Inter-party Cooperation and Knowledge Creation in IJVs:

An organizational identification Perspective

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Bi-Juan Zhong

Graduate Program in Business Administration

The Ohio State University

2013

Dissertation Committee:

Dr. Oded Shenkar (Adviser), Dr. Yaping Gong, Dr.Mona Makhija & Dr. Shad Morris

Copyrighted by

Bi-Juan Zhong

2013

Abstract

My dissertation draws upon social identity and organizational identification theory lenses to study topics pertinent to international strategic alliances, such as inter-organizational cooperation, knowledge creation and venture performance. Through a series of three related papers, my dissertation contributes to the literature on organizational identification, inter-organizational cooperation, team diversity and knowledge creation. Each paper addresses unique gaps in the extant literature and examines critical challenges to the management of cross-border strategic alliances.

Acknowledgments

I am very grateful to all the committee members – Professor Oded Shenkar, Professor Yaping Gong, Professor Mona Makhija and Professor Shad Morris – for all their support and mentoring during the whole process of my dissertation. I am also very grateful to Professor Kim-Sau Chung for guiding me to the academic field. Finally, my special thanks to my grandpa and my parents, Professor Jixin Zhong, Mr. Shucai Zhong and Mrs. Hanling Jiang.

Vita

2005	B.S. of Business Management, University of
International Business and Economics, Be	ijing, China
2008	Master of Economics, University of Hong
Kong, Hong Kong	
2008 to present	Doctoral candidate, Department of
	Management and Human Resources, Fisher
	College of Business, The Ohio State
	University

Fields of Study

Major Field: Business Administration

Table of Contents

Abstract	ii
Acknowledgments	iii
Vita	iv
List of Tables	vi
List of Figures	vii
Introduction	1
Chapter 1: A Model of CEO Organizational Identification, Inter-party Coope	eration, and
Joint Venture Performance	3
Chapter2: TMT National Diversity, Knowledge Creation, and International J	oint Venture
Performance: The Moderating Role of TMT Venture Identification	
Chapter 3: Too Much Of A Good Thing? The Role of TMT Organizational Id	lentification
on Joint Venture Performance	76
References	102
Appendix: Interview results	121

List of Tables

Table 1 Chapter1_Means, standard deviations and correlations	26
Table 2 Chapter 1_Multiple regression analysis for vertical cooperation	29
Table 3 Chapter1_Multiple regression analysis for JV performance	30
Table 4 Chapter 2_Means, Standard Deviations and Correlations	61
Table 5 Chapter2_Regression Analyses for Knowledge Creation	63
Table 6 Chapter 2_Regression Results for IJV Performance	64
Table 7 Chapter 2_Conditional Indirect Effects at Specific Levels of Moderator	66
Table 8 Chapter3_Means, SDs and Correlations	92
Table 9 Chapter3_Regression Results for Knowledge Creation	94
Table 10 Chapter3_Regression Results for IJV Performance	95
Table 11 Chapter3_Results of Bootstrap Analyses on the Indirect Effect through	
Knowledge Creation	97

List of Figures

Figure 1 Chapter1	Theoretical Model	8
0 1 -	-	
Figure 2 Chapter 2	_ Theoretical Model	5

Introduction

My dissertation draws upon social identity and organizational identification theory lenses to study topics pertinent to international strategic alliances, such as inter-organizational cooperation, knowledge creation and venture performance.

The first paper in the dissertation series is about the role of CEO organizational identification in inter-organizational cooperation. The joint venture literature on inter-organizational cooperation has focused largely on external control mechanisms, such as contract completeness and incentive alignments. I complement this view by considering how a relational, psychological feature of the boundary spanner–joint venture (JV) CEO's organizational identification–may influence inter-organizational cooperation and hence JV performance. The framework suggests that JV CEO's organizational identification with a parent firm fosters venture-parent cooperation with that particular parent, and such cooperation, in turn, enhances JV performance. I also find that the cooperation between the JV and a focal parent firm is enhanced by goal incongruity between the parent firms. This study adds to JV research by revealing a positive role for boundary spanners' organizational identification in fostering inter-organizational cooperation and hence venture's performance.

The second study of my dissertation examines the role of TMT organizational identification in TMT knowledge creation where TMT members are with diverse in nationalities. I hypothesize that TMT identification with the IJV is an important condition under which TMT national diversity influences IJV performance. Specifically, when TMT identification with the venture is low, TMT national diversity is negatively related to venture performance through reduced knowledge creation; when TMT identification with the venture is high, however, the relationship is positive via enhanced knowledge creation. These findings advance the current understandings of when and how TMT national diversity may promote venture performance.

The third study of my dissertation takes a closer look at the role of TMT organizational identification on knowledge creation and venture performance. The literature on organizational identification has overwhelmingly focused on the benefits of identification with a given entity while some scholars caution about the potential dark side of it. I propose a curvilinear relationship between top management team (TMT) organizational identification and international joint venture (IJV) performance. TMT organizational identification is beneficial to IJV performance through TMT knowledge creation till certain point. When TMT members are over-identified with the focal organization, its effect on IJV performance becomes negative.

2

Chapter 1: A Model of CEO Organizational Identification, Inter-party Cooperation, and Joint Venture Performance

Joint ventures (JVs) essentially involve cooperation among three or more parties (i.e., the parent firms and the JV), and cooperation is vital to JV success (Kanter, 1994; Dyer and Singh, 1998; Gulati, 1995). Cooperation is the process by which individuals, groups, and organizations come together, interact, and form relationships for mutual gain or benefit (Smith, Carrol and Ashford, 1995). In a JV setting, cooperation lines include those between the parent firms (i.e., horizontal cooperation) and between each parent firm and the venture (i.e., vertical cooperation).

Most JV research is grounded in transaction cost economics (TCE) and agency theory (Eisenhardt, 1989; Williamson, 1991). The general proposition has been that other parties should be 'controlled' to so as to safeguard the interest of a focal party from the incursion of individual interests inconsistent with its own (Kogut, 1988; Park and Russo, 1996). Vis-à-vis the venture itself, a parent firm (aka the principal) face potential agency problems with JV management (the agent) (Geringer and Hebert, 1989). Based on the above, prior research on inter-organizational cooperation in JV systems has largely focused on organizational level antecedents such as contract completeness, incentive alignment, partner rivalry, and the number of JV parents (Gong, Shenkar, Luo, and Nyaw, 2007; Luo, 2002; Parkhe, 1993; Park and Ungson, 2001).

While calling attention to relational variables in developing inter-organizational cooperation (Ring and Van de Ven, 1994; Zaheer and Venkatraman, 1995), past research has understudied the potential role of micro level variables in key JV phenomena (Shenkar and Reuer, 2006). While limited research on JV CEOs has been conducted (e.g., Shenkar and Zeira, 1992; Gong, Shenkar, Luo and Nyaw, 2001), and whilst organizational identification has been used as a lens with which to study JVs (Salk and Shenkar, 2001), the role of CEO organizational identification as a relational and psychological feature of the boundary spanner underlying inter-organizational cooperation, has been by and large neglected. Given that relationships across organizational system members are overseen and managed by key individual boundary spanners, this thrust is of considerable theoretical and practical importance (Katz and Kahn, 1978). The relational and psychological features associated with these boundary spanners have the potential to influence inter-organizational cooperation, especially considering the challenges associated with cooperation under a relational governance mode as compared to a market based transaction or under hierarchical fiat (Ring and Van de Ven, 1992; Williamson, 1973; Zaheer, and Venkatraman, 1995).

In this study, we examine whether and how JV CEO's identification with a parent firm is associated with venture-parent cooperation and venture's performance. We focus on JV CEO's organizational identification as identity and identification are fundamental forces influencing human thought and action, and are, hence, the basis for the development of inter-organizational relationships (Ring and Van de Ven, 1994). The JV CEO, is not only a traditional boundary spanner but also someone with the access and the authority role to influence decision-making and management at all levels. Thus, the JV CEO's organizational identification with a parent firm has the potential to influence venture-parent cooperation.

Following organizational identification theory, we define JV CEO's organizational identification as the degree to which the CEO's self-identity is intertwined with the identity of an organization, or, alternatively, the CEO defines himself or herself in terms of the attributes of an organization (Ashforth and Mael, 1989; Dukerich, Golden, and Shortell, 2002). We propose that JV CEO's identification with a parent firm *indirectly* influences JV performance via enhanced cooperation between that particular parent and the venture. We also extend our theoretical framework to how goal incongruity between parent firms (Contractor and Lorange, 1988; Luo and Park, 2004), moderates this indirect relationship. Greater goal incongruity between the parent firms makes the identities of the identification targets more *salient* to the JV CEO. According to organizational identification theory (Ashforth and Johnson, 2001; Ashforth, Harrison, and Corley, 2008), when the identities of the parent firms become more salient, JV CEO's identification with a given parent is more likely to be turned into cooperative behavior toward that parent, generating a stronger *indirect* relationship between JV CEO's identification with the parent and JV performance.

This study makes a number of contributions to the JV literature. We begin to build a Meso framework for vertical cooperation in JV systems. We complement extant literature by identifying an important relational, psychological antecedent to vertical cooperation and JV performance. With the control of organizational, structural variables, JV CEO's

identification with a parent firm has a positive indirect relationship with JV performance through fostering vertical cooperation between that parent firm and the venture. Organizational identification theory thus adds significantly beyond transaction cost economics and agency theory to advance our understandings of vertical cooperation in JVs. Moreover, our theoretical framework reveals that goal incongruity between identification targets (i.e., parent firms) is a key boundary condition that amplifies the extent to which JV CEO's identification with a parent turns into actual cooperative behavior toward that parent firm.

THEORY AND HYPOTHESES

The construct of organizational identification is rooted in social identity theory (Ashforth and Mael, 1989). Theory and research suggest that individuals who identify with their organization are willing to voluntarily engage in actions that help the organization and its members (Ashford and Barton, 2007; Bergami and Bagozzi, 2000; Dukerich et al., 2002). Individuals tend to choose activities congruent with their identities, and these activities induce positive results for the focal organization. For example, Stryker and Serpe (1982) found that individuals whose religious identity was salient, spent more time in that role, and derived satisfaction from it. Mael and Ashforth (1992) showed that identification of alumni with their alma maters predicted their likelihood of donating to the institutions.

The joint venture literature suggests that a JV CEO plays a dual role—that of leadership of the venture and that of agent of parent firms (Salk and Shenkar, 2001; Shenkar and Zeira, 1992). Both roles involve organizational identification if the JV CEO

endeavors to perform her or his job well, yet each role may affect JV performance via a different path. Building on organizational identification theory, identification under the leadership role (i.e., with the venture) is expected to relate to venture performance through enhanced commitment and intensified efforts on behalf of the venture. In contrast, identification under the agent role (i.e., with the parent firms) will likely relate to the venture performance indirectly via parent-venture cooperation because this role interfaces cooperation with the parent firms (Hennart, 1988; Kumar and Seth, 1998). We suggest that JV CEO's identification with a parent firm is indirectly associated with JV performance via vertical cooperation between a given parent and the venture. Figure 1 schematically illustrates our theoretical framework.





JV CEO's identification with a parent firm and JV-parent cooperation

Researchers have pointed out potential agency problem in equity-based JVs (Luo and Park, 2004) between parent firms (the principal) and JV management (the agent) due to goal conflicts and risk sharing differences between the parties (Eisenhardt, 1989; Geringer and Hebert, 1989; Park and Ungson, 2001). For the parent firms, the focal JV may be just one of several investments, so risk diversification is relatively easy. As JV managers need to invest in human capital specific to the JV but cannot diversify their risk, they may have different risk preferences than those of the parent firms (Arrow, 1970; Jensen and Meckling, 1976). JV managers may also bring along personal experiences and biases that are at odds with the parent firm (Luo and Park, 2004). Because of the potential agency problems, parent firms often rely on control mechanisms (Geringer and Hebert, 1989; Yan and Gray, 1994) to ensure JV compliance with their strategic goals. Agency theory assumes self-interest that, together with the partial goal conflict between the principal and agent, gives rise to agency problems (Eisenhardt, 1989). When a JV CEO strongly identifies with the parent firm, however, the agency problem is mitigated, as self-interest and goal conflict—the two issues underlying the problem—are alleviated.

According to social identity and self-categorization theory, individual identification with an organization triggers a self-categorization effect, whereby his/her identification shifts from the personal level to the collective level. It is a 'shift towards the perception of self as an interchangeable exemplar of the social category and away from the perception of self as a unique person' (Turner, Hogg, Oakes, Reicher, and Wetherell, 1987: p.253). Research has demonstrated that when individuals categorize themselves in terms of the organization, they tend to think and act in collective ways. Identification also engenders internalization of, and adherence to, group goals, values, and norms (Ashforth and Mael, 1989). It follows that when the identification with an organization is strong, self-interested behavior and goal conflicts in the principal-agent scenario are reduced.

As the key person in charge, JV CEO's role as the boundary spanner can significantly influence the vertical relationship between the venture and the parent firms (Browning, Beyer, and Shetler, 1995). As earlier argued, the potential agency problem between a JV and the parent firms is likely more problematic than under a unified ownership structure (Luo and Park, 2004; Yan and Gray, 2001). A JV CEO who identifies strongly with a parent firm, however, may view that firm as part of his/her identity and voluntarily cooperate with the parent rather than being forced to do so. Researchers have argued that social identification is especially powerful in shaping voluntary behavior (Tylor and Blader, 2001).

CEO's identification with a parent firm may also enhance trust between the parent and the JV (Lewicki and Bunker, 1995). First, trust plays a prominent role in the emergence of inter-group cooperation (Dawes, 1980; Edney, 1980; Kramer and Brewer, 1984; Ostrom, 1990), and has been identified as an important antecedent to cooperative relationships (Smith, Carroll, and Ashford, 1995). Social categorization has a positive effect on individuals' perceptions of others' trustworthiness, and research has shown that individuals tend to perceive members of their own social groups in relatively positive terms (Brewer, 1979). Individuals tend to view in-group members as being more honest and trustworthy than members of other groups. All else being equal, people expect more positive behavior from those with whom they share the same categories or identities.

Second, social categorization enhances perceived similarity among individuals within a social category (Ibarra and Andrews, 1993; Tajfel, 1974). Because of this enhanced perception of similarity, individuals may believe that other members of a collective perceive a given trust dilemma in similar terms, and will act in a similar fashion. The trust dilemma refers to a situation where an individual who engages in cooperative behavior bears all the burdens of cooperation, whereas benefits are accrued to all group members (Kramer, 1993). Individual group members, therefore, need some basis to believe that other members will reciprocate. The enhanced perception of similarity gives individual members a basis to form such a belief. According to this logic, CEOs who identify with a parent firm have a higher propensity of conferring trust on other members in the parent firm and are more willing to engage in trusting behavior. In contrast, individuals in the parent firm who observe the CEO's trustworthy behavior are more likely to perceive that the CEO is committed to the parent firm. The enhanced positive perception will lead individuals in the parent firm to confer trust on the CEO and be more supportive. Indeed, research has documented similar effects (McDonald and Westphal, 2010; Tyler and Blader, 2001).

Finally, social categorization also affects individuals' causal attributions about others' motives and intentions —important considerations when determining the risks of engaging in trusting behavior. Research has shown that individuals are more likely to attribute negative behavior of in-group members to external, unstable factors, whereas the same behavior by an out-group member is more likely to be attributed to stable, internal

factors (Brewer and Kramer, 1985; Hewstone, 1994). Due to these attribution biases, confronted with negative information about other in-group members that might be diagnosed as lack of trustworthiness, individuals tend to discount the doubt so that trust within the group remains intact. When a JV's CEO identifies strongly with parent firms, it is easier to maintain the trusting relation in the face of conflicts and misunderstandings between the two and, hence, it is easier to maintain the cooperative relationship. To sum up, when the JV CEO identifies with a parent firm, the potential agency problem is mitigated, voluntary cooperative behavior can be expected, and vertical cooperation between a given parent firm and the venture is enhanced. Thus, we hypothesize:

Hypothesis 1: A JV CEO's identification with a parent firm is positively associated with cooperation between the particular parent firm and the JV.

Parent-venture cooperation and JV performance

Research on inter-firm relationships has linked inter-firm cooperation with firm performance (Combs and Ketchen, 1999; Smith, Carroll, and Ashford, 1995). The JV literature notes that firms can enrich their resource endowment by means of inter-firm cooperation, and thus gain competitive advantage in the market (Borys and Jemison, 1989; Erramilli and Rao, 1993; Hamel, 1991). One important motivation to establish an equity-based JV is to transfer organizational knowledge (Hennart, 1988; Kogut, 1988). From the perspective of transaction cost economics, an equity-based JV is chosen when there is market imperfection in transacting knowledge and when internalizing the knowledge under a unified ownership (e.g., through merger or acquisition) is too costly to manage (Hennart, 1988). Toward a similar end, but from a different logic line, the knowledge-based view (Kogut and Zander, 1992, 1996; Zander and Kogut, 1995) sees an equity-based JV as a means by which firms learn or seek to retain their capabilities (Hamel, 1991; Inkpen and Dinur, 1998). In this view, firms contain a knowledge base that is not easily diffused across firm boundaries. An equity-based JV is, then, a vehicle by which 'tacit' knowledge (Polanyi, 1976) is transferred.

Research has documented that the knowledge transferred from the parent firm to the JV is essential in order for the JV to operate successfully (Dhanaraj, Lyles, Steensma, and Tihanyi, 2004; Lyles and Salk, 1996; Steensma and Lyles, 2000). In the context of international JVs, knowledge from both foreign and local parents is important for the venture. While the foreign parent usually contributes managerial and technological expertise, the local parent often brings local market knowledge, local social networks, and host government support. Dhanaraj, Lyles, Steensma and Tihanyi (2004) examined the influence of vertical knowledge transfer in JVs in Hungary, and found that knowledge from both the local and foreign parents is beneficial to a JV.

A cooperative vertical relationship between the parent firms and the JV is important for the venture to obtain knowledge, independent of a JV's capacity (Dhanaraj et al., 2004; Kale, Singh, and Perlmutter, 2000). Arms-length market relationships are often facilitated through high-order incentives (Williamson, 1991). Within hierarchies, shared values and high-order systems play a critical role in knowledge transfer (Brown and Duguid, 2001; Kogut and Zander, 1992). In hybrid organizational forms such as JVs, however, contract-based high-order incentives are far from complete, and top-down hierarchical fiat does not always work (Crocker and Masten, 1988; Yan and Gray, 2001). Building identification-based cooperation, therefore, is essential for the knowledge transfer to take place. Vertical cooperation provides opportunities for the JV to obtain and absorb knowledge from its parent firms, and the transferred knowledge lays a foundation for the venture to perform successfully. In sum, we expect that vertical cooperation between parent firms and the JV enhances JV performance. Thus, we hypothesize:

Hypothesis 2: The cooperation between a parent firm and the JV is positively associated with the JV performance.

Indirect relationship between JV CEO identification and JV performance

So far, our theoretical development suggests that a JV CEO's identification with a parent firm will be positively associated with the cooperation between that parent firm and the venture. When the JV CEO identifies with a parent firm, the potential agency problem between the parent firm and JV management is potentially reduced. Moreover, when the JV CEO identifies with the parent firm, trust is induced in the relationship, and enhanced cooperation between the two parties—the JV under the CEO's leadership and the parent firm that the CEO identifies with—can be expected.

Second, we expect that vertical cooperation will be positively related to JV performance. The success of a JV partially depends on parents' resources, and parent knowledge is among the most valuable JV resource. Knowledge transfer is essential, yet difficult for lack of the knowledge transfer incentives and coordination mechanisms available from market or unified hierarchy (Crocker and Masten, 1988; Yan and Gray, 2001). Under this circumstance, identification-based cooperation between the parties is critical. When parents cooperate with the JV, they are more willing to transfer managerial and technological knowhow to the venture. Parent firms may also be willing to consider the needs of the venture and give more general support. To sum up, a JV CEO's identification with a parent firm should have an indirect positive relationship with JV performance through the enhanced parent-venture cooperation. Thus, we hypothesize:

Hypothesis 3: A JV CEO's identification with a parent firm will have an indirect positive relationship, via the cooperation between the particular parent and the JV, with JV performance.

Goal incongruity between parents as a moderator

We have argued that a JV CEO's identification with a parent firm has a positive relationship with the cooperation between the venture and that parent firm. We now offer further that this relationship is moderated by parents' goal incongruity. For instance, a local parent may want to use the venture to gain technological and managerial knowledge, whereas the foreign parent seeks to lower manufacturing cost. Alternatively, a local parent may care a great deal about using the venture to expand employment, while the foreign parent seeks to generate profits.

Goal incongruity is an important consideration for two reasons. First, while a JV represents a cooperative system, parents often have only partially overlapping goals. Second, the degree of goal incongruity between parent firms conveys the distinction between the two identification targets to the boundary spanner (Albert and Whetten, 1985; Vora and Kostova, 2007). The difference between potential targets has important implications for the salience of a certain identity over the other (Ashforth and Johnson, 2001). Salience is defined as the probability that a given identity will be invoked, and multiple identities will be ranked in a 'salience hierarchy' (Stryker and Serpe, 1982). A given identity is cued or activated by the relevant settings. When goal incongruity between parents is high, there is a higher probability that the two identities (parent A and parent B) impose different demands upon the boundary spanner (here, the CEO), making the two identities salient. Empirical evidence suggests that it will be cognitively taxing for individuals to integrate the two identities under such circumstances (Ashforth and Mael, 1989; Ashforth and Johnson, 2001). Instead, individuals tend to cognitively solve the tension by prioritizing one identity over the other.

It should be pointed out here that the present study does not focus on the antecedents of organizational identification, and that our theoretical development does *not* assume which of the two parents will be chosen as the primary identity by a given CEO under high goal incongruity. However, let's assume that a CEO has chosen parent A as the primary sense-making identity. As goal incongruity may cause tension between the two parents, the CEO is more likely to act to defend the party with which he or she identifies, and engage in more cooperative and supportive behaviors with parent A. The JV CEO may intensify cooperation with parent A so as to protect the identity under threat (Elsbach and Kramer, 1996). Hence, we hypothesize:

Hypothesis 4: Goal incongruity between the parent firms moderates the positive relationship between JV CEO's identification with a parent and the cooperation between the JV and the particular parent, such that the positive relationship is stronger when goal incongruity is greater.

What we propose is that when goal incongruity between parents is higher, vertical

16

cooperation between the venture and the parent with which JV CEO identifies, rather than the *overall* cooperation across all parents, will be enhanced. Ceteris paribus, the enhanced cooperation with that parent in turn enhances JV performance, making the indirect effect of JV CEO's identification with that parent on JV performance stronger. It could be the case that the cooperation between the JV and the other parent is reduced due to JV CEO's cooperation with a given parent and the higher goal incongruity between the parents. So the overall level of cooperation across parents may not increase.

So far, we have argued that JV CEO's identification with a parent firm increases venture-parent cooperation, which in turn enhances JV performance (Hypothesis 3). Furthermore, goal incongruity between the parent firms moderates the first link (i.e., the relationship between JV CEO's identification with a parent firm and venture-parent cooperation) (Hypothesis 4). The combination of both arguments leads to the first-stage moderated indirect relationship (Preacher, Rucker, and Hayes, 2007) presented in Figure 1.

The integrative model suggests that JV CEO's identification with a parent firm has an indirect relationship with JV performance through venture-parent cooperation and this indirect relationship is stronger when the goal incongruity between parent firms is greater. In other words, the strength of the indirect relationship between JV CEO's identification with a parent firm and JV performance (via venture-parent cooperation) varies depending on the level of goal incongruity between parent firms, and the indirect relationship is stronger when the goal incongruity between parent firms and the indirect relationship is stronger when the goal incongruity between parent firms, and the indirect relationship is stronger when the goal incongruity is greater. We present the summary hypothesis below:

Hypothesis 5: The indirect relationship between JV CEO's identification with a

parent firm and JV performance, via the cooperation between the JV and the particular parent firm, is stronger when goal incongruity between the parent firms is greater.

METHODS

Sample

As the world's largest foreign investment recipient, China obtains approximately 60 percent of this investment in the form of equity JVs and contract-based strategic alliances (World Investment Report, 2006). In this study, we collected data from equity JVs in China. We collected data through two channels in 2008. First, a Nanjing University professor gained access to 103 JVs, mainly in Jiangsu province. The professor directed a team of graduate students to conduct the survey at the physical location of the sample JVs. Second, a professor from China Europe International Business School (CEIBS) gained access to the alumni database, which provided information for identifying JVs. The 115 JVs identified were invited to participate in the study. A team of graduate research assistants and the professor then sent questionnaires (through on-site visit, express delivery, fax, or e-mail) to the 109 JVs that agreed to participate. Using mail, fax, or email, respondents returned completed surveys to the professor's work address. After three rounds of follow-up, we received responses from 82 JVs. Both data collections included one pair of surveys (one for the CEO/general manager, and one for a senior vice-president) for each JV. The pair of surveys for each JV was assigned a unique code for data matching purposes. Respondents were assured that their responses would be kept confidential and used for research purposes only.

The participants were the CEO and a senior vice-president from each JV. The method used to ensure that they were the individuals who completed the questionnaires was, in the first channel, to contact the participants to schedule an appointment, and then have our research assistants conduct the survey on site. In the second channel, once we received the completed surveys, our research assistants verified directly with respondents that they had been the persons who had completed the surveys.

The final sample included 185 JVs. On average, they operated for 9.5 years and had 1,066 employees. In categorization by industry, 54.86% were in the manufacturing industry, 15.43% were in the high technology industry, and 13.14% were in the service industry. The majority (68.28%) of these JVs had two parents. CEOs in the final sample had a mean age of 43.92 years, and on average had worked with the JV for 7.7 years (SD = 7.39). Before taking their JV CEO posts, 27.62% worked with the foreign parent, 53.04% worked with the local parent, and the remaining were affiliated with other firms or organizations. We compared the sample means of JV age, size, and industry distribution to those of a population composed of international JVs that had operated till the end of 2008 in Jiangsu Province and in Shanghai. Both t-test and Wilcoxon rank sum test showed that JVs in our sample did not differ from those in the population in terms of age (t = -0.88, ns) and total assets (t = 1.05, ns). Chi-square goodness of fit test showed that the industry distribution of JVs in our sample also did not differ from that in the population (test statistic = 1.79, ns).

19

Measures

JV CEOs reported their identification with the parent firms (i.e., the local and the foreign parent, respectively), as well the cooperation between the parent firms and the JV. A senior vice-president reported the performance of the JV. All items were rated on a five-point scale. The items were translated into Chinese following the back translation procedure (Brislin, 1980). We provided respondents with the English-version when requested.

JV CEO's organizational identification. We adapted the six-item measure of organizational identification from Mael and Ashforth (1992). The scale has been used extensively in prior research and has been shown to be reliable and valid (Ashforth, Saks, and Lee, 1998; Bergami and Bagozzi, 2000; Dukerich et al., 2002). Cronbach's alpha was 0.91 for JV CEO's identification with the venture, 0.89 for JV CEO's identification with the foreign parent, and 0.93 for JV CEO's identification with the local parent.

Parent-venture cooperation. Cooperation was measured using nine items from Luo and Park (2004). The items tapped into cooperation in different areas (e.g., production, RandD, purchasing, marketing, human resources, and budgeting). Cronbach's alpha was 0.94 for the cooperation between the foreign parent and the venture, and 0.95 for the cooperation between the local parent and the venture.

Both JV CEO identification and parent – venture cooperation were rated by the CEO. The CEO is the best informant to rate his or her own identification and the cooperation between the venture and the parents based on his/her unique role as the JV leader and the boundary spanner connecting parent firms. Nevertheless, we took extra steps to check for potential common method bias. Specifically, we conducted the Harmon's one-factor test (Podsakoff and Organ, 1986) by subjecting to one-factor analysis the CEO's identification with the local parent, the CEO's identification with the foreign parent, cooperation between the local parent and the JV, and cooperation between the foreign parent and JV. No one single factor emerged, nor was a factor that accounted for the majority of the variance generated. Also, the items were loaded on the expected factors with Eigen value greater than 1.00. The largest factor accounted for 32% of the total variance, and no general factor was apparent.

We also observed that JV CEO's identification with the foreign parent was significantly related to the cooperation between the foreign parent and the JV (r = 0.23, *p* <0.05). However, it was not significantly related to the cooperation between the local parent and the JV (r = 0.05, ns). If there were a significant common method bias that typically inflates relationships, we would have observed a stronger correlation. Similarly, JV CEO's identification with the local parent was significantly related to the cooperation between the foreign parent and the JV, but not the cooperation between the foreign parent and the JV. Overall, common method bias was not a concern in the study.

Goal incongruity. We measured goal incongruity by using a composite index containing the following 13 objectives between parents, each on a five-point Likert scale: a) generate profit; b) take advantage of investment incentives; c) gain access to monetary resources; d) learn management and production skills; e) reduce risks associated with full ownership; f) employ skilled personnel; g) expand employment; f) reduce costs; g) expand reputation; h) develop R&D capabilities; i) expand local market; j) expand international market; and k) join forces with potential competitors. The computation of this index is based on the following formula:

$$GI_{fl} = \frac{1}{13} \sum (Q_{if} - Q_{il})^2 / Vi$$

where GI is the goal incongruity between foreign and local parents; Q_{if} is the Likert scale on question i for the foreign partner; Q_{il} is the scale on question i for the local partner; and V_i is the variance of question i. This measure and its computation were taken from Luo and Park (2004).

JV performance. Conceptualizing and measuring JV performance is a complex challenge (Yan and Zeng, 1999). Previous research has used objective measures (e.g., duration and financial gains) and subjective measures (e.g., goal attainment and satisfaction) (Park and Ungson, 1997). We utilized an index based on a senior vice-president's subjective ratings in five areas as compared to major competitors: a) return on investment; b) sales; c) profit growth rate; d) market share growth; and e) reputation. The items covered the diverse concerns of local and foreign parents and of JV management in evaluating venture success. The subjective measurement approach has been shown to correlate, with a high degree of reliability, to objective measures (Chandler and Hanks, 1993; Geringer and Hebert, 1991). Cronbach's alpha was 0.85 for the scale.

We performed a confirmatory factor analysis on the entire measurement model. To account for measurement error in our variables, we used a random assignment method to form parcels of indicators for each latent construct. The random assignment method is appropriate in our context because factor analyses on the scales clearly indicated the unidimensionality of each scale and that our sample size was not large (Kishton and Widaman, 1994; Landis, Beal, and Tesluk, 2000; Little, Cummingham, Shahar, and Widaman, 2002). Specifically, we randomly assigned items from the organizational identification scale to one of the two parcels and took the average score for the assigned items as the parcel score. Similarly, we created three parcels for cooperation between the venture and the parent firm. Estimation of the model indicated an acceptable fit: $\chi^2 = 165$, df = 75, root-mean-square error of approximation (RMSEA) = 0.08, the comparative fit index (CFI) = 0.96, and Tucker-Lewis coefficient (TLI) =0.93.

Control variables. JV size often affects the firm's market power over competitors, in addition to having the potential to increase scale economies and access profitable industries (Luo and Park, 2004). In this study, JV size is measured as the total assets of the JV. This variable is positively skewed, so we took the log of the variable in the analysis. Length of operations reflects the level of organizational learning and experience, which can influence the organization's success. As partners interact over a long period of time, stronger mutual understanding of strategic goals and managerial practices develops, which could make it easier to improve cooperation. This variable is also positively skewed so we used its log value in the analysis. We used dummy variables to control the industries in which JVs operate, differentiating JVs in manufacturing industries from those in other industries. We also controlled the affiliation of the JV CEO prior to the JV CEO post. We used dummy coding to capture three types of affiliations (i.e., foreign parent, local parent, and others), and the 'others' category was set as the reference category.

Research has identified several structural factors that could influence the cooperative

relationship, including the number of partners, resource complements among them, contract completeness, prior cooperation experience between partners, and incentive alignment with the parent firms (Gong et al., 2007; Kumar and Seth, 1998; Luo and Park, 2004; Smith et al., 1995). Accordingly, we controlled for these factors. We measured the degree of resource complementarity between foreign and local partners with one item: 'To what degree do the resources and capabilities of the local and foreign parents complement each other?' (1 = very low, 5 = very high). We used four items to capture contract completeness (Gong et al., 2007). We used a dummy variable to record whether foreign and local partners had prior cooperation experience. We used three items to capture the incentive alignment between CEOs and the parents: 1) parent firms provide JV managers with promotion opportunities in the parent headquarters; 2) parent firms provide JV managers to parent headquarters based primarily on their achievement of parent objectives; and 3) parent firms provide JV managers with career paths in parent firms. Cronbach's alpha was 0.93 for the scale.

Finally, prior studies addressed cultural distance between foreign and local partners as a factor affecting cooperation and performance (Barkema and Vermeulen, 1997; Park and Ungson, 1997). Following Luo (2002) and consistent with the recommendations in Shenkar (2001) and the theme of the present study, we have measured cultural distance at the cognitive level by asking each respondent to report the differences on the national culture values between the two parents with the highest ownership shares in JVs.

RESULTS

Table 1 presents descriptive statistics and zero-order correlations among the major variables. JV CEO's identification with the local parent was positively related to cooperation between the JV and the local parent (r = 0.44, p < 0.01). JV CEO's identification with the foreign parent was positively related to the cooperation between the JV and the foreign parent (r = 0.23, p < 0.01). The relationship between vertical cooperation and JV performance was positive (r = 0.35, p < 0.01 for the foreign parent; r = 0.18, p < 0.05 for the local parent).

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. JV age	2.02	0.72	-																
2. JV size	2.34	0.01	0.04	-															
3. Industry	0.55	0.48	0.10	-0.11	-														
4.Culture distance	2.28	1.20	0.01	-0.07	-0.08	-													
5.Cooperation experience	0.26	0.43	-0.12	-0.01	0.01	0.06	-												
6. Goal incongruity	1.32	1.26	0.05	0.15*	0.05	-0.16*	-0.08	-											
7. Resource complement	3.48	1.02	-0.21**	0.08	0.06	0.18*	0.23**	01	-										
8. Number of parents	2.13	0.78	-0.02	0.10	0.06	-0.08	0.09	0.03	-0.07	-									
9.CEO affiliation: foreign parent	0.28	0.44	0.01	0.02	-0.12	-0.21**	-0.07	0.08	-0.06	-0.14	-								
10.CEO affiliation: local parent	0.53	0.49	0.07	0.01	0.21**	0.10	0.06	-0.15*	0.02	0.10	-0.66*	-							
11. Contract completeness	3.80	0.70	-0.15*	0.10	0.09	-0.06	0.01	0.01	0.11	0.10	-0.06	0.11	-						
12 Alignment with parents	3.43	0.07	-0.05	-0.01	-0.02	-0.01	0.06	0.14	-0.01	0.04	0.10	-0.03	0.07	-					
13. CEO OI: foreign parent	3.82	0.83	-0.13	-0.15*	-0.02	0.10	-0.05	- 0.08	-0.06	-0.02	0.11	-0.12	0.04	0.19**	-				
14. CEO OI: local parent	3.73	0.99	-0.18*	-0.08	0.11	0.26**	0.16*	-0.34**	0.11	0.04	-0.29*	0.25*	0.01	0.04	0.40**	-			
15. CEO OI: joint venture	4.40	0.75	-0.11	-0.02	0.11	-0.08	0.02	0.12	0.04	0.10	-0.05	-0.06	0.07	0.08	0.40**	0.32**	-		
16. JV-LP cooperation	3.87	0.75	-0.07	-0.10	-0.02	0.14	0.23**	-0.27**	0.21**	0.10	-0.17*	0.12	0.07	0.12	0.05	0.44**	0.02	-	
17.JV-FP cooperation	3.73	0.83	0.01	0.03	0.02	-0.03	0.08	0.06	0.15*	-0.03	0.02	-0.04	0.20**	0.11	0.23**	0.07	0.10	0.32**	-
18. JV performance	3.69	0.71	0.08	0.08	0.17*	-0.19**	0.15*	0.10	0.01	0.14	-0.02	0.10	0.05	0.13	0.08	0.04	0.24**	0.18*	0.35**

Table 1 Chapter1_Means, standard deviations and correlations

a n = 185. OI = organizational identification. JV-FP cooperation = joint venture – foreign parent cooperation. JV-LP cooperation = joint venture – local parent cooperation.

Hypothesis testing

We start by conducting regression analyses to test the hypotheses. First, we examine the relationship between JV CEO's organizational identification and the corresponding parent-venture cooperation. Second, we examine the relationship between JV CEO's organizational identification and JV performance. Finally, we add parent-venture cooperation (i.e., the cooperation between the local parent and the JV, and the cooperation between the foreign parent and the JV) to the equation in step 2.

The regression results for step 1 are presented in Table 2. Models 1, 2 and 3 provide results for cooperation between the JV and the foreign parent. The control variables were shown in Model 1, and JV CEO's organizational identification with the foreign parent was shown in Model 2. The regression coefficient for JV CEO's organizational identification with the foreign parent was significant ($\beta = 0.25, p < 0.01$) in Model 2. Models 4, 5 and 6 provide results for cooperation between JV and the local parent. In Model 4, the regression coefficient for the JV CEO's organizational identification with the local parent ($\beta = 0.38, p < 0.01$). Thus, Hypothesis 1 is fully supported.

In Model 3, we entered the interaction between JV CEO's identification with foreign parent and goal incongruity, the regression coefficient for the interaction term was significant ($\beta = 0.92, p < 0.01$). In Model 6, we entered the interaction term between CEO's identification with local parent and goal incongruity, the regression coefficient for the interaction term was significant ($\beta = 0.59, p < 0.01$). Thus, Hypothesis 4 was fully supported. Results for steps 2 and 3 are presented in Table 3. In Model 1, we entered the control variables. In Model 2, we added the JV CEO's identification with the JV. In Model 3, we added the JV CEO's identification with the foreign and local parents. In Model 3, results indicate that the JV CEO's identification with both foreign and local parent was not significant. This suggested that JV CEO's identification with a parent firm was not directly associated with JV performance. This non-significant direct relationship is irrelevant to Hypothesis 3 because what we argued for and tested was an indirect relationship between CEO's identification with a parent firm (X) and JV performance (Y) through the cooperation between the parent firm and JV (Z). Statistically, the significance of X-Z and Z-Y paths is the only key requirements for the significance of the indirect relationship (see Mathieu and Taylor, 2006; Hayes, 2009).

In Model 4, we added the cooperation between the JV and the parent firms to the Model 3 equation. Cooperation between the JV and the foreign parent was significant ($\beta = 0.28, p < 0.01$), while cooperation between the JV and the local parent was marginally significant ($\beta = 0.12, p < 0.10$). Taken together, the results support Hypothesis 2, which posited a positive relationship between the venture-parent cooperation and the venture performance. Theoretically, we would expect vertical cooperation (i.e., foreign parent-venture cooperation and local parent-venture cooperation) to have similarly positive impact on JV performance. Our result showed that the cooperation between the foreign parent and the venture had a stronger positive effect on JV performance than did the cooperation between the local parent and the venture.
	Cooperation between			Cooperation between			
	Foreign Parent and JV			Local Parent and JV			
	Model	Model	Model	Model	Model	Model	
	1	2	3	4	5	6	
CEO identification – foreign		0.25**	0.03		-0.12	-0.06	
CEO identification - local		-0.01	0.01		0.38**	0.16	
CEO identification - joint	0.08	-0.03	0.01		- 0.11	-0.06	
CEO identification with foreign			0.92**				
parent							
× Goal incongruity CEO identification with local parent						0.59**	
× Goal incongruity							
JV age	0.09	0.12	0.10	0.03	0.09	0.07	
JV size	0.01	0.01	0.02	- 0.03	- 0.03	-0.11	
Industry	-0.01	-0.01	0.02	- 0.09	- 0.15	-0.10	
Culture distance	-0.02	-0.05	-0.09	0.03	- 0.03	-0.02	
Cooperation experience	0.11	0.14	0.07	0.27*	0.18	0.09	
Goal incongruity	0.01	0.03	-0.83*	-	-	-	
Resource complement	0.10+	0.12*	0.18*	0.15*	0.14*	0.19**	
Number of parents	-0.05	-0.05	-0.04	0.10	0.10	0.12+	
Affiliation with foreign parent	-0.05	-0.12	-0.11	-0.25	- 0.11	-0.10	
Affiliation with local parent	-0.11	-0.11	-0.11	0.03	- 0.12	-0.11	
Contract completeness	0.22**	0.20*	0.19**	0.05	0.09	0.09	
Alignment with parents	0.06	0.03	0.02	0.12*	0.11*	0.12	
Model R ²	0.09	0.14	0.18	0.20	0.32	0.37	
Change in R ²		0.05**	0.04**		0.12**	0.05**	
F	1.30	1.91*	2.25**	3.39**	5.30**	6.05**	

Table 2 Chapter 1_Multiple regression analysis for vertical cooperat	ion
--	-----

	JV Performance			
	Model 1	Model 2	Model 3	Model 4
CEO identification – foreign parent			0.06	0.01
CEO identification – local parent			- 0.03	- 0.08
CEO identification – joint venture		0.21**	0.20*	0.22**
Cooperation between foreign parent and JV				0.28**
Cooperation between local parent and JV				0.12+
JV age	0.08	0.11	0.11	0.06
JV size	0.02	0.02	0.02	0.02
Industry	0.18	0.14	0.15	0.17
Culture distance	- 0.11*	- 0.10*	- 0.10*	- 0.08+
Cooperation experience	0.24*	0.24*	0.26*	0.20+
Goal incongruity	0.03	0.02	0.02	0.02
Resource complement	0.01	0.01	0.01	- 0.04
Number of parents	0.08	0.07	0.07	0.07
Affiliation with foreign parent	0.05	0.11	0.09	0.13
Affiliation with local parent	0.14	0.20	0.21	0.25+
Contract completeness	0.01	-0.01	- 0.01	- 0.07
Alignment with parents	0.08	0.07	0.06	0.04
Model R ²	0.13	0.17	0.18	0.29
Change in R ²		0.04**	0.01	0.11**
F	2.17*	2.83**	2.48**	4.04**

Table 3 Chapter1_Multiple regression analysis for JV performance

This result suggests that managerial and technological expertise, often provided by the foreign parent, was more important for JV performance in our sample.

The regression results provide indicative evidence for, but not a direct test of the indirect effects we hypothesized. Given that our sample size was not large, we tested the indirect relationship between the JV CEO's identification with parents and JV performance (via vertical cooperation) using the bootstrapping approach. Such a test provides a direct test of the significance of the indirect relationship and is more appropriate for small to moderate samples where the sampling distribution of the indirect relationship is less likely to be normal (Hayes, 2009; Preacher and Hayes, 2004). The bootstrapping results indicate that the *indirect* relation between CEO's identification with the foreign parent and JV performance (via foreign parent-JV cooperation) was significant (p < 0.05, 95% CI [0.02, 0.17]). The indirect relation between CEO's identification) was also significant (p < 0.05, 95% CI [0.02, 0.15]). Hypothesis 3, therefore, is supported.

We also used the bootstrapping method to test the moderated indirect relationship (Preacher, Rucker, and Hayes, 2007), and calculated the conditional indirect relationship at specific levels of the moderator (i.e., goal incongruity between the parents). The results indicate that when goal incongruity was high (one standard deviation above the mean), the indirect positive relationship between CEO's identification with the local parent and JV performance through local parent-JV cooperation was significant (p < 0.01). The indirect relation, however, was not significant when goal incongruity was low (one standard deviation below the mean). Similarly, the indirect relationship that CEO's

identification with the foreign parent has with JV performance via foreign parent-JV cooperation was significant (p < 0.05) when goal incongruity was high (one standard deviation above the mean). When goal incongruity was low (one standard deviation below the mean), the positive indirect relationship was no longer significant. Hence, Hypothesis 5 is supported.

Robustness check and interviews

In the above analyses, we used the rating of JV performance by a senior vicepresident. To check the robustness of the results, we re-tested all hypotheses using the rating from the JV CEO. The results for hypotheses testing were substantively similar. To reduce common method bias, we reported the results based on the senior vice-president's rating of JV performance. In an independent check based on a sample of 30 JVs, we checked the reliability of the JV performance measure. We obtained ratings of JV performance from the JV senior vice president and both the local and foreign parent firms (Lyles and Salk, 1996). The rating from the JV senior vice president was positively related to the ratings from both the local parent firm (r = 0.70, p < 0.01) and the foreign parent firm (r = 0.91, p < 0.01).

To gain more insights into the quantitative findings and to better study causality among variables, we conducted qualitative interviews with CEOs from 21 JVs and performed content analysis of the interview data (see Appendix for a summary of the interview study and results). The results largely supported our predictions.

DISCUSSION

In this study, we examined JV CEO's organizational identification as a relational, psychological antecedent to vertical cooperation and JV performance. Higher level of JV CEO's identification with a parent firm was associated with greater cooperation between the venture and that particular parent firm. Moreover, such cooperation was intensified further when the goal incongruity between the parent firms was greater. Cooperation between the venture and a given parent firm was associated, in turn, with greater JV performance.

In addition to the quantitative survey study, we interviewed 21JV CEOs. In our interviews, we observed how strong identification with parents plays out in the vertical cooperation through cognitive, affective, evaluative, and behavioral aspects. A JV CEO who identifies with a parent firm tends to perceive herself or himself as being associated with the particular company (e.g., 'I regard myself part of the local parent'), and feels strong affective ties toward the company (e.g., 'I must say that I have deep feelings for it [the foreign parent]'). The JV CEO positively evaluates the parent's characteristics (e.g., 'it is a respectable company, and it is a leader in the industry. I would love to work for such a company.'), and has engaged in behaviors beneficial for the cooperation between the venture under his leadership and the particular parent firm (e.g., 'I made the effort to develop a very good relationship with people [in the local parent company] outside of work, and this helped a lot to develop a good relationship with them at work. People [in the local parent company] have been very supportive.'). When goal incongruity is considerable, JV CEOs tend to intensify the cooperation with the parent firm that he/she

identifies with. As one CEO puts it, 'I see myself as a representative for the local parent. When the two parents have different opinions in allocating resources, I try my best to ensure that the interests of the local parent are covered.'

Implications for JV theory and research

With this study, we start building a Meso framework in vertical cooperation in JVs. We complement the current literature by identifying a relational, psychological antecedent—JV CEO organizational identification—to vertical cooperation between the venture and the parent firms. This antecedent is important as it represents a distinct type based upon organizational identity theory, rather than being derived from transaction cost economics and agency theory approach to vertical cooperation. After controlling for the effects of organizational, structural/governance variables, we show that a JV CEO's identification with parents represents a separate determinant and enhances vertical cooperation. This finding will hopefully stimulate more attention to the relational, psychological features associated with the key boundary spanners in the study of JVs and, more broadly, to the behavioral processes underlying the formation, operations, and performance of such ventures.

Our study clearly shows that JV CEO's identification with the parent firms fosters cooperation between the JV and parents, which should reduce agency and transaction costs. This challenges the assumption of transaction cost economics and agency theory, which assumes that an agent will act opportunistically, with control mechanisms (e.g., contract, incentive alignment with parents) placed to foster vertical cooperation. In the example of contract completeness, our results suggest that while contract completeness is as important as the JV CEO's identification in enhancing the cooperation between the foreign parent and the venture, it is not as powerful as the JV CEO's identification in inducing cooperation between the local parent and the venture. The JV CEO's identification, however, is a powerful antecedent to vertical cooperation for both the foreign and the local side. Another example is CEO incentive alignments with parent firms, an important antecedent derived from agency theory to predict venture-parent cooperation. Our results show that while incentive alignment with parent firms is as important as CEO identification for the venture-local parent cooperation, it is not as powerful as the CEO identification in influencing venture-foreign parent cooperation. The broad theoretical implication is that organizational identification theory can add significantly beyond transaction cost economics and agency theory to advance our understanding of vertical cooperation and JV performance.

Moreover, our interviews with CEOs reveal that organizational identification is especially powerful in shaping voluntarily cooperative behaviors. For instances, CEOs are willing to spend time and energy building relationships with people in the parent firm outside of work to establish and/or maintain a cooperative relationship. Organizational identification can foster vertical cooperation beyond what is pre-specified in a formal contract.

Implications for organizational identification theory and research

Our theory and results also contribute to the organizational identification literature. JVs provide for an interesting context in which to extend organizational identification theory and research. Traditionally, organizational identification literature has focused on identification with the focal organization and its impact on the same organization. In an important departure, we examine how the identification with another entity (i.e., parent firm) may benefit the focal entity (i.e., the JV) by using the unique structural feature of the JV. In a JV, at least three parties are involved, including the parent firms and the venture itself. These entities are drawn together in a collaborative effort. Moreover, unlike nested (e.g., departments nested within an organization) and distinct entities (two separate organizations), JV parent firms have partially overlapping goals, and the variability of goals enables us to observe and test our theory about the role of goal incongruity in boundary spanner's identification process and in associated outcomes.

We found that identification with another entity (i.e., a particular parent firm in our case) has an *indirect* positive benefit for the focal organization (i.e., the JV in our case) via enhanced cooperation between the two entities. Also, when the identification targets (i.e., the parent firms) are more different from each other (as indicated by goal incongruity), the indirect effect of identification with a *particular* parent firm in the venture performance is stronger because such difference intensifies the cooperation with *that particular parent*.

Our findings have meaningful implications. Inter-organizational interactions proliferated due to contemporary organizational designs and strategies (Bartel, 2001). CEOs perform boundary-spanning work and interact with an array of interaction partners. While previous research predicts that a boundary spanner's identification with the focal entity will have a 'matched' effect on the focal entity, our study suggests that the identification with the entity with which that focal entity interacts could also relate to the focal entity's performance. Furthermore, the boundary condition we identified is theoretically important. As JV involves three entities, which is more complex than the situations with two entities, we found that the contrasting feature (e.g., goal incongruity) of the other two entities is a critical consideration. More importantly, this contextual factor is different from the factors identified in the previous literature on two entities, such as the similarities on organizational attributes (e.g., same size, or same industry) (Ashforth, Harrison, and Corley, 2008). Two entities could have similar organizational attributes, but their goals could be different. By the same token, two entities could contrast each other along an array of organizational attributes, yet their goals could well be similar. As goal incongruity varies, it suggests to the boundary spanner the salience of the identification targets because of a greater gap between them.

Directions for future research

This study has several limitations that also point to important future research directions. First, the study uses a cross-sectional design, which precluded us from establishing the causal relationships among variables. Although the qualitative interview data and the content analysis results support the causal direction presented in our model, future research could benefit from a longitudinal approach to better establish causality. We were not able to do so because our sample involved a large number of busy senior executives.

Second, we argue for an indirect positive relationship between CEO's identification with a particular parent firm (X) and JV performance (Y) through enhanced cooperation between the venture and the particular parent firm. Theoretically, other links, possibly negative ones, may exist. For example, CEO's identification with a particular parent firm may divert CEO's attention and efforts away from the JV, which in turn decreases JV performance. In a supplementary analysis, we confirmed that identification with a parent firm may lead to lower identification with the venture itself, thus lowering venture's performance. Because positive and negative indirect links may cancel each other out, overall we do not expect a significant direct relationship between CEO's identification with a parent firm and JV performance. Our study focuses on a *positive* indirect pathway between CEO identification with a parent firm and JV performance. An interesting future research direction is to examine potential *negative* indirect pathways.

Finally, we measured the differences in parent companies' goals as a proxy for goal incongruity. Future study can benefit from measuring goal incongruity directly and use longitudinal design to examine the effects of the changes in goal incongruity over time.

Conclusion

To conclude, this study brings much needed attention to the question of how a relational, psychological feature of boundary spanners —CEO organizational identification—may affect vertical cooperation and venture performance. With the control of structural variables derived from transaction cost economics and agency theory, we show that JV CEO's identification with a parent firm has a positive indirect relationship with JV performance through fostering vertical cooperation between that parent firm and the JV. On the whole, this study highlights the importance of organizational identification theory in advancing our understanding on vertical cooperation in JVs.

Chapter2: TMT National Diversity, Knowledge Creation, and International Joint Venture Performance: The Moderating Role of TMT Venture Identification

Multinational top management teams (TMTs), defined as TMTs consisting of multiple nationalities, have been increasingly used in international companies over the past several decades (Hambrick, Davison, Snell & Snow, 1998; Staples, 2007). Despite their increasing popularity, national diversity in TMTs remains an under-researched area (Carpenter, Geletkanycz, & Sanders, 2004; Nielsen & Nielsen, 2010, 2013). International joint venture (IJV), on which companies rely for executing international strategies, presents a rich and relevant research setting to study TMT national diversity (Hambrick, Li, Xin, & Tsui, 2001). By definition, an IJV is a legally independent entity that represents the joint equity holding of two or more partner firms from different countries (Contractor & Lorange, 1988; Shenkar & Zeira, 1987). Reflecting the multinational nature of such cooperation, IJV TMT members come from different countries and are often more nationally diverse than their counterparts in the domestic firms (Parkhe, 1991). TMT national diversity, however, has been largely suggested and/or found to be negatively associated with venture performance (Barkema & Vermeulen, 1997; Hambrick et al., 2001; Harrigan, 1988; Lane & Beamish, 1990; Li, Xin, & Pillutla, 2002; Parkhe, 1991; Sirmon & Lane, 2004). TMT nationality difference, along with other TMT compositional differences (e.g., age, and gender), engenders conflicts and behavior

disintegration hence is destructive to IJV performance.

In this study, we develop a more nuanced model of TMT national diversity on IJV performance. We argue that the largely negative associations suggested so far may well be due to an overlook of alternative underlying mechanism and an omission of important moderator (s). Indeed, researchers have called for a better understanding of the mechanism through which TMT national diversity may influence firm performance, and paying attention to contextual factors (Mannix & Neale, 2005; Nielsen & Nielsen, 2013). To begin with, the negative associations are in disagreement with the information processing perspective (Cox, 1994; Tziner & Eden, 1985). From this perspective, national diversity provides diverse bodies of knowledge from different national environments (Carpenter & Frederickson, 2001; Carpenter, Sanders, & Gregersen, 2001; Gong, 2003; Jackson & Joshi, 2011). A multinational TMT is therefore associated with increased information availability and problem solving perspectives, which has the *potential* to enhance creativity and benefit firm performance. Yet, we have very little empirical evidence on the information/knowledge benefits of TMT national diversity in IJVs. This missing is critical because TMT members are major actors who have tremendous influences on the cross-pollen of the knowledge, and themselves bring to the table with knowledge and experiences associated with their national backgrounds. Our first objective therefore is to explicitly test the information processing perspective and examine knowledge creation as a mechanism linking TMT national diversity and firm performance.

Second, prior research suggests that the negative side of TMT national diversity is

primarily due to the subgroup distinctions arising from nationality-based social categorization (Dahlin, Weingart, & Hinds, 2005; Nielsen & Nielsen, 2013; Stahl, Maznevski, Voigt, & Jonsen, 2009). According to the social categorization perspective (Tajfel, 1981; Tajfel & Turner, 1986; Turner, 1985), nationality provides social categorization cues to team members. Individuals often hold well-developed preconceptions about people from different national backgrounds that may invite intergroup biases (e.g., favoring nationally similar over dissimilar team members) (Hambrick et al., 2001; Harrigan, 1988; Zeira & Shenkar, 1990). The formation of subgroups based on nationality interferes with the sharing and integration of diverse bodies of knoweldge. On the other hand, knowledge management researchers have noted that a shared identity has the poential to curtail the social categorization effect and induce coordination and knowledge transfer (Argote & Kane, 2009; Kane, Argote, & Levine, 2005; Kogut & Zander, 1996). The negative effect of national differences found so far in the IJV literature may well be due to the omission of the role of identification with the focal organization (i.e., IJV). Our second objective therefore is to examine whether a shared identity with the focal organization may moderate the relationship between TMT national diversity and knowledge creation and subsequently IJV performance.

Our study integrates two theoretical perspectives – information and social categorization perspectives – to theorize *when* and *how* TMT national diversity influences firm performance. Our model shows that when the TMT identifies highly with the focal organization (i.e., the IJV), the information perspective (captured by knowledge creation) holds. Otherwise, social categorization effect based on nationality dominates, and

knowledge creation and firm performance suffer. We contribute to the TMT literature by developing a more nuanced model about the role of TMT national diversity in firm performance. TMT national diversity and TMT organizational identification should be promoted simultaneously to realize the knowledge creation potential of multinational TMTs. This study also contributes to the JV literature by providing an important boundary condition of the knowledge-based view of joint venture. A JV is a governance mode frequently chosen for the purpose of combining and coordinating diverse specialized knowledge across individuals (Kogut, 1988; Kogut & Zander, 1996). Our study shows that the knowledge creation benefit of national diversity can be realized only when individuals identify with the focal organization (i.e., IJV).

THEORY AND HYPOTHESES

Nationality reflects the institutional environment of the country in which individuals spend the majority of their formative years (Hambrick et al., 1998). A combination of formal and informal institutions in a country guide individuals and organizations in dealing with uncertainty, deciphering the environment, and taking appropriate actions (Crossland & Hambrick, 2007). North (1990) has noted that a national context can be conceptualized in terms of its formal and informal institutional structure. Formal institutions include its laws, regulations, policies and other codified procedures that govern property rights and transactions in a society. Informal institutions consist of norms, belief systems, practices and customs that shape social interactions. A nation's complex tapestry of formal and informal institutions is rarely exactly the same as those of another

nation (Makhija & Stewart, 2002). Institutions form a continuum moving from the legally enforced to the taken for granted and interact with each other in shaping human behavior.

Researchers have documented the impact of informal institutions, or national culture, on individuals' patterns of thinking, feeling, and acting (Hofstede, 1980). Country of origin patterns of thinking and behaving are acquired in individuals' early childhood and these patterns are deeply imprinted. Once established in individuals' mind, they are unlikely to substantially change through subsequent experiences (Hofstede & Hofstede, 2005). Prior research has shown that national culture has an enduring impact on top managers' mindsets, influencing the way they interpret and respond to strategic issues (Schneider & Meyer, 1991). Formal institutions constrain and regulate economic behavior, and they also affect information processing and problem solving in executive decision making (Makhija & Stewart, 2002). Moreover, national background brings a unique body of knowledge, such as an understanding of the nuances of language, customs and perspectives in the related environment and the knowledge about the industry and consumers embedded in a particular national context (Gong, 2006). The bodies of nationally embedded knowledge are invaluable resources for TMT knowledge creation.

The effects of both informal and formal institutions are profound and enduring (Geletkanyez, 1997; Hofstede & Hofstede, 2005). Executives are likely to carry them along when they join a TMT in a foreign country (Nielsen & Nielsen, 2013). In a multinational team, nationality has been acknowledged as the most salient attribute among others like race, gender, and age (Earley & Mosakowski, 2000; Salk & Shenkar, 2001). Empirical studies have showed that when there are multiple identification targets

to be enacted upon, nationality is the major sense-making vehicle in work teams in IJVs (Salk & Shenkar, 2001).

National diversity refers to the extent to which a team consists of members of different nationalities. We propose that TMT national diversity has an indirect relationship with IJV performance via TMT knowledge creation. Furthermore, we propose that TMT identification with the venture moderates the indirect relationship. Specifically, when TMT identification with the venture is low, TMT national diversity is negatively related to knowledge creation and thus harms venture performance; when TMT identification with the venture is high, the relationship with venture performance via knowledge creation is positive. Figure 1 presents the overall model for this study. Next, we elaborate the model and develop specific hypotheses.





TMT National Diversity and Knowledge Creation

Knowledge creation, defined in this study as the generation and application of new and useful ideas related to an organization's operations (e.g., processes, and products), is especially critical to organization's survival, renewal and growth in today's turbulent and competitive business environment (Grant, 1996; Kogut & Zander, 1996; Nonaka, 1994). Knowledge creation requires diverse information from different sources, seeing things from different perspectives, finding new solutions to old problems, and combining seemingly unrelated processes and materials to produce something new and better (Jackson, 1992;Nonaka, 1994).

According to the information-processing perspective (Cox, 1994; Tziner & Eden, 1985), TMT national diversity is associated with diverse cognitive schemes and institutionally embedded knowledge and experiences. Nationally diverse teams have the potential to arrive at more innovative solutions. We focus on three accompaniments of national diversity which have the most important implications for knowledge creation. First, team members of different nationalities generally possess different knowledge, assumptions, and schema (Dearborn & Simon, 1958; March & Simon, 1958). When it comes to knowledge creation, each increment in cognitive diversity can be expected to enhance the group's likelihood of generating ideas and alternatives (Hambrick et al., 1998; Hambrick & Mason, 1984; Watson, Kumar, & Michaelsen, 1993). The differing perspectives coming from multiple nationalities will serve as resources for solving the unstructured, novel tasks at hand (Hoffman, 1979; Jackson, 1992). Second, members of a multinational team tend to have different ways of problem-solving, and they tend to interpret stimuli in different ways (Postman, Jenkins, & Postman, 1948). They process new information through their own base of experience and knowledge. Diversity can be beneficial for group effectiveness in that team members strive to reconcile various perspectives, engage in in-depth debate and refine alternatives (Hambrick et al., 1998). Third, because each nationality is associated with a body of knowledge in the related country, TMTs with nationally diverse members are better able to recognize information from a broad environment and interpret them accurately (Cohen & Levinthal, 1990). Such TMTs are better linked to external networks for greater access to information and resources for TMT knowledge creation as well (Gong, 2006).

On the other hand, social categorization theory (Tajfel, 1981; Tajfel & Turner, 1986; Turner, 1985) suggests that TMT national diversity does not always lead to desired team outcomes such as knowledge creation. Knowledge creation not only requires a wide array of perspectives and ideas, but also needs team members to share and to combine different pieces of information. Some research suggest that national differences provide social categorization cues that engender biases and cause behavior integration problems (Dahlin et al., 2005; Li et al., 2002; Salk & Shenkar, 2001). Self-categorization is a process that individuals seek to bolster their in-group while derogate out-groups to enhance their own self-construal (Turner, 1975). When team members view themselves mainly in terms of different nationalities, they categorize themselves into different national subgroups within a team (Dahlin, et al., 2005). Subgroups based on different nationalities engender intrateam biases and cause the close-mindedness to opinions and contributions from team members with different nationalities. The exchange and integration of different information, ideas and perspectives, the key to knowledge creation, are difficult to achieve in a nationally splintered team.

Implications from the information-processing perspective and social categorization perspective suggest that there are potentially positive and negative effects associated with TMT national diversity in the knowledge creation process. The relationship between TMT national diversity and knowledge creation is likely to be quite complex. Therefore, instead of expecting a main effect of TMT national diversity on knowledge creation, we believe a more fruitful research enquire is to investigate *under what circumstances* the potential informational benefit can be realized in a nationally diverse team.

The Moderating Role of TMT Identification with the Venture

As discussed earlier, the potential negative side of TMT national diversity is mainly due to the divisive effect of different national categories. Consistent with the social categorization logic, a shared identity with the focal organization by team members (i.e., identification with the IJV) has the potential to unite otherwise divided members, and thus reduce the subgroup distinctions and intra-TMT bias based on nationality.

TMT identification with IJV refers to TMT members' awareness that they belong to the venture from which they define their own identity (Argote & Kane, 2009; Ashforth & Mael, 1989; Dukerich, Golden, & Shortell, 2002). This construct reflects the extent to which TMT members perceive themselves to be psychologically intertwined with the fate of the venture (Ashforth & Mael, 1989). We choose to focus our discussion on TMT identification with the IJV, as the venture is the focal organization they work for and thus provide a highly relevant superordinate identity with which all TMT members can identify.

Researchers have found that the superordinate organizational identity has significant and consistent effects on the opinions, attitudes, and behaviors toward members of the same organization. Group members view others with whom they share the same organizational identity as being more trustworthy, honest, loyal, and cooperative (Dasgupta, 2004). There is considerable evidence of this "own-group" favoritism from both laboratory and field settings (Bartel, 2001; Hewstone, Rubin, & Willis, 2002; Tyler & Blader, 2000).

We mentioned earlier that TMT national diversity complicates the knowledge creation process largely because of the "nationality-categorization" effect. Team members may categorize themselves based on different nationalities and intra-team subgroups interfere with information exchange and integration. Consistent with the social categorization theory, when TMT members identify with the same focal organization, they re-categorize themselves. Re-categorization enables multinational team members to view dissimilar team members as in-group rather than out-group members. It can mitigate the potentially adverse effect of subgroup identities (Brewer & Miller, 1984). The evaluation of those team members becomes more positive (Tajfel & Turner, 1986), and biases in perception and attribution decrease (Brown & Abrams, 1986; Hogg & Turner, 1985; Hoard & Rothbart, 1980). Indeed, previous experimental and field studies have shown that including a superordinate identity in the minds of the members of two separate subgroups reduce inter-group bias (Gaertner, Dovidio, & Bachman, 1996). We argue that a shared organizational identification with the venture ties nationally diverse TMT members together. Re-categorization with the same focal organization reduces the divisive effects derived from different nationalities. When TMT members identify with the venture, they are aware of their own national identities but conceive of themselves as all playing on the same team for the same organization (Gaertner, Rust, Dovido, Bachman, & Anstasio, 1994).

Moreover, a shared identity with the focal organization further enhances the information benefits associated with a multinational team. It works as a coordination mechanism to facilitate knowledge exchange and integration (Kogut & Zander, 1996). Researchers proposed and empirically supported the idea that a shared identity increases knowledge exchange in domestic organizations (Argote & Kane, 2009; Kane, Argote, & Levine, 2005). When the sources and the recipients share an identity, the recipients may exert a pattern of adoption, that is, they thoroughly consider the sources' ideas and were more likely to be affected by the persuasiveness of the arguments (Fleming & Petty, 2000; MacKie, Gastardo-Conaco, & Skelly, 1992; Mackie, Worth, & Asuncion, 1990). In contrast, when the sources and recipients do not share an identity, individuals were not affected by the persuasiveness of the source's arguments. Moreover, the recipients are more likely to be threatened by new ideas or new approaches proposed by the sources (Staw, Sandelands, & Dutton, 1981). Evidence from field studies also showed that a shared identity is associated with spontaneous communication (Hinds & Mortensen, 2005) and team learning behaviors, such as challenging group members' ideas and perspectives (Van Der Vegt & Bunderson, 2005).

When it comes to the characteristics of knowledge that is being exchanged, researchers

have found that a shared identity is especially beneficial to the transfer of tacit and complex knowledge (Galbraith, 1990; Nonaka, 1994). For instances, Kane el al.(2005) demonstrated that a shared identity was more effective for transferring knowledge that is low in demonstrability than for transferring knowledge that is high in demonstrability. The rationale is that knowledge low in demonstrability requires more consideration to recognize its merits than more demonstrable knowledge. Besides this, a shared identity also enhances social interactions and close relationships among nationally diverse team members, which also makes it easier to exchange implicit knowledge. A JV is usually used as a vehicle to transfer "tacit" knowledge (Kogut, 1988), a shared organizational identity (i.e., the venture) is especially critical for the exchange and integration of knowledge among IJV TMT members when the knowledge is implicit, complex or not easy to understand. To summarize, whether TMT national diversity is associated with team knowledge creation depends upon the level of TMT identification with the venture. When a multinational TMT identifies with the venture, nationally diverse team members are more likely to share and integrate diverse bodies of knowledge. This leads to higher level of knowledge creation. Hence, we hypothesize:

Hypothesis 1a: When TMT identification with the IJV is low, the relationship between TMT national diversity and TMT knowledge creation is negative;
Hypothesis 1b: When TMT identification with the IJV is high, the relationship between TMT national diversity and TMT knowledge creation is positive.

TMT Knowledge Creation and IJV Performance

Researchers have argued that knowledge creation is a source of competitive advantage for firms, and a key contributor to organizational performance and competitiveness (Grant, 1996; Kogut & Zander, 1996; Teece, Pisano, & Shuen, 1997). Joint venture is a frequently used organizational form to transfer and create new knowledge (Hennart, 1988; Kogut, 1988). According to the knowledge-based view, firms are consisted of a knowledge base which is not easily diffused across the boundaries of the firm. A joint venture represents a vehicle by which the knowledge, "tacit" knowledge in particular, is transferred. Parent firms pool and combine their knowledge together, and the resulting new knowledge created have been shown to lead to superior venture performance (Dhanaraj et al., 2004; Lyles & Salk, 1996; Steensma & Lyles, 2000). According to the upper echelon literature (Carpenter et al., 2004; Hambrick & Mason, 1984), IJV TMT is critical to the knowledge transfer and creation processes. On one hand, IJV TMT represents a group of executives who bring to the JV their respective experiences and knowledge bases that new "combinative" knowledge can be built upon (McGee, Dowling, & Megginson, 2007; Kogut & Zander, 1996). On the other hand, they are the major actors who have tremendous influences in the cross-pollen of knowledge from different parents. Therefore, new ideas and solutions generated by TMT members are likely to have a positive impact on IJV performances. Hence, we hypothesize:

Hypothesis 2: TMT Knowledge creation is positively related to IJV performance.

Moderated Indirect Relationship between TMT national diversity and IJV Performance

So far, we have argued that TMT national diversity is positively related to knowledge creation when TMT identification with IJV is high, but negatively related to knowledge creation when TMT identification with IJV is low. TMT knowledge creation in turn is positively related to IJV performance. The combination of both arguments leads to the first-stage moderated indirect relationship model (Preacher, Rucker, & Hayes, 2007) presented in Figure 1.

The integrative model suggests that TMT national diversity has an indirect relationship with IJV performance through TMT knowledge creation and this indirect relationship is positive when TMT identification with IJV is high, but negative when TMT identification with IJV is low. In other words, the direction of the indirect relationship between TMT national diversity and IJV performance (through TMT knowledge creation) varies depending on the level of TMT identification with the venture. We present the summary hypothesis below:

Hypothesis 3a: When TMT identification with IJV is low, the indirect relationship from TMT national diversity to IJV performance, via TMT knowledge creation, is negative;

Hypothesis 3b: When TMT identification with IJV is high, the indirect relationship from TMT national diversity to IJV performance, via TMT knowledge creation, is positive.

METHODS

Sample

The hypotheses were tested using a sample of IJVs operating in China. As one of the world's largest foreign investment recipient, China receives approximately 60 percent of the foreign direct investment through IJVs (World Investment Report, 2006). Given the international diversity of IJVs (involving Chinese and foreign parent companies), and the dynamic and competitive nature of the Chinese market, IJVs in China present a rich research context for the examination of national diversity, knowledge creation, and performance outcomes.

We collected data through surveys. There was one pair of questionnaires (one for the CEO/general manager and one for a senior vice-president) for each IJV. Respondents were informed that their responses would be kept confidential and used for research purposes only. The CEO/general manager responded to the questionnaire on knowledge creation. The senior vice president responded to the questionnaire on TMT identification with IJV and IJV performance. The senior vice president also reported information on TMT members' nationalities. The pair of questionnaires was assigned a unique number for the matching purpose.

We collected the data through two channels. First, 103 IJVs in the Jiangsu province were identified and accessed with the help of a professor from a major university in Nanjing. A team of graduate students, under the supervision of the professor, conducted the surveys at the physical location of the sample IJVs. The surveys were distributed, completed, and collected on site. Second, 115 IJVs in Shanghai were identified through the alumni database of a major international business school in Shanghai. 109 IJVs agreed to participate. A team of graduate research assistants sent questionnaires (through express delivery, fax, e-mail, or on-site visit) to the 109 IJVs. After three rounds of follow-up, we received responses from 82 IJVs. To ascertain that CEOs and vice presidents of IJVs indeed completed the questionnaires, our research assistants verified with them using the contact information from the alumni database once the completed surveys were received. The final sample had 185 IJVs. One average, they operated for 9.5 years and had 1,066 employees. In terms of industry, 54.86% were in the manufacturing industry, 15.43% were in the high technology industry, and 13.14% were in the service industry. On average, an IJV TMT had 9 members. IJV TMT members were from 20 countries/regions around the world¹.

Measures

All items were rated on a five-point scale. The items were translated into Chinese following the back translation procedure (Brislin, 1980). We provided respondents with the English version upon request.

TMT national diversity. In line with the definition by upper echelon researchers (Hambrick, 1995), top management team members include the president, the vice-president, and other senior managers who report directly to these two positions (typically heads of functional areas such as finance, manufacturing, marketing and human resources). We measured national diversity by following previous studies on diversity

¹ Hong Kong and Taiwan firms are treated as overseas firms and joint ventures with Hong Kong and Taiwan firms are considered international joint ventures by Chinese laws. Team members from Hong Kong and Taiwan were treated as overseas Chinese, a different category from mainland Chinese.

(Dahlin et al., 2005; Pelled, Eisenhardt, & Xin, 1999). Specifically, we obtained the nationality of each top management team member. We then used Blau's index (1977) to calculate national diversity (Nielsen & Nielsen, 2013).

$$H = 1 - \sum_{i=1}^{l} (Pi)^2$$

Where Pi is the proportion of TMT members from nationality i, and I is the total number of nationalities represented in the TMT (the range was 1-5 in the sample). For example, if a given TMT of ten members has three Chinese and seven Japanese, then P_1 equals .3, P_2 equals .7, and H equals .42.

TMT identification. We adapted the multi-item measure of organizational identification from Mael and Ashforth (1992) to measure TMT identification with IJV. This measure has been validated and used extensively in prior studies (Ashforth, Saks, & Lee, 1998; Bergami & Bagozzi, 2000; Dukerich et al., 2002). We followed the key informant method (Klein & Kozlowski, 2000) to measure TMT identification with IJV. Specifically, the senior vice-president from each IJV was asked to rate the extent to which the items accurately describe the TMT in the venture. Sample items include "When someone criticizes the IJV, TMT members feel like a personal insult" and "TMT members are very interested in what others think about the IJV" (1= very inaccurate to 5 = very accurate). Cronbach's alpha for the scale was 0.93.

TMT knowledge creation. We used a four-item scale adapted from previous research

to capture the generation and application of new and useful ideas by IJV TMT members (Anderson & West, 1998; De Dreu, 2002; Zhou & George, 2001). The items include: a) members often bring about improved procedures for JV operations; b) members often generate new and useful ideas; c) members often institute new work methods that are more effective; d) members frequently bring about new technologies, processes, and/or product ideas (1 = to a very low extent to 5 = to a very large extent). Cronbach's alpha for the scale was 0.88.

IJV performance. Following prior research (Dess & Robinson, 2006; Delaney & Huselid, 1996; Fu, Tsui, Liu, Li, 2010; Luo & Park, 2004), we utilized an index based on a senior vice-president's ratings of current venture performance as compared to close competitors in the industry in the following five aspects: a) return on investment; b) sales; c) profit growth rate; d) market share growth; and e) reputation (1=the lowest 20% in the industry; 5=the highest 20% in the industry). The items covered the diverse concerns of local and foreign parents and of JV management in evaluating venture success. We adopted a comparative approach because "relative performance is ultimately what is of the greatest interest" (Fulmer, Gerhart, & Scott, 2006: 971) in understanding the competitiveness of a firm. Prior research suggests that the use of subjective measure for IJV performance is appropriate (Geringer & Hebert, 1991; Yan & Grey, 1994). This subjective measurement approach has been shown to correlate, with a high degree of reliability, with objective measures (Chandler & Hanks, 1993; Geringer & Hebert, 1991).

Scholars have shown the convergent and discriminate validity for the subjective performance measure in IJVs (Ariño, 2002) and other types of organizations (Wall et al., 2007). Cronbach's alpha was .85 for the scale.

To check the reliability of the senior vice-president's rating, we conducted an independent check based on a subsample of 30 JVs. We obtained ratings of JV performance from the IJV senior vice-president and both the local and foreign parent firms (Lyles & Salk, 1996). The rating from the IJV vice-president was positively related to the ratings from both the local parent firm (r = .70, p < .01) and the foreign parent firm (r = .91, p < .01). This indicates that the senior vice president provided reliable assessment of IJV performance.

Control variables

We included eight control variables, including both team compositional variables (age diversity, gender diversity, affiliation diversity, and education diversity of TMT) and TMT processes variables (task conflict and emotional conflict). TMT size and goal differences between parent firms were also controlled.

Team composition characteristics. We used Allison's (1978) approach for measuring diversity based on numeric data (e.g., age diversity), using the variable's standard deviation divided by the mean. We used Blau's index for diversity based on categorical data (i.e., gender diversity, education diversity, and affiliation diversity). In particular, affiliation diversity was based on TMT members' prior affiliations (before joining the IJV): a) foreign parent firm; 2) local parent firm; 3) other firms.

Team conflict. The team literature has long suggested that intra-team conflicts could be a mediating process that explains the relationships between various types of diversity and team outcomes (Jehn, Northcraft, & Neale, 1999; Pelled et al., 1999). We controlled for the two types of conflicts in teams - task conflict and emotional conflict – that may explain the effect of national diversity on IJV performance. Task conflict refers to disagreement among members about task issues, including key decision areas, procedures, and the appropriate choice for action. Emotional conflict refers to interpersonal clashes among members (Eisenhardt, Kahwajy, & Bourgeois, 1997; Jehn, 1994).

We measured task and emotional conflict by adapting the scale used in prior studies (Jehn, 1994; Pelled et al., 1999) to the context of IJV. The task conflict scale had four items ($\alpha = .89$), and the emotional conflict scale had six items ($\alpha = .91$). A sample item for the task conflict scale includes, "There are frequent conflicts about ideas in the team"; and a sample item for the emotional conflict scale includes "There is a great deal of emotional friction among the members" (1 = to a very low extent to 5 = to a very large extent).

Goal difference. Parent firms may have incongruent goals that influence the cooperation and decision making process in the TMT and the performance of the IJV (Luo, Shenkar, & Nyaw, 2001). We hence controlled the goal differences between the parent firms. We measured goal difference by using a composite index containing the following 13 objectives between parents, each on a five-point Likert scale: a) generate profit; b) take advantage of investment incentives; c) access to monetary resources; d) learn management and production skills; e) reduce risks associated with full ownership; f)

employ skilled personnel; g) expand employment; f) reduce costs; g) expand reputation; h) develop R&D capabilities; i) expand local market; j) expand international market; and k) join forces with potential competitors. The computation of this index is based on the following formula:

$$GI_{fl} = \frac{1}{13} \sum \left(Q_{if} - Q_{il} \right)^2 / V_i$$

Where GI is the goal difference between foreign and local parents; Q_{if} is the Likert scale on question i for the foreign partner; Q_{il} is the scale on question i for the local partner; and V_i is the variance of question i. This measure and its computation were taken from Luo and Park (2004).

Team size. We controlled for the size of the team to control the effects that larger teams tend to be more diverse and that team size may drive team performance (Bantel & Jackson, 1989; Haleblian & Finkelstein, 1993).

RESULTS

Table 1 presents descriptive statistics and zero-order correlations among the major variables. The relationship between TMT identification with IJV and knowledge creation was positive (r = .33, p < .01). TMT knowledge creation was also positively associated with the IJV performance (r = .26, p < .01). The relationship between TMT national diversity and knowledge creation was not significant (r = .11, ns).

•		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
	1. Age diversity	.16	.05	-										
	2. Gender diversity	.29	.16	04	-									
	3. Affiliation diversity	.37	.18	.05	10	-								
	4. Education diversity	.36	.20	10	.02	.01	-							
	5. Task conflict	2.90	.83	01	.07	.08	03	-						
	6. Emotion conflict	1.93	.82	.04	.09	.06	23**	.29**	-					
	7. Team size	9.17	2.58	.11	01	.03	.28**	10	04	-				
6	8. Goal difference	1.32	1.37	04	04	.02	01	.02	07	.08	-			
51	9. TMT national diversity	.19	.18	.04	21**	.31**	02	.01	06	.01	03	-		
	10. TMT IJV identification	4.22	.88	.03	.08	.09	.05	.17*	17*	.11	03	08	-	
	11. Knowledge creation	3.62	.72	.06	.09	.04	.04	.10	14	.02	13	11	.33**	-
	12. IJV performance	3.69	.72	09	12	12	.12	.12	10	.01	.10	11	.31**	.26**

Table 4 Chapter 2_Means, Standard Deviations and Correlations

Hypothesis Testing

We ran hierarchical regression analysis to test the hypotheses. To minimize any potential problems of multicollinearity, we standardized the variables before calculating the cross-product terms (West & Aiken, 1991). In step 1, we examine the relationship between TMT national diversity, TMT identification with IJV, and TMT knowledge creation. In step 2, we examine the relationship between TMT national diversity, TMT identification with IJV, and IJV performance.

The regression results for step 1 are presented in Table 2. The control variables were in Model 1, and TMT national diversity and identification with IJV were entered in Model 2. The interaction term between TMT national diversity and identification with IJV was entered in Model 3. The regression coefficient for the interaction term was significant (β = .23, *p* < .01). Hence, Hypothesis 1a and 1b were fully supported. When TMT identification with IJV was low (below the mean), the relationship between national diversity and knowledge creation was negative. When TMT identification with IJV was high (above the mean), the relationship between national diversity and knowledge creation was positive.

In step 2, we entered the control variables in Model 1. In Model 2, we added TMT identification and national diversity. In model 3, we added the interaction term between TMT identification and TMT national diversity to the regression equation. In Model 4, we added knowledge creation to the Model 3 equation. Results indicated that the association between knowledge creations on IJV performance was significant ($\beta = .15, p < .05$). Hence, Hypothesis 2 was fully supported.

		Knowledge Creation		
—	M1	M2	M3	
National diversity		11	14	
TMT identification		.27**	.21**	
TMT identification \times TMT national diversity			.23**	
Age diversity	.07	.05	.05	
Gender diversity	.10	.05	.04	
Affiliation diversity	.05	.05	.06	
Education diversity	.01	.01	.01	
Goal difference	12	12	12	
Team size	04	01	02	
Task conflict	.15	.09	.06	
Emotional conflict	18*	12	13	
Model R ²	.07	.15	.20	
Change in R ²		.08*	.05*	
F	1.69	3.13**	3.87**	

Table 5 Chapter2_Regression Analyses for Knowledge Creation

	IJV Performance					
-	M1	M2	M3	M4		
National diversity		07	10	08		
TMT identification		.32***	.25**	.22**		
TMT identification × TMT national			.22**	.19*		
diversity						
Knowledge creation				.15*		
Age diversity	07	08	09	09		
Gender diversity	14	19**	20**	20**		
Affiliation diversity	14*	16*	15*	16*		
Education diversity	.10	.08	.09	.09		
Goal difference	.10	.11	.11	.12		
Team size	.02	.05	.05	.05		
Task conflict	.18*	.11	.08	.07		
Emotional conflict	11	03	05	03		
Model R ²	.10	.19	.24	.26		
Change in R ²		.09*	.05*	.02*		
F	2.33*	4.18**	4.87**	4.91**		

Table 6 Chapter 2_Regression Results for IJV Performance
Given that our sample is not large, we tested the moderated indirect relationship by following the bootstrapping approach. Such a test would provide a direct test of the significance of the indirect relationship, and is more appropriate for small to moderate samples where the sampling distribution of the indirect relationship is unlikely to be normal (Hayes, 2009; Preacher & Hayes, 2004; Preacher, Rucker, & Hayes, 2007). We calculated the conditional indirect effect at specific levels of the moderator (i.e., TMT identification with IJV). The results were presented in Table 4. The results indicate that when TMT identification with IJV was high (2 standard deviations above the mean), the indirect effect of TMT national diversity on IJV performance through knowledge creation was positive (p < .05). The indirect effect, however, was negative (p < .05) when TMT identification with IJV was low (2 standard deviations below the mean). Hence, Hypothesis 3a and 3b were supported.

IJV Performance				
TMT Identification	Indirect Effect	SE		
2 SD below mean	10*	.06		
1 SD below mean	06*	.04		
Mean	02	.01		
1 SD above mean	.02	.02		
2 SD above mean	.05*	.03		

Table 7 Chapter 2 Conditional Indirect Effects at Specific Levels of Moderator

TMT identification values are the sample mean, +/- 1 standard deviation and +/- 2 standard deviation . Indirect effect refers to the effect of IV (TMT national diversity) on DV (IJV performance) via knowledge creation. *p < .05, **p < .01

Robustness Check

In the above analyses, we used the rating of IJV performance by the senior vicepresident. To check the robustness of the results, we re-tested all hypotheses using the rating from the IJV CEO. The results for hypotheses testing remained the same. To reduce common method bias, we presented the results based on the senior vicepresident's rating of IJV performance.

As a sensitivity analysis, we replaced each of our diversity measures for categorical variables (national diversity, education diversity, gender diversity, and affiliation diversity) with an alternative measure, i.e., the Teachman's (1980) heterogeneity index.

$$H = -\sum_{i=1}^{l} Pi(lnPi)$$

The index takes into account how work group members are distributed among the possible categories of a variable. Pi is the fraction of team members falling into category i. For example, the gender variable has two possible categories (I = 2): 1 corresponds to a woman and 2 to a man. If a given team of ten members has three women and seven men, then P₁ equals .3, P₂ equals .7, and H equals .61. With this alternative measure, we obtained the same pattern of results.

We also did supplementary analysis controlling for other organizational level and industry level variables in the multiple regression analysis for IJV performance. The controlled variables include IJV age, IJV size, prior cooperation experiences among parent firms and industry in which the venture operates. None of the control variables are significant factor influencing the relationship we proposed in the model. Given our sample size is not big and the additional controls are not significant, we did not include these variables in the final model for parsimony.

DISCUSSION

In this study, we develop a more nuanced theory about the role of TMT national diversity in venture performance. Consistent with the information processing perspective, our findings showed that knowledge creation represents a key mechanism linking TMT national diversity and venture performance. However, TMT national diversity benefits IJV performance through enhanced knowledge creation only when the TMT has a strong identification with the venture. The indirect association between TMT national diversity and IJV performance (via knowledge creation) is negative when TMT identification with the venture is low. The findings from this study offer several noteworthy theoretical implications.

Implications for Joint Venture Theory and Research

Extant research on IJV TMT largely suggested and/or found that national differences are detrimental to venture performance (Hambrick et al., 2001; Li, Xin, & Pillutla, 2002). We argue for a more balanced view on the role of TMT national diversity. TMT national diversity can be beneficial to venture performance through knowledge creation, when the alternative mechanism suggested by previous literature (e.g., conflicts) was controlled for. The largely negative extant findings may well be due to the fact that prior studies did not explicitly examine the knowledge benefit associated with national diversity and the conditions under which this knowledge benefit can be attained. Our study reveals that identification with the focal organization is an important contextual factor for such knowledge benefits to be realized. TMT national diversity benefits venture performance only when TMT identification with the focal organization is high. The omission of such important contextual variable in previous studies may explain why we did not have empirical evidence documenting the positive role of TMT national diversity in venture performance.

Theoretically, our study also speaks to the knowledge-based view and transaction cost economics view of IJV. From the knowledge-based view, joint venture is a frequently

68

used organizational form for knowledge transfer and knowledge creation (Kogut, 1988). The implication is that an IJV's competitive advantage lies in whether it can combine and coordinate the diverse specialized knowledge and competence across individuals and groups (Kogut & Zander, 1996). Our research reveals that a shared organizational identity is an important condition under which individually embedded diverse knowledge and competence can be combined and utilized. We cannot assume that by choosing an IJV, the learning and knowledge creation will happen. As a matter of fact, numerous joint venture arrangements fall short to its knowledge creation mission and fail miserably (Chowdhury, 1992; Hill, & Hellriegel, 1994). This current study augments Kogut and Zander's (1996) argument on organizational identity, and provides the empirical evidence to show shared organizational identity as an important boundary condition for the knowledge based view of IJV.

From the transaction cost economics (TCE) perspective, IJV represents a governance mode for transacting knowledge particularly tacit knowledge (Kogut, 1988; Williamson, 1991). According to TCE, equity-based IJV is chosen when there is market imperfection in transacting knowledge and when internalizing the knowledge under a unified ownership (e.g., through merger or acquisition) is too costly to manage (Hennart, 1988, 1991). At the same time, compared to a hierarchy, a hybrid mode such as IJV poses special challenges to fulfill the knowledge sharing and creation mission. Within hierarchies, organizational hierarchy and high-order systems play a critical role in coordination, facilitating knowledge sharing and integration (Brown & Duguid, 2001; Kogut & Zander, 1992). Within hybrid organizational forms such as an IJV, structural coordination tools (i.e., top-down fiat based on hierarchy) do not always work (Crocker & Masten, 1988; Yan & Gray, 2002). Coordination and knowledge integration often suffers in face of goal conflicts and factionalism (Li, et al., 2002). A take-away from our study is that a shared identification with focal organization, an important psychological factor, may work as an important coordination mechanism for knowledge sharing and integration in a hybrid governance mode. A shared organizational identification may work as a substitution or complement when formal coordination structure is lacking or not strong. Organizational identification theory therefore adds beyond TCE perspective of JV by providing additional insights on how to manage knowledge sharing and creation in a hybrid governance mode.

Towards a More Nuanced Theory of TMT National Diversity and Firm Performance

While nationality has not received much attention compared to other TMT characteristics, researchers have recently noted that nationality has profound and enduring effects on executives' mindsets. National diversity is important in the mix of executive characteristics (Nielsen & Nielsen, 2013). However, theories offer contrasting predictions regarding the role of TMT national diversity in firm performance. TMT national diversity is beneficial to firm performance per information processing perspective while social categorization theory suggests that different nationalities may complicate management team integration (e.g., greater conflicts) and hence harm firm performance. It is theoretically intriguing to examine which theoretical perspective holds and under what circumstances.

We draw upon and integrate the information processing and social categorization perspectives to develop a nuanced theory about the role of TMT national diversity in firm performance. Our study reveals that knowledge creation is a key mechanism through which TMT national diversity benefits firm performance. In the context of complex managerial tasks that requires creativity, the informational dimension of national diversity is more relevant because it provides precious knowledge resources for the team to draw upon. Our research also highlights the importance of TMT identification with the focal organization as a boundary condition. According to the social categorization perspective, national diversity provides categorical cues and functions as a divisive force in TMTs. Greater national diversity is indeed associated with lower level of knowledge creation and venture performance when there is no force to tie different nationals together. Nevertheless, in TMTs with a high level of identification with the focal organization, the association between national diversity and venture performance becomes positive. Whether TMT national diversity is beneficial or detrimental therefore depends on the extent to which a shared identification with the focal organization can tie different nationals together. Our theory and findings on the moderating effect are consistent with the notion of superordinate identity in the social identity theory.

The implications from this study are different from those from previous studies which argues that informational benefits associated with national diversity outweighs the costs associated with national categorization (Nielsen & Nielsen, 2013) or national diversity mainly affect teams by its social categorical effects (Dahlin, Weingart, & Hinds, 2005). We found support for the idea that the information processing and social categorization perspectives are equally important and that they work together (i.e., interact) to explain the impact of TMT national diversity on firm performance. When TMT identification with the IJV is high, the information processing perspective indeed explains the positive effect of TMT national diversity because it enhances knowledge creation and thus IJV performance. When TMT identification with the IJV is low, the divisive effect predicted by social categorization dominates, knowledge creation is reduced, and so is IJV performance. Everything else being equal, the positive and negative impacts of TMT national diversity on performance may cancel out each other. Hence, a direct main effect of TMT national diversity on performance should not be expected. The empirical evidence from this study is consistent with this theoretical prediction. The correlation between TMT national diversity and venture performance is not significant (r = -.11, ns), and there is no significant association between TMT national diversity and IJV performance from the hierarchical regression results either.

Managerial Implications

Organizations have increasingly recognized workforce diversity as a challenging reality. It has become even more challenging when talents are from different national backgrounds. However, very few field studies of nationally diverse teams have been published in the English-language journals (Jackson & Joshi, 2011). This study utilizes IJVs as a research setting to advance our understanding of the role of TMT national diversity in knowledge creation and IJV performance.

Our findings reveal that multinational TMTs have the potential for knowledge creation. Managers with different national backgrounds bring along their institutionally

embedded experiences and knowledge to the team and their national diversity gives the team knowledge sources for creative solutions and ideas. Multinational companies may want to make good use of the potential knowledge value associated with multinational TMTs.

On the other hand, the knowledge value of multinational TMTs does not realize itself automatically. As our study suggested, a strong organizational identification is critical for any organization to realize such value. A multinational TMT needs a high level of organizational identification to tie nationally diverse team members together. A strong bond with the focal organization is required to overcome the divisive effect of national categorization within the TMT. The organizational identification literature has discussed antecedents and bases for a strong psychological bond towards the focal organization. For instances, managers need to be exposed to the uniqueness and prestige of the organization relative to other organizations (Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994). Various socialization programs can be helpful in achieving organizational identification as well. In the context of IJVs, tying managers' careers to the venture (rather than the foreign or local parent firms) may foster the identification with the venture and the same-boat feelings among managers.

Overall, the key take-away from this study is that knowledge creation potential of teams is best achieved by introducing, not limiting, individual identities based on nationalities, and locating them within the context of a biding organizational identity.

73

Limitations and Directions for Future Research

This study has limitations that point to fruitful future research directions. First, this study is cross-sectional and thus does not establish causality. Conceptually, the reverse relationships are less likely. There is no strong theory to suggest that better IJV performance would necessarily lead to more knowledge creation. Ventures performing well may well see less need to create new knowledge. Similarly, there is no strong theory to suggest that knowledge creation would cause national diversity in one way or another. However, future research can benefit from a longitudinal design to better establish the casual relationship.

Second, in this study, we drew upon the notion of superordinate identity and examined TMT identification with IJV as a moderator in the relationship between TMT national diversity and knowledge creation. Future research may draw upon other theoretical perspectives to identify and examine other possible moderators. For example, from a learning perspective, team learning behavior, defined as an ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussion errors or unexpected outcomes of actions (Edmondson, 1999), may interact with TMT national diversity as well. Such examination in future research will provide further and more comprehensive practical suggestions to managers.

74

Conclusions

Despite the limitations, this study advances our current understandings of *when* and *how* to better utilizes TMT national diversity for superior IJV performance. The key finding is that when nationally diverse team members are strongly identified with the focal organization, they are more likely to realize their potentials for knowledge creation. The implication is that firms should put together nationally diverse TMTs, and situate them within the context of a biding organizational identity.

Chapter 3: Too Much Of A Good Thing? The Role of TMT Organizational Identification on Joint Venture Performance

Organizational identification is defined as the degree to which a person's self-identity is intertwined with the identity of the organization, or the degree to which one defines himself or herself in terms of the attributes of the organization (Ashforth & Mael, 1989; Dukerich, Golden, & Shortell, 2002). Consistent with the organizational identification literature, top management team (TMT) identification with the focal organization is defined as team members' awareness that they belong to the organization from which they define their own identity (Argote & Kane, 2009; Ashforth & Mael, 1989; Dukerich, Golden, & Shortell, 2002). This construct reflects that TMT members perceive themselves psychologically intertwined with the fate of the organization (Ashforth & Mael, 1989). The literature on organizational identification has overwhelmingly focused on the benefits of identification with a given entity. A broad array of organizational outcomes (e.g., cooperation, participation, turnover intentions, customer orientation, and better control by the organization) has been found to be associated with identification with organizationally relevant targets (Ashforth, Harrison, & Corley, 2008; Bartel, 2001; Haslam & Ellemers, 2005; Kramer, 2006; Mael & Ashforth, 1995; Thakor & Joshi, 2005). Researchers also found that organizational identification promotes knowledge sharing

and organizational learning (Argote & Kane, 2009).

On the other hand, however, some researchers have noted the dark side of organizational identification, and cautioned that there may be pathologies associated with it. When individuals are over identified with an entity, they may foster automatic trust on other members, and defer too readily to the in-group. They are more influenced by conformity pressures, which create the groupthink problem in the team decision making process (Turner & Pratkanis, 1998 a; Turner &Pratkanis, 1998b). Researchers have argued that organizational identification could have adverse effect on R&D teams' creativity and impede organizational learning and adaptation (Asch, 1951; Dukerich, Golden, & Shortell, 2002; Dukerich, Kramer, & Parks, 1998; Rotondi, 1975).

In the literature of international joint venture studies, scholars have noted that TMT identification is a very important factor affecting venture performance. An IJV is a legally independent entity that represents the joint equity holding of two or more partner firms, at least one of which is headquartered in a different national setting (Contractor & Lorange, 1988). IJV is a frequently-used organizational form to pool knowledge from different firms together into a cooperative effort (Contractor & Lorange, 1988; Hennart, 1988). IJVs present a multi-group context, and split loyalty and identification is always an issue that may stifle JV managers' commitment and productivity. Researchers maintain that a strong identification with the focal organization, i.e., identification with the IJV, is an important psychological factor for superior IJV performance (Salk & Shenkar, 2001; Li, Xin, & Pillutla, 2002). This current study goes beyond the previous study and show that TMT identification with IJV is *not* always a good thing.

The role of organizational identification in firm performance is a complex one. Given the positive and negative sides of organizational identification, it is possible that the relationship between organizational identification and firm performance is a curvilinear one (i.e., an inverted U). Specifically, we propose that TMT organizational identification can be beneficial to firm performance through fostering TMT knowledge creation. Moreover, the degree of organizational identification matters. From low to moderate level of TMT organizational identification, identification increases knowledge creation and thus firm performance. After a certain point and when TMT members are over-identified with the focal organization, the beneficial effects decreases or even become negative because very high levels of organizational identification breeds status quo and hampers knowledge creation. This current study, therefore, contributes to the literature by providing a nuanced understanding about the role of organizational identification in knowledge creation and firm performance.

THEORY AND HYPOTHESES

TMT Identification with IJV and Knowledge Creation

TMT is important in shaping major organizational outcomes (Carpenter, Geletkanycz, & Sanders, 2004; Hambrick & Mason, 1984), and its psychological characteristics are found to have critical implications to IJV management (Hambrick, Li, Xin, & Tsui, 2001a; Li & Hambrick, 2005). Research suggests that a shared identity with a focal organization increases knowledge transfer and creation in teams (Argote & Kane, 2009; Kane, Argote, & Levine, 2005; Van Der Vegt & Bunderson, 2005). In the context of IJVs, top managers

often come from different countries/cultures and thus have different bodies of knowledge. We expect that TMT identification with the focal organization (i.e., the IJV) has a positive impact on t knowledge creation, which in turn enhances IJV performance.

Consistent with work in the social identification literature, TMT identification with IJV is defined as team members' awareness that they belong to the joint venture from which they derive a portion of their own identity (Argote & Kane, 2009; Ashforth & Mael, 1989). TMT identification with IJV is a psychological state that derives from members' feeling a sense of belonging to the entity. IJV identity provides a coordination mechanism that influences the processes of knowledge transfer and creation in organizations (Foss, 2007).

Researchers have found that social identity has significant and consistent effects on opinions, attitudes, and behaviors toward members of one's own group. Reviews of previous work confirm that individuals view those they share an identity more positively than those with whom they do not share such identity (Dasgupta, 2004). There is considerable evidence of this "own-group" favoritism from both laboratory and field settings (Bartel, 2001; Hewstone, Rubin, & Willis, 2002; Tyler & Blader, 2000). Group members view others with whom they share the same identity as being more trustworthy, honest, loyal, and cooperative. Researchers also found that individuals tend to be more influenced by the opinions of those with whom they share a social identity (Wood, 2000). Individuals tend to positively evaluate the information from in-group members, and this is likely to increase receptivity to their ideas.

In a setting that involves information and knowledge exchange, and when the source

and the recipient share an identity, recipients may exert a pattern of adoption, that is, they thoroughly consider the source's ideas, and were more likely to be affected by the persuasiveness of the arguments (Fleming & Petty, 2000; Knippenberg; MacKie, Gastardo-Conaco, & Skelly, 1992; Mackie, Worth, & Asuncion, 1990). In contrast, when the source and recipient do not share an identity, individuals were not affected by the persuasiveness of the source's arguments. Moreover, the recipient is more likely to be threat can lead to a reduction of information processing or a lack of thoughtful consideration of the sources' arguments (Staw, Sandelands, & Dutton, 1981).

Evidence from the field indicates that a shared organizational identity promotes consideration of knowledge, ideas, and innovations from others within the firm boundary. It leads to thoughtful consideration of knowledge and adoption of performance-enhancing ideas. For instances, Kane et al. (2005) found that groups that shared an identity with the rotating member were more likely to adopt the knowledge when it was superior rather than inferior than their own. By contrast, groups that did not share the identity with the rotating member were not likely to adopt the knowledge, regardless of the quality.

When it comes to the characteristics of knowledge that is being transferred, researchers have found that a superordinate identity is especially beneficial to transfer knowledge that is tacit (Nonaka, 1994; Nonaka & Takeuchi, 1995) and complex in nature (Galbraith, 1990). For instances, Kane (2005) demonstrated that a superordinate social identity was more effective for transferring knowledge that is low in demonstrability than for transferring knowledge that is high in demonstrability. The rationale is that knowledge low in demonstrability requires more consideration to recognize its merits than more demonstrable knowledge. Besides this, superordinate identity also enhances social interactions and close relationships among team members, which also makes it easier to exchange implicit knowledge. As JV is usually used as a vehicle to transfer "tacit" knowledge (Kogut, 1988), we expect that organizational identification can be especially critical for the exchange of knowledge among IJV TMT members when the knowledge is implicit, complex or not easy to understand.

Knowledge transfer and sharing is necessarily for the creation of new knowledge. Both theory and evidence also suggest that a superordinate identity may spark knowledge creation. Knowledge creation in IJVs involves the generation of new and potentially useful ideas related to IJV operations (Amabile, 1988; Woodman et al., 1993). Knowledge creation increases with the number of possible ways of recombining and building on existing knowledge (Kogut & Zander, 1992; Nickerson & Zenger, 2004; Schumpeter, 1934). Thus, new knowledge can be created through attempts to exchange and combine knowledge among diverse group members. Because members who are involved in a superordinate identity consider knowledge thoroughly, they are more adept at combining and developing new ideas than a group that lacks such superordinate identity is associated with spontaneous communication (Hinds & Mortensen, 2005) and team learning behaviors, such as challenging group members' ideas and perspectives (Van Der Vegt & Bunderson, 2005).

TMT members in an IJV may be transferred from parents companies, and usually

different in national backgrounds (Hambrick et al., 2001a; Li & Hambrick, 2005). They bring with them valuable and diverse knowledge bases to the venture. When team members share a superordinate identity, i.e. identification with the venture, they are likely to have a higher level of knowledge sharing and creation in the team. Hence, we hypothesize:

Hypothesis 1: In the context of IJVs, TMT identification will be positively related to TMT knowledge creations.

TMT Knowledge Creation and IJV Performance

Knowledge management has become increasingly important to organizations. Knowledge creation, defined in this study as the generation of new and useful ideas regarding an organization's operations (e.g., processes, and products), is especially critical to organization's survival, renewal and growth in today's turbulent and competitive business environment (Amabile, 1988; Woodman, Sawyer, & Griffin, 1993; Zhou & George, 2001). Researchers have argued that the ability to exchange and create knowledge is a source of competitive advantage for firms (Grant, 1996; Kogut & Zander, 1996; Teece, Pisano, & Shuen, 1997).

Joint venture is a frequently used organizational form to transfer and create new knowledge (Hennart, 1988; Kogut, 1988). From the knowledge-based view, firms are consisted of a knowledge base which is not easily diffused across the boundaries of the firm. A joint venture, therefore, is a vehicle by which "tacit" knowledge is transferred. Parent firms pool their knowledge together, and new knowledge created have been shown to lead to superior JV performance (Dhanaraj et al., 2004; Lyles & Salk, 1996; Steensma & Lyles, 2000), especially when the organizational knowledge is "tacit" in nature (Polanyi, 1976).

TMTs in JVs are key to the knowledge transfer and creation processes (Li et al., 2002). On one hand, it includes people from parent firms and brings to the JV their knowledge bases that new "combinative" knowledge can be built upon. On the other hand, they are the key actors who have tremendous influences in the cross-pollen of knowledge. Therefore, consistent with the upper echelon literature (Carpenter et al., 2004), new ideas and solutions from TMT are likely to have positive impact on IJV performances. Hence, we have:

Hypothesis 2: TMT Knowledge creation will be positively related to IJV performance.

Indirect Linear Relationship between TMT Identification and IJV Performance

We argue that TMT identification with the venture positively relates to IJV performance via TMT knowledge creation. TMT members bring to the venture with their valuable knowledge bases. This individual based knowledge could be from their personal education background, functional expertise, work experiences with the parent firm, and life experience in the foreign countries. This knowledge base has the potential to spark innovative solutions. When TMT members identify with the venture, they view ideas from their "in-group" peers with a greater receptivity, and think thoroughly. The psychological belonging to the same group stimulates consideration of diverse ideas and perspectives. Moreover, as we discussed earlier, TMT identification is particularly beneficial to the transfer of tacit knowledge (Argote & Kane, 2009). And tacit knowledge is most valuable for firms to gain competitive advantage (Conner & Prahalad, 1996; Kogut & Zander, 1993). The knowledge transferred from the parent firms to the venture via TMT members, and the new knowledge created based on the exchange of diverse perspectives among them, give the venture an edge to gain superior performance. Hence, we hypothesize:

Hypothesis 3: TMT identification will have an indirect positive relationship with IJV performance via TMT knowledge creation.

Curvilinear Relationship between TMT Identification and IJV Performance

TMT identification with the venture works as a coordination mechanism to facilitate knowledge exchange and integration among IJV TMT members. Identified with the same focal organization, TMT members are more likely to utilize their knowledge and experiences for creating new and useful ideas. However, the relationship between TMT identification with the venture and venture performance is not simple. There is a point above which the increase in the level of identification with the venture may actually reduce the team's ability to generate new and useful ideas.

Researchers are recognizing the potentially negative implications when team members are over-identified with an organization. Over-identification happens when the need for distinctiveness or differentiation is very low, and when the self becomes diminished (Dukerich et al., 1998). There are some negative organizational consequences to over-identification, especially when a team is faced with complex tasks that require creative solutions. A strong identification with other members may foster an automatic trust in them. In a setting of collective sense-making and decision making, this automatic trust make individuals sometimes defer too readily to other members. They perceive less need for intervening in questionable behavior, and suppress dissent when doubt is called for (Dukerich et al., 1998). Accomplishing creative tasks and achieving high quality decision making requires not only the cooperative pooling of information but also the willingness to challenge claims about the interpretation of that information. Overidentification may create group-thinking problem that kills innovation from teams. Researchers have argued the potential detrimental effect of organizational identification on creativity and organizational learning (Dukerich et al., 1998; Rotondi, 1975).

When TMT members are too identified with the venture, they are likely to be trapped in group thinking and the team's ability to generate creative ideas is reduced. While identification with the focal organization helps TMT for knowledge exchange and integration and foster venture's performance, over-identification has detrimental effects on TMT knowledge creation and venture performance. Hence, we hypothesize:

Hypothesis 4: There is an inverted U-shaped curvilinear relationship between TMT identification and TMT knowledge creation: the knowledge creation increases with increasing TMT identification with the venture but decreases at the highest levels of TMT identification.

Hypothesis 5: There is an inverted U-shaped curvilinear relationship between TMT identification and IJV performance: IJV performance increases with increasing TMT identification with the venture but decreases at the highest levels of TMT identification.

METHODS

Sample

We test the hypotheses using IJVs operating in China. China obtains approximately 60 percent of the foreign direct investment from international joint ventures (World Investment Report, 2006). Given the market competition dynamics, IJVs in China present a rich research context for examination of knowledge creation of firms and performance outcomes.

The data was collected through two channels. 103 IJVs were identified in Jiangsu province. A professor at Nanjing University directed a team of graduate students to conduct the surveys at the physical location of the sample IJVs. The surveys were distributed, completed, and collected on site. Respondents were informed that their responses would be kept confidential and used for research purposes only. In the second channel, 115 IJVs were identified from the alumni database of China Europe International Business School (CEIBS). A graduate research assistant then sent questionnaires (through express delivery, fax, e-mail, or on-site visit) to the 109 IJVs that agreed to participate. Respondents were assured that their responses would be kept confidential and used for research purposes only. After three rounds of follow-up, we received responses from 82 IJVs. For both data collections, there was one pair of questionnaires (one for the CEO/general manager and one for a senior vice-president) for each IJV. The pair of questionnaires was assigned a unique number for matching purposes.

The final sample consisted of 185 IJVs. One average, they operated for 9.5 years

and had 1,066 employees. In terms of industry, 54.86% were in the manufacturing industry, 15.43% were in the high technology industry, and 13.14% were in the service industry. On average, an IJV TMT consisted of 9 team members.

Measures

All items were rated on a five-point scale. The items were translated into Chinese following the back translation procedure (Brislin, 1980). We provided respondents with the English version upon request. An IJV senior vice-president rated TMT identification, and reported information on TMT members' demographics. We then calculated the diversity measures based on these objective demographic information. IJV CEOs rated the items for TMT knowledge creation and the senior vice president rated IJV performance.

TMT identification. We adapted the multi-item measure of organizational identification from Ashforth and Mael (1992) to measure TMT identification with IJV. This measure has been validated and used extensively in prior studies (Ashforth, Saks, & Lee, 1998; Bergami & Bagozzi, 2000; Dukerich et al., 2002). Respondents were instructed to rate the extent to which the items truly describe the TMT identification with the focal entity (i.e., the IJV top managers work for). Sample items include, "When someone criticizes the focal entity, JV top managers feels like a personal insult"; "JV top managers are very interested in what others think about the focal entity" (1=very untrue; 2=somewhat untrue; 3=neutral; 4=somewhat true; 5=very true). Alpha for these items was 0.93.

TMT knowledge creation. To measure TMT knowledge creation, we used a fouritem scale adapted from previous research that assesses the development and application of new and useful ideas by teams (Anderson & West, 1998; De Dreu, 2002; Zhou & George, 2001). We adapted the items to reflect the development and application of new and useful ideas by IJV TMT members. Respondents were instructed to rate the extent to which TMT members engage in the behaviors described in the items. The items include: a) members often bring about improved procedures for JV operations; b) members often generate creative (new and useful) ideas; c) members often institute new work methods that are more effective; d) members frequently bring about new technologies, processes, and/or product ideas in the JV (1 = to a very low extent to 5 = to a very large extent). Alpha for these items was 0.88.

LJV performance. Conceptualizing and measuring JV performance is a complex issue (Yan & Zeng, 1999). Previous research has used objective measures (e.g., duration and financial gains) and subjective measures (e.g., goal attainment and satisfaction) (Park & Ungson, 1997). We utilized an index based on a senior vice-president's subjective ratings of the focal IJV's performance in five areas as compared to major competitors: a) return on investment; b) sales; c) profit growth rate; d) market share growth; and e) reputation. The items covered the diverse concerns of local and foreign parents and of JV management in evaluating venture success. The subjective measurement approach has been shown to correlate, with a high degree of reliability, to objective measures (Chandler & Hanks, 1993; Geringer & Hebert, 1991). Cronbach's alpha was .85 for the scale.

Control variable

We included control variables, including both compositional (national diversity, age diversity, gender diversity, affiliation diversity and education diversity) and team processes variables (task conflict, emotional conflict, and goal differences). Team size was also controlled.

Team composition characteristics. National diversity was based on TMT members' dominant national affiliation. We measured national diversity by following previous studies (Pelled, Eisenhardt, & Xin, 1999). Specifically, the senior vice president from each JV provided the nationality of each management team member. We then used Blau's index (1977) to calculate national diversity.

$$H = 1 - \sum_{i=1}^{l} (Pi)^2$$

Where Pi is the proportion of group members in category i, and I is the number of possible categories. For example, if a given team of ten members has three Chinese and seven Japanese, then P1 equals .3, P2 equals .7, and H equals .42.

Affiliation diversity was based on TMT members' prior affiliations (before joining the IJV)":1) foreign parent company; 2) local parent company; 3) other companies. We used Allison (1978) approach for numeric data (age diversity), using the variable's standard deviation divided by the mean. We used Blau's index for categorical data (gender diversity, education diversity, and affiliation diversity).

Team conflict. The team literature has long suggested that intra-team conflicts are important factors that may affect team outcomes (Jehn, Northcraft, & Neale, 1999; Pelled et al., 1999). We controlled for the two types of conflicts that may arise in teams - task conflict and emotional conflict. Task conflict refers to a condition in which group members disagree about task issues, including key decision areas, procedures, and the appropriate choice for action, and emotional conflict refers to a condition in which group members have interpersonal clashes characterized by anger, frustration, and other negative feelings (Eisenhardt, Kahwajy, & Bourgeois 1997; Jehn, 1994). We measured task and emotional conflict by adapting the scale from prior studies (Jehn, 1994; Pelled et al., 1999) to the context of IJV. The task conflict scale had four items ($\alpha = 0.89$), and the emotional conflict scale had six items ($\alpha = 0.91$). A sample item for the task conflict scale includes "There are frequent conflicts about ideas in the team"; a sample item for the emotional conflict scale includes "There is a great deal of emotional friction among the members" (1 = to a very low extent to 5 = to a very large extent).

Goal difference. As TMT members may previously affiliate with parent companies, and if the parent companies have incongruence goals with each other, this may have impact on the cooperation and decision making process among team members (Luo, Shenkar, & Nyaw, 2001). We hence controlled the goal differences between the parent companies. We measured goal difference by using a composite index containing the following 13 objectives between parents, each on a five-point Likert scale: e.g., a) generate profit; b) take advantage of investment incentives; c) access to monetary resources. The computation of this index is based on the following formula:

$$GI_{fl} = \frac{1}{13} \sum (Q_{if} - Q_{il})^2 / V_{il}$$

Where GI is the goal difference between foreign and local parents; Q_{if} is the Likert scale on question i for the foreign partner; Q_{il} is the scale on question i for the local partner; and V_i is the variance of question i. This measure and its computation were taken from Luo and Park (2004).

Team size. We controlled for the size of the team to rule out the possible alternative explanation that team size may drive any team performance (Bantel & Jackson, 1989; Haleblian & Finkelstein, 1993).

RESULTS

Table 1 presents descriptive statistics and zero-order correlations among the major variables. The relationship between TMT identification and knowledge creation was positive (r = .33, p < .01). TMT knowledge creation was also positively associated with the IJV performance (r = .26, p < .01).

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Age diversity	.16	.05	-										
2. Gender diversity	.29	.16	04	-									
3. Affiliation diversity	.37	.18	.05	10	-								
4. Education diversity	.36	.20	10	.02	.01	-							
5. Task conflict	2.90	.83	01	.07	.08	03	-						
6. Emotion conflict	1.93	.82	.04	.09	.06	23**	.29**	-					
7. Team size	9.17	2.58	.11	01	.03	.28**	10	04	-				
8. Goal difference	1.32	1.37	04	04	.02	01	.02	07	.08	-			
9. National diversity	.19	.18	.04	21**	.31**	02	.01	06	.01	03	-		
10. TMT IJV identification	4.22	.88	.03	.08	.09	.05	.17*	17*	.11	03	08	-	
11. Knowledge creation	3.62	.72	.06	.09	.04	.04	.10	14	.02	13	11	.33**	-
12. IJV performance	3.69	.72	-0.09	12	12	.12	.12	10	.01	.10	11	.31**	.26**

Table 8 Chapter3_Means, SDs and Correlations

Hypothesis Testing

To test the hypotheses, we followed the three steps outlined by Baron and Kenny (1986). In step 1, we examine the relationship between TMT identification and TMT knowledge creation. In step 2, we examine the relationship between TMT identification and IJV performance. In step 3, we add knowledge creation to the equation in step 2. The regression results for step 1 are presented in Table 2. The control variables were in Model 1, TMT identification was entered in Model 2, and the square term of TMT identification was entered in Model 3. The regression coefficient for TMT IJV identification with knowledge creation was significant ($\beta = .27$, p<.001) in Model 2. Hence, Hypothesis 1 was fully supported. Model 3 provides results for the quadratic term of TMT identification.

Results for steps 2 and 3 are presented in Table 3. In Model 1, we entered the control variables. In Model 2, we added TMT identification. In model 3, we added the quadratic term of TMT national diversity to the regression equation. In Model 4, we added knowledge creation to the Model 3 equation. Results indicated that the association between knowledge creations on IJV performance was significant ($\beta = .18$, p< .05). Hence, Hypothesis 2 was fully supported. TMT identification was positively related to IJV performance ($\beta = .32$, p< .001), and this positive association became weaker when knowledge creation was in the equation ($\beta = .12$, ns).

In terms of curvilinear relationship, Model 3 in Table 2 showed that the coefficient of the quadratic term of TMT identification was not significant ($\beta = -.15$, ns). Hence,

Hypothesis 4 was not supported. Model 3 in Table 3 showed that the coefficient of the quadratic term of TMT identification on IJV performance was significant (β =-.24, p< .05). Hence, Hypothesis 5 was fully supported.

	Knowledge Creation				
	Model 1	Model 2	Model 3		
TMT identification		0.27**	0.16		
TMT identification square			-0.15		
National diversity	-0.14+	-0.11	-0.14+		
Age diversity	0.07	0.05	0.05		
Gender diversity	0.10	0.05	0.04		
Affiliation diversity	0.05	0.05	0.06		
Education diversity	0.01	0.01	0.01		
Goal difference	-0.12	-0.12+	-0.12+		
Team size	-0.04	-0.01	-0.02		
Task conflict	0.15+	0.09	0.06		
Emotional conflict	-0.18*	-0.12	-0.13+		
Model R ²	.09	.15	.16		
Change in R ²		.06*	.01		
F	1.89+	3.13**	3.09**		

Table 9 Chapter3_Regression Results for Knowledge Creation

	IJV Performance				
	Model 1	Model 2	Model 3	Model4	
TMT identification		0.32**	0.15	0.12	
TMT identification square			-0.24**	-0.21*	
Knowledge creation				0.18*	
National diversity	-0.11	-0.07	-0.10	-0.08	
Age diversity	-0.07	-0.08	-0.09	-0.09	
Gender diversity	-0.14+	-0.19**	-0.20**	-0.20**	
Affiliation diversity	-0.14*	-0.16*	-0.15*	-0.16*	
Education diversity	0.10	0.08	0.09	0.09	
Goal difference	0.10	0.11	0.11	0.12+	
Team size	0.02	0.05	0.05	0.05	
Task conflict	0.18*	0.11	0.08	0.07	
Emotional conflict	-0.11	-0.03	-0.05	-0.03	
Model R ²	.11	.19	.22	.25	
Change in R ²		.09*	.03*	.03*	
F	2.29*	4.18**	4.48**	4.73**	

Table 10 Chapter3_Regression Results for IJV Performance

To test the indirect relationship between TMT identification and IJV performance, we conducted the sobel test. We used the sobel test because Baron and Kenny's (1986) procedure does not provide a direct test of the significance of the mediation effect. In other words, it shows that the effect of independent variable is reduced when the mediator is in the equation, but does not show whether the reduction is statistically significant

(MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Sobel, 1982). The Sobel test results showed that the indirect effect was significant (Z = 2.63, p < .01). Given that our sample size was not large, we also tested the indirect effect by following the bootstrapping approach which does not assume a normal distribution for the indirect effect (Hayes, 2009; Preacher & Hayes, 2004). Such a test would provide a direct test of the significance of the indirect effect, and is particularly appropriate for small to moderate samples where the sampling distribution of the indirect effect is unlikely to be normal (Hayes, 2009; Preacher & Hayes, 2004). The bootstrapping results in Table 4 indicate that the indirect relationship between TMT identification and IJV performance via knowledge creation was significant ($\beta = .07$, p < .05, 95% CI [.02, .15]). Hypothesis 3, therefore, was supported.

	JV Performance			
	β	SE		
Path Analysis				
X-M	.31**	.07		
M-Y	.20**	.07		
Total effect	.34**	.07		
X-Y	.27**	.07		
Bootstrapping				
Indirect effect	.07	.03		
95% CI	.02	.15		

Table 11 Chapter3_Results of Bootstrap Analyses on the Indirect Effect through Knowledge Creation

X refers to TMT identification; M refers to TMT knowledge creation; Y refers to IJV performance. 5,000 bootstrap samples; CI= confidence interval. N=185. +p < .1. *p < .05, **p < .01.

Robustness Check

In the above analyses, we used the rating of IJV performance by a senior vice president. To check the robustness of the results, we re-tested all hypotheses using the rating from the IJV CEO. The results for hypotheses testing remained the same. To reduce common method bias, we presented the results based on the senior vice president's rating of IJV performance.

As a sensitivity analysis, we replaced each of our diversity measures for categorical variables (national diversity, education diversity, gender diversity, and affiliation diversity) with an alternative measure. Instead of Blau's index, we used Teachman's (1980) heterogeneity index.

$$H = -\sum_{i=1}^{l} Pi(lnPi)$$

The index takes into account how work group members are distributed among the possible categories of a variable. Pi is the fraction of team members falling into category 1. For example, the gender variable has two possible categories (I = 2): 1 corresponds to a woman and 2 to a man. If a given team of ten members has three women and seven men, then P1 equals .3, P2 equals .7, and H equals .61. With this alternative measure, we obtained the same pattern of results.

We also did supplementary analysis controlling for other organizational level and industry level variables in the multiple regression analysis for IJV performance. The controlled variables include IJV age, IJV size, number of parent firms, cultural difference between major parent firms and industry. None of the control variables are significant factor influencing the relationship we proposed in the model. Given our sample size is not large, we did not include these variables in the model for parsimony.

DISCUSSION

Implications for Organizational Identification Theory and Research

This paper made noteworthy contributions to organizational identification theory and research. We showed that identifying with focal organization boosted organizational performance via knowledge creation. Having a superordinate identification benefits the knowledge creation process in a TMT team by facilitating the communication, but at the same time put team members at a risk of over conformity which can kill original ideas. Previous research has documented the double-sword nature of organizational identification. While the positive side of organizational identification is well documented, we have very little empirical evidence on the negative side of it.

Our study is the one among the first empirical studies to present evidence on the effect of over-identification with an organization. We synthesize the theories on both bright and dark sides of organizational identification and empirically showed that TMT identification with the focal organization can benefit organizational performance till certain point. The essence of our model points out that there is an important boundary condition to reap the benefits of organizational identification. Degree of organizational identification matters. When team members are over-identified with the focal organization, identification becomes harmful for performance, especially for teams that work on complex tasks.

Implications for JV Theory and Research

Researchers have argued that developing identification with the venture in an IJV TMT is an important condition for a venture to operate and perform (Li, Xin, & Pillutla, 2002; Salk & Shankar, 2001). Our study confirms the argument, and goes beyond by *revealing* a mechanism through which TMT's organizational identification with the venture affects venture performance. TMT identification with the venture works as the coordination mechanism for more knowledge creation from the team. More importantly, our model provides boundary condition on the beneficial role of TMT organizational identification. Developing the identification with focal organization is good till certain point. Overidentification can actually be harmful for venture's performance.

Limitations and Directions for Future Research

This study has several limitations that point to fruitful future research directions. First, this study is cross-sectional and thus does not establish causality. Conceptually, the reverse relationships are less likely. There is no strong conceptual reason to believe that knowledge creation causes identification with the IJV. Similarly, there is no strong reason to suggest that better IJV performance would necessarily lead to more knowledge creation. Ventures performing well may well see less need to create new knowledge. In fact, many evidences suggest that successful firms become complacent and stuck in status quo and thus do not innovate.

Second, it is very interesting to observe that the quadratic term of TMT identification on knowledge creation is not significant in the sample. An interesting feature of an international joint venture is that its TMT is with members with more
diverse nationalities than the TMTs in a domestic setting. The salience of nationality could be a factor to remind team members about their uniqueness in the team hence reduce the negative effect of over-identification (Hornsey & Hogg, 2000). The role of national diversity on over-identification is an intriguing future research question.

Third, in this study we examine knowledge creation as the mediator. We found that knowledge creation partially mediates the relationship between TMT identification and IJV performance. TMT identification may relate to IJV performance through a number of different mechanisms. For example, coordination among team members would be one possible mechanism. Future research may draw upon other theories to examine additional mechanisms.

Conclusions

Despite the limitations, this study provides a nuanced understanding about the roles of organizational identification in organizational performance. The key finding is that organizational identification is beneficial to venture performance till certain point. When TMT members are identified with focal organization, they are more likely to exchange and integrate their expertise and experiences for more knowledge creation. Under the circumstances where team members are over-identified with the organization, however, organizational performance suffers.

101

References

- Ahearne, M., Bhattacharya, C. B., & Gruen, T. 2005. Antecedents and consequences of customer-company identification: expanding the role of relationship marketing. *Journal of Applied Psychology*, 90(3): 574.
- Albert, S., & Whetten, D. 1985. Organizational Identity. In L. S. Cummings, B (Ed.), *Research in Organizational Behavior*, Vol. 7: 263-295. Greenwich: JAI Press.
- Allison, P. D. 1978. Measures of inequality. *American Sociological Review*, 43: 865-880.
- Anderson, N. R., & West, M. A. 1998. Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of organizational Behavior*, 19(3): 235-258.
- Argote, L., & Kane, A. A. 2009. Superordinate identity and knowledge creation and transfer in organizations. In N. Foss, & S. Michailova (Eds.), *Knowledge governance: processes and perspectives*: 166-190. Oxford, UK: Oxford University Press.
- Ariño, A. 2002. Measures of strategic alliance performance: An analysis of construct validity. *Journal of International Business Studies*, 34(1): 66-79.
- Arrow, K. 1970. *Essays in the theory of risk-bearing*: North-Holland Amsterdam.
- Ashford, S., & Barton, M. 2007. Identity-based issue selling, *Identity and the modern organization*: 223–244: Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Ashforth, B., Saks, A., & Lee, R. 1998. Socialization and newcomer adjustment: The role of organizational context. *Human Relations*, 51(7): 897-926.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. 2008. Identification in organizations: An examination of four fundamental questions. *Journal of management*, 34(3): 325-374.

Ashforth, B. E., & Johnson, S. A. 2001. Which hat to wear? The relative salience of

multiple identities in organizational contexts. In M. Hogg, & D. Terry (Eds.), *Social identity processes in organizational contexts*: 31-48. New York: Psychology Press.

Ashforth, B. E., & Mael, F. 1989. Social identity theory and the organization. *The Academy of Management Review*, 14(1): 20-39.

Ashforth, B. E., & Saks, A. M. 1996. Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal*: 149-178.

- Bantel, K. A., & Jackson, S. E. 1989. Top management and innovations in banking: does the composition of the top team make a difference? *Strategic Management Journal*, 10(S1): 107-124.
- Barden, J. Q., Steensma, H. K., & Lyles, M. A. 2005. The influence of parent control structure on parent conflict in Vietnamese international joint ventures: an organizational justice-based contingency approach. *Journal of International Business Studies*, 36(2): 156-174.
- Barkema, H. G., Shenkar, O., Vermeulen, F., & Bell, J. H. J. 1997. Working abroad, working with others: How firms learn to operate international joint ventures. *Academy of Management Journal*: 426-442.
- Barkema, H. G., & Vermeulen, F. 1997. What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of International Business Studies*, 28(4): 845-864.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173.
- Bartel, C. 2001. Social comparisons in boundary-spanning work: Effects of community outreach on members' organizational identity and identification. *Administrative Science Quarterly*, 46(3): 379-413.
- Beamish, P. W. 1988. *Multinational joint ventures in developing countries*: Routledge London.
- Bergami, M., & Bagozzi, R. 2000. Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39(4): 555-577.
- Blau, P. M. 1977. Inequality and heterogeneity: A primitive theory of social structure.

New York: Free Press

- Boivie, S., Lange, D., McDonald, M., & Westphal, J. 2009. Me or We: The Effects of CEO Organizational Identification on Agency Costs. *Academy of Management Journal*, 2009.
- Borys, B., & Jemison, D. 1989. Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. *Academy of management review*, 14(2): 234-249.
- Brewer, M. 1979. In-group bias in the minimal intergroup situation: A cognitivemotivational analysis. *Psychological Bulletin*, 86(2): 307-324.
- Brewer, M. B., & Kramer, R. M. 1985. The psychology of intergroup attitudes and behavior. *Annual review of psychology*, 36(1): 219-243.
- Brewer, M. B., & Miller, N. 1984. *Groups in contact: The psychology of desegregation*. Waltham, Massachusetts: Academic Press.
- Brislin, R. 1980. Translation and content analysis of oral and written material, *Handbook* of cross-cultural psychology: 389-444. Boston, MA: Allyn and Bacon.
- Brown, J., & Duguid, P. 2001. Knowledge and organization: A social-practice perspective. *Organization Science*, 12(2): 198-213.
- Brown, R., & Abrams, D. 1986. The effects of intergroup similarity and goal interdependence on intergroup attitudes and task performance. *Journal of Experimental Social Psychology*, 22(1): 78-92.
- Carpenter, M. A., & Fredrickson, J. W. 2001. Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of management journal*, 44(3): 533-545.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. 2004. Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6): 749.
- Carpenter, M. A., Sanders, G., & Gregersen, H. B. 2001. Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of management journal*, 44(3): 493-511.

- Chandler, G., & Hanks, S. 1993. Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing*, 8(5): 391-408.
- Chen, D., Park, S. H., & Newburry, W. 2009. Parent contribution and organizational control in international joint ventures. *Strategic Management Journal*, 30(11): 1133-1156.
- Child, J. 1973. Predicting and understanding organization structure. *Administrative science quarterly*: 168-185.
- Chowdhury, J. 1992. Performance of international joint ventures and wholly owned foreign subsidiaries: A comparative perspective. *Management International Review*, 32: 115-133.
- Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: a new perspective on learning and innovation. *Administrative science quarterly*, 35: 128-152.
- Combs, J., & Ketchen Jr, D. 1999. Explaining interfirm cooperation and performance: toward a reconciliation of predictions from the resource-based view and organizational economics. *Strategic management journal*, 20(9): 867-888.
- Contractor, F., & Lorange, P. 1988. Why should firms cooperate? The strategy and economics basis for cooperative ventures. In F. Contractor, & P. Lorange (Eds.), *Cooperative strategies in international business: joint ventures and technology partnerships between firms*: 3-28. Bingley, UK: Emerald Group Publishings.
- Cox, T. 1994. *Cultural diversity in organizations: Theory, research and practice*. San Francisco, CA: Berrett-Koehler Publishers.
- Crocker, K., & Masten, S. 1988. Mitigating contractual hazards: Unilateral options and contract length. *The RAND Journal of Economics*: 327-343.
- Crossland, C., & Hambrick, D. C. 2007. How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries. *Strategic Management Journal*, 28(8): 767-789.
- Dahlin, K. B., Weingart, L. R., & Hinds, P. J. 2005. Team diversity and information use. *Academy of management journal*, 48(6): 1107-1123.
- Das, T., & Teng, B. 1998. Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of management review*, 23(3): 491-512.

- Dasgupta, N. 2004. Implicit ingroup favoritism, outgroup favoritism, and their behavioral manifestations. *Social Justice Research*, 17(2): 143-169.
- Dawes, R. M. 1980. Social dilemmas. Annual review of psychology, 31(1): 169-193.
- De Cremer, D., & Tyler, T. R. 2007. The effects of trust in authority and procedural fairness on cooperation. *Journal of Applied Psychology*, 92(3): 639.
- De Dreu, C. K. W. 2002. Team innovation and team effectiveness: The importance of minority dissent and reflexivity. *European Journal of Work and Organizational Psychology*, 11(3): 285-298.
- Dearborn, D. W. C., & Simon, H. A. 1958. Selective perception: A note on the departmental identifications of executives. *Sociometry*, 21(2): 140-144.
- Dekker, H. C., & Van den Abbeele, A. 2010. Organizational learning and interfirm control: The effects of partner search and prior exchange experiences. *Organization Science*, 21(6): 1233-1250.
- Delaney, J. T., & Huselid, M. A. 1996. The impact of human resource management practices on perceptions of organizational performance. *Academy of management journal*, 39(4): 949-969.
- Dess, G. G., & Robinson, R. B. 2006. Measuring organizational performance in the absence of objective measures: The case of the privately held firm and conglomerate business unit. *Strategic Management Journal*, 5(3): 265-273.
- Dhanaraj, C., Lyles, M., Steensma, H., & Tihanyi, L. 2004. Managing tacit and explicit knowledge transfer in IJVs: The role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, 35(5): 428-443.
- Dukerich, J., Golden, B., & Shortell, S. 2002. Beauty is in the eye of the beholder: the impact of organizational identification, identity, and image on the cooperative behaviors of physicians. *Administrative Science Quarterly*, 47(3): 507-537.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. 1994. Organizational images and member identification. *Administrative science quarterly*, 39: 239-263.
- Dyer, J. H., & Singh, H. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of management review*: 660-679.
- Earley, P. C., & Mosakowski, E. 2000. Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of management journal*, 43(1): 26-

49.

- Edney, J. 1980. The commons problem: Alternative perspectives. *American Psychologist*, 35(2): 131-150.
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M. G., & Steiger-Mueller, M. 2010. Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology*, 95(6).
- Eisenhardt, K. 1989. Agency theory: An assessment and review. *Academy of management review*, 14(1): 57-74.
- Eisenhardt, K. M., Kahwajy, J. L., & Bourgeois, L. 1997. How management teams can have a good fight. *Harvard Business Review*, 75(4): 77-85.
- Ellemers, N., & Rink, F. 2005. Identity in work groups: The beneficial and detrimental consequences of multiple identities and group norms for collaboration and group performance. In S. L. Thye, E (Ed.), *Advances in group processes*: Emerald Group Publishing Limited.
- Elsbach, K. D., & Kramer, R. M. 1996. Members' responses to organizational identity threats: Encountering and countering the Business Week rankings. *Administrative Science Quarterly*: 442-476.
- Erramilli, M. K., & Rao, C. P. 1993. Service firms' international entry-mode choice: A modified transaction-cost analysis approach. *The Journal of Marketing*, 57(3): 19-38.
- Fleming, M. A., & Petty, R. E. 2000. Identity and Persuasion: An Elaboration Likelihood Approach. In Terry, & Hogg (Eds.), *Attitudes, behavior, and social context: The role of norms and group membership.*: 171-199. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Fu, P. P., Tsui, A. S., Liu, J., & Li, L. 2010. Pursuit of whose happiness? Executive leaders' transformational behaviors and personal values. *Administrative science quarterly*, 55(2): 222-254.
- Fulmer, I. S., Gerhart, B., & Scott, K. S. 2006. Are the 100 best better? An empirical investigation of the relationship between being a "great place to work" and firm performance. *Personnel Psychology*, 56(4): 965-993.
- Gaertner, S. L., Dovidio, J. F., & Bachman, B. A. 1996. Revisiting the contact hypothesis: The induction of a common ingroup identity. *International Journal*

of Intercultural Relations, 20(3): 271-290.

- Gaertner, S. L., Rust, M. C., Dovidio, J. F., Bachman, B. A., & Anastasio, P. A. 1994. The contact hypothesis: The role of a common ingroup identity on reducing intergroup bias. *Small group research*, 25(2): 224-249.
- Galbraith, C. S. 1990. Transferring core manufacturing technologies in high-technology firms. *California Management Review*, 32(4): 56-70.
- Geletkanycz, M. A. 1998. The salience of 'culture's consequences': The effects of cultural values on top executive commitment to the status quo. *Strategic Management Journal*, 18(8): 615-634.
- George, E., & Chattopadhyay, P. 2005. One foot in each camp: the dual identification of contract workers. *Administrative Science Quarterly*: 68-99.
- Geringer, J., & Hebert, L. 1989. Control and performance of international joint ventures. *Journal of International Business Studies*, 20(2): 235-254.
- Geringer, J. M. 1991. Strategic determinants of partner selection criteria in international joint ventures. *Journal of International Business Studies*: 41-62.
- Geringer, J. M., & Hebert, L. 1991. Measuring performance of international joint ventures. *Journal of International Business Studies*, 22(2): 249-263.
- Gong, Y. 2003. Toward a dynamic process model of staffing composition and subsidiary outcomes in multinational enterprises. *Journal of Management*, 29: 259-280.
- Gong, Y. 2006. The impact of subsidiary top management team national diversity on subsidiary performance: Knowledge and legitimacy perspectives. *Management International Review*, 46(6): 771-790.
- Gong, Y., Chang, S., & Cheung, S. Y. 2010. High performance work system and collective OCB: a collective social exchange perspective. *Human Resource Management Journal*, 20(2): 119-137.
- Gong, Y., Shenkar, O., Luo, Y., & Nyaw, M.-K. 2001. Role conflict and ambiguity of CEOs in international joint ventures: A transaction cost perspective. *Journal of Applied Psychology*, 86(4): 764.
- Gong, Y., Shenkar, O., Luo, Y., & Nyaw, M. K. 2007. Do multiple parents help or hinder international joint venture performance? The mediating roles of contract completeness and partner cooperation. *Strategic Management Journal*, 28(10): 1021-1034.

- Grant, R. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(10): 109-122.
- Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *The Academy of Management Journal*, 38(1): 85-112.
- Gulati, R. 1995. Social structure and alliance formation patterns: A longitudinal analysis. *Administrative Science Quarterly*: 619-652.
- Gulati, R. 1999. Network location and learning: The influence of network resources and firm capabilities on alliance formation. *Strategic Management Journal*, 20(5): 397-420.
- Gulati, R., & Singh, H. 1998. The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances. *Administrative science quarterly*: 781-814.
- Haleblian, J., & Finkelstein, S. 1993. Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of management journal*, 36(4): 844-863.
- Hambrick, D., Li, J., Xin, K., & Tsui, A. 2001. Compositional gaps and downward spirals in international joint venture management groups. *Strategic Management Journal*, 22(11): 1033-1053.
- Hambrick, D. C. 1995. Fragmentation and the other problems CEOs have with their top management teams. *California Management Review*, 37: 110-110.
- Hambrick, D. C., Davison, S. C., Snell, S. A., & Snow, C. C. 1998. When groups consist of multiple nationalities: Towards a new understanding of the implications. *Organization Studies*, 19(2): 181-205.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2): 193-206.
- Hamel, G. 1991. Competition for competence and inter-partner learning within international strategic alliances. *Strategic management journal*, 12(1): 83-103.
- Harrigan, K. R. 1988. Strategic alliances and partner asymmetries. In F. Contractor, & P. Lorange (Eds.), *Cooperative Strategies in International Business*: 205-225. Massachusetts.

- Hayes, A. 2009. Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4): 408-420.
- Hennart, J. 1988. A transaction costs theory of equity joint ventures. *Strategic Management Journal*, 9(4): 361-374.
- Hennart, J.-F. 1991. The transaction cost theory of the multinational enterprise. In C. N. Pitelis, & R. Sugden (Eds.), *The nature of the transnational firm*: 81-116. London, UK: Routledge Ltd.
- Hewstone, M. 1994. Revision and change of stereotypic beliefs: In search of the elusive subtyping model. *European review of social psychology*, 5(1): 69-109.
- Hewstone, M., Rubin, M., & Willis, H. 2002. Intergroup bias. *Annual Review of Psychology*, 53(1): 575-604.
- Hill, R. C., & Hellriegel, D. 1994. Critical contingencies in joint venture management: Some lessons from managers. *Organization science*, 5(4): 594-607.
- Hinds, P. J., & Mortensen, M. 2005. Understanding conflict in geographically distributed teams: The moderating effects of shared identity, shared context, and spontaneous communication. *Organization science*, 16(3): 290.
- Hitt, M. A., Ahlstrom, D., Dacin, M. T., Levitas, E., & Svobodina, L. 2004. The institutional effects on strategic alliance partner selection in transition economies: China vs. Russia. *Organization Science*: 173-185.
- 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*: 449-467.
- Hoffman, L. R. 1979. Applying experimental research on group problem solving to organizations. *The Journal of Applied Behavioral Science*, 15(3): 375-391.
- Hoffmann, W. H. 2007. Strategies for managing a portfolio of alliances. *Strategic Management Journal*, 28(8): 827-856.
- Hofstede, G. 1980. *Culture's consequences: International differences in work related values*. Berkeley Hills: Sage Publishing Inc.
- Hofstede, G., & Hofstede, G. J. 2005. *Cultures and organizations, software of the mind, intercultural cooperation and its importance for survival.* New York: McGraw-Hill.

- Hogg, M. A., & Turner, J. C. 1985. Interpersonal attraction, social identification and psychological group formation. *European Journal of Social Psychology*, 15(1): 51-66.
- Howard, J. W., & Rothbart, M. 1980. Social categorization and memory for in-group and out-group behavior. *Journal of Personality and Social Psychology*, 38(2): 301.
- Ibarra, H., & Andrews, S. B. 1993. Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. *Administrative Science Quarterly*: 277-303.
- Inkpen, A., & Dinur, A. 1998. Knowledge management processes and international joint ventures. *Organization Science*, 9(4): 454-468.
- Jackson, J. 2002. Intergroup attitudes as a function of different dimensions of group identification and perceived intergroup conflict. *Self and Identity*, 1(1): 11-33.
- Jackson, S. E. 1992. Consequences of group composition for the interpersonal dynamics of strategic issue processing. *Advances in strategic management*, 8(3): 345-382.
- Jackson, S. E., & Joshi, A. 2011. Work team diversity. In S. Zedeck (Ed.), APA handbook of industrial and organizational psychology: 651-686. Washington D.C.: American Psychological Association.
- Jehn, K. A. 1994. Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5(3): 223-238.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. 1999. Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative science quarterly*, 44: 741-763.
- Jensen, M., & Meckling, W. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4): 305-360.
- Kale, P., Singh, H., & Perlmutter, H. 2000. Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic management journal*, 21(3): 217-237.
- Kane, A. A., Argote, L., & Levine, J. M. 2005. Knowledge transfer between groups via personnel rotation: Effects of social identity and knowledge quality.
 Organizational behavior and human decision processes, 96(1): 56-71.
- Kanter, R. 1994. Collaborative advantage: the art of alliances. *Harvard Business Review*, 72: 96-96.

Katz, D., & Kahn, L. 1978. *The Social Psychology of Organizations*. New York: Wiley.

- Khanna, T., Gulati, R., & Nohria, N. 1998. The dynamics of learning alliances: competition, cooperation, and relative scope. *Strategic management journal*, 19(3): 193-210.
- Kishton, J. M., & Widaman, K. F. 1994. Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement*, 54(3): 757-765.
- Klein, K. J., & Kozlowski, S. W. 2000. From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, 3(3): 211-236.
- Kogut, B. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9(4): 319-332.
- Kogut, B., & Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3): 383-397.
- Kogut, B., & Zander, U. 1996. What firms do? Coordination, identity, and learning. *Organization Science*, 7(5): 502-518.
- Kramer, R. 1993. Social psychology in organizations: Advances in theory and research: Prentice Hall Englewood Cliffs.
- Kramer, R. M., & Brewer, M. B. 1984. Effects of group identity on resource use in a simulated commons dilemma. *Journal of Personality and Social Psychology*, 46(5): 1044-1057.
- Krippendorff, K. 2004. *Content analysis: An introduction to its methodology*: Sage Publications, Inc.
- Kumar, S., & Seth, A. 1998. The design of coordination and control mechanisms for managing joint venture-parent relationships. *Strategic management journal*, 19(6): 579-599.
- Landis, R. S., Beal, D. J., & Tesluk, P. E. 2000. A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3(2): 186-207.

- Lane, H. W., & Beamish, P. W. 1990. Cross-cultural cooperative behavior in joint ventures in LDCs. *Management International Review*, 30(1): 87-102.
- Lawrence, P. R., & Lorsch, J. W. 1967. Differentiation and integration in complex organizations. *Administrative science quarterly*: 1-47.
- Lewicki, R., & Bunker, B. 1995. *Trust in relationships: A model of development and decline*: Jossey-Bass.
- Li, D. A. N., Eden, L., Hitt, M. A., & Ireland, R. D. 2008. Friends, acquaintances, or strangers? Partner selection in r&d alliances. *Academy of Management Journal*, 51(2): 315-334.
- Li, J., Xin, K., & Pillutla, M. 2002. Multi-cultural leadership teams and organizational identification in international joint ventures. *International Journal of Human Resource Management*, 13(2): 320-337.
- Li, S. X., & Rowley, T. J. 2002. Inertia and evaluation mechanisms in interorganizational partner selection: Syndicate formation among US investment banks. *Academy of Management Journal*: 1104-1119.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. 2002. To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9(2): 151-173.
- Luo, Y. 2002. Contract, cooperation, and performance in international joint ventures. *Strategic management journal*, 23(10): 903-919.
- Luo, Y. 2008. Procedural fairness and interfirm cooperation in strategic alliances. *Strategic management journal*, 29(1): 27-46.
- Luo, Y., & Park, S. 2004. Multiparty cooperation and performance in international equity joint ventures. *Journal of International Business Studies*, 35(2): 142-160.
- Luo, Y., Shenkar, O., & Nyaw, M. K. 2001. A dual parent perspective on control and performance in international joint ventures: lessons from a developing economy. *Journal of International Business Studies*, 32(1): 41-58.
- Lyles, M. A., & Salk, J. E. 1996. Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of International Business Studies*, 27(5): 877-903.
- Mackie, D. M., Worth, L. T., & Asuncion, A. G. 1990. Processing of persuasive in-group messages. *Journal of Personality and Social Psychology*, 58(5): 812.

- Madhok, A. 1995. Revisiting multinational firms' tolerance for joint ventures: A trustbased approach. *Journal of International Business Studies*, 26(1): 117-137.
- Mael, F., & Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2): 103-123.
- Makhija, M. V., & Stewart, A. C. 2002. The effect of national context on perceptions of risk: a comparison of planned versus free-market managers. *Journal of International Business Studies*, 33(4): 737-756.
- Mannix, E., & Neale, M. A. 2005. What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological science in the public interest*, 6(2): 31-55.
- March, J. G., & Simon, H. A. 1958. Organizations. New York: Willey.
- Mathieu, J. E., & Taylor, S. R. 2006. Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, 27(8): 1031-1056.
- McDonald, M. L., & Westphal, J. D. 2010. A Little Help Here? Board Control, CEO Identification with the Corporate Elite, and Strategic Help Provided to CEOs at Other Firms. *The Academy of Management Journal*, 53(2): 343-370.
- McGee, J. E., Dowling, M. J., & Megginson, W. L. 2007. Cooperative strategy and new venture performance: The role of business strategy and management experience. *Strategic Management Journal*, 16(7): 565-580.
- Nielsen, B., & Nielsen, S. 2013. Top management team national diversity and firm performance: A multilevel study. *Strategic Management Journal*, 34(3): 373-382.
- Nielsen, S. 2009. Top management team diversity: a review of theories and methodologies. *International Journal of Management Reviews*, 12(3): 301-316.
- Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. *Organization science*, 5(1): 14-37.
- North, D. C. 1990. *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge university press.

- O'Reilly, C. A., & Chatman, J. 1986. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3): 492.
- Ostrom, E. 1990. *Governing the commons: The evolution of institutions for collective action*: Cambridge University Press.
- Park, S., & Ungson, G. 1997. The effect of national culture, organizational complementarity, and economic motivation on joint venture dissolution. *Academy* of Management Journal, 40(2): 279-307.
- Park, S., & Ungson, G. 2001. Rethinking limits of cooperation: a conceptual framework of strategic alliance failure. *Organization Science*, 12(1): 37-53.
- Park, S. H., & Russo, M. V. 1996. When competition eclipses cooperation: An event history analysis of joint venture failure. *Management science*, 42(6): 875-890.
- Park, S. H., & Ungson, G. R. 2001. Interfirm rivalry and managerial complexity: A conceptual framework of alliance failure. *Organization Science*: 37-53.
- Parkhe, A. 1991. Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of International Business Studies*, 22(4): 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.
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. 1999. Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative science quarterly*, 44: 1-28.
- Pfeffer, J., & Nowak, P. 1976. Joint ventures and interorganizational interdependence. *Administrative science quarterly*: 398-418.
- Podsakoff, P., & Organ, D. 1986. Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(4): 531.
- Polanyi, M. 1976. Tacit knowledge. In M. Marx (Ed.), *Theories in contemporary psychology*: 330–344. New York: Macmillan.
- Postman, L., Jenkins, W. O., & Postman, D. L. 1948. An experimental comparison of active recall and recognition. *The American Journal of Psychology*, 61(4): 511-519.

- 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.
- Preacher, K., & Hayes, A. 2004. SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4): 717.
- Preacher, K., Rucker, D., & Hayes, A. 2007. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1): 185-227.
- Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. 1968. Dimensions of organization structure. *Administrative science quarterly*: 65-105.
- Riketta, M., & Van Dick, R. 2005. Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66(2): 358-384.
- Ring, P., & Van de Ven, A. 1994. Developmental processes of cooperative interorganizational relationships. *Academy of management review*: 90-118.
- Ring, P. S., & Van de Ven, A. H. 1992. Structuring cooperative relationships between organizations. *Strategic management journal*, 13(7): 483-498.
- Salk, J. 1996. Partners and other strangers: Cultural boundaries and cross-cultural encounters in international joint venture teams. *International Studies of Management & Organization*, 26(4): 48-72.
- Salk, J., & Shenkar, O. 2001. Social identities in an international joint venture: An exploratory case study. *Organization science*, 12(2): 161-178.
- Schneider, S. C., & De Meyer, A. 1991. Interpreting and responding to strategic issues: The impact of national culture. *Strategic Management Journal*, 12(4): 307-320.
- Shah, R. H., & Swaminathan, V. 2008. Factors influencing partner selection in strategic alliances: the moderating role of alliance context. *Strategic Management Journal*, 29(5): 471-494.
- Shenkar, O., & Reuer, J. 2006. *Handbook of strategic alliances*. Thousand Oaks, California: Sage Publications Limited.

- Shenkar, O., & Zeira, Y. 1987. Human resources management in international joint ventures: Directions for research. *Academy of management review*, 12(3): 546-557.
- Shenkar, O., & Zeira, Y. 1992. Role conflict and role ambiguity of chief executive officers in international joint ventures. *Journal of International Business Studies*, 23(1): 55-75.
- Sirmon, D. G., & Lane, P. J. 2004. A model of cultural differences and international alliance performance. *Journal of International Business Studies*, 35(4): 306-319.
- Smith, K. G., Carroll, S. J., & Ashford, S. J. 1995. Intra-and interorganizational cooperation: Toward a research agenda. *The Academy of Management Journal*, 38(1): 7-23.
- Stahl, G. K., Maznevski, M. L., Voigt, A., & Jonsen, K. 2009. Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41(4): 690-709.
- Staples, C. L. 2007. Board globalisation in the world's largest TNCs 1993–2005. *Corporate Governance: An International Review*, 15(2): 311-321.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. 1981. Threat rigidity effects in organizational behavior: A multilevel analysis. *Administrative science quarterly*, 26: 501-524.
- Steensma, H., & Lyles, M. 2000. Explaining IJV survival in a transitional economy through social exchange and knowledge-based perspectives. *Strategic Management Journal*, 21(8): 831-851.
- Strauss, A. L., & Corbin, J. M. 2008. Basics of qualitative research: Techniques and procedures for developing grounded theory: Sage Publications, Inc.
- Stryker, S., & Serpe, R. T. 1982. Commitment, identity salience, and role behavior: Theory and research example. *Personality, roles, and social behavior*, 119: 218.
- Stuart, T. E. 2000. Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high-technology industry. *Strategic Management Journal*, 21(8): 791-811.
- Tajfel, H. 1981. *Human groups and social categories: Studies in social psychology*. Cambridge, UK: Cambridge university press.

- Tajfel, H., & Turner, J. C. 1986. The social identity of intergroup In S. Worchel, & W. Austin (Eds.), *Psychology and intergroup relations*: 7-24. Chicago: Nelson-Hall.
- Teachman, J. D. 1980. Analysis of population diversity measures of qualitative variation. *Sociological Methods & Research*, 8(3): 341-362.
- Teece, D., Pisano, G., & Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7): 509-533.
- Turban, D. B., Lau, C.-M., Ngo, H.-Y., Chow, I. H. S., & Si, S. X. 2001. Organizational Attractiveness of Firms in the People's Republic of China. *Journal of Applied Psychology*, 86(2): 194-206.
- Turner, J., Hogg, M., Oakes, P., Reicher, S., & Wetherell, M. 1987. Rediscovering the social group: A self-categorization theory: Basil Blackwell.
- Turner, J. C. 1985. Social categorization and the self-concept: A social cognitive theory of group behavior. *Advances in group processes: Theory and research*, 2: 77-122.
- Tyler, T. R., & Blader, S. L. 2000. *Cooperation in groups: Procedural justice, social identity, and behavioral engagement*. Cambridge, Massachusetts: Hogrefe & Huber.
- Tyler, T. R., & Blader, S. L. 2001. Identity and cooperative behavior in groups. *Group Processes & Intergroup Relations*, 4(3): 207-226.
- Tziner, A., & Eden, D. 1985. Effects of crew composition on crew performance: Does the whole equal the sum of its parts? *Journal of Applied Psychology*, 70(1): 85.
- Ullrich, J., Wieseke, J., Christ, O., Schulze, M., & Van Dick, R. 2007. The Identity-Matching Principle: Corporate and Organizational Identification in a Franchising System. *British Journal of Management*, 18: S29-S44.
- Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*: 35-67.
- Van Der Vegt, G. S., & Bunderson, J. S. 2005. Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of management journal*, 48(3): 532-547.
- Van Dick, R., Wagner, U., Stellmacher, J., & Christ, O. 2004. The utility of a broader conceptualization of organizational identification: which aspects really matter? *Journal of Occupational and Organizational Psychology*, 77(2): 171-191.

- Vora, D., & Kostova, T. 2007. A model of dual organizational identification in the context of the multinational enterprise. *Journal of Organizational Behavior*, 28(3): 327.
- Vora, D., Kostova, T., & Roth, K. 2007. Roles of subsidiary managers in multinational corporations: The effect of dual organizational identification. *Management International Review*, 47(4): 595-620.
- Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. 2007. On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1): 95-118.
- Watson, W. E., Kumar, K., & Michaelsen, L. K. 1993. Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of management journal*, 36(3): 590-602.
- West, S. G., & Aiken, L. S. 1991. *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA Sage Publications.
- Williams, K. Y., & O'Reilly, C. A. 1998. Demography and diversity in organizations: A review of 40 years of research. *Research in organizational behavior*, 20(20): 77-140.
- Williamson, O. 1973. Markets and hierarchies:some elementary considerations. *American Economic Review*, 63(2): 316-325.
- Williamson, O. 1991. Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36(2): 269-296.
- Williamson, O. E. 1979. Transaction-cost economics: the governance of contractual relations. *Journal of law and economics*, 22(2): 233-261.
- Wong, A., Tjosvold, D., & Yu, Z.-y. 2005. Organizational Partnerships in China. Journal of Applied Psychology, 90(4): 782-791.
- World Investment Report 2006: United Nations Conferences on Trade and Development.
- Yan, A., & Gray, B. 1994. Bargaining power, management control, and performance in United States-China joint ventures: A comparative case study. *Academy of Management Journal*, 37(6): 1478-1517.
- Yan, A., & Gray, B. 1994. Bargaining power, management control and performance in United States- China joint ventures: a comparative case study. *Academy of management journal*, 37(6): 1478-1517.

- Yan, A., & Gray, B. 2001. Negotiating control and achieving performance in international joint ventures: A conceptual model. *Journal of International Management*, 7(4): 295-315.
- Yan, A., & Gray, B. 2002. Negotiating control and achieving performance in international joint ventures: A conceptual model. *Journal of International Management*, 7(4): 295-315.
- Yan, A., & Zeng, M. 1999. International joint venture instability: A critique of previous research, a reconceptualization, and directions for future research. *Journal of International Business Studies*, 30(2): 397-398.
- Zaheer, A., McEvily, B., & Perrone, V. 1998. Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*: 141-159.
- Zaheer, A., & Venkatraman, N. 1995. Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange. *Strategic management journal*, 16(5): 373-392.
- Zander, U., & Kogut, B. 1995. Knowledge and the speed of the transfer and imitation of organizational capabilities: An empirical test. *Organization Science*, 6(1): 76-92.
- Zeira, Y., & Shenkar, O. 1990. Interactive and specific parent characteristics: Implications for management and human resources in international joint ventures. *Management International Review*, 30(7): 16-33.
- Zhou, J., & George, J. M. 2001. When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of management journal*, 44(4): 682-696.

Appendix: Interview results

In Chapter 1 of study, to further check the causal relationships among the key variables (i.e., CEO identification, cooperation between the parents and the venture, and JV performance), we conducted interviews with CEOs from 21 JVs. The interviews were semi-structured and conducted either on site or via telephone. Each interview lasted about half an hour. We used the counting and coding strategy from content analysis research (Krippendorf, 2004; Strauss and Corbin, 2008) to count instances of causal relationships among key concepts. We documented the presence or absence of certain causal links, and summarized quotes (available upon request) that contained similar ideas. For example, to depict the relationship between local parent-venture cooperation and JV performance, we first coded each interview for the presence or absence of a causal link between the two, and then categorized the causal relationships based on the directions (i.e., whether the vertical cooperation led to the JV performance, or vice versa.) We did not use interpretive coding, but simply coded for outright mention of a causal link between concepts. This is a conservative way of coding the relationships among concepts. We conducted similar coding for the relationship between foreign parent-JV cooperation and JV performance, the relationship between CEO's identification with the local parent and local parent-JV

cooperation, and the relationship between CEO's identification with the foreign parent and foreign parent-JV cooperation.

The findings from the interviews are as follows. For the relationship between CEO's identification with the local parent firm and local parent-JV cooperation, 77% of cases showed that CEO's identification led to a cooperative relationship, and none of the cases indicated the reverse. In 23% of the cases, we could not establish a causal link between the two variables. For the relationship between CEO's identification with the foreign parent and foreign parent-JV cooperation, 91% of the cases showed that CEO's identification with the foreign parent led to a cooperative relationship. No single case indicated the reverse. In 9% of the cases, we could not establish a causal link between the two variables.

For the relationship between local parent-JV cooperation and JV performance, 85.5 % of the cases indicted that cooperation between the local parent and the venture led to JV performance, while 14.5% of the cases indicated that changes in JV performance could also lead to a change in the cooperative relationship. For the relationship between foreign parent-JV cooperation and JV performance, 90% of the cases indicated that the cooperation between the venture and the foreign parent impacts JV performance, while 10% of the cases suggested that there might be a causal link from JV performance to foreign parent-JV cooperation. Overall, the qualitative interview results provide greater support for the causal relationships proposed in our model than the reverse relationships.

122