998; Aulakh & Madhok 2002; Hennart & Zeng 2005). Therefore, we posit that when resource complementary is high, the same amount of established trust will contribute more to IJV performance because of reduced transaction costs and increased transaction value resulting from resource complementary. Based on these arguments, we formulate the following hypothesis.

Hypothesis 10: Resource complementary among IJV partners enhances the positive relationship between trust and IJV performance.

3.6   Research model of the study

The following Figure 11 provides an overview of the study model of the antecedents of trust and trust-performance relationship in IJVs.

In the case of social antecedent factors taken from social exchange theory, it is suggested that prior alliance experience with the partner, reputation, communication, cultural sensitivity, and expected longevity of IJVs have positive influence on trust. Further it is suggested that social antecedent factors comprising of prior alliance experience with the partner, reputation, communication, cultural sensitivity, and expected longevity of IJVs have negative influence on opportunism.

In the case of structural antecedent factors taken from transaction cost theory, it is suggested that level of symmetric interdependence and level of equivalent ownership have positive influence on trust. Further it is suggested that these structural antecedent factors comprising of level of symmetric interdependence and level of equivalent ownership have negative influence on opportunism. Thereafter, opportunism is suggested to have negative influence on trust.
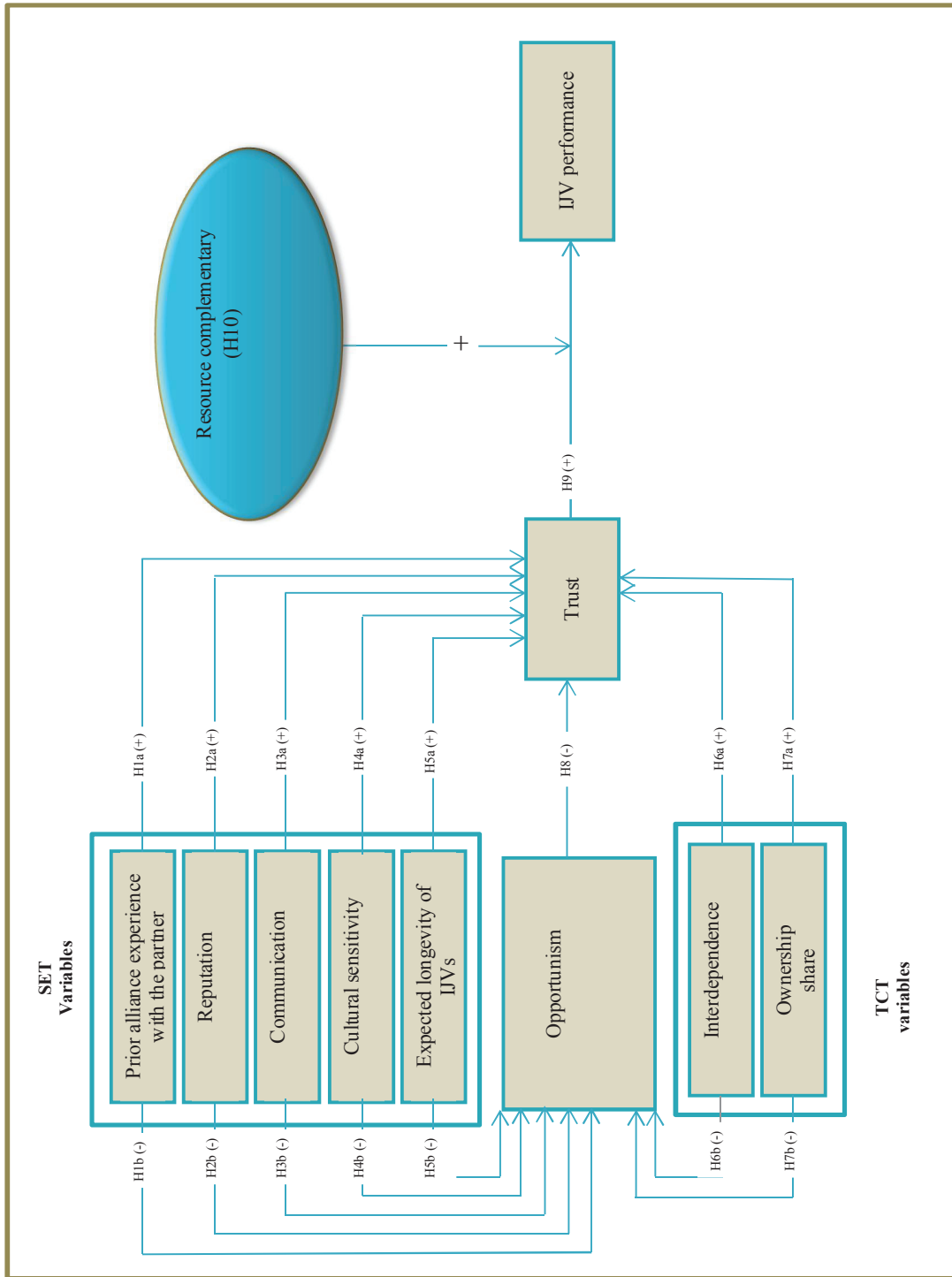
Figure 11. The conceptual model of antecedents of trust and trust–performance relationship in IJVs

The model also depicts that the factor of trust taken from SET has positive impact on the performance of IJVs. Further, we borrowed the concept of resource complementary from TCT and suggested that positive trust-performance relationship will be stronger in case of high resource complementary.

4   RESEARCH METHODOLOGY

This chapter offers the discussion about empirical research design of the study. The chapter starts with the discussion of chosen philosophical stance that guides the methodology of this study. In next section, the data collection procedure including the population, questionnaire development, and survey procedure and response pattern for the survey research are discussed. Thereafter, the variance based structural equation modeling using the PLS approach is discussed by giving emphasis to the description of the PLS path modeling and assessment of the structural model. The chapter concludes with the operationalization of key constructs in the dissertation.

4.1   Philosophical stance followed

The choice of methodology is of fundamental importance in international business studies (Hurmerinta-Peltomäki & Nummela 2004), because it establishes a relationship between theory and data (Honderich 1995). These methodological decisions are not made in isolation, but are always based on some criteria (Hurmerinta-Peltomäki & Nummela 2004). Two important criteria that assist in the choice of the methodology are the researcher's philosophical stance (Easterby-Smith, Thorpe & Lowe 1991: 21; Hurmerinta-Peltomäki & Nummela 2004), and the research objectives (Collis & Hussey 2009). Therefore, it is necessary to know both researcher's philosophical stance and the research objectives. The first criterion warrants an ontological and epistemological justification and the second a technical one (Byrman 1988, cited in Symon & Cassell 1998: 3). Only after aligning the choice of research methodology with these criteria, the research should begin.

The philosophical stance followed by a researcher can be described by trying to know his/her opinion or assumptions about the; "nature of reality" (i.e. ontology) and "what constitutes a valid knowledge" (i.e. epistemology). These assumptions of ontology and epistemology assist the researcher to place themselves into two opposing paradigms of positivism and phenomenology that guide the choice of methodology (Hurmerinta-Peltomäki & Nummela 2004; Collis & Hussey 2009). However, it is believed that in the long-standing debate between the two common cited extreme positions – phenomenology and positivism – no researcher entirely defends one of these views (Tashakkori & Teddlie 1998). Nevertheless, making an effort to understand philosophical issues help clarify the overall configuration of a piece of research, and identify the most appropriate research methodology in relation to the objectives of the research (Easterby-Smith, Thorpe & Lowe 1991).

Hence, I will try to clarify my position in this debate, along with the direction to which the current research leads me.

I believe that social reality is objective, external to the researchers, and therefore there is one reality (i.e. ontology stance), and it is relevant because it can be measured by means of objective methods (i.e. epistemology stance), rather than being inferred subjectively through sensation, reflection or intuition (Easterby-Smith, Thorpe & Lowe 1991; Collis & Hussey 2009). Indeed, I intend to observe the level of trust between IJV partners, and how social and structural factors relate to this level of trust, and how this trust influences IJV performance. It is not my intention to interpret managers' perceptions, but rather ascertain them by means of measures developed from previous empirical studies. Therefore, constructs will be operationalized in a way that reality can be measured quantitatively. This is what present study intends to do with the constructs of trust, IJV performance, and social and structural antecedents of trust. Furthermore, the key objective for researchers following this philosophical stance is to search for regularities and casual relationships between the constituent elements of social world (Easterby-Smith, Thorpe & Lowe 1991). This is exactly what present study is looking for: to know what is the influence of trust on IJV performance, and the possible impact of social and structural characteristics of IJV partners on the trust (i.e. antecedents of trust). Taking these philosophical assumptions into consideration and research objective, present study falls on the left side of the below continuum identified by Collis and Hussey (2009: 57) in Figure 12.

Figure 12.   A continuum of paradigms (Collis & Hussey 2009: 57)

According to Collis and Hussey (2009) and Ghauri and Gronhaug (2010), a deductive approach is followed in positivism paradigm. In this approach, the researcher; builds\deduces hypotheses from the existing knowledge (literature), operationalize the key constructs, collects empirical data, and then empirically test the hypotheses which demonstrates the truth or false of those developed hypotheses.

4.2 Choice of quantitative research methodology and method

Collis and Hussey (2009) suggest that the researcher must choose the methodology and method that meet his\her philosophical assumptions of the chosen paradigm. In above section, based on my ontological and epistemological assumptions, I argued that my research paradigm is positivism where deductive approach is used. A deductive approach is often, according to Ghauri and Gronhaug (2010) as well as Hurmerinta-Peltomäki and Nummela (2004) and Collis and Hussey (2009), associated with quantitative methodology, and method of data collection. According to these authors, survey is a very appropriate methodology for deductive type of research. Typically the instrument used in survey research is a questionnaire, which is an "effective tool to get opinions, attitudes and descriptions as well as getting cause-and-effect relationships (Ghauri & Gronhaug 2010). In this study, a lot of crucial information, such as level of trust between IJV partners, is simply not available from secondary sources. Therefore, a structured questionnaire is designed for survey research to collect primary data from a sample, with a view to analyse primary data statistically and generalizing the results to a population. But for generalizing the results to a population, a sample of sufficient size is required. Therefore, in the followings, I discuss the population and sampling.

4.3 Study population

The target population of the study consists of Nordic (Denmark, Finland, Sweden, and Norway) firms having manufacturing IJVs operations in Asia, Europe, and America. The following selection criterion was defined to identify the target population: firstly, the IJVs have to be equity IJVs; secondly, one of the parents has to be from Nordic countries; and thirdly, IJVs should be formed during the time period from 2000 to 2011. The **first selection criteria** (i.e. limiting the population of this study to equity IJVs) was used because all equity IJVs have standardized structures, and similar management in comparison to non-equity cooperative alliances (Guidice 2001). Therefore, the findings will be comparable with previous studies focusing on equity IJVs (Contractor & Lorange 1988; Park & Russo 1996). The **second criterion** of only inquiring the Nordic firm's IJVs was taken because of easy access to developed databank of Nordic IJVs at the University of Vaasa (Finland). Furthermore, by looking at foreign partners from only Nordic countries (Denmark, Finland, Sweden, and Norway), the influences caused by cultural differences occurring when foreign partners come from diverse countries is also reduced. Besides, this was a prerequisite due to financial restrictions preventing the author from collecting data from other different countries. In collect-

ing data for the present study, the author has excluded the viewpoint of local partners. Although, some researchers suggest that it is necessity to consult local partners (e.g. Fryxell, Dooley & Vryza 2002). However, Geringer and Hebert (1991) maintain that collecting feedback from both foreign and local partners can be logistically infeasible and quite costly. Moreover, they find a positive correlation between IJV manager's evaluations of performance and that of foreign and local parent companies. The **third selection criteria** (i.e. IJVs should be formed during the time period from 2000 to 2011), was used to capture as many of the firms engaged in IJVs as possible, and also avoiding the biasness of only including the relatively newly formed IJVs (Hebert & Beamish 1997; Sarkar, Cavusgil & Evirgen 1997).

Information about the Nordic firms and their operating IJVs in Asia, Europe, and America was obtained from "Nordic International Joint Ventures" database compiled by Professor Jorma Larimo at the "University of Vaasa", Finland. The database provides a comprehensive source of manufacturing Nordic IJVs since 2000 to 2010. This database includes 590 IJVs (196 Danish IJVs, 189 Finnish IJVs, 94 Swedish IJVs, 111 Norwegian IJVs) formed by 214 Nordic Firms (84 Danish Firms, 77 Finnish Firms, 41 Swedish Firms, and 12 Norwegian Firms). The information contained the names of the Nordic firms, names of IJVs, target countries of IJV operation, and names of local IJV partners. However, in case of Norwegian and Danish IJVs, database was available up till 2008. Furthermore, in some of the cases, nature of investment (i.e. either IJV or WOS) was not identified. Therefore, a decision was taken to; upgrade database up till 2011, find the missing data, and find suitable respondents who have been involved in the formation and management of IJVs, their e-mails and telephone numbers. To upgrade the database, company websites, annual reports, and press releases of all 214 Nordic firms were reviewed from 2000-2011. From the review, it was found that; some firms were not in existence anymore, some IJVs were announced but never formed, and some entries in database were in fact WOS from start. After removing these entries and upgrading database up till 2011, a population of 464 IJVs was identified. From the 464 IJVs, 110 IJVs were from Denmark, 180 IJVs were from Finland, 97 IJVs were from Sweden, and 77 IJVs were from Norway.

4.4   Questionnaire development

The ability to collect necessary data is a very important element of the empirical study. Questionnaire is considered an important tool to collect necessary data when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran 1992; Collis & Hussey 2009). The whole success of the

work depends on the quality of the questionnaire (Easterby-Smith, Thorpe & Lowe 1991). Therefore, a particular attention was paid for designing the questionnaire.

Firstly, it was important to identify what information should be collected and how it should be formulated (Collis & Hussey 2009). Therefore, based on theoretical model of the present study, it was clear that the required information is about the antecedents of trust, manager's perceptions of trust, and the impacts of trust on IJV performance. Therefore, the questionnaire was organized into three sections covering each of these topics separately in order to facilitate both reading and answering for managers. The three sections of the questionnaire are: background information and structural characteristics of the IJVs, relationship characteristics between the IJV partners, and IJV survival and performance.

Secondly, it was important to pay special attention to the measurement and scaling of the constructs (Collis & Hussey 2009). Therefore, all the items/questions in the questionnaire are derived or adopted from prior studies conducted by Geringer and Hebert (1991), Aulakh, Kotabe and Sahay (1996), Johnson et al. (1996), Zeng (1998), Glaister and Buckley (1999), Young-Ybarra and Wiersema (1999), Krishnan, Martin and Noorderhaven (2006), Voss et al. (2006), Nielsen (2007), Hsieh, Rodrigues and Child (2010), and Silva, Bradley and Sousa (2012). Further, Easterby-Smith, Thorpe and Lowe (1991) suggest that closed questions with Likert scales should be used because they are quick to complete and analyse. Therefore, all the questions/items of the questionnaire are in a closed or structured form mostly with five point Likert scale.

Thirdly, it is important to pre-test the questionnaire to make sure that questions are clear and the respondents of the questionnaire will understand the questions as presented (Collis & Hussey 2009). Therefore, pre-testing was carried-out with two academicians. These academicians comprise of one professor and one post-doctorate researcher. Both of the academicians are expert with IJV research, and previously had conducted the IJV survey research. They reviewed the initial questionnaire and made some suggestions regarding wording, sequence, and length of questionnaire. Their suggestions were accommodated.

4.5   Survey procedure and response rate

Data for present study was collected by web-survey. It is considered an appropriate distribution method as compare to mail survey because it allows the researchers to access large sample size easily, faster, cheaply (i.e. reducing costs associat-

ed with paper, postage, mail out), and it displays the data in numerical form in real time (Dillman 2001 referred in Silva 2007). Following these advantages, several researchers of IJVs (e.g. Nielsen 2007; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012) have successfully used the web-survey. Therefore, a web-survey was carried out as suggested by Silva (2007). Following three steps were taken sequentially to conduct the web-survey. These steps are: identifying the respondents, preparing web survey, sending web-survey and response rate.

Identifying the respondents:

After deciding to conduct a web-survey, it was necessary to create a database with the data on respondent's names, their contact emails, and phone numbers. Therefore, a decision was taken to review the websites of all 214 Nordic firms and their IJVs, and the annual reports and press releases of all 214 Nordic firms from 2000–2011. I tried to find suitable respondents who have been involved in the formation and management of IJVs. The persons responsible for IJV formation and management from Nordic firms are usually the directors (i.e. regional directors, country specific directors, and product specific directors), Voice presidents, and managing directors of IJVs.

Identifying these respondents from press-releases and matching this information with their profile on company website, and then collecting their emails turned out to be the most difficult and time consuming task in whole survey process. Therefore, to maximize the benefits of this effort, two respondents for each IJV were identified. In this process, the emails were also sent to communication and HRM presidents of Nordic firms to determine the identity of the respondents responsible for their IJVs. In the end, I could identify about 928 appropriate respondents and their emails for 464 IJVs.

Preparing web survey:

After identifying the respondents, next step was the development of web-survey. A research software called "LOMAKE" at the "University of Vaasa (Finland)" was used to convert the original paper-based questionnaire to web-survey. This programme contains important functions of text field, drop down menu, check box group, radio buttons, and background appearance option that help to develop a web-survey. By using these functions, and Java Scripts, a web-survey was prepared and later verified its quality from supervisor of this software programme.

After having respondent's emails and the web-survey, next step was to develop an email message (also called cover letter in mail surveys) to send the web-survey. Collis and Hussey (2009) suggest that a well-developed email message is needed to elevate the response rate. Therefore, a special attention was paid in the email message (i.e. cover letter) to familiarize the respondents with the subject matter, and convince them to respond the web-survey.

Usually, soft-wares, like "LOMAKE", send one standard email message to all respondents at once. However, in my case, instead of sending standard email message to all respondents, I decided to send personalized email messages (i.e. separate email message to each respondent on his name). This decision was taken because I had the details of the respondents (i.e. names and emails of respondents responsible for specific IJVs), and the details of IJVs (i.e. IJV names, IJV formation year, target countries of the IJV, and name of local partner). Further, this could increase the response rate because respondents will know that the researcher has good background information about the IJVs and knows the importance of respondent for this research. Therefore, personalised email messages were sent to each respondent separately that explains the study and contains the link to web-survey. Following are the contents of the personalised email message in Table 10.

Sending web-survey and response rate:

After having the details of respondents (i.e. their names and emails) and web-survey along with email message, the next step was to send the web-surveys to respondents. I had a list of 928 appropriate respondents and their emails to ask for 464 IJVs that made up the population. From the 464 IJVs, 110 IJVs were from Denmark, 180 IJVs were from Finland, 97 IJVs were from Sweden, and 77 IJVs were from Norway.

Finland

The questionnaires were sent in March 2012 to the 360 identified respondents to ask for 180 IJVs. Further, the researcher contacted to the communication directors, investment directors, and HRM directors of Finnish firms via phone calls, emails, and personal visits to explain the nature of study and get their help in arranging interviews and/or filling the web-survey from the respondents. Some respondents were also directly contacted via phone calls to fill the web-survey. After all this effort, the first round resulted in 29 filled questionnaires.

Table 10.   Information given in e-mail

Parts of e-mail message	Information given
Title/subject box	Title of questionnaire
Salutation line	Name of the respondent
Paragraph 1	Purpose of the study
	Institute responsible for this study
Paragraph 2	Details of the IJV (name of IJV, formation year, local partner name, target country) about whom information is requested
	Importance of respondent's contribution
	Request to pass survey-email to another executive if he/she feels that the other executive is more appropriate respondent
Paragraph 3	Benefits of the study, and offering a summary of the results of the research to the respondent
	Assurance of the confidentiality
	Information about the time duration to complete the questionnaire
Paragraph 4	Hyperlink to the survey
The complimentary Close	Appreciating respondent's replies and their invaluable time
Signature	Information about the researcher/researchers

The questionnaires were re-sent in April 2012 to those who had not yet respond-ed. The second round resulted in 13 filled questionnaires. Thus there were 42 an-swered questionnaires. An attempt was made to directly contact the remaining respondents via phone calls to remind them of the questionnaires. Because of this, only two more filled questionnaires were received. Thus, a total of 44 surveys representing 44 IJVs were returned, for an effective response rate of 24.44 %.

Sweden

The questionnaires were sent in April 2012 to the 194 identified respondents to ask for 97 Swedish IJVs. Further, the researcher contacted to the communication directors, investment directors, and HRM directors of Swedish firms via emails to explain the nature of study and get their help in filling the web-survey from the respondents. Despite this all effort, only one filled questionnaire was received. Given the very low response and respondent's un-comfortableness about disclosing such sensitive information to a survey delivered from a university outside of Sweden, a decision was taken to collaborate with the "Uppsala University (Sweden)". Therefore, by using email facility from Uppsala University in May 2012, the web-survey was recent to 192 respondents to ask for remaining 96 IJVs. Further, the researcher re-contacted to the communication directors, investment directors, and HRM directors of Swedish firms via emails, and personal visits to explain the nature of study and get their help in arranging interviews and/or filling the web-survey from the respondents. Due to this effort, the second round resulted in 22 filled questionnaires. Thus, a total of 23 surveys representing 23 IJVs were returned, for an effective response rate of 23.71 %.

Denmark

In case of Denmark, it was decided to collaborate with "Copenhagen Business School (Denmark)". This decision was taken to increase the response rate. In June 2012, a web-survey by using email facility of "Copenhagen Business School" was sent to 220 identified respondents to ask for 110 IJVs. Further, the researcher contacted to the communication directors, investment directors, and HRM directors of Danish firms via phone calls, emails, and personal visits to explain the nature of study and get their help in arranging interviews and/or filling the web-survey from the respondents. This effort resulted in 13 filled questionnaires. Due to some technical reasons, the researcher could not have the second round of data collection from Denmark. Therefore, a total of 13 surveys representing 13 IJVs were returned, for an effective response rate of 11.82 %.

Norway

In case of Norway, I could not have the collaboration with some local Norwegian university. Therefore, by using the own email facility at the university of Vaasa (Finland), the web-surveys were sent in July 2012 to the 154 identified respondents to ask for 77 IJVs. Further, the researcher contacted to the communication directors, investment directors, and HRM directors of Norwegian firms via emails

to explain the nature of study and get their help in filling the web-survey from the respondents. Despite this all effort, only five filled questionnaire was received. The web-survey was recent to remaining respondents in August 2012. This yielded another four filled questionnaires. Therefore, a total of 9 surveys representing 9 IJVs were returned, for an effective response rate of 11.69 %.

Reasons of low response rate:

The target population consisted of 464 IJVs (110 Danish IJVs, 180 Finnish, 97 Swedish IJVs, and 77 Norwegian IJVs). Through a web-survey, a total of 89 responses representing 89 IJVs (13 Danish IJVs, 44 Finnish, 23 Swedish IJVs, and 9 Norwegian IJVs) were received. This makes a total response rate of 19.18 % (11.82 % from Denmark, 24.44 % from Finland, 23.71 % from Sweden, and 11.69 % from Norway). In data collection, although an attempt was made to collect data from two key respondents for each IJV, but finally received single response for each IJV.

The following are the major factors to the low response rate. The most important one is the "questionnaire and interview fatigue". For example, a director at a fiber and speciality paper manufacturing company told me that every day he receives an average of 30 emails from outside of the company and one or two emails are definitely requests for filling questionnaire or interviews. As a result, many respondents refuse to participate in the study. The second reason was the busy schedule of the directors. Many managers declined to participate because they said they are too busy due to meetings, travelling, and etc. The third reason was the restructuring of some companies and respondents declined to disclose sensitive information during restructuring. Fourth reason which was especially visible in case of Sweden and Norway that many respondents were not interested in the study. This was understandable because they did not feel comfortable to disclose sensitive information to a research institute outside their home countries. Fifthly, another reason was that some companies replied that they have company policy not to participate in surveys.

4.6   Structural equation modelling approach with PLS method

4.6.1   *Choice of structural equation modelling approach*

Structural equation modelling (SEM) is a second-generation multivariate technique that couples two traditions: an "econometric perspective" focusing on prediction, and a "psychometric emphasis" that models concepts as latent variables that are indirectly inferred from multiple observed measures. This coupling in SEM allows the researchers to assess the latent variables at the observation level (i.e. measurement model) and test relationship between latent variables on the theoretical level (i.e. structural model). In general, it has been stated that the advantage of SEM-based techniques over first-generation techniques is the greater flexibility for the interplay between theory and data. This means that the researcher has the flexibility to model relationships among multiple predictor and criterion variables, to construct unobservable latent variables, to model errors in measurements for observed variables and to statistically test a priori substantive/theoretical and measurement assumptions against empirical data (Chin 1998: 296).

In this study, SEM is chosen over first generation techniques. The reasons for choosing the SEM are followings: Firstly, the model of current study consists of 17 structural relations between the variables that have to be examined at once. Therefore, to analyse such a complex model, SEM is deemed proper according to Chin (1998). Secondly, the study consists of several latent variables. According to Chin (1998), for a model that contains latent variables, the choice of SEM is deemed important. Furthermore, the choice is according to the references from authors such as Silva (2007) and Robson, Skarmeas and Spyropoulou (2006), who suggest using the SEM in studies on trust since it is soft concept in terms of its measurement. Thirdly, it is suggested to use SEM for models wherein constructs are simultaneously independent and dependent (Robson, Skarmeas & Spyropoulou 2006). Like in this study, trust is simultaneously dependent and independent variable. Therefore, to analyse such a model, choice of SEM is appropriate.

4.6.2   *Choice of PLS method for structural equation modelling*

Structural equation modelling (SEM) can be applied by using different methods. The most often used method is covariance-based structural equation modelling

(CB-SEM), on which also well-known software such as LISREL, EQS, AMOS, SEPATH, and RAMONA are based. The other used method is variance-based partial least squares structural equation modelling (PLS-SEM), on which known software PLS is based (Chin 1998). The CB-SEM minimizes the difference between the sample covariances and those predicted by the theoretical model, whereas the PLS-SEM minimizes the variance of the dependent variables explained by the independent variables. Researchers such as Chin (1998) and Gotz, Liehr-Gobbers and Krafft (2010) suggest that the choice of an appropriate method should depend on the assumptions about data, theory, and the ties between unobservable variables and indicators. This study utilizes PLS-SEM as a primary data analysis technique because of the following reasons:

Firstly, rather than aiming for producing the covariance matrix as close as possible to the theoretical model (i.e. parameter estimation for testing theory) in CB-SEM, the aim has been both to theory testing and prediction. This is so because part of the structural model, which is under investigation, is based on a strong theory (i.e. impact of social factors on trust; and impact of structural factors on opportunism) but part of it on a weak theory (i.e. impact of structural factors on trust; impact of social factors on opportunism). According to Chin (1998: 295), PLS-SEM is appropriate analysis tool when the research objective is theory testing and also theory development.

Secondly, the small sample size (n=89) restricts the use of CB-SEM. Small samples in CB-SEM can lead to poor parameter estimates and model fit, and the poor statistical power of SEM (Peng & Lai 2012). The minimum recommended sample size for CB-SEM is 200-800 (Chin & Newsted 1999). Therefore, the small sample size of this study (i.e. n=89) prevents the use of CB-SEM. In PLS-SEM, the minimal sample size requirement is ten times the greater of the following: 1) the latent variable with the largest number of formative indicators or 2) the dependent latent variable with the largest number of independent latent variables influencing it (Chin 1998: 311). In the study, the largest number of independent latent variables on one dependent latent variable is 8. Thus, the sample size requirement for the structural model under investigation is 80 (10 x 8), which is slightly less than the sample size of current study (i.e. n=89).

Thirdly, another data-related reason to choose PLS-SEM is the danger that the data may not follow multivariate normal distribution assumption, which is required in CB-SEM (Chin 1998; Peng & Lai 2012).

Fourthly, regarding the ties between unobservable variables and indicators, an advantage of PLS-SEM is that it explicitly determines the values of latent variables for the predictive purpose. In contrast, the CB-SEM never determines the values for the latent variables, and therefore there is no possibility to predict the observed variables (Chin 1998: 301). Therefore, PLS-SEM is preferred over CB-SEM in this study.

Thus, the objective of the study, the properties of data, and the ties between unobservable variables and indicators support the application of PLS-SEM over CB-SEM in the study.

4.6.3   Formal specification of the PLS-SEM

A PLS-SEM with latent constructs has two components: **1)** structural or inner model, which shows the relationships (i.e. paths) between the latent constructs; and **2)** the measurement or outer model, which specifies the relationship between the observed variables, often also called manifest variables, and the latent variables (Hair, Ringle & Sarstedt 2011).

The structural model consists of both exogenous and endogenous variables. Exogenous variable is a latent variable, which does not have any structural path relationship pointing at it (i.e. independent variable). On the other hand, endogenous variable is a latent variable, which is explained by other constructs via structural model relationships (i.e. dependent variable). Further, PLS-SEM only permits recursive relationships between latent variables (i.e. no causal loops). Therefore, the structural paths between the latent constructs can only head in a single direction (Hair, Ringle & Sarstedt 2011). Below Figure 13 presents the structural model of this study. The model has eight exogenous variables (i.e. prior alliance experience, reputation, communication, cultural sensitivity, expected longevity of IJVs, interdependence, ownership share, and resource complementary), and three endogenous (i.e. opportunism, trust, and IJV performance), which all are indicated as ovals. The casual relationships between these exogenous variables and endogenous variables make up the structural model of the study.
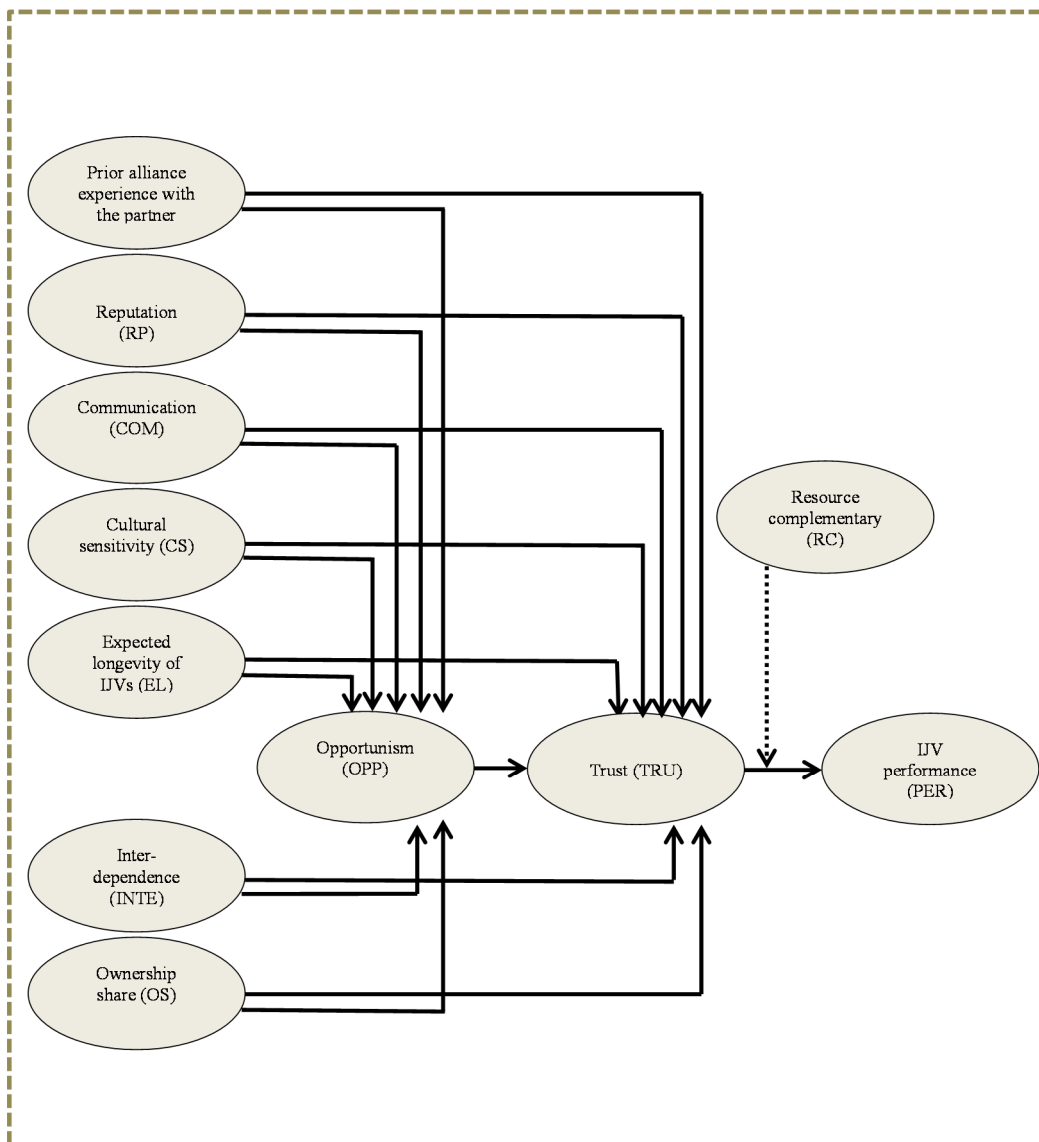
Figure 13. The structural model of the study

The measurement model defines the predictive relationship between each latent construct and its associated observed indicators. PLS.SEM can handle both formative and reflective indicators. Reflective indicators are seen as functions of the latent construct, and changes in the latent construct are reflected in changes in the indicator (manifest) variables. Reflective indicators are represented as single-headed arrows pointing from the latent construct outward to the indicator variables. Further, the associated coefficients for these relationships are called outer loadings. In contrast, formative indicators are assumed to cause a latent construct, and changes in the indicators determine changes in the value of the latent construct. Formative indicators are represented by single-headed arrows pointing toward the latent construct inward from the indicator variables. Further, the asso-

ciated coefficients for these formative relationships are called outer weights (Hair, Ringle & Sarstedt 2011). Figure 14 shows the measurement model of the study. All latent variables are measured with reflective indicators. These reflective indicators are represented with boxes having arrows pointing toward them. The relationships between these indicators and their respective latent constructs comprise the measurement model of the study.
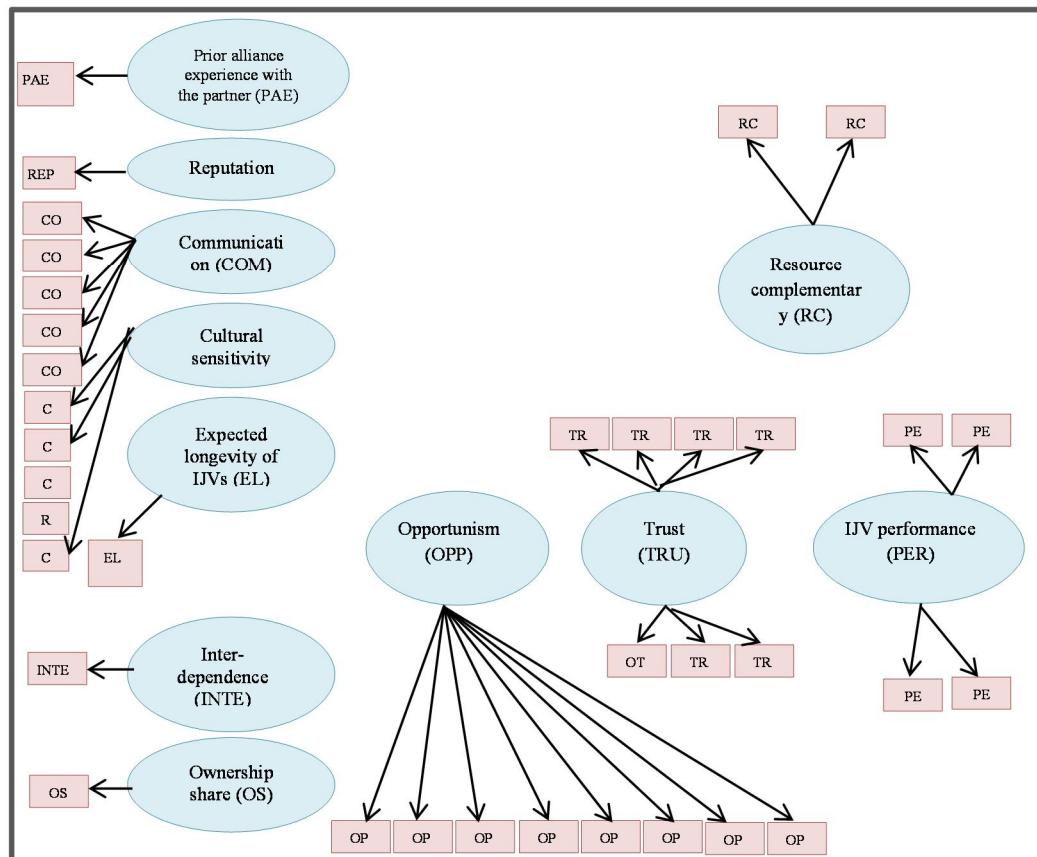
Figure 14. The measurement model of the study

4.6.4 *Evaluation of the model quality*

Although PLS estimates the measurement model and structural model simultaneously, the models are usually analyzed and interpreted in two stages (Sarkar et al. 2001). The measurement model is assessed first, followed by the assessment of the structural model. This is done in order to ensure that the construct measures are reliable and valid before assessing the relationship between latent constructs (Hair, Ringle & Sarstedt 2011). In the following, the criteria for assessing both the measurement model and structural model are presented.

4.6.4.1   Evaluation of measurement model

The measurement model or outer model specifies the relationship between observed variables and the underlying latent construct. The literature on PLS-SEM (Chin 1998; Gotz, Liehr-Gobbers & Krafft 2010; Hair, Ringle & Sarstedt 2011) recommends that the assessment of the measurement model should be conducted by looking at 1) indicator loadings, 2) composite reliability, 3) AVE (average variance extracted), and 4) indicator cross-loadings. In the followings, these evaluation types are discussed in detail.

Indicator loading: The indicator loading on its respective construct is used for assessing the individual item reliability. The loading for reflective indicators with their respective latent variables has been suggested as 0.4 at the early stages of scale development and as 0.7 or greater for developed theory (Hulland 1999; Gotz, Liehr-Gobbers & Krafft 2010).

Composite reliability: The composite reliability describes the internal consistency of a given block of indicators. It is very important that all the construct's indicators jointly measure the construct adequately. The values of composite reliability have been suggested as larger than 0.60 (e.g. Gotz, Liehr-Gobbers & Krafft 2010). In comparison to Cronbach's alpha, which uses equal weighting, the composite reliability includes the actual factor loadings.

Average variance extracted (AVE): It is used to assess the convergent validity of reflective blocks of the items. The AVE includes the variance of its indicators captured by the construct relative to the total amount of variance, including the variance due to measurement error. An AVE of less than .5 is considered insufficient, as more variance is due to error variance than to indicator variance (Gotz, Liehr-Gobbers & Krafft 2010). AVE analysis is also used to evaluate the discriminate validity of the measurement model. Discriminant validity is proven if a latent variable's AVE is larger than the common variance (squared correlations) of this latent variable with any other of the model's constructs (Fornell & Larcker 1981 referred in Gotz, Liehr-Gobbers & Krafft 2010).

Indicator cross-loadings are also used for estimating the discriminant reliability, which presents the extent to which measures of a given construct differ from measures of other constructs in the same model. Therefore, an indicator's loading with its associated latent construct should be higher than its loading with the measures of other latent constructs in the same model (Hair, Ringle & Sarstedt 2011).

4.6.4.2 Evaluation of structural model:

The structural model covers the causal relationships among the hypothetical latent constructs. These causal relationships between the latent constructs in PLS-SEM are always recursive (i.e. there is no loop in the path model). In contrast to CB-SEM, the PLS-SEM does not allow statistical tests to measure the calibrated model's overall goodness, which is mainly due to the assumption of distribution-free variance. Alternatively, non-parametrical tests are applied to evaluate the structural model's quality. It is recommended that the assessment of the structural model should be conducted by 1) looking at R² (coefficient of determination) for dependent latent variables, 2) path loadings, 3) significance levels, and 4) predictive relevance (Q²) (Chin 1998; Gotz, Liehr-Gobbers & Krafft 2010; Hair, Ringle & Sarstedt 2011). In the following, these evaluation types are discussed in detail.

Coefficient of determination (R²): It explains the variance of endogenous latent variables. It is very important evaluation criteria of structural model because the goal of PLS-SEM is to explain the variance of endogenous latent variables. Although, R² can assume values between 0 and 1, but no established threshold value has been suggested. However, the larger R² is, the larger the percentage of variance explained in endogenous latent variable (Gotz, Liehr-Gobbers & Krafft 2010). Chin (1998) suggests that besides inspecting the R², the **effect size f²** (i.e. change in the R²) also shows whether an independent latent variable has a substantial influence on the dependent latent variable. The formula for calculating the effect size is presented below.

$$f^2 = \frac{R^2\text{included} - R^2\text{excluded}}{1 - R^2\text{included}}$$

The effect size of .02, 0.15 and 0.35 can be viewed to represent the small, medium and large effect at the structural level (Chin 1998; Gotz, Liehr-Gobbers & Krafft 2010).

Path loadings: The path loadings in PLS-SEM are the standardized beta coefficients of ordinary least squares regressions. Chin (1998) recommends that standardized path coefficients should be around 0.2 and ideally above 0.3 in order to be considered meaningful.

Significance levels: The significant levels of standardized path coefficients in PLS-SEM are tested by means of t-statistics, which are obtained by resampling methods of either bootstrapping or jack-knifing. Bootstrapping is considered a more efficient approach and recommended by Chin (1998) to generate t-values. As discussed earlier, PLS-SEM does not assume that the data is normally distrib-

uted, so the bootstrapping takes random sample repeatedly from original sample to estimate the population distribution from sample, and hence generates t-values. To assess the acceptance or rejection of an individual hypothesis, the t values for each structural relationship are checked. Critical t-values for a two-tailed test are 1.65 (significance level = 10 percent), 1.96 (significance level = 5 percent), and 2.58 (significance level = 1 percent) (Chin 1998; Hair, Ringle & Sarstedt 2011).

Predictive relevance (Q^2): The predictive relevance of the model is tested by means of Stone-Geisser test, which postulates that the model must be able to adequately predict each endogenous latent construct's indicators. The Q^2 value is obtained by using a blindfolding procedure, which is a sample reuse technique that omits some data and uses the resulting estimates to predict the omitted part. Q^2 comes in two forms – the cross-validated redundancy and communality. It is recommended to use cross-validated redundancy, which unlike the cross-validated communality, uses the PLS-SEM estimates of both the structural model and the measurement models for data prediction. If an endogenous construct's cross-validated redundancy measure value (i.e. Q^2) for a certain endogenous latent variable is larger than zero, its explanatory latent constructs exhibit predictive relevance.

4.7   Operationalization of variables

In order to determine the measurement of the study's constructs, a comprehensive review of the prior literature on inter-organizational trust and IJVs has been conducted. This comprehensive review indicated that most of the constructs can be assessed by measures already established in previous research, therefore minimizing the problems with reliability and validity. Most of the study constructs were measured on a five-point Likert type of scale. The operationalized constructs are related to prior alliance experience with the partner, reputation, communication, cultural sensitivity, expected longevity of IJV, opportunism, ownership share, resource complementary, interdependence, trust, and IJV performance.

Prior alliance experience with the partner

Prior alliance experience with the partner refers to whether or not two firms had a prior alliance with each other before the establishment of current IJV. Consistent with Glaister and Buckley (1999), Young-Ybarra and Wiersema (1999), and Nielsen (2007), the respondents were asked whether or not their firm had a prior alliance with the current IJV partner before the establishment of current IJV. Table

11 provides the measurement item for prior alliance experience with the partner, and the sources of the item.

Table 11.   Item measuring prior alliance experience with the partner

Item	Option	Source
PAE: Has your firm been engaged with your partner firm in alliance/alliances before the establishment of current IJV?	0 = no, 1= yes	Glaister & Buckley (1999); Young-Ybarra & Wiersema (1999); Nielsen (2007)

Partner reputation

Partner reputation was gauged by a single item, related to the degree to which the reputation of the partner was favourable at the time the IJV was formed. Consistent with Nielsen (2007), and Janowicz (2004), the respondents were asked to rate the extent to which the reputation of the partner was favourable at the time the IJV was formed. Table 12 provides the measurement item for partner reputation, and the sources of the item.

Table 12.   Item measuring partner reputation

Item	Scale	Source
REP: Please rate the extent to which partner's reputation was favourable at the time of IJV formation?	Very low 1-5 very high	Janowicz (2004); Nielsen (2007)

Communication

Communication between IJV partners was measured by a five-item Likert scale capturing the quality and frequency of the communication between the IJV partners. The choice of these items was based on a review of existing empirical research (e.g. Young-Ybarra & Wiersema 1999; Mohr & Puck 2005; Krishnan, Martin & Noorderhaven 2006; Silva, Bradley & Sousa 2012). Table 13 provides the measurement items for communication, and the sources of the items.

Table 13.   Items measuring communication

Stem Question: Regarding communication between you and your IJV partner, please indicate your level of agreement with the following statements::		
Items	**Scale**	**Source**
COM1: IJV partners always keep each other informed about events\changes that may affect other party or IJV	Strongly disagree 1–5 strongly agree	Mohr & Puck (2005); Young-Ybarra & Wiersema (1999); Silva, Bradley & Sousa (2012)
COM2: IJV partners promptly notify each other about relevant information that may affect other party or IJV	Strongly disagree 1–5 strongly agree	Mohr & Puck (2005); Krishnan, Martin & Noorderhaven (2006)
COM3: Exchange of information between IJV partners takes place frequently	Strongly disagree 1-5 strongly agree	Young-Ybarra & Wiersema (1999); Silva, Bradley & Sousa (2012)
COM4: IJV partners get clear information from each other that may affect the other party or IJV	Strongly disagree 1–5 strongly agree	Mohr & Puck 2005; Krishnan, Martin & Noorderhaven (2006)
COM5: Over all, the quality of communication between the IJV partners is extremely good	Strongly disagree 1–5 strongly agree	New item

Cultural sensitivity

Cultural sensitivity refers to a firm's awareness of cultural differences between it and its IJV partners, and dealing and managing these differences (Johnson et al. 1996). Five reflective items were used to measure the cultural sensitivity. All the five items are adopted from Johnson (1996) and Voss et al. (2006). The scale ranged from 1 = strongly disagree to 5 = strongly agree. Table 14 provides the measurement items for cultural sensitivity, and the sources of the items.

Table 14.   Items measuring cultural sensitivity

Item	Scale	Sources
CS1: Our firm makes deliberate efforts to understand the ways our partner do things	Strongly disagree 1–5 strongly agree	Johnson et al. (1996); Voss et al. (2006)
CS2: Our firm makes necessary adjustments to the partner's way of doing things	Strongly disagree 1–5 strongly agree	Johnson et al. (1996); Voss et al. (2006)
CS3: Our firm makes special efforts to implement those customs and strategies in IJV with which partner firm agrees	Strongly disagree 1–5 strongly agree	Johnson et al. (1996); Voss et al. (2006)
CS4: A number of our firm's managers spend much time learning local language of partner firm	Strongly disagree 1–5 strongly agree	Johnson et al. (1996)
CS5: A number of our firm's managers spend many non-business hours learning local partner business culture	Strongly disagree 1–5 strongly agree	Johnson et al. (1996)

Expected longevity of IJV

Expected longevity of IJV refers to the degree to which a firm expects that the IJV relationship with partner firm will continue on a long-term basis (Muthusamy, White & Carr 2007). Consistent with Aulakh, Kotabe and Sahay (1996) and Muthusamy, White and Carr (2007), the respondents were asked to provide their opinion regarding the continuity of their IJV relationship with partner firm on long term basis. Table 15 provides the measurement item for expected longevity of IJV, and the sources of the item.

Table 15.   Item measuring expected longevity of IJV

Item	Scale	Source
EL: Our firm plans to continue the IJV for a long time	Strongly disagree 1–5 strongly agree	Aulakh, Kotabe & Sahay (1996); Muthusamy, White & Carr (2007)

Opportunism

Eight items were employed to measure the opportunism perceived by foreign partner on a five-point Likert scale. The choice of these items was based on a review of existing empirical research (e.g. Morgan & Hunt 1994, Liu et al. 2008; Katsikeas, Skarmeas & Bello 2009; Hsieh, Rodrigues & Child 2010; Silva, Bradley & Sousa 2012). These items asked if the IJV partner firm (1) alters facts, (2) makes false promises, (3) presents incomplete information, (4) fails to provide support (5) breaches contract, (6) engages in opportunistic behavior, (7) appropriates technology, and (8) supplies substandard/overpriced material. Table 16 provides the measurement items for opportunism, and the sources of the items.

Table 16.   Items measuring opportunism

Stem Question: With respect to your partner firm's behaviour in the present IJV, please indicate your level of agreement with the following statements:		
Items	**Scale**	**Sources**
OPP1: Sometimes partner firm alters the facts slightly in order to get what they need from IJV	Strongly disagree 1–5 strongly agree	Morgan & Hunt (1994); Katsikeas, Skarmeas & Bello (2009); Hsieh, Rodrigues & Child (2010); Silva, Bradley & Sousa (2012)
OPP2: Partner firm has sometimes promised to do things without actually doing them later	Strongly disagree 1–5 strongly agree	Morgan & Hunt (1994); Hsieh, Rodrigues & Child (2010); Silva, Bradley & Sousa (2012)
OPP3: Partner firm sometimes presents incomplete or distorted information to get their benefit	Strongly disagree 1–5 strongly agree	Hsieh, Rodrigues & Child (2010)
OPP4: Sometimes partner firm fails to provide your firm\IJV with the support and resources that it is obliged to	Strongly disagree 1–5 strongly agree	Morgan & Hunt (1994); Liu et al. (2008); Hsieh, Rodrigues & Child (2010); Silva, Bradley & Sousa (2012)
OPP5: Partner firm breaches formal or informal IJV agreement to get their benefit	Strongly disagree 1–5 strongly agree	Katsikeas, Skarmeas & Bello (2009); Hsieh, Rodrigues & Child (2010)
OPP6: Partner firm engages in opportunistic behaviour	Strongly disagree 1–5 strongly agree	Hsieh, Rodrigues & Child (2010)
OPP7: Partner firm appropriates technological know-how which your firm provides to IJV	Strongly disagree 1–5 strongly agree	Liu et al. (2008); Hsieh, Rodrigues & Child (2010)
OPP8: Partner firm supplies substandard/overpriced material or products to IJV	Strongly disagree 1–5 strongly agree	Hsieh, Rodrigues & Child (2010)

Ownership share

Ownership share refers to the ratio of equity distribution between the IJV partners. Respondents were asked to indicate their firm's ownership share in the IJV, and their partner firm's ownership share in the IJV. In order to measure the ratio of equity distribution between IJV partners, both firm's ownership shares were transformed to 5-point scale with 5 if the equity difference between two partners was equal to or less than 6 %, 4 if 7–21%, 3 if 22–36%, 2 if 37–51%, and 1 if equal or larger than 52%. Table 17 provides the measurement scale for IJV ownership share distribution between IJV partners.

Table 17.   Item measuring ownership share

Item	Scale
OS: Ratio of equity differences between the IJV partners	5= equal to or less than 6 %, 4 = 7–21%, 3 = 22–36%, 2 = 37–51%, and 1 = equal or larger than 52%.

Resource complementary

Resource complementary of IJV partners was measured by two-items, 5 point Likert scale adapted from Donnell (2005), Nielsen (2007), and Deitz et al. (2010) that evaluated the degree to which the resources and competencies brought by partners to IJV are complementary for accomplishing the IJV goals. The scale anchored by 1= "very low" to 5 = "very high". Table 18 provides the measurement items for resource complementary, and the sources of the items.

Table 18.   Items measuring resource complementary

Item	Scale	Source
RC1: Extent to which resources and competencies brought by each partner to IJV are different?	Very low 1–5 very high	Donnell (2005)
RC2: Extent to which resources and competencies brought by each partner to IJV are complementary for accomplishing the IJV goals?	Very low 1–5 very high	Donnell (2005); Nielsen (2007); Deitz et al. (2010)

Interdependence

Interdependence represents the degree to which the partners in the IJV (i.e. the foreign partner and local partner) depend on each other by investing transaction specific assets. For measuring purpose, the variable of interdependence was divided into two dependence types: the dependence of foreign firm and the dependence of local firm. Each dependence type is the product of two questions: one is how large is the investment in the IJV; and other is the degree to which a partner's investment in the IJV is sunk. To measure the first question, the ownership share of each IJV partner was taken as a proxy for the size of investment in the IJV. The second question is measured by a single question; "if the IJV ends in conflict, the difficulty your firm would have in redeploying your resources (i.e. people and facilities) presently serving the IJV to other uses would be". The scale anchored with this question is 1= "very low" to 5 = "very high". These two questions were collapsed into one to determine the dependence of foreign partner (see Table 19).

Table 19.   Items measuring dependence of foreign firm

Item	Scale	Source
Foreign firm's size of investment in IJV (ownership share taken as proxy for the size of investment)	5–19 % (very low), 20–38 (low), 39-57 (average), 58–76 (high), 77–95 (very high)	New item
If the IJV ends in conflict, the difficulty your firm would have in redeploying your resources (i.e. people and facilities) presently serving the IJV to other uses would be	Very low 1–5 very high	Zeng (1998); Reuer & Arino (2002)

Similarly, these two questions were collapsed into one for determining the dependence of local partner (see Table 20).

In order to determine the interdependence, a comparison between dependence of foreign firm and dependence of local firm was made by taking the absolute difference between them. Here, a "zero" indicated a perfectly balanced set of interdependence. A numerical example might be helpful here. Suppose a foreign firm (1) has size of investment in IJV (3 out of 5); and (2) the difficulty in redeploying its resources outside the IJV (4 out of 5). Then the foreign firm's dependence would be: 3×4=12. Following the same steps, the dependence of local firm can be determined. Suppose the value is also 12 for the local partner, then the difference

between these values: 12–12=0 presents the perfect balanced interdependence. The scale for measuring the level of interdependence is given below in Table 21.

Table 20. Items measuring dependence of local firm

Item	Scale	Source
Local firm's size of investment in IJV (ownership share taken as proxy for the size of investment)	5–19 % (1= very low), 20-38 (2= low), 39–57 (3= average), 58-76 (4= high), 77–95 (5= very high)	New item
If the IJV ends in conflict, the difficulty your partner firm would have in redeploying his resources (i.e. people and facilities) presently serving the IJV to other uses would be	Very low 1–5 very high	Zeng (1998); Reuer & Arino (2002)

Table 21. Item measuring the interdependence

Item	Scale	Source
INTE: Level of interdependence between IJV partners (i.e. difference between dependence of local and foreign partner)	≤ 3= 5, 4-8=4, 9-13=3, 14-18=2, 19-24=1	New item

Trust

In order to measure trust we included seven items reflecting a level of trust (i.e. reliability, fairness, goodwill, and overall level of trust). The choice of the measures was based on a review of existing empirical research on trust (e.g. Morgan & Hunt 1994; Aulakh, Kotabe & Sahay 1996; Johnson et al. 1996; Dyer & Chu 2003; Mohr & Puck 2005; Muthusamy & White 2005; Krishnan, Martin & Noorderhaven 2006; Muthusamy, White & Carr 2007; Nielsen 2007; Liu et al. 2008; Hoffmann, Neumann & Speckbacher 2010; Silva, Bradley & Sousa 2012). Item 1 reflects reliability, items 2–3 reflect fairness, items 4-5 reflect goodwill, and items 6-7 reflect overall level of trust. The scale anchored with these items is 1= "strongly disagree" to 5 = "strongly agree". Table 22 provides the measurement items for trust, and the sources of the items.

Table 22.   Items measuring trust

Stem Question: Please indicate your level of agreement with the following statements:		
Items	**Scale**	**Source**
TRU1: In our IJV, the partner firm is reliable to move our joint project forward	Strongly disagree 1–5 strongly agree	Morgan & Hunt (1994); Mohr & Puck (2005); Nielsen (2007); Silva, Bradley & Sousa (2012)
TRU2: In our IJV, we feel secure with partner firm because of its sincerity	Strongly disagree 1–5 strongly agree	Muthusamy, White & Carr (2007)
TRU3: In our IJV, we are confident that our partner firm will not take advantage of us	Strongly disagree 1–5 strongly agree	Johnson et al. (1996); Muthusamy & White (2005); Krishnan, Martin & Noorderhaven (2006); Muthusamy, White & Carr (2007); Nielsen (2007); Hoffmann et al. (2010)
TRU4: In our IJV, partner firm is always ready and willing to offer us support beyond the IJV agreement	Strongly disagree 1–5 strongly agree	Krishnan, Martin & Noorderhaven (2006); Muthusamy, White & Carr (2007); Liu et al. (2008)
TRU5: In our IJV, partner considers our firm's welfare alongside its own while making important decisions	Strongly disagree 1–5 strongly agree	Johnson et al. (1996); Mohr & Puck (2005); Muthusamy & White (2005); Liu et al. (2008)
TRU6: In our IJV, the relationship with partner firm is characterized by high levels of trust	Strongly disagree 1–5 strongly agree	Aulakh, Kotabe & Sahay (1996); Dyer & Chu (2003); Nielsen (2007)
TRU7: Based on experience in our IJV, we know that our partner can be completely trusted	Strongly disagree 1–5 strongly agree	Morgan & Hunt (1994); Silva, Bradley & Sousa (2012)

IJV performance

In order to measure IJV performance, respondents were asked to evaluate their side's satisfaction with the IJV using four performance indicators: (1) overall performance, (2) profitability, (3) market share, and (4) achieving the goals set for IJV. These items were taken from existing empirical research on IJV performance. For all items 5-point Likert-type scales were used. These items have been widely used in the literature as subjective measures of IJV performance. Table 23 presents the performance measurement employed in this study.

Table 23.   Items measuring IJV performance

Stem Question: How satisfied is your firm with the performance of the IJV in term of:		
Item	**Scale**	**Source**
Overall performance	Very unsatisfied 1–5 very satisfied	Geringer & Hebert (1991); Fey (1996); Lane, Salk & Lyles (2001); Krishnan, Martin & Noorderhaven (2006)
Profitability	Very unsatisfied 1–5 very satisfied	Geringer & Hebert (1991); Lane, Salk & Lyles (2001); Krishnan, Martin & Noorderhaven (2006); Ng et al. (2007); Nielsen (2007); Robson, Katsikeas & Bello (2008)
Market share	Very unsatisfied 1–5 very satisfied	Geringer & Hebert (1991); Aulakh, Kotabe & Sahay (1996); Inkpen & Currall (1997); Lane, Salk & Lyles (2001); Ng, Lau & Nyaw (2007); Nielsen (2007)
Achieving the goals set for IJV	Very unsatisfied 1–5 very satisfied	Krishnan, Martin & Noorderhaven (2006); Kwon (2008)

5   EMPIRICAL ANALYSIS AND RESULTS

This chapter starts with a description of the sample, which is followed by the presentation of the results. The analysis of the results consists of two steps. Firstly, the full structural model consisting of 17 hypotheses about the antecedent of trust and trust-performance relationship is tested. Secondly, the structural model is divided into five sub-models to better explain the results.

5.1   Description of the sample

In this section the sample (n=89) of the study, from which the results are derived, is described. The description focuses on the following characteristics: 1) Nordic parents of the IJVs, 2) location regions of the IJVs, 3) host countries of Nordic IJVs, 4) year of investment, 5) Nordic parent's ownership in IJVs, 6) establishment mode of Nordic IJVs, 7) and Nordic firm's size.

The foreign parents of IJV in the study sample are from Nordic region comprising of Denmark, Finland, Norway, and Sweden. The study sample (n= 89 IJVs) comprises of 44 IJVs (49.43%) made by Finnish firms, 23 IJVs (25.84%) made by Swedish firms, 13 IJVs (14.69%) made by Danish firms, and 9 IJVs (10.11%) made by Norwegian firms (see Figure 15).
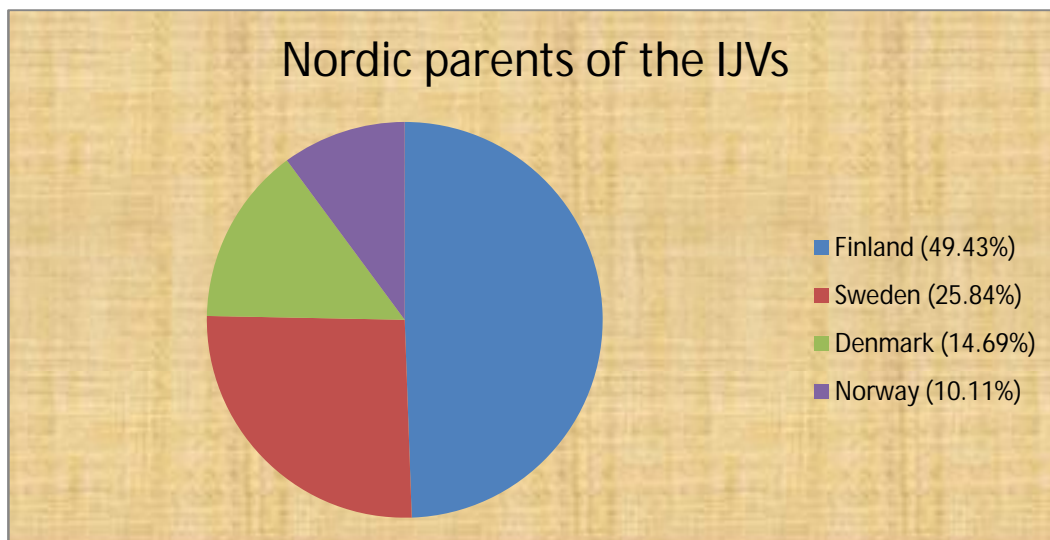
Figure 15.   Nordic parents of IJVs

The location regions of the IJVs (i.e. target regions of IJVs) are presented in figure 16. A detailed analysis reveals that Asia was the most often entered region with 49 IJVs (55.05%), followed by Central and Eastern Europe (CEE) with 16

IJVs (17.97%), and Western Europe with 11 IJVs (12.36%). Further, 7 IJVs (7.86%) were operating in Latin America, 5 IJVs (5.62%) were operating in North America, and one IJV (1.12%) was operating in Africa.
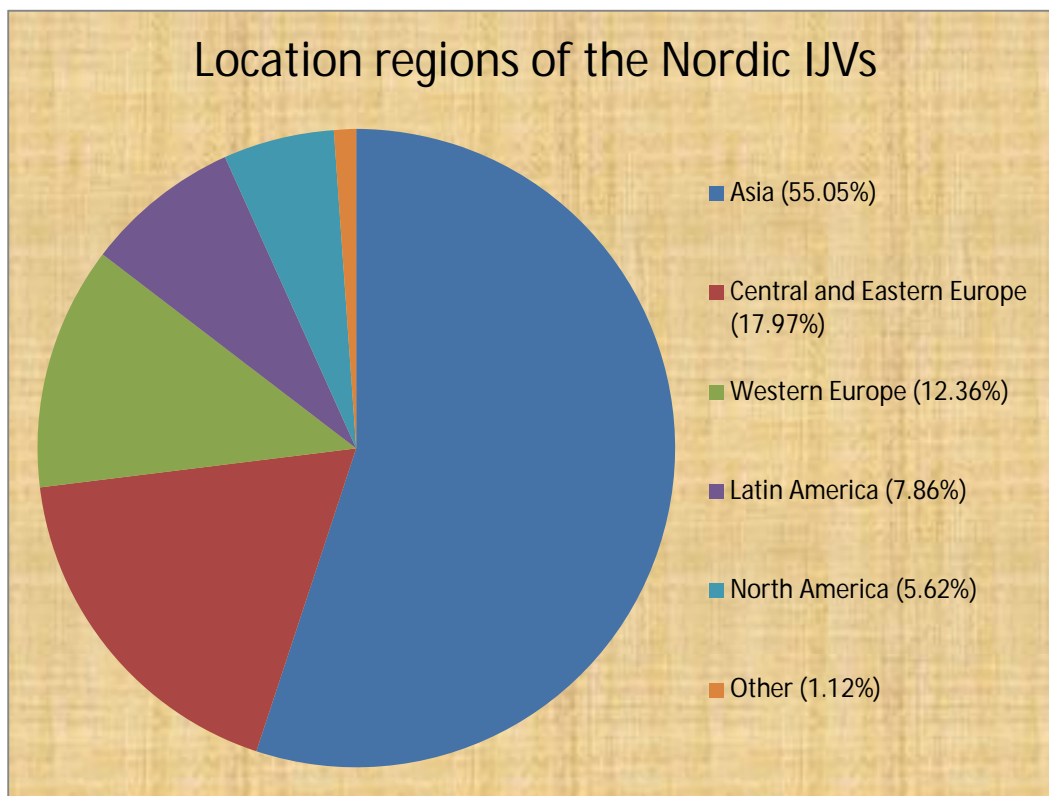
Figure 16. Location regions of the Nordic IJVs

Further, the distribution of host countries of Nordic IJVs is presented in Table 24. There were 32 countries in our sample, indicating substantial variation in the locations of target countries of the IJVs. The table depicts that China was the most often entered country with 25 IJVs, followed by Russia with 7 IJVs, India and Poland both with 5 IJVs, and USA with 4 IJVs. Further, the target countries of Germany, Japan, Norway, Qatar, and South Korea were all with three IJVs. The remaining 22 target countries had either one or two IJVs.

Table 24.   Host countries of Nordic IJVs

Target country	Total	Percentage
China	25	28,1%
Russia	7	7,9%
India	5	5,6%
Poland	5	5,6%
USA	4	4,5%
Germany	3	3,4%
Japan	3	3,4%
Norway	3	3,4%
Qatar	3	3,4%
South Korea	3	3,4%
Australia	2	2,2%
Brazil	2	2,2%
France	2	2,2%
Italy	2	2,2%
Saudi Arabia	2	2,2%
Vietnam	2	2,2%
Argentina	1	1,1%
Bulgaria	1	1,1%
Canada	1	1,1%
Chile	1	1,1%
Finland	1	1,1%
Hungary	1	1,1%
Laos	1	1,1%
Libya	1	1,1%
Slovakia	1	1,1%
South Africa	1	1,1%
Thailand	1	1,1%
Trinidad & Tobago	1	1,1%
Turkey	1	1,1%
UAE	1	1,1%
Ukraine	1	1,1%
Uruguay	1	1,1%
Total	**89**	**100,0%**

The years of Nordic IJV formation varied from 1984 to 2011 as can be seen in table 25. Most of the IJVs (68, 53%) were formed during the 2005-2011, of which the peak year was 2007 in which 17 IJV were formed. Although, in this study one selection criteria of IJVs was that IJV should be formed from year 2000 to year 2011. This criterion was chosen due to the possible erosion of respondent memo-

ries if the IJVs were formed before 2000. However, we received 7 IJVs which were formed before 2000. A decision was made to retain them because respondents themselves were interested to describe those IJVs, and further three of these IJVs were still surviving.

Table 25. Formation year of Nordic IJVs

Year of IJV formation	Total	Percentage
1984	1	1,1%
1989	1	1,1%
1994	1	1,1%
1995	2	2,2%
1998	1	1,1%
1999	1	1,1%
2000	5	5,6%
2001	1	1,1%
2002	8	9,0%
2003	3	3,4%
2004	4	4,5%
2005	6	6,7%
2006	13	14,6%
2007	17	19,1%
2008	9	10,1%
2009	5	5,6%
2010	5	5,6%
2011	6	6,7%
Total	**89**	**100,0%**

The ownership level of IJVs varied from 12,5% to 94,9%, as can be seen in Table 26. The share of minority 1JVs (i.e. 12,5%–49,9%) was 26,96% and share of majority JVs (i.e. 50,1%–94,9%) was about 51,68 %. Further 21,36% of the IJVs were classified as equal 1JVs (i.e. 50%–50%).

Table 26. Nordic parents ownership share in IJVs

Level of ownership	Frequency	Percent
Minority ownership (12,5%–49,9%)	24	26,96%
Equal ownership (50%)	19	21,36%
Majority ownership (50,1%–94,9%)	46	51,68%
Total	89	100%

The study sample further reveals that almost half of the Nordic IJVs were green-field IJVs (50,56%) and about half were acquisition IJVs (49,44%). The distribution of establishment mode of Nordic IJVs is shown in Figure 17.
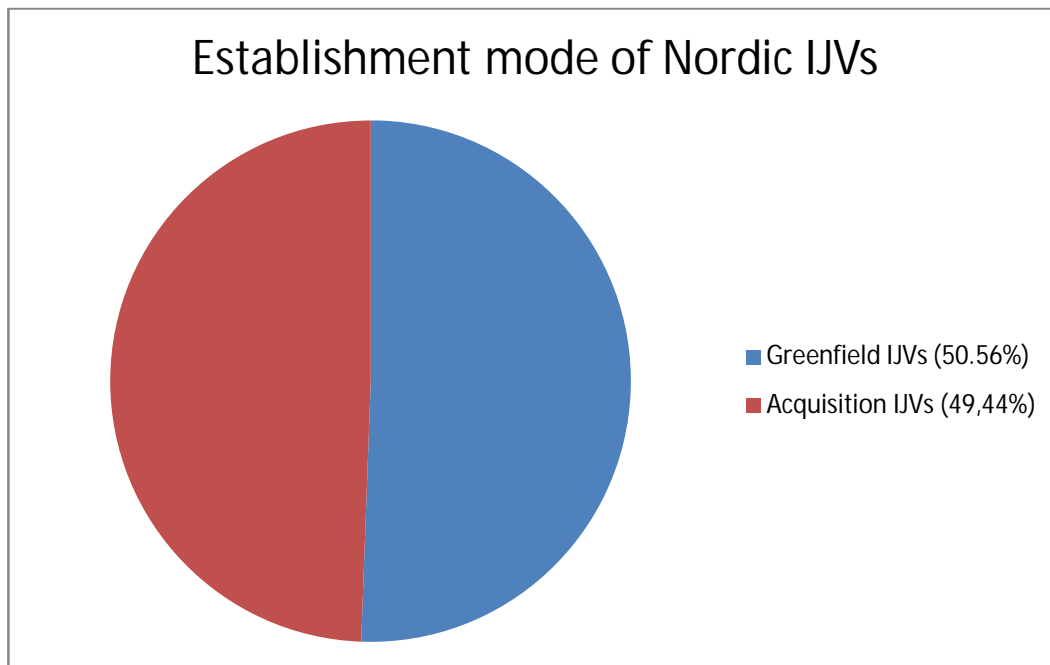
Figure 17.   Establishment mode of Nordic IJVs

The size of the Nordic firms was measured by the number of employees. Figure 18 presents the distribution of the number of employees of the Nordic firms. Figure depicts that 53 Nordic firms (59,55%) had more than 5000 employees. Further, 7 firms (7,86%) had employees between 3000–4999, 10 firms (11,23%) had employees between 1000–2999, 8 firms (9%) had employees between 500–999, and 5 firms (5,61%) had employees between 10–99.

The profile of the key respondents was assessed by their official position held in Nordic firms. Table 27 depicts that mostly respondents were high level executives of Nordic firms. Of the 89 respondents, 67 respondents (72.28%) were CEO, Vice president, business directors, general managers and managing directors; and 6 respondents (6.74%) were the chief financial officers, directors of sales and marketing, and chief operating director. This participation at the highest level of Nordic firms in our sample ensures that the responses come from key boundary spanning officials, who interact with the partner firms.
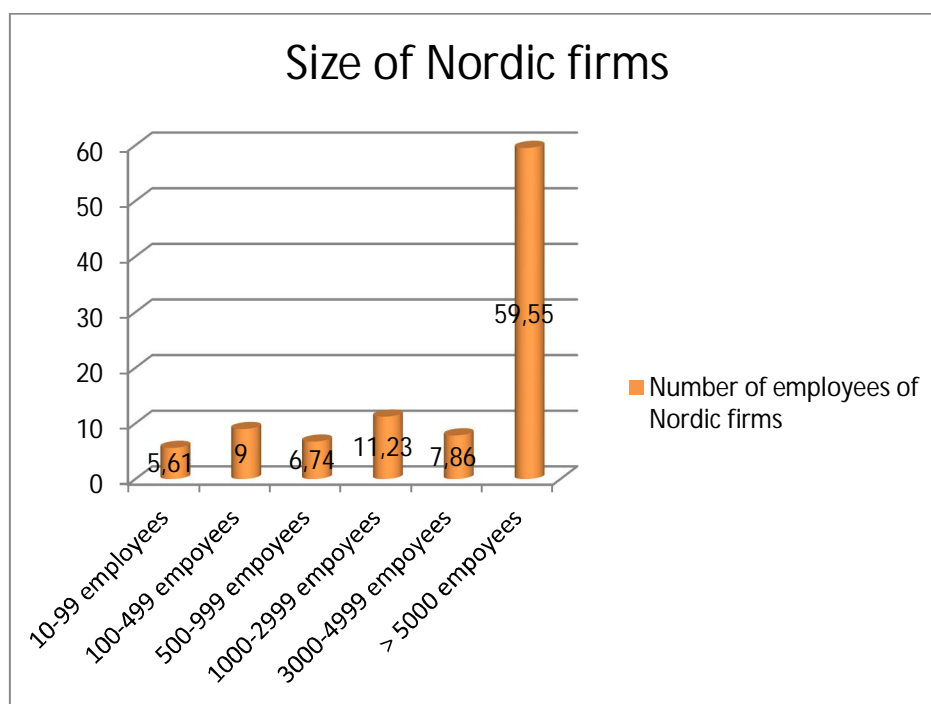
Figure 18.   Distribution of Nordic firm's size

Table 27.   Profile of key respondents

Tile	Frequency	Percent
CEO	7	7,9
CFO	3	3,4
Chairman	1	1,1
Chief operating director	1	1,1
Deputy CEO	1	1,1
Director of Business	11	12,4
Director of sales and marketing	1	1,1
EVP	8	9,0
General manager	9	10,1
Group EVP	3	3,4
Group executive director	1	1,1
Managing Director	3	3,4
President	2	2,2
Senior Vice President	10	11,2
Vice President	11	12,4
Other	17	19,1
Total	89	100,0

Finally, the important characteristics of the study sample are presented and summarized in following Table 28.

Table 28.   Summary of sample characteristics

Sample characteristics	Description
Nordic parents of the IJVs	Finland (44 IJVs), Sweden (23 IJVs), Norway (9 IJVs), Denmark (13 IJVs)
location regions of the IJVs	Asia (49 IJVs), Latin America (7 IJVs), North America (5 IJVs), CEE (16 IJVs), Western Europe (11 IJVs), Other (1 IJV)
Host countries with highest number of Nordic IJVs	China (25 IJVs), Russia (7 IJVs), India (5 IJVs), Poland (5 IJVs),
Year of investment	1984, 1989, 1994, 1998, 1999 (One IJV in each year), 1995 (2 IJVs), 2000 (5 IJVs), 2001 (One IJV), 2002 (8 IJVs), 2003 (3 IJVs), 2004 (4 IJVs), 2005 (6 IJVs), 2006 (13 IJVs), 2007 (17 IJVs), 2008 (9 IJVs), 2009 (5 IJVs), 2010 (5 IJVs), 2011 (6 IJVs)
Nordic parent's ownership in IJVs	< 49 % (17 IJVs), 49 % (7 IJVs), 50% (19 IJVs), 51% (16 IJVs), > 51% (30 IJVs)
Establishment mode of Nordic IJVs	Greenfield (45 IJVs), Acquisition (44 IJVs)
Nordic firm's size	≤ 100 (5 IJVs), 100-499 (8 IJVs), 500-999 (6 IJVs), 1000-2999 (10 IJVs), 3000-4999 (7 IJVs), ≥ 5000 (53 IJVs)

5.2   Two common problems with mail survey

According to Aulakh, Kotabe and Sahay (1996: 1016), in a (single respondent, self-report) mail survey research; there are two types of errors that can result in both sample selection and data collection process. These errors are:

- Non-response biasness
- Common method biasness

Both errors are a type of statistical bias and can occur and affect the results of a survey if:

- Non-respondent of the mailed questionnaire cause any systematic exclusion of the opinions of the participants in certain groups (non-response bias), or

– Respondents provide systematic answers to the questions (i.e. respondents answer the questions in a socially desirable manner) (common method variance).

5.2.1 Assessment of non-response biasness

The non-response biasness raises the issue whether data obtained from respondents are representative of non-respondents. Following the procedure suggested by Mohr and Spekman (1994), Aulakh, Kotabe and Sahay (1996), Sarkar et al. (2001), Krishnan, Martin and Noorderhaven (2006), and Silva, Bradley and Sousa (2012), independent samples t tests was performed for comparing the early respondents (N=48) to the late respondents (N=41) in terms of firm size and industry of Nordic parents.

The results of these t tests are shown in Table 29. There were no significant differences at the 5% significant level between the early and late respondents in terms of firm size (p = .708) and industry (p = .548). [Levene's test for equality of variances was non-significant for the firm size (p = .883) and for industry (p = .230). This indicates that non-response bias is not an issue.

Table 29. Independent samples t-test by firm size and industry for early and late respondents

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diffe-rence	Std. Error Difference
Size of firm	Equal variances assumed	,022	,883	-,376	87	,708	-,112	,297
	Equal variances not assumed			-,375	84,096	,708	-,112	,298
In-dustry	Equal variances assumed	1,459	,230	-,603	87	,548	-,046	,076
	Equal variances not assumed			-,597	80,334	,552	-,046	,077

5.2.2 Assessment of common method variance

According to Aulakh, Kotabe and Sahay (1996: 1016), Harman's one factor test is used to address the common method variance issue. Therefore, Harman's one factor test was performed. Table 30 shows the results of Harman's one factor test.

Using the eigenvalue greater than 1 criterion, 11 factors emerged with eigenvalues ranging from 1.11 to 8.83. The first factor explained 43 % of variance. This factor structure does not point to a single or general factor that accounts for most of the variability in the data, suggesting that common method variance is not a significant feature of the data of the study.

Table 30.   The results of Harman's single factor test

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	8,839	43,994	43,994
2	4,659	15,081	59,075
3	4,537	13,974	73,049
4	3,643	5,844	78,892
5	3,582	5,295	84,188
6	2,512	4,654	88,842
7	2,365	3,318	92,160
8	2,299	2,721	94,881
9	1,484	2,586	97,468
10	1,155	1,405	98,872
11	1,114	1,128	100,000
Extraction Method: Principal Component Analysis.			

5.3   Validating the measurement model

The quality of the measurement model is assessed by looking at the individual item reliability (i.e. assessing the indicator loadings), the internal consistency of a given block of indicators (i.e. assessing the composite reliability, and AVE), and discriminant validity (i.e. assessing the AVE, and indicator cross-loadings) (Chin 1998; Gotz, Liehr-Gobbers & Krafft 2010; Hair, Ringle & Sarstedt 2011). In the followings, the results of these evaluation types are discussed in detail.

Firstly, the individual-item reliability was assessed by examining loadings of the measures on their respective constructs. A rule of thumb is that loadings should be greater than .7 to demonstrate individual item reliability. However, according to Hulland (1999) and Gotz, Liehr-Gobbers and Krafft (2010), loadings greater than 0.4 may also be acceptable at the early stages of scale development. An examination of the initial measurement model revealed that of the 36 items, 33 had

loadings greater than .7, and 3 items had loadings of less than .7. Cultural sensitivity construct has 2 indicators out of 5 with poor loadings of .6695, and .4672, and opportunism has one indicator out of 8 with poor loading of .6417. These 3 items with poor loadings were removed from subsequent analysis. Table 31 provides the list of individual items and their loadings. Except the 3 indicators with poor loadings, the remaining loadings are above the cut-off of .7 as suggested by Hulland (1999) and Gotz, Liehr-Gobbers and Krafft (2010). This indicates that all of the items demonstrate good individual-item reliabilities.

Table 31.   The measurement model: Individual items loadings

Constructs	Items	Loadings
Communication	COM1	0,9712
	COM2	0,9624
	COM3	0,8662
	COM4	0,9513
	COM5	0,9298
Cultural sensitivity	CS1	0,8424
	CS2	0,8271
	CS3	0,8205
	CS4	0,6695
	CS5	0,4672
Opportunism	OPP1	0,9226
	OPP2	0,8969
	OPP3	0,9318
	OPP4	0,878
	OPP5	0,8909
	OPP6	0,6417
	OPP7	0,8212
	OPP8	0,7735
Trust	TRU1	0,9187
	TRU2	0,9586
	TRU3	0,9137
	TRU4	0,9416
	TRU5	0,9288
	TRU6	0,9619
	TRU7	0,9461
Resource complementary	RC1	0,9395
	RC2	0,9628
Performance	PER1	0,9261
	PER2	0,8526
	PER3	0,7957
	PER4	0,8779
Ownership share	OS	1
Prior alliance experience with partner firm	PAE	1
Interdependence	INTE	1
Reputation	REP	1
Expected longevity of IJV	EL	1

Next, the **composite reliability** of constructs was assessed by using the internal consistency measure developed by Fornell and Larcker (1981), who argue that their measure of internal consistency is superior to Cronbach's alpha since the loadings estimated within the causal model are used in its computation. The internal consistency values for the constructs are reported in table 32. All constructs exhibit composite reliabilities of more than .7, thus indicating that the reliabilities of all the constructs are adequate (Hulland 1999; Gotz, Liehr-Gobbers & Krafft 2010).

In addition, **Average variance extracted (AVE)** is also used to examine the composite reliability. It is recommended that AVE should be over 0.5 in order to demonstrate composite reliability (Gotz, Liehr-Gobbers & Krafft 2010). As can be seen in table 32, all the constructs have AVE greater than 0.5, which is an indicative of good composite reliability.

Further, **AVE analysis** can also be used to assess the **discriminate validity of the measurement** model. For discriminant validity, the square root of AVEs of the latent variables should be greater than their inter-correlation, i.e. each latent variable should share more variance with its own indicators than with another (Fornell & Larcker 1981 referred in Gotz, Liehr-Gobbers & Krafft 2010). From Table 32, it can be seen that the square of the AVEs of the latent constructs is higher than the correlation among any other latent variables. Thus, indicators for each latent variable shared more variance between their respective latent variable components.

Finally, it is suggested that discriminant validity can also be evaluated by looking at the **indicator cross-loadings** (Hair, Ringle & Sarstedt 2011). Each latent variable should share more variance with its own block of indicators than with other latent variable indicators. This means that all the loadings of the measurement items on their assigned latent variables should be larger than any other loading. As can be seen in Table 33, all measures loaded higher on intended constructs than on other constructs. Overall, these statistics indicate that the measurement model is sufficiently strong to enable interpretation of structural estimates. In the followings, the structural model evaluation, and the results are discussed.

Table 32. Composite reliability, AVE, and square root of AVE and correlation matrix

	CR	AVE	COM	CS	INTE	LG	OPP	OS	PAE	PER	RC	REP	TRU
COM	0,9729	0,8779	*0,9369*	0	0	0	0	0	0	0	0	0	0
CS	0,8913	0,7322	0,4353	*0,8557*	0	0	0	0	0	0	0	0	0
INTE	1	1	0,112	0,1341	*1*	0	0	0	0	0	0	0	0
LG	1	1	0,4084	0,4417	0,0985	*1*	0	0	0	0	0	0	0
OPP	0,9588	0,7695	-0,4619	-0,4972	-0,1827	-0,4837	*0,8772*	0	0	0	0	0	0
OS	1	1	0,0474	0,0425	0,4039	0,0929	0,0316	*1*	0	0	0	0	0
PAE	1	1	0,0238	-0,1863	-0,1346	0,0007	0,2195	0,0844	*1*	0	0	0	0
PER	0,9218	0,7471	0,4203	0,4501	0,1805	0,4576	-0,4388	0,0675	0,0234	*0,8643*	0	0	0
RC	0,95	0,9048	0,4611	0,4258	0,2799	0,4587	-0,4159	0,1339	-0,1545	0,4589	*0,9512*	0	0
REP	1	1	0,4494	0,4013	0,24	0,4168	-0,5077	0,2042	-0,1781	0,4838	0,4371	*1*	0
TRU	0,9811	0,8811	0,428	0,4667	0,1622	0,4859	-0,4599	0,07	-0,1371	0,4307	0,4871	0,4806	*0,9905*

Note: The diagonal (in silver colour) shows the square root of AVE

Table 33. Cross loadings of the measurement model

	COM	CS	INTE	LG	OPP	OS	PAE	PER	RC	REP	TRU
COM1	0,9712	0,4019	0,1294	0,4791	-0,4419	0,0461	-0,045	0,4077	0,4403	0,4558	0,4006
COM2	0,9624	0,4148	0,0903	0,4082	-0,4374	0,0407	-0,0006	0,4694	0,4271	0,4417	0,5982
COM3	0,8661	0,4478	0,018	0,4689	-0,4227	0,0236	0,1377	0,3871	0,3655	0,4069	0,4563
COM4	0,9512	0,4951	0,1422	0,4645	-0,4408	0,0963	0,0859	0,4329	0,4327	0,4562	0,4789
COM5	0,9301	0,5038	0,1237	0,4105	0,5454	0,0128	-0,034	0,4935	0,4255	0,4732	0,4329
CS1	0,4444	0,8685	0,1098	0,4171	-0,4178	0,0468	-0,2011	0,4459	0,4205	0,4094	0,4547
CS2	0,4908	0,8414	0,2444	0,4524	-0,4639	0,1748	-0,0451	0,4089	0,4195	0,4312	0,4842
CS3	0,4188	0,857	-0,01	0,419	-0,4887	-0,1132	-0,2307	0,4545	0,407	0,4032	0,4295
INTE	0,112	0,1341	1	0,0985	-0,1827	0,4039	-0,1346	0,1805	0,2799	0,24	0,1622
LG	0,4084	0,4417	0,0985	1	-0,4837	0,0929	0,0007	0,4576	0,4587	0,4168	0,4859
OPP1	-0,4774	-0,4292	-0,0857	-0,4473	0,9161	0,0721	0,162	-0,4747	-0,4679	-0,4279	-0,4967
OPP2	-0,4211	-0,4723	-0,1361	-0,4617	0,9058	-0,0338	0,2213	-0,4817	-0,4165	-0,4248	-0,4067
OPP3	-0,4923	-04776	-0,0929	-0,4321	0,937	0,0685	0,2542	-0,4158	-0,4939	-0,4476	-0,4181
OPP4	-0,4266	-0,4334	-0,1522	-0,4044	0,8982	0,0153	0,1923	-0,4906	-0,4116	-0,4896	-0,4103
OPP5	-0,4374	-0,4183	-0,3205	-0,4483	0,8924	-0,0742	0,232	-0,4492	-0,4862	-0,4988	-0,4807
OPP7	-0,5473	-0,4576	-0,1828	-0,3445	0,8061	0,1593	0,2629	-0,4559	-0,3872	-0,3931	-0,4108
OPP8	-0,4682	-0,4569	-0,1662	-0,3293	0,7721	0,0095	-0,0003	-0,4556	-0,4786	-0,3075	-0,4178
OS	0,0474	0,0425	0,4039	0,0929	0,0316	1	0,0844	0,0675	0,1339	0,2042	0,07
PAE	0,0238	-0,1863	-0,1346	0,0007	0,2195	0,0844	1	0,0234	-0,1545	-0,1781	-0,1371
PER1	0,4591	0,4832	0,2857	0,4612	-0,4576	0,1362	-0,0755	0,9261	0,4178	0,4049	0,4372
PER2	0,4659	0,4362	0,0194	0,479	-0,4973	0,0709	0,1584	0,8526	0,3188	0,3425	0,4327
PER3	0,3466	0,3759	0,0196	0,3896	-0,4386	-0,0042	-0,0566	0,7957	0,3172	0,326	0,4939
PER4	0,4919	0,4731	0,2354	0,4327	-0,4784	0,0039	0,0516	0,8779	0,3993	0,4666	0,4727
RC1	0,4232	0,4502	0,1477	0,3805	-0,4986	0,0716	-0,1276	0,38	0,9395	0,4217	0,4551
RC2	0,4222	0,4407	0,3603	0,4729	-0,4477	0,1717	-0,1626	0,4822	0,9628	0,4674	0,4736
REP	0,4494	0,4013	0,24	0,4168	-0,5077	0,2042	-0,1781	0,4838	0,4371	1	0,4806
TRU1	0,4820	0,4687	0,1454	0,4017	-0,4558	0,1031	0,0171	0,4679	0,4582	0,4506	0,9186
TRU2	0,4092	0,4196	0,0892	0,4721	-0,4974	0,0385	-0,1441	0,4556	0,4483	0,4741	0,9586
TRU3	0,3104	0,4622	0,1714	0,4888	-0,4525	0,0278	-0,2755	0,4621	0,4432	0,4206	0,9137
TRU4	0,4946	0,4146	0,1476	0,4598	-0,4786	0,1178	-0,0639	0,4165	0,4494	0,4678	0,9416
TRU5	0,4206	0,4978	0,1437	0,4041	-0,4181	0,0088	-0,166	0,4602	0,4611	0,4661	0,9289
TRU6	0,6006	0,4194	0,1859	0,4507	-0,4325	0,0712	-0,097	0,4353	0,4694	0,5183	0,9619
TRU7	0,4303	0,4393	0,1819	0,4247	-0,4306	0,0883	-0,1842	0,4265	0,4623	0,4682	0,9462

5.4 Assessment of the overall structural model

It is recommended that the assessment of the structural model should be conducted by 1) looking at R^2 (coefficient of determination) for dependent latent variables, 2) path loadings, and 3) significance levels (Gotz, Liehr-Gobbers & Krafft 2010; Hair, Ringle & Sarstedt 2011). Therefore, R^2 (coefficient of determination) and the sign and significance of path coefficients are used to assess the structural model. Assessment of the structural mode is depicted in figure 19. An examination of the R^2 values revealed that the variance explained in endogenous constructs ranges from .4007 to .8052. The structural equation related to trust represents the highest R^2 value (0.8696) meaning that the research model can explain 86,96% of the variance in that dependent model. In the case of opportunism and performance, R^2 values are .8052 and .4007 respectively. Overall, R^2 values of trust, opportunism and performance are sufficiently high, which shows the quality of structural model.

Further the assessment of the significant levels reveals that 11 out of 17 structural relationships in the model are statistically significant, while 6 are not. When assessing the impact of social and structural antecedent factors on trust, reputation ($\beta = .23$, $p < .01$), communication ($\beta = .28$, $p < .01$), cultural sensitivity ($\beta = .14$, $p = .05$), and expected longevity of IJVs ($\beta = .16$, $p = .01$) have a statistically significant positive relationship with trust. When assessing the impact of social and structural antecedent factors on opportunism, reputation ($\beta = -.21$, $p < 0.01$), communication ($\beta = -.33$, $p < .01$), cultural sensitivity ($\beta = -.40$ $p < .01$), and interdependence ($\beta = -.14$, $p = .05$) have a statistically significant negative relationship with opportunism. While ownership share ($\beta = .19$, $p < .01$) has significant positive relationship with opportunism. Regarding the impact of opportunism on trust, the relationship is negative and significant ($\beta = -.28$, $p < .01$). Further, evaluating the relationships between trust and IJV performance, trust has statistically significant and positive relationship with IJV performance ($\beta = .55$, $p < .01$). Thus, when looking at the p-levels, almost 64 % of the structural relationships are statistically significant. However, according to Falk and Miller (1992), all path coefficients give a relevant empirical contribution to the predicted construct if path coefficients reach or exceed 0.10. If the same rule was used here, altogether 11 structural relationships would have been declared significant, because of regression coefficient of 0.10 or above. This would have led to the conclusion that 11 structural relationships make a statistically significant impact. However, the minimum path coefficients found in international business studies on trust in international strategic alliances and IJVs is .12 (e.g. Aulakh, Kotabe & Sahay 1996). Following this base of path coefficients also results in 11 structural relationships.
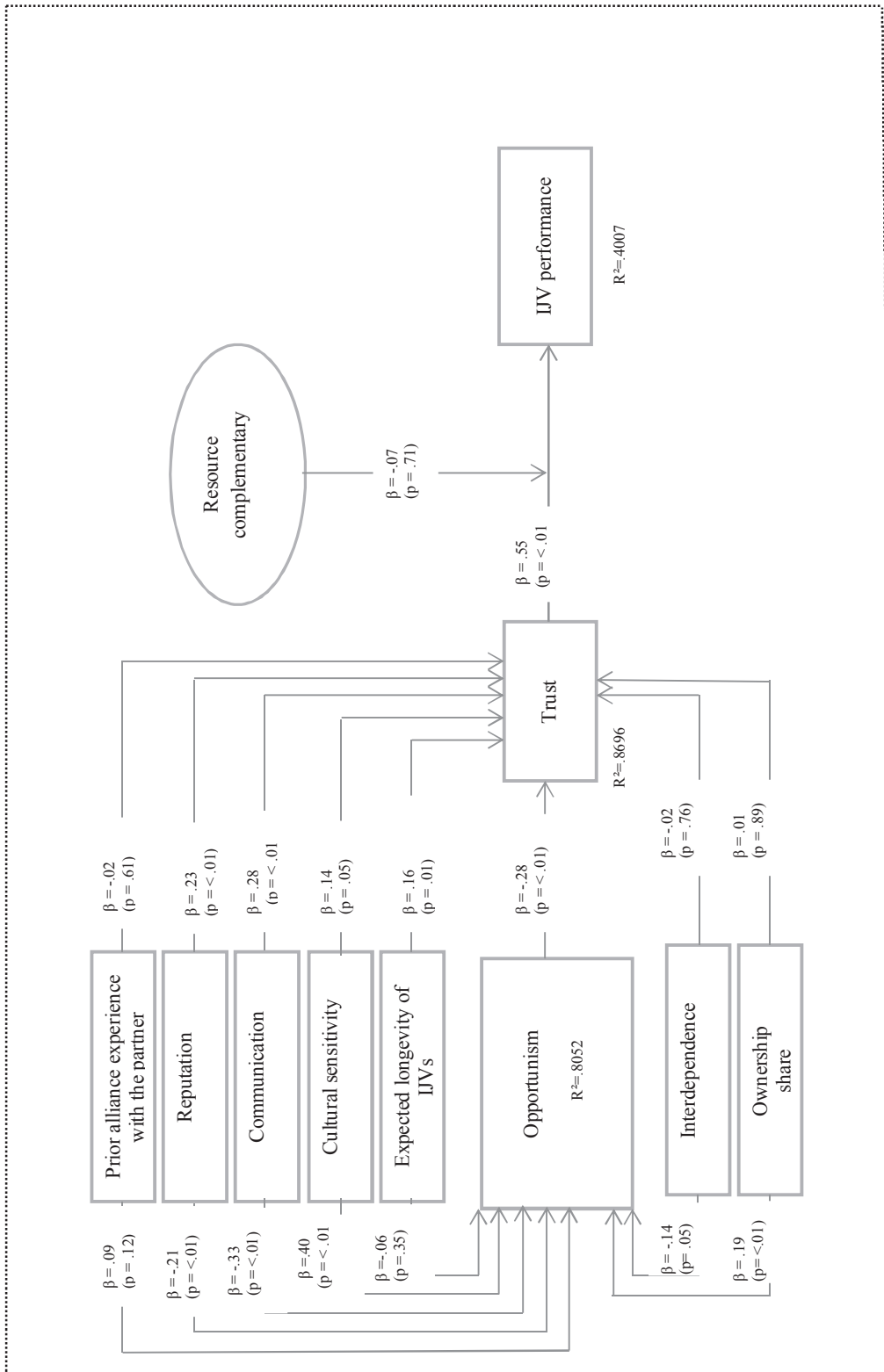
Figure 19.   The empirical model of the antecedents of trust and trust-performance relationship in IJVs

5.5   Analyzing the individual structural models

This section aims to assess the structural models of the study. It is recommended that the assessment of the structural model should be conducted by 1) looking at R^2 (coefficient of determination) for dependent latent variables, 2) path loadings, and 3) significance levels (Gotz, Liehr-Gobbers & Krafft 2010; Hair, Ringle & Sarstedt 2011). Therefore, R^2 (coefficient of determination) and the sign and significance of path coefficients are used to assess the structural model. In the following the results of the structural model are discussed in detail.

5.5.1   *Impact of social antecedent factors on opportunism and trust*

An examination of the R^2 values revealed that the variance explained in endogenous constructs of opportunism is 0.8052 (i.e. model can explain 80,52% of the variance in opportunism). In the case of trust, R^2 value is .8696 (i.e. model can explain 86,96% of the variance in trust). Overall, R^2 values of opportunism and trust are sufficiently high, which shows the quality of structural model (see figure 20).

The structural relationship between prior alliance experience and trust was captured in terms of hypothesis H1a, and the structural relationship between prior alliance experience and opportunism was captured in terms of H1b. Hypothesis H1a stated that prior alliance experience with the partner will have a positive relationship with the trust. Hypothesis H1b stated that prior alliance experience with the partner will have a negative relationship with the opportunism. However, prior alliance experience is neither related to trust ($\beta = -.02$, $p = .61$) nor to opportunism ($\beta = .09$, $p = .12$). Therefore, no support is found for Hypotheses H1a and H1b.

The structural relationship between reputation and trust was captured in terms of hypothesis H2a, and the structural relationship between reputation and opportunism was captured in terms of H2b. Hypothesis H2a stated that reputation will have a positive relationship with the trust. Hypothesis H2b stated that reputation will have a negative relationship with the opportunism. According to expectations, reputation is positively related to trust ($\beta = .23$, $p < .01$) and negatively related to opportunism ($\beta = -.21$, $p < 0.01$), thereby supporting Hypotheses H2a and H2b.

The structural relationship between communication and trust was captured in terms of hypothesis H3a, and the structural relationship between communication and opportunism was captured in terms of H3b. Hypothesis H3a stated that com-

munication will have a positive relationship with the trust. Hypothesis H3b stated that communication will have a negative relationship with the opportunism. Results indicate that the effect of communication on trust is positive (β = .28, p < .01), and its effect on opportunism is negative (β = -.33, p < .01). Therefore Hypotheses 3a and 3b are supported.

The structural relationship between cultural sensitivity and trust was captured in terms of hypothesis H4a, and the structural relationship between cultural sensitivity and opportunism was captured in terms of H4b. Hypothesis H4a stated that cultural sensitivity will have a positive relationship with the trust. Hypothesis H4b stated that cultural sensitivity will have a negative relationship with the opportunism. Results suggest that the effect of cultural sensitivity on trust is positive (β = .14, p = .05), and its effect on opportunism is negative (β = -.40 p < .01). Therefore Hypotheses 4a and 4b are supported.

Finally, the structural relationship between expected longevity of IJVs and trust was captured in terms of hypothesis H5a, and the structural relationship between expected longevity of IJVs and opportunism was captured in terms of H5b. Hypothesis H5a stated that expected longevity of IJVs will have a positive relationship with the trust. Hypothesis H5b stated that expected longevity of IJVs will have a negative relationship with the opportunism. Results indicate that the impact of expected longevity of IJVs on trust (β = .16, p = .01) is significant and positive, however its impact on opportunism (β = -.06, p = .35) is not significant. Thus Hypothesis H5a is supported, but not Hypothesis H5b.

5.5.2   *Impact of structural antecedent factors on opportunism and trust*

The impact of structural antecedent factors on opportunism and trust are depicted in Figure 21. The structural relationship between interdependence and trust was captured in terms of hypothesis H6a, and the structural relationship between interdependence and opportunism was captured in terms of H6b. Hypothesis H6a stated that interdependence will have a positive relationship with the trust. Hypothesis H6b stated that interdependence will have a negative relationship with the opportunism. Regarding the impact of interdependence on trust (β = −.025, p = .76), the path coefficient is statistically non-significant and sign is reversed. However, its impact on opportunism is significant and sign is according to hypothesized direction (β = −.14, p = .05). Thus Hypothesis 6a is thus not supported, but Hypothesis 6b is supported.
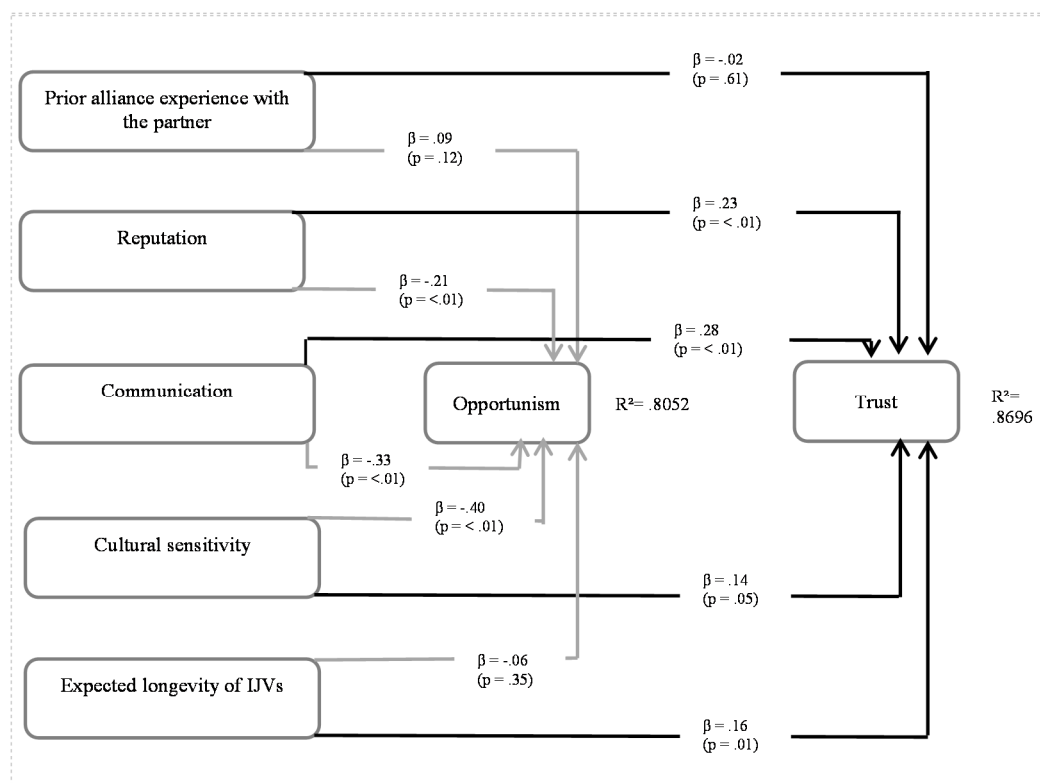
Figure 20.   Impact of social antecedent factors on opportunism and trust

The structural relationship between ownership share and trust was captured in terms of hypothesis H7a, and the structural relationship between ownership share and opportunism was captured in terms of H7b. Hypothesis H7a stated that ownership share will have a positive relationship with the trust. Hypothesis H7b stated that ownership share will have a negative relationship with the opportunism. The results reflect interesting impact of ownership share on trust and opportunism. Contrary to expectations, ownership share is not significantly related to trust ($\beta =$ .01, p = .89), and further its relation to opportunism is significant but with reversed sign ($\beta = .19$, p < .01). Therefore, neither Hypothesis 7a is supported, nor the Hypothesis 7b.

5.5.3   *Impact of opportunism on trust*

The impact of opportunism on trust is depicted in Figure 22. The structural relationship between opportunism and trust was captured in terms of hypothesis H8, which stated that opportunism will have a negative relationship with trust in IJVs. The results ($\beta = -.28$, p < .01) indicate that the path coefficient is statistically significant and β is in the hypothesized direction, thereby supporting Hypothesis H8.
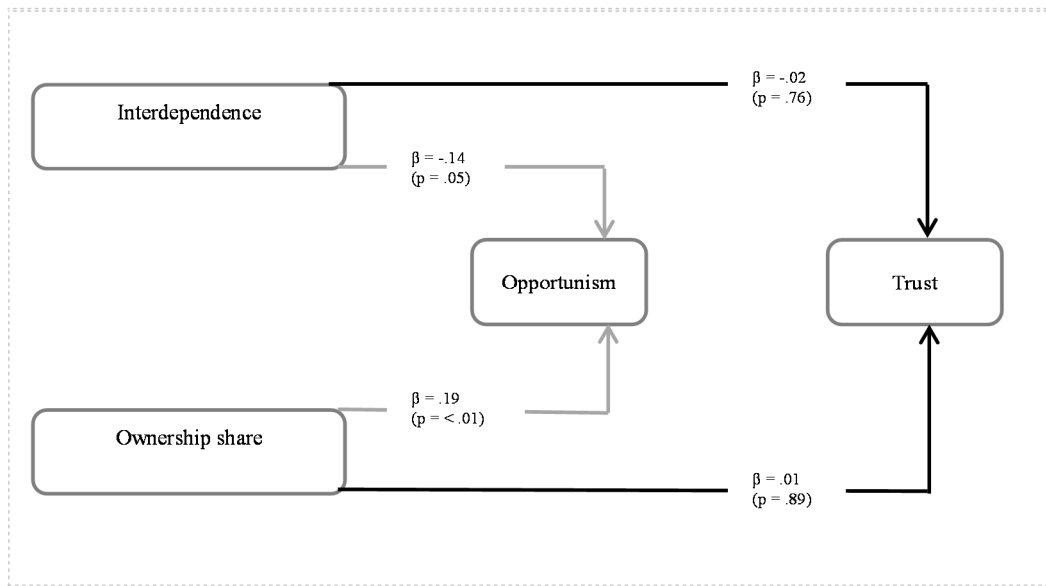
Figure 21.   Impact of structural antecedent factors on opportunism and trust

5.5.4   *Impact of trust on IJV performance*

The R² value of IJV performance is .4004 which reveals that the model can explain 40,04% of the variance in IJV performance. The R² value of IJV performance and the impact of trust on IJV performance are depicted in Figure 23. The structural relationship between trust and IJV performance was captured in terms of hypothesis H9, which stated that trust will have a positive relationship with IJV performance. As expected, trust is significantly related to IJV performance (β = .55, p < .01), thereby supporting Hypothesis 8.
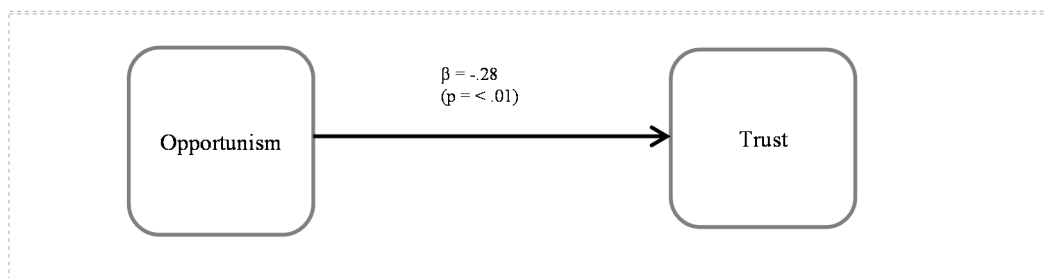

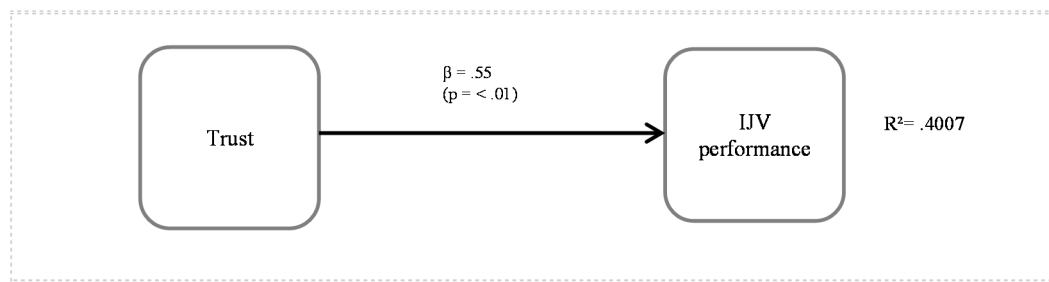**Figure 22.**   Impact of trust on IJV performance

Figure 23.   Impact of trust on IJV performance

5.5.5   *Moderation Impacts on trust-performance relationship – resource complementary*

The moderating impact of resource complementary on trust-performance relationship is depicted in Figure 24. The structural relationship about the impact of resource complementary on trust-performance relationship was captured in terms of hypothesis H10, which stated that resource complementary will have a positive impact on trust-performance relationship in IJVs. Contrary to expectations, the moderating impact of resource complementary is not significant and further sign is reversed (β = -.07, p > .05), thus indicating no support for Hypothesis 10.
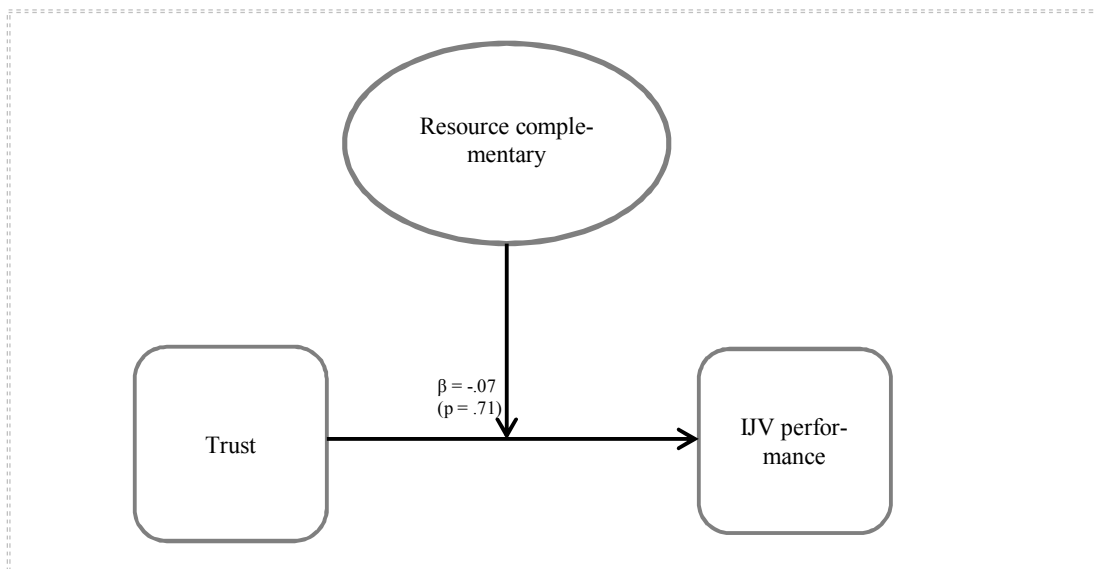

Figure 24.   Moderation impact of resource complementary on trust-performance relationship

Finally, the results of the structural model are summarized in Table 34. The R^2 values reveal that the variance explained in endogenous constructs ranges from

.4007 to .8052. The structural equation related to trust represents the highest R^2 value (0.8696) meaning that the research model can explain 86,96% of the variance in that dependent model. In the case of opportunism and performance, R^2 values are .8052 and .4007 respectively. Overall, R^2 values of trust, opportunism and performance are sufficiently high, which shows the quality of structural model.

Regarding the social and structural antecedent factors of trust, results depict that: reputation, communication, cultural sensitivity, and expected longevity of IJVs have significant and positive relationship with trust. Therefore, Hypotheses H2a, H3a, H4a, and H5a are supported. Regarding the impact of social and structural antecedent factors on opportunism, results depict that: reputation, communication, cultural sensitivity, and interdependence have significant and negative relationship with opportunism. Therefore, Hypotheses H2b, H3b, H4b, and H6b are supported. Further the impact of opportunism on trust is negative, and the impact of trust on IJV performance is positive. Therefore, Hypotheses H8 and H9 are supported.

Table 34.   Evaluation of structural model and hypotheses: R² values and standardized PLS coefficients

Dependent Variable	Independent Variable	Hypotheses	Hypothesized Sign	Standardized Coefficients	Results	Accept\Reject
Trust (R² = .8696)	Prior alliance experience	H1a	+	-.02	N.S	Reject
	Reputation	H2a	+	.23	S***	Accept
	Communication	H3a	+	.28	S***	Accept
	Cultural sensitivity	H4a	+	.14	S**	Accept
	Expected longevity of IJVs	H5a	+	.16	S***	Accept
	Interdependence	H6a	+	-.025	N.S	Reject
	Ownership share	H7a	+	.01	N.S	Reject
	Opportunism	H8	-	-.28	S***	Accept
Opportunism (R² = .8052)	Prior alliance experience	H1b	-	.09	N.S	Reject
	Reputation	H2b	-	-.21	S***	Accept
	Communication	H3b	-	-.33	S***	Accept
	Cultural sensitivity	H4b	-	-.40	S***	Accept
	Expected longevity of IJVs	H5b	-	-.06	N.S	Reject
	Interdependence	H6b	-	-.14	S**	Accept
	Ownership share	H7b	-	.19	S***	Reject
Performance (R² = .4007)	Trust	H9	+	.55	S***	Accept
	Trust × Resource complementary	H10	+	-.07	N.S	Reject

** .02 $\leq$ p $\leq$ 0.05
*** p $\leq$ 0.01

6 SUMMARY AND CONCLUSIONS

This chapter starts with a summary discussion of the key results of this study. The next section presents the key theoretical and empirical contributions of the study. This discussion is followed by the managerial implications based on the findings of the study. The last section refers to the limitations of the study, and the research areas that can be explored in future research.

6.1 Key results of the study

The central concern in the IJV literature has been the parent's dissatisfaction with the performance of IJVs, and trust has been suggested as a key determinant of it. However, limited empirical evidence exists to substantiate a positive relationship between trust and performance of IJVs, and further there is a limited understanding of the antecedents of trust. The purpose of this study was to investigate the antecedents of trust and to examine the trust–performance relationship in IJVs. In this study the conceptual framework of the antecedents of trust and trust-performance relationship is drawn from social exchange theory (SET) and transaction cost theory (TCT). The framework consists of five social factors (i.e. prior alliance experience with partner, reputation, communication, cultural sensitivity, and expected longevity of IJVs) from SET and two structural factors (ownership share, and interdependence) from TCT that are considered as potential antecedent factors of trust. Further, the framework proposes a positive linkage between inter-partner trust and IJV performance based on the logic of SET, and it is suggested that inter-partner resource complementary (an important structural factor from TCT) moderates the trust-performance relationship. The empirical testing is based on quantitative analysis of 89 Nordic IJVs operating in Asia, Europe, and America. The quantitative data is analyzed by using the structural modeling approach with PLS method and some interesting results were discovered.

Among the social antecedent factors of trust, four of five antecedent factors have found support. Unexpectedly the hypothesis H1a, predicting a positive relationship between prior alliance experience with the partner and trust, was not supported. This finding contradicts with the logic of SET (e.g. Blau 1964; Parkhe 1998a, 1998b; Inkpen & Currall 1998; Nielsen 2001) and with finding from prior empirical studies (e.g. Jennings et al. 2000; Boersma, Buckley & Ghauri 2003; Dyer & Chu 2011). This suggests that experience gained from prior alliance with the partner either has little transferability to the new IJV setting or it loses its importance during the course of IJV operations. However, this finding is in accord-

ance with the finding of Inkpen and Curral (1997) study that analyzed 35 Japanese IJVs operating in North America.

The results of the remaining four social antecedent factors of trust indicate that reputation, communication, culture sensitivity, and expected longevity of IJVs have a positive influence on the development of trust, thus providing support for H2a, H3a, H4a and H5a. These findings are in accordance with the logic of SET (e.g. Blau 1964; Parkhe 1998a, 1998b). Further, these findings are also consistent with the earlier empirical research that has examined the reputation (e.g. Ganesan 1994; Jennings et al. 2000; Boersma, Buckley & Ghauri 2003), cultural sensitivity (e.g. Johnson et al. 1996; Boersma, Buckley & Ghauri 2003; Voss et al. 2006), communication (e.g. Aulakh, Kotabe & Sahay 1996; Kwon 2008; Ybarra & Turk 2009; Silva, Bradley & Sousa 2012), and expected longevity (e.g. Aulakh, Kotabe & Sahay 1996; Sako 1998; Boersma, Buckley & Ghauri 2003; Poppo, Zhou & Ryu 2008) as important determinants of trust.

Regarding the impact of these five social antecedent factors on opportunism, three of five antecedent factors have found support. Except for prior alliance experience (i.e. H1b) and expected longevity of IJVs (H5b), the remaining three social antecedent factors of reputation, communication and culture sensitivity are found to reduce opportunism, thus supporting for H2b, H3b, and H4b. This suggests that these three social antecedent factors are not only determinants of trust, but also reduce the opportunism. These findings have important implications for transaction cost scholars that only consider structural characteristics of IJV as deem necessary to prevent opportunistic behavior (e.g. Hennart & Zeng 2005).

Further, the structural antecedent factors of interdependence and ownership share are not found to have a positive influence on the development of trust, thus providing no support for hypotheses H6a and H7a. These findings are in direct contrast to Parkhe (1998a, 1998b) and Lui, Wong and Liu (2009) suggestions that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust. These findings are also in direct contrast to transaction cost economists (e.g. Hennart & Zeng 2005) logic that chosen structural characteristics of IJV can engender trust because they limit the opportunistic behavior of IJV partners. In relation to the impact of these structural antecedent factors on opportunism, increase in symmetric interdependence (i.e. H6b) is found to reduce opportunism and increase in equivalent ownership share (i.e. H7b) is found to increase opportunism. Therefore findings support H6b and reject H7b. The significant and negative relation between increases in symmetric interdependence and opportunism ($\beta = -.14$, $p = .05$) is in accordance with the suggestion of Das and Rahman (2002) and the findings of Zeng (1998) based on transac-

tion cost theory. This suggests that increase in symmetric interdependence reduces the partner's opportunism in IJVs. However, a significant and positive relation between increases in equivalent ownership share and opportunism ($\beta = .19$, $p < .01$) is found. This finding challenges the argument advanced by Bleeke and Ernst (1991) and Madhok (1995a) that when each partner puts in an equal ownership share, commitment to an IJV is maximized and therefore risk of opportunistic behavior is minimized.

Further in relation to H8, the findings suggest that opportunistic behavior has a negative influence on trust. This supports H8 and is corroborated by the findings of Morgan and Hunt (1994), and Silva, Bradley and Sousa (2012), who found that opportunistic behavior has a significant negative impact on trust. Inkpen and Currall (1997) also found that forbearance from opportunistic behavior indicates trusting behavior. Further results support H9, which states that trust exerts a positive influence on performance of IJVs. This result is in line with previous research findings (e.g. Lane, Salk & Lyles 2001; Ng, Lau & Nyaw 2007; Nielsen 2007; Kwon 2008; Nielsen & Nielsen 2009; Bener & Glaister 2010) and shows that trust plays a key role in achieving the superior IJV performance. Finally, the results do not support H10, which states that resource complementary among the IJV partners enhances the positive relationship between trust and performance. This finding is in contrast to argument advanced by Madhok (1995b) that trust is not sufficient in and of itself to hold IJV performance for long time until structural base of IJV in the form of resource complementary is strong. This suggests that resource complementary does not explain the trust-performance relationship in IJVs.

In conclusion, the results of the study suggest that trust has a positive effect on the performance of the IJVs. The findings also indicate that reputation, communication, cultural sensitivity, expected longevity of IJVs, and opportunism are the key antecedents of trust. Further, reputation, communication, cultural sensitivity, and interdependence are the factors which attenuate opportunism. Contrary to expectations, the moderation effect of resource complementary on trust-performance relationship is not significant.

6.2   Theoretical and empirical contributions

This dissertation offers useful theoretical and empirical contributions to the existing literature on trust in IJVs. Firstly, this study examines the social and structural antecedent factors of trust in the context of IJVs. Most previous empirical studies on the antecedents of trust have only addressed the social antecedents of trust

(e.g, Inkpen & Currall 1997; Jennings et al. 2000; Brouthers & Bamossy 2006; Robson, Katsikeas & Bello 2008; Kwon 2008; Nielsen & Nielsen 2009; Silva, Bradley & Sousa 2012). Parkhe (1998a, 1998b) in his theoretical papers and Boersma, Buckley and Ghauri (2003) in their case study based paper addressed both the social and structural antecedents of trust. However, no survey based study so far has addressed the social and structural antecedents of trust in the context of IJVs.

The theoretical contribution of this dissertation is also reflected by the fact that it is one of the first studies to use transaction cost theory and social exchange theory in studying the social and structural antecedents of trust in the context of IJVs. Therefore, this dissertation develops an integrated theoretical framework of social exchange theory and transaction cost theory while addressing the social and structural antecedents of trust in the context of IJVs. Hennart and Zeng (2005) in their theoretical paper suggested integrating the social exchange theory and transaction cost theory to study the antecedents of trust. However, no study so far has used these two theories in a unified theoretical framework to investigate the social and structural antecedents of trust in the context of IJVs. Another important theoretical contribution of this dissertation relates to the social antecedents of trust grounded in social exchange theory. A review of prior empirical studies on antecedents of trust in IJVs reveals that researchers investigated limited but different antecedents of trust and therefore lack a comprehensive framework of social antecedents of trust. Parkhe (1998a, 1998b) seminal study on the antecedents of trust identified a comprehensive model of five social antecedents of trust that comprise of prior alliance experience with the partner, reputation, communication, cultural sensitivity, expected longevity of IJVs. This model has been tested in decade award winning article of Dyer and Chu (2011) on 453 supplier-automaker relationships in the US, Japan, and Korea. However, this model has not been tested in the context of IJVs. Therefore, testing a comprehensive model of five social antecedents of trust in the context of IJVs is an important contribution of present dissertation.

Further an important theoretical contribution of this dissertation is reflected by the fact that it analyses the social and structural antecedents of trust by two pathways: (1) a direct path to analyze the social and structural antecedent factors of trust, and (2) an indirect path of social and structural antecedent factors of trust by influencing opportunism. These direct and indirect pathways are added because prior literature suggests that structural antecedent factors are subject to two different interpretations. Proponents of transaction cost theory like Hennart and Zeng (2005) suggest that structural characteristics of IJV engender trust by limiting the extent to which partners can be opportunistic. However, some other stud-

ies (e.g. Parkhe 1998a, 1998b; Lui, Wong & Liu 2009) suggest that chosen structural characteristics of IJV can be interpreted as a symbol or sign of commitment that leads to trust. Therefore, investigating the direct and indirect path of social and structural antecedent factors to trust is an important contribution to the literature on antecedents of trust by clarifying that which social and structural antecedent factors directly lead to trust and which indirectly leads to trust by reducing opportunism.

Another important contribution of present dissertation is that it empirically verifies the direct association between trust and IJV performance. Given the fact that limited empirical evidence exists to substantiate a positive relationship between trust and IJV performance, it is an important contribution. This dissertation also contributes to the literature on trust in IJVs by analyzing and empirically testing the moderating effects of resource complementary on the influence of trust on IJV performance. The prior empirical research on trust-performance relationship in IJVs, although equivocal, has been widely criticized by Hennart and Zeng (2005) for ignoring the structural factors of IJV. Specially, they assert that: *"Researchers in the process tradition have typically regressed performance on variables such as trust, communication, and commitment, often without much control for structural variables. This raises the possibility that much of the variance in performance attributed to process variables may in fact be due to structural conditions (2005: 113)".* Although, the expected support for possible moderation impacts of resource complementary on trust-performance relationships is not received in present dissertation, but it is a preliminary effort to investigate the possible moderation impacts of structural characteristics of IJV on trust-performance relationship. Future research can further refine the measurement of resource complementary and investigate its role on trust-performance relationship in IJVs.

Finally, a noteworthy contribution of this dissertation pertains to the empirical setting of the study. So far the studies addressing the antecedents of trust and trust-performance relationship in IJVs have used sample based on IJVs made by Japanese firms (Inkpen & Currall 1997), United States firms (Muthusamy, White & Carr 2007), United Kingdom firms (Kauser & Shaw 2004), Danish firms (Nielsen 2007; Nielsen & Nielsen 2009), United States, United Kingdom, and Japanese firms (Kwon 2008; Luo 2008); United States, Western Europe, and Far East firms (Robson, Katsikeas & Bello 2008). This dissertation focuses on Nordic firm's (Danish, Finnish, Norwegian, and Swedish) IJVs operating into Asia, Europe, and America to analyze the antecedents of trust and trust-performance relationship in IJVs. Outward FDI from Nordic region is significantly increasing (e.g. Danish outwards FDI increased from 8206 million dollars in 2006 to 23413 million dollars in 2011, and similar trends can be observed for Finnish, Swedish, and Nor-

wegian outward FDI) (UNCTAD 2012). Therefore, this empirical setting provides new evidence on the antecedents of trust and trust-performance relationship in IJVs.

6.3   Managerial implications

Firms ought to establish IJVs with other firms in order to reap the benefits of cooperation. These IJVs usually grow in rather complex and uncertain environments in which all possible contingencies are not considered beforehand. Therefore, IJV partners have to respond to these external complexities together and develop good relationship with each other. They should know how to work with each other, to each other, and through each other during the course of IJV to reap the benefits of cooperation. A trustful relationship between IJV partners is considered very crucial towards attaining the goals of IJVs. This dissertation addresses the important role of trust in IJVs and offers a number of important suggestions for managers to understand the main building blocks of a trustful relationship and the benefits of trustful relationship in IJVs.

Present dissertation suggests that trust is not a commodity that can be bought or sold in market place, but the managers of the IJVs have to develop this attribute. The findings of the dissertation show that establishing IJV with reputable partners, establishing quality of communication practices between IJV partners, understanding and aligning each other's cultural values, continuing IJVs for longer period of time, and forbearance from opportunistic behavior can indeed foster trust between IJV partners. Further, the presence of symmetric interdependence and equivalent ownership share do not play an important role in promoting inter-partner trust in IJVs. However, once trust is developed between partners, it increases the performance of the IJV.

The positive relationship between trust and performance shows managers that trust is a key determinant of IJV performance. Despite the moral connotation asserted to trust, managers now have economic reasons to invest in the quality of their relationships by building up interactions characterized by trustworthiness. In today's business environment, the relations between firms are often characterized by hidden agendas and firms with different objectives, so trust will play an increasingly important role as a counterweight to the potential dangers in forming an IJV.

Given the fact that trust pays off, the understanding the drivers of trust in IJVs and using this knowledge to build trust becomes crucially important for manage-

ment. Results suggest that managers when selecting IJV partners need to pay attention to the reputation of potential partner firms. Managers should make an effort to form IJV with reputable partners because the reputable partners are more consistent in their behavior and this build trust between IJV partners. The results also indicate that during the course of IJV, managers need to pay attention to the differences that exist between the firms. Managers should make an effort to understand the practices of IJV partners, their managerial values, organizational culture, and internal procedures and try to bridge them with their own practices, managerial values, organizational cultures and internal procedures. It is important to bear in mind that such efforts help to reduce misunderstandings between IJV partners and build trust.

The results also propose that communication is a significant factor that positively influences trust. Managers should, therefore, foster inter-partner communications to allow partners to learn about each other and develop a deeper understanding between the partners. The frequent, open, clear, and timelier exchange of information between IJV partners minimizes unpleasant surprises, resolves disagreements quickly, and builds trust. Further, the positive relationship between longer time horizons of IJV relationship and trust suggests that managers should form IJVs for longer duration. The long duration of IJV is a perception that IJV partners have long term objectives to achieve and have to work together for long period of time. This perception aligns their interests and builds trust. Further, the dissertation suggests that opportunistic behaviors have a negative impact on trust. While a partner firm may engage in opportunistic behavior in order to exploit the other for short-term gains, managers need to be aware that this behavior will have a detrimental effect on trust and create difficulties for a successful long-term IJV relationship. Therefore, it is important for managers to realize that trust is fragile, and once damaged it is difficult to re-establish. Knowing this should help reduce opportunistic behaviors. Finally, an important implication for managers is that symmetric interdependence and equivalent ownership share do not have a significant impact on trust. Therefore, the managers need to understand that presence of symmetric interdependence as well as equivalent ownership share do not play an important role in promoting inter-partner trust in IJVs.

6.4   Limitations and suggestions for further research

Limitations

As with any study there are few research limitations of the present dissertation that should be taken into consideration. The first limitation relates to the conceptual framework of the dissertation. This dissertation incorporates only one structural factor of 'resource complementary' as an important moderator of trust-performance relationship in IJVs. However, the other structural characteristics of IJV (e.g. equity ownership and interdependence) could also be incorporated as moderators of trust-performance relationship. But doing so would make the framework more complex because of overlap between structural antecedents of trust, and the structural factors as moderators of trust-performance relationship. Therefore, the construct of resource complementary is only investigated as a moderator of trust-performance relationship in present dissertation.

Second limitation of the present dissertation is that it only includes the perspective of Nordic parents of the IJVs and therefore does not incorporate the view point of both parents of the IJVs. Previous research (e.g. Fryxell, Dooley & Vryza 2002; Luo 2002) suggests for incorporating the perceptive of both parents of the IJV. However, gathering such information is very challenging (time and expense considerations) especially when parent firms originate from many countries around the world, as in our sample (Asia, Europe, and America).

Third limitation of present dissertation is that it relies on the information collected from a single key informant of the Nordic parents of IJVs. This may cause bias in the data, as it is based on one person's views only. Although, the data of present dissertation was collected from the key respondents that comprise of CEOs, presidents, vice presidents, and directors, which were highly knowledgeable and involved with specific IJVs. But the use of single informant remains a key limitation of the present dissertation. Another possible limitation of the present dissertation is that only Nordic firm's IJVs operating into Asia, Europe, and America were surveyed, and thus results may not be generalizable to the IJVs from other countries or regions.

Further an important limitation of present dissertation relates to the use of subjective measures of IJV performance. Some IJV studies suggest for using objective financial measures of IJV performance (e.g. Luo 2002). However, given the difficulties of getting access to financial data, it was not possible to use objective financial measures of IJV performance. Using subjective measures of IJV perfor-

mance, however, has become an accepted practice in IJV research (e.g. Nielsen 2007; Muthusamy, White & Carr 2007; Kwon 2008; Lin & Wang 2008). Further the studies of Geringer and Herbert (1991) and Robson, Katsikeas & Bello (2008) have found a correlation between subjective and objective measures of IJV performance. This further justifies the reliance on subjective measures of IJV performance.

Final limitation of present dissertation is that it relies on cross-sectional survey data to study the antecedents of trust and trust-performance relationship in IJVs. Longitudinal studies are assumed as a potential approach to drive strong claims about the direction of causal links between the antecedents of trust and trust-performance relationship in IJVs. Although, the developed model of present dissertation lends support from theoretical considerations in previous studies (e.g. Parkhe 1998a, 1998b; Hennart & Zeng 2005; Silva, Bradley & Sousa 2012), however the possibility of feedback loops between the constructs cannot be ruled out.

Suggestions for further research

Building upon the theoretical discussion and empirical findings of the present dissertation, there are some areas that merit further discussion and hold the most promise for further research. Some of these areas of potential research arise directly from the present dissertation, although others are notable primarily due to the lack of research attention paid to them. Firstly, the present dissertation suggests that trust leads to the performance of IJVs, the argument that performance may lead to trust has merit as well. Inkpen and Currall (1997) suggested that performance may have a feedback effect on trust. Poor performance may cause distrust between the partners, which leads to poor long-term IJV performance. Therefore, If IJV performance is worse than expected; the level of trust between IJV partners will therefore suffer accordingly. Therefore, it is worthwhile to investigate the impact of IJV performance on trust between the IJV partners.

Secondly, the moderating role of resource complementary on trust-performance relationship was not verified. However, this should not trivialize the important role of resource complementary in IJVs. Further research should attempt to improve the measurement of resource complementary. Further, it is possible that resource complementary has impact on other measures of IJV performance, such as longevity of IJVs (e.g. Deitz et al. 2010). Therefore, further research should improve the measurement of resource complementary and investigate its role on trust-performance relationship by using different measures of IJV performance.

Thirdly, present dissertation only investigates the moderation role of resource complementary on trust-performance relationship; a further development of this work will be to investigate the moderation roles of 'ownership share', and 'interdependence' on trust-performance relationship in IJVs. This is very important future research avenue as Hennart and Zeng (2005) had criticized the prior research on trust-performance relationship for ignoring the role of structural characteristics of IJV. Fourthly, an interesting avenue for further research could be to examine the implications of other structural characteristics of IJV for trust, and trust-performance relationship. For example, Gong et al. (2007), and Hennart and Zeng (2005) suggest that nature of stipulations involved in IJV contract, and number of partners involved in IJV are important IJV structural arrangements to examine.

Fifthly, future research could examine the relationship between trust and IJV performance using IJV samples from service industries. This would provide valuable insights into whether the findings of the present dissertation differ depending on industry characteristics. Furthermore, concerning IJV performance measurement, future research on trust and IJV performance using the presented framework could use both objective and subjective measures of IJV performance to enrich the findings about the impact of trust on IJV performance. Sixthly, the temporal element of trust development in IJV studies has been given very less attention. The limited studies on the development of trust over time remains at conceptual level (Nielsen 2003) or case based (e.g. Boersma, Buckley & Ghauri 2003). Therefore, the temporal development of trust in IJVs is a fruitful arena for further research. Seventhly, research on trust in IJVs collects data from only one parent of the IJV and implicitly assumes that trust between the IJV partners is essentially symmetric. However, research has not examined the empirical validity of this assumption. Future research should investigate this issue because there may be performance implications of symmetry trust and asymmetry trust between IJV partners.

Eighthly, the topic of trust repair and rebuilding is notably absent from the empirical research on trust in IJVs. Although trust scholars have declared a theoretical interest in the problem of repair and rebuilding trust between IJV partners (e.g. Krishnan 2006), there has been no empirical research investigating the trust repair and rebuilding between the IJV partners. Therefore, given the fact that trust is important to achieve superior IJV performance, it is important for future research to investigate the issue of trust repair and rebuilding between IJV partners.

REFERENCES

Anderson, E. & Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies* 17:3, 1–26.

Anderson, J. C. & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*. 54:1, 42–58.

Arino, A., de la Torre, J. & Ring, P. S. (2001). Relational quality: managing trust in cooperative alliances. *California Management Review* 44:1, 109–131.

Aulakh, P. S., Kotabe, M. & Sahay, A. (1996). Trust and performance in cross-border marketing partnerships: A behaviour Approach. *Journal of International Business Studies* 27:5, 1005–1032.

Aulakh, P. S. & Madhok, A. (2002). Cooperation and performance in international alliances: The critical review of flexibility. In F. J. Contractor & P. Lorange (Eds). *Cooperative Strategies and Alliances*. Oxford: Elsevier Science Ltd. 25–46.

Bachmann, R. (2001). Trust, power and control in trans-organizational relations. *Organization Studies* 22:2, 337–365.

Barney, J. B. & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal* 15, 175–190.

Beamish, P. W. (1985). The characteristics of joint ventures in developed and developing countries. *Columbia Journal of World Business* 20:3, 13–19.

Beamish, P. W. & Banks, J. C. (1987). Equity joint ventures and the theory of the multinational enterprise. *Journal of International Business Studies* 18:2, 1–16.

Bener, M. & Glaister, K. W. (2010). Determinants of performance in international joint ventures. *Journal of Strategy and Management* 3:3, 188–214.

Bierly, P. E. & Gallagher, S. (2007). Explaining alliance partner selection: Fit, trust and strategic expediency. *Long Range Planning* 40:2, 134–153.

Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: John Wiley and Sons.

Bleeke, J. & Ernst, D. (1991). The way to win in cross-border alliances. *Harvard Business Review* 69:6, 127–135.

Boersma, M. F., Buckley, P. J. & Ghauri, P. N. (2003). Trust in international joint venture relationships. *Journal of Business Research* 56:12, 1031–1042.

Brouthers, K. D. & Bamossy, G. (2006). Post-formation processes in Eastern and Western European joint ventures. *Journal of Management Studies* 43:2, 203–229.

Brouthers, K. B. & Hennart, J.-F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management* 33:3, 395–425.

Buckley, P. J. & Casson, M. (1988). The concept of cooperation. *Management International Review* 28, 19–38.

Buckley, P. J. & Glaister, K. W. (2002). What do we know about international joint ventures?. In F. J . Contractor & P. Lorange (Eds). *Cooperative Strategies and Alliances*. Oxford: Elsevier Science Ltd. 49–69.

Chen, R. & Boggs, D. J. (1998). Long term cooperation prospects in international joint ventures: Perspective of Chinese firm. *Journal of Applied Management Studies* 7:1, 111–126.

Child, J. (2001). Trust-The fundamental bond in global collaboration. *Organizational Dynamics* 29:4, 274–288.

Child, J. (2002). A configurational analysis of international joint ventures. *Organization Studies* 23:5, 781–815.

Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In G. A. Marcoulides (Eds). *Modern Methods for Business Research*. 295–336. New Jersey: Lawrence Erlbaum Associates.

Chin, W. W. & Newsted, P. R. (1999). Structural equation modelling analysis with small samples using partial least squares. In R. H. Hoyle (Eds). *Statistical Strategies for Small Sample Research*. California: SAGE Publications. 307–341.

Coase, R. H. (1937). The nature of the firm. *Economica* 4:16, 386–405.

Coase, R. H. (1993). The nature of the firm. In O. E. Williamson & S. G. Winter (Eds). *The Nature of the Firm: Origins, Evolution, and Development*. New York: Oxford University Press. 18–33.

Collis, J. & Hussey, R. (2009). *Business research: A practical guide for undergraduate and postgraduate students*. 3rd ed. UK: Palgrave Macmillan.

Contractor, F. J. & Lorange, P. (1988). Competition vs. cooperation: A benefit\cost framework for choosing between fully-owned investments and cooperative relationships. *Management International Review* 28:5, 5–18.

Contractor, F. J. & Lorange, P. (2002). The growth of alliances in the knowledge-based economy. In F. J. Contractor & P. Lorange (Eds). *Cooperative Strategies and Alliances*. Oxford: Elsevier Science Ltd. 2–22.

Cullen, J. B., Johnson, J. L. & Sakano, T. (2000). Success through commitment and trust: The soft side of strategic alliance management. *Journal of World Business* 35:3, 223–240.

Daniels, J. D., Radebaugh, L. H. & Sullivan, D. P. (2009). *International Business. Environment and Operations*. 12th ed. New Jersey: Pearson Prentice Hall.

Das, T. K. & Rahman, N. (2002). Opportunism dynamics in strategic alliances. In F. J . Contractor & P. Lorange (Eds). *Cooperative Strategies and Alliances*. Oxford: Elsevier Science Ltd. 89–118.

Das, T. K. & Teng, B.-S. (2002). A social exchange theory of strategic alliances. In F. J. Contractor & P. Lorange (Eds). *Cooperative Strategies and Alliances*. Oxford: Elsevier Science Ltd. 439–460.

Deitz, G. D., Tokman, M., Richey, R. G. & Morgan, R. M. (2010). Joint venture stability and cooperation: Direct, indirect and contingent effects of resource complementarity and trust. *Industrial Marketing Management* 39:5, 862–873.

Donnell, E. A. O. (2005). *A United Framework for Industrial Buyer-seller Relationships*. Kent State University Graduate School of Management. Doctoral dissertation.

Dyer, J. H. (1997). Effective inter-firm collaboration: How firms minimize transaction costs and maximize value. *Strategic Management Journal* 18:7, 535–556.

Dyer. J. H. & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea. *Organization Science* 14:1, 57–68.

Dyer, J. H. & Chu, W. (2011). The determinants of trust in supplier-automaker relationships in the US, Japan, and Korea. *Journal of International Business Studies* 42:1, 10–27.

Easterby-Smith, M., Thorpe, R. & Lowe, A. (1991). *Management Research: An Introduction*. London: Saga Publications Ltd.

Falk, R. F. & Miller, N. B. (1992). *A Primer for Soft Modeling*. 1st ed. Akron, Ohio: University of Akron Press.

Fornell, C. & Larcker, D F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18:1: 39–50.

Fryxell, G. E., Dooley, R. S. & Vryza, M. (2002). After the ink dries: the interaction of trust and control in U.S.-based international joint ventures. *Journal of Management Studies* 36:6, 865–886.

Ganesan, S. (1994). Determinants of long-term orientation in buyerseller relationships. *Journal of Marketing* 58, 1–19.

Geringer, J. M. (1991). Strategic determinants of partner selection criteria in international joint ventures. *Journal of International Business Studies* 22:1, 41–62.

Geringer, J. M. & Hebert, L. (1991). Measuring performance of international joint ventures. *Journal of International Business Studies* 22:2, 249–263.

Geringer, J. M. & Hebert, L. (1989). Control and performance of international joint ventures. *Journal of International Business Studies* 20:2, 235–254.

Ghauri, P. & Gronhaug, K. (2010). *Research Methods in Business Studies*. 4th ed. UK: Pearson Education Limited.

Gill, J. & Butler, R. J. (2003). Managing instability in cross-cultural alliances. *Long Range Planning* 36:6, 543–563.

Glaister, K. W. & Buckley, P. J. (1997). Task-related and partner-related selection criteria in UK international joint ventures. *British Journal of Management* 8:3, 199–222.

Glaister, K. W. & Buckley, P. J. (1999). Performance relationship in UK international alliances. *Management International Review* 39:2, 123–147.

Glaister, K. W. & Wang, Y. (1993). UK joint ventures in China: Motivation and partner selection. *Marketing Intelligence and Planning* 11:2, 9–15.

Globerman, S & Nielsen, B. B. (2007). Equity versus non-equity strategic alliances involving Danish firms: An empirical investigation of the relative importance of partner and host country determinants. *Journal of International Management* 13, 449–471.

Gomes-Casseres, B. (1987). Joint venture instability: Is it a problem? *Columbia Journal of World Business* 22:2, 97–102.

Gong, Y., Shenkar, O., Luo, Y. & Nyaw, M.-K. (2007). Do multiple parents help or hinder international joint venture performance? The mediating roles of contract completeness and partner cooperation. *Strategic Management Journal* 28:10, 1021–1034.

Gotz, O., Liehr-Gobbers, K. & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds). *Handbook of Partial Least Squares: Concepts, Methods, and Applications*. New York: Springer. 691–711.

Guidice, R. M. (2001). *Managing Joint Ventures: The Impact of Experience, Strategic Interdependence and Control on Performance*. Washington State University. Doctoral dissertation.

Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal* 38:1, 85–112.

Gulati, R. & Sytch, M. (2008). Does familiarity breed trust? Revisiting the antecedents of trust. *Managerial and Decision Economics* 29, 165–190.

Hair, J. F., Ringle, C. M. & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice* 19:2, 139–151.

Harrigan, K. P. (1986). *Managing for Joint Venture Success*. Lexington Books: Lexington, MA.

Hebert, L. & Beamish, P. (1997). Characteristics of Canada-based international joint ventures. In P. W. Beamish & J. P. Killing (Eds). *Cooperative Strategies: North American Perspectives*. California: Lexington Press. 403–427.

Heide, J. B. & Miner, A. S. (1992). The shadow of the future: Effects of anticipated interactions and frequency of contact on Buyer–Seller Cooperation. *Academy of Management Journal* 35:2, 265–291.

Hennart, J.-F. (1988). A transaction costs theory of equity joint ventures. *Strategic Management Journal* 9:4, 361–374.

Hennart, J.-F. (1993). Explaining the swollen middle: Why most transactions are a mix of "market" and "hierarchy". *Organization Science* 4:4, 529–547.

Hennart, J.-F. (2008). Transaction costs perspectives on inter-organizational relations. In S. Cropper et al. (Eds). *The Oxford Handbook of Inter-organizational Relations*. New York: Oxford University Press Inc. 339–365.

Hennart, J.-F. (2010). Transaction cost theory and international business. *Journal of Retailing* 86:3, 257–269.

Hennart, J.-F. & Zeng, M. (2005). Structural determinants of joint venture performance. *European Management Review* 2:2, 105–115.

Hitt, M. A., Dacin, M. T., Levitas, E., Arregle, J.-L. & Borza, A. (2000). Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of Management Journal* 43:3, 449–467.

Hoffmann, W. H., Neumann, K. & Speckbacher, G. (2010). The effect of interorganizational trust on make-or-cooperate decisions: Disentangling opportunism-dependent and opportunism-independent effects of trust. *European Management Review* 7:2, 101–115.

Honderich, T. (1995). *The Oxford Companion to Philosophy*. Oxford: Oxford University Press.

Hosmer, L. T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review* 20:2, 379–403.

Hsieh, L. H. Y., Rodrigues, S. B. & Child, J. (2010). Risk perception and post-formation governance in international joint ventures in Taiwan: The perspective of the foreign partner. *Journal of International Management* 16:3, 288–303.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal* 20:2, 195–204.

Hurmerinta-Peltomäki, L. & Nummela, N. (2004). First the sugar, Then the Eggs…or the other way round? Mixed methods in international business research. In R. Marschan-Piekkari & C. Welch (Eds). *Handbook of Qualitative Research: Methods for International Business*. UK: Edward Elgar Publishing Limited. 162–180.

Inkpen, A. C. & Currall, S. C. (1997). International joint venture trust. In P. W. Beamish & J. P. Killing (Eds). *Cooperative Strategies: North American Perspectives*. California: Lexington press. 308–334.

Inkpen, A. C. & Currall, S. C. (1998). The nature, antecedents, and consequences of joint venture trust. *Journal of International Management* 4:1, 1–20.

Janowicz, M. (2004). *The Role of Trust in Interorganizational Learning*. Tilburg University. Doctoral dissertation.

Jennings, D. F., Artz, K., Gillin, L. M. & Christodouloy, C. (2000). Determinants of trust in global strategic alliances: AMRAD and the Australian biomedical industry. *Competitiveness Review* 10:1, 25–44.

Johnson, J. L., Cullen, J. B., Sakano, T. & Takenouchi, H. (1996). Setting the stage for trust and strategic integration in Japanese-U.S. cooperative alliances. *Journal of International Business Studies* 27:5, 981–1004.

Katsikeas, C. S., Skarmeas, D. & Bello, D. C. (2009). Developing successful trust-based international exchange relationships. *Journal of International Business Studies* 40:1, 132–155.

Kauser, S. & Shaw, V. (2004). The influence of behavioural and organizational characteristics on the success of international strategic alliances. *International Marketing Review* 21:1, 17–52.

Killing, J. P. (1982). How to make a global joint venture work. *Harvard Business Review* 24:3, 120–127.

Kogut, B. (1989). The stability of joint ventures: Reciprocity and competitive rivalry. *The Journal of Industrial Economics* 38:2, 183–198.

Krishnan, R. (2006). *When Is Trust Produced and When Does It Matter? Taking a Closer Look at Trust and Alliance Performance*. Tilburg University. Doctoral dissertation.

Krishnan, R., Martin, X. & Noorderhaven, N. G. (2006). When does trust matter to alliance performance? *Academy of Management Journal* 49:5, 894–917.

Kumar, M. V. S. (2005). The value from acquiring and divesting a joint venture: A real options approach. *Strategic Management Journal* 26:4, 321–331.

Kwon, Y.-C. (2008). Antecedents and consequences of international joint venture partnerships: A social exchange perspective. *International Business Review* 17:5, 559–573.

Lane, P., Salk, J. E. & Lyles, M. A. (2001). Absorptive capacity, learning and performance in international joint ventures. *Strategic Management Journal* 22:12, 1139–1161.

Lewicki, R. J. & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. M. Kramer & T. R. Tyler (Eds). *Trust in Organizations: Frontiers of Theory and Research*. London: Sage Publications. 114–139.

Li, P. P. (2007). Towards an interdisciplinary conceptualization of trust: A typological approach. *Management and Organization Review* 3:3, 421–445.

Lin, X. & Wang, C. L. (2008). Enforcement and performance: the role of ownership, legalism and trust in international joint ventures. *Journal of World Business* 43:3, 340–351.

Liu, Y., Li, Y., Tao, L. & Wang, Y. (2008). Relational stability, trust and relational risk in marketing channels: Evidence from China. *Industrial Marketing Management* 37:4, 432–446.

Lu, J. W. & Hebert, L. (2005). Equity control and survival of international joint ventures: A contingency approach. *Journal of Business Research* 58:6, 736–745.

Luhmann, N. (1979). *Trust and Power*. Chichester: Wiley.

Lui, S. S., Wong, Y.-Y. & Liu, W. (2009). Asset specificity roles in interfirm cooperation: Reducing opportunistic behavior or increasing cooperative behavior? *Journal of Business Research* 62:11, 1214–1219.

Luo, Y. (2002a). Contract, cooperation, and performance in international joint ventures. *Strategic Management Journal* 23:10, 903–919.

Luo, Y. (2002b). Building trust in cross-cultural collaborations: toward a contingency perspective. *Journal of Management* 28:5, 669–694.

Luo, Y. (2005). Transactional characteristics, institutional environment and joint venture contracts. *Journal of International Business Studies* 36:2, 209–230.

Luo, Y. (2007a). An integrated anti-opportunism system in international exchange. *Journal of International Business Studies* 38:6, 855–877.

Luo, Y. (2007b). Are joint venture partners more opportunistic in a more volatile environment? *Strategic Management Journal* 28:1, 39–60.

Luo, Y. (2008). Procedural fairness and interfirm cooperation in strategic alliances. *Strategic Management Journal* 29:1, 27–46.

Luo, Y. (2009). From gain-sharing to gain-generation: The quest for distributive justice in international joint ventures. *Journal of International Management* 15:4, 343–356.

Madhok, A. (1995a). Opportunism and trust in joint venture relationships: An exploratory study and a model. *Scandinavian Journal of Management* 11:1, 57–74.

Madhok, A. (1995b). Revisiting multinational firms' tolerance for joint ventures: A trust based approach. *Journal of International Business Studies* 26:1, 117–137.

Madhok, A. (2006). How much does ownership really matter? Equity and trust relations in joint venture relationships. *Journal of International Business Studies* 37:1, 4–11.

Mayer, R. C., Davis, J. H. & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review* 25:2, 709–734.

McAllister, D. J. (1995). Affect- and cognition- based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal* 38:1, 24–59.

McEvily, B. & Zaheer, A. (2006). Does trust still matter? Research on the role of trust in inter-organizational exchange. In R. Bachmann & A. Zaheer (Eds). *Handbook of Trust Research*. USA: Edward Elgar Publishing, Inc. 280–300.

Mohr, A. T. & Puck, J. F. (2005). Managing functional diversity to improve the performance of international joint ventures. *Long Range Planning* 38:2, 163–182.

Mohr, J. & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal* 15:2, 135–152.

Mollering, G. (2003). A typology of supplier relations: from determinism to pluralism in inter-firm empirical research. *Journal of Purchasing and Supply Management* 9:1, 31–41.

Morgan, R., & Hunt, S. (1994). The commitment–trust theory in relationship marketing. *Journal of Marketing* 58:3, 20–38.

Morris, B. G. A. & Cadogan, J. W. (2001). Partner symmetries, partner conflict and the quality of joint venture marketing strategy: An empirical investigation. *Journal of Marketing Management* 17:1, 223–256.

Muthusamy, S. K. & White, M. A. (2005). Learning and knowledge transfer in strategic alliances: A social exchange view. *Organization Studies* 26:3, 415–441.

Muthusamy, S. K., White, M. A. & Carr, A. (2007). An examination of the role of social exchanges in alliance performance. *Journal of Management Issues* 19:1, 53–75.

Ng, P. W.-K., Lau, C.-M. & Nyaw, M.-K. (2007). The effects of trust on international joint venture performance in China. *Journal of International Management* 13:4, 430–448.

Nielsen, B. B. (2001). *Trust and Learning in International Strategic Alliances*. Working Paper Series. Copenhagen Business School.

Nielsen, B. B. (2003). *Managing Knowledge in International Strategic Alliances: Theory and Practice*. Copenhagen Business School. Unpublished doctoral dissertation.

Nielsen, B. B. (2007). Determining international strategic alliance performance. *International Business Review.* 16:3, 337-361.

Nielsen, B. B. (2011). Trust in strategic alliances: Toward a co-evolutionary research model. *Journal of Trust Research* 1:2, 159–176.

Nielsen, B. B. & Nielsen, S. (2009). Learning and innovation in international strategic alliances. An empirical test of the role of trust and tacitness. *Journal of Management Studies* 46:6, 1031–1056.

Noorderhaven, N. G. (1996). Opportunism and trust in transaction cost economics. In J. Groenewegen (Eds). *Transaction Cost Economics and Beyond*. United States: Kluwer Academic Publications. 105–128.

Nooteboom, B. (1996). Trust, opportunism and governance: a process and control model. *Organization Studies* 17:6, 985–1010.

Nooteboom, B., Berger, H. & Noorderhaven, N. G. (1997). Effects of trust and governance on relational risk. *Academy of Management Journal* 40:2, 308–338.

Oxley, J. E. (1999). Institutional environment and the mechanisms of governance: the impact of intellectual property protection on the structure of inter-firm alliances. *Journal of Economic Behvior and Organization* 38, 283–309.

Pak, S. H. & Russo, M. V. (1996). When competition eclipses cooperation: An event history analysis of joint venture failure. *Management Science* 42:6, 875–890.

Pak, Y. S., Ra, W. & Park, Y.-R. (2009). Understanding IJV performance in a learning and conflict mediated context. *International Business Review* 18:5, 470–480.

Parkhe, A. (1993). Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal* 36:4, 794-829.

Parkhe, A. (1998a). Understanding trust in international alliances. *Journal of World Business* 33:3, 219–240.

Parkhe, A. (1998b). Building trust in international alliances. *Journal of World Business* 33:4, 417–437.

Peng, D. X. & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operation Management* 30:6, 467–480.

Poppo, L & Zenger, T. (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal* 23, 707–725.

Poppo, L., Zhou, K. Z. & Ryu, S. (2008). Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science* 19:1, 39–55.

Pothukuchi, V., Damanpour, F., Choi, J., Chen, C. C. & Park, S. H. (2002). National and organizational culture differences and international joint venture performance. *Journal of International Business Studies* 33:2, 243–265.

Puck, J., Hodl, M. & Wisgickl, A. (2011). *IJV Partnering: A Combined Transaction Cost Approach*. A competitive paper in 11th Vaasa Conference on International Business, Finland, 24th-26th August 2011.

Ramanathan, K., Seth, A. & Thomas, H. (1997). Explaining joint ventures: Alternative theoretical perspectives. In P. W. Beamish & J. P. Killing (Eds). *Cooperative Strategies: North American Perspectives*. California: Lexington Press. 51–85.

Ramaseshan, B. & Loo, P. C. (1998). Factors affecting a partner's perceived effectiveness of strategic business alliance: some Singaporean evidence. *International Business Review* 7:4, 443–458.

Ramaswamy, K., Gomes, L. & Veliyath, R. (1998). The performance correlates of ownership control: A study of U.S. and European MNE joint ventures in India. *International Business Review* 7:4, 423–441.

Reuer, J. J. (2001). Parent firm performance across international joint venture life-cycle stages. *Journal of International Business Studies* 31:1, 1–20.

Reuer, J. J. (2001). From hybrids to hierarchies: Shareholder wealth effects of joint venture partner buyout. *Strategic Management Journal* 22:1, 1–23.

Reuer, J. J. & Arino, A. (2002). Contractual renegotiations in strategic alliances. *Journal of Management* 28:1, 47–68.

Reuer, J. J. & Miller, K. D. (1997). Agency costs and the performance implications of international joint venture internationalization. *Strategic Management Journal* 18:6, 425–438.

Ring, P. S. (1996). Fragile and resilient trust and their roles in economic exchange. *Business and Society* 35:2, 148–175.

Robson, M. J., Leonidou, L. C. & Katsikeas, C. S. (2002). Factors influencing international joint venture performance: Theoretical perspectives, assessment, and future directions. *Management International Review* 42:4, 385–418.

Robson, M. J., Katsikeas, C. S. & Bello, D. C. (2008). Drivers and performance outcomes of trust in international strategic alliances: The role of organizational complexity. *Organization Science* 19:4, 647–665.

Robson, M. J., Skarmeas, D. & Spyropoulou, S. (2006). Behavioral attributes and performance in international strategic alliances: Review and future directions. *International Marketing Review* 23:6, 585–609.

Rousseau, D. M., Sitkin, S., Burt, R. S., & Camperer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review* 23, 393–404.

Sako, M. (1998). Does trust improve business performance?. In C. Lane and R. Bachmann (Eds). *Trust Within and Between Organizations*. Oxford: Oxford University Press. 88–117.

Sako, M. & Helper, S. (1998). Determinants of trust in supplier relations: evidence from the automotive industry in Japan and United States. *Journal of Economic Behavior and Organization* 34:3, 287–417.

Sarkar, M., Cavusgil, S. T. & Evirgen, C. (1997). A commitment-trust mediated framework of international collaborative venture performance. In P. W. Beamish & J. P. Killing (Eds). *Cooperative strategies: North American Perspectives*. California: Lexington Press. 255–285.

Sarkar, M. B., Echambadi, R., Cavusgil, S. T. & Aulakh, P. S. (2001). The influence of complementarity, compatibility, and relationship capital on alliance performance. *Journal of the Academy of Marketing Science* 29:4, 358–373.

Saxton, T. (1997). The effects of partner and relationship characteristics on alliance outcome. *Academy of Management Journal* 40:2, 443–461.

Sekaran, U. (1992). *Research Methods for Business: A Skill Building Approach.* 2nd ed. Canada: John Wiley and Sons.

Seppanen, R., Blomqvist, K & Sundqvist, S. (2007). Measuring inter-organizational trust-a critical review of the empirical research in 1990–2003. *Industrial Marketing Management* 36:2, 249–265.

Sherman, S. (1992). Are strategic alliances working? *Fortune* (September 21), 77–78.

Silva, S. C. L. C. (2007). *The Impact of Trust and Relational Quality in the Performance of International Alliances.* University College Dublin. Unpublished doctoral dissertation.

Silva, S. C., Bradley, F. & Sousa, C. M. P. (2012). Empirical test of the trust-performance link in an international alliances context. *International Business Review.* 21:2, 293-3067.

Smith, J. B. & Barclay, D. W. (1997). The effects of organizational differences and trust on the effectiveness of selling partner relationships. *Journal of Marketing* 61:1, 3–21.

Steensma, H. K., Barden, J. Q., Dhanaraj, C., Lyles, M. & Tihanyi, L. (2008). The evolution and internalization of international joint ventures in a transitioning economy. *Journal of International Business Studies* 39:3, 491–507.

Symon, G. & Cassell, C. (1998). Reflections on the use of qualitative methods. In G. Symon & C. Cassell (Eds). *Qualitative Methods and Analysis in Organizational Research: A Practical Guide.* London: Saga Publications.1–9.

Tashakkori, A. & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches.* Thousand Oaks, CA: Sage Publications Ltd.

UNCTAD (2012). *World Investment Report: Towards a New Generation of Investment Policies.* Switzerland: United Nations Publications.

Voss, K. E., Johnson, J. L., Cullen, J. B., Sakano, T. & Takenouchi, H. (2006). Relational exchange in US-Japanese marketing strategic alliances. *International Marketing Review* 23:6, 610–635.

Williamson, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications. A Study in the Economics of Internal Organization.* New York: The Free Press.

Williamson, O. E. (1985). *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting.* New York: The Free Press.

Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly* 36:2, 269–296.

Williamson, O. E. (1993a). Introduction. In O. E. Williamson & S. G. Winter (Eds). *The Nature of the Firm: Origins, Evolution, and Development*. New York: Oxford University Press. 3–17.

Williamson, O. E. (1993b). Calculativeness, trust, and economic organization. *Journal of Law and Economics* 36:1, 453–486.

Woolthuis, R. K., Hillebrand, B. & Nooteboom, B. (2005). Trust, contract and relationship development. *Organization Studies* 26:6, 813–840.

Xie, Y. H., Suh, T. & Kwon, I.-W. G. (2010). Do the magnitude and asymmetry of specific asset investments matter in the supplier-buyer relationship? *Journal of Marketing Management* 26:9, 858–877.

Ybarra, C. E. & Turk, T. A. (2009). The evolution of trust in information technology alliances. *Journal of High Technology Management Research* 20:1, 62–74.

Young-Ybarra, C. & Wiersema, M. (1999). Strategic flexibility in information technology alliances: The influence of transaction cost economics and social exchange theory. *Organization Science* 10:4, 439–459.

Zaheer, A., McEvily, B. & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Sciences* 9:2, 141–159.

Zeng, M. (1998). *The Impact of Structure on Cooperation and Performance in Joint Ventures: An Empirical Investigation of International Joint Ventures*. University of Illinois at Urbana-Champaign. Unpublished doctoral dissertation.

Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840–1920. In B. M. Staw & L. L. Cummings (Eds). *Research in Organizational Behavior*. Greenwich, CT: JAI Press. 53–111.