

CULTURAL AND INSTITUTIONAL CONTEXT, ENTREPRENEURSHIP, AND
INTERNATIONAL VENTURING

By

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CULTURAL AND INSTITUTIONAL CONTEXT, ENTREPRENEURSHIP, AND
INTERNATIONAL VENTURING

Abstract

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This dissertation examines cultural and institutional context on entrepreneurial activities and international venturing through three essays. The first essay investigated the role of individualism-collectivism as a continuum and institutional variables on entrepreneurship. Drawing upon signaling theory and institutional theory, this study proposes that the relationship between individualism-collectivism and entrepreneurial activities is positive curvilinear or U-shaped. The paper also examines the interaction effect of institutional determinants such as transparency level and business freedom. Using ten years of panel data for this cross-country study, this study finds that at intermediate levels of the continuum, individuals will face a dilemma or “get stuck in the middle” which in turn results in the U-shape relationship.

The second essay examines the distance context in both formal and informal institutional environments as well as infrastructure factors on the cross-border alliance governance mode. Building on institutional distance and institutional theory, this study focuses on the dyad alliance between MNEs base in emerging economies (EMNEs) and MNEs based in developed economies (DMNEs). Using 1,334 dyadic alliances between EMNEs and DMNEs, both formal and informal

institutional distance affect the alliance governance mode. Moreover, infrastructure distance significantly plays a moderating role on the relationship between formal institutional distance and propensity of choosing equity alliance mode. Given EMNEs possess an adversity advantage, when host countries are developed economies, the effect of the distances on governance mode becomes trivial.

The third essay investigates the value creation of cross-border alliances when EMNEs alliance with DMNEs. Building on a springboard perspective, EMNEs have incentive to ally with DMNEs. Using 122 cross-border alliance events and long-term event study, the results indicate that they do create value from such alliances. Further, given the nature of EMNEs, the contractual alliance governance enhances the value creation of the EMNEs while the cultural distance does not. This study also examines the influence of risk level inhabited in EMNEs before the alliance events due to shareholders are recognized a great benefit of risk sharing through value creation. Moreover, the interaction effect between cultural distance and risk level on value creation is explored.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
1. INTRODUCTION	1
2. PAPER ONE	6
	“When being Stuck in the Middle Hurts: The Effect of Culture and Institutions on Entrepreneurship”
3. PAPER TWO	49
	“The Impact of Institutional and Infrastructure Distance on the Cross-Border Alliance Governance Mode”
4. PAPER THREE	93
	“Do Cross-Border Alliances with MNEs from Developed Economies Create Firm Value for MNEs from Emerging Economies?”
5. DISSERTATION SUMMARY AND GENERAL CONCLUSIONS	135

LIST OF TABLES

2.1 Descriptive Statistics and Correlations for Paper One.....	28
2.2 Estimates Effect of Individualism-Collectivism on Level of Entrepreneurship For Paper One.....	29
3.1 Descriptive Statistics and Correlations for Paper Two.....	76
3.2 Logistic Regression Results on the Propensity to Choose Equity Alliance Mode (Pooled Sample) for Paper Two.....	78
3.3 Logistic Regression Results on the Propensity to Choose Equity Alliance Mode by Host Countries for Paper Two.....	79
4.1 Comparison of the Characteristic of the Sample Firms and the Industry-Matched, Industry-Size-Matched, and Industry-Size-BM-Matched Control Groups for Paper Three.....	111
4.2 Buy-and-Hold Returns for the Sample Firms and the Industry-Matched, Industry-Size-Matched, and Industry-Size-BM-Matched Control Groups after alliance event (36 Months) for Paper Three.....	115
4.3 Mean Buy-and Hold Abnormal Returns of the Sample Firms Using the Industry-Matched, Industry-Size-Matched and Industry-Size-BM-Matched Control Groups for Paper Three.....	117
4.4 Descriptive Statistics and Correlations for Paper Three.....	119
4.5 Regression Results on EMNEs Value Creation for Paper Three.....	121

LIST OF FIGURES

2.1 Conceptual Framework in Paper One.....	13
2.2 Main Effect of Individualism-Collectivism as a continuum on Levels of Entrepreneurship in Paper One.....	30
2.3 Moderating Effect of Levels of Transparency on Individualism-Collectivism as a continuum and Levels of Entrepreneurship in Paper One.....	32
2.4 Moderating Effect of Business Freedom on Individualism-Collectivism as a continuum and Levels of Entrepreneurship in Paper One.....	33
3.1 Conceptual Framework in Paper Two.....	60
3.2 Main Effect of Informal Institutional Distance on Propensity to Choose Equity Alliance Mode in Paper Two.....	81
3.3 Interaction Effect of Infrastructure Distance on Formal Institutional Distance and Propensity to Choose Equity Alliance Mode in Paper Two.....	82
4.1 Conceptual Framework in Paper Three.....	99
4.2 Interaction Effect of Cultural Distance on EMNEs risk level and EE MNEs Value Creation in Paper Three.....	123

Dedication

This dissertation is dedicated to my Mom and Dad and to my Wife for their unconditional support, encourages, patience and love in everything.

In GOD, I love and trust.

CHAPTER ONE

INTRODUCTION

The focus of my dissertation is to examine the cultural and institutional contexts on entrepreneurial activities, international venturing strategies and consequences. The following three papers discuss the information needed for the complete understanding of the research; the first paper focuses on the relationship between cultural and institutional contexts and entrepreneurial activities across nations, while the second and the third papers focus on the international venturing strategies, namely cross-border alliances, and consequences.

Given the ongoing debate of the roles of cultural and institutional contexts on entrepreneurial activities existing in the literature, the first paper seeks to resolve the debate and respond to recent calls for examining how cultural variables interact with institutional environment and motivate entrepreneurial activities by examining the influences of both cultural and institutional factors. Based on the exploring of signaling theory and institutional theory, the first paper examines the role of individualism-collectivism as a continuum and institutional variables on entrepreneurial activities. I propose that the relationship between the individualism-collectivism continuum and entrepreneurial activities is positive curvilinear or U-shaped to extension of the ongoing debate in literature. This study clearly depicts that individuals, at intermediate levels of the continuum, will confront a dilemma or “*get stuck in the middle*” which inhibits the entrepreneurial activities. Moreover, in order to respond to the call and to investigate the interactional effects between cultural and institutional variables on entrepreneurial activities, I examine the moderating roles of transparency level and business freedom.

Since corruption level (as opposite to transparency level) reflects an inefficient, over regulated environment with officials endowed with discretionary power, it inhibits business growth and entrepreneurial activities. When the level of transparency is high, individuals in individualistic culture and collectivistic culture receive positive signals for pursuing the idea and taking risks in the new venture. The other institutional variable is business freedom representing the overall burden of regulation as well as the efficiency of government in the regulatory process. I contend that business freedom is a double-edged sword. While high business freedom liberates individuals to start, operate and close business, it can limit the creativity of entrepreneurs and enhance imitators to engage only incremental innovation. Thus, in the high level of business freedom, there exists a positive but diminishing effects relationship between individualism-collectivism as a continuum and the levels of entrepreneurship.

Moreover, the rise of MNEs from emerging economies has become a spotlight in the global economies over decades. Since the literature on emerging economies has arisen, the second and the third papers of my dissertation emphasize on the cross-border alliance between MNEs from emerging economies (EMNEs) and MNEs from developed economies (DMNEs). Despite the cultural, institutional, and contextual differences between emerging economies and developed economies, the second paper aims to resolve how these differences influence alliance governance's choice in cross-border alliances (i.e., equity or non-equity mode). Building on institutional distance and institutional theory, I particularly focus on dyadic alliances between EMNEs and DMNEs. Indeed, the differences could bring the possibility to exchangeable state of different skills and knowledge among partners. Yet, these differences represent major obstructs of the transferring between those capabilities.

Following North (1990), I categorize institutions into formal and informal institutions. I posit that the propensity of MNEs to choose the equity alliance mode over the contract mode is curvilinear (inverse U-shaped) relative to the informal institutional distance between emerging economies and developed economies countries. When informal institutional distance between emerging economies and developed economies is low, the similarity of norms and values allow EMNEs and DMNEs to easily incorporate and establish trust. The need of controlled mechanism via equity alliance is trivial since similarities of norms and values between partners enhance the capability of cross-cultural communication. When informal institutional distance increases, controlled mechanism via equity governance is needed in order to prevent risk of opportunism. After informal institutional distance across a certain threshold, controlled mechanisms through equity of governance do not appropriately function since the cost of hierarchical structure crosses over the benefits. Furthermore, I propose that formal institutional distance between emerging-economies and developed-economies countries is positively associated with MNEs' propensity to choose equity of alliance, given with the more formal institutional distance, the more likely MNEs from home country would establish monitoring and controlling mechanism via equity of alliance.

Since well-developed infrastructures facilitate operation and promote investors, the high difference of infrastructure development are more likely to enhance the barriers of business operations and liability of foreignness. I posit that infrastructure distance positively moderates the relationship of institutional distance (both informal and formal) and MNEs' propensity to choose equity alliance such that in the presence of high infrastructure distance, the relationship between institutional distance and the propensity of choose equity alliance is stronger. In

addition, despite of EMNEs possessed adversity advantage, the results show that the effect of the distances either informal or formal institutional on alliance governance mode become trivial when host countries are developed economies.

Based on the information that the prior literature has paid attention to DMNEs entering to emerging economies, the third paper focuses on EMNEs. Building on springboard perspective, EMNEs have motives to ally with DMNEs since not only EMNEs can access to know-how, managerial expertise, and specific-assets from DMNEs, but the EMNEs can also leverage their organizational legitimacy in order to mitigate liability of foreignness. For this reason, I posit that cross-border alliance between EMNEs and DMNEs result in positive value for EMNEs. This paper seeks to examine not only the value of the creation of EMNEs when they ally with DMNEs but also three conditional roles on EMNEs value of creation, including cross-border alliance governance mode, the level of EMNEs risk, and cultural distance between emerging economies and develop economies.

Prior literature suggests that alliances do create value through organizational learning in which joint venture governance allows partners to exchange knowledge and skills. However, I argue that contractual alliances between EMNEs and DMNEs are particularly beneficial for EMNEs since EMNEs possess less resources and are more likely to prefer flexibility in order to respond changing in emerging market. I also posit that the risk level of EMNEs undertaken, namely ex ante risk, leverages the benefit of risk sharing from cross-border alliance between EMNEs and DMNEs. As such, EMNEs' shareholder will perceive more value of the alliance event when this risk level of EMNEs is high.

Furthermore, I propose the difference of culture between emerging economies and develop economies which obstructs the EMNEs benefits in cross-border alliance events since cultural distance impede the collaboration and learning between alliance's partners. When EMNEs ally with DMNEs from highly different culture, the value of creation of activities for EMNEs may not achieve its goal due to the absence of coordination effectiveness. Moreover, I posit that cultural distance also plays a contingent role in the relationship between ex ante risk level and value of creation of EMNEs. Given cultural distance associated with uncertainty on collaboration, the relationship between ex ante risk level and value creation is positively enhanced when cultural distance is high.

These three papers in my dissertation provide both research and managerial contribution within the international entrepreneurship and alliance literature. While the first paper extends and responds to a call to examine the cultural and institutional context on entrepreneurial activity, the second and third papers emphasize the cross-border alliance governance mode and value of creation from such alliance, particularly for EMNEs.

CHAPTER TWO

PAPER ONE

WHEN BEING STUCK IN THE MIDDLE HURTS: THE EFFECT OF CULTURE AND INSTITUTIONS ON ENTREPRENEURSHIP

ABSTRACT

Building on signaling theory and institutional theory, this study examines the role of individualism-collectivism as a continuum and institutional variables on entrepreneurship. I propose that the relationship between individualism-collectivism and entrepreneurship is positive curvilinear or U-shaped particularly in the presence of institutional determinants such as transparency or business freedom. I employed random-effects regression model to analyze ten years of panel data for this cross-country study. The results find support for hypotheses and present a more complete picture of the impact of individualism-collectivism and institutional variables on entrepreneurship. By proposing a theoretical model, developing measures and empirically testing propositions based on signaling and institutional theories, this study contributes to international entrepreneurship and institutional literatures.

Keywords: international entrepreneurship, institutions, national culture, entrepreneurial activity, signaling theory

INTRODUCTION

There is a growing body of literature arguing that cultural factors such as individualism-collectivism and orientation play a substantial role in entrepreneurial decision-making. The importance of cultural variables in understanding entrepreneurship has been highlighted by scholars over the last two decades (Baum et al., 1993; Hayton, George, & Zahra, 2002; Hunt & Levie, 2002; Mueller & Thomas, 2001; Taylor & Wilson, 2012). Though researchers have primarily focused on the role of individualism¹ in motivating entrepreneurship, there is an ongoing debate in the literature regarding the role of individualism *and* collectivism, or individualism *versus* collectivism on entrepreneurship in both the entrepreneurship and international management literatures (Chui, Titman, & Wei, 2010; Hofstede, 2001; Tiessen, 1997).

On one hand, extant research, which has mostly focused on individualism shows that individualism does have a strong effect on entrepreneurship. For example, Mueller and Thomas (2001) studied culture and entrepreneurial potential and found that high levels of individualism are associated with an internal locus of control which is an important entrepreneurial trait. Others have examined the impact on the need to achieve and an entrepreneur's propensity for risk (Korunka, Frank, Lueger, & Mugler, 2003; McGaughey, Liesch, & Poulson, 2000; Podoyntsyna, Van der Bij, & Song, 2011). Furthermore, Taylor and Wilson (2012) found that cultural individualism enhances innovative and entrepreneurial activities. On the other hand,

¹ Individualism, out of the five Hofstede's Culture dimensions, is the degree to which people are supposed to look after themselves Hofstede, G. 2001. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage Publications, Incorporated.. In other words, it reflects the level of concern the individual has for themselves or for the group. Individualism and collectivism are posited as the conceptions of self.

interestingly, even when collectivism was posited as the other end of the continuum, researchers have found collectivism to be associated with entrepreneurship (Baum et al., 1993; Hunt & Levie, 2002). Indeed, a consensus has yet to evolve among scholars on the precise relationship between individualism and entrepreneurship (Hayton et al., 2002).

I believe that such indeterminacy indicates a need to delve more deeply and examine the contingencies influencing the relationship between individualism-collectivism and entrepreneurship. Contingencies could be associated with the context. For example, prior research suggests that institutions affect various entrepreneurial activities and phenomena (Busenitz, Gomez, & Spencer, 2000; Davidsson, Hunter, & Klofsten, 2006; Garud, Jain, & Kumaraswamy, 2002; Levie & Autio, 2011; Stenholm, Acs, & Wuebker, 2011). Moreover, scholars have called for examining the role of cultural and institutional factors in combination with one-other to provide a more complete picture (Bruton, Ahlstrom, & Li, 2010). In response to these calls, I explore the relationship between individualism-collectivism as a continuum and entrepreneurship particularly in the presence of institutional transparency and business freedom (Aidis, Estrin, & Mickiewicz, 2008; Anokhin & Schulze, 2009; Minniti, 2008).

I draw on signaling theory (Spence, 1973; Spence, 1974) and institutional theory (North, 1990; Scott, 1995) to explain entrepreneurial behavior in response to institutional quality. I begin with the premise that entrepreneurs with either self (i.e., individualistic or collectivistic self; e.g., Brewer & Chen, 2007) can scan and identify opportunities from the maze of asymmetric information via signals, which they recognize within the institutional environment. As they pursue entrepreneurship based on the signals from institutions and drawing on their own self, I believe that these theories provide particularly appropriate lenses to analyze cultural variables

such as individualism in combination with institutional determinants such as transparency, and business freedom in motivating entrepreneurship.

I expect to make several contributions, in terms of both theoretical and managerial implication. To the best of my knowledge, this paper is one of the first studies to draw on signaling and institutional theories and examine a curvilinear (U-shaped) relationship between the individualism-collectivism as a continuum and entrepreneurship. I also extend the literature on the interaction between institutional variables and individualism-collectivism on the levels of entrepreneurship. The results extend the corruption literature that the level of transparency is positively related to entrepreneurial activities, especially within individualistic cultures but not in collectivistic culture. Further, the business freedom acts as a double edged sword. While the high level of business freedom delivers a signal to entrepreneurs to freely open, operate, and close their new ventures with low governmental interference, this level of business freedom also limits the creativity activities, given imitators can immerge in such institutional environment.

The remainders of this paper are ordered as follows. First, I provide theoretical background on culture, institutions and entrepreneurship. Second, I develop the theoretical framework and hypotheses. Next, the method section describes sources of data, variables, and methodology. To test the hypotheses, I then use panel data from 2001 to 2010 in 54 nations and employ panel regression to examine variables. In the last section, I provide discussions, implications, and a conclusion of this study.

LITERATURE AND THEORETICAL FRAMEWORK

Since entrepreneurship has received attention from several scholars, different perspectives of entrepreneurship and definitions have been proposed to the field (Baumol, 1990;

Shane & Venkataraman, 2000). As opportunities are one of the key concepts that defines the boundary and exchange condition of entrepreneurship field (Busenitz et al., 2003), Shane and Venkataraman (2000) defined opportunities as situations in which new goods, service, raw materials, markets and organizing method can be introduced through the formation of new means, ends or means-ends relationship. Discovery, evaluation and exploitation of opportunities via novel efforts reflect entrepreneurial process (Cullen, Johnson, & Parboteeah, 2013). As such, entrepreneurship in this paper is focused on the intentional startup of new firms or the creation of new ventures.

Institutional environment, cultural variables and entrepreneurship

The institutional environment plays a crucial role in the entrepreneurial process (Aldrich, 1990). Entrepreneurship is influenced by different institutional environments (Stephen, Urbano, & Van Hemmen, 2005), such as a nation's financial system, education system, corruption, and regulation of burden. Entrepreneurs could have coercive, mimetic or normative isomorphism mechanisms that influence their activities and behavior regarding the start-up, acquisition or closure of their venture (DiMaggio & Powell, 1983; North, 1990; Scott, 1995). The effectiveness of an institutional environment provides a signal to potential entrepreneurs regarding enabling or constraining role of institutions for new venture creation (Aldrich, 1990; Gnyawali & Fogel, 1994).

Signaling theory explains activities or attributes that can qualify as credible indicators of potential indicators of potential quality that change the belief of, or convey information to, other individuals in the market (Spence, 1973; Spence, 1974). This theory appropriately explains entrepreneur behaviors in the presence of incentives or penalties imposed by institutions, within

the view of information asymmetry. Building on signaling theory, I contend that entrepreneurs confront information asymmetry, associated with uncertainty. Through an information perspective (Vaghely & Julien, 2010), I argue that entrepreneurs view their institutional environment as providing quality information—such information signals their subsequent decisions regarding the exploitation of opportunities because entrepreneurs process information in an interpretative way and link patterns for information from multiple resources. The use of signaling theory to explain entrepreneurial behavior in response to institutional quality is consistent with prior research studies in entrepreneurship and management (Busenitz, Fiet, & Moesel, 2005; Karasek Iii & Bryant, 2011).

Similarly, for over two decades, scholars have sought to explain how national culture influences levels of a nation's entrepreneurial activity. As Hofstede (2001) suggested, culture is the collective programming of mind and is a system of collectively held values. In other words, national culture is collectively embedded in the minds differently across nations (Lee & Peterson, 2000). As one of five national cultural dimensions (Hofstede, 2001), individualism and collectivism represent opposite sides of a continuum (Morris, Davis, & Allen, 1994). Nevertheless, Hofstede states that “individualism stands for a society in which the ties between individuals are loose: everyone is expected to look after him/herself and her/his immediate family only” and “collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive, in-groups that, throughout peoples' lifetimes, continue to protect them in exchange for unquestioning loyalty” (Hofstede 2001: p.225). In addition, individualism places an emphasis on individual-level factors such as self-control, self-responsibility, and self-objectivity, while collectivism focuses on group-interests, incorporation, alliances, and harmony.

Given culture is a collective mind of programs (Hofstede, 2001), I argue that individualism and collectivism are two variables and posit these on a continuum (e.g., Morris, Davis, & Allen, 1994; Hofstede, 2001).

Previous studies note that *culture* is one of the mechanisms that contributes to opportunity recognition, a fundamental component of entrepreneurial behavior (Shane, Locke, & Collins, 2003), which leads to entrepreneurial activity (Hayton et al., 2002). Entrepreneurial opportunity recognition and subsequent activities involve cognitive and subjective processes as well as opportunity exploitation (Shane & Venkataraman, 2000). The exploited action, in this study, refers to entrepreneurial activities such as new venture creation, innovation, and unrestricted competition (Stel, Carree, & Thurik, 2005). Scholars state that though policy makers recognize that entrepreneurship represents one of the most critical factors in a nation's economic growth, it is difficult to explain why nations have differing rates of entrepreneurial activities (Hayton et al., 2002; Hechavarria & Reynolds, 2009).

A review by Hayton et al. (2002) suggests that the relationship between national culture and entrepreneurship remains inconclusive, though prior studies have investigated the direct effects of national culture on diverse streams of entrepreneurship. For example, scholars have used aggregate measures of entrepreneurship (Shane, 1992, 1993), characteristics of individual entrepreneurs (McGrath & MacMillan, 1992; McGrath, MacMillan, & Scheinberg, 1992), and corporate entrepreneurship (Steensma, Marino, & Weaver, 2000) to examine similar relationships. Regarding the role of individualism and collectivism on entrepreneurship, some report that individualism and entrepreneurship have a positive relationship (Mueller & Thomas, 2001; Taylor & Wilson, 2012), while others suggest a negative relationship exists (Baum et al.,

1993; Hunt & Levie, 2002). Moreover, Morris et al. (1994) found that a curvilinear relationship exists between individualism-collectivism and corporate entrepreneurship.

In view of the above inconclusive results, scholars have called for examining how cultural variables interact with institutional environment and motivate entrepreneurial activities (Bruton et al., 2010; Cullen et al., 2013; Hayton et al., 2002). In response to these calls, this study examines the interaction between individualism, which is a national cultural variable (Hofstede, 2001), and the institutional environment, including level of transparency and business freedom. I draw on signaling and institutional theories to develop a theoretical framework for the following reasons. While signaling theory delivers an explanation of entrepreneurs' response, institutional theory describes how institutions may enable or constrain entrepreneurial activities. As shown in figure 2.1, the conceptual framework elaborates how entrepreneurial decisions are derived through a combination of individualism-collectivism as a continuum and institutional environments.

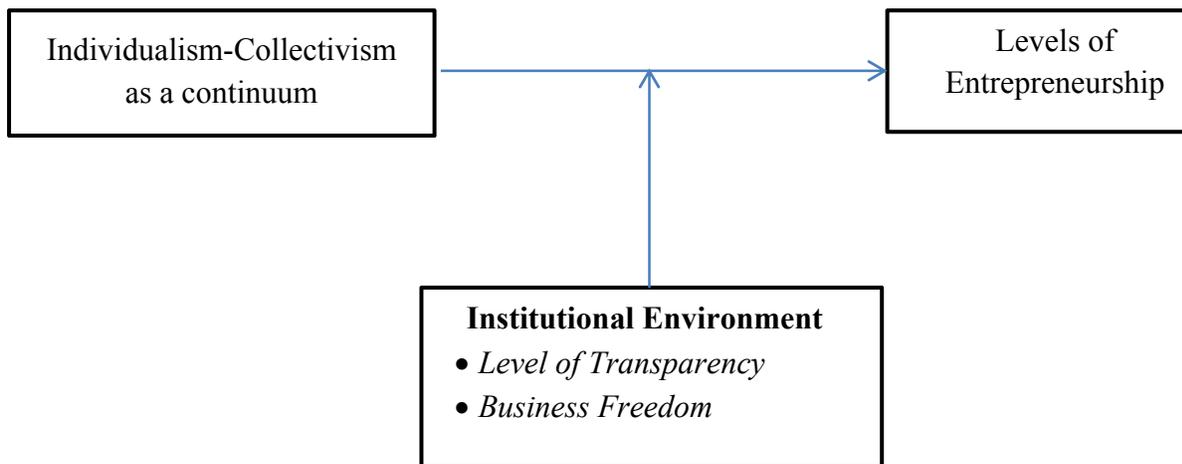


Figure 2.1: Conceptual Framework

HYPOTHESES DEVELOPMENT

Individualism-Collectivism as a Continuum and Entrepreneurship

There is an ongoing debate in the literature regarding the influence of individualism and collectivism on entrepreneurship. I build on the premise that individualism and collectivism are two ends of a continuum, and that the difference between individualism and collectivism is based on the different conceptions of self rather than collective behavior (Chui et al., 2010; Hofstede, 2001)². Tiessen (1997) suggested that individualism and collectivism are orientations of the self that reflect how entrepreneurs conduct their interactions drawing on their self and motivation—collectivists are motivated to perform activities to serve their group's interest whereas individualists will perform those activities only if it would benefit herself or himself.

Hofstede (2001) argues that individualism reflects the degree to which people focus on their internal attributes, such as their own abilities, to differentiate themselves from others. Gelfand, Raver, and Ehrhart (2002) suggested that within individualistic cultures, the self is served by being distinct from, and being better than others; individuals are motivated to become independent and to stand out from the crowd (Gelfand et al. 2002, p. 835). Individualism places an emphasis on self-orientation, autonomy, determination, courage, and commitment (Sexton & Bowman, 1985; Timmons, 1999); and empirical evidence suggests a positive relationship between individualism and entrepreneurship (Mueller & Thomas, 2001; Pinillos & Reyes, 2011; Taylor & Wilson, 2012). In consideration of the individualism side of the continuum, when individualism is high, levels of entrepreneurial activity will be high. In sum, I propose that the

² However, people in individualistic cultures can demonstrate collective behavior (Chui, A. C. W., Titman, S., & Wei, K. C. J. 2010. Individualism and momentum around the world. *The Journal of Finance*, 65(1): 361-392. —for example, investors in individualistic cultures have often been found to behave collectively and overpay based on overconfidence and optimism in the potential of new ventures going for initial public offering in U.S. stock markets (e.g., investors with individualistic orientation recently overpaid for Facebook shares at the time of its initial public offering at Nasdaq).

relationship between individualism and entrepreneurship that is based on an entrepreneur's self and orientation is likely to be strong only at high levels of individualism, and it will sharply taper off as cultural attributes become distant from that high point and move toward ambiguity at the center.

On the other hand, collectivists perceive themselves as interdependent members of a group (e.g., their extended family, race, religion, team, firm or nationality) and tend to act cooperatively in their group's interest (Hofstede, 1980, 2001; Triandis, 1993). They are deeply concerned for and are committed to others around them (Hui & Triandis, 1986) and are served through being accepted by others, being interdependent, and blending in to implant themselves in a group or society within the pursuit of the group's interests and objectives (Chui et al., 2010), including within entrepreneurial ventures (Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008). As such, entrepreneurs from collectivist cultures are motivated by strategic cooperation and teamwork based on trust, and long-run mutual commitment based on relational contracting (Steensma et al., 2000; Tiessen, 1997). Social capital, intimate ties and shared values, drive individuals toward entrepreneurship and innovations as they link their innovations to collective goals or group interests (Shane, 1994; Shane, Venkataraman, & MacMillan, 1995; Steensma et al., 2000; Tiessen, 1997). Furthermore, Davidsson and Honig (2003) suggested that social capital plays a vital role among nascent entrepreneurs. In terms of discipline and dedication, they are better in responding to socialized control and efficient communication rather than contracts (Tiessen, 1997). Consequently, when looking at the collectivism side of the continuum, I propose that the relationship between collectivism and entrepreneurship, which is based on an entrepreneur's community-oriented self and orientation is likely to be strong only at high levels

of collectivism, and it will sharply decline as cultural attributes become distant from that high point and will move toward ambiguity at the center. This is consistent with Tiessen (1997: 372), who proposed that “studies at the national level suggest that both individualism and collectivism are positively associated with entrepreneurial outcomes.”

However, at intermediate levels of the continuum, neither motivation is as strong as individuals in individualistic or collectivistic culture will ‘get stuck in the middle’ in the proverbial sense. I propose that moderate levels of collectivism and individualism insufficiently motivate entrepreneurship. At moderate levels, the self of potential entrepreneurs will face a dilemma. Individuals, whose self is served by the quest to be distinctively better than others, based on their locus of control, autonomy, determination, courage and commitment to contracts will be marred by confusion and dilemma at the midpoint (Gelfand et al. 2002, p. 835). A moderate level of individualism does not provide enough push for proactively taking risks, and the pursuit of creativity and innovations despite odds of success. It would create ambivalence with regard to recognizing opportunities, generating ideas and pursuing those for commercialization. Similarly, a moderate level of collectivism will give rise to in-group collectivism that is focused on satisficing local interests (i.e., “localism”) and immediate relations (i.e., “familism”) without any regard for efficiency (e.g., Taylor and Wilson, 2012)—in-group collectivism is antagonistic to change, innovation and entrepreneurship as they could threaten local interests. These issues will create uncertainty and ambiguity with mixed signals that dampen the pursuits of innovations and entrepreneurship. Overall, I believe that “average” levels of these orientations can obscure the positive attributes and their impact in the context of entrepreneurial behavior. Consequently, I propose:

H1: The relationship between individualism-collectivism as a continuum and the levels of entrepreneurship is positive curvilinear (U-shaped): At higher levels of individualism, the levels of entrepreneurship will be high and on the other end of the continuum, at higher levels of collectivism, the levels of entrepreneurship will be high as well compared to relationship at the intermediate levels.

Moderating Role of Transparency Level on Entrepreneurship

The level of transparency is contrary to the level of corruption. Transparency International (TI), a nonprofit organization, defines corruption as “*the abuse of entrusted power for private gain.*”³ Aidis et al. (2008) stated that corruption reflects an inefficient, over regulated environment with officials endowed with discretionary power. Scholars have shown that corruption inhibits business growth as expectation of corrupt behavior by government officials discourages entrepreneurship (Aidis et al., 2008; Anokhin & Schulze, 2009; Minniti, 2008). This is because corruption imposed by a third party delivers an unfavorable signal to entrepreneurs since the fairness of the rule of game could be omitted by one party. This increases levels of uncertainty, which makes it extremely difficult to adequately plan or even innovate (Luthans, Peterson, & Ibrayeva, 1998; Luthans, Stajkovic, & Ibrayeva, 2000). Entrepreneurs may lose their competitive position and advantage to competitors who pay bribes. Corruption increases the level of uncertainty and reduces entrepreneurial gains (Aidis & Mickiewicz, 2006). Moreover, it is difficult to remove corruption from the institutions rapidly because such practices are generally embedded and institutions are slow to change. Indeed, control of corruption has been positively associated with entrepreneurial activity and innovation (Anokhin & Schulze, 2009).

³ Strategy 2015, Transparency International, 2011

As such, when the levels of corruption are low, that is, institutional levels of transparency are high, entrepreneurs with individualistic culture receive positive signals for pursuing their ideas independently. They can pursue their creative ideas and ‘dream big’ with confidence, courage and determination. In such business climates, individuals with a high internal locus of control and appropriate motivation, who seek autonomy can pursue their ideas in proverbial ‘garages’ and aim to match the successes of individuals such as Steve Jobs of Apple, Inc., and Larry Page of Google. They know that if they follow the rules of the game, they can start their ventures without proverbial ‘greasing the palms’ of government officials and earn rents from their enterprise. In essence, I propose that the positive attributes of individualistic entrepreneurs get a boost in the presence of transparent, relatively corruption-less system. In other words, transparency enhances curvilinear relationship between individualism-collectivism as a continuum and the level of entrepreneurship in such a fashion that the relationship becomes stronger or more strongly positive. As a result, I propose:

H2: Institutional transparency moderates the relationship between individualism-collectivism as a continuum and levels of entrepreneurship: In the presence of transparency, the relationship between individualism-collectivism as a continuum and the levels of entrepreneurship will first decrease down to the point of inflection and then increase showing positive curvilinear effect on the levels of entrepreneurship.

Moderating Role of Business Freedom on Entrepreneurship

According to the index of economic freedom established by Heritage foundation, “business freedom measure(s) the ability to start, operate, and close a business that represents the overall burden of regulation as well as the efficiency of government in the regulatory process.”⁴ Business freedom is a double-edged sword depending on the levels and context (Desai et al., 2003; Dreher and Gassebner, 2007; McMullen, Bagby, & Palich, 2008; Troilo, 2011). On one hand, business freedom reflects minimal regulatory burdens that consist of difficult bureaucratic procedures, legal and tax barriers, and fees and penalties that limit the ability to start, operate and close a business. Research findings support the contention that procedural clarity saves cost and time and entrepreneurs can start new ventures relatively easily (Bruton et al., 2010; Freytag and Thurik, 2007; McMullen, Bagby, & Palich, 2008; Troilo, 2011). On the other hand, high business freedom can limit the creativity of entrepreneurs. For instance, high levels of property rights protection can deter imitators who often engage in incremental innovation; and prevents such entrepreneurs from earning rents (He, Morck, & Yeung, 2003).

For individualistic entrepreneurs, I propose that the business freedom provides positive signal and would motivate entrepreneurial activities particularly in the initial stages. This is because such individuals will be motivated to exploit their own abilities to differentiate themselves from others, while developing streamlined procedures that will provide ample opportunities to pursue their ambitions for standing out from the crowd. Such entrepreneurs will apply their determination, courage, commitment and locus of control to thrive in an environment where the time and cost for starting new venture are minimal. However, the benefits of the

⁴ The Heritage Foundation 2013 Index of Economic Freedom: <http://www.heritage.org/index/business-freedom>

combination of business freedom and individualism would diminish beyond a point because such a combination would result in the dysfunctional side of these attributes such as hubris and greed, lack of focus and planning, gamesmanship, zero-sum competition and exploitation of resources to satisfy self-interests (Morris et al., 1994). Such a combination also amplifies lack of teamwork, social capital, due diligence and conscientiousness—these elements are critical for commercializing the idea (that is, invention to innovation stage) and making a venture successful. Too much of individualism and business freedom would also increase the numbers and frequency of business failures and decrease the funding available for sounder ideas and business plans over time, there will be shortage of capital for suitable projects and the marginal cost of funding additional initiatives will rise to a point where incentives to start ventures diminish.

Similarly, when business freedom is high, collectivistic entrepreneurs will be motivated to pursue entrepreneurial activities for the benefit of the group, network or nation. In the presence of business freedom, such entrepreneurs will leverage resources through the enabling institutions or systems and pursue entrepreneurship for collective goals or group interests (Shane, 1994; Shane et al., 1995; Steensma et al., 2000; Tiessen, 1997). However, the benefits resulting from the combination of business freedom and collectivism would diminish beyond a point because such a combination could result in an anti-entrepreneurship bias. The dark side of this combination is focused more towards ‘in-group’ loyalties and benefits than collective growth. Such a combination can mellow down ambitions in favor of compromise and acceptance of group norms. Under such conditions, entrepreneurial philosophically will be oriented towards

status-quo, inertia, pursuing routines and incremental innovations rather than radical change or innovations (Morris et al., 1994). As such, I propose

H3a: Business freedom moderates the relationship between individualism-collectivism as a continuum and entrepreneurship: When business freedom is high, there exists a positive but diminishing effects relationship between individualism-collectivism as a continuum and the levels of entrepreneurship.

On the other hand, when business freedom is low, highly individualism would motivate entrepreneurs to believe in themselves and find innovative ways to move forward with determination. Under these conditions, regular individuals may get discouraged due to the constraints and regulatory burdens. However, entrepreneurs with individualistic entrepreneurs will pursue their ideas without inhibitions with a sense of charting destiny for themselves under tough conditions as their locus of control is high. They will seek resources from diverse sources, may 'grease the wheel' and move forward. As such, the levels of entrepreneurship will be high in the presence of individualism and low business freedom low. Similarly, when business freedom is low, collectivistic entrepreneurs are incentivized to use their social capital and network to pursue entrepreneurial activities to with the aim of improving the conditions of their group, communities or nation (Tata & Prasad, 2010). They reduce regulatory burden and constraints via relationships and social networks. Further, they must exploit social and familial relationships to secure essential resources (Tiessen, 1997). With the mission to promote group welfare and an emphasis on sharing, cooperation, and group harmony, these entrepreneurs are able to overcome constraints via discovering opportunities, pursuing innovations, exploiting gaps in the system,

and creating new markets for revenues that can benefit their community (Mair & Marti, 2006; Zapalska & Edwards, 2001). As such, I propose

H3b: Business freedom moderates the relationship between individualism-collectivism continuum as a continuum and entrepreneurship: When business freedom is low, there exists a positive curvilinear (U-shaped) relationship between individualism-collectivism as a continuum and the levels of entrepreneurship.

RESEARCH METHODOLOGY

Data and Sample

I collected data from several reliable sources in order to test hypotheses. The data on entrepreneurial activities is derived from the Global Entrepreneurship Monitor (GEM) database, which was developed by the Global Entrepreneurship Research Association (GERA). Numerous past studies have employed data from GEM, which is widely accepted by researchers (Cullen et al., 2013; De Clercq, Lim, & Oh, 2011; Levie & Autio, 2011; Stenholm et al., 2011). The GEM database was established in 1997 through a partnership between London Business School and Babson College. This project began in 1999 with 10 countries and expanded to over 40 countries within a decade⁵. According to Reynolds et al. (2005), GEM teams across nations conduct the survey by asking standard questions concerning business startup activities in each country. A representative-weighted sample of at least 2,000 adults between the ages of 18 to 64 who are interviewed (primarily by telephone) by the team is gathered. Teams conduct the formal interviews following the questionnaire which is translated from English into the native language

⁵ Global Entrepreneurship Monitor: <http://www.gemconsortium.org/>

of each country. Another source of data set came from the World Bank's database, index of economic freedom established by Heritage Foundation⁶ and the United Nation database. Though there are missing data due to differences in data across nations, I was able to successfully collect a sample of 54 countries⁷. Although these countries represent approximately 22% of the available countries in the world these countries represent majority of the world population and commercial activities.

The time span of the data from GEM database is 10 years from 2001-2010. As the GEM database has only existed since 1997, it is relatively limited in terms of number of countries, when compared to the World Bank, Heritage foundation and United Nation databases. However, in order to have a one year lag in my model, this study utilizes the time span from 2000-2009 for independent and control variables. My data were constructed as an unbalanced panel dataset with 326 available observations as the GEM did not survey all countries every year.

Variables

Dependent Variables.

As entrepreneurship refers to the intentional startup of new firms or the creation of the new venture, I measure levels of entrepreneurship by using the Total Early-Stage Entrepreneurial Activity (TEA) index for each year and country within my study. The TEA index refers to the percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business. TEA index is calculated in a survey of the adult population of each country,

⁶ The Heritage Foundation: <http://www.heritage.org/>

⁷ Argentina, Australia, Austria, Belgium, Brazil, Canada, Chili, China, Colombia, Costa Rica, Czech Republic, Denmark, Ecuador, England, Finland, France, Germany, Greece, Guatemala, Hong Kong, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Norway, Pakistan, Panama, Peru, Philippine, Poland, Portugal, Romania, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, USA, Uruguay and Venezuela.

which, among many other things, registers the percentage of entrepreneurial initiatives carried out in a 1- year period. The data was directly retrieved from official GEM website.⁸ The TEA index is widely accepted by researchers and is used to measure the entrepreneurial process from nascent entrepreneurs, involved in firm creation entrepreneurs who own young firms (up to 3.5 years old) (Lepoutre, Justo, Terjesen, & Bosma, 2013). Past studies have used this measurement such as Pinillos and Reyes (2011) and Cullen et al. (2013).

Independent Variables.

Individualism-Collectivism as a Continuum (Ind_Col) is measured by the Hofstede (2001) study⁹. The score ranges from 0 to 100. A higher score indicates a country with individualism while the lower score indicates a country with collectivism. International management scholars have utilized Hofstede's cultural dimensions for several decades. Moreover, these dimensions have been used within many disciplines, including sociology, psychology, economics, marketing, and management. Although the GLOBE study (House, 2004) provides recent data, most studies in organizational research have used Hofstede's (2001) dimensions. In addition to the research conducted in international business literature, most of the studies within the entrepreneurship discipline have also used Hofstede's cultural dimensions (e.g., Shane (1993); Mueller and Thomas (2001); and Pinillos and Reyes (2011)). Following previous empirical studies, I employ Hofstede's measures with an assumption that cultural variables remain relatively time invariant for a span of time (Li & Zahra, 2012).

⁸ Global Entrepreneurship Monitor: <http://www.gemconsortium.org/>

⁹ Hofstede official website (<http://geert-hofstede.com>) which provides the culture dimension score for 93 countries.

Moderating Variables.

My moderators consist of two variables, which are level of transparency (LOT) and business freedom (BF). To capture the extent of level of transparency and business freedom, I retrieved data from the Index of Economic Freedom,(Johnson & Lenartowicz, 1999) which consists of ten economic freedom indicators, including freedom from corruption and business freedom (Beach & Miles, 2006) . According to this methodology, freedom from corruption is derived primarily from Transparency International's Corruption Perception Index (CPI) which captures the transparency level while business freedom was captured through data obtained from the World Bank's Doing Business report, capturing ten factors in terms of starting a business, obtaining a license and closing a business¹⁰. Each country's overall score is graded on scale range 0 to 100. Bell, Moore, and Al-Shammari (2007) have used the Index of Economic Freedom to capture economic freedom in their study.

Control Variables.

I control for three variables including GDP per capita, immigrant stock (IMS) and human resource development because each of these influences entrepreneurial activity. Previous studies found that GDP per capita, representing the level of economic development, has an influence on entrepreneurial activity at the national level (Pinillos & Reyes, 2011; Wennekers, Van Wennekers, Thurik, & Reynolds, 2005). Further, immigrant stock has an influence on entrepreneurial activity, especially in the collectivist cultures (Sanders & Nee, 1996; Yuengert, 1995). According to Cullen et al. (2013), immigrant stock has an influence on entrepreneurial activity. Sociological scholars have evidence to support immigrant stock, especially in the

¹⁰ This data comes from The Heritage Foundation: <http://www.heritage.org/index/book/methodology>.

collectivist cultures (Sanders & Nee, 1996; Yuengert, 1995). Both variables are retrieved from the World Bank¹¹. To control for the extent of human resource development, I embraced the Human Development Index (HDI), which is published by the United Nations¹². HDI represents the knowledge, education and standard of living of each country by calculating based on life expectancy. Cullen et al. (2013) found that entrepreneurship education at universities can promote entrepreneurial activities since it provide course training to students who may be compelled or who have a desire to create new ventures.

Methods

To test hypotheses, I employed a panel regression that allowed me to analyze complex models for this cross-country study (Greene, 2003; Park, 2005). I used the random effects model, which allows time invariant variables. In this study, the cultural variable, individualism-collectivism, does not change over time; this also supports earlier work on national culture by Hofstede (2001). I also employed a Hausman test in order to compare fixed versus random effects (Greene, 2003; Hausman, 1978). This analysis tests whether the unique errors are correlated with the independent variables. The Hausman test recommends that the random-effects model provides a better fit for the data. The probability of chi-square is larger than 0.05, which indicates a preference for the random effect model.

The models included six panel regression models. In models 1 to 5, I pooled the dataset by country since there are differences based on country. The baseline model with all control variables is illustrated in model 1. In model 2, I tested the main effect on hypothesis 1. Model 3 and 4 are tested with the interaction effects on hypothesis 2 and 3, respectively. In model 5, I

¹¹ World Bank: www.data.worldbank.org

¹² United Nations: <http://hdr.unpd.org/en>

inserted all variables. To examine the robustness of my panel analysis, I re-pooled my panel data by using time, and inserted all variables in model 6.

Given the moderately high correlation among GDP, human development index and immigrant stock, I ran the models for the linear terms and included variance inflation factors (VIF), tolerance indicators, and Durbin-Watson in order to ensure that these variables do not lend to multi-collinearity problem. VIF for the regressions is 2.53 and does not exceeded the threshold of 10 which would cause concerns for multi-collinearity (Cohen, West, Cohen, & West, 2003). However, in order to check the need to control for serial autocorrelation (Baltagi & Wu, 1999), which is common within cross-country studies (Khoury & Peng, 2011), my panel data regressions used the Baltagi-Wu test which offers an applicable statistic for unequally spaced panel data. It has been recommended that the Baltagi-Wu value test will result in a value that is “much smaller than 2”, which is required to correct serial autocorrelation (Levie & Autio, 2011); although no exact critical values for the Baltagi-Wu test in past studies had been suggested. The data did not indicate an autocorrelation requirement.

RESULTS

Table 2.1 illustrates a correlation matrix and descriptive statistics for all variables that I utilized in this study. I recognized that the GDP, human development index and immigrant stock have moderately positive high correlations. GDP has a positive association with both human development index and immigrant stock. However, the test for multi-collinearity does not indicate problematic results from the linear-regression analysis.

Table 2.2 reports the models for hypotheses testing and the results of the panel regressions, which includes both main effects and interaction effects. Model 1 is the baseline

**Table 2.1:
Descriptive Statistics and Correlations**

	Mean	Std. Deviation	TEA	GDP	IMS	Ind_Col	HDI	LOT	BF
Total Entrepreneurial Activities (TEA)	8.976	6.218	1						
GDP per capita (GDP)	17820.52	17062.86	-.4693**	1					
% of Immigration Stock (IMS)	7.465	9.172	-.2812**	.4960**	1				
Individualism- Collectivism (Ind_Col)	45.163	24.996	-.4604**	.6603**	.3073*	1			
Human Development Index (HDI)	0.765	0.120	-.4723**	.8009**	.5362**	.6344**	1		
Level of Transparency (LOT)	55.211	24.533	-.4325**	.8099**	.6107**	.6413**	.7863**	1	
Business Freedom (BF)	72.175	13.384	-.3846**	.6761**	.5320**	.4644**	.6404**	.7521**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 2.2:
Estimates Effect of Individualism-Collectivism on Levels of Entrepreneurship

Variable	Hypothesized sign	Model					
		1 (Baseline)	2	3	4	5	6
Intercept		27.040*** (5.126)	31.951*** (5.236)	28.534** (6.896)	73.80*** (9.372)	70.01*** (9.475)	59.023*** (7.846)
Controls							
GDP		-3.31e-06 (0.00)	-5.76e-06* (0.00)	-9.82e-06* (0.00)	1.43e-06 (0.00)	0.000013 (0.00)	0.00006* (0.00)
Immigrant Stock		-0.0732 (0.08)	-0.0863 (0.07)	-0.0683 (0.08)	0.0127 (0.07)	-0.0477 (0.08)	-0.0176 (0.03)
Human Development Index		-21.050** (7.12)	-13.175* (7.27)	-11.352† (7.58)	-10.770† (7.11)	-11.888† (7.35)	-4.809 (4.71)
Independent Variables							
Individualism-Collectivism (Ind_Col)			-0.4925*** (0.116)	-0.161 (0.271)	--2.082*** (0.379)	-1.721*** (0.402)	-1.507*** (0.349)
Individualism-Collectivism Sq (Ind_Col) ²	H1: U-shape (+)		0.004*** (0.001)	-0.0009 (0.003)	0.018*** (0.003)	0.0132** (0.004)	0.011** (0.003)
Level of Transparency (LOT)				0.004 (0.120)		0.435*** (0.134)	0.130† (0.091)
Business freedom (BF)					-0.667*** (0.124)	-0.873*** (0.141)	-0.567*** (0.144)
Interaction effects							
Ind_Col x LOT				-0.004 (0.005)		-0.0196*** (0.006)	-0.009** (0.004)
Ind_Col x BF					0.024*** (0.005)	0.324*** (0.006)	0.022** (0.006)
(Ind_Col) ² x LOT	H2: (+)			0.00007† (0.00005)		0.0002*** (0.00005)	0.0001** (0.00003)
(Ind_Col) ² x BF	H3a & H3b: (-)				-0.00021*** (0.00005)	-0.0003*** (0.00005)	-0.0002** (0.00006)
Wald Chi ² (No. Variables)		21.64***	48.26***	55.29***	84.94***	100.85***	343.83***
R-Square (overall)		0.227	0.440	0.479	0.436	0.491	0.523
rho		0.763	0.714	0.704	0.724	0.730	0.000

Notes:

1. †p<.10, *p<.05, **p<.01, ***p<.001, 1-tailed significances (controls 2-tailed), GLS coefficients (unstandardized)
2. Standard errors appear in parentheses.

model, which includes all control variables. As shown in Model 2, this study focused on a curvilinear relationship (U-Shaped) between individualism-collectivism as a continuum and levels of entrepreneurship. In hypothesis 1, I posited that at higher levels of individualism, the levels of entrepreneurship will be high and on the other end of the continuum, at higher levels of collectivism, the levels of entrepreneurship will be high as well when compared to intermediate levels. The estimated coefficient of the square term for individualism-collectivism is positive and statistically significant ($p < .001$), supporting Hypothesis 1. As shown in Figure 2.2, levels of entrepreneurship are high at the high points on the continuum of individualism and collectivism while the lowest point of entrepreneurial activities is located at the midpoint of the continuum.

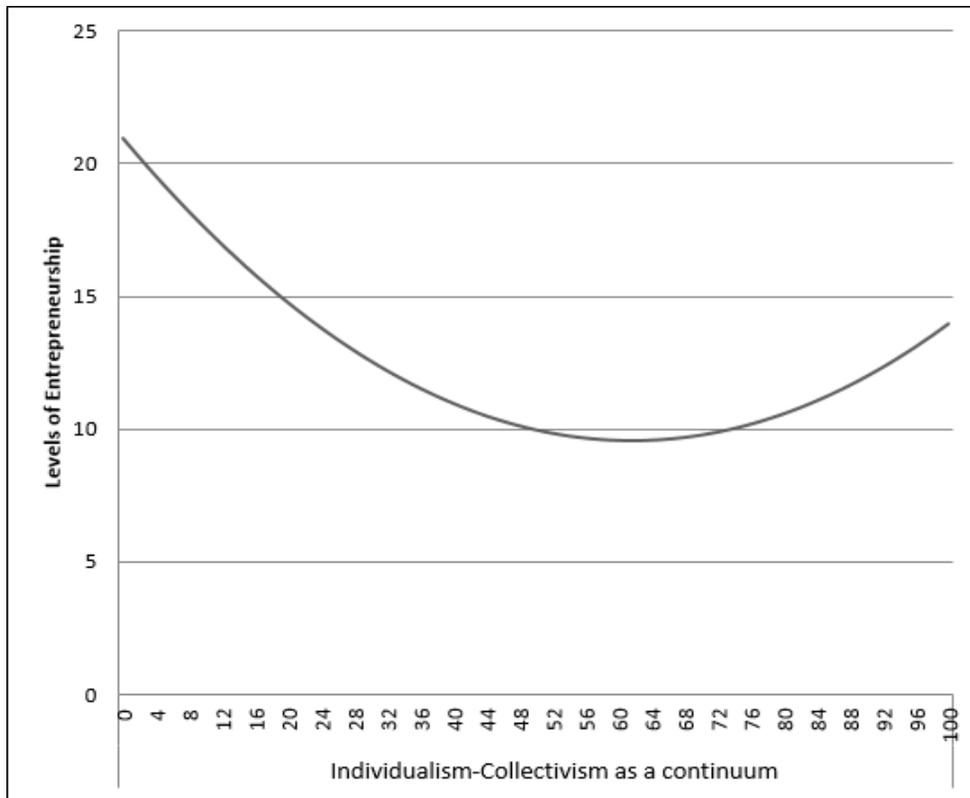


Figure 2.2: Main Effect of Individualism-Collectivism as a continuum on Levels of Entrepreneurship

In addition, I tested the interaction effect in Model 3 and 4. Hypothesis 2 predicted that in the presence of transparency, the relationship between individualism (collectivism) and levels of entrepreneurship will first show a downward trend to the point of inflection and then go upward showing positive curvilinear effect. Model 3 illustrates that the estimated coefficient for the interaction term between the square term of individualism-collectivism and level of transparency is positive and significant ($p < .10$), supporting Hypothesis 2. Given the effects of individualism-collectivism on the levels of entrepreneurship at the low level of transparency (-1SD) and the high level of transparency (+1SD), figure 2.3 illustrates the estimated relationship between the individualism-collectivism, the levels of entrepreneurship and level of transparency (keeping other variables constant). As shown in figure 2.3, in the presence of level of transparency, the relationship between the individualism-collectivism and the levels of entrepreneurship is positive curvilinear (U-shape).

Lastly, Hypothesis 3 (a) proposes that in the presence of high business freedom, the relationship between the individualism-collectivism and the levels of entrepreneurship is negative curvilinear (inverted U-shaped). The coefficient of interaction term between the squared individualism-collectivism and business freedom in the model 4 is negative and significant ($p < .001$), which provide support for the negative curvilinear prediction. Figure 2.4 shows the negative curvilinear relationship between the individualism-collectivism and the levels of entrepreneurship in the presence of high business freedom. This relationship is visible at the front end of the cube in the three-dimensional plot. As Figure 2.4 shows, above its mean value, the individualism-collectivism has a gradually diminishing positive effect on entrepreneurial

activities. The data also suggests a positive but ultimately declining relationship with entrepreneurship, though the inflection point for this occurs beyond two standard deviations.

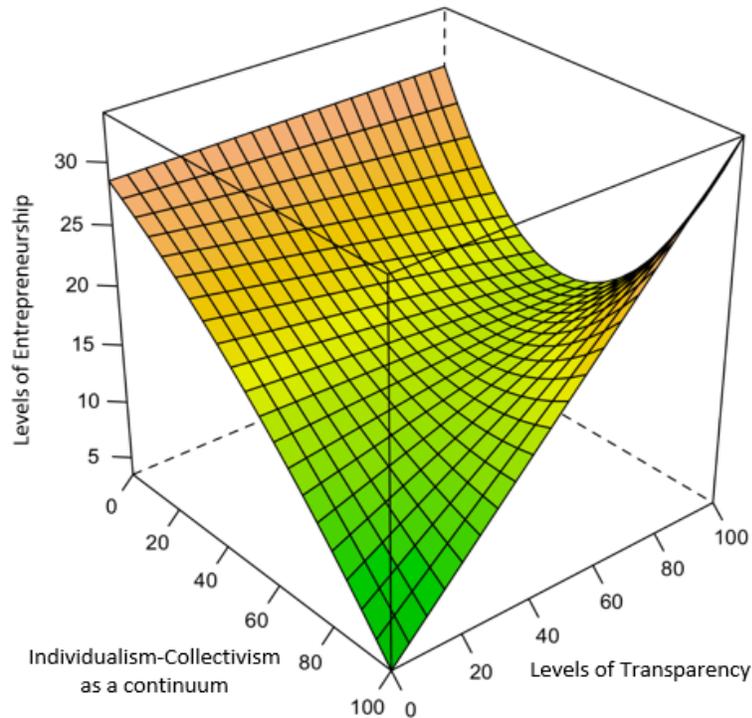


Figure 2.3: Moderating Effect of Levels of Transparency on Individualism-Collectivism as a continuum and Levels of Entrepreneurship

Further, Hypothesis 3 (b) it states that when business freedom is low, the relationship between the individualism-collectivism and the levels of entrepreneurship will be positive curvilinear (U-shaped). Figure 2.4 also shows the positive curvilinear (U-shaped) toward the back end of the cube in the three-dimensional plot. In other words, the presence of low levels of business freedom results in a positive curvilinear relationship between the individualism-collectivism and the levels of entrepreneurship.

In Model 5, I inserted all variables in the panel regression model. The results from Table 2.2 indicate all estimated coefficients for Hypothesis 1, 2 and 3 are statistically significant ($p < .001$).

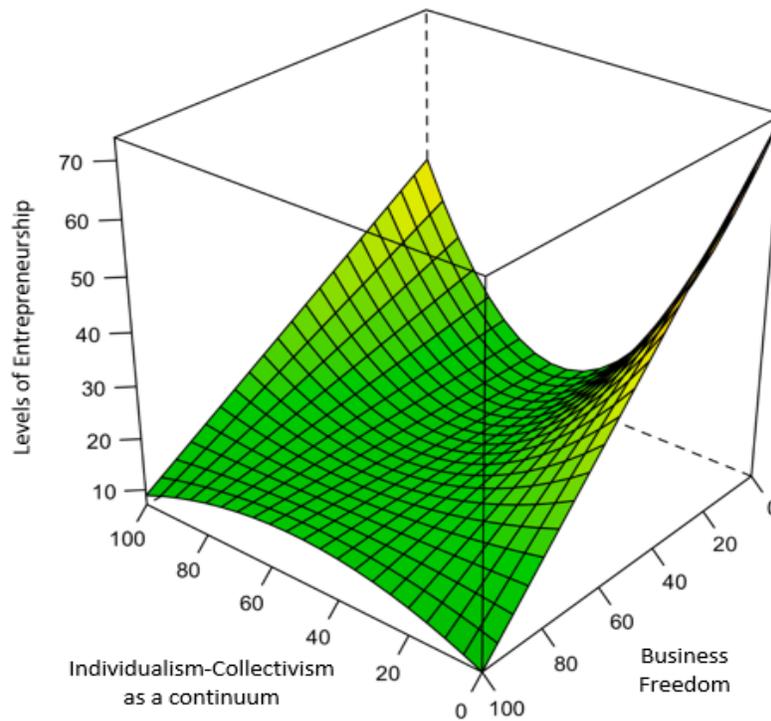


Figure 2.4: Moderating Effect of Business Freedom on Individualism-Collectivism as a continuum and Levels of Entrepreneurship

Robustness Check and Alternative Model

In Model 6, I examined the robustness of panel regression analysis by re-pooling the panel data. I used year as a group and then re-ran the analysis. The results from the alternative model are statistically significant ($p < .01$), which support Hypothesis 1, 2 and 3, and are consistent with the results from Model 5.

Overall, the hypotheses are supported. Entrepreneurs who emerge in either individualism or collectivism cultures are more likely to pursue activities, while they who are stuck between individualism and collectivism experience difficulties in their pursuits. All institutional environments, including level of transparency, and business freedom, play a vital role and interplay with the relationship between the individualism-collectivism and the levels of entrepreneurship.

DISCUSSION AND CONCLUSION

Discussion

This study provides a vital response to recent calls from the literature in examining the manner that both cultural and institutional factors combine with one another to impact rates of entrepreneurship at national levels (Bruton et al., 2010; Li & Zahra, 2012). Not only do I highlight valuable new findings on the effect of individualism-collectivism as continuum on the levels of entrepreneurship, but I also extend institutional and signal theories in the context of international entrepreneurship and management.

This study add to the extant literature, which primarily focuses on either individualism or collectivism solely. Consistent with the general theme of my inquiry, the results clearly demonstrate a positive curvilinear effect between the individualism-collectivism and the levels of entrepreneurship. These results demonstrate that the levels of entrepreneurship experiences a boost when levels of individualism are high but taper off when individualism recedes toward intermediate levels, and simultaneously, levels of entrepreneurship amplifies when collectivism is high but declines when collectivism moves toward intermediate levels. Entrepreneurs at either end of the continuum can be successful when their “self” is correctly matched with the correct

cultural environment. This suggests that entrepreneurs from either end of the continuum are able to develop strategies to successfully operate within their environment. This supports earlier work, which demonstrated the right fit between entrepreneurs and their national culture is important for new venture success (e.g., Lee & Peterson, 2000).

More importantly, this study also responds to scholarly calls for further investigating the combinative effects between cultural and institutional variables on entrepreneurship (Bruton et al., 2010). Drawing upon signaling and institutional theories, the moderating effects of transparency and business freedom are clearly demonstrated on the individualism-collectivism as a continuum; further, a combination of these factors influences national levels of entrepreneurship. In the presence of transparency, the relationship between the individualism-collectivism and the levels of entrepreneurship first goes downward and then increases. I find that the positive attributes of individualistic-self amplify the levels of entrepreneurship in the presence of transparency. However, the levels of entrepreneurship are relatively less influenced by the levels of transparency for collectivistic cultures for the following reasons. First, in collectivist cultures, potential entrepreneurs may leverage their social capital and networks to recognize and engage in entrepreneurial activities. Second, if such entrepreneurs belong to influential families, group or clans, they may leverage resources through their advantageous, self-serving positions within society. It would be easier for them to work through corrupt structure as compared to fair and transparent structure. For example, Tonoyan, Strohmeier, Habib, and Perlitz (2010) find that within the transition economies of the post-Soviet Union and Central-Eastern Europe, privileged entrepreneurs engage in corrupt deals because family,

friends, and national bureaucrats avail them the required resources for entrepreneurial activity while reducing the related transaction costs, which only breeds further corruption.

The findings also indicate that in the presence of business freedom, the relationship between the individualism-collectivism and the levels of entrepreneurship remains positive, but a diminishing effect on levels of entrepreneurship beyond the point of inflection is observed. I also recognize that levels of entrepreneurship are lower in the presence of high business freedom for both highly collectivistic and highly individualistic countries. This is consistent with the previous empirical findings (e.g., McMullen et al. 2011). Entrepreneurs need to overcome roadblocks and other obstacles to capitalize on opportunities within uncertain environments (Persinger, Civi, & Vostina, 2011). If business freedom is extremely high, only a select few entrepreneurs have undue advantages; this can erode any rent-generating opportunities for nascent entrepreneurs (He et al., 2003; Lee & Peterson, 2000). Legal, financial, and other risks may simply be higher than most entrepreneurs are able to bear. This finding is consistent with Simhony (1993) who suggested that freedom has a negative side.

Contributions & Implications

This paper offers both theoretical and managerial implications. To my best knowledge, this is one of the first studies to draw on signaling and institutional theories to find a curvilinear (U-Shaped) relationship between the individualism-collectivism continuum and the levels of entrepreneurship in the context of international entrepreneurship. This result from the main effect between individualism-collectivism and entrepreneurship not only helps to explain why conflicting and often inconclusive results are reported within the entrepreneurship literature, but also brings-to-light new findings that were previously concealed. These results show that rates of

entrepreneurship are higher in both collectivist and individualist countries versus those residing in the middle of the continuum. The findings also resonate with the suggestions of Tiessen (1997), who argued that both individualism and collectivism promote rates of entrepreneurship. However, at the midpoint of individualism and collectivism, inconsistent attributes of culture diminish the benefits from either being independent-, or community-oriented in the ability to create new ventures via leveraging resources for one's own self or for one's group.

As culture can influence an entrepreneur's potential for success (Mueller & Thomas, 2001), a culture stronger in collectivism or individualism can significantly improve one's chances for success. Entrepreneurs developing ventures within high collectivism seek-out and create strong in-group relationships within a community to succeed (Tata & Prasad, 2010). Entrepreneurs in highly-individualistic nations will break through regulations in order to pursue their personal entrepreneurial goals (Amit, Glosten, & Muller, 2007). Hofstede (2001) suggested that national cultures are relatively stable and slowly changing, while institutional environments can be reformed through the involvement of both policy-makers and institutions, which can promote or restrain entrepreneurship levels (Baumol, 1990). This has a direct implication for policy makers, who have the responsibility to create and improve the quality of their institutional environments in order to promote and encourage entrepreneurial level in their countries. This study also extends Cullen et al. (2013) by offering a novel measurement by employing different institutional environment variables and also through utilization of Hofstede's individualism dimension. The findings suggest that greater transparency promotes a positive curvilinear relationship between the individualism-collectivism continuum and the levels of entrepreneurship.

Previous literature on corruption found that the level of transparency positively promotes the entrepreneurial levels, since it represents the efficiency of legal institutions and law of enforcement, leading to fairness in the rule of game (e.g., Anokhin & Schulze, 2009). The interaction results extend the corruption research and contributes a neo-result that the level of transparency is highly positively associated with entrepreneurial levels, especially within individualist cultures. Furthermore, business freedom promotes entrepreneurial level since it minimizes transaction costs and allows individuals and firms to capitalize on property rights (Aidis, Estrin, & Mickiewicz, 2012). Higher business freedom provides a free path without interference from institutions and the public sector regarding the start-up, operating and closing of new ventures. However, the interaction results suggest that the individualism-collectivism continuum in the presence of business freedom indicates a diminishing return on entrepreneurial levels. This diminishing effect is likely caused by entrepreneurs who suffer from hubris and greed. Such individualistic-oriented entrepreneurs, who are overconfident and who lack human and social capital, teamwork, and collaboration, may create turbulence as shown by the history of “economic boom times” (Lastra & Wood, 2010). For example, during the “economic bubble” of 1997 in the emerging economies of Asia (e.g., South Korea, Malaysia, Thailand, Philippines, and Indonesia), countries that experienced a significant increase in entrepreneurial and economic opportunities abruptly collapsed. From an alternative perspective, since high business freedom delivers a signal to entrepreneurs the existence of a low regulatory burden, it allows entrepreneurs to freely open, operate, and close their businesses with low governmental interference and law enforcement. A high level of freedom could hinder rates of entrepreneurs in founding new ventures due to low regulations and other protection. Further, I suggest that

regulatory and law enforcement should be established and put in place to control situations resulting from an unbridled business environment. Through high levels of business freedom, individualistic entrepreneurs are enticed to pursue new ventures, regardless of inhibitions and inconsideration, which may easily lead to business failure.

For managerial implications, policy makers should allocate adequate public budgets to enhance the level of transparency in both public government and private enterprise. The level of transparency, represented as the degree of fairness in government policy, is one of the crucial matters that policy makers need to be concerned. At last, government policies, driven by policy makers, have a significant influence on a firm's competitive position and advantage (Hillman & Zardkoochi, 1999). Entrepreneurs receive these signals, not only from the fairness of its policy but also the efficiency of policies to enhance their activities. Business freedom is often heavily influenced or even generated by policy makers. High business freedom indicates high freedom from regulation in terms of starting, operating and closing their ventures. Through high levels of business freedom, individualistic entrepreneurs are enticed to pursue new ventures, regardless of inhibitions and inconsideration, which can easily lead to business failure. Thus, I suggest that government policies regarding business freedom are needed in order to control and maintain the rule of game. Further, I suggest that regulatory and law enforcement should be established to control and dissuade unbridled business practices.

Overall, this findings have implications for both theory and practice as the panel regression model illustrated that the relationship between the individualism-collectivism as a continuum and the levels of entrepreneurship is positive curvilinear (U-shaped), which help consolidate and provide an answer to the ongoing debate in the literature. My model also

indicates how crucial institutional environments, interplaying with the individualism-collectivism continuum, should increase policy makers' concern towards entrepreneurship activities in order to improve entrepreneurial levels, which will lead to growth within these economies.

Limitations, Future Research, and Extensions

Indeed, the limitations of this study are existed. I acknowledge that the size of the data provided by GEM and other sources can lead to limitations in providing statistical power. Another issue is associated with missing data, which forces us to use statistical tools to average values, which may diminish the true variance of the data. However, these secondary data gathered across nations, which were retrieved from the GEM, World Bank and United Nations, provide an essential resource in conducting cross-national research (De Clercq et al., 2011; Stenholm et al., 2011).

This study provides exciting directions for future research. It may be extended to other institutional variables such as the degree of informality, patriotism level, and origin of law. In addition, a nation's economic stage of development may interact with institutional variables to impact entrepreneurship (Fogel, 2006). Other cultural dimensions or measures such as Schwartz (1994) may provide robust findings and further extend cross sectional research. Future research may also focus on the availability of capital to nascent entrepreneurs between collectivist and individualist countries. This includes examining differences between privatized versus state-owned banking systems (Berger, Clarke, Cull, Klapper, & Udell, 2003), a well-functioning stock market (Hill, 2004), along with access to vital venture capital and other business expertise (McGaughey, 2007)

This research may also be extended to examine differences between formal and informal institutions regarding rates of entrepreneurship between collectivist and individualist and countries. This complex topic has numerous, multi-dimensional factors, which need to be empirically tested (Li & Zahra, 2012). While formal and informal institutions may operate against one another, they often cooperate to strengthen the level of entrepreneurship (Tonoyan et al., 2010). An extension into social entrepreneurship to explain the impact of intuitional effects impact these ventures in both individualist and collectivist nations would expand the literature as well. Previous research explains that characteristics, which benefit social entrepreneurs within collectivist and individualist societies may differ (Peredo & McLean, 2006). However, Desa (2012) found that social ventures can find success across virtually all institutional conditions. This study opens the door to numerous research topics and extensions, which will expand the breadth and depth of entrepreneurial research in an international context.

REFERENCES

- Aidis, R., Estrin, S., & Mickiewicz, T. 2008. Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6): 656-672.
- Aidis, R., Estrin, S., & Mickiewicz, T. M. 2012. Size matters: entrepreneurial entry and government. *Small Business Economics*, 39(1): 119.
- Aidis, R., & Mickiewicz, T. 2006. Entrepreneurs, expectations and business expansion: lessons from Lithuania. *Europe-Asia Studies*, 58(6): 855-880.
- Aldrich, H. 1990. Using an ecological perspective to study organizational founding rates. *Entrepreneurship Theory and Practice*, 14(3): 7-24.
- Amit, R., Glosten, L., & Muller, E. 2007. Challenges to Theory Development in Entrepreneurship Research. *Journal of Management Studies*, 30(5): 815-834.
- Anokhin, S., & Schulze, W. S. 2009. Entrepreneurship, innovation, and corruption. *Journal of Business Venturing*, 24(5): 465-476.
- Baltagi, B. H., & Wu, P. X. 1999. Unequally spaced panel data regressions with AR (1) disturbances. *Econometric Theory*, 15(6): 814-823.
- Baum, J. R., Olian, J. D., Erez, M., Schnell, E. R., Smith, K. G., Sims, H. P., Scully, J. S., & Smith, K. A. 1993. Nationality and work role interactions: A cultural contrast of Israeli and US entrepreneurs' versus managers' needs. *Journal of Business Venturing*, 8(6): 499-512.
- Baumol, W. J. 1990. Entrepreneurship: Productive, Unproductive, and Destructive. *Journal of Political Economy*, 98(5): 893-921.
- Beach, W. W., & Miles, M. A. 2006. Explaining the factors of the index of economic freedom. *2006 Index of Economic Freedom*: 55-76.
- Bell, R. G., Moore, C. B., & Al-Shammari, H. A. 2007. Country of origin and foreign IPO legitimacy: Understanding the role of geographic scope and insider ownership. *Entrepreneurship Theory and Practice*, 32(1): 185-202.
- Berger, A. N., Clarke, G. R. G., Cull, R., Klapper, L., & Udell, G. F. 2003. Corporate Governance and Bank Performance: A Joint Analysis of the Static, Selection, and Dynamic Effects of Domestic, Foreign, and State Ownership, Including Domestic M&As, Foreign Acquisitions, and Privatization. In W. Bank (Ed.), *Conference on Bank Privatization*: World Bank.

- Brewer, M. B., & Chen, Y. R. 2007. Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological review*, 114(1): 133.
- Bruton, G. D., Ahlstrom, D., & Li, H. L. 2010. Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, 34(3): 421-440.
- Busenitz, L. W., Fiet, J. O., & Moesel, D. D. 2005. Signaling in Venture Capitalist—New Venture Team Funding Decisions: Does It Indicate Long-Term Venture Outcomes? *Entrepreneurship: Theory & Practice*, 29(1): 1-12.
- Busenitz, L. W., Gomez, C., & Spencer, J. W. 2000. Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*: 994-1003.
- Busenitz, L. W., West III, G. P., Shepherd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. 2003. Entrepreneurship research in emergence: Past trends and future directions. *Journal of Management*, 29(3): 285-308.
- Chui, A. C. W., Titman, S., & Wei, K. C. J. 2010. Individualism and momentum around the world. *The Journal of Finance*, 65(1): 361-392.
- Cohen, P. C., West, L. S. A., Cohen, J., & West, S. G. A. 2003. Applied multiple regression/correlation analysis for the behavioral sciences: Mahwah, NJ, USA: Lawrence Erlbaum Associates.
- Cullen, J. B., Johnson, J. L., & Parboteeah, K. P. 2013. National Rates of Opportunity Entrepreneurship Activity: Insights from Institutional Anomie theory. *Entrepreneurship Theory and Practice*.
- Davidsson, P., & Honig, B. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3): 301-331.
- Davidsson, P., Hunter, E., & Klofsten, M. 2006. Institutional Forces. *International Small Business Journal*, 24(2): 115-131.
- De Clercq, D., Lim, D. S. K., & Oh, C. H. 2011. Individual-Level Resources and New Business Activity: The Contingent Role of Institutional Context. *Entrepreneurship Theory and Practice*.
- Desa, G. 2012. Resource Mobilization in International Social Entrepreneurship: Bricolage as a Mechanism of Institutional Transformation. *Entrepreneurship Theory and Practice*.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*: 147-160.

- Fogel, K. 2006. *Institutional obstacles to entrepreneurship*. School of Business, New York University.
- Garud, R., Jain, S., & Kumaraswamy, A. 2002. Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1): 196-214.
- Gelfand, M. J., Raver, J. L., & Ehrhart, K. H. 2002. Methodological issues in cross-cultural organizational research. *Handbook of research methods in industrial and organizational psychology*: 216-246.
- Gnyawali, D. R., & Fogel, D. S. 1994. Environments for Entrepreneurship Development: Key Dimensions and Research Implications. *Entrepreneurship: Theory & Practice*, 18(4): 43-62.
- Greene, W. H. 2003. *Econometric analysis*, 5th. Ed.. Upper Saddle River, NJ.
- Hausman, J. A. 1978. Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*: 1251-1271.
- Hayton, J. C., George, G., & Zahra, S. A. 2002. National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship: Theory & Practice*, 26(4): 33.
- He, K. S., Morck, R., & Yeung, B. 2003. Corporate stability and economic growth.
- Hechavarria, D. M., & Reynolds, P. D. 2009. Cultural norms & business start-ups: the impact of national values on opportunity and necessity entrepreneurs. *International Entrepreneurship and Management Journal*, 5(4): 417-437.
- Hill, H. 2004. *Technology and Innovation in Developing East Asia*. Washington, DC: World Bank.
- Hillman, A. J., & Zardkoohi, A. 1999. Corporate political strategies and firm performance: Indications of firm-specific benefits from. *Strategic Management Journal*, 20(1): 67.
- Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*: Sage Publications, Incorporated.
- Hofstede, G. 2001. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage Publications, Incorporated.
- House, R. J. 2004. *Culture, leadership, and organizations : the GLOBE study of 62 societies*. Thousand Oaks, Calif.: Sage Publications.
- Hui, C. H., & Triandis, H. C. 1986. Individualism-Collectivism A Study of Cross-Cultural Researchers. *Journal of Cross-Cultural Psychology*, 17(2): 225-248.

- Hunt, S., & Levie, J. 2002. *Culture as a predictor of entrepreneurial activity*. Paper presented at the Babson College, Babson Kauffman Entrepreneurship Research Conference (BKERC).
- Johnson, J. P., & Lenartowicz, T. 1999. Culture, freedom and economic growth: do cultural values explain economic growth? *Journal of World Business*, 33(4): 332-356.
- Karasek Iii, R., & Bryant, P. 2011. SIGNALING THEORY: PAST, PRESENT, AND FUTURE. *Allied Academies International Conference: Proceedings of the Academy of Strategic Management (ASM)*, 10(1): 27-32.
- Khoury, T. A., & Peng, M. W. 2011. Does institutional reform of intellectual property rights lead to more inbound FDI? Evidence from Latin America and the Caribbean. *Journal of World Business*, 46(3): 337-345.
- Korunka, C., Frank, H., Lueger, M., & Mugler, J. 2003. The Entrepreneurial Personality in the Context of Resources, Environment, and the Startup Process—A Configurational Approach. *Entrepreneurship: Theory & Practice*, 28(1): 23-42.
- Lee, S. M., & Peterson, S. J. 2000. Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35(4): 401-416.
- Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. 2013. Designing a global standardized methodology for measuring social entrepreneurship activity: the Global Entrepreneurship Monitor social entrepreneurship study. *Small Business Economics*, 40(3): 693-714.
- Levie, J., & Autio, E. 2011. Regulatory burden, rule of law, and entry of strategic entrepreneurs: an international panel study. *Journal of Management Studies*.
- Li, Y., & Zahra, S. A. 2012. Formal institutions, culture, and venture capital activity: A cross-country analysis. *Journal of Business Venturing*, 27(1): 95-111.
- Luthans, F., Peterson, S. J., & Ibrayeva, E. 1998. The potential for the “dark side” of leadership in post communist countries. *Journal of World Business*, 33(2): 185-201.
- Luthans, F., Stajkovic, A. D., & Ibrayeva, E. 2000. Environmental and psychological challenges facing entrepreneurial development in transitional economies. *Journal of World Business*, 35(1): 95-110.
- Mair, J., & Marti, I. 2006. Social Entrepreneurship Research: A source of Explanation, Prediction, and Delight. *Journal of World Business*, 41(1): 36-44.
- McGaughey, S. L. 2007. Hidden ties in international new venturing: The case of portfolio entrepreneurship. *Journal of World Business*, 42(3): 307-321.

- McGaughey, S. L., Liesch, P. W., & Poulson, D. 2000. An unconventional approach to intellectual property protection: The case of an Australian firm transferring shipbuilding technologies to China. *Journal of World Business*, 35(1): 1-20.
- McGrath, R. G., & MacMillan, I. C. 1992. More like each other than anyone else? A cross-cultural study of entrepreneurial perceptions. *Journal of Business Venturing*, 7(5): 419-429.
- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. 1992. Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2): 115-135.
- Minniti, M. 2008. The Role of Government Policy on Entrepreneurial Activity: Productive, Unproductive, or Destructive? *Entrepreneurship: Theory & Practice*, 32(5): 779-790.
- Morris, M. H., Davis, D. L., & Allen, J. W. 1994. Fostering corporate entrepreneurship: Cross-cultural comparisons of the importance of individualism versus collectivism. *Journal of International Business Studies*: 65-89.
- Mueller, S. L., & Thomas, A. S. 2001. Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1): 51-75.
- North, D. C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge; New York: Cambridge University Press.
- Park, H. M. 2005. Linear regression models for panel data using SAS, Stata, LIMDEP, and SPSS. *The Trustees of Indiana University*.
- Peredo, A. M., & McLean, M. 2006. Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1): 56-65.
- Persinger, E. S., Civi, E., & Vostina, S. W. 2011. The Born Global Entrepreneur In Emerging Economies. *International Business & Economics Research Journal (IBER)*, 6(3).
- Pinillos, M.-J., & Reyes, L. 2011. Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 37(1): 23-37.
- Podoyntsyna, K., Van der Bij, H., & Song, M. 2011. The Role of Mixed Emotions in the Risk Perception of Novice and Serial Entrepreneurs. *Entrepreneurship Theory and Practice*, 36(1): 115-140.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P., & Chin, N. 2005. Global entrepreneurship monitor: Data collection design and implementation 1998–2003. *Small Business Economics*, 24(3): 205-231.

- Sanders, J. M., & Nee, V. 1996. Immigrant self-employment: The family as social capital and the value of human capital. *American sociological review*: 231-249.
- Schwartz, S. H. 1994. *Beyond individualism/collectivism: New cultural dimensions of values*: Sage Publications, Inc.
- Scott, W. R. 1995. *Institutions and organizations*: Sage Publications, Inc.
- Sexton, D. L., & Bowman, N. 1985. The entrepreneur: A capable executive and more. *Journal of Business Venturing*, 1(1): 129-140.
- Shane, S. 1992. Why do some societies invent more than others? *Journal of Business Venturing*, 7(1): 29-46.
- Shane, S. 1993. Cultural influences on national rates of innovation. *Journal of Business Venturing*, 8(1): 59-73.
- Shane, S. 1994. Cultural Values and the Championing Process. *Entrepreneurship: Theory & Practice*, 18(4): 25-41.
- Shane, S., Locke, E. A., & Collins, C. J. 2003. Entrepreneurial motivation. *Human Resource Management Review*, 13: 257-297.
- Shane, S., & Venkataraman, S. 2000. The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*(25): 217-226.
- Shane, S., Venkataraman, S., & MacMillan, I. 1995. Cultural differences in innovation championing strategies. *Journal of Management*, 21(5): 931-952.
- Spence, M. 1973. Job market signaling. *The quarterly journal of Economics*, 87(3): 355.
- Spence, M. 1974. Competitive and Optimal Responses to Signals: An Analysis of Efficiency and Distribution. *Journal of Economic Theory*, 7(3): 296.
- Steensma, H. K., Marino, L., & Weaver, K. M. 2000. Attitudes toward cooperative strategies: A cross-cultural analysis of entrepreneurs. *Journal of International Business Studies*: 591-609.
- Stel, A., Carree, M., & Thurik, R. 2005. The effect of entrepreneurial activity on national economic growth. *Small Business Economics*, 24(3): 311-321.
- Stenholm, P., Acs, Z. J., & Wuebker, R. 2011. Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*(0).

- Stephen, F. H., Urbano, D., & Van Hemmen, S. 2005. The impact of institutions on entrepreneurial activity. *Managerial and decision economics*, 26(7): 413-419.
- Tata, J., & Prasad, S. 2010. National cultural values, social capital and micro-enterprise success. *International Journal of Business Environment*, 3(1): 95-119.
- Taylor, M. Z., & Wilson, S. 2012. Does culture still matter?: The effects of individualism on national innovation rates. *Journal of Business Venturing*, 27(2): 234-247.
- Tiessen, J. H. 1997. Individualism, collectivism, and entrepreneurship: A framework for international comparative research. *Journal of Business Venturing*, 12(5): 367-384.
- Timmons, J. A. 1999. *New venture creation : entrepreneurship for the 21st century*. Boston: Irwin/McGraw-Hill.
- Tonoyan, V., Strohmeyer, R., Habib, M., & Perlitz, M. 2010. Corruption and Entrepreneurship: How Formal and Informal Institutions Shape Small Firm Behavior in Transition and Mature Market Economies. *Entrepreneurship: Theory & Practice*, 34(5): 803-831.
- Triandis, H. C. 1993. Collectivism and individualism as cultural syndromes. *Cross-Cultural Research*, 27(3-4): 155-180.
- Vaghely, I. P., & Julien, P. A. 2010. Are opportunities recognized or constructed?: An information perspective on entrepreneurial opportunity identification. *Journal of Business Venturing*, 25(1): 73-86.
- Wennekers, S., Van Wennekers, A., Thurik, R., & Reynolds, P. 2005. Nascent Entrepreneurship and the Level of Economic Development. *Small Business Economics*, 24(3): 293-309.
- Yuengert, A. M. 1995. Testing hypotheses of immigrant self-employment. *Journal of Human Resources*: 194-204.
- Zahra, S. A., Hayton, J. C., Neubaum, D. O., Dibrell, C., & Craig, J. 2008. Culture of Family Commitment and Strategic Flexibility: The Moderating Effect of Stewardship. *Entrepreneurship: Theory & Practice*, 32(6): 1035-1054.
- Zapalska, A. M., & Edwards, W. 2001. Chinese Entrepreneurship in a Cultural and Economic Perspective. *Journal of Small Business Management*, 39(3): 286-292.

CHAPTER THREE

PAPER TWO

THE IMPACT OF INSTITUTIONAL AND INFRASTRUCTURE DISTANCE ON THE CROSS-BORDER ALLIANCE GOVERNANCE MODE

ABSTRACT

Drawing upon the institution theory and institutional distance perspective, this paper examines the influence of institutional and infrastructure distance on cross-border alliance governance mode. Using 1,334 dyadic alliances between MNEs from emerging economies and MNEs from developed economies, the results clearly demonstrate that both formal and informal institutional distance affect the alliance governance mode (i.e., equity versus contractual mode). Moreover, infrastructure distance significantly plays moderating role on the relationship between formal institutional distance and propensity of choose equity alliance mode. Given MNEs from emerging economies possess adversity advantage, when host countries are developed economies, the effect of the distances on governance mode becomes trivial. This study contributes and extends more complete picture of cross border alliances literature.

Keywords: cross-border alliances, alliance governance mode, emerging economies, institutional distance, infrastructure distance.

INTRODUCTION

While cross border alliances allow partners to utilize resources from autonomous organizations headquartered in separate countries (Parkhe, 1991), alliance governance mode establishes a direction how partners reciprocally behave toward alliances (Faems, Janssens, Madhok, & Van Looy, 2008). Alliance governance mode can be distinguished between equity and non-equity alliances (Pan & Tse, 2000). These two alliance governance modes considerably distinguish with regard to investment requirement and control. Given the difference of institutional and contextual environments between emerging economies and develop economies are immense, this paper seeks to resolve how institutional and contextual differences influence alliance governance choice in cross border alliances.

Over decades, MNEs from emerging economies (EMNEs) have been play an increasingly prominent role in the global economies (Hoskisson, Wright, Filatotchev, & Peng, 2013; Ramamurti & Singh, 2009). From 2000 to 2007, the number of EMNEs on the Fortune Global 500 raised from 20 to 70 companies (Contessi & El-Ghazaly, 2010). The number of evidences indicates the substantial growth of EMNEs. For instance, China's Haier is the fourth largest maker of home appliances in the world. India's Infosys and TCS have become two of the world's leading information technology companies. In alliance context, the difference of institutional and contextual environments between emerging economies and develop economies plays an important role to EMNEs as well as MNEs from developed economies (DMNEs). There is ongoing debate of how the differences influences on alliances. On one hand, the differences can enhance skills and knowledge. On the other hand, the same differences can represent major hurdles to transfer those capabilities. Given alliance governance sets how partners behave, the

essence of this study seeks to examine two research questions: 1) Do the dissimilarity of institutional and contextual environments between emerging economies and develop economies influence the governance strategic choices in cross border alliances?, and 2) Whether institutional and contextual differences play an interaction on governance strategic choices?

Drawing upon institutional theory (North, 1990) and institutional distance perspective (Kostova, 1999), this paper investigates how institutional and contextual distances affect MNEs choice of cross-border alliance governance mode (i.e., equity or non-equity alliance mode). Cross-border alliances could be contaminated due to the extent of dissimilarity between host and home institutions, namely institutional distance (Xu & Shenkar, 2002), and the contextual difference, namely infrastructure distance. Following North (1990) study, this paper incorporates the context of institutional distance by categorizing to informal and formal institution components. The application of institutional distance to explain the MNEs behavior (Xu & Shenkar, 2002) and to choose alliance governance mode is crucial. Formal and informal institutional dissimilarities between emerging economies and develop economies influence EMNEs and DMNEs regarding to alliance governance mode since cross-border alliances are an entry strategy to create legitimacy and mitigate liability of foreignness in host countries.

For contextual environments, given Hoskisson et al. (2013) suggested the trajectory from emerging to a developed economy context and a new typology for emerging economies by proposed two by two matrix between institutional development and infrastructure and factor market development, this paper further examines the extent of infrastructure dissimilarity between host and home countries, namely infrastructure distance which is taken into account when MNEs decide to choose the alliance governance mode. Further, given prior study

emphasized on the DMNEs operating in emerging economies (Yamakawa, Peng, & Deeds, 2008), this study distinguishes scenarios to examine when the host countries locate in developed economies. When EMNEs entering to developed economies, EMNEs exercise their adversity advantage, the ability to function effectively in the difficult condition in emerging economies countries (Ramamurti & Singh, 2009). This adversity advantage allows EMNEs disregarding to the institutional difference. As such, I propose that the influence of the host countries (either emerging economies or develop economies) plays a moderating role on the relationship between institutional distance and cross-border alliances governance mode.

Using data of 1,334 cross-border alliances established by EMNEs and DMNEs across different industries in 31 host countries both in emerging economies and develop economies from 2006 to 2012, this dataset has high variation of institutional and contextual distance between host and home countries. As such, the results are not likely to be driven by the idiosyncrasies of particular host countries. In support of my theoretical arguments, the results make several theoretical and managerial contributions. First, this paper implicitly demonstrates the threshold of equity governance control mechanism that cannot exercise effectively. I find the curvilinear (positive but diminishing returns) relationship between informal institutional distance and the propensity to choose the equity alliance mode over the contract mode. Second, this paper empirically tests the typology of mid-range emerging economies (Hoskisson et al., 2013). The interaction between institutional and infrastructure distance influences alliance governance decision choices. Moreover, I explicitly show that EMNEs possess adversity advantage which is the ability to tolerance the difficult situations. The differences of formal and informal institutional distance are less likely to influence on EMNEs. The findings suggested that

DMNEs' managers may pay attention more regarding institutional and contextual distance, comparing to EMNEs' managers do. More importantly, managers who embedded in either EMNEs or DMNEs should aware the limitation of equity alliance governance mechanism.

The remainders of the paper are organized as follows. In the next section, I discuss theoretical constructs including institutional and infrastructure distance, and cross-border alliance governance mode. Then, I develop hypotheses concerning the impact of institutional distance on cross-border alliances governance mode as well as the moderating roles of infrastructure distance and host countries. Next, I describe my source of data, variables and methodology to empirical analysis. Conclusion and discussion are drawn in the final section.

LITERATURE AND THEORETICAL FRAMEWORK

Institutional and Infrastructure Distance and International Venturing

Along with transaction cost economics and resource based views, institutional theory is one of three perspectives on strategy in emerging economies (Hoskisson, Eden, Lau, & Wright, 2000; Wright, Filatotchev, Hoskisson, & Peng, 2005). Institutional environments are associated with norms, values, systems and rules of game surrounding organizations that shape social and organizational behaviors (Scott, 1995). Institutions provide rules of the game that assemble human and social interaction which organizations are constrained. North (1990) suggested that institutions comprised with two constraints; formal and informal, which influence economic activities and outcome such as innovation, strategic alliance and acquisition. While formal institutions are manifested in a set of political and economic rules, legal decisions and contract, informal institutions refer to norms, value and code of conducts which are embedded in culture and ideology (Peng, 2000).

When MNEs expand beyond their territory to another market MNEs confront to the institutional difference between home and host countries. Based on Kostova (1999) and Xu and Shenkar (2002), the dissimilarity of institutional profiles between home and host countries is called by “*institutional distance*”. Kostova and Zaheer (1999) suggested that institutional distance is positively associated with the difficulty for MNEs to establish legitimacy in the host country. Legitimacy is vital to MNEs entering to host country since it promotes the survival and success of organizations. Moreover, the larger institutional distance, the more liability of foreignness it is for MNEs to encounter. Although Kostova (1999) proposed institutional distance construct by incorporating three pillars of institutions including regulative, cognitive and normative (Scott, 1995), in this paper, I incorporate institutional distance following North (1990) study by using formal and informal institutions. Formal institutional distance is defined as the difference of setting, monitoring and enforcement of political and economic rules which based on instrumental logic and legal systems between host and home countries. In contrast, informal institutional distance is defined as the difference of norms and values which are embedded in culture and ideology between host and home country. Both informal and formal institutional distance influence the strategic decision of MNEs based on emerging economies as well as developed economies.

In addition, Johns (2006) defines context as “situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationship between variables” (John,2006: p.386). MNEs are surrounding with the difference between home and host countries of phenomenon and situations. This contextual difference not only affects the organizational behavior but also influence the choice of strategy which MNEs select. In this

paper, I propose contextual difference, namely infrastructure distance, given Hoskisson et al. (2013) suggested new typology for emerging economies by institutional development and infrastructure development. I refer infrastructure distance as the extent of dissimilarity of the level of infrastructure development between home and host countries including quality of facilitated supplies such as water and electricity, quality of transportation such as road, railroads, ports, and air transport, and quality of telecommunication network. To ensure the effective and efficient functioning of the economy, infrastructure is prominent as factor in determining the location of economic activity (Schwab, 2013). Well-developed infrastructures in host country promote the FDI inflow as well as the confidence of MNEs to operate their business. On one hand, infrastructure distance is a major concern for DMNEs entering to emerging economies where well-developed infrastructure establishes. On the other hand, infrastructure distance may also concern for EMNEs entering to developed economies since they are incapable to leverage and maximize infrastructure support to gain competitive advantage comparing to DMNEs.

Cross-Border Alliances as Entry Strategy

For entry strategies, Pan and Tse (2000) dissected entry modes into two categories including equity and non-equity mode. They suggested that these two categories of entry modes considerably differ with regard to investment requirements and control. While equity modes (e.g., joint venture and wholly owned ventures such as greenfield and acquisition) require the exercise of high level of control from headquarters due to their involving a relatively large commitment to investment, non-equity modes (e.g., contractual modes such as licensing, R&D contract, and contract alliances) require lower level of control since these forms of entry are much less investment intensive (Anderson & Gatignon, 1986; Pan & Tse, 2000). However,

MNEs consider not only the strategic choice between equity and non-equity mode but also whether MNEs will be solely owned by the MNC (Headquarter) (Wholly Owned) or will have partner with local firms in host country (Joint Venture) as well as whether MNEs will acquire existing firm in host country (Acquisition) or will build the new facility from scratch (Greenfield). Many research have been studied entry strategies employ many theoretical perspective to explain this phenomenon (Canabal & White III, 2008). For instance, the entry choice between acquisition and greenfield (Brouthers & Brouthers, 2000; Hennart & Park, 1993; Kogut & Singh, 1988) and the entry choice between wholly owned and joint venture (Chen & Hennart, 2002; Makino & Neupert, 2000; Yiu & Makino, 2002). In this study, I focus on the choice between equity and non-equity mode under the cross-border alliance between EMNEs and DMNEs.

Cross-border alliances have become widespread for international venturing. These strategic alliances provide firms an gateway to access, assets, skills and knowledge embedded in host countries (Kogut, 1988) as well as mitigate uncertainty environment (Burgers, Hill, & Kim, 1993) . Moreover, cross-border alliances help MNEs to maintain a higher level of corporate flexibility as compared to other entry modes such as mergers and acquisitions (Xia, 2011). As Gulati (1998) defined strategic alliance as “voluntary arrangement between firms involving exchange, sharing or co-development of products, technologies or services” (Gulati,1998; p.293), I refer cross-border alliances as the cooperative arrangement between two or more firms based in different countries in order to gain, share and exchange assets, knowledge and skill among partners. To explain cross-border alliances, prior literature have been used several theoretical perspective, including transaction cost economics (Oxley & Sampson, 2004),

resource based view (Eisenhardt & Schoonhoven, 1996), institutional theory (Ionascu, Meyer, & Estrin, 2004; Michailova & Ang, 2008), resource dependency (Xia, 2011) as well as real option theory (Kogut, 1991; Reuer & Tong, 2005). In this study, I apply institutional theory and institutional distance to propose my arguments and examine hypotheses.

Among alliance strategies, cross-borders alliances also divide into equity alliance (commonly represented by a joint venture) and non-equity alliance or contract alliance. Kogut and Singh (1988) suggested that equity alliance or joint venture is the pooling of assets in a common a separate organization or new firms by two or more firms who share joint ownership and control over the use and outcome of these assets. The primary benefit of joint venture is the interchange of knowledge. However, lack of trust could damage the benefit and lead to conflict of interest. In contrast, contract alliances are the agreements between two or more firms to exchange and implement its product or service strategy including marketing, R&D and manufacturing. Although contract alliance's partners do not involve to investment the lack of control may damage among partners and increase risk of opportunistic behaviors. Thus, equity alliances have more hierarchical controls that allow partners coordination and exchange information and capabilities while contract alliances have less control over which may lead to poor outcome of alliances. Nevertheless, equity alliances embedded in investment risk but control over risk from opportunistic behavior while contract alliances may not encounter to investment risk but partners may engage to opportunistic behavior which risk to asset specific.

HYPOTHESES DEVELOPMENT

Institutional Distance and Cross-border Alliances

According to North (1990), institutions are “the rule of the game in a society or, more formally, are the humanly devised constraints that shape human interaction” (North, 1990: 3). Institutions provide the rules of game that structure human interaction in societies and organizations are constrained by those formal and informal rules (North, 1990). Since organizations are embedded in and shaped by institutional environments, the different of institutional environment will influence the organizational interaction. When organizations expand beyond their own institutional environment or territory to another market they undeniably face to the different institutional context in host country. According to Kostova (1999) and Xu and Shenkar (2002), institutional distance is the dissimilarity of institutional profiles between home and host countries. Cross-border alliances will encounter the difficulty when institutional distance between partners is high, especially partners alliance involves into equity mode. However, institutional distance influences MNEs for global integration and local responsiveness (Xu & Shenkar, 2002). To gain competitive advantage, MNEs are required to think globally and act locally (Ghoshal & Bartlett, 1988). To establish global integration, informal institutional distance could play a critical role rather than formal institutional distance since it enhances the difficulties of transferring MNEs practice between alliances’ partners. Further, formal institutional distance could interrupt MNEs to create local responsiveness strategies. The difference of regulatory setting and monitoring create more local isomorphism and pressure firm to coercive isomorphism through cross-border alliances.

To embrace cross-border alliances strategy, MNEs need to consider the choice of governance mode based on a distinction between equity and non-equity arrangement. Given the goodness of the establishment of an administrative hierarchy, equity alliances provide partners with more administrative control than non-equity alliances or contract alliances. This governance structure allows partners to exercise a residual right of control (Hennart, 1988). Indeed, the institutional distance between host and home countries matters to both MNEs, considering the governance choice for cross-border alliances. The more distance, the more uncertainty MNEs cannot foresee. Scholars in strategic management and entrepreneurship view uncertainty as synonymous with risk (Shane, 2003). Trust and control are undeniably interlinked with risk in strategic alliance (Das & Teng, 2001). For this reason, institutional distance is associated with governance mode which allows firms to exercise their control and monitor. Furthermore, Eden and Miller (2004) suggested that institutional distance should be positively related to liability of foreignness. According to Zaheer (1995), liability of foreignness is defined as “the costs of doing business abroad that result in a competitive disadvantage for a MNE subunit” (Zaheer,1995:342). Institutional distance may not raise the cost associated with spatial distance but it escalates the cost resulting from the host country environment such as the lack of legitimacy, the cost based on company’s unfamiliarity with and lack of roots in environment, and the cost resulting from the home country environments. To overcome liability of foreignness, cross-border alliances strategy allows MNEs to not only interact with partners to deal with complex, uncertain, or hostile environment but also increase an MNE’s organizational legitimacy. As Kostova and Zaheer (1999) mentioned that the greater institutional distance, the more difficulty for MNEs to establish legitimacy in host country, the inter-linkage of these constructs, including institutional

distance, liability of foreignness, organizational legitimacy and cross-border alliances governance mode, are discussed in this study. Next, since national economic are shaped by formal and informal rules that administrate economic behavior (North, 1990), I propose that informal and formal institutional distance are associated with cross-border alliances governance mode. I also contend that contextual factors, namely infrastructure distance and host countries, play a moderating role on the institutional distance and cross-border alliances governance mode. As such, the conceptual framework is following in figure 3.1.

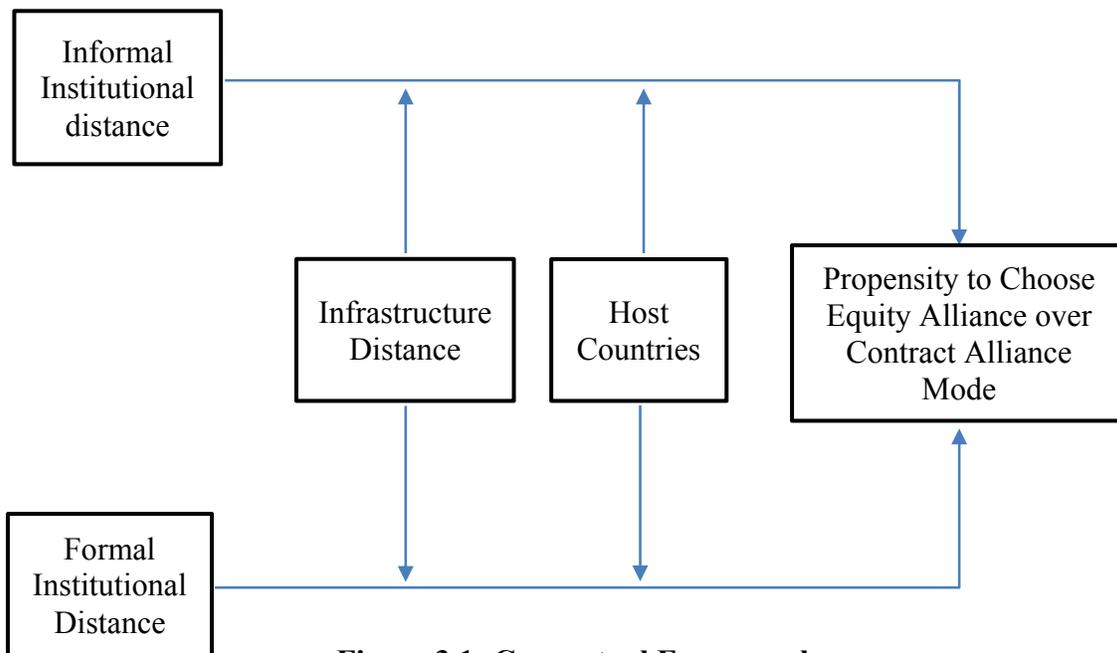


Figure 3.1: Conceptual Framework

Informal Institutional Distance and Cross-Border Alliance Governance Mode

According to North (1990), informal institutions are not formally codified such as rules and laws but embedded in society as value, norm and belief. They include codes of conduct and norms of behavior which are embedded in culture and ideology (Peng, 2000). Although informal

institutions are not explicitly codified they largely influence individual behaviors (Estrin, Baghdasaryan, & Meyer, 2009). Prior literature incorporate informal institutional distance to culture distance (Michailova & Ang, 2008; Schwens, Eiche, & Kabst, 2011) operationalized by Hofstede or GLOBE cultural dimension. Since informal institutional distance is the difference of norm and values, EMNEs and DMNEs faced to the difficulty of engagement across culturally different environments. Informal institutional distance enforces MNEs to intensively engage cross-cultural communication increasing liability of foreignness. On one hand, Xu and Shenkar (2002) suggested that large informal institutional distance tends to increase the challenge of doing business in the host country. Further, the difference in informal institutions increase the requirement for local knowledge and local isomorphism (Estrin et al., 2009). On the other hand, the benefit of informal institutional distance can exceed the cost for cross-cultural communication (Kotabe, Dunlap-Hinkler, Parente, & Mishra, 2007). Prior study suggested that cultural distance has a positive effect on post-acquisition performance (Morosini, Shane, & Singh, 1998). Since the governance choice of cross-border alliances between equity and contract alliance associated with risks of opportunisms, trust and control, informal institutional distance is considered into strategic decision choice. I unite and extend the line of argument by proposing that informal institutional distance has curvilinear relationship to governance choice of cross-border alliances

When informal institutional distance between emerging economies and developed economies is low, the similarity of norms and values allows EMNEs and DMNEs to easily incorporate and establish trust. DMNEs perceive less institutional difference from EMNEs, or vice versa. The need of control mechanism via equity alliance is trivial since the similarity of

norms and values between partners enhances the capability of cross-cultural communication. However, when informal institutional distance increases the cost of collaboration and communication is increased. As liability of foreignness caused by the distance, MNEs are required to establish organizational legitimacy in host country. Moreover, EMNEs and DMNEs confront to the different of norms and values which risks to opportunism behaviors from one another. Control mechanism from equity governance is needed in order to protect risk of opportunism (Oxley, 1999). As such, the informal distance will increase the likelihood for MNEs adopting equity governance mode in cross-borders alliances.

After informal institutional distance across a certain threshold, control mechanisms through equity governance are not appropriately function since the cost of hierarchical structure cross over the benefits. Risk of investment is increased beyond the risk from opportunistic behavior due to the difference of norms and values. The informal institutional environment is too hostile beyond control mechanism to overcome and function. As informal institutions reflect individuals' standpoint, the informal distance that beyond a certain threshold make workers between EMNEs and DMNEs reluctant to coordinate and transfer knowledge. The benefits of equity alliance or joint venture tend to be diminished. Equity alliance is pointless to pursue. As such, when informal institutional distance increases across a certain point, MNEs are less likely to choose equity alliance governance mode in cross-border alliances. As the result, I hypothesize that

H1: Informal institutional distance between emerging economies and developed economies countries has a positive but diminishing returns relationship with the MNEs' propensity to choose alliances.

Formal Institutional Distance and Cross-Border Alliance Governance Mode

Formal institutions are demonstrated in rules of games, political and economic rules and legal decision which actually codified and formalized. It set rules by which business actors have to interact (North, 1990). Formal institutional constraint are quite similar to the regulative pillar consisting of rules and regulations, which proposed by (Scott, 1995). This institution could either encourage or discourage MNEs behaviors. Formal institutions can be classified into less restrictive and more restrictive (Michailova & Ang, 2008). However, it can be distinguished by the quality of formal institutions and the capability of their implementation. For example, political and economic rules may codify to protect the intellectual property but the high corruption environment makes it difficult to implement these rules. It is more likely to inhibit the transfer knowledge of business practice when the formal institutional distance is high (Kostova & Roth, 2002). Estrin et al. (2009) examined and found that the larger the distance in formal institutions, the more likely to MNEs to choose greenfield investment rather than a cooperative or alliance mode. However, this study examines governance mode either equity or contract mode.

Regulatory frameworks within developed economies are more likely to gain high quality and homogenous since the globalization pressures, regional integration schemes and international institutions such as World Trade Organizations (Eden & Miller, 2004). In contrast, within emerging economies, the quality of regulation and the capability of implementation tend to be low. Many emerging economies countries still have poor formal institutions such as laws and regulations are weak, ill-defined, or poorly-enforced. When formal institutions are highly different the needs to monitoring and controlling via equity governance mode are undisputable.

Contract alliance mode may not be a good option since it may not provide safety guard for asset specific. Contract alliance mode does not allow MNEs from home country to involve the decision making with MNEs from host country. The more formal institutional distance, the more likely MNEs from home country establish monitoring and controlling mechanism via equity alliance. Further, as regulative institutional distance is interchangeable to formal institutional distance, Kostova and Roth (2002) suggested that regulatory institutions create coercive isomorphism pressure for adoption of social pattern. Thus, MNEs require establishing organizational legitimacy in host country in order to minimize the risk of instability of formal institutional environment, especially in emerging economies as host country. Further, the need of organizational legitimacy applies to the scenario of developed economies as host country. EMNEs may receive a negative image from developed economies society and need to establish the reputation and legitimacy when they enter to developed economies. Equity alliance with developed economies partners will signal developed economies' society and gain legitimacy. Moreover, equity alliance allows EMNEs to gain more international credibility. As a result, I hypothesize that an increase in the formal institutional distance would have a positive impact to the likelihood of MNEs to establish the equity alliance mode.

H2: Formal institutional distance between emerging economies and developed economies countries is positively associated with the MNEs' propensity to choose equity alliances in cross-border alliances.

The Moderating Role of Infrastructure Distance

To enhance investment atmosphere and develop economic environment, infrastructure is one of the crucial factors. Infrastructure level in host country is taken into consideration for

MNEs entry decision since it represents the quality of facilitated supplies, transportation and telecommunication network. Indeed, the well-developed infrastructures in host countries promote and motivate investors to invest. Prior study suggested that an infrastructure is a determinant of FDI inflow (Mollick, Ramos-Duran, & Silva-Ochoa, 2006). However, apart from institutional distance, other dimensions of distance still matter to MNEs strategic decision. Ghemawat (2001) suggested that economists often embrace on the gravity theory of trade inflow which elaborates a negative relationship between distance and trade. Infrastructure distance, the extent of dissimilarity of the level of infrastructure development, is one of dimensions that negatively influence the trade. Hoskisson et al. (2013) also suggested the mid-range emerging economies that incorporate the level of institutions and infrastructure. For instance, some countries in mid-range emerging economies have well-developed infrastructure but inadequate institutional development, such as China (Bai & Qian, 2010). Many governments from mid-range emerging economies attempt to promote their country via having many mega-infrastructure projects but still having political instability, such as Thailand (political protest and finally coup d'état in May 2014). In contrast, some emerging countries have established the quality of institution but lack of infrastructure development. For instance, India has relatively strong democratic political stability but relatively poor infrastructure. These typologies of mid-range economies show the interaction between institutional development and infrastructure development. As such, I argue that infrastructure distance between emerging economies and developed economies plays a moderating role of the relationship between institutional distance (both formal and informal) and the propensity to choose equity alliance mode.

Practically, infrastructure contexts influence firms to adapt in order to operate and survive in the market. Firms that embedded in the low infrastructure environment know how to operate the business while others could not adapt and operate under this circumstance. In contrast, firms embedded in the well developed infrastructure know how to exercise their external support mechanism to gain efficiency and effective in their business while others firm may not know this benefit. The difference of infrastructure development between emerging economies and developed economies enhances the likelihood for MNEs to choose equity alliance since it allows MNEs to transfer knowledge and skill to operate different infrastructure development. When informal or formal institutional distance is high the infrastructure distance will magnify the need to monitoring, operating and controlling via hierarchical governance. Since the infrastructure distance obstructs the routine and practice of MNEs, equity alliances between EMNEs and DMNEs allow both organizations to share and transfer knowledge and skills. For this reason, I hypothesize that

H3a: The relationship between informal institutional distance and MNEs' propensity to choose the equity alliances increases positively in the presence of high infrastructure distance between emerging economies and developed economies.

H3b: The relationship between formal institutional distance and MNEs' propensity to choose the equity alliances is enhanced in the presence of high infrastructure distance between emerging economies and developed economies.

Host countries as Moderating role

A host country represents a location that MNEs strive to expand their territory. It determines the extent of institutional environments or rules of game on both EMNEs and DMNEs. Ramamurti and Singh (2009) suggested that source and destination of foreign direct investment (FDI) can be categorized into four scenarios including 1) North-to North FDI which source and destination of FDI belong to developed economies, 2) North to South FDI which source of FDI belongs to developed economies and destination of FDI belongs to emerging economies, 3) South to South FDI which source and destination of FDI belong to emerging economies, and 4) South to North FDI which source of FDI belong to emerging economies and destination of FDI belongs to developed economies. Yamakawa et al. (2008) mentioned that many scholars focus on North to South FDI and the competing domestically between MNEs in developed economies and local firms within emerging economies while not focusing on other scenarios. In this study, I compare two scenarios between North to South FDI and South to North FDI as I select the alliances event between EMNEs and DMNEs as well as the host country either emerging economies or developed economies. Equity alliance mode also represents the FDI inward in the host country. I argue that host country whether emerging economies or developed economies determines the relationship between institutional distance and the propensity of choose equity alliance mode over contract mode.

In the North to South FDI scenario, DMNEs expand their boundary to emerging economies market or emerging economies as a host country where formal institutional environments tend to be poor. To overcome this environment, DMNEs exercise their firm specific advantage through technological, marketing and managerial strengths (Guillén &

García-Canal, 2009). Since DMNEs are not acquainted to poor institutional environment, seeking alliance with the local firms based in emerging economies is one of the entry strategies that overcome this liability of foreignness. Contrasting to South to North FDI scenario, EMNEs exercise their adversity advantage, the ability to function effectively in the difficult condition in emerging economies countries (Ramamurti & Singh, 2009). This adversity advantage allows EMNEs disregarding to the institutional difference. Moreover, formal institutional environments in developed economies generally have been developed and established high quality of institutions which provide benefits to EMNEs comparing to their home country. As such, the relationship between formal institutional distance and the propensity to choose equity alliance mode is stronger in developed economies' host countries than in emerging economies' host countries.

Similarly in informal institutional environment, EMNEs, having adversity advantage, can expect to tolerate cultural impediments to their alliances in developed economies as host countries. I argue that informal institutions from developed economies are more likely to spread out throughout the global via various media. Moreover, many young generations from emerging economies have a chance to get education aboard in developed economies where education's quality is more advance. When they go back home and work in their country, they are more likely to understand norms and values from developed economies. In addition, since the first globalization wave was started from DMNEs entering to emerging economies. Many firms in emerging economies tend to absorb developed economies' norms and values and tend to know the code of conduct when they decide to expand their territory to developed economies market. In contrast, DMNEs still need overcome the liability of foreignness due to the gap of informal

institutions. According to Luo, Shenkar, and Nyaw (2002), offensive mechanism via input localization, including equity alliance, can mitigate liability of foreignness. As such, I hypothesize that

H4a: The relationship between informal institutional distance and MNEs' propensity to choose the equity alliance mode is stronger in emerging host countries than in developed host countries.

H4b: The relationship between formal institutional distance and the likelihood of MNEs to adopt the equity alliance mode is stronger in emerging host countries than in developed host countries.

RESEARCH METHODOLOGY

Data and Sample

As this study focus on cross-border alliance between equity and contract mode, I collected a sample of the alliance from SDC Platinum database, from 2006 to 2012. Developed by Thomson Financial, the database contains worldwide announcement of alliance through the information of each participants joining alliance such as location, participants nation, SIC code, public trades files and sources of information. In order to maximize the variance of distance argument, I focused on alliances with only two partners based in different nation. For each alliance, I collected information regarding to alliance mode (equity or contract mode), date announcement, status, participants nation, SIC code of participants and alliance. I dropped alliance case whereby Hofstede (2001) cultural dimensions score (calculating informal institutional distance) are not available. The participant nations in sample set are 39 countries¹³. I

¹³ Argentina, Australia, Austria, Brazil, Canada, China, Denmark, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Philippines, Poland,

also discarded alliance case whereby two participants enter to a third nation. All alliance cases in the sample illustrate two participants; one based in developed economies and one based in emerging economies, entering to either one or other participant nation. Further, I removed the government-owned companies as alliance's participants. As a result, for analysis, I was able to collect 1,334 alliances in 30 nations as host countries, including 13 nations as emerging economies and 17 nations as developed economies. While 1,200 alliances are located in emerging economies as host countries 134 alliances are located in developed economies as host countries. In addition, I collected another data from several reliable sources in order to measure independent variables and moderated variables. The data on informal institutional distance is derived from Hofstede (2001) study while the data on formal institutional distance is collected from the Economic Freedom Index published by The Heritage Foundation¹⁴. Another source of data for control variables come from the World Bank's database, World economic forum, International Monetary Fund (IMF) and United Nations Conference on Trade and Development (UNCTAD).

Variables

Dependent Variable

My dependent variable for testing the hypotheses is the propensity of equity alliance. Using SDC platinum dataset, I categorized alliances mode into either equity alliance (represented by JVs) or contract alliance. This categorized procedure has been employed in prior study

Portugal, Republic of Ireland, Russia, Singapore, Slovenia, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom, United States of America, and Venezuela.

¹⁴ The Heritage Foundation: <http://www.heritage.org/>

(Michailova & Ang, 2008; Oxley & Sampson, 2004; Pan & Tse, 2000). I coded this variable as dummy variable, where 1 represents equity alliances and 0 represents contract alliances.

Independent and Moderated Variables

Since informal institutional distance refers to the difference of norm and value between host and home country, I captured this distance by employing culture distance. By using Hofstede’s indices of culture and following Kogut and Singh (1988), I employed the composite measure as shown in following:

$$ID_{jk} = \frac{\sum_{i=1}^4 \frac{(I_{ij} - I_{ik})^2}{V_i}}{4}$$

where ID_{jk} is the informal institutional distance between alliance host country j and home country k , I_{ij} is the score for country j for the i cultural dimension¹⁵ (where i = power distance, uncertainty avoidance, masculinity/femininity, and individualism/collectivism), I_{ik} is the score for country k for the i cultural dimension, and V_i is the variance of the index for the i cultural dimension. This formula has been measure normative pillar institutional distance in prior study (Ionascu et al., 2004; Michailova & Ang, 2008). Normative pillar consists of values and norms which represent informal institutions.

Formal institutional distance is operationalized based on eight of ten components of economic freedom index established by the heritage foundation (Beach & Miles, 2006). These eight components comprise with property rights, freedom of corruption, business freedom, monetary freedom, trade freedom, investment freedom and financial freedom. They represent

¹⁵ I exclude a fifth dimension “Confucian dynamism” and sixth dimension “Indulgence versus Restraint” since these data are not available for the same large set of nations, and Kogut and Singh (1988) did not incorporate it.

three aspects of formal institutions including rule of law, regulatory efficiency and market openness. I adopt an operationalization of culture distance Kogut and Singh (1988) by using each component of formal institutions instead of cultural dimension. I employ the composite measure as shown in following:

$$FD_{jk} = \frac{\sum_{i=1}^8 \frac{(F_{ij} - F_{ik})^2}{V_i}}{8}$$

where FD_{jk} is the formal institutional distance between alliance host country j and home country k , F_{ij} is the score for country j for the i component of formal institutions (where i = property rights, freedom of corruption, business freedom, monetary freedom, trade freedom, investment freedom and financial freedom), F_{ik} is the score for country k for the i component of formal institutions, and V_i is the variance of the index for the i component of formal institutions.

In addition, I drew on measures variable in World Economic Forum *Global Competitiveness Report* from 2006 to 2012 related to the infrastructure development. In order to operationalize infrastructure distance, I calculated following the same formula in informal and formal institutional distance. However, infrastructure score in global competitiveness report is a sole pillar. As such, I employed the composite measure as shown in following:

$$INF_{D_{jk}} = \frac{(INF_j - INF_k)^2}{V}$$

where $INF_{D_{jk}}$ is the infrastructure distance between alliance host country j and home country k , INF_j is the infrastructure score for country j , INF_k is the infrastructure score for country k , and V is the variance of the infrastructure score.

For host countries, I employ IMF benchmark to categorize between emerging economies and developed economies.

Control Variables

Several variables in the analysis are control for alternative explanation. First, since geographic distance between host and home country increase the cost of doing business as well as entry decision mode, I controlled this distance by measuring as the logarithm of the number of kilometers between the capital cities of home and host countries. Next, since economic distance between host and home country provides MNEs opportunities to gain economic rent via arbitrage, the exploitation of cost and price difference between markets, prior literature show that economic distance increases the likelihood of foreign direct investments (FDIs) survival (Tsang & Yip, 2007). To control the variance of economic distance, I operationalized by the absolute logarithmic difference in the gross domestic product (GDP) per capita between home and host country following prior study (Tsang & Yip, 2007; Xia, 2011). This data is derived from World Bank's Database¹⁶. Further, knowledge transfer and learning asymmetry are influenced by unrelated alliance (Dussauge, Garrette, & Mitchell, 2000). Following Xia (2011), I controlled for business relatedness, coded 0 if the two participants were in unrelated industries, 1 if there were in the same one-digit SIC industry, 2 if they were in the same two-digit SIC industry, 3 if they were in the same three-digit SIC industry and 4 if there were in the same four-digit industry.

As host countries macro-economic environment influence alliance mode, I controlled the host country's GDP (logged) as a measure of its economic size. I also included FDI inflow as a percentage of GDP in host country in order to control the openness to the presence of foreign

¹⁶ Since World Bank's database excludes all the data of Taiwan, I collected this data including GDP per capita, GDP and FDI inflow from IMF database and UNCTAD.

business in the host country. Moreover, I controlled the alliance industry and year effect. For alliance industry, I constructed dummy variables of alliance SIC code by SIC division. Since my sample alliance mainly contains SIC division D (manufacturing), I constructed this division as default dummy. To analyze the pooled data, I also controlled the host countries whether they are developed economies or emerging economies. To categorize the countries, I followed International Monetary Fund (IMF).

Method

To test hypotheses, I embraced the economic analysis using a logistic regression in which the dependent variable either equity alliance or contract alliance mode. This method estimates the probability that cross-border alliances establish equity alliances governance (joint venture), given by

$$P(\text{Alliance Governance} = \text{Equity Alliance}) = \frac{e^Y}{1+e^Y},$$

where Y is defined as equation following;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

where X_1, X_2, \dots, X_n are the independent variable, moderating variables as well as control variables. According to my sample, the proportion of equity alliance is 61 % of total sample. While the proportion of equity alliance in developed economies as host country is 5 % of total sample the proportion of equity alliance in emerging economies as host country is 56% of total sample.

RESULTS

I employed the logistic regression for testing the hypotheses in the study. Table 3.1 illustrates means, standard deviations, and correlations of variables in this study. Although each

correlation between variables in the study does not show high correlation value I ran collinearity diagnostics to test for problem of multicollinearity. Variance inflation factor (VIF) scores are not exceeded the threshold of 10. The mean score of VIF is 1.22. As such, multicollinearity is not problematic (Cohen, Cohen, West, & Aiken, 2013).

I ran nine different models. Table 3.2 reports the models for hypotheses testing and the result of the logistic regression on the propensity to adopt equity alliance mode for pooled sample, including both main and interaction effects. Model 1 is a based model, which includes all control variables. Model 2 tests the main effect of informal and formal institutional distance while model 3 to model 5 tests the moderating roles of infrastructure and economic distance. In model 2, as I hypothesize that informal institutional distance and the propensity to adopt equity alliance mode has positive but diminishing returns relationship, the result shows that the coefficient for the square term of informal institutional distance is negative and significant ($\beta = -.46, p < 0.05$), providing support for Hypothesis 1. Further, I propose that the greater formal institutional distance, the likelihood to adopt equity alliance mode is increased. The coefficient for formal institutional distance is positive and significant ($\beta = .12, p < 0.01$), providing support for Hypothesis 2.

For interaction effect, model 3 to 5 tests the moderating role of infrastructure distance. I hypothesize that infrastructure distance positively moderates the effect of informal and formal institutional distance on the propensity to adopt equity alliance mode. The results in model 3 to 5 show that the coefficient for the interaction effect between informal institutional and infrastructure distance is positive but not significant, providing not support Hypothesis 3a while

Table 3.1
Descriptive Statistics and Correlations

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Equity Alliance	0.61	0.49								
2. Informal Institutional Distance	0.38	0.47	0.12*							
3. Formal Institutional Distance	4.59	1.72	0.01	-0.31*						
4. Infrastructure Distance	3.59	2.02	0.00	-0.03	0.20*					
5. GDP Host Countries	28.21	1.10	-0.05	-0.02	0.25*	-0.21*				
6. FDI as percent of GDP Host	0.03	0.03	0.04	-0.03	0.00	-0.06*	-0.17*			
7. Geographic Distance	8.76	0.71	-0.19*	-0.34*	0.15*	0.02	0.20*	-0.20*		
8. Economic Distance	10.54	0.30	-0.07*	-0.22*	0.27*	0.15*	0.11*	-0.07*	0.40*	
9. Business Relatedness	1.64	1.65	-0.07*	0.01	-0.01	0.04	0.01	0.03	0.03	-0.01
10. Emerging Economies as Host Country	0.90	0.30	0.08*	0.01	-0.01	0.00	-0.16	-0.19*	0.01	-0.02
12. SIC Div_A (Code 01-09)	0.01	0.09	0.04	0.03	0.04	-0.01	0.03	0.00	0.00	0.03
11. SIC Div_B (Code 10-14)	0.07	0.26	-0.13*	-0.05	0.00	-0.01	-0.11*	-0.03	0.03	0.01
13. SIC Div_C (Code 15-17)	0.02	0.15	0.05	0.09*	-0.06*	0.06*	-0.09*	-0.03	-0.10*	-0.03
14. SIC Div_E (Code 40-49)	0.08	0.27	0.03	0.01	0.04	0.05	-0.04	0.02	-0.05	0.01
15. SIC Div_F (Code 50-51)	0.09	0.29	-0.16*	-0.04	-0.01	0.01	-0.03	0.03	0.06*	0.00
16. SIC Div_G (Code 52-59)	0.04	0.18	0.01	0.02	-0.06*	-0.02	0.00	-0.03	-0.06*	0.01
17. SIC Div_H (Code 60-67)	0.12	0.33	0.01	0.00	-0.01	-0.02	-0.04	0.03	-0.11*	-0.06*
18. SIC Div_I (Code 70-89)	0.23	0.42	-0.17*	-0.13*	0.09*	0.08*	0.07*	0.00	0.12*	0.07*

Table 3.1 (Cont.)
Descriptive Statistics and Correlations

	Mean	S.D.	9	10	11	12	13	14	15	16	17
12. SIC Div_A (Code 01-09)	0.01	0.09	-0.06*	0.01							
11. SIC Div_B (Code 10-14)	0.07	0.26	0.00	-0.08*	-0.03						
13. SIC Div_C (Code 15-17)	0.02	0.15	-0.06*	0.05	-0.01	-0.04					
14. SIC Div_E (Code 40-49)	0.08	0.27	0.00	0.02	-0.03	-0.08*	-0.04				
15. SIC Div_F (Code 50-51)	0.09	0.29	-0.03	-0.05	-0.03	-0.09*	-0.05	-0.10*			
16. SIC Div_G (Code 52-59)	0.04	0.18	-0.06*	0.05	-0.02	-0.05	-0.03	-0.06*	-0.06*		
17. SIC Div_H (Code 60-67)	0.12	0.33	-0.03	0.05	-0.04	-0.10*	-0.06*	-0.11*	-0.12*	-0.07*	
18. SIC Div_I (Code 70-89)	0.23	0.42	0.04	-0.06*	-0.05	-0.15*	-0.08*	-0.16*	-0.18*	-0.10*	-0.20*

1) *. Correlation is significant at the 0.05 level.

2) n = 1,334

Table 3.2: Logistic Regression Results on the Propensity to Choose Equity Alliance Mode (Pooled Sample)

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Control</i>					
Intercept	7.09**(2.71)	7.99**(2.85)	7.54**(2.93)	6.53*(2.94)	6.36*(2.97)
Log GDP Host Countries	-0.08 (0.06)	-0.12† (0.06)	-0.11† (0.07)	-0.07(0.07)	-0.07 (0.07)
FDI as percent of GDP Host Countries	1.64 (2.04)	1.50 (2.05)	1.59 (2.09)	2.00 (2.13)	1.97 (2.13)
Log Geographic Distance	-0.57*** (0.11)	-0.50*** (0.11)	-0.51*** (0.12)	-0.50*** (0.11)	-0.51*** (.12)
Economic Distance	0.13 (0.23)	0.02 (0.23)	0.05 (0.24)	0.09 (0.24)	0.11 (0.24)
Business Relatedness	-0.11** (0.04)	-0.12** (0.04)	-0.12** (0.04)	-0.12** (0.04)	-0.12** (0.04)
EE as Host Countries	0.33 (0.21)	0.29 (0.21)	0.30 (0.21)	0.35† (0.22)	0.35† (0.21)
SIC Div_A (Code 01-09)	0.10 (0.79)	0.06 (0.79)	0.07 (0.79)	0.10 (0.79)	0.09 (0.79)
SIC Div_B (Code 10-14)	-1.92*** (0.25)	-1.96*** (0.25)	-1.96*** (0.26)	-1.91*** (0.26)	-1.91*** (0.25)
SIC Div_C (Code 15-17)	-0.67 (0.46)	-0.69 (0.47)	-0.70 (0.47)	-0.61 (0.47)	-0.61 (0.48)
SIC Div_E (Code 40-49)	-0.88*** (0.24)	-0.91*** (0.24)	-0.91*** (0.24)	-0.91*** (0.24)	-0.91*** (0.24)
SIC Div_F (Code 50-51)	-1.98*** (0.23)	-1.99*** (0.23)	-1.99*** (0.23)	-1.99*** (0.23)	-1.98*** (0.23)
SIC Div_G (Code 52-59)	-1.08*** (0.33)	-1.01** (0.33)	-1.02** (0.34)	-1.00** (0.34)	-1.01** (0.34)
SIC Div_H (Code 60-67)	-1.06*** (0.21)	-1.04*** (0.21)	-1.05*** (0.21)	-1.04*** (0.21)	-1.05*** (0.21)
SIC Div_I (Code 70-89)	-1.51*** (0.17)	-1.52*** (0.17)	-1.53*** (0.17)	-1.51*** (0.17)	-1.51*** (0.17)
<i>Main Effects and Interaction Effects</i>					
Informal Institutional Dist		0.93* (.40)	1.47 (0.94)	0.91*(0.40)	1.12 (0.96)
Informal Institutional Dist. ² (H1)		-0.46* (.24)	-0.82 (0.61)	-0.46*(0.24)	-0.70 (0.61)
Formal Institutional Dist. (H2)		0.12** (.04)	0.11** (0.04)	-0.04 (0.09)	-0.06 (0.09)
Infrastructure Dist.			0.03 (0.05)	-0.16† (0.09)	-0.17 (0.11)
Informal Institutional Distance x Infrastructure Distance			-0.14 (0.20)		-0.05 (0.21)
Informal Institutional Distance ² x Infrastructure Distance (H3a)			0.09 (0.14)		0.06 (0.14)
Formal Institutional Distance x Infrastructure Distance (H3b)				0.04* (0.02)	0.04* (0.02)
N	1,334	1,334	1,334	1,334	1,334
Chi-Square (df)	215.11*** (14)	224.84*** (17)	225.36*** (19)	229.82*** (19)	230.26*** (21)
Pseudo R ²	.1206	.1260	.1263	.1288	.1291
Increase in Chi-Square (df) relative to Benchmark Model	--	9.73* (3) over Model 1	0.52 (3) over Model 2	4.98† (2) over Model 2	5.42 (4) over Model 2

Notes:

1. †p<.10, *p<.05, **p<.01, ***p<.001
2. Standard errors appear in parentheses.

Table 3.3: Logistic Regression Results on the Propensity to Choose Equity Alliance Mode by Host Countries

Variables	Developed Economies		Emerging Economies	
	Model 6	Model 7	Model 8	Model 9
<i>Control</i>				
Intercept	12.51 (8.64)	18.08† (9.95)	5.15† (2.85)	5.69† (3.05)
Log GDP Host Countries	-0.92** (0.31)	-0.89** (0.32)	-0.01 (0.07)	-0.05 (0.07)
FDI as percent of GDP Host Countries	-3.04 (4.02)	-4.66 (4.60)	-2.32 (3.27)	-1.19 (3.18)
Log Geographic Distance	-0.42 (0.41)	-0.54 (0.55)	-0.55*** (.11)	-0.47*** (0.12)
Economic Distance	1.87† (1.10)	1.31 (1.21)	0.14 (0.24)	0.07 (0.24)
Business Relatedness	-0.29* (0.13)	-0.26* (0.14)	-0.10** (0.04)	-0.10** (0.04)
SIC Div_A (Code 01-09)	---	---	-0.04 (0.80)	-0.06 (0.80)
SIC Div_B (Code 10-14)	-4.37*** (1.06)	-4.35*** (1.05)	-1.76*** (0.27)	-1.76*** (0.27)
SIC Div_C (Code 15-17)	---	---	-0.62 (0.46)	-0.67 (0.47)
SIC Div_E (Code 40-49)	-0.81 (0.94)	-0.66 (0.96)	-0.89*** (0.25)	-0.91*** (0.25)
SIC Div_F (Code 50-51)	-1.24† (0.68)	-1.12 (0.70)	-2.05*** (0.24)	-2.07*** (0.24)
SIC Div_G (Code 52-59)	---	---	-1.04** (0.34)	-0.96** (0.34)
SIC Div_H (Code 60-67)	-1.44 (0.99)	-1.41 (1.01)	-1.04*** (0.21)	-1.02*** (0.22)
SIC Div_I (Code 70-89)	-1.43* (0.59)	-1.38* (0.58)	-1.53*** (0.18)	-1.53*** (0.18)
<i>Main Effects and Interaction Effects</i>				
Informal Institutional Distance		-1.24 (1.7)		0.99* (0.42)
Informal Institutional Distance ²		0.77 (1.02)		-0.49* (0.25)
Formal Institutional Distance		0.16 (0.15)		0.10* (0.05)
N	132	132	1200	1200
Chi-Square (df)	50.26*** (10)	52.38*** (12)	176.92*** (13)	184.67*** (16)
Pseudo R ²	.2747	.2862	.1112	.1161
Increase in Chi-Square (df) relative to Benchmark Model	--	2.12 (3) over Model 6	--	7.75† (3) over Model 8

Notes:

1. †p<.10, *p<.05, **p<.01, ***p<.001

2. Standard errors appear in parentheses.

the coefficient for the interaction effect between formal institutional and infrastructure distance is positive and significant ($\beta = .04, p < 0.05$), providing support Hypothesis 3b.

In figure 3.2, I plot the main effect of informal institutional distance and propensity of choose equity alliance mode over contract alliance mode. MNEs are less likely to choose equity alliances mode when informal institutional distance is at the lowest and the highest distance. In order to better understand the nature of the interactions in the regression analysis, I used model 4 to conduct follow-up simple slope test (Aiken & West, 1991). In figure 3.3, given low and high level of formal institutional distance (one standard deviation below and above the mean), I plot the interaction terms to illustrate the impact of infrastructure distance on the propensity to adopt equity alliance mode, using one standard deviation below and above the mean of infrastructure distance (low and high infrastructure distance). The dashed slope represents the hypothesized relationship when infrastructure distance is low while the solid slope represents the hypothesized relationship when infrastructure distance is high. As supporting hypothesis 3b, the slope of high infrastructure distance is positive and more steep, comparing to the slope of low infrastructure distance. It clearly demonstrates that infrastructure distance positively moderates the relationship between formal institutional distance and the propensity to adopt equity alliance mode.

Table 3.3 reports the model in the scenarios of host countries based in developed economies and emerging economies. Model 6 and 8 are the baseline model of host countries based in developed economies and emerging economies, respectively. I propose Hypothesis 5a that the positive relationship between informal institutional distance and the propensity to adopt equity alliance is stronger in emerging economies than developed economies. Comparing

between model 7 and 9, the result indicates that the coefficient for informal institutional distance is not significant when the host countries based in developed economies while it is negative and

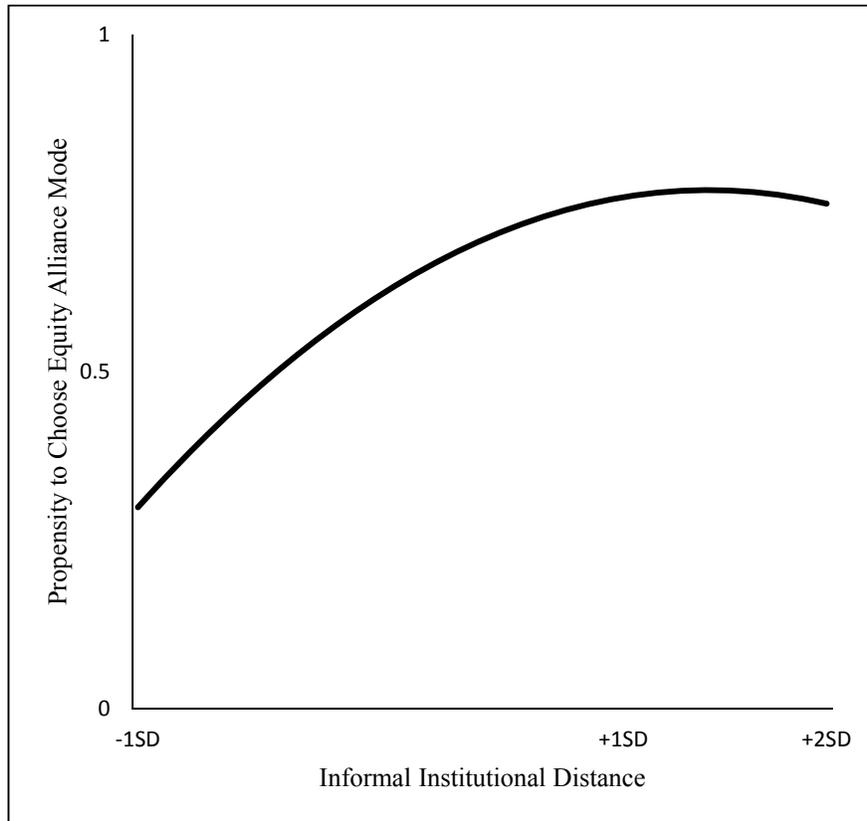


Figure 3.2: Main Effect of Informal Institutional Distance on Propensity to Choose Equity Alliance Mode

and significant ($\beta = -0.49, p < 0.05$) when the host countries based in emerging economies. As such, Hypothesis 4a is supported. Moreover, the results shows that the coefficient for formal institutional distance when host countries based in developed economies is not significant while it is positive and significant ($\beta = 0.10, p < 0.05$) when the host countries based in emerging economies. Thus, the formal institutional distance and the propensity to adopt equity alliance is stronger in emerging economies than developed economies, providing supported Hypothesis 4b.

I also test the marginal contribution of formal and informal institutional distance using Chi-square test. For developed economies as host country, the increasing in Chi-square relative to benchmark model (model 6) is not significant. In contrast, for emerging economies as host

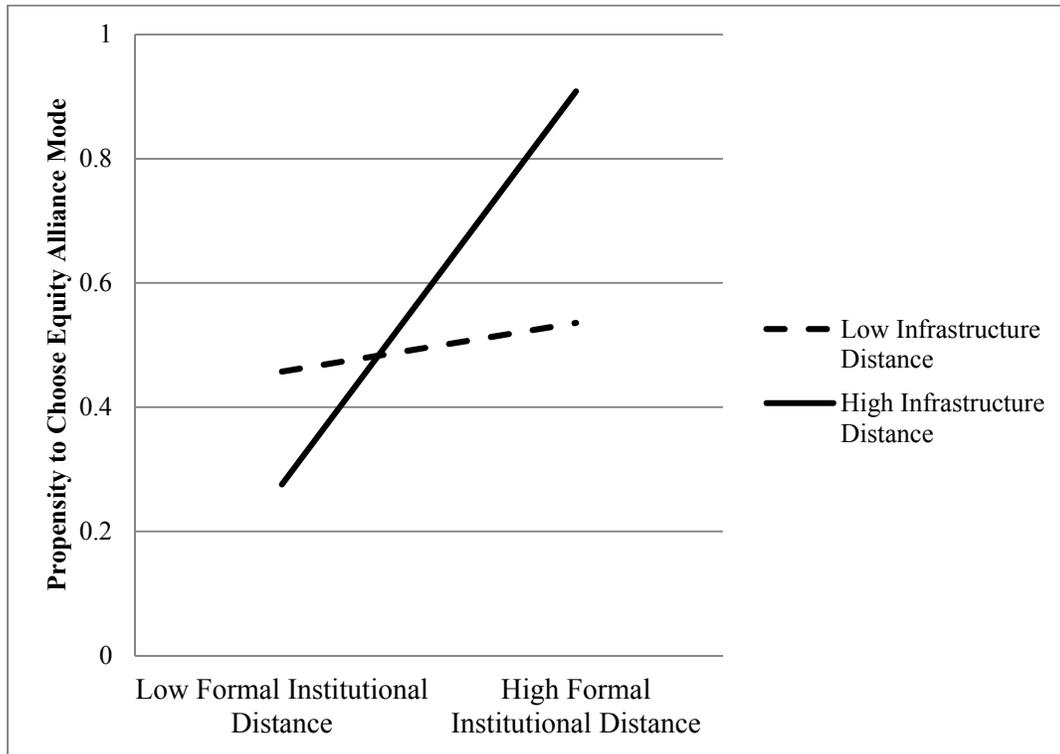


Figure 3.3: Interaction Effect of Infrastructure Distance on Formal Institutional Distance and Propensity to Choose Equity Alliance Mode

country, the increasing Chi-square relative to benchmark model (model 8) is significant ($p < 0.10$). This result is robust Hypothesis 4a and 4b.

The coefficient result of several control variables gives some highlight in the paper. Beside the industry effect, business relatedness and geographic distance significantly influence the propensity to adopt equity alliance mode. Throughout the model, business relatedness has positively related to the contract mode over equity mode. It means that the more similarity between participants of cross boarder alliance the more chance they choose contract mode over

equity alliance mode. Further, as geographic distance lead to higher cost of doing business, the result logically show that the geographic distance between participants is negatively related to the propensity of equity alliance.

DISCUSSION AND CONCLUSION

Discussion

In this paper, I seek to examine the impact of institutional and infrastructure distance on the propensity to choose equity alliance over contract alliance using the cross-border alliance events between EMNEs and DMNEs. Building upon institutional theory and institutional distance, I argue that informal and formal institutional distance influence MNEs to choose equity alliance. Particularly, informal institutional distance has a curvilinear (positive but diminishing return) relationship to the likelihood to adopt equity alliance while formal institutional distance is positively related to the likelihood to adopt equity alliance. Moreover, I argue that contextual distance, namely infrastructure distance, play a moderating roles in the relationships. The results indicate that when informal institutional distance increases MNEs take advantage from equity alliance to overcome the liability of foreignness, to enhance transferring capability of skills and knowledge as well as to mitigate the risk of opportunistic behavior. After a certain threshold, however, the benefit from equity alliance seems to be decreased. MNEs are less likely to choose equity alliance mode over contract alliance mode when informal institutional distance crosses that threshold. I also find empirical support for formal institutional distance. When codified and formalized rules of games are highly different, MNEs are more likely to adopt equity alliance in order to alleviate the difference via the governance mechanism. Furthermore, these relationships are more likely to stronger when the alliance events locate in emerging economies than when

they locate in developed economies. This result shows that EMNEs have more tolerance to function efficiency and effectively in the difficult conditions. In other word, EMNEs possess adversity advantage.

More importantly, to respond Hoskisson et al. (2013) study, I examine the interaction between institutional and infrastructure distance on the cross-border alliance mode. The result shows that the moderating effect of infrastructure distance is significantly demonstrated to formal institutional distance but not to informal institutional distance. In the presence of high infrastructure distance, the relationship between formal institutional distance and the propensity of choose equity alliance is enhanced. Interestingly, geographic distance seems to respond the concept of cost of doing business aboard and liability of foreignness. The greater geographic distance, the greater cost of doing business and liability of foreignness arise. Moreover, the similarity between EMNEs and DMNEs in the context of business relatedness influence how cross border alliance governance will be chosen. The more similarity in business between EMNEs and DMNEs is, the more chance they choose contract mode over equity alliance mode.

Contributions and Implications

This study extends in both theoretical and managerial contribution. I add to the current literature in three folds. First, to my best knowledge, this paper builds on the institutional theory and distance to find a curvilinear (positive but diminishing returns) relationship between informal institutional distance and the propensity to choose the equity alliance mode over the contract mode. This result not only demonstrates the benefit of equity alliance when MNEs face to the informal institutional distance but also raises the limitation of control mechanism via equity alliance when informal institutional distance cross over a certain threshold. Moreover, this

result provides an alternative view comparing to the prior empirical study of Michailova and Ang (2008). Second, this empirical paper provides an evidence of the typology of mid-range emerging economies proposed by (Hoskisson et al., 2013). The interaction between infrastructure and institutional development influences to MNEs entry decision. In particular, when formal institutional distance and infrastructure distance are high, MNEs tend to choose equity alliance over contract alliance mode. Lastly, this paper indicates that adversity advantage of EMNEs is existed and empirically validates this conceptual advantage (Ramamurti & Singh, 2009). Although EMNEs are lack of firm specific advantage, including knowledge, skills, technology and resources they are capable to tolerance the difficult situations whether informal or formal institutional difference. Further, it proves that EMNEs exercise their flexibility when they enter to developed economies territory. As such, the contribution of this study not only extends the prior literature focusing on DMNEs but also verifies recent conceptual research on EMNEs.

Furthermore, this study highlights several contributions to executive managers who embedded in either EMNEs or DMNEs. To choose the decision between equity or non-equity governance mode in cross-border alliances, DMNEs' managers may need to concern regarding to adversity advantage which EMNEs possess. While EMNEs' managers may have an incentive to exercise this adversity advantage overcoming the difficult situation due to institutional difference, DMNEs' managers should consider governance mode which be able to protect their specific assets, given EMNEs generally lack of such technology and resources. In addition, managers should recognize the limitation of governance mechanism via joint venture (or equity mode). The result clearly depicts the threshold that equity alliance may not implement the

control mechanism when norm and value between emerging economies and developed economies are different. Such governance mode of cross-border alliances may change when the difference are across the point of benefit from equity mode. Lastly, infrastructure distance between emerging economies and developed economies should be taken into consideration by managers. This level of infrastructure dissimilarity induces the difficulty of operations to both EMNEs and DMNEs whether entering to emerging economies or developed economies. Further, the influence of both institutional and infrastructure differences also plays a prominent role in alliance governance mode, which managers should be awareness.

Limitations, Future Research, and Extensions

This study is not without its limitations. First, due to the limitation of data, I discard many alliance events since Hofstede Cultural dimension, infrastructure score and institutional score have not measured in partner's country of the events. Although I am able to collect 1,334 alliance events for the pooled dataset, the alliance on developed economies as host countries is only 134 which can lead to limitations in providing statistical power. However, the data was collected across nations and retrieved from different sources, including World Bank's database, UNCTAD, World economic forum, SDC Platinum database and IMF, which are reliable and have been used in literature. Second, I mainly focus on the cross country level of MNEs which limit the variance from the firm level. Several firm attributes, such as firm size, alliance experiences and firm's resource and capability also impact the strategic choice.

However, this limitation provides promising direction for future research. If data is available, future research can further investigate by using logistic hierarchical regression model to nest the firm level. Moreover, since this paper integrates the formal institutional distance, it

would be interested to categorize the type of formal institutional distance, such as intellectual property protection, corruption level, or government efficiency. Each type of formal institutional distance may differently influence MNEs' behaviors and decisions. As Ramamurti and Singh (2009) suggested four scenarios of source and destination of FDI, one of the scenarios, South to South FDI or EMNEs entering to emerging economies, is called to further investigate, not only in strategic entry but also what competitive advantage they employ.

In conclusion, this paper provides a highlight in emerging economies literature and opens the gateway to numerous research topic and extension, which will expand the emerging economies research and international venturing.

REFERENCES

- Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*: Sage.
- Anderson, E., & Gatignon, H. 1986. Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17(3): 1-26.
- Bai, C.-E., & Qian, Y. 2010. Infrastructure development in China: the cases of electricity, highways, and railways. *Journal of Comparative Economics*, 38(1): 34-51.
- Beach, W. W., & Miles, M. A. 2006. Explaining the factors of the index of economic freedom. *2006 Index of Economic Freedom*: 55-76.
- Brouthers, K. D., & Brouthers, L. E. 2000. Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal*, 21(1): 89-97.
- Burgers, W. P., Hill, C. W., & Kim, W. C. 1993. A theory of global strategic alliances: the case of the global auto industry. *Strategic management journal*, 14(6): 419-432.
- Canabal, A., & White III, G. O. 2008. Entry mode research: Past and future. *International Business Review*, 17(3): 267-284.
- Chen, S.-F., & Hennart, J.-F. 2002. Japanese Investors Choice of Joint Ventures Versus Wholly-owned Subsidiaries in the US: The Role of Market Barriers and Firm Capabilities. *Journal of International Business Studies*, 33(1): 1-18.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2013. *Applied multiple regression/correlation analysis for the behavioral sciences*: Routledge.
- Contessi, S., & El-Ghazaly, H. 2010. Multinationals from Emerging Economies. *The Regional Economist*: 16-17.
- Das, T. K., & Teng, B.-S. 2001. Trust, control, and risk in strategic alliances: An integrated framework. *Organization studies*, 22(2): 251-283.
- Dussauge, P., Garrette, B., & Mitchell, W. 2000. Learning from competing partners: outcomes and durations of scale and link alliances in Europe, North America and Asia. *Strategic Management Journal*, 21(2): 99-126.
- Eden, L., & Miller, S. R. 2004. Distance matters: Liability of foreignness, institutional distance and ownership strategy. *Advances in international management*, 16: 187-221.
- Eisenhardt, K. M., & Schoonhoven, C. B. 1996. Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *organization Science*, 7(2): 136-150.

- Estrin, S., Baghdasaryan, D., & Meyer, K. E. 2009. The impact of institutional and human resource distance on international entry strategies. *Journal of Management Studies*, 46(7): 1171-1196.
- Faems, D., Janssens, M., Madhok, A., & Van Looy, B. 2008. Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics, and contract application. *Academy of Management Journal*, 51(6): 1053-1078.
- Ghemawat, P. 2001. Distance still matters. *Harvard business review*, 79(8): 137-147.
- Ghoshal, S., & Bartlett, C. A. 1988. Creation, adoption and diffusion of innovations by subsidiaries of multinational corporations. *Journal of International Business Studies*, 19(3): 365-388.
- Guillén, M. F., & García-Canal, E. 2009. The American model of the multinational firm and the “new” multinationals from emerging economies. *The Academy of Management Perspectives*, 23(2): 23-35.
- Gulati, R. 1998. Alliances and networks. *Strategic management journal*, 19(4): 293-317.
- Hennart, J.-F., & Park, Y.-R. 1993. Greenfield vs. acquisition: The strategy of Japanese investors in the United States. *Management science*, 39(9): 1054-1070.
- Hennart, J. F. 1988. A transaction costs theory of equity joint ventures. *Strategic management journal*, 9(4): 361-374.
- Hofstede, G. H. 2001. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. 2000. Strategy in emerging economies. *Academy of management journal*, 43(3): 249-267.
- Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. 2013. Emerging Multinationals from Mid-Range Economies: The Influence of Institutions and Factor Markets. *Journal of Management Studies*.
- Ionascu, D., Meyer, K. E., & Estrin, S. 2004. Institutional distance and international business strategies in emerging economies.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2): 386-408.
- Kogut, B. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic management journal*, 9(4): 319-332.

- Kogut, B. 1991. Joint ventures and the option to expand and acquire. *Management science*, 37(1): 19-33.
- Kogut, B., & Singh, H. 1988. The effect of national culture on the choice of entry mode. *Journal of international business studies*: 411-432.
- Kostova, T. 1999. Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24(2): 308-324.
- Kostova, T., & Roth, K. 2002. Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1): 215-233.
- Kostova, T., & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64-81.
- Kotabe, M., Dunlap-Hinkler, D., Parente, R., & Mishra, H. A. 2007. Determinants of cross-national knowledge transfer and its effect on firm innovation. *Journal of International Business Studies*, 38(2): 259-282.
- Luo, Y., Shenkar, O., & Nyaw, M.-K. 2002. Mitigating liabilities of foreignness: Defensive versus offensive approaches. *Journal of International Management*, 8(3): 283-300.
- Makino, S., & Neupert, K. E. 2000. National culture, transaction costs, and the choice between joint venture and wholly owned subsidiary. *Journal of International Business Studies*, 31(4): 705-713.
- Michailova, S., & Ang, S. H. 2008. Institutional explanations of cross-border alliance modes: The case of emerging economies firms. *Management International Review*, 48(5): 551-576.
- Mollick, A. V., Ramos-Duran, R., & Silva-Ochoa, E. 2006. Infrastructure and FDI inflows into Mexico: a panel data approach. *Global Economy Journal*, 6(1).
- Morosini, P., Shane, S., & Singh, H. 1998. National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1): 137-158.
- North, D. C. 1990. *Institutions, institutional change and economic performance*: Cambridge university press.
- 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 Behavior & Organization*, 38(3): 283-309.
- Oxley, J. E., & Sampson, R. C. 2004. The scope and governance of international R&D alliances. *Strategic Management Journal*, 25(8-9): 723-749.

- Pan, Y., & Tse, D. K. 2000. The hierarchical model of market entry modes. *Journal of International Business Studies*: 535-554.
- Parkhe, A. 1991. Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of international business studies*: 579-601.
- Peng, M. W. 2000. *Business strategies in transition economies*. Thousand Oaks, Calif. [u.a.: Sage Publications.
- Ramamurti, R., & Singh, J. V. 2009. *Emerging multinationals in emerging markets*: Cambridge University Press.
- Reuer, J. J., & Tong, T. W. 2005. Real options in international joint ventures. *Journal of Management*, 31(3): 403-423.
- Schwab, K. 2013. The global competitiveness report 2013–2014. Switzerland: World Economic Forum.
- Schwens, C., Eiche, J., & Kabst, R. 2011. The moderating impact of informal institutional distance and formal institutional risk on SME entry mode choice. *Journal of Management Studies*, 48(2): 330-351.
- Scott, W. R. 1995. *Institutions and organizations*. Thousand Oaks: SAGE.
- Shane, S. A. 2003. *A general theory of entrepreneurship: The individual-opportunity nexus*: Edward Elgar Publishing.
- Tsang, E. W., & Yip, P. S. 2007. Economic distance and the survival of foreign direct investments. *Academy of Management Journal*, 50(5): 1156-1168.
- Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. 2005. Strategy Research in Emerging Economies: Challenging the Conventional Wisdom*. *Journal of Management Studies*, 42(1): 1-33.
- Xia, J. 2011. Mutual dependence, partner substitutability, and repeated partnership: the survival of cross-border alliances. *Strategic Management Journal*, 32(3): 229-253.
- Xu, D., & Shenkar, O. 2002. Note: Institutional distance and the multinational enterprise. *Academy of Management Review*, 27(4): 608-618.
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. 2008. What drives new ventures to internationalize from emerging to developed economies? *Entrepreneurship Theory and Practice*, 32(1): 59-82.
- Yiu, D., & Makino, S. 2002. The choice between joint venture and wholly owned subsidiary: An institutional perspective. *organization Science*, 13(6): 667-683.

Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management journal*, 38(2): 341-363.

CHAPTER FOUR

PAPER THREE

DO CROSS-BORDER ALLIANCES WITH MNEs FROM DEVELOPED ECONOMIES CREATE FIRM VALUE FOR MNEs FROM EMERGING ECONOMIES?

ABSTRACT

This paper investigates the creation of value from cross-border alliances when multinational enterprises (MNEs) from emerging economies ally with those from developed economies. Based on a long-term event study of 122 cross-border alliances, the results indicate that MNEs from emerging economies derive value from such alliances. Given the nature of the MNEs from emerging economies, contractual alliance governance will enhance value creation, while cultural distance does not. This study also examines the influence of pre-alliance risk on MNEs from emerging economies as shareholders recognize the benefit of risk sharing through value creation. The interaction between cultural distance and risk level on value creation is also explored. This study highlights not only emerging economies and their MNEs but offers an expanded picture of cross-border alliance literature.

Keywords: cross-border alliances, emerging economies, joint venture, contractual alliance, value creation, risk level, culture distance, long-term event study.

INTRODUCTION

It is widely accepted that strategic alliances create firm value. According to research, stock prices increased approximately 1% with announcements of a new alliance, which translates into an increase in market value of \$54 million per alliance (Dyer, Kale, & Singh, 2001). While enterprises from emerging economies (EMNEs) have adopted strategies used by MNEs from developed economies (DMNEs), their use may not be appropriate, due to the inherent difference in the enterprises. The EMNEs tend to be smaller (Wells, 1983), have less sophisticated resources (Bartlett & Ghoshal, 2000) and fewer advanced technologies (Lall & Chen, 1983), giving them less competitive edge and a greater incentive to ally forces with DMNEs, which tend to have more resources and capabilities. Research has yet to focus on whether EMNEs benefit from alliances with DMNEs, and if so, under what conditions. I seek to examine the following research questions: Do cross-border alliances between EMNEs and DMNEs create firms value for EMNEs? What conditions may enhance or diminish value creation for EMNEs when they enter a cross-border alliance with a developed MNE?

Cross-border alliances allow alliance partners to gain access to resources and skills (Kogut, 1988), share risk (Hitt, Dacin, Levitas, Arregle, & Borza, 2000), obtain information via social capital (Gulati, 1995b; Koka & Prescott, 2002), access complementary resources (Henderson & Cockburn, 1994), and improve technological capabilities (Powell, Koput, & Smith-Doerr, 1996). Since EMNEs have less of a competitive advantage than DMNEs, alliance with DMNEs should enhance their performance. While previous studies have focused on firms listed in the U.S. (developed) market, this study focuses uniquely on firms from emerging markets such as China, India, Russia, and South Africa, a context that highlights how value is

created for MNEs in a domestic market through cross-border alliances with DMNEs.

This study incorporates a long-term event study designed to capture value creation when EMNEs announce alliances with DMNEs, given that the market efficiency assumption may not hold in all emerging economies, due to the weakness of their institutions. It also explores how the governance mode of cross-border alliances, the level of risk for EMNEs, and the cultural distance between emerging and developed economies can influence value creation when EMNEs ally with DMNEs.

Although research suggests that joint ventures are more likely to increase firm value via a learning effect (Anand & Khanna, 2000), this study focuses on how contractual or license alliances can enhance EMNEs value creation. First, contractual alliances allow EMNEs access to knowledge, technology, and other specific assets of DMNEs without equity endowment. Since the nature of EMNEs includes a lack of resources (Wells, 1983), contractual alliances are more likely to help EMNEs generate firm value. Second, as emerging economies can grow quickly, EMNEs are more likely to become entrepreneurial than DMNEs (Ramamurti & Singh, 2009). Contractual alliances represent a contract arrangement that provides more flexibility for EMNEs, which need a quick response in the volatile environment of emerging markets. Lastly, without financial investment, contractual alliances decrease the uncertainty of EMNEs as they enter the international market, as well as enhance their legitimacy. Given that EMNEs are inherently riskier as compared to DMNEs (Ramamurti & Singh, 2009), I argue that emerging MNE shareholders are more likely to reap greater benefits when EMNEs ally with DMNEs. One of the rationales for a strategic alliance is risk-sharing (Das & Teng, 1998). Alliances can allow partners to improve their strategic position in competitive markets by exchanging resources and

sharing both cost and risk (Eisenhardt & Schoonhoven, 1996). High *ex ante* risk levels tend to increase EMNEs value creation within cross-border alliance. As cultural distance represents the difference in cultural norms between two countries (Kogut & Singh, 1988), the value creation among EMNEs may be hindered when the cultural distance between emerging and developed economies is high. Communication, cooperation, and commitment issues between alliance partners occur when differences in norms and values between the partners are great (Pothukuchi, Damanpour, Choi, Chen, & Park, 2002). In that sense, EMNEs may not obtain much benefit from DMNEs. From a shareholder's perspective, the importance of risk sharing is critical, and even more valuable when not only high uncertainty from the level of cultural distance but *ex ante* risk levels are palpable. Therefore, the relationship between risk level among EMNEs and value creation is enhanced when the cultural distance between emerging and developed economies increases.

The study is expected to make several theoretical and managerial contributions. It extends the literature in emerging economies by examining the value created by allying with DMNEs. The result should confirm the notion of alliances creating value across global firms, including EMNEs. Next, it extends the work of Anand and Khanna (2000) by suggesting that EMNEs may not obtain alliance benefits through learning effects but rather by flexibility, and examines the influence of risk level on alliance events that trigger shareholder perceptions of the benefit of risk sharing. In terms of managerial implications, the managers of EMNEs should evaluate both the risk level within EMNEs and their cultural distance before pursuing cross-border alliances with DMNEs. Any value created by EMNEs may not be obtained as expected when the cultural distance between emerging and developed economies is small.

The next section includes a brief description of theoretical and conceptual constructs, including cross-border alliances, value creation, and conceptual framework, followed by hypothetical development. I describe sources of data, variables, and the methodology used to test the proposed hypothesis. The final section discusses the study, limitations of the work, and future research.

LITERATURE AND THEORETICAL FRAMEWORK

Cross-Border Alliance and Value Creation

Cross-border alliances are an interchangeable term for global strategic alliances which are corporate arrangements between two or more firms located in different countries (Parkhe, 1991). Prior studies have shown that strategic alliances create firm value (Chan, Kensinger, Keown, & Martin, 1997; Das, Sen, & Sengupta, 1998). Strategic alliances allow firms to access the resources, knowledge, and skills embedded in other firms. Arrangements made via strategic alliance can offer a competitive advantage (Ireland, Hitt, & Vaidyanath, 2002). Several major theoretical explanations exist in alliance research: transaction cost theory emphasizes the cost of coordination, contracts, and commitment, and views strategic alliances as an intermediate governance structure (Parkhe, 1993), while the resource based-view focuses on how strategic alliances can leverage heterogeneous resources from collaboration to enhance their competitive advantage (Eisenhardt & Schoonhoven, 1996).

Strategic alliances may create a synergy between partners through the exchange and sharing of business activities such as R&D, manufacturing, distribution, sales and marketing (Das et al., 1998). However, partners of a given alliance may not be satisfied with its outcomes since they are often unsuccessful due to alliance formation, selection, and instability (Inkpen &

Beamish, 1997; Madhok & Tallman, 1998). Studies have shown that alliance failures are derived from two main sources: inter-firm rivalry and managerial complexity (Park & Ungson, 2001). To improve the success rate of strategic alliances, firms may need to delegate the alliance management function (Dyer et al., 2001), develop trust and relationship between partners (Cullen, Johnson, & Sakano, 2000), and learn how to select the right partners (Hitt et al., 2000).

Since the goal of strategic alliances is to create a competitive advantage, investors generally recognize the potential of strategic alliances to impact firm value in the capital market (Das et al., 1998). Using event studies, researchers have investigated the antecedents of firm value in strategic alliance announcements, including horizontal or non-horizontal alliances (Chan et al., 1997), firm attributes (Das et al., 1998), learning effects (Anand & Khanna, 2000), alliance capability (Kale, Dyer, & Singh, 2002), alliance types and industries (Park, Mezias, & Song, 2004), acquiring or divesting a joint venture (Kumar, 2005), and alliance experience (Gulati, Lavie, & Singh, 2009).

Few recent studies have explored the context of international alliances (Merchant & Schendel, 2000; Reuer & Miller, 1996). The rise of international venturing among EMNEs continues to gain the attention of global managers and academic scholars (Hoskisson, Wright, Filatotchev, & Peng, 2013; Ramamurti & Singh, 2009; Wright, Filatotchev, Hoskisson, & Peng, 2005). Few studies have examined the cross-border mergers and acquisitions (M&A) pursued by emerging and DMNEs (Aybar & Ficici, 2009; Deng, 2009; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010). Given that emerging firms play a vital role in the global economy, I wanted to examine whether EMNEs who engage in cross-border alliances with DMNEs create value in the long term. Next, I examine how three factors—contractual alliance governance mode, the *ex ante*

risk level of EMNEs, and culture distance—influence emerging MNE value creation when they ally with DMNEs. I also examine the interaction effect between the *ex ante* risk level of EMNEs and cultural distance on EMNEs value creation. The conceptual framework is shown in Figure 4.1.

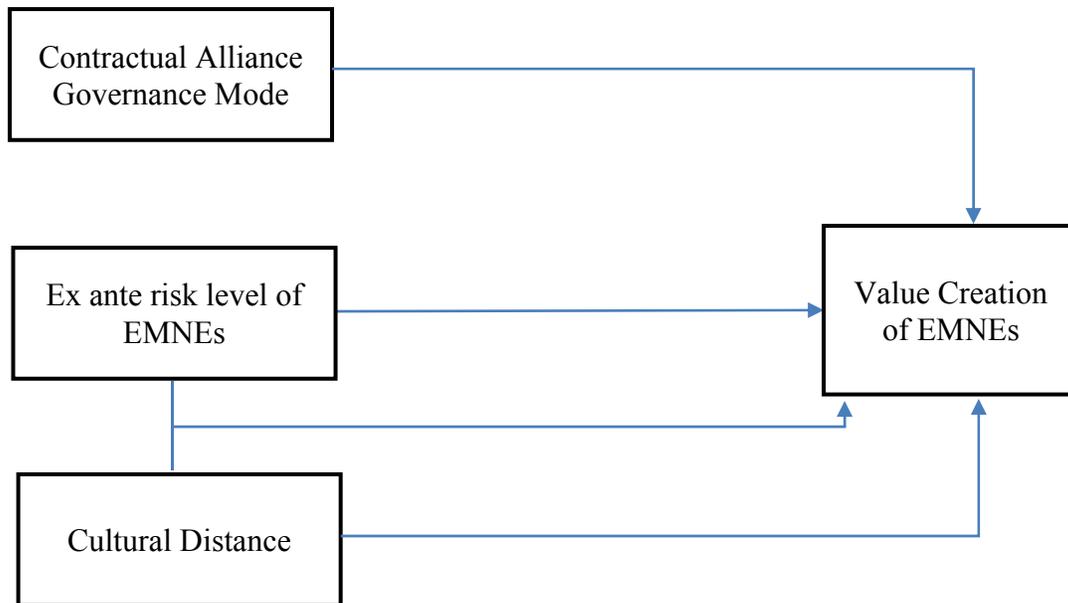


Figure 4.1: Conceptual Framework

HYPOTHESIS DEVELOPMENT

EMNEs Value Creation through Cross-border Alliances with DMNEs

Compared with developed economies, emerging economies may suffer from the lack of both institutional development and infrastructure development (Hoskisson et al., 2013). EMNEs are more likely to be smaller and possess fewer resources and technology (Lall & Chen, 1983; Wells, 1983), and as a result are often at a disadvantage relative to DMNEs (Cuervo-Cazurra & Genc, 2008). In order to overcome their weaknesses, EMNEs have incentive to establish

cooperation with DMNEs. Cross-border alliances represent inter-firm arrangements pertaining to enhance the cross-border flow of resources, capabilities, knowledge, and skills between organizations in separate countries (Parkhe, 1991).

Building on a springboard perspective (Luo & Tung, 2007), I argue that EMNEs have two motives to form cross-border alliances with DMNEs. The first motive is asset seeking. Due to a lack of technology, expertise, R&D capabilities, distribution channels, brands, managerial experience, and markets, EMNEs must acquire these assets from others (Luo & Tung, 2007). They also seek the opportunities embedded in DMNEs. EMNEs could tap into niche opportunities in developed economies that complement their strengths or have the opportunities to gain preferential treatment in their own countries, in order to grow in size and reputation, to escape the institutional weakness, or bypass the trade barriers of developed economies. Prior research has suggested that alliances provide benefit to partners in various ways such as reducing transaction costs (Gulati & Singh, 1998), optimizing resource configuration (Das & Teng, 2000), and enhancing learning opportunities (Dussauge, Garrette, & Mitchell, 2000).

Beyond such benefits, when EMNEs ally with DMNEs, the latter can serve as a role model in terms of their organizational structure, routines, and practices, which EMNEs can learn and adopt (Luo & Tung, 2007). Developed routines and managerial practices may allow EMNEs to improve their status in reaching an international standard. Second, their liability of foreignness is mitigated when EMNEs enter the developed market. Since cross-border alliances represent a form of contract, whose major purpose to afford a safeguard from conflict or inter-firms problems, Luo, Shenkar, and Nyaw (2002) suggest that contract protection as a defensive mechanism can mitigate any liability of foreignness. Finally, DMNEs can offer EMNEs

legitimacy, crucial for international venturing. Strategic alliances thus serve a legitimizing function for organizations (Dacin, Oliver, & Roy, 2007). With DMNEs providing an endorsement as their alliance partners, EMNEs may gain social and international validations they would not otherwise have.

Taken together, the benefits from alliances with DMNEs can generate emerging MNE valuation in numerous ways. Indeed, due to the cross-border alliance, stakeholders and investors positively respond to the value of EMNEs. Based on that, I hypothesize the following:

H1: Cross border alliances between EMNEs and DMNEs result in positive value creation for the EMNEs.

Alliance Governance Mode and EMNEs Value Creation

I would propose that contractual alliances between EMNEs and DMNEs are particularly beneficial for the EMNEs. As hybrid governance arrangements between two extremes of market and hierarchy (Gulati, 1995a), joint ventures versus contractual alliances are two alternative governance modes for a strategic alliance which differ considerably with regard to investment requirement and control. On one hand, as an equity-based alliance, joint ventures represent an agreement between two or more firms who pool a portion of their resources to create a common legal organization (Kogut, 1988). In an equity joint venture contract, alliance partners must agree on terms for partners' rights and responsibility as well as how to make a joint decisions and activities (Luo, 2005). On the other hand, contractual alliances such as licensing, distribution agreements, manufacturing agreements, or technology exchange agreements are non-equity, contract-specific alliances which lack a shared ownership or dedicated administrative structure (Globerman & Nielsen, 2007). Contractual alliances are less formal and involve less

commitment of resources, more akin to arm-length transactions (Gulati, 1995a; Pan & Tse, 2000).

From the standpoint of the EMNEs, contractual alliances offer benefits as follows: first, given that EMNEs are small and lack resources, contractual alliances with DMNEs will allow them to access knowledge, technology, and other specific assets from DMNEs without an equity investment, as with a joint venture. Contractual alliances provide opportunities for knowledge spillover from DMNEs without accompanying hierarchical difficulties, generating value for EMNEs. Second, due to the fast growth of emerging economies, such MNEs tend to be entrepreneurial firms, unlike DMNEs (Ramamurti & Singh, 2009). Since contractual alliances are often arm's-length market exchanges on the continuum of market to hierarchy (Gulati, 1995a), they can provide flexibility for EMNEs, who may need a thin layer of hierarchical arrangement in order to enhance their competitive dynamics.

Given that EMNEs are generally entrepreneurial firms, contractual alliances allow them the flexibility to function in volatile environments. From the investor's point of view, contractual alliances will decrease the uncertainty of EMNEs as they move into international ventures, and enhance their legitimacy in a global market. Although contractual alliances may raise internal uncertainty regarding governance, based on lower degrees of monitoring and commitment, EMNEs have a certain "adversity advantage" (Ramamurti & Singh, 2009), surviving less advantageous institutional environments by learning to adapt and function effectively in difficult conditions. Contractual alliances also offer alliance partners some degree of control over governance mechanisms (Reuer & Ariño, 2007).

Taken together, I argue that contractual alliances with DMNEs will allow EMNEs to generate firm value. As such, I hypothesize the following:

H2: In the event of cross-border alliances between EMNEs and DMNEs, a contractual governance mode is positively associated with value creation for EMNEs.

Ex Ante Risk Level in EMNEs and EMNEs Value Creation

In exploring the influence on value creation when EMNEs ally with DMNEs, I focus on the risks taken by EMNEs leading up to cross-border alliances, i.e., *ex ante risk*. Given that strategic decision making is concerned with various inputs and strategy outcomes, risk plays a prominent role in the process (Das & Teng, 1998). As used here, "risk" refers to unanticipated or negative corporate outcomes or performance (Miller, 1992). Organizations may be involved in risk-taking at different levels, depending on firm-specific variables, industries, and general environment. Assuming risk-averse decision-making, organizations attempt to reduce risk and uncertainty using such strategic activities as avoidance, control, cooperation, imitation, and flexibility (Miller, 1992). Alliances, including those in R&D and marketing, use risk-sharing, which serves as one of the key motives for forming strategic alliances (Das & Teng, 2001; Das & Teng, 1998; Kogut, 1988). When a firm makes a strategic move, it faces different kinds of risk, including international, R&D, commercial, corporate, and strategic risk (Das & Teng, 2001). Strategic alliances can help to control uncertainties and risk by sharing and pooling resources with alliance partners, which increasing the likelihood of success. .

Thus, I would argue that EMNEs operate at an *ex ante* risk level which shareholders must take into consideration when such MNEs ally with DMNEs. That is, when EMNEs form an alliance with DMNEs, the higher the *ex ante* risk level perceived by shareholders, the greater the

value generated by the EMNEs. Building on an agency perspective (Fama & Jensen, 1983), *ex ante* risk is generated by top executives (the agent) who are risk averse when it comes to risky projects, as they are unwilling to take on unnecessary risks that could jeopardize their jobs. However, shareholders and investors may be more risk-neutral, willing to take on any project that might generate firm value.

Cross-border alliances with DMNEs will decrease shareholders and investors' perception of high *ex ante* risk. When such risk is high, the benefits of risk sharing increase for top executives and shareholders alike. When executives from EMNEs share alliance-related risk with DMNEs, they reduce their own burden of risk. In the meantime, shareholders and investor perceive that high *ex ante* risk will decrease, which reflects positively on firm value. As Lyons (1996) suggests, contracts between firms may be used to allocate risk and such risk sharing may become more important when the level of risk is high. Given the risk level borne by EMNEs before a cross border alliance, shareholders may recognize the benefits of this type of risk sharing via alliances.

Thus, I propose that emerging MNE shareholders will perceive more benefits from cross border alliances between EMNEs and DMNEs when the risk level is high. I therefore hypothesize the following:

H3: In the event of cross-border alliances between EMNEs and DMNEs, the higher the ex ante risk level for EMNEs perceived by shareholders, the greater the value generated for EMNEs.

Cultural Distance and EMNEs Value Creation

Cultural distance between emerging and developed economies may impede the benefits that accrue from cross border alliances. As used here, "culture" is the collective programming of

minds which dictates a system of shared norms, values, and behaviors among individuals and groups in society (Hofstede, 2001). Cultural distance is the difference in attitude toward authority, trust, and the importance of work (Berry, Guillén, & Zhou, 2010). Research has shown that there is a cultural distance between emerging and developed economies in terms of norms, values, and organizational and administrative practices (Kogut & Singh, 1988; Michailova & Ang, 2008). Such a distance can impede the collaboration and learning between alliance partners (Hennart & Zeng, 2002; Lane & Beamish, 1990; Parkhe, 1991). Cullen, Johnson, and Sakano (1995) found that cultural differences are associated with difficulties in commitment among alliance partners. Cultural distance creates managerial complexity, one of the most frequent reasons for an alliance failure (Park & Ungson, 2001). A high degree of cultural distance between partners can lead to difficulties in communication, cooperation, commitment and solutions due to partner values and norm differences (Pothukuchi et al., 2002).

When an emerging MNE allies with a developed MNE from a very different culture (that is, when cultural distance is high), value creation suffers due to the difficulties associated with communication and coordination (Pothukuchi et al., 2002). Value creation is facilitated by satisfaction and effectiveness of sharing, and combining and leveraging resources and capabilities. When alliance partners are culturally proximate and share cultural norms, values, and behaviors, such similarity will enable understanding and help with problem solving, and allow knowledge transfers between partners, which in turn develops mutual trust (Johnson, Cullen, Sakano, & Takenouchi, 1996).

Taken together, I propose that cross border alliance performance may not yield the expected results when cultural distance is high. I hypothesize the following:

H4: In the event of cross-border alliances between EMNEs and DMNEs, the cultural distance between them is negatively associated with value created by EMNEs

Interaction between *Ex Ante* Risk Level and Cultural Distance in Value Creation

Cultural distance not only influences the creation of value for EMNEs, but plays a contingent role in *ex ante* risk. Risk level often reflects a firm's sensitivity to risk factors (Deutsch, Keil, & Laamanen, 2011). When a firm's inherent risk level is high, shareholders and managers tend to mitigate risk through risk-sharing, entering into an alliance with established firms from developed countries. EMNEs may prefer to share risk by engaging in cross border alliances with DMNEs when their perceived *ex ante* risk level is high.

I would argue that when both cultural distance and firm risk levels are high, cross border alliances with DMNEs will create more value for EMNEs. First, when cultural distance is high, shareholders may perceive uncertainty, due to communication and coordination issues (Kogut & Singh, 1988; Pothukuchi et al., 2002). High levels of cultural distance can impede coordination and governance due to the differences in cultural norms between partners, and thus diminish the alliance's value creation. More cultural distance tends to increase the difficulty of operating a business in a host country (Xu & Shenkar, 2002), which increases uncertainty for MNEs. Cultural distance can also create additional costs, with the need to invest time and resources in learning local norms and values (Meyer, Estrin, Bhaumik, & Peng, 2009). When a firm's *ex ante* risk level is also high, shareholders will perceive very high risk levels and may be motivated to mitigate them through an alliance.

When the degree of risk is compounded by a combination of cultural distance and inherent risk level for the firm, the relative gains from engaging in cross-border alliances with

DMNEs will also rise. Cross border alliances include risk sharing and learning from partners in developed economies who are arguably more knowledgeable and experienced than emerging MNE's. Thus, such an alliance will not only increase risk sharing, but also the knowledge gained will provide legitimacy for EMNEs.

In sum, when both cultural distance and *ex ante* risk levels are high, shareholders will seek refuge in alliances between EMNEs and DMNEs as these can mitigate operational risk, promote learning, and provide legitimacy, enhancing the potential value of the emerging MNE. As such, I hypothesize the following;

H5: In the event of cross-border alliances between EMNEs and DMNEs, value created by EMNEs will be particularly high in the presence of both cultural distance and ex ante risk level.

RESEARCH METHODOLOGY

Data and Sample

Given that this study examines the events of cross-border alliance between EMNEs and DMNEs, I used alliance data from SDC Platinum database, from 1994 to 2005. This database was developed by Thomson Financial and contains worldwide announcements of alliances. Further, it indicates information about all participants involved in the alliance, participant nations, type of agreement, and public trades file. The sample pulled for the dataset included only dyad alliances with one of the participant firm based in an emerging BRIC county which includes Brazil, Russia, India and China and the other participating firm based in a developed economy. I collected information regarding alliance mode (equity or contract mode), date of

announcement, status, participant nations, SIC code, and R&D alliance. A total of 339 alliance events were found in the SDC database for the 10 year time period.

Since this study examines the EMNE's value via stock price, my data was limited by the availability of stock price information on Global Security Daily in COMPUSTAT via Wharton Research Data Services as stock price information for firms based in emerging economies are not readily available. Given this limitation, my final sample consisted of 122 alliance events. I also controlled for the overlap of alliances by the same firm to avoid confound effect. In addition, to measure independent variables and control variables, I also collected data from several reliable sources including the World Bank's database, International Monetary Fund (IMF), United Nations Conference on Trade and Development (UNCTAD), and Economic Freedom Index by The Heritage Foundation¹⁷.

Variables

Dependent Variable

Because of limitations related to the methodology used in short-term event studies (Oler, Harrison, & Allen, 2008), I employed a long-term event study methodology by using buy-and-hold abnormal returns (BHARs) over a three year period (36 months) after the event day specified by the announcement date of alliance between EMNEs and DMNEs. Since Kogut (1988) suggests that firms enter cooperative alliance arrangements because of long-term strategic consideration and don't regard immediate cost benefits as much, long term value creation should be examined in alliances. According to Barber and Lyon (1997), BHARs accurately capture shareholder's experience better than do the other methods, such as cumulative abnormal returns

¹⁷ The Heritage Foundation: <http://www.heritage.org/>

(CARs) or mean monthly abnormal returns (MMARs). I used Hendricks and Singhal (2001)'s approach to calculate the month interval (21-trading-day). However, I did not randomly choose a trading day but rather specifically chose alliance announcement day. For example, the event day is January 4, 1995. If this day is trading day, it is coded as day 0. If not, I selected the next trading day as day 0. Then, I selected another trading day by using N multiple by 21, and $N = 1, 2, \dots, 36$ in order to collect the stock price. Each N represents the event month from 0 (day 0), +1 (day 21), +2 (day 42), ..., +36 (day 756). To examine the BHARs, I examined 0-12 event months (1 year), 0-24 event months (2 years) and 0-36 event months (3 years). To measure BHARs, I followed Barber and Lyon (1997)'s approach by matching sample firms to control firms based on specific characteristics. To identify control firms (or benchmark firms), I followed Hendricks and Singhal (2001)'s approach. Three characteristics of control firms are based on industry-matching, industry-size-matching, and industry-size-BM (book-market) matching. The control firm is required to have at least the same amount of stock return data (36 event month period). In each sample-control firm matching, the control firm is used only once in a control group to reduce cross-sectional dependence.

For industry-matched control firm, I attempted to pair each sample firm with a control firm that has at least the same three-digit SIC code and has similar size in terms of the market value of equity on the year of the event. If I was able to identify a four-digit SIC code, I chose the four-digit over the three-digit SIC code. However, if the three-digit SIC code could not be found, I attempted to find a control firm with a two-digit SIC code. To generate the industry-size-matched control group, I first tried to pair each sample firm to a three-digit SIC code. Similar to industry-matched control firm, if I was able to identify a four-digit SIC code, I

selected the four-digit SIC code over the three-digit one. However, the industry-size-matched control group is constrained by the difference in size between the larger firm and the smaller firm in a matched pair with more than 70% of the size of the larger firm in the matched pair. Again, if the sample firm is not matched after this stage, I attempted to find a control firm that has at least the same two digits SIC code within the same size factor. Lastly, the industry-size-BM-matched control group is identified by at least the same two-digit SIC code, though the three or four-digit SIC codes were preferred if they could be identified. Then, I selected the control firm that the absolute percentage difference between the size (the market value of equity) and the book-to-market ratio is the minimum. After I retrieved all the control firms, I collected the stock price at the same time as the matched sample firm and calculated BHAR using the following formula:

$$BHAR_j = \left[\prod_{t=1}^n (1 + r_{j,t}) \right] - \left[\prod_{t=1}^n (1 + r_{benchmark,t}) \right]$$

Where $BHAR_j$ is the buy-and-hold abnormal return on sample j , $r_{j,t}$ is stock price return of sample j on event month t , $r_{benchmark,t}$ is stock price return of a matched control firm on event month t , and n is an event month period (12, 24 and 36).

Table 4.1 shows the comparison of the characteristic of the 122 sample firms and three control groups. Industry-size-BM-matched control group is 106 (87%) firms while other two groups are nearly 96% matched. Further, I was able to collect approximately 55% of the control firms at four-digit SIC code matching with sample firms in both industry-matched and industry-size-matched. However, for the industry-size-BM-matched, four-digit SIC code matches were not easy to find. Although it is difficult to get control firms that are perfect on all matching

criteria, these three control groups provide a robust analysis and overcame any potential bias when I tested the hypotheses.

Table 4.1: Comparison of the Characteristic of the Sample Firms and the Industry-Matched, Industry-Size-Matched, and Industry-Size-BM-Matched Control Groups

	Industry- matched	Industry-size- matched	Industry-size- BM-matched
Number of sample firms to be matched	122	122	122
Number of sample firms matched	117	117	106
Total sample of firms matched	96%	96%	87%
Average book-to-market ratio of sample firms	1.073	1.074	1.079
Average book-to-market ratio of control firms	1.068	1.050	1.087
t statistic for the paired differences in book-to-market ratio	0.13	0.88	-0.17
Average market value of equity of sample firms (\$ millions)	40,961.50	41,718.54	16,609.43
Average market value of equity of control firms (\$ millions)	12,448.48	5,402.84	2,535.36
t statistic for the paired differences in market value	1.95*	2.23*	3.36***
Industry Matching Statistics			
Firms matched at 4-digit SIC code (%)	55%	56%	23%
Firms matched at 3-digit SIC code (%)	18%	21%	20%
Firms matched at 2-digit SIC code (%)	27%	23%	53%

Notes: †p<.10, *p<.05, **p<.01, ***p<.001

Independent and Moderated Variables

CBA's governance mode could be categorized into either contract alliance mode or equity alliance mode (represented by JVs). This data can be collected by using SDC platinum dataset and has been employed in prior literature (Michailova & Ang, 2008; Oxley & Sampson, 2004; Pan & Tse, 2000). I code this variable as a dummy variable, where 1 represents contract alliance mode and 0 represents equity alliance mode (or JV).

To measure the EMNEs ex ante risk level, I used the ratio of a firm's book value of common equity to its market value. Book equity to market equity has been widely accepted as a strong proxy for sensitivity to risk factors and used in finance research instead of beta (Fama & French, 1995, 1996). Further, management scholars adopt this measurement as a proxy for firm level risk (Deutsch, Keil, & Laamanen, 2011). As such, EMNEs ex ante risk level is calculated by the ratio of book equity to market equity on a yearly basis at the end of each fiscal year.

Following Kogut and Singh (1988), cultural distance refers to the difference of norm and value between two countries. To capture this distance, I use Hofstede's indices of culture and employ the formula as shown below:

$$CD_{jk} = \frac{\sum_{i=1}^4 \frac{(C_{ij} - C_{ik})^2}{V_i}}{4}$$

where CD_{jk} is the cultural distance between country j and country k , C_{ij} is the score for country j for the i cultural dimension¹⁸ (where i = power distance, uncertainty avoidance, masculinity/femininity, and individualism/collectivism), C_{ik} is the score for country k for the i cultural dimension, and V_i is the variance of the index for the i cultural dimension. This formula has been used as a measure of cultural distance in prior studies (Kogut & Singh, 1988; Pothukuchi et al., 2002)

Control Variables

In order to eliminate any competing explanations for this analysis, I included several control variables in my model. First, the firm's size represents the resources needed to operate

¹⁸ I exclude a fifth dimension "Confucian dynamism" and sixth dimension "Indulgence versus Restraint" since these data are not available for the same large set of nations, and Kogut and Singh (1988) did not incorporate it.

their business internationally (Dunning & Lundan, 2008), so I controlled for EMNEs firm size in my analyzes, calculating it as the logarithm of the total asset. Since firm performance is directly associated with firm value creation, I controlled for EMNEs firm performance using Tobin-Q ratio as a proxy. The Tobin's Q ratio is calculated by total market value of the firm divided by the total asset of the firm. Further, a previous study has found that similarity with the business partner can affect alliance outcomes (Koh & Venkatraman, 1991). As such, I controlled for business relatedness by following Xia (2011). To doing so, business relatedness is coded as follows: 0 if the two participants were in unrelated industries, 1 if they were in the same one-digit SIC industry, 2 if they were in the same two-digit SIC industry, 3 if they were in the same three-digit SIC industry and 4 if they were in the same four-digit industry. Due to R&D alliance's influence in partner's performance (Sampson, 2007), I controlled for R&D agreement. To do so, I constructed dummy variables, where "1" represents R&D agreement and "0" otherwise. Next, I controlled for emerging partner status (EMNEs status) since both partner's reputation and status affect alliance performance (Saxton, 1997). I coded dummy variables, where "1" represents public status and "0" otherwise.

Due to alliance location's influence on how the EMNEs can cultivate the value of the alliance (Michailova & Ang, 2008), I controlled for the host country of the alliance by using dummy variables, where "1" represents host country based in emerging economies and "0" otherwise. Further, as geographic distance between the two countries is positively related to actual cost of doing business (Ganesan, Malter, & Rindfleisch, 2005; Ghemawat, 2001), I controlled for this distance by measuring the logarithm of the number of kilometers between the capital cities of emerging economies and developed economies. I also controlled for economic

distance between emerging economies and developed economies since it provides EMNEs opportunities to gain economic rent and previous studies have suggested that economic distance increases the likelihood of foreign direct investment survival (Tsang & Yip, 2007). I operationalized economic distance by using the absolute logarithmic difference in the gross domestic product (GDP) per capita between emerging economies and developed economies following methods used in previous studies (Tsang & Yip, 2007; Xia, 2011). Lastly, I controlled for industry effects by constructing dummy variables of alliance SIC code by SIC division. Since my alliance sample mainly contains SIC division D: manufacturing, I used this division as the default dummy.

Method

I used t-statistic for the paired difference and Wilcoxon-signed rank Z statistic (median of the pair difference) to test the first hypothesis. Since the BHARs approach could lead to potential criticisms, I also measured 36 months buy and hold return to increase the robustness of the results. To test the other hypotheses, I employed multiple regression analysis and robust-tested the result by using four dependent variables, including buy-and-hold return 36 months, buy-and-hold abnormal return using the industry-matched, industry-size-matched, and industry-size-BM-matched, to represent the emerging MNE's value creation.

RESULTS

To test hypothesis 1, table 4.2 compares the 36-month buy-and-hold returns of the sample firm and the three control groups. The mean return of sample firms is generally greater than the mean return of the control firms for the three different benchmarks, approximately 30%. When I used industry-matched as the control group, the mean buy-and-hold return for the sample firms is

150.19% and the mean buy-and-hold return for the control firms is 121.39%. The mean of the paired difference between sample and control firms is 28.79%, with a t statistic of 2.21 (p-value <.05). Similarly, with the other two control groups, including industry-size-matched and industry-size-BM-matched, the mean of the paired difference between sample and control firms are 34.97% and 36.58%, respectively. The t statistic for the paired differences for both control groups is significant at 5% level. Moreover, the median of paired difference is not significant when using Wilcoxon-signed rank Z statistic and sign test Z statistic when I used industry-matched as the control group. However, when I used either the industry-size-matched or industry-size-BM-matched groups, the median of pair difference became significant (p-value <.05). This result indicates that EMNEs allied with DMNEs generate a positive value creation, supporting hypothesis 1.

Table 4.2: Buy-and-Hold Returns for the Sample Firms and the Industry-Matched, Industry-Size-Matched, and Industry-Size-BM-Matched Control Groups after alliance event (36 Months)

	Industry-matched	Industry-size-matched	Industry-size-BM-matched
Sample Size	116	116	103
Mean return of sample firms	150.19%	149.62%	150.00%
Mean return of control firms	121.39%	114.65%	113.42%
Mean of the paired differences	28.79%	34.97%	36.58%
t statistic for the paired differences	2.21*	2.27*	2.22*
Median of the paired differences	0.42%	15.38%	12.98%
Wilcoxon-signed rank Z statistic	1.44†	1.91*	2.10*
Paired differences that are positive (%)	50.86%	56.90%	58.65%
Sign test Z statistic	0.10	1.39†	1.67*

Notes: †p<.10, *p<.05, **p<.01, ***p<.001

To robust-test the results for my first hypothesis, table 4.3 represents the buy-and-hold abnormal returns (BHARs) for different event periods using the three different control groups. The mean abnormal returns are positive across the three different control groups. Although the mean abnormal return is not significant in the event period (0 to +12) when using industry-match as the control group, the other mean abnormal returns across the event period for the two other control groups are significant.

Especially for the 36 months event period, the mean abnormal returns using all three control groups are significant (p -value $< .05$). This result indicates the significant positive abnormal returns of EMNEs after cross-border alliances with DMNEs. Although the event period 0 to +12 for the industry-matched control group is not significant, the t -statistic test for event period 0 to +24 and 0 to +36 for the industry-matched control group are significant. Moreover, the t -statistic test in three event period for industry-size-matched and industry-size-BM-matched as control groups are significant. Overall, hypothesis 1 is supported.

In order to test the other hypotheses, I used multiple regression to analyze the data and conducted logical follow-up analysis using simple slopes to better understand the interaction effects between the explanatory variables in my model (Aiken & West, 1991). The descriptive statistics (means and standard deviation) and correlations are shown in Table 4.4. While the correlations between the dependent variables and independent variables do not show high correlation values, I ensured that the regression models do not face multicollinearity problems by running collinearity diagnostics. The average score for variance inflation factor (VIF) is 1.93, which is not above the threshold of 10. Therefore, multicollinearity is not a problem.

Table 4.3: Mean Buy-and-Hold Abnormal Returns of the Sample Firms Using the Industry-Matched, Industry-Size-Matched, and Industry-Size-BM-Matched Control Groups

	Event Period (Months)		
	0 to +12	0 to +24	0 to +36
<i>Industry-matched control group</i>			
Number of observations	117	116	116
Mean abnormal return (%)	4.38	21.29	28.79
t statistic	0.53	1.43†	2.21*
<i>Industry-size-matched control group</i>			
Number of observations	117	116	116
Mean abnormal return (%)	18.71	34.71	34.97
t statistic	2.60**	2.07*	2.27*
<i>Industry-size-BM-matched control group</i>			
Number of observations	107	106	103
Mean abnormal return (%)	12.80	27.31	36.58
t statistic	1.42†	1.67*	2.22*

Notes: †p<.10, *p<.05, **p<.01, ***p<.001

I ran eight different regression models. Table 4.5 reports the eight models for hypotheses testing and the regression. I enriched the results by using EMNEs value creation in four different measurements, including buy-and-hold return, BHARs with industry-matched, BHARs with industry-size-matched, and BHARs with industry-size-BM-matched groups. The model fit for all eight models were significant: the F-ratio values ranged from 1.72, $p < .05$ to 2.28, $p < .01$ for all eight models. The variance explained (R^2) in the eight models ranged from .216 to .270. Models 1, 3, 5 and 7 test the main effect on EMNEs value creation whereas models 2, 4, 6, and 8

test the interaction effect between emerging MNE ex ante risk level and culture distance on EMNEs value creation.

Models 1 and 2 test the model on Buy and Hold Return. Model 3 and 4 test the model on BHARs with industry-matched control groups. Model 5 and 6 test the model on BHARs with industry-size-matched control groups. Lastly, model 7 and model 8 test the model on BHARs with industry-size-BM-matched control groups. For hypothesis 2, I propose that contract mode alliance is positively related to the EMNEs value creation, in the event of CBAs between EMNEs and DMNEs. In models 1, 3, 5 and 7, the results show that the coefficient for contract mode alliance is positive and significant, providing support for Hypothesis 2. Furthermore, I propose that the higher ex ante risk level of EMNEs, the greater will be value creation for EMNEs received from the cross-border alliances with DMNEs. The coefficient for EMNEs ex ante risk level is positive and significant, providing support for Hypothesis 3. Hypothesis 4 states that culture distance will diminish the value creation of EMNEs when EMNEs alliance with DMNEs. The results in table 4.5 indicate that the coefficient for culture distance is negative and significant. However, I didn't find a significant regression coefficient in model 5 which uses BHARs with Industry-Size-Matched as the dependent variable.

Next, I analyzed the moderating role of cultural distance. The models 2, 4, 6, and 8 test the interaction effect between cultural distance and EMNEs ex ante risk level. I propose that the relationship between the ex ante risk level of EMNEs and the value creation of EMNEs is enhanced when culture distance between emerging economies and developed economies is high, in the event of cross-border alliances between EMNEs and DMNEs. The coefficient of the interaction is positive and significant in models 2, 6 and 8, providing support for hypothesis 5.

Table 4.4
Descriptive Statistics and Correlations

Variables	M	S.D.	1	2	3	4	5	6	7	8	9
1. Buy and Hold Return	1.50	1.49									
2. BHARs comparing with Industry-Matched	0.27	1.39	0.77*								
3. BHARs comparing with Industry-Size-Matched	0.31	1.69	0.77*	0.64*							
4. BHARs comparing with Industry-Size-BM-Matched	0.33	1.67	0.79*	0.80*	0.73*						
5. Contract Mode Alliance	0.64	0.48	0.25*	0.23*	0.20*	0.18					
6. EMNEs Ex ante Risk Level	1.07	0.24	0.17	0.13	0.22*	0.21*	0.05				
7. Culture Distance	2.00	1.01	-0.09	-0.15	-0.04	-0.13	0.06	0.04			
8. EMNEs Firm Size	4.06	0.79	0.12	0.10	-0.02	0.01	-0.01	-0.08	0.00		
9. EMNEs Firm Performance	0.53	0.50	0.04	0.01	0.06	0.00	0.11	-0.14	-0.05	-0.11	
10. Business Relatedness	1.56	1.63	-0.01	0.01	0.01	0.02	0.09	0.02	-0.10	-0.07	0.15
11. R&D Agreement	0.07	0.25	-0.10	-0.13	0.00	-0.14	0.06	-0.04	0.03	0.05	-0.07
12. Emerging Partner's Public Status	0.52	0.50	-0.07	-0.09	-0.05	-0.02	-0.07	0.10	0.08	0.00	-0.08
13. Emerging economies as Host Countries	0.58	0.50	-0.04	-0.09	-0.08	-0.10	-0.33*	-0.06	-0.06	-0.11	0.07
14. Geographical Distance	3.86	0.27	0.10	0.10	0.11	0.05	0.12	-0.13	0.26*	-0.11	0.14
15. Economic Distance	4.47	0.13	-0.06	-0.03	-0.14	-0.10	0.14	0.02	0.28*	-0.06	0.14
16. SIC Div_B	0.04	0.20	0.00	0.02	0.01	-0.05	-0.02	-0.06	-0.27*	0.04	0.07
17. SIC Div_E	0.10	0.30	0.04	-0.02	0.05	-0.03	0.13	-0.05	0.14	0.21*	-0.03
18. SIC Div_F	0.03	0.18	0.14	0.11	0.15	0.13	-0.05	-0.02	0.16	-0.10	-0.08
19. SIC Div_G	0.02	0.13	0.03	0.07	0.05	0.06	-0.04	-0.03	-0.11	-0.15	-0.03
20. SIC Div_I	0.20	0.40	-0.03	0.03	-0.01	0.08	0.16	-0.08	-0.06	-0.06	0.36*

Table 4.4 (Cont.)
Descriptive Statistics and Correlations

Variables	M	S.D.	10	11	12	13	14	15	16	17	18	19
11. R&D Agreement	0.07	0.25	-0.09									
12. Emerging Partner's Public Status	0.52	0.50	-0.01	-0.01								
13. Emerging economies as Host Countries	0.58	0.50	-0.11	-0.18*	0.12							
14. Geographical Distance	3.86	0.27	0.00	0.13	-0.13	0.02						
15. Economic Distance	4.47	0.13	-0.03	0.09	-0.05	0.00	0.46*					
16. SIC Div_B	0.04	0.20	0.06	-0.05	0.11	0.09	0.11	-0.16				
17. SIC Div_E	0.10	0.30	0.16	-0.09	0.09	-0.11	-0.07	-0.10	-0.07			
18. SIC Div_F	0.03	0.18	0.02	-0.05	0.08	0.06	0.05	0.11	-0.04	-0.06		
19. SIC Div_G	0.02	0.13	0.04	-0.03	0.12	0.11	0.11	0.09	-0.03	-0.04	-0.02	
20. SIC Div_I	0.20	0.40	-0.08	-0.05	-0.07	-0.21*	0.18	0.31*	-0.10	-0.16	-0.09	-0.06

- 1) *. Correlation is significant at the 0.05 level.
- 2) n = 122

Table 4.5: Regression Results on EMNEs Value Creation

Variables	Buy and Hold Return				BHARs with Industry-Matched			
	Model 1		Model 2		Model 3		Model 4	
	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>
<i>Control</i>								
Intercept	2.50	(5.16)	9.88	(6.34)	-1.08	(4.98)	4.37	(6.15)
EMNEs Firm Size	0.36*	(0.17)	0.38*	(0.17)	0.29†	(0.17)	0.30†	(0.16)
EMNEs Firm Performance	0.28	(0.29)	0.29	(0.29)	0.44	(0.82)	0.48	(0.82)
Business Relatedness	-0.07	(0.08)	-0.08	(0.08)	-0.06	(0.08)	-0.07	(0.08)
R&D Agreement	-0.72	(0.55)	-0.75	(0.54)	-0.98†	(0.53)	-1.00†	(0.53)
Emerging Partner's Public Status	-0.13	(0.27)	-0.15	(0.27)	-0.12	(0.27)	-0.13	(0.27)
Emerging economies as Host Countries	0.06	(0.30)	0.14	(0.30)	-0.18	(0.29)	-0.12	(0.29)
Geographical Distance	1.41*	(0.60)	1.18*	(0.60)	1.23*	(0.59)	1.06†	(0.59)
Economic Distance	-2.09†	(1.26)	-2.22†	(1.24)	-1.19	(1.22)	-1.29	(1.21)
SIC Div_B	-0.76	(0.73)	-0.99	(0.73)	-0.64	(0.73)	-0.82	(0.73)
SIC Div_E	0.05	(0.47)	-0.08	(0.47)	-0.26	(0.45)	-0.35	(0.46)
SIC Div_F	1.75*	(0.74)	1.85*	(0.74)	1.43†	(0.82)	1.51†	(0.81)
SIC Div_G	0.52	(1.07)	0.47	(1.05)	1.22	(1.46)	1.16	(1.45)
SIC Div_I	-0.29	(0.40)	-0.27	(0.40)	-0.26	(0.42)	-0.25	(0.42)
<i>Main Effects</i>								
Contract Mode Alliance	0.86**	(0.29)	0.93**	(0.29)	0.71*	(0.29)	0.76**	(0.29)
EMNEs Ex ante Risk Level	1.40*	(0.55)	-4.26	(2.96)	1.05†	(0.56)	-3.13	(2.85)
Culture Distance	-0.28†	(0.15)	-3.05*	(1.43)	-0.34*	(0.15)	-2.37†	(1.38)
<i>Interaction Effects</i>								
Risk level * Culture Distance			2.58*	(1.33)			1.91	(1.28)
<i>N</i>	121		121		117		117	
<i>R-Squared</i>	0.236		0.263		0.216		0.233	
<i>Adjust R-Squared</i>	0.119		0.142		0.090		0.102	
<i>F-Ratio</i>	2.01*		2.17**		1.72*		1.77*	

Notes: 1. †p<.10, *p<.05, **p<.01, ***p<.001, 2. Standard errors appear in parentheses.

Table 4.5: Regression Results on EMNEs Value Creation (Cont.)

Variables	BHARs with Industry-Size-Matched				BHARs with Industry-Size-BM-Matched			
	Model 5		Model 6		Model 7		Model 8	
	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>	<i>Est.</i>	<i>S.E.</i>
<i>Control</i>								
Intercept	10.13†	(5.76)	20.0**	(7.02)	6.54	(6.12)	15.15*	(7.64)
EMNEs Firm Size	0.07	(0.19)	0.09	(0.19)	0.04	(0.24)	0.06	(0.24)
EMNEs Firm Performance	0.44	(0.33)	0.45	(0.32)	0.16	(1.15)	0.21	(1.13)
Business Relatedness	-0.08	(0.10)	-0.10	(0.09)	-0.03	(0.10)	-0.05	(0.10)
R&D Agreement	0.03	(0.61)	0.00	(0.60)	-1.09†	(0.64)	-1.10†	(0.64)
Emerging Partner's Public Status	-0.10	(0.31)	-0.13	(0.30)	0.13	(0.35)	0.08	(0.34)
Emerging economies as Host Countries	-0.19	(0.34)	-0.07	(0.34)	-0.24	(0.39)	-0.13	(0.39)
Geographical Distance	1.59*	(0.67)	1.29†	(0.67)	2.02*	(0.80)	1.75*	(0.80)
Economic Distance	-4.1**	(1.41)	-4.3**	(1.38)	-3.45*	(1.51)	-3.69*	(1.50)
SIC Div_B	-0.48	(0.81)	-0.80	(0.81)	-2.42*	(1.14)	-2.83*	(1.15)
SIC Div_E	0.33	(0.53)	0.16	(0.52)	-0.14	(0.57)	-0.28	(0.56)
SIC Div_F	2.13*	(0.83)	2.27**	(0.81)	1.74*	(0.87)	1.89*	(0.86)
SIC Div_G	(omitted)		(omitted)		(omitted)		(omitted)	
SIC Div_I	0.16	(0.47)	0.17	(0.46)	0.14	(0.60)	0.17	(0.60)
<i>Main Effects</i>								
Contract Mode Alliance	0.57†	(0.34)	0.66*	(0.33)	0.70†	(0.40)	0.79*	(0.39)
EMNEs Ex ante Risk Level	1.96**	(0.62)	-5.63†	(3.27)	1.70*	(0.68)	-4.57	(3.48)
Culture Distance	-0.15	(0.17)	-3.85*	(1.58)	-0.46*	(0.20)	-3.53*	(1.68)
<i>Interaction Effects</i>								
Risk level * Culture Distance			3.46**	(1.47)			2.87†	(1.56)
<i>N</i>	116		116		105		105	
<i>R-Squared</i>	0.228		0.269		0.242		0.270	
<i>Adjust R-Squared</i>	0.112		0.151		0.114		0.137	
<i>F-Ratio</i>	1.97*		2.28**		1.89*		2.03*	

Notes: 1. †p<.10, *p<.05, **p<.01, ***p<.001, 2. Standard errors appear in parentheses.

However, the coefficient of the interaction variable in model 4 which uses BHARs with Industry-Matched group as the dependent variable is positive, but not significant.

In order to better understand the nature of the interactions in the regression analysis, I used model 2 to conduct follow-up simple slope test (Aiken & West, 1991). Specifically, I tested high and low cultural distance across high and low levels of ex ante risk. I depict the simple slope results in figure 4.2. The dashed slope represents the hypothesized relationship when cultural distance is high (one third standard deviation above the mean), whereas the solid slope represents the relationship when the cultural distance is low (one third standard deviation below the mean). Overall, the slope for high cultural distance is positive and more steep compared to the slope of the relationship when cultural distance is at the mean (dashed slope) indicating a support for hypothesis 5. The figure clearly indicates that cultural distance positively moderates the relationship between EMNEs risk level and their value creation.

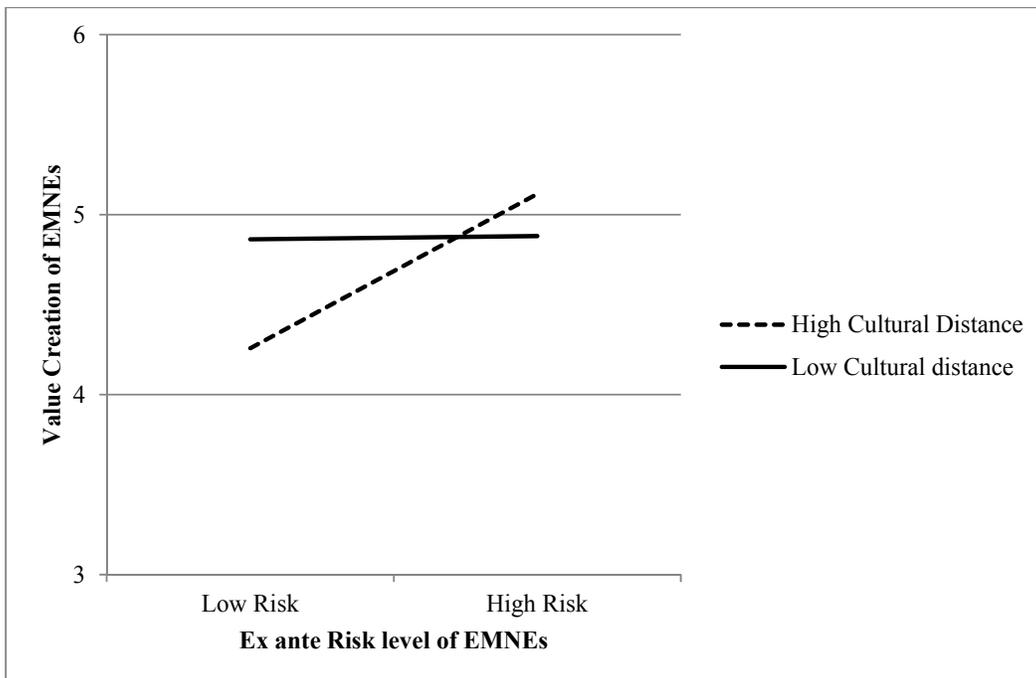


Figure 4.2: Interaction Effect of Cultural Distance on EMNEs risk level and EMNEs Value Creation

DISCUSSION AND CONCLUSION

Discussion

In this study, I seek to examine whether EMNEs allied with DMNEs create value for EMNEs and what conditions promote or deplete the value creation of EMNEs. Overall, the results support all of my research hypotheses when buy and hold return is used at the dependent variable while the robust analyses from the other three dependent variables find general support for the hypotheses. In hypothesis 1, I investigate whether EMNEs obtain value creation when they ally with DMNEs. The result shows a consistency with the notion of “*Alliances do create value*”. Given their lack of resources and capabilities, EMNEs have an incentive to capture benefits from DMNEs through cross-border alliances. Shareholders also recognize these benefits from such alliance events. The results for hypothesis 2 extend prior alliance literature in the context of EMNEs. I propose that contractual or license alliances enhance EMNEs’ value creation when such firms alliance with DMNEs. Contractual alliances allow EMNEs to gain flexibility in order to quickly and efficiently respond to the volatile environment and rapid growth prevalent in emerging economies. Moreover, given EMNEs are small and lack resources, contractual alliances give EMNEs access to knowledge and specific assets from DMNEs, decrease the uncertainty of EMNEs in the global market as well as enhance their legitimacy. As such, EMNEs shareholders positively respond to such contractual alliance over a JV governance structure.

In addition, the result for hypothesis 3 indicates that risks taken by the EMNEs before the cross-border alliances events positively influence shareholders’ perceptions of the alliance benefit. Given risk sharing as one of primary motives for strategic alliances, the higher ex ante risk level embedded in the EMNEs, the greater is the value of creation via cross-border alliances perceived by the EMNEs’ shareholders. However, the result from hypothesis 4 finds

that cultural distance between emerging economies and developed economies impedes the value creation for EMNEs because of challenges in coordination and commitment. The high level of cultural distance dampens not only the alliance performance (Pothukuchi et al., 2002) but also value creation of EMNEs. Furthermore, I analyze the interaction effect between ex ante risk of EMNEs and cultural distance between emerging economies and developed economies on value creation of EMNEs. The result for hypothesis 5 for the interaction effects provides intriguing conclusions. The high level of cultural distance stimulates shareholder's perception of uncertainty which in turn means that the importance of risk sharing becomes critical. In other words, the relationship between ex ante risk and value creation of EMNEs positively increases when cultural distance between emerging economies and developed economies is high. However, the figure for simple slope analysis illustrates an intriguing result. The slope of the relationship between ex ante risk level and value creation is trivial when cultural distance is low. It indicates that the benefit of risk sharing from cross-border alliances becomes trivial when similarities of value and norms exist between the emerging economy and the developed economy.

Contributions and Implications

This study contributes in both theoretical and managerial implications. I add to the extant literature in cross border alliances and emerging economies. Several contributions are extended in theoretical implications. First, this study seeks to explore cross-border alliances between EMNEs and DMNEs, given prior studies emphasize on cross-border merger and acquisitions (M&A) because of EMNEs aggressively to acquire firms in developed economies to expand (Aybar & Ficici, 2009; Deng, 2009). While cross-border M&As create substantial value, especially when EMNEs acquires target firms located in developed economies (Gubbi et al., 2010), this study highlights the positive value creation of EMNEs

when EMNEs alliance with DMNEs. Second, by using long term event studies, this study attempts to confirm the notion of “*Alliances do create value*” not only for firms listing in the U.S. market but also for firms in emerging market like China or India. Moreover, I extend the study of Anand and Khanna (2000) by suggesting that EMNEs may not gain alliance benefits via learning effect. EMNEs are more likely to prefer contractual alliance over joint ventures. Contractual alliances allow EMNEs to gain benefit from DMNEs with less costs than joint ventures. Moreover, EMNEs need flexibility in governance alliance to enhance their competitive dynamics in volatile environments. Lastly, this study raises the issue of risk before the alliance is completed which influences value creation from alliances. Prior studies have suggested the risk *within* the strategic alliances, including relational risk and performance risk (Das & Teng, 2001; Das & Teng, 1996). This study highlights the *ex ante risk embedded* in the firms before even pursuing strategic alliances. This ex ante risk stimulates shareholders perception of risk sharing benefits which can be gain from the alliance relationship. However, such ex ante risk may not provide positive perception to shareholders in the cross-border alliances context. If cultural distance between alliance partners is low, the ex ante risk becomes concerning to shareholders rather than providing perceptions of risk sharing benefits.

In addition, this research highlights several contributions to managers who execute MNEs based in emerging economies as well as developed economies. First, whereas it has been widely acknowledged that alliances do create value, this empirical study extends the notion in the context of EMNEs. Alliances with DMNEs generally provides benefit and value for EMNEs. Indeed, DMNEs will bring advanced specific assets and knowledge into the alliance. However, compared to the joint venture’s structure, managers of EMNEs prefer pursuing contractual alliance with DMNEs since it not only enhances the firm’s value but

also allows firms to gain flexibility to change and adapt, especially in the emerging economies context where environmental turbulence is high. In contrast, managers from DMNEs may prefer pursuing the joint venture governance structure over the contractual governance mode. To protect opportunistic behavior from others, DMNEs have strong incentive to use joint ventures, especially when firm's level of commitment to technology transfer is high (Isobe, Makino, & Montgomery, 2000). Finally, EMNEs' managers should appraise the ex ante risk as well as the cultural distance before engaging in cross-border alliances with DMNEs. Though shareholders' positive perceptions of risk sharing benefit through alliances does exist, the similarities in culture between the emerging economies and developed economies may alter the direction of this perception.

Limitations, Future Research, and Extensions

The implications of this study may be constrained by a few limitations. I acknowledged that the data availability in emerging economies is limited. Although the CBAs between EMNEs and DMNEs from the SDC platinum database are over 700 events from 1994 to 2005 many of these EMNEs are private firms. Given missing data especially in terms of stock price data, the sample size is rather small. However, I attempted to conduct robust analysis by using different dependent variables in order to test hypotheses. Future research may expand the time horizon from 2009 to 2014 for which data availability in emerging markets has improved but it may not represent the raised period of EMNEs. Moreover, this dataset is also constrained in terms of the number of emerging countries studied. I was able to collect data for only large four emerging economies, namely China, India, Russia and South Africa. As Hoskisson et al. (2013) suggested a mid-range of emerging economies such as Indonesia, Malaysia, Thailand or Philippine, it would be intriguing to explore these countries.

Next, I believe that collaboration between EMNEs and DMNEs can be examined in two perspectives. While many studies in emerging economies focused on DMNEs entering emerging markets, few studies focused on EMNEs. Not only cross-border alliances but also several international strategic alliances can be applicable in different ways for EMNEs, given the distinguished nature of EMNEs. According to Ramamurti and Singh (2009), EMNEs aggressively engage in cross-border M&As. Though previous research already investigates the value creation when EMNEs acquire firms in developed economies, future research may extend the investigation by examining whether EMNEs pay extra acquisition premium for firms in developed economies.

Finally, this study attempts to complete the picture of value creation in alliance by focusing on emerging economy firms. The empirical results not only provide a confirmation of value creation from strategic alliances but also encompass the conditional role of value creation due to various characteristics of the emerging economy firms.

REFERENCES

- Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*: Sage.
- Anand, B. N., & Khanna, T. 2000. Do firms learn to create value? The case of alliances. *Strategic management journal*, 21(3): 295-315.
- Aybar, B., & Ficici, A. 2009. Cross-border acquisitions and firm value: an analysis of emerging-market multinationals. *Journal of International Business Studies*, 40(8): 1317-1338.
- Barber, B. M., & Lyon, J. D. 1997. Detecting long-run abnormal stock returns: The empirical power and specification of test statistics. *Journal of financial economics*, 43(3): 341-372.
- Bartlett, C. A., & Ghoshal, S. 2000. Going global: lessons from late movers. *Harvard business review*, 78: 3.
- Berry, H., Guillén, M. F., & Zhou, N. 2010. An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9): 1460-1480.
- Chan, S. H., Kensinger, J. W., Keown, A. J., & Martin, J. D. 1997. Do strategic alliances create value? *Journal of Financial Economics*, 46(2): 199-221.
- Cuervo-Cazurra, A., & Genc, M. 2008. Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6): 957-979.
- Cullen, J. B., Johnson, J. L., & Sakano, T. 1995. Japanese and local partner commitment to IJVs: Psychological consequences of outcomes and investments in the IJV relationship. *Journal of International Business Studies*: 91-115.
- 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.
- Dacin, M. T., Oliver, C., & Roy, J. P. 2007. The legitimacy of strategic alliances: An institutional perspective. *Strategic Management Journal*, 28(2): 169-187.
- Das, S., Sen, P. K., & Sengupta, S. 1998. Impact of strategic alliances on firm valuation. *Academy of Management Journal*, 41(1): 27-41.
- Das, T., & Teng, B.-S. 2001. A risk perception model of alliance structuring. *Journal of International Management*, 7(1): 1-29.
- Das, T., & Teng, B. S. 1996. RISK TYPES AND INTER-FIRM ALLIANCE STRUCTURES*. *Journal of Management studies*, 33(6): 827-843.

- Das, T. K., & Teng, B.-S. 1998. Resource and risk management in the strategic alliance making process. *Journal of management*, 24(1): 21-42.
- Das, T. K., & Teng, B.-S. 2000. A resource-based theory of strategic alliances. *Journal of management*, 26(1): 31-61.
- Deng, P. 2009. Why do Chinese firms tend to acquire strategic assets in international expansion? *Journal of World Business*, 44(1): 74-84.
- Deutsch, Y., Keil, T., & Laamanen, T. 2011. A dual agency view of board compensation: The joint effects of outside director and CEO stock options on firm risk. *Strategic Management Journal*, 32(2): 212-227.
- Dunning, J. H., & Lundan, S. M. 2008. *Multinational enterprises and the global economy*: Edward Elgar Publishing.
- Dussauge, P., Garrette, B., & Mitchell, W. 2000. Learning from competing partners: outcomes and durations of scale and link alliances in Europe, North America and Asia. *Strategic Management Journal*, 21(2): 99-126.
- Dyer, J. H., Kale, P., & Singh, H. 2001. Strategic alliances work. *MIT Sloan Management Review*: 37-43.
- Eisenhardt, K. M., & Schoonhoven, C. B. 1996. Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *organization Science*, 7(2): 136-150.
- Fama, E. F., & French, K. R. 1995. Size and book-to-market factors in earnings and returns. *The Journal of Finance*, 50(1): 131-155.
- Fama, E. F., & French, K. R. 1996. The CAPM is wanted, dead or alive. *The Journal of Finance*, 51(5): 1947-1958.
- Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. *Journal of law and economics*: 301-325.
- Ganesan, S., Malter, A. J., & Rindfleisch, A. 2005. Does distance still matter? Geographic proximity and new product development. *Journal of Marketing*, 69(4): 44-60.
- Ghemawat, P. 2001. Distance still matters. *Harvard business review*, 79(8): 137-147.
- Globerman, S., & Nielsen, B. B. 2007. Equity versus non-equity international strategic alliances involving Danish firms: An empirical investigation of the relative importance of partner and host country determinants. *Journal of International Management*, 13(4): 449-471.
- Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M., & Chittoor, R. 2010. Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms. *Journal of International Business Studies*, 41(3): 397-418.

- Gulati, R. 1995a. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of management journal*, 38(1): 85-112.
- Gulati, R. 1995b. Social structure and alliance formation patterns: A longitudinal analysis. *Administrative science quarterly*: 619-652.
- Gulati, R., Lavie, D., & Singh, H. 2009. The nature of partnering experience and the gains from alliances. *Strategic Management Journal*, 30(11): 1213-1233.
- Gulati, R., & Singh, H. 1998. The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances. *Administrative science quarterly*: 781-814.
- Henderson, R., & Cockburn, I. 1994. Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic management journal*, 15(S1): 63-84.
- Hendricks, K. B., & Singhal, V. R. 2001. The long-run stock price performance of firms with effective TQM programs. *Management Science*, 47(3): 359-368.
- Hennart, J.-F., & Zeng, M. 2002. Cross-cultural differences and joint venture longevity. *Journal of International Business Studies*: 699-716.
- 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.
- Hofstede, G. 2001. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage Publications, Incorporated.
- Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. 2013. Emerging Multinationals from Mid-Range Economies: The Influence of Institutions and Factor Markets. *Journal of Management Studies*, 50(7): 1295-1321.
- Inkpen, A. C., & Beamish, P. W. 1997. Knowledge, bargaining power, and the instability of international joint ventures. *Academy of management review*, 22(1): 177-202.
- Ireland, R. D., Hitt, M. A., & Vaidyanath, D. 2002. Alliance management as a source of competitive advantage. *Journal of management*, 28(3): 413-446.
- Isobe, T., Makino, S., & Montgomery, D. B. 2000. Resource commitment, entry timing, and market performance of foreign direct investments in emerging economies: The case of Japanese international joint ventures in China. *Academy of Management journal*, 43(3): 468-484.
- Johnson, J. L., Cullen, J. B., Sakano, T., & Takenouchi, H. 1996. Setting the stage for trust and strategic integration in Japanese-US cooperative alliances. *Journal of International Business Studies*: 981-1004.

- Kale, P., Dyer, J. H., & Singh, H. 2002. Alliance capability, stock market response, and long-term alliance success: the role of the alliance function. *Strategic Management Journal*, 23(8): 747-767.
- Kogut, B. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic management journal*, 9(4): 319-332.
- Kogut, B., & Singh, H. 1988. The effect of national culture on the choice of entry mode. *Journal of international business studies*: 411-432.
- Koh, J., & Venkatraman, N. 1991. Joint venture formations and stock market reactions: An assessment in the information technology sector. *Academy of Management Journal*, 34(4): 869-892.
- Koka, B. R., & Prescott, J. E. 2002. Strategic alliances as social capital: A multidimensional view. *Strategic management journal*, 23(9): 795-816.
- Kumar, S. 2005. The value from acquiring and divesting a joint venture: A real options approach. *Strategic Management Journal*, 26(4): 321-331.
- Lall, S., & Chen, E. 1983. *The new multinationals: The spread of third world enterprises*: Wiley Chichester.
- Lane, H. W., & Beamish, P. W. 1990. Cross-cultural cooperative behavior in joint ventures in LDCs. *Management International Review*, 30(Special Issue): 87-102.
- Luo, Y. 2005. Transactional characteristics, institutional environment and joint venture contracts. *Journal of International Business Studies*, 36(2): 209-230.
- Luo, Y., Shenkar, O., & Nyaw, M.-K. 2002. Mitigating liabilities of foreignness: Defensive versus offensive approaches. *Journal of International Management*, 8(3): 283-300.
- Luo, Y., & Tung, R. L. 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4): 481-498.
- Lyons, B. R. 1996. Empirical relevance of efficient contract theory: inter-firm contracts. *Oxford Review of economic policy*, 12(4): 27-52.
- Madhok, A., & Tallman, S. B. 1998. Resources, transactions and rents: managing value through interfirm collaborative relationships. *Organization science*, 9(3): 326-339.
- Merchant, H., & Schendel, D. 2000. How do international joint ventures create shareholder value? *Strategic Management Journal*, 21(7): 723-737.
- Michailova, S., & Ang, S. H. 2008. Institutional explanations of cross-border alliance modes: The case of emerging economies firms. *Management International Review*, 48(5): 551-576.
- Miller, K. D. 1992. A framework for integrated risk management in international business. *Journal of international business studies*: 311-331.

- Oler, D. K., Harrison, J. S., & Allen, M. R. 2008. The danger of misinterpreting short-window event study findings in strategic management research: an empirical illustration using horizontal acquisitions. *Strategic Organization*, 6(2): 151-184.
- Oxley, J. E., & Sampson, R. C. 2004. The scope and governance of international R&D alliances. *Strategic Management Journal*, 25(8-9): 723-749.
- Pan, Y., & Tse, D. K. 2000. The hierarchical model of market entry modes. *Journal of International Business Studies*: 535-554.
- Park, N. K., Mezas, J. M., & Song, J. 2004. A resource-based view of strategic alliances and firm value in the electronic marketplace. *Journal of Management*, 30(1): 7-27.
- Park, S. H., & Ungson, G. R. 2001. Interfirm rivalry and managerial complexity: A conceptual framework of alliance failure. *Organization science*, 12(1): 37-53.
- Parkhe, A. 1991. Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of international business studies*: 579-601.
- Parkhe, A. 1993. Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of management journal*, 36(4): 794-829.
- 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*: 243-265.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. 1996. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative science quarterly*: 116-145.
- Ramamurti, R., & Singh, J. V. 2009. *Emerging multinationals in emerging markets*: Cambridge University Press.
- Reuer, J. J., & Ariño, A. 2007. Strategic alliance contracts: Dimensions and determinants of contractual complexity. *Strategic Management Journal*, 28(3): 313-330.
- Reuer, J. J., & Miller, K. D. 1996. Agency costs and the performance implications of international joint venture internalization.
- Sampson, R. C. 2007. R&D alliances and firm performance: the impact of technological diversity and alliance organization on innovation. *Academy of Management Journal*, 50(2): 364-386.
- Saxton, T. 1997. The effects of partner and relationship characteristics on alliance outcomes. *Academy of Management Journal*, 40(2): 443-461.
- Tsang, E. W., & Yip, P. S. 2007. Economic distance and the survival of foreign direct investments. *Academy of Management Journal*, 50(5): 1156-1168.

- Wells, L. T. 1983. Third world multinationals: The rise of foreign investments from developing countries. *MIT Press Books*, 1.
- Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. 2005. Strategy Research in Emerging Economies: Challenging the Conventional Wisdom*. *Journal of Management studies*, 42(1): 1-33.
- Xia, J. 2011. Mutual dependence, partner substitutability, and repeated partnership: the survival of cross-border alliances. *Strategic Management Journal*, 32(3): 229-253.

CHAPTER FIVE

DISSERTATION SUMMARY AND GENERAL CONCLUSIONS

Three papers of my dissertation contribute not only to theoretical implication to literature in international entrepreneurship and alliance but also managerial implication to global managers, especially in firms in emerging economies. In my first paper, not only do I demonstrate a new finding on the effect of individualism-collectivism as continuum on the levels of entrepreneurship, but I also extend institutional and signaling theories in the context of international entrepreneurship and management. The results of the first paper clearly depict the positive curvilinear relationship between individualism-collectivism continuum and the levels of entrepreneurship. As quoting “get stuck in the middle”, entrepreneurs at the intermediate level of the continuum confront to the dilemma which in turn sabotage entrepreneurial activities. The result suggests that entrepreneurs from either end of the continuum are able to develop strategies to successfully operate within their environment.

In order to respond to scholarly calls for further investigating the combinative effect between cultural and institutional variables on entrepreneurship, my first paper examines the moderating role of transparency and business freedom. The results clearly depict that in the presence of transparency, the relationship between individualism-collectivism and the levels of entrepreneurship become more positive curvilinear. Interestingly, the levels of entrepreneurship are relatively less influenced by the levels of transparency for collectivistic cultures. In collectivism culture, it would be easier for entrepreneurs to work through corrupt structure as compared to fair and transparent structure. Furthermore, in the presence of business freedom, the relationship between the individualism-collectivism and the levels of entrepreneurship remains positive, but a diminishing effect on levels of entrepreneurship beyond the point of inflection is observed. It clearly demonstrates that levels of

entrepreneurship are lower in the presence of high business freedom for both highly collectivistic and highly individualistic countries. This suggests that business freedom has a dark side effect to entrepreneurial activities.

While my first paper examines a cross-national sample, the second and third papers investigate the alliance scenario between MNEs from emerging economies (EMNEs) and MNEs from developed economies (DMNEs). In second paper, I seek to examine how institutional and contextual distance influence the propensity to choose the equity alliance mode over the contract mode. This paper extends the literature in three points. First, this study builds on the institutional theory and distance to find a curvilinear (positive but diminishing returns) relationship between informal institutional distance and the propensity to choose the equity alliance mode over the contract mode. This result not only demonstrates the benefit of equity alliance when MNEs face to the informal institutional distance but also raises the limitation of control mechanism via equity alliance when informal institutional distance cross over a certain threshold. Second, I find empirical evidence to support the conceptual type of mid-range of emerging economies. In doing so, I find the interactional effect between institutional and infrastructure distance on alliance governance. Lastly, the finding also indicates the adversity advantage in which EMNEs possess. This paper clearly shows an evidence that EMNEs exercise their adversity advantage to overcome the difficult situation due to institutional difference.

Given the interesting alliance scenarios between EMNEs and DMNEs lead to the research question in the third paper, I aim to answer whether such the alliances do create value for EMNEs and what conditional roles increase or decrease the value creation of EMNEs. Using long term event studies, the finding of third paper hammers the notion of “*Alliances do create value*” into the alliance literature, not only firms listing on U.S. market

but also firms in emerging markets. I also extend the alliance literature by suggesting that EMNEs may not obtain alliance benefits through learning effect, given EMNEs are more likely to prefer contractual alliance over joint venture. Moreover, this study highlights the ex ante risk in which firms embedded in before pursuing strategic alliances. This ex ante risk stimulates shareholders perception of risk sharing benefit which gain from the alliances. Lastly, the third paper also examine the cultural distance between emerging economies and developed economies which impedes the value creation of EMNEs as well as plays a moderating role on the relationship between the ex ante risk level and value creation of EMNEs.

Last but not least, three papers in this dissertation contribute not only to international entrepreneurship literature but also to cross-border alliance in the context of emerging economies and developed economies. Several managerial implications for global manager are suggested and highlight several findings for MNEs from emerging economies.