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Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach

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ABSTRACT

This study applies a network approach to develop a model that highlights the role of resource acquisition through networks as an important mediating mechanism through which entrepreneurial orientation influences firm performance. This approach provides an alternative explanation for the divergent findings of the EO-performance relationship. We also investigate how business and political ties, differently and configurationally, shape the relationship between EO and network resource acquisition. Empirical findings from a study of 251 firms provide general support for the hypotheses, highlighting the unique value of leveraging a network approach to reconsider the performance-enhancing mechanism of entrepreneurial orientation.

1. Introduction

Using a network approach, this study explores the role of resource acquisition through different types of external networks (business networks and government networks) as an important mediating mechanism through which entrepreneurial orientation (EO) influences firm performance. This is done in part because although the performance implication of EO—defined as the strategic posture in which a firm exhibits innovative, proactive, and risk-taking behaviors (Miller, 1983)—is among the most researched topics in the entrepreneurship domain, accumulated evidence on the EO-performance relationship remains not fully conclusive or consistent (Anderson, Kreiser, Kuratko, Hornsby, & Eshima, 2015; Rauch, Wiklund, Lumpkin, & Frese, 2009). Most scholars have found a positive impact of EO on firm performance (Covin & Miller, 2014; Lomberg, Urbig, Stockmann, Marino, & Dickson, 2016), and this influence may increase over time (Wiklund, 1999). Yet there is also inconsistent evidence, including a finding of an inverted U-shaped relationship (Tang, Tang, Marino, Zhang, & Li, 2008) and an insignificant relationship (George, Wood Jr, & Khan, 2001). More recently, Wiklund and Shepherd (2011) proposed the concept EO-as-experimentation to suggest that high EO firms are bound to have a higher probability of both success and failure, which together with the above results suggests that scholars are yet to reach a consensus understanding of this complex phenomenon.

Recognizing this mixture of results, scholars have offered various moderating or mediating models to reconcile these inconsistencies. For instance, studies have advocated that the strength of the EO-performance link varies across several moderators internal and external to the firm, including environment (Zahra & Covin, 1995), national culture (Arbaugh, Cox, & Camp, 2005), organizational structure (Covin & Slevin, 1988), leadership (Engelen, Guptal, Strenger, & Brettel, 2015), strategic process (Covin, Green, & Slevin, 2006), as well as resources and capabilities (Engelen, Kube, Schmidt, & Flatten, 2014).

Investigations into possible mediators have also emerged in recent years, including information acquisition (Keh, Nguyen, & Ng, 2007), learning orientation (Wang, 2008), knowledge-creation process (Li, Huang, & Tsai, 2009), and exploratory and exploitative innovation (Kollman & Stockmann, 2014). Yet these mediating studies have predominantly focused on factors internal to the firm, while ignoring the possible intermediate role of external factors like the external network in which the firm is embedded. Understanding external networks has important theoretical consequences for grasping how high EO firms operate and function since network factors significantly impact how organizations are managed, developed, and sustained (Robins, 2015). For instance, from their multisource survey data set of 122 Chinese firms, Cao, Simsek, and Jansen (2015) reported that the firm's CEO's bridging social capital with the firm's diverse set of external stakeholders has a positive association with the firm's EO.

Despite a recent call for analyzing the intricate relation between EO and the network context (Hoang & Yi, 2015), the precise means by

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which high EO firms attract and utilize network resources to fulfill their entrepreneurial ambitions to enhance their performance remain, unfortunately, largely unclear. Hence, the first aim of this article is to discover whether resource acquisition through networks (network resource acquisition)—defined as the firm's extent of accessing, attracting, and acquiring valuable resources from surrounding network actors—is a missing intermediate link between EO and firm performance.

In addition, given that the varying nature of network factors may enable or constrain the effectiveness of acquiring cross-boundary resources (Boso, Story, & Cadogan, 2013; Kim, Steensma, & Park, 2017), the contribution of a firm's EO to network resource acquisition may be contingent on the social ties that the focal firm has built with its network actors. For instance, Tung and Worm (2001) found that for 40 companies that they examined, only those firms which have successfully built social ties with local political and business partners have made substantial progress in the Chinese market. Similarly, Wang, Jiang, Yuan, and Yi (2013) reported that the financial performance of 253 Chinese firms is affected by their level of managerial ties by leveraging these ties to acquire necessary resources. Social ties have often been categorized into two types, business ties (i.e., the firm's relationships with business communities such as suppliers, buyers, competitors, and collaborators) and political ties (i.e., the firm's relationships with various types of the government agencies) (Boso et al., 2013; Li, Zhou, & Shao, 2009). Past studies suggest that these two types of ties may have distinct value via providing access to diverse resources and capabilities (Li, Zhou, & Shao, 2009; Pollack, Vanepps, & Hayes, 2012). In this sense, business ties and political ties would be two critical moderators that shape the value creation process of EO. Furthermore, prior configurational research suggests that firms, which are properly configured on many factors, perform better than those that only align on two factors (Shirokova, Bogatyreva, Beliaeva, & Puffer, 2016; Stam & Elfring, 2008; Wiklund & Shepherd, 2005). Yet, little research has paid attention to the exact configuration of EO and these two types of ties. Thus, the second aim of our study is to explore the appropriate configurations of EO, business ties, and political ties to maximize the extent of network resource acquisition that further enhances firm performance.

To achieve the above research objectives, we leverage network theory as our overarching framework and develop specific hypotheses which are tested on data collected from 251 Chinese firms. We aim to address two important but under-explored questions: (1) How does network resource acquisition act as a mediating mechanism between EO and firm performance? (2) How do business ties and political ties differently and configurationally influence the benefits of EO for network resource acquisition? By exploring these questions our study makes both theoretical and practical contributions. Theoretically, we attempt to investigate how network resource acquisition functions as a prior-neglected mediating mechanism that connects EO with firm performance, extending prior EO-performance relationship research that emphasizes either moderators or intermediating factors internal to the firm. In addition, by conducting a fine-grained analysis of the moderating effect of social ties, this study applies the network approach to help better understand the interactive and configurational roles of social ties (business vs. political ties). Practically, findings of this study will allow us to better illustrate how the configuration of business and political ties affects a firm's EO propensity to attract and utilize resources from network actors that further help them fulfill its EO propensity.

2. Theory and hypotheses

2.1. Entrepreneurial orientation (EO)

EO is one of the most extensively researched topics in both the strategy and entrepreneurship literature, which can be traced back to Miller's (1983) seminal work. EO captures "the methods, dispositions, practices, and decision-making styles managers use to act entrepreneurially" (Lumpkin & Dess, 1996; p. 136). It reflects how the firm explicitly or implicitly chooses to compete when facing emerging opportunities (Rauch et al., 2009; Wales, 2016).

Most studies suggest that EO comprises three core dimensions: innovativeness, proactiveness, and risk-taking (Miller, 1983; Wales, Gupta, & Mousa, 2013). Innovativeness refers to "a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes" (Lumpkin & Dess, 1996; p. 142). Proactiveness involves "taking the initiative in an effort to shape the environment to one's own advantage" (Lumpkin & Dess, 1996; p. 147). Risk-taking refers to "the degree to which managers are willing to make large and risky resource commitments – i.e., those which have a reasonable chance of costly failures" (Miller & Friesen, 1978; p. 923). With emphasis on bold and exploratory activities, firms with high EO are gifted in creating industrial configurations and reshaping market conditions to their advantage (Baker & Sinkula, 2009). Yet EO is also a resource-consuming strategic orientation (Teng, 2007); without considerable resource support, the performance implication of EO may be impeded (Su, Xie, Wang, & Li, 2011; Teng, 2007). Thus, access to more resources, perhaps from external networks, appears to be particularly important for facilitating EO. This indicates an imperative need to reconsider the effectiveness of EO through a network viewpoint.

2.2. Reconsidering EO from a network approach

Scholars have adopted a network perspective in entrepreneurship research (Hoang & Antoncic, 2003; Hoang & Yi, 2015; Slotte-Kock & Coviello, 2010), highlighting that firms are embedded in social networks within which they are connected (Granovetter, 1985). This approach emphasizes the importance of network-based constructs such as structural positions, cohesion, trust, and embeddedness in affecting entrepreneurial strategic choices and outcomes (Ozcan & Eisenhardt, 2009; Uzzi, 1997). This stream of literature also identifies the influence of network factors in the enactment of entrepreneurial postures (Walter, Auer, & Ritter, 2006).

From the network perspective, EO can be seen as a strategic posture that stimulates firms to proactively engage in environmental scanning and resource/opportunity seeking actions from organizations and institutions with which they have or wish to build relationships (Li, Liu, & Liu, 2011). These firms can be characterized as appreciating an open-system mindset that seeks to proactively pursue entrepreneurial initiatives within established and emerging networks (Kreiser, 2011). Here, we argue that high EO firms have a good potential to attract and leverage outside resources inherent in their networks to capitalize on emerging opportunities. Drawing upon the network perspective, we next formally theorize why network resource acquisition is a missing link between EO and firm performance.

2.3. Network resource acquisition as a missing link between EO and performance

EO and network resource acquisition. The acquisition of resources from outside the firm has been seen as a critical entrepreneurial task for a long time (Kim et al., 2017; Shane, 2003). We argue that firms with higher EO are more likely to succeed in resource seeking and acquisition tasks from their network actors. The theoretical argument supporting this assertion is based on a network approach that emphasizes motivation-opportunity-ability reasoning, indicating that a lack of any of these three reasons may undermine social capital generation and utilization (Adler & Kwon, 2002; Siemsen, Roth, & Balasubramanian, 2008). Specifically, motivation captures "a firm's willingness to act" (Siemsen et al., 2008; p. 427). Opportunity represents "the environmental or contextual mechanisms that enable the action" (Siemsen

et al., 2008; p. 427). Ability represents "the competencies at the nodes of the network" (Adler & Kwon, 2002; p. 26). Within the focal firm's networking context, motivation, opportunity, and ability reasons may explain why high EO firms may be advantaged in acquiring valuable resources from their networks.

First, with respect to the motivation reason, high EO firms often conceive and identify more opportunities (Wales et al., 2013), and thus recognize an urgent need for resources which they work to acquire to pursue these opportunities (Teng, 2007). Once they identify such resource needs, they are more likely to have a higher innate motivation to acquire resources from network actors in a proactive and risk-taking way (Lumpkin & Dess, 1996; Wilson & Appiah-Kubi, 2002). Therefore, firms with higher EO may have a stronger motivation to acquire network resources compared to those firms with lower EO.

Second, with respect to the opportunity reason, the surrounding network actors are more willing to grant high EO firms a chance or priority to access to their resources because they perceive these firms as of better quality and to have higher future potential than low EO firms (Burt, 1992). That is, a high EO provides a positive signal that may make network partners feel more confident to collaborate in business with them (Smith & Lohrke, 2008). Thus, firms with higher EO may be exposed to better opportunities to access network resources (Li et al., 2011).

Third, with respect to the ability reason, network resource acquisition is a risky activity requiring related skills (Winborg & Landstrom, 2001). In this sense, a firm's high EO is likely to be activated in the acquisition process to assure that the firm has capacities to proactively and ebulliently contact potential network partners to make them aware of cooperation benefits and design an attractive cooperation plan. A high EO firm could also have the ability to find innovative solutions to arrange appropriate collaboration and resolve the inter-firm conflict as well as bear unknown difficulties. For instance, Powell, Koput, and Smith-Doerr (1996) found that innovative firms tend to have greater diversity among their interfirm linkages.

In addition, the three dimensions of EO (innovativeness, proactiveness, and risk-taking propensity) will also enhance the degree of network resource acquisition. The innovativeness aspect of EO would encourage exploratory learning behaviors, which leads to more proactive network searching activities (Jones & Macpherson, 2006; Kollman & Stockmann, 2014). To respond to the demand for innovativeness, firms are more likely to exploit shared perceptions and communication with network actors to acquire needed resources. Yet external resource acquisition itself is a risky activity as it involves substantial expenditures and effort (Wiklund & Shepherd, 2003). Thus, a firm's risk-taking propensity is likely to be activated because the firm is more willing to bear uncertainty in collaboration. Similarly, proactiveness leads to more network resource acquisition because a proactive firm acts quicker rather than waiting and contemplating. This leads to the proactive firm being known for 'step-ahead' tactics (Morgan & Strong, 2003) and pursuing first-mover advantages (Lumpkin & Dess, 1996), helping the firm to be among the first to leverage surrounding resource-acquisition opportunities. Collectively, the higher EO a firm has, the more network resource acquisition is likely to be achieved.

Network resource acquisition and firm performance. The resource-based view (RBV) suggests that a firm's ability to target, acquire, and deploy "valuable, rare, inimitable, and non-substitutable resources" provides a basis for value creation and competitive advantage (Barney, 1991; p. 99). Extending the RBV into the network context, resources obtained from networks fit some of these RBV criteria. First, network resources are valuable because they are purposefully invested for the expectation of future higher rents (Adler & Kwon, 2002). Second, network resources are relatively rare because the successful acquisition of such resources depends on path-dependent processes and social complexities (Das & Teng, 2000; Jiang, Jiang, Cai, & Liu, 2015). Third, acquired network resources are imperfectly imitable and non-substitutable since they are "socially constructed and depend on interconnectivity" (Nahapiet & Ghoshal, 1998; p. 260). Thus, we expect that the acquisition of valuable resources from networks improves a firm's competitiveness over its counterparts', and puts it in a favorite position in providing more differentiating products and satisfying customer needs in a timely manner (Sirmon, Hitt, & Ireland, 2007). Therefore, network resource acquisition is positively related to firm performance.

The mediating role of network resource acquisition. We have argued that, if we see from a network perspective, firms with higher EO may have a better chance to access and attract outside resources from their network actors. Also, network resource acquisition facilitates these firms outperforming other rivals by developing unique marketplace positions of competitive advantage. Thus, it is positively related to high firm performance. Synthesizing these arguments, we here envision that network resource acquisition will serve as an important, yet prior-neglected, conduit by which the enactment of EO contributes to firm performance. Thus, our first hypothesis is proposed:

H1. Network resource acquisition mediates the EO-performance relationship in such a way that EO has a positive impact on network resource acquisition which, in turn, has a positive impact on firm performance.

2.4. Two dimensions of social ties as moderators

Although we predict that firms with higher EO tend to acquire more network resources, it seems unlikely that the same degree of EO will contribute equally to network resource acquisition in different network contexts. It is therefore necessary to recognize the heterogeneity of contextual factors upon the EO-network resource acquisition linkage (Rauch et al., 2009). In particular, being aware of configurations of social ties that make resources and information available (Wang & Chung, 2013), we suggest that the impact of EO on network resource acquisition may be affected by different types of social ties that the firm has built with other network actors. This is especially true in emerging economies, where business supporting systems are not fully matured given under-developed legal, regulatory, and normative institutions (Li, Poppo, & Zhou, 2008). While it is likely that high EO firms could directly attract network resources through arm's length exchanges in advanced economies, social ties may be critical in explaining variations in the effectiveness of EO in emerging economies (Boso et al., 2013). Social ties refer to firms' associated interactions and linkages with external entities through boundary-spanning and relation-building activities (Boso et al., 2013; Geletkanycz & Hambrick, 1997). There are two theoretically distinct dimensions of social ties, i.e., business vs. political ties (Li, Zhou, & Shao, 2009; Peng & Luo, 2000). Business ties are "managers' connections with their counterparts at other firms such as buyers, suppliers, and competitors" (Li, Zhou, & Shao, 2009; p. 343). Such relations allow firms to benefit from information transfer and resource sharing through close contacts and associations between partners (Peng & Luo, 2000). Political ties refer to "managers' connections with government officials, including political leaders in various levels of government, officials in industrial bureaus, and officials in regulatory and supporting organizations" (Li, Zhou, & Shao, 2009; p. 343). Political ties can create an environment that facilitates firms' political legitimacy (Fan, Liang, Liu, & Hou, 2012) and benefits firms by providing the necessary financial support and unique information concerning such issues as changes in government regulations and political favors (Sun, Mellahi, & Wright, 2012).

Network theory posited that social ties through mutual acquaintance and recognition provide private and trustworthy channels for accessing and sharing valuable information between entities (Burt, 1992; Davidsson & Honig, 2003). Therefore, high EO firms facing appropriate social ties may enjoy considerable advantages in terms of favorable access to privately controlled market intelligence, policy changes, as well as competitive trends. These advantages of information

enable high EO firms to pre-plan for a better strategy to gain resources from networks, highlighting a moderating role of social ties on the EO-network resource acquisition relationship. In addition, due to the different nature of business and political ties (Dong, Li, & Tse, 2013; Du, Lu, & Tao, 2015; Sheng, Zhou, & Li, 2011), the value of EO to attract resources from network actors is likely to vary depending on different types of social ties (business vs. political ties).

2.5. The moderating effect of business ties (BT)

We first expect the moderation effect of business ties on a firm's EO-network resource acquisition link to be a curvilinear, inverted-U shape. A low level of business ties does not noticeably affect the impact of EO on network resource acquisition. These ties are too weak to provide a meaningful help in connecting resource providers and receivers, leading to little dynamic interaction in the entrepreneurial resource acquisition process. As the level of business ties increases, firms with higher EO tend to acquire more resources from business partners due to informational and trusting advantages provided by business ties. Acquiring resources from others is widely recognized as a challenge due to several constraints, such as information asymmetry between resource providers and receivers (Zhang, Soh, & Wong, 2010) and the tacit or sticky nature of firm-specific resources (Miller, Fern, & Cardinal, 2007). Relying on established business ties, however, may weaken these difficulties by reducing the uncertainty and ambiguity surrounding the resource seeking process. If high EO firms have built strong ties with business parties that possess targeted resources, they would be more likely to have informational and trust advantages (Stam & Elfring, 2008). These advantages may help such firms to know where to search for resources, and to be able to more accurately assess the resources' value, thus enhancing the effectiveness of EO in network resource acquisition.

However, while the level of business ties increases beyond a certain point, these ties may have a reduced effect on the EO-network resource acquisition relationship. Extremely strong business ties often imply over-embeddedness in current business networks (Uzzi, 1999), and when this happens, drawbacks may occur. For instance, it may imply blindness to new opportunities arising from the outside of their current network (Li, Wang, Huang, & Bai, 2013). When high EO firms focus too much on existing business relationships, they will be confined to those elements existing in current networks. Even where connections continue to be allowed with out-group firms, the resources and information that flow from outside can be ignored because of strong positive in-group biases and negative out-group biases (Pruitt & Rubin, 1986). Thus, high EO firms cannot efficiently acquire network resources under such circumstance. As a result, overly strong business ties restrain a firm's entrepreneurial posture from taking its full effect in the network resource acquisition process. Thus, we hypothesize that:

H2. The effect of EO on network resource acquisition will be greatest at a moderate level of business ties, such that the relationship between EO and network resource acquisition across low, medium, and high levels of business ties is inverted U-shaped.

2.6. The moderating effect of political ties (PT)

Political ties link a firm with various government agencies. In most emerging economies, the government still commands a substantial number of public resources and key information that shape the firm's competitive environments (Sun, Mellahi, Wright, & Xu, 2015). The government also possesses powerful forces in allocating resources, distributing materials, issuing bank loans, approving projects, and the like (Shi, Markoczy, & Stan, 2014). We thus contend that different from the nonlinear moderation of business ties, political ties will strengthen the beneficial effect of EO on network resource acquisition in a linear manner.

First, scholars have agreed that firms with stronger political ties will be more likely to obtain valuable information and political privileges (Li, Zhou, & Shao, 2009). High EO firms with the help of political ties can obtain critical information regarding future economic development trends and industry regulation change (Sun et al., 2015), which helps them rapidly capitalize on resource-seeking opportunities. This may enhance their motivation and ability to attract network resources to seize these opportunities, stimulating firms' proactive and risk-taking propensity to seek network resources in order to enlarge their business.

Second, political ties may also assist firms in their entrepreneurial activities in indirect ways. For example, high EO firms can utilize their good relationships with the government to gain external legitimacy (Zimmerman & Zeitz, 2002). This legitimacy signal makes them more visible and trustworthy to external network actors who may regard them as attractive collaboration partners (Khoury, Junkunc, & Deeds, 2013; Lounsbury & Glynn, 2001). They are therefore in a relatively advantageous position to negotiate favorable terms of resource exchange with other network actors, and thus enhancing the effectiveness to leverage EO successfully in gaining valuable knowledge and resources distributed across those network actors.

Third, since the government in countries like China often sits at the intersection of many firms, organizations, and institutions (Du et al., 2015), ties to the government enable firms with high EO to plug into a broader network. Therefore, political ties also contribute to their entrepreneurial resource acquisition by broadening the scope of external search (Zhang & Li, 2010). Thus, over-embeddedness should not be a problem since a high level of political ties could serve as an indirect channel to plug into new and broad networks that do not constrain these firms' entrepreneurial posture in network resource acquisition. In addition, while there are many firms to choose from, there is only one government to choose from and thus there is not really a good option normally of some other government organizations to switch to for a given need (Park & Luo, 2001). This explains why we believe that there is no cap on how strong it is optimal to have government ties when examining the EO-network resource acquisition relationship. Thus, we suggest:

H3. Political ties will moderate the relationship between EO and network resource acquisition in such a way that EO will be more strongly associated with high network resource acquisition when the level of political ties is high than when it is low.

2.7. The configuration of EO, business ties, and political ties

As in reality, both business and political ties operate simultaneously and represent a holistic structure, a better understanding of the EO-network resource acquisition relationship may require examining the appropriate configuration of EO and the two types of ties. The configurational perspective suggests that the interactions of more than two constructs tend to portray the real world more accurately and completely than the interaction of only two constructs (Miller, 2011; Stam & Elfring, 2008). Following this logic, the effective configuration of different ties should be essential for firms to realize the network resource acquisition potential that is inherent in their EO propensity.

Specially, we argue that the value that high EO firms derive from social ties will be amplified most when the focal firm has significant ties with both business partners and the government at the same time. Too strong business ties, as argued above, may produce over-embeddedness effects which limit high EO firms' external resource-seeking channels and opportunities (Li et al., 2013). Political ties help deal with this dilemma by providing new information that is missing for those over-embedded in a certain business network. Meanwhile, a good relationship with the government provides official authorization to enforce contracts and settle negotiations (Khoury et al., 2013), which decreases credit risks and opportunistic behaviors in the entrepreneurial resource exchange processes. The institutional support derived from political ties

also encourages the exchange of information and resources within the business network as beneficial industrial policies and preferential tax rates make them active in doing so. In return, high EO firms with strong business ties are perceived by government officials as stable, highly potential, and reliable market actors. These firms are therefore in a more advantageous position to obtain political legitimacy which facilitates the enactment of EO to achieve the successful acquisition of network resources. Collectively, the coexistence of high levels of both types of ties is ideal to help firms to exploit entrepreneurial opportunities in searching for and acquiring resources as the enactment of EO facilitates the focal firm obtaining wide support from outside.

However, different from the above case of high levels of both ties, we predict that high EO firms tend to suffer from overly-strong business ties when they have only weak ties to the government. Our preceding arguments suggest that strong ties to the government serve as a unique social resource for firms. In particular, firms tend to "use political ties to help decode policies and regulations as well as anticipate future development plans" that help them adapt to high uncertain and fast change institutional conditions (Li, Zhou, & Shao, 2009; p. 343). Without such valuable information sources, high EO firms may be perceived by their business partners to lack reliable direction in highly dynamic market competition and institutional turbulence, which undermines the benefit of EO to network resource acquisition. Meanwhile, the drawbacks of over-embeddedness in a current business network will be aggravated in the face of weak political ties, since networked firms may need political ties to plug into broader business circles to sense and pursue new business opportunities outside of the current business network (Khoury et al., 2013). As a result, strong business ties in combination with weak political ties may constrain the benefit of a firm's EO to its network resource acquisition. Thus:

H4a. At high levels of political ties, the relationship between EO and network resource acquisition is stronger for firms with strong business ties than for firms with weak business ties.

H4b. At low levels of political ties, the relationship between EO and network resource acquisition is weaker for firms with strong business ties than for firms with weak business ties.

In summary, we provided our conceptual model in Fig. 1.

3. Methodology

3.1. Design, sample and data

We manually collected data from top managers of a sample of Chinese firms. We first developed an English version of the questionnaire on the basis of a thorough, in-depth review of related literature and then translated it into Chinese. We pre-tested the Chinese-version survey instruments with 20 top managers experienced with doing business in China. The questionnaire was revised based on the interviews which were semi-structured and lasted for about 1.5 h on average. After minor modification based on their feedback, we finalized our Chinese-version. The questionnaire was then back-translated into English to ensure conceptual equivalence (Berry, 1980).

We undertook a two-stage design to reduce common method bias. In Stage 1, we collected the data through on-site interviews from August 2010 to January 2011. We first identified three regions of mainland China according to their developmental level: the eastern and coastal region (developed region), the middle region (medium-developed region), and the western region (underdeveloped region). Then we used provincial governments' directories (In the directory for each province all of the registered companies are listed) to randomly select 500 firms in each region. That means we randomly selected 1500 firms in total. Then, we recruited trained interviewers who also understood the research process to conduct onsite interviews (Li et al., 2008). Before the survey was administered, we informed all of the interviewers of the goal of the study, the content and the focus of the survey, and the communication skills required to arrange meeting times. After this training, all of the interviewers were familiar with key issues relating to administering our survey. Interviewers visited each firm personally and distributed the same questionnaire to two managers in each firm. The informants were asked to recall their firm's decision-making processes in the past three years (Yiu, Lau, & Bruton, 2007).

Our sampled firms represent the four-digit Chinese Industrial Classification codes 1311-4190 and 6311-6591 which covers diverse manufacturing industries (e.g., mechanical, chemical, electronics, IT, and textiles). We received 303 paired responses, representing a response rate of 20.2%. For each firm, we collected two questionnaires, with questionnaire A completed by CEOs/TMT members and questionnaire B from at least a middle-level manager (including TMT members and department heads). The average experience of informants for questionnaire A was 10.55 years in the industry and 7.94 years in the firm. The average experience of informants from questionnaire B was 10.02 years in the industry and 7.58 years in the firm. These results indicate that our informants were quite knowledgeable about the issues the questionnaire discussed.

We checked the inter-rater reliability of the two paired questionnaires and found that respondents shared similar views about key descriptions (e.g., product life cycle and firm ownership). We also tested non-response bias with *t*-tests. No statistically significant differences emerged between the population and the sample in terms of firm age and firm size. Second, following Lambert and Harrington (1990) we used t-tests to explore potential differences in responses from early and late waves of questionnaire, but no significant differences were observed. Thus, non-response bias was not a serious threat.

In Stage 2, we collected accounting performance data for the same 303 companies in two ways in early 2012. First, using company reports available on the firms' website, we obtained information on return on assets (ROA) for the year 2011 for all firms we could—116 firms from our sample. Second, we telephoned one of the two managers in the remaining 187 firms we interviewed before and asked them to provide information on their firm's ROA in 2011. However, 5 firms could not be reached and 47 firms refused to provide financial figures. Thus, through these efforts, we finally got a matched sample of 251 firms.

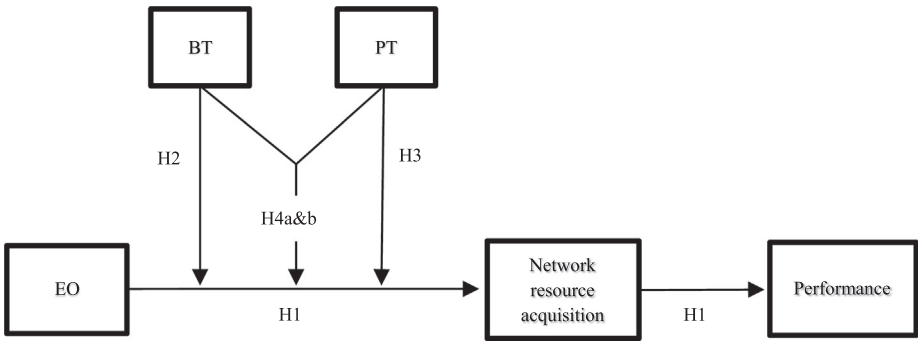

Fig. 1. Conceptual model.

3.2. Variables and measurements

We selected data of the independent variable, moderating variables, and control variables from questionnaire A, and data of the mediator variable from questionnaire B. Firm performance is a 1-year lagged variable. We adapted the measures of constructs from the extant literature, and present them in detail in Appendix A.

3.2.1. Entrepreneurial orientation (EO)

We used Covin and Slevin's (1989) nine-item scale—three each for the components of innovativeness, proactiveness, and risk taking.

3.2.2. Network resource acquisition

On the basis of Sirmon and Hitt (2003) and Sirmon et al. (2007), we developed the measurement scale for network resource acquisition with five items by putting firms in the ego-centered networking context. It assesses the extent to which those firms had acquired different types of resources from their network members.

3.2.3. Firm performance

We used ROA at the firm level as our performance measure.

3.2.4. Social ties

Based on Sheng et al. (2011), business ties was measured with 5 items, which capture the extent to which firms had established good relationships with other business partners including buyers, customers, competitors, technological collaborators, and marketing collaborators. Similarly, based on Li and Zhang (2007) and Peng and Luo (2000), political ties were measured with 4 items, which reflect the relationships between the firm and various levels of the government.

3.2.5. Control variables

Guided by related literature, we included six often-used variables as control variables. First, firm age was measured by the logarithm of the number of years since the firm was started. Second, firm size was measured by the logarithm of the number of employees. Third, ownership type was defined by a dummy variable: 1 (state-owned enterprises SOEs) and 0 (non-SOEs). Fourth, competition was measured by asking the informants to assess the extent of industry competition as: 1 (no competition), 2 (minor competition), 3 (median competition), 4 (strong competition), and 5 (very strong competition). Fifth, firm development stage was measured by the four stages of a firm's product life cycle: 1 (introduction stage), 2 (growth stage), 3 (maturity stage), and 4 (recession stage). Sixth, high-tech was measured by a dummy variable: 1 (high-tech firms) and 0 (others).

4. Analysis and results

Table 1 provides the correlations, means, and standard deviations. It shows that EO is positively associated with network resource acquisition. EO and network resource acquisition are both significantly associated with firm performance. This suggests that our main variables are all positively associated in the correlation matrix.

4.1. Reliability and validity

We used distinct methods to assess the reliability and validity of our model because of the disparate nature of the constructs in our study—formative-scale (business ties) and reflective-scale (all other variables). Similar to Sheng et al.'s (2011) treatment, business ties are measured as a 5-indicator formative scale. We followed Diamantopoulos and Winklhofer's (2001) process to test the validity of this type of construct. First, we checked for multicollinearity among the indicators to assess the suitability of the formative scale. The maximum variance inflation factor (VIF) is 2.85, far below the maximum threshold of 10, suggesting that multicollinearity among these five indicators does not pose a problem. Second, we assessed external validity by means of a multiple indicator multiple causes (MIMIC) model. The effects of business ties were represented by two items: (1) the difficulty of establishing these ties, and (2) the costs associated with it, as perceived by the respondents. The estimated model showed good fit (χ^2/df = 2.02, CFI = 0.97, NNFI = 0.97, SRMR = 0.037, RMSEA = 0.057), and the loadings of all five indicators were significant, suggesting good external validity.

Next, we assessed the construct validity of reflective variables as follows. First, we evaluated their convergent validity using confirmatory factor analysis (CFA; O'Leary-Kelly & Vokurka, 1998). The model fit indices (χ^2/df = 1.88, CFI = 0.99, NNFI = 0.99, RMSEA = 0.061, SRMR = 0.036) suggest that the model was acceptable, indicating its convergent validity (Hu & Bentler, 1999). Furthermore, all factor loadings were > 0.50 and the t-values were > 2.0 (see the Appendix A), further suggesting that our constructs have convergent validity (Fornell & Larcker, 1981). Second, we used Cronbach's alpha to evaluate reliability. All alpha values exceeded the threshold value of 0.70, providing evidence for the reliability of measures (Nunnally, 1978).

Second, we assessed discriminant validity by performing a series of chi-square difference tests. Results indicate that all chi-square difference tests were significant ($p < 0.001$), demonstrating sufficient discriminant validity (Anderson & Gerbing, 1988).

4.2. Results

We conducted a three-step regression analysis to examine the mediating effect (Table 2). In Step 1, we added the independent variable to test the effect of EO on firm performance. Results in Model 1c show that EO is positively related to firm performance ($\beta = 0.250$, $p < 0.001$). In Step 2, results in Model 1d suggest that network resource acquisition has a significantly positive effect on firm performance ($\beta = 0.347$, $p < 0.001$). In Step 3, we regressed firm performance on both EO and network resource acquisition simultaneously. Results in Model 1e show that the effect of EO on firm performance is reduced (from 0.250 to 0.157), but still significantly positive when resource acquisition is included in the model. This indicates that network resource acquisition partially mediates the relationship between EO and firm performance. We also conducted the Sobel test to assess the significance of the mediation effect (Sobel, 1982). The Sobel test results confirm the mediating effect of network resource acquisition ($z = 3.438$, $p < 0.01$, two-tailed). Thus, the results provide support for H1.

We used hierarchical moderated regression analysis to test H2-H4, with a mean-centering procedure to minimize multicollinearity (Aiken & West, 1991). We took additional steps to test problems with multicollinearity by calculating the variance inflation factor (VIF) for each of the regression coefficients. The VIF for each individual variable was below 2.8. Therefore, multicollinearity was not an issue in our analyses (Neter, Wasserman, & Kutner, 1985). Table 3 reports the results of the moderated hierarchical regression analyses.

As shown in Model 2c of Table 3, the interaction effect of EO and squared term of business ties was statistically significant, negative ($\beta = -0.157$, $p < 0.05$). This finding supported H2 that the synergistic effect of EO and business ties on network resource acquisition is greatest at a moderate level of business ties, such that the relationship between EO and network resource acquisition across low, medium, and high levels of business ties is inverted-U shaped. For clarity, we conducted a simple slope test using a method from Aiken and West (1991), which is shown in Fig. 2. We plotted the effects of EO on network resource acquisition for three levels of business ties: low (one standard deviation below the mean), the mean, and high (one standard deviation above the mean). As Fig. 2 shows, the slope of the solid line (b = 0.323) is greater than those of the dotted and dashed lines (b = 0.147 and 0.147, respectively), thus supporting H2.

Table 1
Descriptive statistics and correlation matrix.

Variables	1	2	3	4	5	6	7	8	9	10	11
1. EO											
2. Network resource acquisition	0.319**										
3. Firm performance	0.232**	0.339**									
4. Business ties	0.296**	0.432**	0.102								
5. Political ties	0.037	0.237**	0.030	0.185*							
6. Firm age[a]	−0.045	0.082	−0.035	0.008	−0.035						
7. Firm size[a]	0.069	0.205**	0.022	0.023	0.062	0.476**					
8. Ownership type	−0.040	−0.002	−0.031	−0.046	0.024	0.350**	0.299**				
9. Competition	0.140*	0.020	−0.084	0.032	0.003	0.109	0.101	−0.099			
10. Firm development stage	−0.073	0.026	−0.001	0.060	−0.085	0.282**	0.176**	0.184**	0.127*		
11. High-tech	0.152*	0.059	0.031	0.055	0.096	−0.114	−0.084	−0.192	−0.009	−0.197	
Mean	4.753	4.560	3.940	5.036	5.085	2.672	6.315	0.430	3.578	2.600	0.438
S.D.	0.955	1.184	2.425	1.060	1.077	0.832	1.866	0.496	0.827	0.543	0.516

[a] Log-transformed.
* $p < .05$.
** $p < .01$.

Model 2c also revealed a positive and significant interaction effect between EO and political ties on network resource acquisition ($\beta = 0.165$, $p < 0.01$). The results provided support for H3 that political ties will moderate the relationship between EO and network resource acquisition in a positive manner. To further understand the linear moderating effect of political ties, we plotted in Fig. 3 the effects of EO on network resource acquisition for two levels of political ties: low (one standard deviation below the mean) and high (one standard deviation above the mean). As the plot suggests, the EO-network resource acquisition relationship is stronger at high levels (b = 0.501) than at low levels of political ties (b = 0.145). This finding provided strong support for H3.

Model 2d tested the configurational effects, which showed that the configurational terms had significant, positive relationships with network resource acquisition ($\beta = 0.142$, $p < 0.05$). The inclusion of the configurational terms significantly increased explained variance ($\triangle R2 = 0.040$, $p < 0.001$) from Model 2c to model 2d, which suggesting that the configurational model can better explain the relationships among EO, business ties, political ties, and network resource acquisition. To further investigate the configurational effects, we plotted these interaction effects under two scenarios of different levels of political ties: high (one standard deviation above the mean) and low (one standard deviation below the mean). For each level of political ties, we plotted the relationship between EO and network resource acquisition for low, medium, and high levels of business ties. Fig. 4a shows that the relationship between EO and network resource acquisition increases with the growth of business ties at a high level of political ties: low business ties (b = 0.285), medium business ties (b = 0.467), and high business ties (b = 0.609). As Fig. 4b shows, the slope of the EO-network resource acquisition relationship at medium business ties (b = 0.147) is greater than at high business ties (b = 0.003) and at low business ties (b = −0.321). Collectively, both H4a and H4b are supported.

4.3. Robustness check

We further conducted a robustness test to examine the stability of our findings. We ran regressions using the return on investment data collected from 101 of the firms in 2011. Results suggest that using this alternative measure and sample generates highly consistent results. Specifically, EO has a positive effect on network resource acquisition ($\beta = 0.311$, $p < 0.001$). The interaction effect of EO and the squared term of business ties was statistically significant, negative ($\beta = -0.333$, $p < 0.001$). The interaction effect of EO and political ties was positive and statistically significant ($\beta = 0.190$, $p < 0.01$).The interaction effect of EO, business ties, and political ties was positive and statistically significant ($\beta = 0.239$, $p < 0.01$), and the interaction

Table 2
Mediated regression models.

Variables	Dependent variable: network resource acquisition		Dependent variable: firm performance							
	Model 1a		Model 1b		Model 1c		Model 1d		Model 1e	
Controls	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Firm age	0.028	(0.102)	−0.043	(0.223)	−0.022	(0.217)	−0.043	(0.210)	−0.030	(0.209)
Firm size	0.191***	(0.044)	0.062	(0.096)	0.034	(0.093)	−0.016	(0.092)	0.024	(0.091)
Ownership	−0.063	(0.158)	−0.043	(0.346)	−0.046	(0.337)	−0.022	(0.327)	−0.027	(0.324)
Competition	−0.056	(0.088)	−0.092	(0.192)	−0.129*	(0.188)	−0.089	(0.181)	−0.113*	(0.181)
Firm development stage	0.031	(0.139)	0.025	(0.304)	0.041	(0.296)	0.021	(0.286)	0.031	(0.284)
High-tech	0.024	(0.142)	0.027	(0.309)	−0.008	(0.304)	0.004	(0.292)	−0.016	(0.291)
Predictor										
EO	0.311***	(0.076)			0.250***	(0.162)			0.157*	(0.163)
Mediator										
Network resource acquisition							0.347***	(0.126)	0.299***	(0.131)
R^2	0.142		0.013		0.071		0.127		0.148	
Adjusted R^2	0.117		−0.012		0.045		0.102		0.120	
ΔR^2					0.059		0.114		0.077	
ΔF					15.336***		31.838***		21.767***	
F value	5.739***		0.525		2.668*		5.056***		5.255***	

* $p < .05$.
*** $p < .001$.

Table 3
Hierarchical regression models.

Variables	Dependent variable: network resource acquisition							
	Model 2a		Model 2b		Model 2c		Model 2d	
Controls	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Firm age	0.001	(0.107)	0.029	(0.092)	0.027	(0.090)	0.039	(0.088)
Firm size	0.227**	(0.046)	0.163*	(0.040)	0.140*	(0.039)	0.130*	(0.038)
Ownership	−0.061	(0.116)	−0.054	(0.143)	−0.048	(0.140)	−0.068	(0.137)
Competition	−0.010	(0.092)	−0.040	(0.080)	−0.071	(0.079)	−0.102+	(0.078)
Firm development stage	0.012	(0.145)	0.011	(0.126)	0.025	(0.124)	0.020	(0.121)
High-tech	0.069	(0.148)	0.002	(0.129)	−0.008	(0.127)	−0.022	(0.124)
Main effects								
EO			0.246***	(0.074)	0.323***	(0.090)	0.307***	(0.087)
Business ties (BT)			0.288***	(0.067)	0.324***	(0.076)	0.262***	(0.076)
BT^2			−0.156**	(0.048)	−0.131*	(0.051)	−0.092	(0.050)
Political ties (PT)			0.172**	(0.061)	0.173**	(0.061)	0.117*	(0.061)
Two-way interactions								
EO × BT					−0.055	(0.074)	−0.061	(0.072)
EO × BT^2					−0.157*	(0.054)	−0.145*	(0.052)
EO × PT					0.165**	(0.067)	0.149*	(0.069)
BT × PT					0.002	(0.052)	−0.008	(0.051)
Three-way interactions								
EO × BT × PT							0.142*	(0.087)
EO × BT^2 × PT							0.119+	(0.054)
R^2	0.051		0.309		0.351		0.391	
Adjusted R^2	0.028		0.280		0.313		0.349	
ΔR^2			0.258		0.042		0.040	
ΔF			22.400***		3.837**		7.666**	
F value	2.180*		10.727***		9.121***		9.390***	

+ $p < 0.10$.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

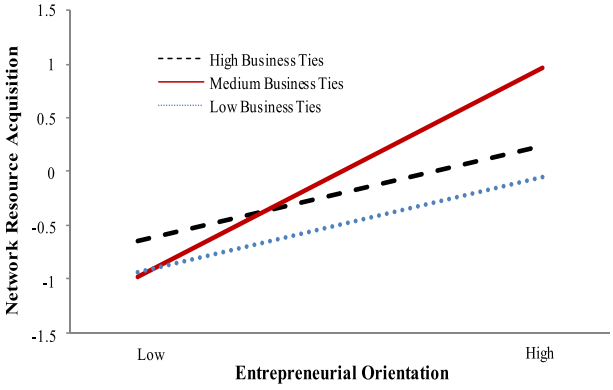

Fig. 2. The moderating effect of business ties.

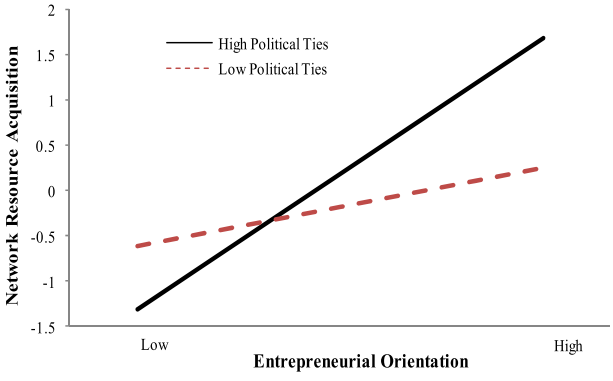

Fig. 3. The moderating effect of political ties.

effect of EO, the squared term of business ties and political ties was positive and statistically significant (β = 0.318, $p < 0.001$).

5. Discussion

5.1. Theoretical contributions

This study contributes to the entrepreneurship literature and network research in several ways. First, unlike most of the prior studies explaining the complex EO-performance relationship by testing diverse boundary conditions (Anderson et al., 2015), this study introduces a strategic intermediate variable—network resource acquisition—to break up the direct link, providing an alternative explanation for the divergent results obtained from past studies (Wales, 2016). Our results suggest that the advantage to access and acquire valuable resources from network actors is an underlying mechanism by which EO contributes to firm performance. For those EO studies that already examined mediating mechanisms, they have consistently looked at factors internal to the firm (Keh et al., 2007; Kollman & Stockmann, 2014; Li, Huang, & Tsai, 2009), without considering the external social network context in which firms are embedded. Echoing network theory, we highlight the need to reconsider the impact of EO paying special attention to its role in affecting the attractiveness to network resources. Adding this network approach helps explain why some firms with constrained internal resources can still find ways to fulfill their entrepreneurial ambitions. While it is generally agreed that EO leads to more experimentation which requires much resource-consumption (Avlonitis & Salavou, 2007; Teng, 2007; Wiklund & Shepherd, 2011), we argue that this internal resource gap may be filled up by external resources which are acquired from network actors. We believe that our effort to examine this phenomenon from a network angle can provide an enhanced understanding of the nature of the value creation process of EO.

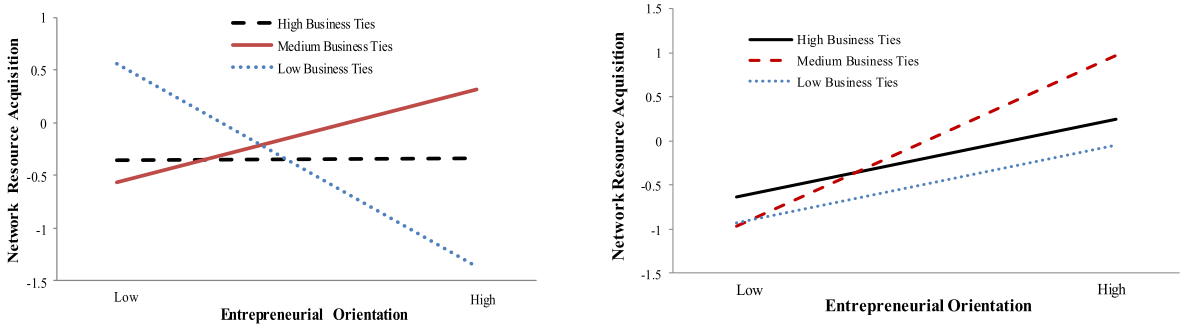

Fig. 4. The moderating effects of business ties and political ties.

Second, recognizing the limited knowledge regarding the interaction of EO and network-related contextual factors, we examine how business and political ties, respectively and collectively, moderate the EO-network resource acquisition relationship. By emphasizing the social embeddedness of entrepreneurial activities, this framework enables us to examine how these entrepreneurial processes may benefit from particular network tie configurations. We show that both ties have important implications in the entrepreneurial resource acquisition processes (Luo, Huang, & Wang, 2012), albeit their moderating effects are different. We found that EO is most effective on the extent of network resource acquisition when firms maintain a moderate level of business ties, yet political ties moderate the EO-network resource acquisition relationship in a linear, positive manner in the Chinese setting. One of the key reasons behind this difference is that while too strong business ties may lead to over-embeddedness problems that constrain a firm's entrepreneurial posture to acquire resources within its original network, political ties do not face similar difficulties by enabling the firm to plug into a broader network. As such, our study provides additional evidence to support the notion that different dimensions of social ties may have contingent values (Bu & Roy, 2015; Stam & Elfring, 2008), highlighting the need for further research to understand the interactive role of strategic orientation and networking strategies (Boso et al., 2013).

Finally, this study adds to the entrepreneurship literature by adopting a configurational perspective to understand how two types of ties (business ties and political ties) collectively moderate the EO-network resource acquisition link. The finding that both types of ties have complementary effects on network resource acquisition fills the research gap of the under-explored configuration of different “types” of ties and EO in the extant literature (Stam & Elfring, 2008). Accordingly, firms with high EO may maximize their network resource acquisition by achieving a mix of ties with business partners and ties with government agencies. This result reveals that the configurational approach explains the contribution of EO to network resource acquisition more completely and deeply compared to a contingency model.

5.2. Implications for practice

The present study offers several managerial implications. The findings reveal that a high EO tends to enhance the firm's ability to acquire valuable resources from surrounding network actors that may differentiate them from others who do not enjoy this resourceful advantage. Therefore, the purposeful effort of and specific role to manage the network resource acquisition must be in place in the process of strategic planning when firms pursue entrepreneurial initiatives. Managers may need to design more effective ways to communicate to make their network actors more aware of their EO advantage in order to attract more resource-based collaborations. This is particularly important for firms operating in emerging economies because they generally face a relative shortage of internal resources and capabilities (Kim et al., 2017; Li, Huang, & Tsai, 2009). In order to improve their competitive advantage, emerging economy firms could be able to acquire and leverage resources across organizational boundaries to create the necessary conditions for the effective exploitation of incoming entrepreneurial opportunities.

Our results also emphasize the importance of the social context in which firms enact their entrepreneurial posture and provide useful guidelines for managers on how to cultivate specific ties and their configurational combinations. Generally, our findings show that having an intermediate level of business ties helps entrepreneurial firms to most effectively exploit external sources of knowledge and technologies, while too high business ties will in turn limit the effectiveness of EO as the focal firm may be so linked to their partner firms that they tend to be blind to other opportunities, for example, with other potential partners outside of existing networks. In this sense, firms that cultivate moderate ties to business parties may benefit most from their entrepreneurial strategic orientation. Meanwhile, building strong political ties will help them obtain direct and indirect support from the government, both centrally and locally. This implies that managers in emerging economies, especially in China, should spend time and effort to cultivate and maintain a high level of ties with the government agencies to gain political legitimacy due to the institutional setting.

Moreover, when combining both business and political ties together to consider their collective impact on the value creation process of EO, we suggest that top managers need to cultivate high levels of both ties. In particular, we argue that too high business ties will have a dark side only when the firm has weak ties to the government. In contrast, if it has cultivated close relationships with the government, the negative consequences of high levels of business ties tend to be countervailed. In this sense, high levels of both ties provide an effective configurational context in which firms benefit most from their pursuit of entrepreneurial postures. That is, by purposefully building on appropriate network configurations, managers in emerging economies can more successfully benefit from being innovative, proactive, and risk taking, thus differentiating their firm from competitors, especially in their capacity to attract and utilize network resources.

5.3. Limitations and future research directions

This study has some limitations that present opportunities for future research. First, we empirically explored the role of EO using an aggregate measure of EO that involves the three dimensions of innovativeness, proactiveness, and risk-taking. However, some scholars have warned that these dimensions may possess differential relationships with performance (Kreiser, Marino, Kuratko, & Weaver, 2013). Future studies could examine how the dimensions interact with one another and how they independently and collectively work in network settings.

Second, social ties are measured by managers' subjective assessment of the extent of such social relationships. Future research should better consider the mode and content of social ties so as to understand the

complex networking phenomena in more detail. Future research could consider more different types of ties than just business and government ties. In addition, future research might examine how these ties co-evolve over time and how their dynamic interactions affect firm outcomes, including resource acquisition and firm performance.

Finally, while our results are based on data collected in China, the logic that explains why network resource acquisition is mediated between EO and firm performance can be extended to other country settings directly, since the opportunity-ability-motivation reasons for why high EO firms may be advantaged in acquiring resources from the networks appear to apply generally. Indeed, although our research continues to support the importance of social ties for firms operating in an emerging economy-China, the applicability of our findings beyond China deserves further empirical exploration. It may be the case that other emerging economy contexts which suffer similar institutional voids may also be impacted similarly by social ties, while firms in developed countries are less likely to be prominently affected by social ties to enhance their EO's resource acquisition potential. Thus, in the future, more comparative research should be conducted to determine the importance of social ties (both business and political ties) in other contexts to explore the generalizability of our results. In addition, since our database is a little bit old, future studies may collect new data to ensure results remain consistent over time.

6. Conclusion

To better illustrate the EO-performance relationship and understand previously observed conflicting results, this study applies a network perspective to explain how network resource acquisition acts as a critical, yet prior-neglected, mediator between EO and firm performance. We also examine how different types of social ties (business vs. political) serve as different and configurational moderators between EO and network resource acquisition. The above empirical analysis of 251 Chinese firms provides general support for the proposed hypotheses. Overall, our findings suggest that the EO–performance link, as well as the individual and configurational moderations we examined, contribute to a deeper understanding of the value creation process of EO. While our study makes valuable advances in this important area, additional research in this area continues to be needed, and, as such, the area is a promising area for future research.

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Appendix A. Measurement scales

Constructs/items	Loadings
Entrepreneurial orientation (α = 0.96, AVE = 73.09%, CR = 96.07%)	
In general, our firm favors…	
1—"a strong emphasis on the marketing of tried and true products or services", to 7 "a strong emphasis on R&D, technological leadership, and innovations."	0.81
How many new lines of products or services has your firm marketed during the past three years?	
1—"No new lines of products or services", to 7—"Very many new lines of products or services."	0.86
1—"Changes in product or service lines have been mostly of a minor nature", to 7—"Changes in product or service lines have usually been quite dramatic."	0.87
In dealing with its competitors, our firm…	
1—"typically responds to actions which competitors initiate", to 7—"typically initiates actions to which competitors respond."	0.88
1—"is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc." to 7—"is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc."	0.89
1—"typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture", to 7—"typically adopts a very competitive "undo-the-competitors" posture."	0.86
In general, our firm has…	
1—"a strong proclivity for low-risk projects with normal and certain rates of return", to 7—"a strong proclivity for high-risk projects with chances for very high returns."	0.88
In general, our firm believes that…	
1—"owing to the nature of the environment, it is best to explore it gradually via cautious, incremental behavior", to 7—"owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives."	0.81
When confronted with decision making situations involving uncertainty, our firm…	
1—"typically adopts a cautious "wait and see" posture in order to minimize the probability of making costly decisions", to 7—"typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities."	0.83
Network resource acquisition (α = 0.96, AVE = 81.76%, CR = 95.73%)	
Please assess the extent to which your company has acquired such resources from your network actors (1 = "extremely low," and 7 = "extremely high"):	
(1) Advanced technologies	0.88
(2) Financial resources	0.89
(3) Managerial expertise	0.93
(4) Human capital	0.92
(5) Key information	0.90
Business ties	
Your company has built good connections (*guanxi*) with (1 = "strongly disagree", 7 = "strongly agree"):	
(1) Supplier firms	
(2) Customer firms	
(3) Competitor firms	

(4) Technological collaborators
(5) Marketing collaborators

Political ties (α = 0.91, AVE = 73.07%, CR = 91.52%)
To what extent do you agree with the following statements regarding your firm's connections with the government? (1 = "strongly disagree", 7 = "strongly agree"):

(1) Our firm has maintained good relationships with various levels of the government	0.87
(2) Our firm has developed good connections with regulatory and supporting organizations such as tax bureaus, state banks, and commercial administration bureaus	0.92
(3) Our firm has spent substantial resources in building relationships with government agencies	0.75
(4) Our firm's relationship with local government agencies has been good	0.87

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