# Networking, Resource Acquisition, and the Performance of Small and Medium-Sized Enterprises: An Empirical Study of Three Major Cities in China

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Previously, resource-based view (RBV) research has focused on the characteristics of resources, paying less attention to the relationship between resource acquisition and the acquisition method. In addition, entrepreneurship research has focused a lot on the firm's entrepreneurial network to explain performance. This network is critical not only to resource acquisition but also to overall firm performance. The results of a study of small and medium-sized firms in three major Chinese cities support these notions. The results differ when dividing the sample into two groups (young vs. old).

Key Words: resource acquisition, networking, performance, smes, entrepreneurship

JEL Classification: M20

### **Executive Summary**

Resource-based view (RBV) research argues that firms with valuable, rare, non-substitutable, and inimitable resources have the potential of achieving unique competitive advantages, thus winning superior performance (Barney 1991; 1995; Wernerfelt 1995). However, to date not enough attention has been given to the positive effects that a strong, diverse network can have on resource acquisition methods employed by a firm and the firm's resulting performance. This paper provides insights into our

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understanding of methods for acquiring the necessary resources, particularly through networks. Specifically, the research focuses on the relationship between resources and performance by addressing the following questions: (1) Do the range and intensity of a firm's network influence the resources acquisition? (2) Do the capability and outcome of resource acquisition impact subsequent performance of small and medium-sized enterprises (SMES)?

The hypotheses are based on theoretical constructs developed in literature on social networks and entrepreneurial performance. The network is viewed as a tool useful for the process of resource acquisition and particularly for investigating the change of venture performance based on resource acquisition. To test the hypotheses, surveys and interviews were conducted with SMES in three major Chinese cities: Changchun, Tianjin, and Shanghai. The selection criteria for the SMEs that became part of our data set included the availability of the founding entrepreneur and/or founding executive for an interview, the age of the firm, and its sector. The resulting data set consists of information from 83 SMEs in Changchun, 44 in Shanghai, and 50 in Tianjin. Using data gathered from these three areas and using different analysis techniques, evidence was provided that resource acquisition influences the development and performance of businesses. In addition, the effects that the intensity, range, and closeness of a network have on identifying and acquiring resources were analyzed.

The empirical results provide evidence that resource acquisition and performance of a firm are positively correlated. Previous research has shown that a social network can benefit a firm's ability to find new resources, which result in high growth and superior performance (Black and Boal 1994). Thus, as suggested in prior studies, a network impacts the performance (Young 1998; Cromie and Birley 1992; Watson 2006). Furthermore, as firms develop, the social network will change, impacting the amount of resources acquired and thus the venture's performance. Taken in concert, the overall results show that it is preferable for a firm to develop a strong network to acquire the resources needed for growth and performance. The positive correlation between the social network and enterprise performance is taken to a new level by identifying the key role that a network plays in acquiring resources.

This research also has practical implications, since it gives firms the impetus to enhance and reinforce relationships with other firms and organizations. These broadened and strengthened networks then assist the firms in acquiring tangible and intangible resources to upgrade capabilities in all aspects. In addition, the government should construct policies that strengthen networking connections among enterprises.

#### Introduction

According to resource-based views (RBVs) of strategy, firms with valuable, rare, and inimitable resources (including non-substitutability) have the potential for achieving superior performance (Barney 1991; 1995). Resources are inputs into a firm's production process (Barney 1991) that are either knowledge-based or property-based (Miller and Shamsie 1996). Property-based resources typically refer to tangible input resources, whereas knowledge-based resources are the ways in which firms combine and transform these tangible inputs (Galunic and Rodan 1998). Knowledge-based resources may be particularly important for providing sustainable competitive advantage, because they are inherently difficult to imitate, thus facilitating sustainable differentiation (McEvily and Chakravarthy 2002). They also play an essential role in the firm's ability to be entrepreneurial (Galunic and Eisenhardt 1994) and to improve performance (McGrath et al. 1996). From the standpoint of resource acquisition, the initial resources involve different dimensions including capital (Bygrave 1992), human resources (Cooper 1981; Dollinger 1995), and physical resources (Dollinger 1995).

In RBV theory, resource acquisition is a crucial point since resources with value, rareness, inimitableness and non-substitutability can create sustainable competitive advantages and have a great impact on performance (Foss 1996). Resource acquisition is divided into two dimensions: resource acquisition capability and resource acquisition outcome (Zhang, Wong, and Soh 2005). Resource acquisition capability is the ability to acquire both tangible and intangible useful resources through firms or individuals. Resource acquisition outcome focuses on the usability of the resources acquired and on whether these resources can bring current or long-term competitive advantages.

RBV research also postulates that both the employees' personal networks and the organization's networks are the core resources of the firms. From the view of transaction cost theory, Jones, Hesterly, and Borgatti (1997) think a network will thrive because of the environmental uncertainty and intense competition. When uncertainty of product demand, proprietorship of human resources, complexity of tasks, and transaction frequency among groups increase, the network will reveal more advan-

tages for the firm when compared to the capability of the individual firm. In the context of this paper, the network provides a special structure for connecting to the outside to get useful information, resources, and social support that allows the firm to identify and make use of various opportunities.

Because of its complexity, researchers divide the network into several dimensions when studying the relationship between the network and other variables. According to Burt (1992), and Zhao and Aram (1995), the network breaks into two dimensions: the range of the network and the intensity of the network. Range, defined as the degree of diversity contained in a network, refers to differences among contacts within a focal actor's network. In addition to the dimension of breadth (range), entrepreneurial networks can also be characterized by a dimension of depth (intensity). Intensity refers to the extent of the interacting organizations' resources committed to the relationship, in terms of the frequency of contact and amount of resource exchanged.

Many researches have focused on the effect of the network on resource acquisition (Leung et al. 2006; Zhang, Wong, and Soh 2005). However, little has been done to test the influence of intensity and range of network on resource acquisition. In this study, the consecutive connections between network and resource acquisition, as well as resource acquisition and venture performance are evaluated.

### Theory and Hypotheses

### NETWORK AND RESOURCES ACQUISITION

The setup of a network needs time and energy, and the network at different stages influences resource acquisition of the firm differently. In the initial stages, the individual network of the entrepreneur is crucial to the development of the firm, although this individual network is defined within a restricted range (Aldrich 1989). However, in the mature stages, the organizational network is essential for the firm precisely for its range and intensity. This paper uses the range and intensity of a network to analyze its impact on the capability and outcome of resources acquisition.

## Networking Intensity and Resources Acquisition

Granovetter (1973) argues that the network is the combination of time, feeling, familiarity (mutual trust), and reciprocal services. A distinct correlation exists between the length, mutual feelings, benefits of reciprocal services, and closeness of a network to the overall networking intensity.

Ahuja (2000) believes the closer the relationship among members, the faster the speed of sharing resources is, so firms can acquire resources needed to improve the capability and effectiveness of that process. Gulati (1995) and Uzzi (1996) think that the more familiar the contacts are, the more trustworthy the members become, which can reduce unethical behaviors and encourage resource exchange amongst group members. Using networks allows firms to locate valuable resources and improve acquisition capability. Tsai and Ghoshal (1998) believe that if the relationship among members is closer, group members will have a common vision, which can facilitate the exchange and combination of resources. So the firms not only receive rare resources but also use the resources acquired from other groups properly to enhance acquisition capability and outcomes. The two hypotheses are:

HYPOTHESIS 1A Network intensity is positively related to resource acquisition capability (H1a).

HYPOTHESIS 1B Network intensity is positively related to resource acquisition outcome (H1b).

Networking Range and Resources Acquisition

The characteristics and categories of the resources acquired via the network rest with the variety of networking members. Since range means the variety and number of connections (Burt 1982; 1992), the broader the external network is, the easier it is to have access to resources. Then the firm can obtain the resources according to demand (Burt 1992), which illustrates strong resource acquisition capability. In addition, the network has the benefit of reducing the uncertainty of innovation (Dess and Starr 1992), enhancing communication and exchange of resources (Larson 1991), and speeding up the transfer of knowledge and technology. Therefore the network can facilitate the firm's ability to obtain intangible resources quickly. Elfring and Hulsink (2003) posit that the core strategy of the firm is to get resources needed at the lowest cost and that a social network plays an important role in capturing resources. That is to say, close and sparse networks can both provide entrepreneurs with resources, but the amount provided by the former is greater than that provided by the latter. The closeness and tightness of a network can stabilize nascent ventures. Because of the large range of the network, the amount and quality of the resources can be improved, which can enhance and advance the efficiency of resource acquisition to obtain sustainable competitive advantages. The two hypotheses are:

HYPOTHESIS 1C Network range is positively related to resource acquisition capability (H1c).

HYPOTHESIS 1D Network range is positively related to resource acquisition outcome (H1d).

#### RESOURCES ACQUISITION AND PERFORMANCE

Resources are widely used to explain performance according to RBV (Barney 1996; Brush, Greene and Hart 2001). These theories can contribute to the understanding of the importance of a firm's internal resources and how to acquire resources needed for the improvement of venture performance.

Some research has studied the relationship between resource acquisition and performance, as the amount of needed resources compared with performance. Romanelli (1991) thinks that two factors in resource acquisition impact the survival and growth of the firms: resource availability and organizational strategy. Stevenson and Lundström (2001) define entrepreneurship as the ability to discover opportunity and organize resources into a venture that consequently creates new value in the market. Therefore, obtaining the necessary resources is essential for the setup and growth of a new venture and its future performance. Resource acquisition capability and outcome have a noticeable effect on venture performance. Premaratne (2002) believes that resource acquisition for a new venture is positively related to the performance and the enhancement of influence under environmental uncertainty. Heirman and Clarysse (2004) studied the relationship between resources and the formation of resource advantages. Resources have particular value for new ventures and these differences can affect their performance. Capital and human resources interact to form competitive advantages, which can bring superior profit for firms.

In addition, some research has studied the relationship between acquisition strategies of technical resources and performance. For example, Zahra and Bogner (2000) believe that acquiring resources from outside can have an effect on performance, while Annika (2000) believes that the more ways of acquiring technical resources exist, the better the performance will be. The two hypotheses are:

HYPOTHESIS 2A Resource acquisition capability is positively related to venture performance (H2a).

HYPOTHESIS 2B Resource acquisition outcome is positively related to venture performance (H2b).

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### **Hypotheses Testing**

#### SAMPLE AND DATA COLLECTION

This study focused on small and medium-sized enterprises in the economic zones of the regionally diverse cities of Changchun, Shanghai, and Tianjin as the primary research sources. The firms in the sample meet the following three criteria: first, the firms must be independent start-ups in which the founding entrepreneurs maintain significant control; second, the firms must be operating in high-tech industries and service industries; and third, the firms must be less than eight years old at the time of study so that the entrepreneurs could recall the initial resource acquisition processes accurately (Wong et al. 1993). Since many of the questionnaire items involve the circumstances and details during the start-up phase of the firm as well as details of firm strategies, it was necessary that the firms' executive officers complete the questionnaire themselves (Bowman and Ambrosini 1997; Phillips 1981). Specifically, a respondent had to be either the entrepreneur or a member of the firm's start-up team, who was privy to the details and circumstances of the firm during its inception. An important step in the data collection process was gaining direct access to the firm's original entrepreneur(s) or executive officer(s). This allowed us to conduct personal interviews in addition to the standard paper survey, which collected the basic information regarding the firm and its history. The personal interview also helped improve the reliability level of the survey answers.

After verifying the role of the entrepreneur or original executive in the firm, the potential respondent was contacted and solicited to fill out the research questionnaire and take part in the telephone interview. The personal phone interviews were then conducted after the paper surveys had been returned by the respondents. All together 227 firms were surveyed with 102 participants from Changchun, 49 from Shanghai, and 76 from Tianjin. Two months later 187 responses were returned: 90 from Changchun, 47 from Shanghai and 50 from Tianjin. After careful analysis, 177 responses were usable, of which 83 came from Changchun, 44 from Shanghai, and 50 from Tianjin.

#### VARIABLES MEASURES

Given the exploratory nature of this study, construct operationalization and measurement were achieved in two ways: (1) for those variables employed in previous studies, the measures were adopted as long as they could provide acceptable measurement quality with only minor modifications in wording needed to increase their applicability to the Chinese context; (2) for variables that were not used in previous studies, operational measures were developed based on previous conceptual studies and assessed content validity via interviews with five hi-tech entrepreneurs and three scholars. Our measurement criteria came from the following variables:

Networking Intensity. Prior social network studies have employed several different measures of the 'strength of ties' (Marsden and Campbell 1984). A three-item, evenly weighted scale based on the three most widely used measures was constructed: (1) duration of the relationship, ranked by answering the question 'How many years have you known each other prior to this resource acquisition? with x = 1 for less than one year x = 2for 1–2 years, x = 3 for 2–3 years, x = 4 for 3–5 years and x = 5 for longer than 5 years; (2) intimacy level, measured by a 5-point Likert scale answer to the question 'To what extent do you agree that you kept a close relationship with each other prior to this resource acquisition?' (Bian 1997), with x = 1 for 'strongly disagree' and x = 5 for 'strongly agree;' and (3) meeting frequency, measured by a 5-point Likert scale answer to the question 'To what extent do you agree that you met each other every week prior to this resource acquisition?' (Bian 1997), with x = 1 for 'strongly disagree' and x = 5 for 'strongly agree.' NII, NI2, and NI3 were used to stand for the three networking intensity measures.

Networking Range. The connecting scope (examples: competitors, consumers, suppliers, universities, government, and agencies) of the firms was used to measure the breadth of the networking range. NR1, NR2, NR3, NR4, NR5, and NR6 were used to stand for the six measures.

Resource Acquisition Capability. To measure this variable, three questions were used: (1) 'To what extent do you agree that you can get tangible resources from the network?' (2) 'To what extent do you agree that you can get intangible resources from the network?' and (3) 'To what extent do you agree that you can get resources from the network?' with the responses ranging from 'strongly disagree' (x = 1) to 'strongly agree' (x = 5). RAC1, RAC2, and RAC3 were used to stand for the three measures.

Resource Acquisition Outcome. Three questions gauged the significance of this criterion: (1) 'To what extent do you agree that you have obtained resources from the network?' (2) 'To what extent do you agree that the resources you have gotten from the network have brought competitive advantages to your firm?' and (3) 'To what extent do you agree that the resources you have gotten from the network are available for other firms?'

The responses ranged from 'strongly disagree' (x = 1) to 'strongly agree' (x = 5) (Zhang, Wong, and Soh 2005). RAO1, RAO2, and RAO3 were used to stand for the three variables.

Performance. Gupta and Govindarajian's (1984) multi-item, multidimensional performance method was employed in this study. The first performance measure focused on financial results including the following: (1) profitability (net profit to sales ratio, return on investment); (2) growth (growth rate in revenue, sales growth rate, rate of new employee growth); (3) liquidity (net cash flow); and (4) market performance (market share, rate of new product/service development, developing new markets). Furthermore, two items adapted from Khandwalla (1977) created the second measure to gauge their direct and indirect impact on non-financial performance: 'employee job satisfaction and commitment to a firm's objectives' and 'public image and goodwill of a firm.' To develop the third measure based on firm longevity and survival, insights from Jovanovic (1982) were used that link firm growth as measured by net profit to survival, which in turn is particularly important to policy makers because of the widespread belief that growing businesses will create new jobs. However, Delmar, Davidsson and Gartner's (2003) belief that the best indicator of firm growth comes from the rate of sales growth was also considered. Thus, the third measure of firm performance used the rate of growth in total income (sales plus other income). Palepu, Healy, and Bernard (2000) assert that a certain level of return on investment should be maintained by firms to ensure their routine operation and shareholder satisfaction. This theory is the basis of the fourth criteria for measuring performance: return on investment. The respondents were asked to indicate how important and satisfactory they perceived each item to be on a five-point Likert-type scale, which has also been widely employed in previous studies. Furthermore, in order to complement the subjective measures, the respondent was given the option to provide actual quantitative data related to each performance measure. PER1, PER2, PER3, and PER4 were used to stand for the four measures.

#### **Results and Discussion**

RESULTS

In order to test the hypotheses mentioned above, spss 13.0 (Statistical Package for the Social Sciences) and AMOS 6.0 (Analysis of Moment Structure) were used to analyze the data collected. A descriptive analysis

| Variables                          | 1      | 2        | 3       | 4     | 5     |
|------------------------------------|--------|----------|---------|-------|-------|
| 1. Network intensity               | 1      |          |         |       |       |
| 2. Network range                   | 0.184* | 1        |         |       |       |
| 3. Resource acquisition capability | 0.192  | -0.008   | 1       |       |       |
| 4. Resource acquisition outcome    | 0.190  | -0.184** | 0.150   | 1     |       |
| 5. Performance                     | 0.183* | 0.071*   | 0.259** | 0.120 | 1     |
| Mean                               | 3.422  | 2.985    | 2.448   | 3.541 | 3.116 |
| Std. dev.                          | 0.446  | 0.679    | 0.346   | 0.478 | 0.721 |

TABLE 1 Descriptive statistics and correlation matrix

NOTES \*\* Significant at the level 0.05. \* Significant at 0.1 level (2-tailed).

was completed before testing the model, and the results are summarized in table 1.

The overall response rate to the questionnaires was 82.4 percent with 187 out of 227 questionnaires returned. After excluding ten incomplete responses (7 from Changchun and 3 from Shanghai), 177 usable questionnaires provided the data for analysis. The reason why the response rate was so high is that the respondents were continuously called and emailed to remind them about the questionnaires. The participants were motivated by their interest in the survey results and were eager to cooperate. The response rate was extremely good. Several two-sample *t*-tests were performed to investigate sample biases such as non-response bias and respondent bias with no biases found.

### Reliability and Validity Assessment

A coefficient alpha test examined the internal consistency of the scales of network (0.729), resources acquisition (0.848), and firm performance (0.795). All scales were well above the 0.7 cut-off, as suggested by Nunnally (1978). Hair et al. (1998) state that validity is the extent to which the concept one wishes to measure is actually being measured by a particular scale or index and is concerned with how well the concept is defined by the measure(s). Four strategies for determining a measure's validity are provided as follows: (1) face validity; (2) content validity, which relies on the internal logic of the measure; (3) criterion validity; and (4) construct validity, which is less subjective and more empirical. All three constructs (network, resource acquisition, firm performance) were considered to have both face and content validities. To assess discriminant validity of a network, Brüderl and Preisendörfer (1998) used the principal compo-

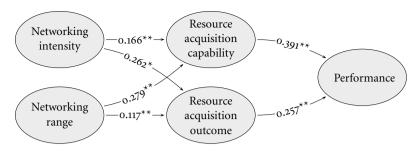
TABLE 2 Results of reliability analysis and factor loadings

| Items    | Factor loading  | Cronbach's alpha  |  |  |
|----------|---|---|--|--|
| 1. NI1   | 0.917   | 0.735   |  |  |
| 2. NI2   | 0.727   |   |  |  |
| 3. NI3   | 0.743   |   |  |  |
| 4. NR1   | 0.850   | 0.720   |  |  |
| 5. NR2   | 0.679   |   |  |  |
| 6. NR3   | 0.785   |   |  |  |
| 7. NR4   | 0.637   |   |  |  |
| 8. NR5   | 0.581   |   |  |  |
| 9. nr6   | 0.649   |   |  |  |
| 10. RAC1 | 0.735   | 0.783   |  |  |
| 11. RAC2 | 0.724   |   |  |  |
| 12. RAC3 | 0.932   |   |  |  |
| 13. RAO1 | 0.823   | 0.777   |  |  |
| 14. RAO2 | 0.707   |   |  |  |
| 15. RAO3 | 0.920   |   |  |  |
| 16. PER1 | 0.833   | 0.706   |  |  |
| 17. PER2 | 0.642   |   |  |  |
| 18. PER3 | 0.597   |   |  |  |
| 19. PER4 | 0.638   |   |  |  |
|          | 1. NI1 2. NI2 3. NI3 4. NR1 5. NR2 6. NR3 7. NR4 8. NR5 9. NR6 10. RAC1 11. RAC2 12. RAC3 13. RAO1 14. RAO2 15. RAO3 16. PER1 17. PER2 18. PER3 | 1. NI1 0.917 2. NI2 0.727 3. NI3 0.743 4. NR1 0.850 5. NR2 0.679 6. NR3 0.785 7. NR4 0.637 8. NR5 0.581 9. NR6 0.649 10. RAC1 0.735 11. RAC2 0.724 12. RAC3 0.932 13. RAO1 0.823 14. RAO2 0.707 15. RAO3 0.920 16. PER1 0.833 17. PER2 0.642 18. PER3 0.597 |  |  |

nent factor method with varimax rotation to identify how the items of these two scales were loaded. The items were clearly loaded on the two separate constructs as anticipated, indicating that the network had discriminant validity. Furthermore, five items of resource acquisition and twelve items of firm performance scale were also analyzed, and all three construct scales were proved to have discriminant validity. Several sample bias tests were conducted through two sample t-tests, followed by reliability tests of inter-items of the scales and validity assessment of construct scales (see table 2) prior to testing the proposed hypotheses. Finally, a path analysis was used to construct the relationship among the variables (figure 1).

The results showed that the Model (network-resource acquisition-performance model) met all the requirements for goodness of fit (see table 3). The results show that hypotheses 1a, 1b, 1c, 1d, 2a, 2b are supported when all samples enter the analysis.





Path diagram for relationships of variables ( $n = 177, \chi^2 = 126.300$ , degrees FIGURE 1 of freedom = 115, probability level = 0.121, CFI = 0.979, GFI = 0.936, RMSEA = 0.033; \*\* significant at the 0.01 level (2-tailed), \* significant at the 0.05 level (2-tailed))

TABLE 3 Results of fit measures for the model

| Indexes*                | CMIN    | DF  | CMIN/DF | GFI   | CFI   | NFI    | IFI   | RMSEA |
|-------------------------|---------|-----|---------|-------|-------|--------|-------|-------|
| Value ( <i>n</i> = 177) | 126.300 | 115 | 1.10    | 0.936 | 0.979 | 0.981. | 0.989 | 0.033 |
| Value $(n = 81)$        | 37.220  | 16  | 2.33    | 0.917 | 0.943 | 0.897  | 0.933 | 0.072 |
| Value $(n = 96)$        | 42.710  | 23  | 1.86    | 0.944 | 0.959 | 0.973  | 0.901 | 0.054 |

\* The following cutoff criteria were used: (1) for 'acceptable' model fit: RMSEA < 0.08; GFI > 0.90; CFI > 0.90; NFI > 0.90; IFI > 0.90; and (2) for 'good' model fit: RMSEA < 0.06; GFI > 0.95; CFI > 0.95; NFI > 0.95; IFI > 0.95. These criteria are generally accepted (Hu and Bentler 1999; Kline 1998).

Although the total sample supports the six hypotheses, since network building is a time-dependent dynamic process, firms' networking contacts can change with time, and in different stages the role of the network changes (Batjargal 2006). In order to account for this, time was measured by the number of years the current firm had been established. Two groups were formed, split approximately on the median: (1) Y was less than 3.5 years (n = 81) and (2) O was 3.5+ years (n = 96). Measurement loadings were specified invariant across groups. The results are shown in figures 2 and 3 and table 3.

According to the results shown in figures 2 and 3, for the young group the network range has no significant relation with resource acquisition capability ( $\beta = 0.043, p > 0.1$ ), and the same with resource acquisition outcome and performance ( $\beta = 0.107, p > 0.1$ ). Therefore, for young groups, H1c and H2b are not supported. But H1a, H1b, H1d, and H2a are all supported. For the Old group, the results show that hypotheses 1a, 1b, 1c, 1d, 2a, and 2b are all supported though the relation between

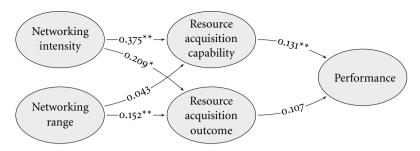


FIGURE 2 Two-group structural model: young group (n = 81,  $\chi^2 = 37.220$ , degrees of freedom = 16, probability level = 0.047, CFI = 0.943, GFI = 0.917, RMSEA = 0.072; \*\* significant at the 0.01 level (2-tailed), \* significant at the 0.05 level (2-tailed))

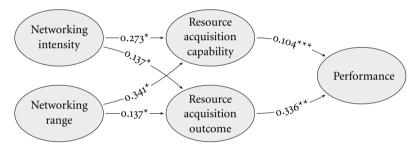


FIGURE 3 Two-group structural model: old group (n = 96,  $\chi^2 = 42.700$ , degrees of freedom = 23, probability level = 0.148, CFI = 0.959, GFI = 0.944, RMSEA = 0.054; \*\*\* significant at the 0.01 level (2-tailed), \*\* significant at the 0.05 level (2-tailed), \* significant at the 0.1 level (2-tailed))

networking range and resource acquisition outcome is slightly low ( $\beta = 0.029$ ).

#### DISCUSSION

Hypothesis 1a is supported by the positive relation between network intensity and resource acquisition capability. Firms should build close networking connections with other groups. Within the network, a firm can improve its resource acquisition capability by using close network contacts for more resources. Capability, as a unique intangible resource, can gain other benefits for the firms.

Hypothesis 1b is supported by the positive relation between network intensity and resource acquisition outcome. This means the more frequent the network connections, the closer the connections, and the bet-

ter the relationships, the more resources the firms can get, and the better the outcomes.

In the analysis, Hypothesis ic is supported by the positive relationship between network range and resource acquisition capability for both the total group and the Old group. But for the Young group, this hypothesis is not supported, which means that firms younger than three and a half years old have a hard time forming trust alliances within the dynamic and complex market (Guthrie 1998), and for these new firms, they lack a good, established reputation, so other firms are probably not willing to take a chance on them, which results in low capability. But when a firm has broader contacts, it can more easily identify and acquire resources needed. Conversely, if the firm has few contacts, which are loosely connected, it will be hard to identify and obtain special resources that develop and increase a firm's competitive advantage.

Hypothesis 1d is supported by the positive relation between network range and resource acquisition outcome. The broader the network is, the more resources the firm can come into contact with, and the more easily the firm can acquire necessary resources. The outcome of acquisition, to an extent, is contingent on the networking range.

Hypotheses 2a and 2b are supported in terms of a positive relationship between resource acquisition capability and firm performance as well as between resource acquisition outcome and firm performance according to the total group and Old group samples, respectively. But for the Young group, there is no significant relationship between resource acquisition outcome and firm performance. This means that for firms younger than three and a half years, when they acquire the necessary resources, lack a special capability to integrate these resources to form competitive advantage and enhance performance. The Old group, however, can easily allocate the resources acquired because of their market experience (Wang and Bao 2007), which can bring them better performance. So the firms with strong capability and better acquisition outcomes will get key resources. After combining, matching, and integrating the acquired resources, the firm will own sustainable competitive advantages, and consequently will bring in higher profitability (Brush and Chaganti 1998; Brush, Greene and Hart 2001).

After analyzing the hypotheses it is apparent that firms should strengthen the building of their networks and also develop and extend the intensity, range, and closeness of contacts. Only by following this method can firms acquire crucial resources, increase resource acquisition capability, and improve resource acquisition outcome, which can successfully contribute to the performance.

### **Conclusion and Implication**

This paper empirically studies the relationships among network range and intensity, resource acquisition, and firm performance and analyzes the six hypotheses theoretically. Survey data from three Chinese cities were used to test the hypotheses. The results show that all hypotheses are supported in empirical investigation. Namely: a network influences resource acquisition, which in turn has a definitive impact on the firm's performance.

Theoretically, this paper studied the relationship between a network and a firm's resource acquisition capability and outcome and tested the positive connection. The analysis was then taken a step further to study the relationship between resource acquisition capability and outcome and firm performance, based on the previous literature. Previous studies only focused on the relationship between resource acquisition and performance and the strategies of resource acquisition. However, these studies seldom illuminate the relationship from the standpoint of capability and outcome.

In practice, this paper provides useful and valuable suggestions for small and medium-sized enterprises and the government. Firms should enhance and reinforce their relationship with other firms and organizations, in order to acquire tangible and intangible resources to upgrade capabilities in all aspects. As for government, policies should be enacted to support this network creation process.

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