

Domestic alliance network to attract foreign partners: Evidence from international joint ventures in China

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Abstract

Partner selection is a critical issue in building international joint ventures (IJVs). We argue that foreign firms are more likely to select local firms with unique network structural advantages within a local alliance network. We frame structural advantages as two network position traits: centrality and brokerage. Specifically, network centrality acts as a stronger network trait than brokerage in attracting foreign IJV partners. However, such a relationship may be moderated by foreign firms' local experience and perceived capabilities. We contend that when foreign firms have a high level of local market experience and perceived capabilities, they may prefer a local broker over a centrally located local firm. Data on the domestic alliance network in China's electronics and information technology (IT) industries largely support our hypotheses. We conclude that as foreign investors become strategic insiders, they may not only seek a local partner's capability attributes, but also more critically pay attention to a local partner's domestic network.

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INTRODUCTION

How can foreign firms identify the right local firms as international joint venture (IJV) partners? Research on partner selection has focused on partner-related characteristics, such as partner attractiveness, complementarity, and alliance experience (Hitt, Ahlstrom, Dacin, Levitas, & Svobodina, 2004; Li, Zhou, & Zajac, 2009; Luo, 1997, 1998, 2008; Mitsuhashi & Greve, 2009; Zhao, Anand, & Mitchell, 2005). Within the alliance formation literature, some studies focus on dyad-level constructs such as tie strength (Wong & Ellis, 2002). Other studies deal with features of the overall alliance network, such as the clustering patterns among partners (Nair, Hanvanich, & Cavusgil, 2007) and the multiplexity of the network (Beckman, Haunschild, & Phillips, 2004). The existing IJV literature, however, has paid less attention to local partners' network positions as an important trait for partner selection, despite the critical roles of network positions in firms' strategy and competitive advantage documented by Burt (1992) and Koka and Prescott (2008). It has also

Received: 10 February 2012 Revised: 12 November 2013 Accepted: 5 December 2013 Online publication date: 23 January 2014 paid inadequate attention to the actual practice of due diligence process in IJV partner selection in which multinational enterprises (MNEs) often investigate focal firms' network position to comprehensively map the local embeddedness (Wolf, 2000). In this article, we focus on how individual local firms' network position traits - primarily centrality and brokerage - within the domestic alliance network influence foreign firms' partner selection.

We define a "centrally located local firm" as a firm that occupies a central position in a domestic alliance network, and a "local broker" as a firm that bridges a structural hole in a domestic alliance network (Yang, Lin, & Peng, 2011a). A firm's network positions have a profound impact on its partnering behavior (Benjamin & Podolny, 1999; Podolny, 1993, 2001). Some research emphasizes centrality (Higgins & Gulati, 2003; Ozmel, Reuer, & Gulati, 2012; Podolny, 2001), but does not examine brokerage. Other research has shown that brokerage is important for partner selection (Guler & Guillén, 2010; Jensen, 2008; Xiao & Tsui, 2007). For example, Xiao and Tsui (2007: 5) argue that firms bridging structural holes may be unattractive partners because "people who stay at the boundary of two in-groups tend to be distrusted by both groups". This stream assumes that brokerage is observable and may thus influence partner selection.

Extending such earlier work, we argue that a firm's network positions in the domestic alliance network measured by centrality and brokerage – influence its odds of being selected as IJV partners by foreign entrants. Some previous studies suggest that network centrality matters for partner selection, but fall short of discussing under what conditions centrality matters more relative to brokerage. We endeavor to shed new light on this line of research by investigating how centrally located local firms differ from local brokers in their odds of being selected as IJV partners. Such a comparison is important since prior studies have not differentiated between the relative benefits of each network position trait (Pollock & Gulati, 2007). In the context of market entry into an emerging economy (Meyer, Estrin, Bhaumik, & Peng, 2009a), we also study the boundary conditions of network position traits as selection criteria in the process of IJV partner selection.

Specifically, we focus on two questions: (1) How do foreign firms observe and distinguish between centrally located local firms and local brokers in the local alliance network during partner selection? (2) How do foreign firms' local experience and perceived capabilities influence their choice between

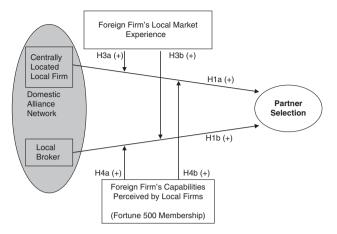


Figure 1 Theoretical framework. Note: Hypotheses 2, 3c, and 4c are not shown because they compare the relative effects of network centrality and brokerage.

centrally located local firms and local brokers as IJV partners? Our core argument is that network position traits differ in their visibility and level of inimitability. We hypothesize that the effect of a centrally located local firm on partner selection will be stronger than that of a local broker. We also argue that foreign firms' local experience and perceived capabilities can help them identify these network position traits. Where traditional IJV partner selection research suggests that foreign firms with high capabilities may seek out centrally located local firms (Benjamin & Podolny, 1999), we argue that foreign firms may consider local brokers and centrally located local firms in a contingent manner. In other words, we argue that when foreign firms have a longer presence in the host country and when they are more capable, they are more likely to select a local broker than a centrally located local firm. Figure 1 illustrates our research framework.

This article aspires to make two contributions. First, building on social network theory, we contribute to the literature on IJV partner selection by demonstrating how network position traits may attract foreign partners in economies where moral hazards and adverse selection have been key problems for foreign firms. Unlike prior studies that focus mainly on centrally located local firms, we examine both centrally located local firms and local brokers under the assumption that both network position traits can be observed, but the level of effort needed to observe and interpret these position traits in a local network differ widely. Second, we also enrich our understanding of the comparative value of both network position traits in emerging



economies. Existing research tends to study when and under which condition network position traits matter *individually*. Our study aims to understand under which conditions one type of network position trait (such as being a local broker) matters more than the other type (such as being a centrally located local firm). Overall, our comparative contingency approach helps establish boundary conditions for IJV partner selection in emerging economies.

THEORETICAL DEVELOPMENT

Importance of Local Network and Its Position

We argue that local network and its position in emerging economies are becoming increasingly important for foreign firms for three reasons. First, many foreign investors have been transformed into strategic insiders that are significantly building and localizing their primary activities of the entire value chain in these markets (Luo, 2007). Such strategic insiders particularly rely on local networks, especially those local firms holding central or brokerage positions. Second, due to heightened industrialization and specialization in emerging economies, businesses are becoming increasingly interdependent, particularly in resource sharing and synergetic collaboration, which makes local networks and positions within such networks more critical than ever before (Zhao et al., 2005). In this environment, understanding the embedded local norms and practices is of utmost importance (Laursen, Masciarelli, & Prencipe, 2012). Third, historically and culturally, success in China depends not merely on how extensive a firm's networks are but more on with whom it networks (Peng & Luo, 2000). This is particularly true considering that the institutional environment is still underdeveloped, characterized by information asymmetries and critical resources still being controlled by governmental institutions (Krug & Hendrischke, 2012; Li, Peng, & Macaulay, 2013; Shi, Markóczy, & Stan, 2013). Thus local partners holding central or brokerage positions will be potentially more valuable to foreign firms.

Network Position Traits in an Emerging Economy

While prior research on IJV partner selection has focused on a variety of selection criteria, two network position traits in particular can reveal important information about a local firm's resources and prospects in emerging economies. First, IJV scholars have argued that identifying specific selection criteria may depend on the strategic context (Geringer, 1991; Luo, 1997). In an emerging economy context,

accessing local cultural, regulatory, and market knowledge are the three top concerns of foreign firms (Meyer et al., 2009a; Tatoglu & Glaister, 2000). Prior network research has well documented the role of brokerage in accessing such information (Guler & Guillén, 2010; Koka & Prescott, 2008). In China, recent studies indicate that the local network represents an alternative channel for critical resources and information to flow among market players due to the significant advancement and development of various business networks (Keister, 2009). This situation is particularly salient in Chinese high-technology industries (our research setting) – suggesting the need to access information through various business networks (Li & Zhang, 2007).

Meanwhile, recent IJV research indicates that under the condition of underdeveloped regulatory regime where the problem of adverse selection abounds (Roy & Oliver, 2009), foreign firms tend to focus on factors such as local firms' industry position, prominence within the local network, and partnering ability (Damanpour, Devece, Chen, & Pothukuchi, 2012). As noted earlier, local firms' network centrality is clearly related to these important factors. Therefore given the context in which we study, our focus on the network position as an IJV selection criterion is not only relevant but also important (Glaister & Buckley, 1997). Specifically, the China context provides a unique opportunity to assess the impact of local firms' centrality and brokerage advantages.

Second, local partners' network position is a strategic attribute that remains under-researched in partner selection research in emerging economies and particularly in China (Yang, Sun, Lin, & Peng, 2011b). Recent research shows that success in China increasingly depends on the cultivation of ego-business networks such as vertical networks (Liu, Luo, & Liu, 2009) and horizontal networks (Yang et al., 2011a). In addition, equity-based joint ventures or alliances are recently used not only to access local partners' distinctive resources and capabilities, but more importantly to access their network-based resources and capabilities (Lin, Peng, Yang, & Sun, 2009a). As such, network position traits such as centrality and brokerage now matter more to foreign firms' growth and success in China. However, an analysis of the importance of brokerage and centrality to foreign investors has not been addressed in the IJV literature. It is, therefore, both theoretically and empirically imperative that this factor be investigated.

Despite attractive market potential in an emerging economy, foreign firms often face significant

uncertainties (Meyer et al., 2009a) and liabilities of foreignness (Kostova & Zaheer, 1999). The competitive space in an emerging economy, far from being "perfectly competitive," is characterized by imperfect and incomplete information (Jacobson, 1992; Peng, 2003). The literature has documented two different sources of such liabilities of foreignness. The first is the lack of information and knowledge about local market in terms of consumer behavior, culture, and legal environment (Guler & Guillén, 2010). The second is the lack of legitimacy in the new market (Zaheer, 1995) and the information about local partners' partnering ability (Roy & Oliver, 2009). We argue that local firms that are well connected in the domestic alliance network can help foreign firms to overcome some of these liabilities (Lu & Ma, 2008) and to establish legitimization and develop partnering competence (Dacin, Oliver, & Roy, 2007).

Following Burt (1992), we focus on centrally located local firms (centrality) and local broker firms (brokerage) for two reasons. First, these two network position traits have been documented in prior studies in emerging economies to be important and relevant (Lin et al., 2009a). Second, within network studies, different levels of analyses may allow researchers to study different network features and related questions. Our main interest is how individual firms' network features within the overall network impact partner selection behaviors. Our choice of two network position traits is particularly interesting in the setting of IJV formation in an emerging economy where foreign firms are usually less embedded within the domestic network than domestic firms. Such asymmetric levels of embeddedness (Ahuja, Polidoro, & Mitchell, 2009) require us to fully explore the incentives and constraints for creating ties between local firms and foreign partners.

Overall, we argue that centrally located local firms and local brokers convey different resources and information to foreign firms. While our baseline model predicts that both centrally located local firms and local brokers are likely to be selected by foreign partners as IJV partners, our comparative model suggests that centrally located local firms in general are more likely to be selected as potential partners.

HYPOTHESIS DEVELOPMENT

Firm Centrality Position Trait

Firms that occupy a central position in a social network generally enjoy a high level of social status

(Podolny, 1993). Social status conveys important information about a firm's underlying quality (Jensen, 2008). Within the alliance context, a firm's central position trait represents its resources and prospects, which alleviates problems associated with adverse selection (Shipilov & Li, 2008). "The fact that a particular firm is able to form extensive direct and indirect ties in alliance networks and hence achieve a prominent position indicates that the firm possesses valuable resource and capabilities that are in demand by other companies" (Ozmel et al., 2012: 10).

Within our research context, we argue that centrally located local firms have two underlying capabilities that are important for IJV formation with foreign partners. The first is the ability of local firms to establish legitimacy and gain prominence in the local market. Centrally located local firms enjoy deference from others due to their standing in the social hierarchy (Gould, 2002; Guler & Guillén, 2010). Foreign firms are attracted to potential partnerships with centrally located local firms because the high social status of these local firms can confer legitimacy - an important, intangible resource that may help foreign firms overcome the initial liabilities of foreignness (Kostova & Zaheer, 1999). In addition, centrality also indicates market power, which is widely sought by foreign partners. This is because this power fortifies a foreign investor's ability to cope with market uncertainties and institutional hindrance. For example, Lin et al. (2009a) argue that centrally located firms in China have a higher likelihood of establishing a foothold and leadership within the local marketplace. This market power can usually translate into greater ability to access partners' resources (Okhmatovskiy, 2010) and higher bargaining power with external stakeholders (Luo, 1997). Ren, Au, and Birtch (2009) find that centrally located firms in China tend to receive a significant amount of loan guarantees from their partners. Markóczy, Sun, Peng, Shi, and Ren (2013) also point out that a Chinese firm occupying a central position tends to have stronger cooptation forces that mitigate the threat of potential state intervention, which is a critical capability that is highly sought after by foreign partners given the institutional uncertainty and business risk in China (Luo, 1997).

The second is the partnering capability. When facing information asymmetries in an emerging economy, choosing the wrong local firms may generate a significant headache (Ding, Huang, & Liu, 2012). Social status positively influences the



collective perceptions of potential partners in regard to the focal firm's quality and ability to deliver on its commitments in the future (Guler & Guillén, 2010; Pollock & Gulati, 2007), particularly when information about the quality and behavior is imperfectly observable (Podolny, 2001). Therefore the fact that the focal firm has multiple linkages with different local firms indicates that it possesses sufficient skills in developing high-quality relationships with other firms and is a trustworthy partner (Roy & Oliver, 2009).

Hypothesis 1a: A centrally located local firm's position (centrality) within the domestic alliance network is positively related to its likelihood of being selected as an IJV partner by foreign firms.

Local Broker Position Trait

Local brokers span different segments within the local market. Their unique position allows them to access non-redundant (usually novel) opportunities and localized information (Burt, 2007). We argue that foreign firms are particularly eager to acquire such local knowledge in an effort to overcome liabilities of foreignness due to their lack of local information (Guler & Guillén, 2010; Meyer, Wright, & Pruthi, 2009b). In particular, the local market, cultural, and regulatory knowledge appears to be the top three concerns for foreign firms entering emerging economies (Nielsen, 2003). Local market knowledge refers to market-specific knowledge such as information on market forecasts, consumer preferences, and supplier behaviors (Figueiredo & Brito, 2011; Mariotti & Piscitello, 1995). Local cultural and regulatory knowledge refers to information regarding local institutions such as local procedures and practices of law (Glaister & Buckley, 1997; Nielsen, 2003). Such knowledge is likely to be institutionally sensitive and embedded within the local context (Tan & Meyer, 2011). It is socially constructed, tacit, and idiosyncratic in nature (Dhanaraj, Lyles, Steensma, & Tihanyi, 2004).

By definition, the advantage accrued by local brokers is usually local (Burt, 2007; Shi, Markóczy, & Dess, 2009) and context-specific (Guler & Guillén, 2010; Koka & Prescott, 2008). Such advantage may lose its strategic value out of the local firms' immediate network. Local brokers generally connect with fewer local firms than centrally located local firms. It is, therefore, easy for local brokers to spend more time to interact and socialize with each specific firm in the local context. This helps local brokers to gain a rich understanding of the highly embedded and

sensitive local information (Laursen et al., 2012). The nature of local embeddedness enables these local brokers to better understand the needs of local consumers that have been traditionally ignored, leading to potential new opportunities for sales and profitability. Local brokers may also have a better position to understand local rules of thumb, regulation, and possibly create value by bridging institutional distance (Tracey & Phillips, 2011) or even institutional contradictions (Bjerregaard & Lauring, 2012) within a single emerging economy (Chabowski, Hult, Kiyak, & Mena, 2010; Meyer & Nguyen, 2005).

In fact, local brokers are particularly important in China since information transmission is quite sticky due to a lack of nationwide markets and inefficient market intermediaries (Chang & Xu, 2008). Local brokers therefore can create a competitive advantage by overcoming the geographic limitations of information transfer (Owen-Smith & Powell, 2004), thereby tapping into more diverse, non-redundant, and novel knowledge (Winter, 2012).

However, how can a foreign firm identify a local broker? We suggest that there are both "pull" and "push" arguments underlying the local broker identification process. Specifically, local brokers often share non-overlapping information with alters that aid in opportunity recognition (Koka & Prescott, 2008). Brokers are also often necessary to match unconnected parties in order to realize a specific transaction. The need for local brokers' services incentivizes brokers to "advertise" themselves (Markóczy et al., 2013). This is one of the ways why foreign firms may identify specific local broker firms (Galunic, Ertug, & Gargiulo, 2012).

Furthermore, recent studies also suggest that firms that bridge structural holes also tend to exhibit behaviors that make it easy to discern to their partners (Sytch, Tatarynowicz, & Gulati, 2012). In a network of interorganizational partnerships in the computer industry, for example, brokers are often key hubs for recombinant innovations, which endow them with significant power relative to providers of a single or substitute components (nonbrokers). Non-brokers depend on the brokers' ability to supply new ideas for recombinant innovations and complementary inputs (Ding et al., 2012). This typically translates into aggressive contract negotiation practices by the brokers with unevenly distributed spoils. This behavior (as a byproduct of brokerage) can affect the brokers' partners directly, and is thus relatively easy for these firms to act upon (Sytch et al., 2012). Our additional open-ended

interviews with two top managers in China about the discernibility of dealing with brokers reinforce these points. The interviewees suggested that while local brokers tend to boast about their abilities to provide access to other alters, they also tend to carefully guard direct access to these alters. The interviewees gave other specific examples for discernible behaviors that characterize local brokers. In informal settings, for example, local brokers are extremely eager to gather information about other firms but are reluctant to share information about themselves beyond emphasizing that they have access to alters from which the interested partners would benefit. Local brokers also tend to seek invitations to informal social gatherings, events, and parties that are seemingly irrelevant to their domain of business. These arguments suggest:

Hypothesis 1b: A local broker's position (brokerage) within the domestic alliance network is positively related to its likelihood of being selected as an IJV partner by foreign firms.

Centrality vs Brokerage: A Comparison

Our arguments on centrally located local firms and local brokers indicate that both types of firms are positively related to the likelihood of being selected as IJV partners by foreign firms, although each provides different resources. However, which network position traits have a *stronger* likelihood in attracting foreign firms? To address this question, we argue network position traits differ by (1) their visibility and (2) their degree of inimitability. The brokerage trait, compared with the centrality trait, is less visible and therefore more difficult to identify. Meanwhile it is also more difficult to imitate a centrally located local firm than a local broker.

A firm's proclivity to form alliances is largely dependent on its visibility within the industry (Pollock, Rindova, & Maggitti, 2008). In other words, foreign partners need to first be aware of a given local firm's existence and availability in order to form a potential alliance with it (Pollock & Gulati, 2007). For foreign firms, a centrally located local firm is observable prior to the actual formation of the potential IJV (Al-Laham & Souitaris, 2008). This is because information on local firms' previous alliances within a domestic alliance network is available through at least three credible sources. First, for listed firms, such information is typically included in the registration statement to the relevant regulatory authorities, such as the China Securities Regulatory Commission (CSRC), which is similar to the Securities and Exchange Commission in the United States, Second, for both listed and non-listed local firms, such information may be available on a local firm's website or through initial contact or interviews. Third, foreign firms can triangulate the local firm's network position from media sources.² The media in an emerging economy may be especially interested in reporting alliance-related activities, which create jobs and boost local prosperity. Media exposure of firms' alliance activities tends to increase the chance that a focal firm will be noticed by foreign partners. In fact, stakeholders often rely on media sources as important disseminators of information about firms, particularly when uncertainty is high (Zavyalova, Pfarrer, Reger, & Shapiro, 2012). In this way, we follow Podolny's (1993) argument that high status (through its premier position within an alliance network) creates certain benefits for the local firm. Media attention may supplement a firm's own advertisement and may improve exposure to potential recipients. Furthermore, this exposure also helps foreign partners to perceive local firms' network position traits in a positive way.

Meanwhile, a high degree of centrality in the domestic alliance network is difficult and costly to imitate by other local firms because a high centrality network position is not built overnight (Koka & Prescott, 2008). A firm must make large initial investments in forming and managing the alliance network (Lavie, 2007). Therefore only a limited number of local firms can successfully position themselves to be centrally located within a domestic alliance network. In this sense, the costs of positioning a firm in a central location in the local network create exclusivity among the small number of local firms that may occupy such a position (Uzzi & Lancaster, 2005). In turn, the network position exclusivity makes it costly (and difficult) for less centrally located local firms to mislead foreign firms seeking centrally located IJV partners. Similarly, broker firms need to be particularly sensitive to the overall network changes and know who is connected or not connected with whom. The social process to establish and maintain these connections creates causal ambiguity and complexity. The competence underlying this type of activity is established over time, making it costly for pretenders to imitate in the short-run.

Compared with locating centrally located firms, it is more challenging for foreign firms to identify local brokers for two reasons. First, Burt (2005: 22–23) argues that "seeing" brokerage positions is not easy. To accurately identify the local brokers, a foreign



firm must accurately map both the local firm's network and that particular local firm's partners' network(s). The amount of information required to accurately map such complex networks becomes exponentially demanding (Krackhardt, 1987). Second, social networks evolve and change over time (Koka & Prescott, 2008). Local brokers' network positions may be especially unstable compared with centrally located local firms' positions (Lin et al., 2009a). For instance, firms associated with the local broker may form ties with each other in an attempt to block value appropriation by the local broker (Madhavan, Gnyawali, & He, 2004). Alternatively, local brokers may develop ties with distant firms in an effort to pool resources, making it difficult for outside observers to accurately reconstruct the local network (Obstfeld, 2005; Shi et al., 2009). Such instability may reduce the visibility of local brokers by foreign firms. Overall, these arguments suggest that a local broker may be less visible to foreign partners than a centrally located local firm. The level of visibility, as prior literature shows, may influence the likelihood of inclusion in the "consideration set" (Roberts & Lattin, 1997) of organizations that could, for instance, become valuable alliance partners (Pollock & Gulati, 2007).

Finally, the value of local brokers is in access to tacit local knowledge at low cost. These firms prefer weak ties over strong ties (Burt, 1992). Initiating a network of mainly weak ties is less costly than establishing a network of strong ties typified by a centrally located local firm (Levin & Cross, 2004). Therefore it may be comparatively easier to imitate local brokers than to imitate centrally located local firms

In summary, identifying local brokers is difficult, but not impossible. However, foreign firms must work harder to identify these local brokers. In other words, it is easier for foreign firms to observe and identify centrally located local firms than local brokers. These arguments suggest the following:

Hypothesis 2: The relationship between a local broker's position (brokerage) within the domestic alliance network and its likelihood of being selected as an IJV partner by foreign firms will be weaker than the relationship between a centrally located local firm's position (centrality) and the likelihood of being selected by foreign firms.

Contingency Effect of Network Position Traits

Visibility is important for foreign firms to identify centrally located local firms and local brokers. Underlying this statement are two important assumptions. First, foreign firms have the same ability to accurately observe these network position traits. Second, local firms willingly demonstrate and therefore will not purposefully mask their network position traits. In developing our arguments on moderating effects, we now relax these two assumptions. The ability to identify network traits differs among foreign firms. In particular, firm-specific capabilities can influence the interpretation and transmission process of network traits (Heil & Robertson, 1991). In addition, local firms vary in their willingness to demonstrate their network position traits. Therefore it is important to investigate (1) foreign firms' local market experience and (2) foreign firms' capabilities as perceived by local firms.

Foreign firms' local market experience

One important moderating variable is organizational experience – the intensity of exposure to certain activities or the time spent on these activities (Luo & Peng, 1999). We focus on a foreign firm's local market experience because it indicates familiarity with the local market. In addition, local market experience may capture the foreign firm's identification processing capabilities (Heil & Robertson, 1991). The foreign firm's capabilities to identify local firms' network position traits is critical during partner selection, allowing the foreign firm to accurately identify centrally located local firms and local brokers (Luo & Peng, 1999).

Local market experience may thus help the foreign firm in at least two ways. First, it improves the efficiency of information search and processing (Chang, Gong, & Peng, 2012). Second, foreign firms with a high level of local experience may have well-developed cognitive structures capable of piecing together a local firm's network portfolio (Ozcan & Eisenhardt, 2009). Foreign firms with a high level of local experience are also more likely to enjoy good relationships locally, thus facilitating the information search process (Li, Poppo, & Zhou, 2008).

Hypothesis 3a: A foreign firm's experience in a local market will positively moderate the relationship between centrally located local firms' positions (centrality) within the domestic alliance network and the likelihood of being selected as IJV partners by foreign firms.

Hypothesis 3b: A foreign firm's experience in a local market will positively moderate the relationship between local brokers' positions (brokerage) within the domestic alliance network and the

likelihood of being selected as IJV partners by foreign firms.

The above arguments suggest that foreign firms' local market experience helps them understand network position traits (regardless of centrality or brokerage) more effectively. However, corresponding to Hypothesis 2, what is the role of foreign firms' local market experience in their selection of centrally located local firms relative to local brokers? Next, we argue that when foreign firms' local market experience is strong, they are more likely to select local brokers rather than centrally located local firms.

Firms with different levels of local market experience may have different challenges and therefore experience different liabilities of foreignness (Luo, 2007). First, for foreign firms with a low level of local market experience, achieving local legitimacy through building technological leadership or defining the technological standard in the local market may be a primary concern (Isobe, Makino, & Montgemery, 2000; Luo & Tung, 2007). This may provide certain advantages in an emerging economy where established technical specifications and designs among local firms rarely exist (Yan, 1998). The main goal for these foreign firms is to survive rather than to make profit. Foreign firms with little local experience may therefore like to draw on centrally located local firms to achieve this goal of gaining local legitimacy.

In contrast, foreign firms with a high level of local experience have gained initial local legitimacy and are more likely to be concerned with expanding to new territories (either geographically or product-related) within an emerging economy. To these firms, the change of concern and challenge makes centrally located local firms *less* attractive. In contrast, local brokers may become *more* attractive IJV partners because they provide complementary, novel information that foreign firms can use for market expansion.

Foreign firms with a high level of local experience may want to explore the idiosyncratic local rules and norms in various regions or areas. Similar to tourists, foreign firms may seek a mainstream tour guide to show them the high-profile sights on an initial trip to the local market. However, on subsequent trips, tourists, having seen the major sights, may seek a more specialized tour guide that specializes in "off the beaten path" sights and experiences in the local market. From this perspective, we may consider the local network a field of secondary brokers that possess information about local interests that may exclude high-profile sights all together, and thus are

more interesting to a seasoned traveler – or, in our case, an experienced foreign firm (Burt, 2007). Therefore local market, cultural, and regulatory knowledge and information become increasingly important and arise as the top priority for experienced foreign firms

Meanwhile, firms with little local experience may also suffer from information asymmetries regarding their potential local partners' trustworthiness (Guler & Guillén, 2010; Luo & Peng, 1999; Roy & Oliver, 2009). Experience in the local market helps foreign firms to cultivate important organizational routines that mitigate adverse selection (Ozmel et al., 2012). Simply put, experienced foreign firms tend to recognize potentially trustworthy local partners. Therefore selecting centrally located local firms becomes less important as a source of identifying trustworthy local partners.

In addition, foreign firms with a high level of local experience may be more concerned with technology spillovers that may increase rivalry (Meyer & Sinani, 2009). Centrally located local firms are in the best position to take advantage of technology spillovers. In contrast, local brokers specialize in niche markets (either technologically or geographically), and thus are less likely to have technical domains that overlap with the foreign firm. Limited absorptive capability will also keep local brokers from taking advantage of technology spillovers from foreign firms. The breadth of technological coverage by a centrally located local firm may limit the absorption of the technology spillovers from foreign firms. However, centrally located local firms may efficiently diffuse technology know-how to other local firms given their local alliance network position.³ Taken together:

Hypothesis 3c: The moderating effect of foreign firms' experience in a local market will be stronger in the selection of local brokers than in the selection of centrally located local firms. In other words, experienced foreign firms are more likely to select local brokers than centrally located local firms within the local alliance network.

Foreign firms' capabilities as perceived by local firms

As discussed earlier, local partners have incentives to advertise their network positions. However, the desire to do so varies by conditions. One of the important conditions is foreign firms' perceived capabilities, which is defined as the capabilities that are perceived by local firms. When foreign firms' perceived capabilities are strong, local partners'



desire to demonstrate network position traits will be higher. In other words, the utility of demonstrating network position traits is essentially a function of local firms' willingness to enhance their visibility in the eyes of foreign firms (Higgins & Gulati, 2003; Pollock et al., 2008). This is because a fundamental requirement for membership in local networks is the perceived ability to reciprocate in exchange relations (Choi & Beamish, 2013). Trading information is part of an exchange relationship that is bounded by the rules of reciprocity (Puffer, McCarthy, & Peng, 2013; Teagarden & Schotter, 2013; Thams, Liu, & Von Glinow, 2013). In addition, a trader may "favor partners that promise the most useful information in return for his/her own" (Carter, 1989: 159). The ability of a foreign firm to contribute valuable information and skill-sets in a potential partnership with local firms will depend on the amount of resources that it is perceived (by local firms) to possess (Luo, 2008; Zhan, Chen, Erramilli, & Nguyen, 2009). To the same extent that foreign firms prefer more capable local partners, local firms also prefer more capable foreign firms (Mitsuhashi & Greve, 2009; Zhan & Chen, 2013). We argue that a more capable foreign firm (in the eyes of local partners) will be more attractive to local firms. In turn, the perceived capabilities will help a foreign firm accelerate its learning of the local network, enhancing its ability to interpret network position traits. Specifically,

Hypothesis 4a: A foreign firm's perceived capabilities in the eyes of local firms will positively moderate the relationship between local brokers' positions (brokerage) within the domestic alliance network and the likelihood of being selected as IJV partners by foreign firms.

Hypothesis 4b: A foreign firm's perceived capabilities in the eyes of local firms will positively moderate the relationship between centrally located local firms' positions (centrality) within the domestic alliance network and the likelihood of being selected as IJV partners by foreign firms.

Here we are also interested in examining the relative importance of centrally located local firms vs local brokers under the condition of foreign firms' capabilities. In parallel with Hypothesis 3c, we argue when foreign firms' capabilities are perceived higher by local firms, foreign firms are more likely to select local brokers rather than centrally located local firms. This is because foreign firms with a high level of perceived capabilities (such as belonging to Fortune 500) already possess a high status globally

and command a great deal of respect locally. This is especially true in an emerging economy such as China where foreign products (especially those produced by reputable foreign firms) are usually perceived as higher quality than domestic ones (Brouthers & Xu, 2002). This indicates that foreign firms that have a high level of perceived capabilities can achieve local legitimacy even without ties with centrally located local firms. Therefore these foreign firms may be less likely to ally with centrally located local firms given that these local firms' status resources may be redundant (Lin et al., 2009a). Centrally located local firms may also have extravagant demands on the foreign firms, increasing the cost of IJVs for foreign firms (Tong, Reuer, & Peng, 2008). In addition, the overlapping reputation resources may push centrally located local firms into a competitive position with these foreign firms.

In contrast, local brokers usually possesses complementary (but non-overlapping) knowledge such as unique local knowledge and region-specific expertise (Shipilov & Li, 2008). In this sense, foreign firms with a high level of perceived capabilities may find a local broker more attractive as an IJV partner relative to a centrally located local firm. Furthermore, foreign firms with a high level of perceived capabilities may have a much larger pool of resources to expand within an emerging economy. Understanding the local market, cultural, and regulatory knowledge, therefore, is one of their priorities. Forming an alliance with a local broker can thus achieve this goal.

Hypothesis 4c: The moderating effect of a foreign firm's perceived capabilities will be stronger for the selection of local broker than for a centrally located local firm. In other words, foreign firms that have a high level of perceived capability are more likely to select a local broker than a centrally located local firm within the local alliance network.⁴

METHODOLOGY

Research Setting

We sampled the electronics and information technology (IT) industries in China. We selected these two industries for three reasons that are consistent with our theoretical framework. First, open FDI policies in these two industries have attracted significant FDI (Sun, Chen, & Pleggenkuhle-Miles, 2010; Sun & Lee, 2013). Some local firms have developed a domestic alliance network, which allows them to gain more bargaining power when negotiating with foreign firms for new IJVs (Meyer & Sinani, 2009).

Some local firms have honed the skill of conveying the value generated from their accumulation of domestic alliances to attract foreign firms. Second, the number of IJVs in these industries provides a large sample. Third, some alliances may cross these two industries because of the emerging trend of integrating hardware and software in global competition.

Meanwhile, we focused on alliance network rather than other kinds of networks (e.g., board interlocks, value chain production networks, or patenting reference groups). Methodologically, the type of content of our choice of network should be linked with (1) resources that flow through the network and (2) the theory that we draw on (Wasserman & Faust, 1994). The intuition would be that each type of network represents a specific set of pipes, through which different resources flow. For example, value chain production networks may be conduits for day-to-day operational flows, while alliances may allow for strategic information and resource exchange. In our study, we are interested in the ability for foreign firms to obtain local market, cultural, and regulatory knowledge. The alliance network may be a suitable venue to gain such business-related knowledge (Sun, Peng, Ren, & Yan, 2012). While past research mainly focuses on the alliance at the dyad level (a focal firm's allies make a difference), our study centers on the alliance at the network level (the position occupied makes a difference).

Sample and Data Collection

For the domestic alliance network, we focused on equity-based alliances, which require a serious commitment in resources. Alliance data were collected from WIND Data Services. Similar to the Security Data Corporation Platinum database, the WIND database has reasonably consistent and complete coverage on alliance activities, and has been used in recent research (Lin et al., 2009a; Shi, Sun, & Peng, 2012; Sun & Lee, 2013).

Following Rowley, Behrens, and Krackhardt (2000), we constructed the domestic alliance network by incorporating all listed firms within two industries. In total, we identified 84 focal firms (listed on either the Shanghai or Shenzhen Stock Exchange) that had relatively complete financial information from WIND, resulting in a total of 191 domestic alliances from 2001 to 2005 (inclusive). From WIND, we also obtained 73 IJV formation events with 69 foreign partners among these 84 local firms during these 5 years.⁶ Foreign partners included Ericsson, GE, Hitachi, Hyundai, Intel, LG, Microsoft, Motorola, NEC, Nokia, Philips, Samsung, Sony, Toshiba, and other world-class MNEs. Famous local partners included the world's top TV makers TCL, Changhong, Konka, and Hi-Sense; the world's top refrigerator maker Haier; the world's top airconditioner maker MIDEA; China's largest TFT-LCD maker BOE; IBM's previous OEM Greatwall; China's top software developer UFIDA; China's largest software outsourcing providers Neusoft and ChinaSoft; China's top PC maker Founder; and one of the world's top telecommunications equipment providers ZTE. We also collected shareholder background, state ownership, and other corporate governance and finance data from WIND.

Local firms' patent information was collected from China's State Intellectual Property Office.⁷ Local firms' CEO profiles were obtained from the "Profile of Directors and Senior Managers" section of their annual reports. Foreign partners' local market experience data were collected from foreign partners' annual reports and news in Lexis-Nexis and the Dow Jones News Retrieval Service. We obtained data on country-level institutional indicators for foreign firms from various editions of the World Competitiveness Yearbook (2001–2005). We also accessed the Fortune Global 500 Online Database to obtain data on Fortune Global 500 membership data (http:// money.cnn.com/magazines/fortune/global500/2008/).

Main Variables

The number of new foreign partners

Our interest was the likelihood of a local firm being selected by a foreign firm as an IJV partner. The likelihood significantly increases when there are a large number of new foreign firms that select local firms as their local partners. Specifically, we counted the number of *new* foreign partners that have chosen a local Chinese firm as an IJV partner in a specific year.

Alternatively, a simple way to operationalize our dependent variable was to use a binary variable – whether a domestic firm was selected as partner of foreign firms in IJVs (1) or not (0). While this did not capture the number of new foreign partners, we had similar results using a count and binary variable.8

Network centrality

We computed eigenvector centrality in the domestic alliance network using UCINET 6 (Borgatti, Everett, & Freeman, 2002), after constructing the symmetric (non-directional) matrix for each year. A local firm obtains higher value of eigenvector centrality by being connected to a group of partners



that are themselves well connected (Jensen, 2008; Podolny, 2001; Shipilov & Li, 2008). Our formula follows Bonacich (1972). Given an adjacency matrix A, the centrality of vertex i (denoted C_1), is given by

$$C_i = \alpha \sum A_{ij} C_j \tag{1}$$

where α is a parameter. The centrality of each vertex is therefore determined by the centrality of the vertices it is connected to. The parameter α is required to give the equations a non-trivial solution and is therefore the reciprocal of an eigenvalue. It follows that the centralities will be the elements of the corresponding eigenvector.

Brokerage

Burt (1992) suggested that network constraint effectively measures a firm's lack of access to structural holes. Following this constraint formula, we have:

$$P_{ij} + \sum_{q} P_{iq} P_{jq}, q \neq i, j$$
 (2)

where P_{ij} captures the strength of direct ties from firm i to firm j, and $\sum_q P_{iq} P_{jp}$ is the sum of the indirect ties' strength from firm i to firm j via all firms q. If the constraint score is non-zero, we calculate the brokerage as 1 minus the constraint score. If the constraint score equals 0, it suggests the firm is not connected to any others in the network (Jensen, 2008; Sun & Lee, 2013). In Figure 2, we illustrate the overall network in 2005. We separate unconnected clusters from one another and move them to the right edges of the figure.

Foreign firms' local market experience

We searched a foreign firm's entry year from its annual reports and news. Then we measured a foreign firm's local market experience by the

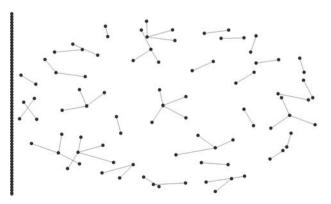


Figure 2 Local alliance network in 2005.

difference between the selected year and the year when the foreign firm entered the local market (Luo & Peng, 1999). We did not use a count-based experience variable for foreign firms because our theoretical arguments mainly focus on foreign firms' local market experience (in the context of China) rather than general or specific alliance experience.

Foreign firms' perceived capabilities

Since foreign firms come from different countries, it is not easy to find common criteria to measure their capabilities. Therefore local firms tend to look for common indicators of past performance. The Fortune Global 500 uses a common set of criteria across different countries. The literature on certification has shown that certifications bestowed by third parties (e.g., Fortune Global 500 rankings) mitigate the uncertainties faced by stakeholders when accessing a firm's capabilities (Polidoro, 2013). This has been empirically verified in a variety of settings such as education (Rindova, Williamson, Petkova, & Sever, 2005) and high-technology (Pollock & Gulati, 2007). In an emerging economy such as China where information transmission is less transparent, local firms are more likely to embark on international standards as a common measure to evaluate foreign firms. In fact, there is enthusiastic reporting by the media on the Fortune Global 500 firms in China. We, therefore, believed that these rankings (based on revenues and assets) offer a suitable proxy for perceived capabilities of foreign firms (Lin, Yang, & Arva, 2009b). Thus we created a dummy variable for Fortune Global 500 membership (1) or otherwise (0).

Control Variables

Firm performance

Good past performance is likely to attract foreign partners. Past performance thus was measured by the average return on assets during the previous 5 years.

Average domestic alliance size

We counted invested assets in all domestic alliances annually and calculated their average value over the size of the domestic alliance network. This information is available in CSRC filings and can be readily obtained by foreign firms during the process of due diligence. Large average domestic alliance size enhances the information salience to the outsiders. Prior research shows that when information salience reaches a threshold level, decision makers are more

likely to pay attention to and further integrate this information into decision making (Davis & Ashton, 2002).

Local firms' international alliance experience

This measure captures how effectively local firms can manage their cross-border alliance (Glaister & Buckley, 1997). Following Luo and Peng (1999), we recorded the year a local firm established its first international alliance, and then measured alliance experience by the difference between the selected year and the year when the first alliance was established. In addition, we also used count-based experience variables by the number of previous international alliance (s) a local firm had prior to the time period of our study (Gulati, Lavie, & Singh, 2009). Since we found no significant difference, we only reported the count-based variable in the final result.

Innovation

In our two industries characterized by rapid innovation, a local firm's capabilities of innovation are important (Khoury & Peng, 2011; Nielsen, 2003) and may affect the formation of IJVs. We measured a local firm's innovation capabilities as the number of patents filed in China each year (Ahuja, 2000). We used the logarithmic form to overcome data overdispersion.

Media exposure

The previous media exposure of alliances may affect partner valuation and new IJV formation (Pollock et al., 2008). Using financial media for example. Pollock and Gulati (2007: 349) argued that "a firm's ability to obtain coverage may help to maintain the company's visibility and cognitive availability because repeated exposure via analysts' quarterly earnings estimates, ratings and periodic reports and updates makes the company more familiar and easier to recall." Therefore we counted the number of search results when we searched for key words in Google (English) and Baidu (Chinese) search engines. We used key words such as "alliance," "cooperation," "joint venture," and "cooperative relationship". Two MBA students independently collected the news and coded the exposure variable under a standardized protocol. The intercoder reliability was 95%. We then took the natural logarithm of the number of medium exposure.

Outside director ratio

A high ratio of outside directors may affect a firm's search for IJV partners and reduce inside

(executive) directors' power in IJV formation (Gulati & Westphal 1999). Many outside directors at Chinese firms play this role (Peng, 2004). We captured this with the percentage of directors who are classified as outside directors.

CEO duality

In China, CEO duality has been found to be a double-edged sword, sometimes adding value but other times reducing the value of decision making (Peng, Li, Xie, & Su, 2010). Thus we created a dummy variable if a CEO is chairman of board (1) or otherwise (0).

CEO overseas background

Recent studies suggest that local firm CEOs who have international experience are familiar with Western-style managerial skills are more likely to be preferred by foreign partners (Liu, Lu, Filatotchev, Buck, & Wright, 2010). We obtained CEO profiles from the annual reports that contained information on their education, professional background, and career history. We created a dummy variable, *CEO Overseas Experience*, to reflect whether he or she had worked or was currently working in a foreign MNE, an IJV, or an overseas branch office of a Chinese company (1), or not (0). We created another dummy variable, *CEO Overseas Education*, to reflect whether he or she had been educated abroad (1) or not (0).

Institutional distance

Institutional distance may affect a foreign firm's costs and benefits of cooperating with local partners, and determine IJV formation (Xu & Shenkar, 2002). Following Gaur and Lu (2007), we used a Euclidean distance calculation on country-level indicators related to regulative and normative aspects of institutional environment, to construct institutional distances. This variable ranges between 0 and 2.3875.

State-owned enterprise (SOE)

This dummy variable was measured by whether a firm's controlling shareholder is an SOE or not. A controlling shareholder is one that holds a minimum of 25% of firm shares and has main influence over firm decisions. Whether a local partner is an SOE may influence its attractiveness as a valuable partner to foreign partners (Lu & Ma, 2008; Stan, Peng, & Bruton, 2013). Therefore we further included *State Ownership* as a control variable. It was measured by the percentage ownership owned by the state.



Marketization index

As a large emerging economy, China has substantial regional differences, thus making it necessary to control for such a nuance (Kwon, 2012; Lu & Ma, 2008). Certain regions have developed better market-supporting institutions, thus facilitating the dissemination of clear investment-related information (Peng, 2003). Following Fan, Wang, and Zhu (2007a), we defined regions based on the provinces in China. Fan et al. (2007a) developed this province-based marketization index through five different categories: (1) government and market forces; (2) development of non-SOEs; (3) development of commodity markets; (4) development of factor markets; and (5) development of market intermediaries and a legal environment. Each category is also further divided into several subcategories. This index has been used extensively in finance and economics (Chen, Firth, Gao, & Rui, 2006) as well as management (Markóczy et al., 2013; Shi et al., 2012) and international business (Gao, Murray, Kotabe, & Lu, 2010). Since the score achieved by each province changes over time, our marketization index is time-variant. Following Fan et al. (2007a), we included an index (Marketization Index) to capture the stage of institutional progression in different provinces ranging from 2.95 to 10.41. A higher marketization index indicates a higher degree of development of market-supporting institutions.

Political ties

This variable was measured by determining whether the CEO of a domestic firm was or is an official of the central government, local government, or military. This measure is consistent with the one used in prior literature. For example, Fan, Wong, and Zhang (2007b) defined political ties as a CEO serving as a current or former government bureaucrat. As Fan et al. (2007b: 331) argued, because "Chinese government possesses the right to appoint the CEO of a listed company, the CEO's political affiliation provides a suitable proxy for government influence". As a result, ties with the government are often associated with greater resource support from the government (Lu & Ma, 2008; Peng & Luo, 2000). Therefore firms with political ties may be perceived as a good alliance candidate (Siegel, 2007).

Other control variables included *Firm Age* (in years), *Firm Size* (number of employees of the firm, using natural logarithm), *Year Dummies*, and *Industry Dummies* (which equals 0 if in the electronics industry and equals 1 if in IT industry).

Estimation Strategy

Since the dependent variable is a count variable (the number of foreign partners that the focal firm has), it ranges from 0 to a positive number, which is nonnegative and makes it inappropriate to use standard multiple regression. Poisson regression is explicitly designed for count dependent variables. However, Poisson assumes that the mean and variance of the counts are equal. For most social-science data, the variance likely exceeds the mean, resulting in the problem of overdispersion that biases the estimated standard errors downward. The negative binomial model overcomes the overdispersion problem and also accounts for omitted - we used a different estimation and model that directly delivered the standard error for the variable of interest variable bias. But it is only suitable when dependent variables span a wide range of values. In our study, the dependent variable – the number of foreign partners ranges from 0 to 4. Under these conditions, ordinal logistic regression is more suitable. We, therefore, used a general linear model that incorporated ordinal logistic analysis. The model is:

$$Log \{P[Y \geqslant a]/P[Y < a]\} = \beta_a + \beta_1 X_1
+ \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_p X_p$$
(3)

We assumed that the response variable is ordinal and takes on integer values a=0,1,2,3,4 in our sample. If $1 \le Y \le 4$ then we have four equations for a=0,1,2,3. The X's are covariates or interactions. This model is also called the proportional odds model. In theory we could have four different coefficients, $\beta_{1,1}$, $\beta_{1,2}$, $\beta_{1,3}$, $\beta_{1,4}$, one for each equation. But we have only one coefficient for X_1 . This is a simplified model that states that the odds for obtaining a response of at least a, for different values of a, is proportional to $\exp(\beta_a)$, whatever the fixed value of all the covariates. We used the GENMOD procedure in SAS.

We had multiple observations for a firm over time, which may raise the concern of potential autocorrelation. To address this, we used a repeated measure in the GENMOD procedure that allowed us to control for autocorrelation (AR1). This is akin to controlling for number of foreign partners in the prior year. We also lagged independent variables and control variables by 1 year in the regression analysis.

To test Hypotheses 2b, 3c, and 4c, we needed to compare the coefficient of network centrality and brokerage: $\beta_{Network\ centrality}$ vs $\beta_{Brokerage}$. Because it was difficult to compute the standard error – namely, the square root of the variance of the

differences between the two coefficients (e.g., $\sqrt{\hat{\beta}_{Networkcentrality} - \hat{\beta}_{Brokerage}}$) – we used a different estimation and model that directly delivered the standard error for the variable of interest (Wooldridge, 2006). We first defined a new parameter θ so that $\theta = \beta_{Network\ centrality} - \beta_{Brokerage}$. Then, we tested a new null hypothesis:

$$H_{0:}\theta = 0 \text{ vs } H_{being tested} : \theta < 0$$
 (4)

We can do this by rewriting the regression model so that θ appears directly with one of the independent variables. Because $\beta_{Network\ centrality} = \theta + \beta_{Brokerage}$, we can plug this into our original model and rearrange the equation in the following way:

$$Log(number of foreign partners)$$

$$= \beta_{o} + \left(\theta + \beta_{Brokerage}\right) Network centrality$$

$$+\beta_{Brokerage} \times Brokerage + \beta_{control\ variables}$$

 $\times Control\ variables + u$ (5)

$$= \beta_{o} + \theta \times Network \ centrality + \beta_{Brokerage}$$

$$\times (Brokerage + Network \ centrality)$$

$$+ \beta_{control \ variables} \times Control \ variables + u \quad (6)$$

Equation (6) is essentially a different way of writing Eq. (5). However, through estimating the coefficient θ , we can identify the difference between the value of centrality and brokerage. This equation can also be applied in comparison with the other two pairs of interactions.

RESULTS

Table 1 presents descriptive statistics. Multicollinearity is not a significant problem – the average variation inflation factor, 1.57, is lower than the threshold level of 10. Descriptive statistics show that the IT industry has a 12% higher level of alliance formation than the electronics industry. Both centrality and brokerage show positive correlation with the number of foreign partners, lending preliminary support to our Hypotheses 1 and 2a.

Table 2 shows the results of the ordinal logistic regression. Model 1 is the base model. Hypothesis 1a suggests that network centrality is positively related to the likelihood of being selected by foreign firms. Model 2 supports Hypothesis 1a (p<0.001). This means that controlling for all other factors, the odds for Y (being selected by N number of foreign firms, for N=1, 2, 3, 4, per year) are predicted by our model to increase by a factor of 3.062 when network

centrality is increased by one unit.¹¹ Hypothesis 1b is not supported.

Hypotheses 3a, 3b, 4a, and 4b are also supported. Hypotheses 3a and 3b show stronger significance than Hypotheses 4a and 4b. These hypotheses argue that the relationship between network position traits and the likelihood of local firms being selected by foreign firms will differ by (1) whether foreign firms have sufficient local market experience and (2) whether these foreign firms are perceived by local firms as resource-abundant. These hypotheses are supported in Models 3, 4, 5, and 6, respectively.

Next, following Aiken and West (1991), we explored the significant two-way interactions as reported in Table 3. For each significant interaction we calculated the simple slopes of network centrality/ brokerage on the likelihood of being selected by foreign firms and their standard errors at three levels (i.e., mean, one standard deviation above, and one standard deviation below the mean) of the second predictors (i.e., average size of alliance, foreign partner's local market experience, and foreign partner's Fortune 500 membership) as suggested by Cohen and Cohen (1983). We then conducted t-tests on the values of the simple slopes divided by their standard errors. Table 3 indicates that the positive relationship between network centrality and the likelihood of being selected by foreign firms is stronger when foreign firms have extensive local market experience than when they have limited experience.

Table 4 reports the comparison test of coefficients. In Model 7, we compared the coefficients of network centrality and brokerage. Positive and significant coefficients on network centrality in Model 7 indicate the coefficient of centrality is significantly larger than that of brokerage, providing support for Hypothesis 2. Models 8 and 9 have negative and significant coefficients on centrality, suggesting that the coefficient of network centrality is significantly smaller than that of brokerage in both interaction terms. These results lend support for Hypotheses 3c and 4c, respectively.

Robustness Checks

Our estimates would be unbiased only if self-selection bias and omitted variable bias were accounted for. In other words, local firms' decisions to ally need to be random and we need to account for unobserved factors that might impact these decisions. To assess these endogeneity issues, we employed a two-stage Heckman (1979) selection procedure. The results were consistent with the reported findings and the inverse Mills ratio was not significant,

Table 1 Descriptive statistics and Pearson correlation matrix (N = 323)

Variables	Mean	Standard deviation	Minimum N	/laximum	1	2	3	4	5	6	7	8	9	10	11
1 Number of foreign partners	0.19	0.59	0	4	1				•					,	
2 Firm age	9.08	4.69	1	22	0.02	1									
3 Firm size	7.23	1.20	4.09	11.09	0.05	-0.04	1								
4 Performance	0.26	11.65	-135.38	27.93	0.09	-0.24*	0.13*	1							
5 Patents	0.30	0.53	0	2.11	-0.04	-0.14*	0.34*	0.10	1						
6 Media	3.98	5.17	0	13.79	0.07	0.04	0.23*	-0.04	0.14*	1					
7 Industry	0.67	0.47	0	1	0.12*	0.14*	-0.37*	-0.06	-0.15*	-0.18*	1				
8 Outside director ratio	0.26	0.13	0	0.5	-0.23*	0.16*	-0.02	-0.18*	0.21*	0.05	-0.01	1			
9 CEO duality	0.16	0.37	0	1	-0.02	0.06	0.04	-0.09	-0.03	0.08	-0.09	-0.04	1		
10 CEO oversea experience	0.15	0.36	0	1	-0.04	-0.10	-0.09	0.05	0.02	0.04	0.01	-0.04	-0.17*	1	
11 CEO oversea education	0.05	0.21	0	1	-0.05	-0.16*		0.01	0.00	-0.04	-0.05	-0.08	-0.09	0.29*	1
12 Institutional distance	0.19	0.55	0	2.39	0.10*	-0.07	-0.11*	0.05	-0.04	0.01	-0.03	0.01	-0.02	-0.09	-0.04
13 Average domestic alliance size	4947	8830	0	99904	-0.04	0.02	0.04	-0.04	-0.03	0.01	-0.17*	-0.01	-0.10	-0.06	-0.02
14 Local firms' foreign experience	2.01	2.37	0	7	0.07	-0.08	0.22*	0.02	0.16*	0.24*	-0.35*	0.11*	-0.05	-0.14*	-0.09
15 Foreign firms' local market experience	1.72	5.89	0	39	0.03	-0.08	-0.01	-0.04	0.02	0.41*	-0.12*	0.00	-0.05	0.06	0.04
16 Fortune 500 membership	0.05	0.22	0	1	0.07	-0.08	-0.02	-0.05	0.05	0.31*	0.04	0.05	-0.10	0.15*	0.07
17 SOE	0.73	0.44	0	1	0.09	-0.06	0.23*	0.21*	0.11*	0.11*	-0.24*	-0.15*	0.01	0.10	0.01
18 Marketization index	7.54	1.71	2.95	10.41	-0.02	0.21*	0.20*	-0.02	0.25*	0.29*	0.07	0.35*	-0.05	0.10	-0.01
19 Political ties	0.17	0.38	0.00	1.00	0.00	-0.19*	-0.04	0.03	-0.01	0.00	0.04	-0.02	0.29*	-0.03	-0.10
20 State ownership	30.02	26.43	0.00	85.00	0.08	-0.38*	0.13*	0.14*	0.07	0.04	-0.13*	-0.13*	-0.06	0.18*	0.04
21 Network centrality	0.36	0.82	0	6.3	0.35*	-0.04	0.10*	0.03	-0.03	0.05	-0.13*	-0.18*	-0.04	-0.04	-0.04
22 Brokerage	0.28	0.45	0	1	0.28*	0.05	0.02	-0.01	0.03	0.02	0.15*	-0.16*	-0.05	-0.09	-0.05
		12	13	14	15		16	17		18	19		20	21	22
12 Institutional distance		1													
13 Average domestic alliance s		-0.04	1												
14 Local firms' foreign experien		-0.03	0.02	1											
15 Foreign firms' local market	experience	-0.04	0.21*	0.38*	1										
16 Fortune 500 membership		-0.02	0.09	0.08	0.33		1								
17 SOE		-0.05	0.04	0.27*	0.04		0.03	1							
18 marketization index		-0.05	-0.07	0.09	0.17		0.17*	-0.1		1					
19 Political ties		0.00	-0.10	-0.04	-0.10)* _	0.04	-0.04	4	0.05	1				
20 State ownership		-0.04	0.17*	0.26*	0.13		0.01	0.59	9* -	-0.27*	-0.08	3 1			
21 Network centrality		0.00	0.02	0.01	-0.01	_	0.02	0.0	3 -	-0.04	-0.04	4 (0.03	1	
22 Brokerage		0.03	-0.01	-0.03	-0.02	! -	0.03	0.0	1	0.00	0.0	1 –(0.06	0.38*	1

Note: * *p*<05.

Table 2 Ordinal logistic regression analysis by general linear models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Control Variables						
Firm age	0.018	0.021	0.033	0.038	0.027	0.028
Firm size	0.392**	0.324*	0.346*	0.337*	0.348*	0.334*
Performance	0.002	0.002	0.001	0.001	0.001	0.001
Patents	-0.109	0.131	-0.023	0.132	-0.013	0.095
Media	0.047	0.033	0.031	0.033	0.034	0.032
Industry	1.303***	2.321***	2.235***	2.328***	2.345***	2.338***
Outside director ratio	-4.617*	-2.212	-3.336	-3.631	-2.646	-3.159
CEO duality	0.074	0.736 [†]	0.813 [†]	0.736	0.644	0.636
CEO oversea experience	-0.459	-0.002	-0.223	-0.063	-0.213	-0.089
CEO oversea education	-1.114	-0.315	0.034	0.163	-0.146	-0.141
Institutional distance (ID)	0.567^{\dagger}	0.737*	0.759*	0.768*	0.756*	0.771*
Average domestic alliance size (ADAZ)	0.116	0.093	0.071	0.086	0.082	0.091
Local firms' foreign experience (LFE)	0.185*	0.325**	0.348**	0.224**	0.227**	0.238**
Foreign firms' local market experience (FLE)	-0.048	-0.037	-0.128	-0.167*	-0.075	-0.082
Fortune 500 membership (F500)	1.897*	2.238 [†]	4.017**	3.786*	2.563	2.517
SOE	0.133	0.113	0.014	0.156	0.146	0.154
Marketization index	-0.074	-0.064	-0.135	-0.056	-0.061	-0.067
CEO political ties	2.231*	2.735*	2.926*	2.526 [†]	2.837*	2.463 [†]
State ownership	0.013	0.014	0.026^{\dagger}	0.033^{\dagger}	0.031^{\dagger}	0.032^{\dagger}
Main effect						
Network centrality (Hypothesis 1a+)		1.119***	1.298***	1.154***	1.171***	1.138***
Brokerage (Hypothesis 1b+)		0.507	0.261	0.362	0.284	0.327
Interaction effect						
Network centrality×FLE (Hypothesis 3a+)			0.391**			
Brokerage×FLE (Hypothesis 3b+)				0.776**		
Brokerage×F500 (Hypothesis 4a+)					6.549*	
Network centrality×F500 (Hypothesis 4b+)						12.617 [†]
Intercept 1	-9.425***	-10.549***	-10.926***	-10.853***	-10.942***	-10.636***
Intercept 2	-8.992***	-10.132***	-10.365***	-10.345***	-10.458***	-10.153***
Intercept 3	-7.873***	-9.236***	-9.766***	-9.467***	-9.438***	-9.224***
Intercept 4	-6.675***	-7.254***	-7.378***	-7.435***	-7.576***	-7.306***
N	323	323	323	323	323	323
Log likelihood	-166.30	-149.25	-137.38	-137.11	-138.28	-138.34

Notes: †*p*<0.10, **p*<0.05, ***p*<0.01, ****p*<0.001.

Due to the space limitation, we omit the coefficient estimates of the year dummy variables in this table.

Table 3 Results of standard error and *t*-tests for simple slopes of two-way interactions including network position traits and second predictors

		Network cen		Brokerage				
	Simple slope	Standard error	<i>t</i> -test	Intercept	Simple slope	Standard error	<i>t</i> -test	Intercept
Foreign firm's local marke	et experience							
High	1.863	0.382	4.88***	-12.801**	1.285	0.448	2.87**	-12.614***
Mean	1.298	0.291	4.46***	-11.338***	0.362	0.511	0.71	-10.937***
Low	0.702	0.301	2.33*	-10.425***	-0.667	0.685	-0.97	-9.919***
Fortune 500 membership)							
High (member)	1.434	0.347	4.13***	-11.453***	0.801	0.463	1.73 [†]	-10.962***
Mean	1.171	0.286	4.09***	-11.275***	0.327	0.556	0.59	-10.857***
Low (not a member)	0.764	0.283	2.70**	-12.436***	-0.103	0.686	-0.15	-12.016***

Note: †*p*<0.10, **p*<0.05, ***p*<0.01, ****p*<0.001.



Table 4 Ordinal logistic regression analysis by general linear models on comparison

	Model 7	Model 8	Model 9
Control variables			
Firm age	0.023	0.035	0.027
Firm size	0.314*	0.363*	0.339*
Performance	0.002	0.001	0.001
Patents	0.131	-0.018	-0.011
Media	0.025	0.027	0.031
Industry	2.221***	2.294***	2.369***
Outside director ratio	-2.363	-3.629	-2.667
CEO duality	0.784 [†]	0.862 [†]	0.656
CEO oversea experience	-0.002	-0.218	-0.232
CEO oversea education	-0.515	0.062	-0.173
Institutional distance (ID)	0.727*	0.801*	0.797*
Average domestic alliance size (ADAZ)	0.093	0.071	0.083
Local firms' foreign experience (LFE)	0.257**	0.242**	0.233**
Foreign firms' local market experience (FLE)	-0.063	-0.152	-0.068
Fortune 500 membership (F500)	2.153 [†]	4.147**	2.573
SOE	0.152	0.028	0.135
Market index	-0.049	-0.095	-0.078
CEO political ties	2.863*	2.945*	2.924*
State ownership	0.012	0.036^{\dagger}	0.035 [†]
Main effect			
Network centrality (Hypothesis 2+)	0.629*	1.418*	1.308**
Brokerage+network centrality	0.259	-1.403	-1.418
Interaction Effect			
Network centrality×FLE (Hypothesis 3c–)		-1.064*	
(Network centrality+brokerage)×FLE		0.938*	
Network centrality×F500 (Hypothesis 4c–)			-38.478***
(Brokerage+Network centrality)×F500			30.002***
Intercept 1	-10.637***	-10.939***	-10.812***
Intercept 2	-10.319***	-10.439***	-10.343***
Intercept 3	-9.263***	-9.567***	-9.426***
Intercept 4	-7.383***	-7.649***	-7.419***
N	323	323	323
Log likelihood	-149.64	-137.96	-137.61

Note: †*p*<0.10, **p*<0.05, ***p*<0.01, ****p*<0.001.

indicating that endogeneity did not significantly impact our results. In addition, we also tested a fixed effect model, which generated similar results.

DISCUSSION

Contributions

In our view, at least two contributions emerge. First, our theoretical framework enriches research on interorganizational relationships, especially on IJV formation. We find that certain network position traits within the alliance network seem to be associated with a greater likelihood of participating in an IJV. Theoretically, network position traits as selection criteria represent an under-researched area in the partner selection literature (Luo, 1998). We

investigate the importance of network position traits in attracting foreign IJV partners. As foreign investors become strategic insiders (Luo, 2007), they not only seek a local partner's capability attributes (operational, technological, and organizational), but also more critically pay attention to a local partner's domestic network. While prior research offers extensive knowledge of the role of networks in partner selection, recent research has begun to explore the role of centrality and brokerage simultaneously in firms' cross-border investment decisions (Guler & Guillén, 2010). Extending this line of research, we argue that brokerage can be an important attribute that affects foreign firms' market entry. The value of brokerage is also particularly important in emerging economies where regulatory regimes are less well

established, where uncertainties are high, yet where significant risks are accompanied by large market rewards (Li et al., 2009; Li et al., 2013). In such an environment, competitive advantages may accrue for foreign firms that can access tacit local "recipes" since such local information and knowledge are not readily available on the open market. While Guler and Guillén (2010) focused on centrality from the perspective of foreign partners, we go above and beyond their work by extending our attention to cover brokerage advantage from the perspective of domestic partners.

Second, the comparative analysis between centrally located local firms and local brokers has helped us to develop the boundary conditions of network theory - when and under what conditions network position traits are more likely to be observed and interpreted. For example, Pollock and Gulati (2007) pointed out that existing studies cannot differentiate the relative benefits of each network position trait in terms of visibility enhancement and uncertainty reduction. Our results indicate that centrally located local firms and local brokers clearly convey different levels of visibility. This is particularly important in a highly dynamic and uncertain environment (Lavie, 2007) such as in emerging economies, where the importance of alliances for local knowledge acquisition and legitimacy establishment are both especially significant. In such an environment, network position traits that may have the visibilityenhancing and uncertainty-reducing capabilities may well influence firms' partnering behaviors in different ways (Pollock et al., 2008).

More importantly, our comparative analysis of centrality and brokerage contributes to the alliance network literature. Prior studies have found that firms' centrality in their alliance network is an important network position trait that attracts potential partners' attention (Benjamin & Podolny, 1999). Some studies have focused on how brokerage can constrain a local broker's ability to be selected as a partner (Jensen, 2008). Few studies have compared the relative importance of each network position trait. We argue that foreign firms' local market experience and their capabilities as perceived by the local firms constitute important boundary conditions that suggest one type of network position trait may be more important than the other. Guler and Guillén (2010) found that firms that have high centrality in the home country network tend to enjoy a higher rate of foreign market entry. One of the key assumptions underlying this finding is that foreign firms differ in terms of their home-country network characteristics. This heterogeneity assumption makes local partners' network position trait particularly important for foreign partners. According to Guler and Guillén (2010), foreign firms that already outperform other firms in their home countries in social status would be willing to act on dissimilar capabilities of local partners firms. In fact, this type of "matching" argument is consistent with our Hypothesis 4c, where we argue that foreign firms that have a high level of perceived capabilities are more likely to select a local broker than a centrally located local firm. In our study, foreign firms' perceived capabilities are measured as a function of the foreign firms being a Fortune Global 500 member or not. Conceptually, social status is the prestige accorded actors due to their social positions within the system. Empirically, a suitable measure would be those related to a network such as centrality (Guler & Guillén, 2010). Jensen and Roy (2008) used an alternative measure, whether a firm belongs to the Big 4 Accounting Firm to operationalize social status. To this end, the Fortune Global 500 membership can be viewed as an alternative measure for social status, although we agree that this is not a perfect measure. In a nutshell, local brokers usually possess complementary (but non-overlapping) knowledge such as unique local market knowledge (Shipilov & Li, 2008). Therefore Fortune Global 500 firms may find a local broker more attractive as an IJV partner relative to a centrally located local firm.

Managerial and Policy Implications

Our findings have two important implications for managers and policymakers. Our results indicate that managers of foreign firms should use caution when applying a general theory of selecting an IJV partner based on the local firm's location in the domestic network. Instead, foreign firms' managers must be aware of the context of their decision, and consider the contingent implications of centrally located local firms vis-à-vis local brokers in the domestic market. For our study, centrally located local firms and local brokers offer different strategic resources. The longer the foreign firm is in the market, the more likely it is to select a local broker as an IJV partner. Anticipating this search process and acquiring the "best" local broker IJV partner may prove critical for the long-term success in the domestic market.

Policymakers may also find value in knowing how foreign firms select local partners. Often, policymakers in emerging economies will replicate institutions found in developed economies. This is



problematic because the resulting institutions may mislead foreign firms looking for information on local partners (Spicer, Dunfee, & Bailey, 2004). Instead, policymakers may look for ways to enhance the quality of network position traits from local firms in domestically unique ways - in this case reporting whether the firm is a centrally located local firm or a local broker. By creating a public forum for local firms to display their network position trait, policymakers may create social pressures to avoid misrepresentation. This will increase the costs associated with imitation, making the network position trait easier to identify and interpret from the perspective of the foreign firm. Overall, such a system may facilitate the partner selection process and (potentially) attract more FDI to the country by mitigating information asymmetries (Stiglitz, 2000).

Limitations and Future Research Directions

One of the limitations is that we do not measure whether foreign partners truly map out local company networks and the position of specific companies within them when making partnering decisions. To address this issue, we did three things to further fine-tune our arguments. First, Godfrey and Hill (1995) argued that simply because we cannot observe certain phenomena does not mean they do not exist. "The evidence that we have that such entities exist independent of our theorizing about them is not based upon observation of the entities themselves, since they are unobservable, but upon observation of their effects" (Godfrey & Hill, 1995: 525). In other words, we believe the identification process is essentially an underlying mechanism, which is unobservable. However, we can document its existence by empirically observing its effects on partner selection.

Second, theoretically, individuals are highly motivated to generate an overall view of the system ("the forest") when they enter into a new social situation (von Hecker, 1993). They are eager to learn and to make sense of the complex network structures or patterns. Within the alliance literature, some practitioners pointed out the importance of understanding "group structure" of alliance partners. As Wolf (2000: 340) stated, "We therefore must understand all the major commercial relations ... that the joint venture company has with other enterprises. This requires an inquiry into the interrelationships between the joint venture company and others. This inquiry will afford a comprehensive understanding of the dynamics of the joint venture

company." Furthermore, the fact that high social status foreign firms will be more likely to search for local brokers rather than centrally located local firms (Hypothesis 4c) further reinforces the notion that some (although not all) foreign firms are indeed observing these network position traits.

Third, to further enhance the face validity of MNEs mapping local firms' network, we conducted three informal interviews. As our interviewees pointed out, they do not map out the local firms' network in the same way that researchers do (i.e., calculating network centrality or brokerage). It is also impossible or very challenging for boundedly rational people to keep track of all possible relationship pairs (Kilduff, Crossland, Tsai, & Krackhardt, 2008). However, the information on who are central players and who are local brokers can be discerned through observing the behavior clue or pattern of local firms and are shared and agreed upon by local communities. For example, as one of our interviewees responded when asked "Do you truly pay attention to your potential alliance partners' network?"

That (their network) is certainly important to us ... you know the behavior patterns are important to decide what are the firms that enjoy high social status here and what are those brokers ...

Another interviewee pointed out:

Central players are usually easy to spot. Our suppliers talk about them, so do our distributors and our legal and financial consultants.

Another limitation is that because we examine IIV partner selection in a single country, we cannot study the effect of different institutional effects on partner selection as Hitt et al. (2004) and Meyer et al. (2009a) did by comparing multiple countries. A possible future direction is to compare how network position traits impact partner selection in multiple emerging economies with different market-supporting institutions (Meyer et al., 2009a). Similarly, our examination period is between 2001 and 2005, the first period after China's accession to the World Trade Organization that resulted in an influx of FDI. To this end, our study hinges on an important assumption: having foreign IJV partners is valuable for local firms. However, the relative value of establishing IJVs may decline over time (Pajunen & Fang, 2013; Tong et al., 2008), especially after the establishment of market-supporting institutions (Peng, 2003; Xia, Tan, & Tan, 2008). Unfortunately, our data preclude us from investigating such a dynamic effect, which should be explored in future research.

One of the limitations is that our political ties only measure whether the CEO of a domestic firm was or is an official of the central government, local government, or military, but it does not capture the specific communist party links that are sometimes more intricate and complex. For instance, the leading cadres of the central government may follow the implicit rule of intergenerational inheritance when appointing top managers (Shi et al., 2013). Firms that are represented by these managers may be well sought after by foreign partners due to these managers' particularistic relations (Luo & Chung, 2005) with the top leaders in the government sector. More nuanced data showing these differences can shed more light on the role of political ties in facilitating and constraining foreign partners' selection.

Also, our sample is limited to IJVs. We do not include other types of alliances, especially non-equity alliances. This may limit the generalizability of our arguments in other contexts. The alliance networks formed by equity-based IJVs may be different from those formed by non-equity-based alliances. Partners in equity-based IJVs entail significantly more resource commitments. Therefore an alliance network formed by equity-based IJVs can be considered a network with multiple strong ties. Non-equity-based alliances are more likely to be characterized by weak ties, which may be even harder for foreign partners to identify. Future research may examine how the strength of ties impacts the observation and interpretation of network position traits.

Furthermore, we only include listed firms. Our main rationales for this sampling strategy are twofold. First, publicly listed firms have much better corporate governance than private firms in China. Listed firms with sophisticated governance structures may more strongly protect foreign firms' interest than private firms. Second, publicly listed firms have relatively more transparent policies than private firms. The more available corporate information related to publicly listed firms will help foreign firms' partner selection. While private firms are active in forming domestic alliance networks and some have attracted foreign IJV partners, lack of data availability for private firms may pose a potential threat to the validity of our results. We, therefore, have conducted some additional tests. In an ad hoc analysis, we compare centrality and brokerage measures between some listed firms and some private firms. The rationale is that if both groups demonstrate different levels of centrality and brokerage, then there is a potential sample selection bias. Our test indicates that there is no significant difference at the level of centrality and brokerage between these two groups.

CONCLUSION

Prior research on IJV partner selection has left unexplored the potentially important network properties of the domestic alliance network in which local firms are embedded. We argue and substantiate the case that the domestic alliance network can be a credible and powerful source for foreign firms to filter and sort prospective local partners in an emerging economy. For practitioners, the implications of our findings are clear. Specifically, local firms' network position traits in the domestic alliance network can help foreign firms reduce information asymmetries when selecting IJV partners. In turn, managers of local firms are advised to leverage their domestic alliance network to attract foreign IJV partners by considering not only the foreign firms' capabilities, but also the foreign firms' local market experience.

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NOTES

¹While China has been plagued by information credibility historically, the issue has been generally improving over time. For specific information about disclosure requirements for listed companies, check the website of China Securities Regulatory Commission (http://www.csrc.gov.cn/pub/csrc_en/).



²Foreign firms can de-code local media through two main mechanisms. First, for the human mechanism, foreign firms can hire someone who understands the local language to de-code media. Many large foreign firms also have a large ethnic group of employees (e.g., overseas Chinese), who can be useful for understanding local media. Second, for the social mechanism, many local medium (e.g., newspapers, trade journals, TV programmers) now have an English version (a global language) of their local content. This is particularly true in China where the force of globalization makes such an endeavor necessary to attract FDI.

³For example, Japan's Hitachi, which entered China earlier, had more local market experience than the United States' Corning did. Hitachi chose the Fujian Electric Group in Fuzhou as the partner to build a digital media JV company in 2001, and Corning selected SEG as the partner to build a JV for manufacturing color cathode ray tubes and monitor bulbs. Fujian Electric Group was a local broker, while SEG was a centrally located firm in the local alliance network.

⁴The central element here would be that the foreign firm's choice (local broker vs centrally located firm) is not exclusively determined by the foreign firm's capability level. The capability level is one factor that our theory proposes adds explanatory power – we do not claim that it will exhaustively predict the foreign firm's choice. Rather, what capability level does is to predispose the foreign firm in some ways, not force that choice. In other words, the model is not a "causal-deterministic" one but an "associative-likelihood" one.

⁵For three reasons, we focused on the FDI policy during the study period (2001–2005). First, China's People's Parliament Committee revised the Foreign Joint Venture Law and Foreign Direct Investment Law in 2000 to be more consistent with the WTO agreement. Second, the new FDI policy eliminates those restrictions that are incompatible with the WTO agreement. Third, the Chinese government also revised industry policies in order to attract FDI toward strategic industries such as electronics and IT.

⁶One IJV event may engage two or more partners, since some foreign entrants (e.g., Microsoft) have two or more IJVs with multiple local partners in China.

⁷We accessed http://search.sipo.gov.cn/sipo/zljs/. In summary, China's patent law divides patents into three categories: invention, utility model, and external design. Invention patents are regarded as major innovations. To obtain a patent for invention, an application must meet the requirements of "novelty, inventiveness, and practical applicability." Usually, it takes about 1-1.5 years for the State Patent Office to process an invention patent application. The processing time for patent applications for a utility model is about 6 months, and it is even shorter for design patent. Today's patent law in China is mostly in line with the international standard. Up till now, China has acceded to all the international patent treaties in order to meet the requirements of the WTO's Agreement on Trade-Related Intellectual Properties (Cheung & Lin, 2004).

⁸This approach generates similar results. Results are available upon request.

⁹We thank one reviewer for pointing this out.

¹⁰We also conducted the Proportional Odds Assumption test, which tests whether our one-equation model is valid (the ordered logit model estimates one equation over all levels of the dependent variable). If we were to reject the null hypothesis, we would conclude that ordered logit coefficients are not equal across the levels of the outcome and we would fit a less restrictive model. If we fail to reject the null hypothesis, we conclude that the assumption holds. We first download a user-written command in Stata called omodel. We then conduct likelihood ratio test (Long & Freese, 2006). The results (Prob > $\chi^2 = 0.3427$) indicate that we cannot reject the null hypothesis, which suggests that there is no difference in the coefficients among models.

¹¹We take the following form to calculate the Odds ratio.

$$Odds = \frac{Odds[Y \ge a] when X_{centrality} = i + 1}{Odds[Y \ge a] when X_{centrality} = i}$$
$$= \exp(1.119) \sim 3.062$$

REFERENCES

Ahuja, G. 2000. Collaboration networks, structural holes, and innovation: A longitudinal study. *Administrative Science Quarterly*, 45(3): 425–455.

Ahuja, G., Polidoro, F., & Mitchell, W. 2009. Structural homophily or social asymmetry? The formation of alliances by poorly embedded firms. Strategic Management Journal, 30(9): 941–958. Aiken, L. S., & West, S. G. 1991. Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.

Al-Laham, A., & Souitaris, V. 2008. Network embeddedness and new-venture internationalization: Analyzing international linkages in the German biotech industry. *Journal of Business Venturing*, 23(5): 567–586.

Beckman, C. M., Haunschild, P. R., & Phillips, D. J. 2004. Friends or strangers? Firm-specific uncertainty, market uncertainty, and network partner selection. *Organization Science*, 15(3): 259–275.

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- Benjamin, B. A., & Podolny, J. M. 1999. Status, quality, and social order in the California wine industry. *Administrative Science Quarterly*, 44(3): 563–589.
- Bjerregaard, T., & Lauring, J. 2012. Entrepreneurship as institutional change: Strategies of bridging institutional contradictions. European Management Review, 9(1): 31–43.
- Bonacich, P. 1972. Factoring and weighting approaches to status scores and clique identification. *Journal of Mathematical Sociology*, 2(1): 113–120.
- Borgatti, S. P., Everett, M. G., & Freeman, L. C. 2002. *Ucinet 6 for windows: Software for social network analysis*. Harvard, MA: Analytic Technologies.
- Brouthers, L. E., & Xu, K. 2002. Product stereotypes, strategy and performance satisfaction: The case of Chinese exporters. *Journal of International Business Studies*, 33(4): 657–677.
- Burt, R. S. 1992. *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. 2005. *Brokerage and closure*. New York: Oxford University Press.
- Burt, R. S. 2007. Secondhand brokerage: Evidence on the importance of local structure for managers, bankers, and analysts. *Academy of Management Journal*, 50(1): 119–148.
- Carter, A. P. 1989. Knowhow trading as economic exchange. Research Policy, 18(3): 155–163. Chabowski, B. R., Hult, G. T. M., Kiyak, T., & Mena, J. A. 2010. The
- Chabowski, B. R., Hult, G. T. M., Kiyak, T., & Mena, J. A. 2010. The structure of JIBS's social network and the relevance of intracountry variation: A typology for future research. *Journal of International Business Studies*, 41(5): 925–934.

 Chang, S. J., & Xu, D. 2008. Spillovers and competition among
- Chang, S. J., & Xu, D. 2008. Spillovers and competition among foreign and local firms in China. Strategic Management Journal, 29(5): 495–518.
- Chang, Y.-Y., Gong, Y., & Peng, M. W. 2012. Expatriate knowledge transfer, subsidiary absorptive capacity, and subsidiary performance. *Academy of Management Journal*, 55(4): 927–948.
- Chen, G., Firth, M., Gao, D. N., & Rui, O. M. 2006. Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance*, 12(3): 424–448.
- Cheung, K.-Y., & Lin, P. 2004. Spillover effects of FDI on innovation in China: Evidence from the provincial data. *China Economic Review*, 15(1): 25–44.
- Choi, C.-B., & Beamish, P. W. 2013. Resource complementarity and international joint venture performance in Korea. *Asia Pacific Journal of Management*, 30(2): 561–576.
- Cohen, J., & Cohen, P. 1983. Applied multiple regression/correlation analysis for the behavioral sciences. Hallstale, NJ: Lawrence Erlbaum.
- Dacin, M. T., Oliver, C., & Roy, J.-P. 2007. The legitimacy of strategic alliances: An institutional perspective. *Strategic Management Journal*, 28(2): 169–187.
- Damanpour, F., Devece, C., Chen, C. C., & Pothukuchi, V. 2012. Organizational culture and partner interaction in the management of international joint ventures in India. *Asia Pacific Journal of Management*, 28(2): 169–187.
- Davis, E. B., & Ashton, R. H. 2002. Threshold adjustment in response to asymmetric loss functions: The case of auditors' 'substantial doubt' thresholds. *Organizational Behavior and Human Decision Processes*, 89(2): 1082–1099.

 Dhanaraj, C., Lyles, M. A., Steensma, H. K., & Tihanyi, L. 2004.
- Dhanaraj, C., Lyles, M. A., Steensma, H. K., & 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): 428–442.
- Ding, X.-H., Huang, R.-H., & Liu, D.-L. 2012. Resource allocation for open and hidden learning in learning alliances. *Asia Pacific Journal of Management*, 29(1): 103–127.

 Fan, G., Wang, X. L., & Zhu, H. P. 2007a. *Marketization index in*
- Fan, G., Wang, X. L., & Zhu, H. P. 2007a. Marketization index in China: The regional process report of 2006. Beijing: Economic Science Press, (in Chinese).
- Fan, J. P. H., Wong, T. J., & Zhang, T. 2007b. Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84(2): 330–357.

- Figueiredo, P. N., & Brito, K. 2011. The innovation performance of MNE subsidiaries and local embeddedness: Evidence from an emerging economy. *Journal of Evolutionary Economics*, 21(1): 141–165.
- Galunic, C., Ertug, G., & Gargiulo, M. 2012. The positive externalities of social capital: Benefiting from senior brokers. *Academy of Management Journal*, 55(5): 1213–1231.
- Gao, G. Y., Murray, J. Y., Kotabe, M., & Lu, J. 2010. A "strategy tripod" perspective on export behaviors: Evidence from domestic and foreign firms based in an emerging economy. *Journal of International Business Studies*, 21(3): 141–165.
- Gaur, A. S., & Lu, J. W. 2007. Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management*, 33(1): 84–110.
- Geringer, J. M. 1991. Strategic determinants of partner selection criteria in international joint ventures. *Journal of International Business Studies*, 22(1): 41–62.
- Glaister, K. W., & Buckley, P. J. 1997. Task-related and partnerrelated selection criteria in UK international joint ventures. British Journal of Management, 8(3): 199–222.
- Godfrey, P. C., & Hill, Č. W. L. 1995. The problem of unobservables in strategic management research. *Strategic Management Journal*, 16(7): 519–533.
- ment Journal, 16(7): 519–533.
 Gould, R. V. 2002. The origins of status hierarchies: A formal theory and empirical test. *American Journal of Sociology*, 107(5): 1143–1178.
- Gulati, R., Lavie, D., & Singh, H. 2009. The nature of partnering experience and the gains from alliances. *Strategic Management Journal*, 30(11): 1213–1233.
- Gulati, R., & Westphal, J. D. 1999. Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44(3): 473–506.
- Guler, I., & Guillén, M. F. 2010. Home country networks and foreign expansion: Evidence from the venture capital industry. *Academy of Management Journal*, 53(2): 390–410.
- Heckman, J. J. 1979. Sample selection bias as a specification error. *Econometrica*, 47(1): 153–161.
- Heil, O., & Robertson, T. S. 1991. Toward a theory of competitive market signaling: A research agenda. *Strategic Management Journal*, 12(6): 403–418.
- Higgins, M. C., & Gulati, R. 2003. Getting off to a good start: The effects of upper echelon affiliations on underwriter prestige. Organization Science, 14(3): 244–263.
- Hitt, M. A., Ahlstrom, D., Daćin, M. T., Levitas, E., & Svobodina, L. 2004. The institutional effects on strategic alliance partner selection in transition economies: China vs. Russia. *Organization Science*, 15(2): 173–185.
- Isobe, T., Makino, S., & Montgemery, D. B. 2000. Resource commitment, entry timing, and market performance of foreign direct investments in emerging economies: The case of Japanese international joint ventures in China. *Academy of Management Journal*, 43(3): 468–484.
- Jacobson, R. 1992. The "Austrian" school of strategy. Academy of Management Review, 17(4): 782–807.
- Jensen, M. 2008. The use of relational discrimination to manage market entry: When do social status and structural holes work against you? *Academy of Management Journal*, 51(4): 723–743.
- Jensen, M., & Roy, A. 2008. Staging exchange partner choices: When do status and reputation matter? *Academy of Management Journal*, 51(3): 495–516.
- Keister, L. A. 2009. Organizational research on market transition: A sociological approach. *Asia Pacific Journal of Management*, 26(4): 719–742.
- Khoury, T., & Peng, M. W. 2011. Does institutional reform of intellectual property rights lead to more inbound FDI? Evidence from Latin America and the Caribbean. *Journal of World Business*, 46(3): 337–345.
- Kilduff, M., Crossland, C., Tsai, W., & Krackhardt, D. 2008. Organizational network perceptions vs reality: A small world

- *
 - after all? Organizational Behavior and Human Decision Processes, 107(1): 15–28.
- Koka, B. R., & Prescott, J. E. 2008. Designing alliance networks: The influence of network position, environmental change, and strategy on firm performance. *Strategic Management Journal*, 29(6): 639–661.
- Kostova, T., & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. Academy of Management Review, 24(1): 64–81.
- Krackhardt, D. 1987. Cognitive social structures. Social Networks, 9(2): 109–134.
- Krug, B., & Hendrischke, H. 2012. Market design in Chinese market places. *Asia Pacific Journal of Management*, 29(3): 525–546.
- Kwon, J.-W. 2012. Does China have more than one culture? Exploring regional differences of work value in China. *Asia Pacific Journal of Management*, 29(1): 79–102.
- Laursen, K., Masciarelli, F., & Prencipe, A. 2012. Regions matter: How localized social capital affects innovation and external knowledge acquisition. *Organization Science*, 23(1): 177–193.
- Lavie, D. 2007. Alliance portfolios and firm performance: A study of value creation and appropriation in the US software industry. *Strategic Management Journal*, 28(12): 1187–1212.
- Levin, D. Z., & Cross, R. 2004. The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11): 1477–1490.
- Li, H., & Zhang, Y. 2007. The role of managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. *Strategic Management Journal*, 28(8): 791–804.
- Li, J. J., Poppo, L., & Zhou, K. Z. 2008. Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms. *Strategic Management Journal*, 29(4): 383–400.
- Li, J., Zhou, C., & Zajac, E. J. 2009. Control, collaboration, and productivity in international joint ventures: Theory and evidence. *Strategic Management Journal*, 30(8): 865–884.
- Li, Y., Peng, M. W., & Macaulay, C. D. 2013. Market-political ambidexterity during institutional transitions. *Strategic Organization*, 11(2): 205–213.
- Lin, Z., Peng, M. W., Yang, H., & Sun, S. L. 2009a. How do networks and learning drive M&As? An institutional comparison of China and the United States. *Strategic Management Journal*, 30(10): 1113–1132.
- Lin, Z., Yang, H., & Arya, B. 2009b. Alliance partners and firm performance: Resource complementarity and status association. *Strategic Management Journal*, 30(9): 921–940.
- Liu, X., Lu, J., Filatotchev, I., Buck, T., & Wright, M. 2010. Returnee entrepreneurs, knowledge spillovers and innovation in high-tech firms in emerging economies. *Journal of International Business Studies*, 41(7): 1183–1197. Liu, Y., Luo, Y., & Liu, T. 2009. Governing buyer–supplier rela-
- Liu, Y., Luo, Y., & Liu, T. 2009. Governing buyer–supplier relationships through transactional and relational mechanisms: Evidence from China. *Journal of Operations Management*, 27(4): 294–309.
- Long, J. S., & Freese, J. 2006. Regression models for categorical and limited dependent variables using stata, 2nd edn. College Station, TX: Stata Press.
- Lu, J., & Ma, X. 2008. The contingent value of local partners' business group affiliations. *Academy of Management Journal*, 51(2): 295–314.
- Luo, X., & Chung, C. 2005. Keeping it all in the family: The role of particularistic relationships in business group performance during institutional transition. *Administrative Science Quarterly*, 50(3): 404–439.
- Luo, Y. 1997. Partner selection and venturing success: The case of joint ventures with firms in the People's Republic of China. *Organization Science*, 8(6): 648–662.
- Luo, Y. 1998. Joint venture success in China: How should we select a good partner? *Journal of World Business*, 33(2): 145–166.

- Luo, Y. 2007. From foreign investors to strategic insiders: Shifting parameters, prescriptions and paradigms for MNCs in China. *Journal of World Business*, 42(1): 14–34.
- Luo, Y. 2008. Procedural fairness and interfirm cooperation in strategic alliances. *Strategic Management Journal*, 29(1): 27–46.
- Luo, Y., & Peng, M. W. 1999. Learning to compete in a transition economy: Experience, environment, and performance. *Journal of International Business Studies*, 30(2): 269–295.
- Luo, Y., & Tung, R. L. 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of Inter*national Business Studies, 38(4): 481–498.
- Madhavan, R., Gnyawali, D., & He, J. 2004. Two's company, three's a crowd? Triads in cooperative-competitive networks. *Academy of Management Journal*, 47(6): 918–927.
- Mariotti, Ś., & Piscitello, L. 1995. Information costs and location of FDIs within the host country: Empirical evidence from Italy. *Journal of International Business Studies*, 26(4): 815–841.
- Markóczy, L., Sun, L., Peng, M. W., Shi, W., & Ren, B. 2013. Social network contingency, symbolic management, and boundary stretching. *Strategic Management Journal*, 34(11): 1367–1387.
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. 2009a. Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1): 61–80.
- Meyer, K. E., & Nguyen, H. V. 2005. Foreign investment strategies and sub-national institutions in emerging markets: Evidence from Vietnam. *Journal of Management Studies*, 42(1): 63–93
- Meyer, K. E., & Sinani, E. 2009. When and where does foreign direct investment generate positive spillovers: A meta-analysis. *Journal of International Business Studies*, 40(7): 1075–1094.
- Meyer, K. E., Wright, M., & Pruthi, S. 2009b. Managing know-ledge in foreign entry strategies: A resource-based analysis. Strategic Management Journal, 30(5): 557–574.
- Mitsuhashi, H., & Greve, H. 2009. A matching theory of alliance formation and organizational success: Complementarity and compatibility. *Academy of Management Journal*, 52(5): 975–995.
- Nair, A., Hanvanich, S., & Cavusgil, S. T. 2007. An exploration of the patterns underlying related and unrelated collaborative ventures using neural network: Empirical investigation of collaborative venture formation data spanning 1985–2001. *International Business Review*, 16(6): 659–686.
- Nielsen, B. B. 2003. An empirical investigation of the drivers of international strategic alliance formation. *European Manage*ment Journal, 21(3): 301–322.
- Obstfeld, D. 2005. Social networks, the tertius iungens orientation, and involvement in innovation. *Administrative Science Quarterly*, 50(1): 100–130.
- Okhmatovskiy, I. 2010. Performance implications of ties to the government and SOEs: A political embeddedness perspective. *Journal of Management Studies*, 47(6): 1020–1047.
- Owen-Smith, J., & Powell, W. W. 2004. Knowledge networks as channels and conduits: The effects of spillovers in the Boston biotechnology community. *Organization Science*, 15(1): 5–21.
- Ozcan, P., & Eisenhardt, K. M. 2009. Origin of alliance portfolios: Entrepreneurs, network strategies, and firm performance. *Academy of Management Journal*, 52(2): 246–279.
- Ozmel, U., Reuer, J. J., & Gulati, R. 2012. Signals across multiple networks: How venture capital and alliance networks affect interorganizational collaboration. *Academy of Management Journal*, 56(3): 852–866.
- Pajunen, K., & Fang, L. 2013. Dialectical tensions and path dependence in international joint venture evolution and termination. *Asia Pacific Journal of Management*, 30(2): 577–600.
- Peng, M. W. 2003. Institutional transitions and strategic choices. *Academy of Management Review*, 28(2): 275–296.
- Peng, M. W. 2004. Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25(5): 453–471.



- Peng, M. W., Li, Y., Xie, E., & Su, Z. 2010. CEO duality, organizational slack, and firm performance in China. *Asia Pacific Journal of Management*, 27(4): 611–624.
- Peng, M. W., & Luo, Y. 2000. Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal*, 43(3): 486–501.
- Podolny, J. M. 1993. A status-based model of market competition. *American Journal of Sociology*, 98(4): 829–872.
- Podolny, J. M. 2001. Networks as the pipes and prisms of the market. *American Journal of Sociology*, 107(1): 33–60.
- Polidoro, F. 2013. The competitive implications of certifications: The effects of scientific and regulatory certifications on entries into new technical fields. *Academy of Management Journal*, 56(2): 597–627.
- Pollock, T. G., & Gulati, R. 2007. Standing out from the crowd: The visibility-enhancing effects of IPO-related signals on alliance formation by entrepreneurial firms. *Strategic Organization*, 5(4): 339–372.
- Pollock, T. G., Rindova, V. P., & Maggitti, P. G. 2008. Market watch: Information and availability cascades among the media and investors in the US IPO market. *Academy of Management Journal*, 51(2): 335–358.
- Puffer, S. M., McCarthy, D. J., & Peng, M. W. 2013. Managing favors in a global economy. *Asia Pacific Journal of Management*, 30(2): 321–326.
- Ren, B., Au, K., & Birtch, T. 2009. China's business network structure during institutional transitions. *Asia Pacific Journal of Management*, 26(2): 219–240.
- Rindova, V. P., Williamson, I. O., Petkova, A. P., & Sever, J. M. 2005. Being good or being known: An empirical examination of the dimensions, antecedents, and consequences of organizational reputation. *Academy of Management Journal*, 48(6): 1033–1049.
- Roberts, J. H., & Lattin, J. M. 1997. Consideration: Review of research and prospects for future insights. *Journal of Marketing Research*, 34(3): 406–410.
- Rowley, T., Behrens, D., & Krackhardt, D. 2000. Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries. *Strategic Management Journal*, 21(3): 369–386.
- Roy, J.-P., & Oliver, C. 2009. International joint venture partner selection: The role of the host-country legal environment. *Journal of International Business Studies*, 40(5): 779–801.
- Shi, W., Markóczy, L., & Dess, G. G. 2009. The role of middle management in the strategy process: Group affiliation, structural holes, and tertius lungens. *Journal of Management*, 35(6): 1453–1480.
- Shi, W., Sun, S. L., & Peng, M. W. 2012. Sub-national institutional contingencies, network positions, and IJV partner selection. *Journal of Management Studies*, 49(7): 1221–1245.
- Journal of Management Studies, 49(7): 1221–1245.
 Shi, W., Markóczy, L., & Stan, C. 2013. The continuing importance of political ties in China. Academy of Management Perspectives, published online May 24, doi: 10.5465/amp.2011.0153.
 Shipilov, A. V., & Li, S. X. 2008. Can you have your cake and eat it
- Shipilov, A. V., & Li, S. X. 2008. Can you have your cake and eat it too? Structural holes' influence on status accumulation and market performance in collaborative networks. *Administrative Science Quarterly*, 53(1): 73–108.
- Siegel, J. 2007. Contingent political capital and international alliances: Evidence from South Korea. *Administrative Science Quarterly*, 52(4): 621–666.
- Spicer, A., Dunfee, T. W., & Bailey, W. J. 2004. Does national context matter in ethical decision making? An empirical test of integrative social contracts theory. Academy of Management Journal, 47(4): 610–620.
- Stan, C., Peng, M. W., & Bruton, G. D. 2013. Slack and the performance of state-owned enterprises. *Asia Pacific Journal of Management*, published online 27 March, doi:10.1007/s10490-013-9347-7.
- Stiglitz, J. E. 2000. The contributions of the economics of information to twentieth century economics. *The Quarterly Journal of Economics*, 115(4): 1441–1478.
- Sun, S. L., Chen, H., & Pleggenkuhle-Miles, E. 2010. Moving upward in global value chains: The innovation of mobile

- phone developers in China. *Chinese Management Studies*, 4(4): 305–321.
- Sun, S. L., & Lee, R. P. 2013. Enhancing innovation through international joint venture portfolios: From the emerging firm perspective. *Journal of International Marketing*, 21(3): 1–21.
 Sun, S. L., Peng, M. W., Ren, B., & Yan, D. 2012. A comparative
- Sun, S. L., Peng, M. W., Ren, B., & Yan, D. 2012. A comparative ownership advantage framework for cross-border M&As: The rise of Chinese and Indian MNEs. *Journal of World Business*, 47(1): 4–16.
- Sytch, M., Tatarynowicz, A., & Gulati, R. 2012. Toward a theory of extended contract: The incentives and opportunities for bridging across network communities. *Organization Science*, 23(6): 1651–1658.
- Tan, D., & Meyer, K. E. 2011. Country-of-origin an industry FDI agglomeration of foreign investors in an emerging economy. *Journal of International Business Studies*, 42(4): 504–520.
- Tatoglu, E., & Glaister, K. W. 2000. Strategic motives and partner selection criteria in international joint ventures in Turkey: Perspectives of Western firms and Turkish firms. *Journal of Global Marketing*, 13(3): 53–92.
- Teagarden, M. B., & Schotter, A. 2013. Favor prevalence in emerging markets: A multi-level analysis. *Asia Pacific Journal of Management*, 30(2): 447–460.
- Thams, Y., Liu, Y., & Von Glinow, M. A. 2013. Asian favors: More than a cookie cutter approach. *Asia Pacific Journal of Management*, 30(2): 461–486.
- Tong, T. W., Reuer, J. J., & Peng, M. W. 2008. International joint ventures and the value of growth options. *Academy of Management Journal*, 51(5): 1014–1029.
- Tracey, P., & Phillips, N. 2011. Entrepreneurship in emerging markets: Strategies for new venture creation in uncertain institutional contexts. *Management International Review*, 51(1): 23–39
- Uzzi, B., & Lancaster, R. 2005. Relational embeddedness and learning: The case of bank loan managers and their clients. *Management Science*, 49(4): 383–399.
- von Hecker, U. 1993. The importance of balance, generalization and positivity as cognitive structural rules. *Zeitschrift fur Experimentelle und Angewandte Psychologie*, 40(1): 548–576.
- Wasserman, S., & Faust, K. 1994. Social network analysis: Methods and applications. Cambridge, UK: Cambridge University Press.
- Winter, S. G. 2012. Purpose and progress in the theory of strategy: Comments on Gavetti. *Organization Science*, 23(1): 288–297.
- Wolf, R. C. 2000. Effective international joint venture management: Practical legal insights for successful organization and implementation. Armonk, NY: M.E. Sharpe.
- Wong, L. K., & Ellis, P. 2002. Social ties and partner identification in Sino–Hong Kong international joint ventures. *Journal of International Business Studies*, 33(2): 267–289.
- Wooldridge, J. M. 2006. *Introductory econometrics: A modern approach*. Mason, OH: South-Western.
- Xia, J., Tan, J., & Tan, D. 2008. Mimetic entry and bandwagon effect: The rise and decline of international equity joint venture in China. *Strategic Management Journal*, 29(2): 195–217.
- Xiao, Z. X., & Tsui, A. S. 2007. When brokers may not work: The cultural contingency of social capital in Chinese high-tech firms. *Administrative Science Quarterly*, 52(1): 1–31.
- Xu, D., & Shenkar, O. 2002. Institutional distance and the multinational enterprise. *Academy of Management Review*, 27(4): 608–618.
- Yan, R. 1998. Short-term results: The litmus test for success in China. *Harvard Business Review*, 76(5): 61–69.
- Yang, H., Lin, Z., & Peng, M. W. 2011a. Behind acquisitions of alliance partners: Exploratory learning and network embeddedness. *Academy of Management Journal*, 54(5): 1069–1080.
- Yang, H., Sun, S. L., Lin, Z., & Peng, M. W. 2011b. Behind M&As in China and the United States: Networks, learning, and institutions. *Asia Pacific Journal of Management*, 28(2): 239–255.
- Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2): 341–363.



Zavyalova, A., Pfarrer, M. D., Reger, R. K., & Shapiro, D. L. 2012. Managing the message: The effects of firm actions and industry spillovers on media coverage following wrongdoing. *Academy of Management Journal*, 55(5): 1079–1101.

Zhan, W., & Chen, R. 2013. Dynamic capability and IJV performance: The effect of exploitation and exploration capabilities.

Asia Pacific Journal of Management, 30(2): 601–632.

Zhan, W., Chen, R., Erramilli, M. K., & Nguyen, D. T. 2009. Acquisition of organizational capabilities and competitive advantage of IJVs in transition economies: The case of Vietnam. *Asia Pacific Journal of Management*, 26(2): 285–308. Zhao, Z., Anand, J., & Mitchell, W. 2005. A dual networks

Zhao, Z., Anand, J., & Mitchell, W. 2005. A dual networks perspective on inter-organizational transfer of R&D capabilities: International joint ventures in the Chinese automotive industry. *Journal of Management Studies*, 42(1): 127–160.

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