The Effect of Entrepreneurial Orientation, Social Network, and Resource Acquisition on Firm Performance in Chinese SMEs: The Mediating Effect of Resource Acquisition

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ABSTRACT

Purpose: The purpose of this study is to explore the impact of entrepreneurial orientation (EO), social network, and resource acquisition on firm performance in Chinese SMEs. Moreover, we analyze the impact of EO and social network on resource acquisition and further the mediating effect of resource acquisition on the relationship between EO and firm performance, and the mediating effect of resource acquisition on the relationship between social network and firm performance.

Design/methodology/approach: The research is based on a survey of 204 SMEs in the Liaoning province of China, which includes entrepreneurial orientation, social network, resource acquisition, and firm performance. A structural equation model is used as the methodology.

Findings: EO and social network have a significant positive impact on resource acquisition and firm performance. Resource acquisition proves to play a mediating role in the relationship between EO and firm performance, and the relationship between social network and firm performance. A higher EO can acquire more resources, and thus improve firm performance.

Research limitations/implications: This research is meaningful, but it has its own limitations. First, the analysis target is limited to one area of China. If the target is expanded to other areas, different results may come out. Second, there may be measurement errors because firm performance is self-reported by the respondents. It is almost impossible that the authors gauge the accuracy and precision of these responses. The research implications are as follows: for SMEs in this region to thrive, the corporate executives should promote their entrepreneurial orientation, and strengthen their business and political ties to enhance mutual trust, and to get government support, information, loans or financing from financial institutions. These ties may also enable them to get favorable details on tax reduction.

Originality/value: The five-dimensional model of EO is the most prevalent in recent studies. Yet, there is not much research existent on Chinese companies. In this regard, this research using EO’s five-dimensional model on Chinese SMEs may provide some contributions to the literature.

Keywords: Chinese SME, Entrepreneur Orientation, Firm Performance, Resource Acquisition, Social Network
I. Introduction

Small and medium-sized enterprises (SMEs) are essential for the Chinese economy, and they account for 97.6% of total enterprises in China. By the end of 2018, there were 36.9 million SMEs in China. The business income of SMEs was 57.9 trillion Yuan (USD 8.2 trillion); it accounted for 56.7% of the primary income of ‘Enterprises above-designated size’ (Nation Bureau of Statistics of China, 2019). ‘Enterprises above-designated size’ refers to enterprises with annual primary business income of 20 million Yuan and above. Since SMEs form the largest group of Chinese enterprises as mentioned above, the growth and survival of SMEs are crucial for China’s economic development and stability. Therefore, it is meaningful to study the relationship between business strategy and firm performance of Chinese SMEs and suggest some implications.

However, SMEs, in general, face some problems such as relatively small scales, limited resources, and low credit capacity that may hinder their growth in highly competitive markets. To overcome those drawbacks, SMEs are heavily dependent on the top managers’ role.

Lumpkin & Dess (1996) indicate that entrepreneurial orientation (EO) reflects the extent to which a firm can accept the risk and is innovative or competitively aggressive. Many fast-growing young corporations attribute much of their success to entrepreneurial orientation. Firms often rely on EO to enhance venturing corporate activities (Dess & Lumpkin, 2005). Several studies verifying the relationship between EO and firm performance argue that higher EO can improve firm performance (Jiang et al., 2018; Lomberg et al., 2017; Wiklund & Shepherd, 2003, 2005). On the other hand, inconsistent results are also existent (Anderson et al., 2015), including a finding of an insignificant relationship (George, Wood Jr. & Khan, 2001; Wiklund & Shepherd, 2011), and an inverted U-shaped relationship (Tang et al., 2008).

Current literature on social networking and entrepreneurial activities has acknowledged that entrepreneurial activity can heavily be influenced by network relationships in which resources flow directly to entrepreneurs who are somehow better "connected" (Hoang & Antonicc, 2003). Adler & Kwon (2002) contend that social capital, or the resources that entrepreneurs may access through their networks, allows entrepreneurs to identify opportunities, mobilize resources and build legitimacy for the firm (Wang & Steiner, 2015).

It is common knowledge that in many cases, the opportunity exploitation of SMEs is often constrained by lack of resources (Neneh et al., 2016). Resource-based theories on strategy (RBV) argue that firms with valuable, rare, and inimitable resources (including non-substitutability) have the potential to achieve superior performance (Barney, 2001). Moreover, resource acquisition is inseparable from the network connection of enterprises or individuals (Shah & Ahmad, 2019). "Resource thrift" is a crucial strategy for SMEs’ survival and development, which means that SMEs need to obtain resources at a lower cost. The price of resources obtained through market transactions is too high, and friendship and trust in social networks can significantly reduce the cost of resource acquisition (Liu, 2017). Social networks play an indispensable role in SMEs’ access to external resources.

The research on the relationship between EO, social network, resource acquisition, and firm performance based on a resource-based theory can provide companies, especially SMEs, with strategies to gain competitive advantages.

From this perspective, this study explores the impact of entrepreneurial orientation (EO), social network, and resource acquisition on firm performance in Chinese SMEs. We will also analyze the mediating role of resource acquisition on the relationship between entrepreneurial orientation and firm performance, and the mediating role of resource acquisition on the relationship between social network and firm performance. Also, from the empirical results, we will derive implications for the survival and growth of Chinese SMEs.

In studying the EO-firm performance link, many scholars have used ‘social network’ as a moderating
variable (Agyapong, Mensah & Ayuuni, 2018; Jiang et al., 2018). In this research, however, we study the direct role of the social network in firm performance. Moreover, we explore whether EO and social networks can collectively influence firm performance through resource acquisition. Many previous studies used three-dimensional EO (innovativeness, risk-taking, and proactiveness) to explore the EO-firm performance link (Covin and Slevin, 1983; Wiklund & Shepherd, 2003; Gupta & Batra, 2016; Jiang et al., 2018). Recently, though, Lumpkin's five-dimensional model is considered the most popular model. Therefore, our study will use the 5-dimensional EO, including these two dimensions, such as competitive aggressiveness and autonomy proposed by Lumpkin & Dess (1996).

The EO-performance link researches started mostly with start-ups. In recent years, many scholars have conducted researches on emerging economies or start-ups (Lumpkin & Dess, 1996; Gupta & Batra, 2016). Our research is limited to Chinese SMEs in Liaoning Province. Liaoning is a province in the northeastern coastal region. For this geographical reason, Liaoning is a bridgehead for China's development of economic and trade cooperation with Japan, South Korea, Russia, and Mongolia. Currently, China is going through the period of "Belt and Road," which is a new stage for the rapid transformation and development of enterprises. So, Liaoning can be an important node for the construction of the "Belt and Road." At the same time, it is an old industrial base for a large number of SMEs.

This study has the following structure. Section two reviews the concept of each factor and its theoretical development. In section three, we state hypotheses on a speculative basis; we also explain the research tools used in this study and the operational significance of each factor. In section four, we analyze the research data statistically and obtain the results. Section five discusses and summarizes the research results and suggests implications and future research directions.

II. Theoretical Background and Hypothesis

A. Entrepreneurial Orientation

Firms that want to engage in successful corporate entrepreneurship need to have an entrepreneurial orientation (Dess & Lumpkin, 2005). Entrepreneurial orientation (EO) refers to the strategy-making practices that businesses use to identify and launch corporate ventures. It represents a frame of mind and a perspective about entrepreneurship that is reflected in a firm’s ongoing processes and corporate culture (Covin & Slevin, 1989; Lumpkin & Dess, 1996).

Looking at previous researches, EO has many dimensions. The most frequently used dimensions have been derived from both the strategy-making process and the entrepreneurship literature (Covin & Slevin, 1989; Dess & Lumpkin, 2005). Miller (1983) argued that an entrepreneurial firm "engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch," suggesting the dimensions of innovativeness, risk-taking, and proactiveness, respectively (Dess & Lumpkin, 2005). Based on Miller’s (1983) original conceptualization, Covin & Slevin (1989) investigated the performance of entrepreneurial firms in hostile and benign environments. In their study of 161 small manufacturers, "entrepreneurial strategic posture" was measured using a scale that ranked firms as entrepreneurial if they were innovative, risk-taking, and proactive (Dess & Lumpkin, 2005). Lumpkin & Dess (1996) also proposed two additional dimensions that are critical to the EO concept: competitive aggressiveness and autonomy. The EO definitions by Lumpkin and Dess (1996) are the most popular and relevant (Covin & Wales, 2012).

Here, autonomy is related to the independent spirit comprising the free action and freedom of entrepreneurs (Lechner & Gudmundsson, 2014; Loong Lee, Chong, & Ramayah, 2019; Lumpkin & Dess, 1996; Sellappan & Shanmugam, 2020). Competitive aggressiveness is related to the intensity of a firm’s efforts to beat
industry rivals in the market and taking head-on at every opportunity (Loong Lee, Chong, & Ramayah, 2019; Lumpkin & Dess, 1996; Sellappan & Shanmugam, 2020; Shah & Ahmad, 2019).

B. Social Network

The study of ‘social network’ originated from anthropology in the UK, mainly in the discussion of networks of relationships (Yuan & Li, 2013). In the definition of social networks, different scholars have given different definitions based on their theories and research objects. Nahapiet & Ghoshal (1998) regarded social networks as social capital. They moved the classification of social capital at the organizational level to the individual level of entrepreneurs. They divided it into three dimensions: the structural dimension, cognitive dimension, and relationship dimension. Earlier works by Peng & Luo (2000) and Park & Luo (2001) proposed Chinese social networks at the organizational level as managerial ties. Moreover, they defined corporate social networks as managers’ social networks and ties with business partners and government officials that could be employed for organizational purposes (Luo, Huang & Wang, 2012). Panda (2014) also defined managerial ties as “the structure in which managers of firms connect with others who are directly or indirectly connected with the organization.” This definition of Chinese social networks includes two domains: (i) business ties, the relationships with managers at other business firms such as suppliers, buyers, competitors, and other business intermediaries (Dubini, 1991; Peng & Luo, 2000); and (ii) political ties, the relationships with government officials at various levels of governmental, bureaucratic, and regulatory agencies (Peng & Luo, 2000).

C. Resource Acquisition

The resource-based view is that the tangible and intangible resources of the enterprise can become the unique capabilities of the enterprise, especially the rare resources which cannot be imitated, which makes the enterprise more competitive (Barney, 2001). There are many kinds of resources, and the ways of obtaining these are also diverse. Resource acquisition is the acquisition of knowledge resources, the acquisition of information resources, and the acquisition of financial resources (Wang & Wang, 2016).

D. Hypothesis Development

To achieve the research purpose, we establish the following hypotheses.

1. EO and Firm Performance

EO involves a willingness to innovate, take risks, take self-directed actions, and be more proactive and aggressive than competitors to new marketplace opportunities (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). The importance of EO to the survival and performance of firms has been acknowledged in the entrepreneurship literature (Balodi, 2020; Miller, 1983; Loong Lee, Chong, & Ramayah, 2019; Lumpkin & Dess, 2001; Sah & Ahmad, 2019; Sellappan & Shanmugam, 2020; Wiklund & Shepherd, 2005). Firms with EO have the capabilities to discover and exploit new market opportunities (Wiklund & Shepherd, 2003), and they can respond to challenges to prosper and flourish in a competitive and uncertain environment (Alegre & Chiva, 2013; Lumpkin & Dess, 1996).

Accordingly, EO is essential for firms to discover entrepreneurial opportunities and compete with other firms (Li, Huang, & Tsai, 2009). If SMEs have a more exceptional aptitude for EO (innovation, risk-taking, proactiveness, competitive aggressiveness, and autonomy), they will gain a more significant competitive advantage and have a higher firm performance. Thus, an effective EO may be a good predictor of firm performance (Li, Huang, & Tsai, 2009). These arguments lead to the following hypothesis.

Hypothesis 1: EO will be positively related to firm performance.
2. EO and Resource Acquisition

The acquisition of resources from outside the firm has been seen as a critical entrepreneurial task for a long time (Wang, Thornhill & De Castro, 2017). First, concerning the motivation reason, high EO firms often conceive and identify more opportunities (Wales, Parida & Pate, 2013). They recognize an urgent need for resources, and they work to acquire and pursue these opportunities (Teng, 2007). Second, concerning 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 recognize that high EO firms have better future potential than low EO firms (Burt, 1992). Third, for ability, 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 the capacities to proactively connect potential network partners to make them aware of cooperation benefits and design a mutually beneficial cooperation plan (Jiang et al., 2018). These arguments lead to the following hypothesis.

Hypothesis 2. EO will be positively related to resource acquisition.

3. Social Network and Firm Performance

Social networks provide opportunities for both bridging and bonding social capital in seeking information (Wang & Steiner, 2015). In the business context, a social network refers to the number of relationships and sharing resources, which allows individuals to achieve the expected performance (Pratono et al., 2018). The entrepreneur’s network, which includes a content multiplicity of friends, business partners, and relatives, provides significant support for firm growth (Kregar & Antoncic, 2016). The impact of business ties on SMEs can be understood from the following aspects: First, it provides business support for the development of SMEs. Supporting services such as advice and services provided by banks, accounting, and business consultants have a critical impact on the development of SMEs. The second is to provide SMEs with the knowledge and information necessary for development. Entrepreneurs gain commercial support and promote information sharing through formal relationships such as business networks, business associations, official and semi-official government agencies, and trade organizations dedicated to supporting business (Sheng, Zhou & Li, 2011). The third is to provide the necessary financial support for the development of SMEs (Shen, 2010). Political ties mainly refer to the network of relationships established between entrepreneurs and government officials, banks, or other administrative agencies (Peng & Luo, 2000). Most studies believe that such a network of relationships is of considerable significance to Chinese SMEs in the context of economic transformation (Luo, Huang & Wang, 2012; Wang et al., 2013). The network of social relationships between entrepreneurs and regulatory agencies is beneficial in helping companies to obtain the resources, information, and knowledge needed for their operations. Therefore, it provides a particular buffer for enterprises to face the high uncertainty of the business environment. Here, we analyze the effect of business ties and political ties of managers on firm performance. These arguments lead to the following hypothesis.

Hypothesis 3a. Stronger business ties will be positively related to firm performance.

Hypothesis 3b. Stronger political ties will be positively related to firm performance.

4. Social Network and Resource Acquisition

Business ties refer to managers’ connections with their counterparts (e.g., buyers, suppliers, and competitors) in other organizations (Peng & Luo, 2000). Since social ties facilitate knowledge transfer, knowledge learning, and resource exchange (Adler & Kwon, 2002), they are an essential mechanism for a firm and its managers to absorb tacit and explicit knowledge, expertise, and know-how through cooperation with partners. Close social interactions lower the risk of opportunism by encouraging reciprocity and joint problem-solving opportunities with a long-term orientation (Uzzi, 1997; Wang et al., 2013).
Under the original planned economic system, the Chinese government still holds the ownership of a large number of crucial and scarce resources and intervenes to incorporate activities (Ring et al., 2005). Political ties help companies gain valuable insights into the policy environment from the government and help companies get limited access to the latest policy information (Hillman & Hitt, 1999). Political ties help companies learn about the opportunities, channels, procedures of government resources, and understand the relevant policy systems for government resource allocation, which can improve the chances for enterprises to obtain political subsidies and other asset resources. These arguments lead to the following hypothesis.

**Hypothesis 4a.** Stronger business ties will be positively related to resource acquisition.

**Hypothesis 4b.** Stronger political ties will be positively related to resource acquisition.

5. Resource Acquisition and Firm Performance

Resources are a critical factor in improving business performance (Zhu & Chen, 2010). Resource acquisition can significantly promote SME performance (Si, 2014). The resource-based view 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 advantages (Barney, 2001). The complexity and specificity of a firm's knowledge contribute to a higher performance over that of its competitors (McEvily & Chakravarthy, 2002). We expect that the acquisition of valuable resources from networks improves a firm's competitiveness over its counterparts, and puts it in a favored position in providing more differentiated products and satisfying customer needs promptly (Sirmon, Hitt, & Ireland, 2007). Therefore, resource acquisition is positively related to firm performance. These arguments lead to the following hypothesis.

**Hypothesis 5.** Resource acquisition will be positively related to firm performance.

6. The Mediating Role of Resource Acquisition

We have argued that, if we see from a network perspective, firms with higher EO may have a better chance to contact and attract resources from network actors (Jiang et al., 2018). Also, resource acquisition facilitates these firms outperforming other rivals by developing a competitive advantage (Jiang et al., 2018). Thus, this is positively related to high firm performance. Synthesizing these arguments, we here envision that network resource acquisition will serve as an important, yet previously-neglected, conduit by which the enactment of EO contributes to firm performance (Jiang et al., 2018).

Many studies have shown that resource shortages are the main obstacles hindering the survival and growth of SMEs, and the government is also controlling the scarce resources of SMEs. Corporate political ties help companies obtain resources from the government and thus improve firm performance. Si (2014) proved that the political ties of SMEs played a decisive role in helping the innovation performance of enterprises through resource acquisition. There is a clear positive relationship between the development of social networks and the performance of SMEs (Baum et al., 2000). These arguments lead to the following hypothesis.

**Hypothesis 6a.** Resource acquisition mediates the relationship between EO and firm performance.

**Hypothesis 6b.** Resource acquisition mediates the relationship between business ties and firm performance.

**Hypothesis 6c.** Resource acquisition mediates the relationship between political ties and firm performance.

III. Empirical Model

A. Sample and Data Collection

We targeted member SMEs of one of SME associations in Liaoning province, which has 1,050
member SMEs. There is no consensus in the literature on the appropriate sample size for SEM. Simple SEM models can be meaningfully tested even with small sample sizes (Hoyle, 1999; Hoyle & Kenny, 1999; Marsh & Hau, 1999), but generally, 100 to 150 samples are the minimum sample size (Velicer & Harlow, 1995; Tabachnick & Fidell, 2001). Some researchers believe that SEM requires a larger sample size, for example, \( N = 200 \) (Hoogland & Boomsma, 1998 2001; Kline, 2005). In other studies on Chinese SMEs, the sample size was 150 to 300. The larger the sample size, the better the statistics are, but the time limit led to the analysis of 204 samples.

We first developed an English version of the questionnaire based on related literature and then translated it into Chinese. We pilot-tested the Chinese version questionnaire with 10 top managers of member companies in the SME Association of Liaoning province. The questionnaire was modified based on the interviews. Since the translation of English into Chinese may cause errors, it was crucial to correct the context of the Chinese version questionnaire with feedback from the pilot test. After minor revision based on their feedback, we finalized the Chinese-version questionnaire.

The survey items were prepared by referring to the prior studies shown in Table 1. And then they were fine-tuned to suit the environment of targeted SMEs. For example, while firm performance was measured by profitability, growth, and market position in previous studies, we did not include the market position in our firm performance items. That is because we reasoned, it may be difficult for our targeted SMEs to identify their market position accurately.

We used a web-based survey with respondents who are chairpersons or managers of member companies in an SME association in Liaoning province. 230 questionnaires were sent by the SME association through QQ (an instant messaging software service and web portal in China). We collected the answers through a professional data survey website in China (www.wjx.cn) with functions similar to Amazon Mechanical Turk. For companies that do not answer, the SME association urged to answer by several rounds of phone and personal follow-ups. 210 answers were collected. The final response rate was 91.3%. The high final response rate was because the survey was conducted on members of the SME association. 6 answers were not used for the analysis due to insincere responses, such as those with non-responsive items, and the remaining 204 questionnaires were used for the analysis.

### B. Measurement of Variables

1. **Entrepreneurial Orientation**

We explored EO in five dimensions risk-taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy.
and autonomy (Covin & Wales, 2012; Hughes & Morgan, 2007; Lumpkin & Dess, 1996). All items are rated on Likert-type 7-point scales ranging from “Strongly disagree” (=1) to “Strongly agree” (=7).

2. Social Network

We explored social network in two dimensions, business ties such as relationships with the top managers of buyer firms, top managers of supplier firms or top managers of competitor firms, and political ties such as a relationship with political leaders in various levels of the government, officials in industrial bureaus, or officials in regulatory and supporting organizations such as tax bureaus, banks, commercial administration bureaus, and the like (Peng & Luo, 2000). All items are rated on Likert-type 7-point scales ranging from “very little” (=1) to “very extensive” (=7).

3. Resources Acquisition

The measurement of resource acquisition mainly refers to Wang & Wang (2016). Resource acquisition was explored in three aspects: information resource acquisition, knowledge resource acquisition, and financial resource acquisition. All items are rated on Likert-type 7-point scales ranging from “Strongly disagree” (=1) to “Strongly agree” (=7).

4. Firm Performance

This study used ROI, average sales growth, average net profit growth, average market share growth, and average employment growth to measure firm performance (Covin & Slevin, 1989; Sheng, Zhou, & Li, 2011). All items are rated on Likert-type 7-point scales ranging from “very low level” (=1) to “very high level” (=7).

5. Control Variables

Although control variables are not the main focus of the research, omitting it would make the results less accurate. A control variable is a variable that the researcher suspects to be influencing the relationship between the dependent and independents variables (Rubin, 2009; Al-Surmi, Gao & Duan, 2020). Guided by related literature, we included four often-used variables as control variables; firm age (years since firm establishment), industry sectors, the number of employees, and the sales amount (see Figure 1). First, firm age was classified by the three age groups: 1 (5-10 years), 2 (10-20 years), and 3 (over 20 years). Second, industry sectors have been applied considering four main economic sectors: 1 (manufacturing), 2 (services), 3 (wholesale and retail), and 4 (others). Third, the number of employees was classified by the four sizes: 1 (under 50), 2 (50-300), 3 (300-1,000), and 4 (over 1,000). Fourth, the sales amount was classified by the four sizes: 1 (under 3 million yuan), 2 (3-20 million yuan), 3 (20-400 million yuan), and 4 (over 400 million yuan).

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Figure 1. Research Model
C. Structural Equation Model

SEM is the second-generation method of the multivariate analysis technique developed to cater to limitations in traditional ordinary least squares (OLS), and the analysis for latent constructs is no longer appropriate with traditional OLS (Hoque et al., 2017). Therefore, researchers need to use SEM to keep up with the development of research methods. Besides, using AMOS software, the researcher could also convert their theoretical framework directly into AMOS Graphics for analysis (Hoque et al., 2017). In SEM, a researcher validates the measurement model of a latent construct using the Confirmatory Factor Analysis (CFA) procedure. Therefore, using AMOS software to analyze and test this theory is fast, efficient, and powerful (Awang, 2015; Hoque et al., 2017). For this reason, this study will use AMOS software for the analysis.

IV. Empirical Test Results

A. Sample Characteristics

In terms of firm age, most of the 204 respondent companies were 5-10 years of age, with a total of 130 companies accounting for 63.7%. As for the respondents’ position, 87 were directors, accounting for 42.6%. In terms of industry sector, 59 companies were in the manufacturing industry, accounting for 28.9% of the total. In terms of the number of employees, companies with fewer than 300 employees accounted for 72.5%. In terms of sales amount, companies with sales of less than 20 million Yuan accounted for 72.5%. The detailed characteristics of the sample firms are presented in Table 2.

B. Reliability and Confirming Factor Analysis

The reliability of the multi-item scale for each dimension was measured using Cronbach alphas and composite reliability measures. Both reliability indicators should be higher than the recommended minimum of 0.60 (Bagozzi & Yi, 1988). The Cronbach alpha values of all latent variables are higher than 0.79, and the CR values are higher than 0.8. This proves that these potential variables have excellent reliability. Table 3 shows that each dimension has good content validity.

To assess the discriminant validity, Fornell & Larcker’s (1981) criterion, the square root of the AVE for each construct should be higher than the correlation between constructs. Also, the maximum shared squared variance (MSV), and average shared squared variance (ASV) should be less than AVE (Hair et al. 2010; Alhaddad, 2015). The AVE (Average Variance Extracted) of each dimension is shown in Table 4. Except for the RA dimension, the others are greater than 0.5. Moreover, the AVE of the RA is 0.404, and the CR is 0.801. AVE should be higher than 0.5, but we can accept 0.4. Fornell & Larcker (1981) said that if AVE is less than 0.5, but composite...
reliability is higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981). Table 5 shows the values of the square root of the AVE were all greater than the inter-construct correlations, and Table 4 shows that MSV and ASV were less than AVE, suggesting good discriminant validity.

AMOS provides a chi-square value and five additional indices that assess the fit of path models, the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the normed fit index (NFI), the comparative fit index (CFI), and RMSEA (Li, Huang, & Tsai, 2009). This five-factor CFA model includes the following constructs: EO, political ties, business ties, resource acquisition, and firm performance. All item loadings were significant and as hypothesized (p < .01). Results indicated that the five-factor model fitted the data moderately well (Chi-square= 273.138 (df= 179) p < .01, GFI= 0.886, AGFI= 0.853, NFI= 0.917, CFI= 0.97, and RESMA= 0.051).

### Table 3. Results of Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>Indicators</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Ties (BT)</td>
<td>Ties with top managers at buyer firms</td>
<td>0.924</td>
</tr>
<tr>
<td></td>
<td>Ties with Top managers at supplier firms</td>
<td>0.900</td>
</tr>
<tr>
<td></td>
<td>Ties with top managers at competitor firms</td>
<td>0.755</td>
</tr>
<tr>
<td>Political Ties (PT)</td>
<td>Ties with political leaders</td>
<td>0.919</td>
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<tr>
<td></td>
<td>Ties with Officials in industrial bureaus</td>
<td>0.773</td>
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<tr>
<td></td>
<td>Ties with officials in regulatory and supporting organizations</td>
<td>0.708</td>
</tr>
<tr>
<td>Entrepreneurial Orientation (EO)</td>
<td>Risk-taking</td>
<td>0.815</td>
</tr>
<tr>
<td></td>
<td>Innovativeness</td>
<td>0.823</td>
</tr>
<tr>
<td></td>
<td>Proactiveness</td>
<td>0.820</td>
</tr>
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<td></td>
<td>Competitive aggressiveness</td>
<td>0.877</td>
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<tr>
<td></td>
<td>Autonomy</td>
<td>0.890</td>
</tr>
<tr>
<td>Resource Acquisition (RA)</td>
<td>Market information acquisition</td>
<td>0.654</td>
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<td></td>
<td>Macro policy information acquisition</td>
<td>0.696</td>
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<tr>
<td></td>
<td>Innovative management knowledge acquisition</td>
<td>0.553</td>
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<td>Business management knowledge acquisition</td>
<td>0.633</td>
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<tr>
<td></td>
<td>Reduce the financial burden</td>
<td>0.554</td>
</tr>
<tr>
<td></td>
<td>Getting loans from financial institutions</td>
<td>0.705</td>
</tr>
<tr>
<td>Firm Performance (FP)</td>
<td>ROI over the past three years</td>
<td>0.924</td>
</tr>
<tr>
<td></td>
<td>Average sales growth over the past three years compared to competitors</td>
<td>0.935</td>
</tr>
<tr>
<td></td>
<td>The average net profit growth rate over the past three years compared to competitors</td>
<td>0.970</td>
</tr>
<tr>
<td></td>
<td>The employment growth rate over the past three years compared to competitors</td>
<td>0.963</td>
</tr>
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</table>

### Table 4. Validity and Reliability Table

<table>
<thead>
<tr>
<th>Factor</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
<th>Cronbach α</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>0.845</td>
<td>0.745</td>
<td>0.134</td>
<td>0.087</td>
<td>0.836</td>
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<td>PT</td>
<td>0.889</td>
<td>0.648</td>
<td>0.176</td>
<td>0.102</td>
<td>0.889</td>
</tr>
<tr>
<td>BT</td>
<td>0.926</td>
<td>0.715</td>
<td>0.184</td>
<td>0.096</td>
<td>0.926</td>
</tr>
<tr>
<td>RA</td>
<td>0.801</td>
<td>0.404</td>
<td>0.229</td>
<td>0.128</td>
<td>0.797</td>
</tr>
<tr>
<td>FP</td>
<td>0.972</td>
<td>0.899</td>
<td>0.229</td>
<td>0.179</td>
<td>0.972</td>
</tr>
</tbody>
</table>
C. Correlation Analysis

To explore the correlation of EO, business ties, political ties, resource acquisition, firm performance, and control variables (firm age, industry sector, the number of employees, and sales), we conducted a Pearson correlation analysis. Table 6 provides the correlations, means, and standard deviations. There is a significant positive correlation between EO, business ties, political ties, resource acquisition, and firm performance. However, there seems to be no concern for multicollinearity as the correlation coefficient is less than 0.5.

D. Model Test

To test the hypothesis, we performed an SEM (Structure Equation Model) analysis using AMOS software. Table 7 presents assessment measures of overall fit such as the Chi-square, the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the normed fit index (NFI), the comparative fit index (CFI), and RMSEA. The results indicate that the model fits the data moderately well. The ratio of the model is X2/df = 1.415. Hence, the model is stable and converges correctly.

E. Control Variables

The empirical results show that none of the control variables have a significant effect (see Table 8), which means that there is no evidence that firm age, industry sectors, the number of employees, and sales amount influence firm performance.

Table 5. Factor Correlation Matrix with Square Root of the AVE on the Diagonal

<table>
<thead>
<tr>
<th></th>
<th>EO</th>
<th>PT</th>
<th>BT</th>
<th>RA</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>(.863)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>.254**</td>
<td>(.805)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BT</td>
<td>.152*</td>
<td>.271**</td>
<td>(.846)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>.366**</td>
<td>.303**</td>
<td>.242**</td>
<td>(.636)</td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>.355**</td>
<td>.420**</td>
<td>.429**</td>
<td>.479**</td>
<td>(.948)</td>
</tr>
</tbody>
</table>

Table 6. Descriptive Statistics and Correlation Matrix

<table>
<thead>
<tr>
<th>Firm Age</th>
<th>Industry</th>
<th>Employees</th>
<th>Sales</th>
<th>EO</th>
<th>PT</th>
<th>BT</th>
<th>RA</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>0.024</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>0.108</td>
<td>-0.056</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>-0.028</td>
<td>0.063</td>
<td>0.019</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>-0.015</td>
<td>0.018</td>
<td>0.038</td>
<td>0.092</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>0.056</td>
<td>0.007</td>
<td>.165*</td>
<td>0.080</td>
<td>.254**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BT</td>
<td>-0.010</td>
<td>0.126</td>
<td>-0.008</td>
<td>.188**</td>
<td>.152*</td>
<td>.271**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>0.020</td>
<td>0.050</td>
<td>0.038</td>
<td>0.064</td>
<td>.366**</td>
<td>.303**</td>
<td>.242**</td>
<td>1.000</td>
</tr>
<tr>
<td>FP</td>
<td>-0.020</td>
<td>0.028</td>
<td>0.073</td>
<td>0.116</td>
<td>.355**</td>
<td>.420**</td>
<td>.429**</td>
<td>.479**</td>
</tr>
<tr>
<td>Mean</td>
<td>1.550</td>
<td>2.140</td>
<td>2.050</td>
<td>2.040</td>
<td>5.239</td>
<td>5.618</td>
<td>5.549</td>
<td>5.278</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.789</td>
<td>0.958</td>
<td>0.956</td>
<td>0.972</td>
<td>1.315</td>
<td>1.059</td>
<td>1.112</td>
<td>0.901</td>
</tr>
</tbody>
</table>

Note: *p<0.05; **p<0.01(two-tail test).
significant at the levels of 0.05/0.01/0.001, respectively. Therefore, the empirical results strongly support all hypotheses. That is, H1 for EO is positively related to firm performance at the 0.05 level. H2 for EO is positively related to resource acquisition at the 0.01 level. H3a for business ties is positively related to firm performance at the 0.001 level. H3b for political ties is positively related to firm performance at the 0.05 level. H4a for business ties is positively related to resource acquisition at the 0.05 level. H4b for political ties is positively related to resource acquisition at the 0.01 level. H5 for resource acquisition is positively related to firm performance at the 0.001 level.

Figure 2 shows that political ties, business ties, and EO are all positively related to resource acquisition, and resource acquisition has a positive effect on firm performance. We found that the direct effect of EO on firm performance is 0.133, and the indirect effect is 0.119 (0.260*0.459). The direct effect of political ties on firm performance is 0.205, and the indirect effect is 0.078 (0.172*0.459). The direct effect of
business ties on firm performance is 0.307, and the indirect effect is 0.057 (0.126*0.459).

The multi-mediation model uses structural equation models for analysis because it involves more variables and more complex paths, even if only explicit variables are involved (Macho & Ledermann, 2011). A better way to test multiple mediating effects is the Bootstrap method (Wen & Ye, 2014). According to the results of Bootstrap (1000 times loop), the confidence interval of EO for the indirect effect of firm performance is (0.43–0.265). The confidence interval of political ties for the indirect effect of firm performance is (0.21–0.188). The confidence interval of business ties for the indirect effect of firm performance is (0.01–0.173). It is found that the confidence interval did not include 0, and the mediation effect transmitted through resource acquisition is significant. Therefore, we can support H6 that resource acquisition has a mediating role in the relationship between EO-firm performance and social network-firm performance.

V. Conclusion and Discussion

A. Summary

By reviewing the previous studies, we have clarified the research objectives. Social network and EO were used as independent variables to explore the impact on resource acquisition and firm performance. We regard the social network as manager’s ties, which are divided into business ties and political ties (Luo, Huang & Wang, 2012), explore which ties have an impact on external resource acquisition, and study the role of resource acquisition in the social network-firm performance link. We consider EO in five dimensions to examine the relationship between EO and firm performance and to explore the mediating role of resource acquisition. With the help of the regional SME Association, we surveyed regional companies. In exploring the relationship between the various factors, we first used SPSS for both descriptive analysis and reliability analysis and then calculated the Cronbach α. To test the reliability and validity of the factors, we used AMOS to perform CFA and then calculated the CR, AVE, MSV, ASV values. To test the research hypotheses, we performed an SEM analysis. We found that EO, social network, and resource acquisition all have a positive impact on firm performance. Moreover, EO and social network also have a positive impact on resource acquisition. The results also indirectly prove that resource acquisition plays a mediating role in the relationship between EO and firm performance and between social network and firm performance.

B. Implications

1. Academic Implications

The five-dimensional model of EO by Lumpkin & Dess (1996) is the most popular in recent studies. Yet, not much research on Chinese companies is existent. In this regard, research using EO’s five-dimensional model on Chinese companies provides some contributions to the literature.

Concerning social networks, many scholars started with the theory of Granovetter (1973) and divided the network into strong ties and weak ties for research purposes. This theory was further developed into Structural Hole Theory in 1992 by Burt. Collins & Slevin (1989) studied social networks from two aspects: tie size and tie range. Based on Peng & Luo (2000), which regards social networks as managerial ties, our research addresses the social relations of SMEs from a perspective closer to the enterprise, dividing them into two dimensions: business ties and political ties. While most researches on the EO-performance link and social network-performance link are based on emerging enterprises, this study focuses on SMEs, which have urgent needs to survive and transform as its primary object and explores the impact of various social networks and EO on firm performance and the mediating role of resource acquisition. In this respect, this study may also contribute to the literature.
2. Practical Implications

SMEs face various problems in highly competitive markets due to their relatively small scales, limited resources, low credit capacity, and limited organizational capabilities. This study was initiated in a way to explore the ways to solve the problems, and to suggest guidelines for the survival and development of SMEs. From the analysis results, we can infer that entrepreneurs of SMEs in the region should promote their entrepreneurial orientation since, as the results show, the higher the EO, the more resources they can acquire, thus resulting in higher firm performance.

The results confirm that business ties have a more substantial effect on firm performance than political ties. This is consistent with the findings of Shu et al. (2012) and Sheng, Zhou & Li (2011). Business and political ties differ with respect to their time horizons. In business ties, companies have common interests in maximizing their economic returns and encourage long-term cooperation (Ganesan, 1994; Ghosh & John, 1999; Sheng, Zhou & Li, 2011). In contrast, political ties lack an effective mechanism to encourage long-term cooperation. Government officials rotate their positions across different geographical locations and different departments, which may terminate or weaken a firm’s political ties (Sheng, Zhou & Li, 2011).

To improve business ties, it seems necessary to enhance communication and network between enterprises so that the companies can learn from each other and seek joint development. Enterprises should maintain a good relationship with the supplier to help the company obtain quality materials and excellent service. Good relationships with buyers should also be maintained, which may stimulate customer loyalty, sales, and reliable payments. Also, establishing and maintaining good relationships with competitors' executives can promote possible inter-company cooperation and implicit collusion while minimizing uncertainty.

Corporate executives should also strengthen political ties (relationships with the government, banks, industry, and commerce departments) to enhance mutual trust and to obtain support or access to information to receive favorable government support, loans, or financing from financial institutions. Moreover, they can gain favorable details on tax reduction from the ties. Social networks enable companies to acquire complimentary resources, management talents, and intelligence capabilities of network partners to develop, produce, and market better products, thereby accelerating the growth of SMEs. Through a study on the member companies of a regional SMEs Association, this study may offer some suggestions for the development of these enterprises and other enterprises as well.

C. Limitations and Future Study

The research is meaningful, but it does have its limitations. First, the analysis target is limited to one area of China, and if the target is expanded to another area, different results may come out. China has an extensive geographical range, and there is regional heterogeneity in economic development stages and business environments. Therefore, the applicability of our findings beyond the Liaoning province may depend on further empirical analyses. It is necessary for the researchers to analyze with a greater diversity of respondents from other areas of China.

Second, measures of firm performance were self-reported, and the authors did not have alternative sources to gauge the accuracy and precision of these responses. Most SMEs are privately held, which precludes them from exhibiting reliable financial data in the public domain (Sellappan & Shanmugam, 2020). Still, we expected that a survey through a business association would support some degree of accuracy of the responses. Prior studies suggested that in the absence of archival data, self-reported measures are acceptable, provided that care is taken to obtain data from reliable informants (De Mel et al., 2009; Dess & Robinson, 1984).

Third, our web-based survey does not guarantee the anonymity of respondents. The lack of anonymity may be an obstacle to obtaining accurate information. A previous study argued that under anonymity, the
Chinese manager was more willing to provide accurate information (Tan & Litshert, 1994).

Fourth, although all respondent companies are SMEs, the sizes of the companies cannot be considered the same. Therefore, each respondent was not likely to provide equally informative responses, even if we tried to obtain more accurate information through the survey of the SME Association.

Fifth, we empirically examine the effects of EO on firm performance using an aggregate measure of EO that involves the five dimensions of risk-taking, innovativeness, pro-activeness, competitive aggressiveness, and autonomy. However, some scholars have suggested that each of these dimensions may possess different relationship with firm performance (Kreiser et al., 2013). Future studies could explore how the dimensions interact with one another (Jiang et al., 2018).

Sixth, while resource acquisition was found to be a key intermediary, the extent of resource utilization was not assessed in this study. Resource acquisition is essential, but the efficiency and effectiveness of resource use may, also or even more, be crucial for sustainable SME performance.

Lastly, future studies may include highly educated returnees in the analyses. These returnees with high academic achievements abroad may have broader and more innovative perspectives than most of the existing SME entrepreneurs do. Their business scope may also be expanded without being limited to traditional industries any longer. Studies on the EO of such people will also be meaningful and offer more opportunities for exploration of the relationship between social networks, resource acquisition, and firm performance.

References


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