Research on Financial Institution Relationship and Performance of Startups

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ABSTRACT

Financial institution relationship is widely believed to be essential in mitigating financial constraints for startups to improve performance. Firstly, this paper examines whether and how the relationship between entrepreneurs and financial institutions affects startups’ performance. Further, we examine the moderating role of educational background and entrepreneurial experience in this process.

Keywords: Financial institution; Educational background; Entrepreneurial experience; Startups’ performance

1. INTRODUCTION

Because of the high complexity and uncertainty of the entrepreneurial environment, the rate of success of startups is low [1]. There are many antecedent variables of startups’ performance, such as personality traits, external environment, resource and social network. This paper mainly studies financial institutions (i.e., banks, venture capital institutions and underwriters) which are important sources of capital and information for startups whether and how to influence startups’ different stage performance. In particular, we focus on the moderating role of educational background and entrepreneurial experience in this process.

2. THEORY AND HYPOTHESES

This paper uses First-round Financing amount, Financing Rounds, and Initial Public Offering (IPO) or Mergers and Acquisitions (M&A) to respectively represent inception performance, growth performance, and maturity performance.

2.1 Bank Relationship And Startups’ Performance

Bank relationship has become an important solution for startups to obtain resources. Bing concluded that the relationship between banks and enterprises can effectively reduce financing costs and enable enterprises to obtain higher credit loan funds, which is of great practical significance to mitigate financing constraints [2]. Besides, some research focused on the relationship between the reputation of banks and IPO and found that the startups initiated by famous banks are more likely to help them successfully IPO [3]. Thus, we propose the following hypothesis:

H1a. Bank relationship may positively affect inception performance, growth performance, and maturity performance of startups.

2.2 Venture Capital Institution Relationship And Startups’ Performance

Venture capital institutions can bring different value-added services for startups. Firstly, there are venture capitalists with a variety of experience and skills in the investment business, it is directly proportional to the amount of capital [4]. Addition to, reputable venture capital institutions will spend more time monitoring the companies they invest in, to help startups build social relationships and attract potential investors [5]. Moreover, venture capital institutions play a value-added role in the success of IPO. Lei found that venture capital institutions with higher qualification are helpful to the successful IPO of startups with better potential [6]. Thus, we propose the following hypothesis:

H1b. Venture capital institution relationship may positively affect inception performance, growth performance, and maturity performance of startups.
2.3 Underwriter Relationship And Startups’ Performance

The underwriter can help to mitigate the information asymmetry between investors and startups. The buffering effect of the underwriter on information asymmetry can make banks obtain more information, reduce financing costs and obtain over and obtain over raised funds [7]. Underwriter has a close relationship with the China Securities Regulatory Commission. The relationship with underwriter is conducive to obtain the information generated for startups. Rumokoy found that companies seeking IPO in China must obtain the approval of the CSRC, which can be helped by the Underwriters’ social network [8]. Thus, we propose the following hypothesis:

H1c. Underwriter relationship may positively affect inception performance, growth performance, and maturity performance of startups.

2.4 The Moderating Role Of Educational Background

Educational background reflects entrepreneurs’ ability of learning [9], and the uncertainty of entrepreneurship requires entrepreneurs to have the ability to learning [10]. Viewed as a critical influencing factor of financing, higher-level education is significantly associated with better performance [11]. With a high level of knowledge, entrepreneurs would be supported by investors more likely, to meet the needs of capital for the survival and growth of startups.

Moreover, Imandoust finds that human capital (including education background) and social relationship supplement each other [12], and studies have shown that entrepreneurs can extract benefits from their social relationships and networks in influencing startups performance [13]. Thus, we propose the following hypothesis:

H2a. Educational background positively moderates the relationship between bank relationship and startups’ performance (i.e., inception performance, growth performance, and maturity performance).

H2b. Educational background positively moderates the relationship between venture capital relationship and startups’ performance.

H2c. Educational background positively moderates the relationship between underwriter relationship and startups’ performance.

2.5 The Moderating Role Of Entrepreneurial Experience

Entrepreneurial experience is specific to running startups. On the one hand, entrepreneurial experience may help entrepreneurs to accumulate skills and identify entrepreneurial opportunity [14]. On the other hand, entrepreneurs with entrepreneurial experience have more advantages to build the relationship with financial institutions in the acquisition of external resource and funds, and to enhance startups’ performance [15].

Grichnick found that, Previous experience will expand entrepreneurs’ social relations and improve the development efficiency of network relations, thus he suggested that startups can obtain more diversified resource by entrepreneurial experience [16]. Moreover, entrepreneurs with entrepreneurial experience are better to transform the social relations into resource acquisition channels, and external channels build a comprehensive social network for entrepreneurs, which can bring a variety of social capital for entrepreneurial activities, and finally improve startups’ performance. Thus, we propose the following hypothesis:

H3a. Entrepreneurial experience positively moderates the relationship between bank relationship and startups’ performance.

H3b. Entrepreneurial experience positively moderates the relationship between venture capital relationship and startups’ performance.

H3c. Entrepreneurial experience positively moderates the relationship between underwriter relationship and startups’ performance.

3. RESEARCH METHOD

3.1 Sample And Data Collection

To answer the research questions, the data collection was conducted from the CV source database of China investment group and Private equity data base. The sample consisted of 228 Chinese startups from high-tech industries and traditional industries. Excluding those with missing or incomplete information, we obtained 209 complete, valid responses, including 169 high-tech startups and 40 traditional startups. The valid return rate was 16.3%.

3.2 Measures

Dependent variables: we used the First round financing amount to measure the inception performance. The growth performance is measured by the number of Financing rounds obtained. The investment rounds are divided into A, B, C, D, and E, we coded A as ‘1’, B as ‘2’, C as ‘3’, D as ‘4’, and E as ‘5’. To measure maturity performance, we used Successful IPO or M&A (coded as ‘1’) or not (coded as ‘0’).

The independent variables were bank relationship (BR), venture capital relationship (VCR), and underwriter relationship (UR). To measure independent variables, we used having bank relationships (coded as ‘1’).
or not (coded as ‘0’). Having venture capital relationships (coded as ‘1’) or not (coded as ‘0’). Having underwriter relationships (coded as ‘1’) or not (coded as ‘0’).

The moderating variables were educational background (Edu) and entrepreneurial experience (Exp). The educational background can be divided into five levels, and respectively code ‘1~5’.

To account for the effects of extraneous variables, we controlled for industrial type, region, and firm size, as prior research has argued that these factors have explanatory roles in startups’ performance.

4. RESULTS

To test the research hypotheses, SPSS was utilized. Descriptive correlational analysis shows that, bank relationship, venture capital relationship had significantly positive correlations with First VC (p <0.1) and VC Round (p <0.05), Underwriter relationship had significantly positive correlations with First VC (p <0.1), VC Round (p <0.05) and IPO or M&A (P <0.05).

Table 1 shows that, (1) entrepreneur’s financial institution relationships have significantly positive impacts on startups’ performance. Specifically, the underwriter relationship was positively related to inception performance (P <0.05), growth performance (P <0.01), and maturity performance (P <0.05) of startups. Supporting Hypothesis 1c. The bank relationship and venture capital institution relationship were positively related to inception performance (P <0.05) and growth performance (P <0.01; P <0.01) of startups; (2) educational background plays a moderating role between entrepreneur’s financial institution relationship and startups’ performance. The interaction of underwriter relationship and educational background was positively related to inception performance (P <0.05), growth performance (P <0.05), and maturity performance (P <0.05). Hypothesis 2c was supported. The interaction of bank relationship and educational background was positively related to inception performance (P <0.05), growth performance (P <0.01), the interaction of venture capital institution relationship and educational background was positively related to inception performance (P <0.05), growth performance (P <0.01). Hypothesis 2a and Hypothesis 2b were only partially supported; (3) entrepreneurial experience has significantly moderating impact on the relationship between financial institution and startups’ performance. The interaction of the underwriter relationship and the entrepreneurial experience was positively related to inception performance (β = 0.044, P <0.1), growth performance (β = 0.202, P <0.01), and maturity performance (β = 0.051, P <0.1). Hypothesis 3c was supported. The interaction of bank relationship and the entrepreneurial experience was positively related to inception performance (β = 0.052, P <0.1), growth performance (β = 0.103, P <0.01), the interaction of venture capital institution relationship and the entrepreneurial experience was positively related to inception performance (β = 0.041, P <0.01), growth performance (β = 0.135, P <0.01). Hypothesis 3a and Hypothesis 3b were only partially supported.

Table 1: Regression results

| Variables       | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Inception       |         |         |         |         |         |         |         |         |         |
| performance     |         |         |         |         |         |         |         |         |         |
| Growth          |         |         |         |         |         |         |         |         |         |
| performance     |         |         |         |         |         |         |         |         |         |
| Maturity        |         |         |         |         |         |         |         |         |         |
| performance     |         |         |         |         |         |         |         |         |         |
| Industrial type | 0.036   | 0.035   | 0.038   | 0.060   | 0.051   | 0.028   | -0.102  | -0.105  | 0.101   |
| Region          | 0.061   | 0.065   | 0.064   | 0.043   | 0.060   | 0.046   | -0.124  | -0.130  | 0.129   |
| Firm size       | 0.049   | 0.050   | 0.051   | 0.245   | 0.228   | 0.169   | 0.264   | 0.250   | 0.259   |
| BR              | 0.064   | 0.189   | 0.065   | 0.206   | 0.001   | 0.220   |         |         |         |
| VCR             | 0.065   | -0.039  | 0.447   | 0.327   | -0.024  | 0.056   |         |         |         |
| UR              | 0.052   | -0.048  | 0.419   | 0.218   | 0.063   | 0.028   |         |         |         |
| Edu             | 0.054   |         |         |         | 0.240   | 0.172   |         |         |         |
| Exp             | 0.103   |         |         |         | 0.153   | 0.060   |         |         |         |
| Edu*BR          | 0.148   |         |         |         | 0.702   | 0.252   |         |         |         |
| Edu*VCR         | 0.106   |         |         |         | 0.796   | 0.09    |         |         |         |
| Edu*UR          | 0.023   |         |         |         | 0.077   | 0.114   |         |         |         |
| Exp*BR          | 0.052   |         |         |         | 0.103   | 0.015   |         |         |         |
| Exp*VCR         | 0.041   |         |         |         | 0.135   | 0.027   |         |         |         |
| Exp*UR          | 0.044   |         |         |         | 0.202   | 0.051   |         |         |         |
| R²              | 0.015   | 0.013   | 0.019   | 0.280   | 0.470   | 0.109   | 0.100   | 0.109   |         |
| Adjusted R²     | 0.011   | 0.010   | 0.014   | 0.277   | 0.467   | 0.106   | 0.097   | 0.104   |         |
5. CONCLUSIONS

This paper aimed to propose and empirically investigate whether and how the entrepreneur-financial institution relationship influences different stages performance of startups. Results show that the relationship between entrepreneur and different financial institutions have different effects on startups’ performance, educational background and entrepreneurial experience play the moderating roles in this process. Specifically, underwriter relationship significantly and positively affects startups’ three stages performance (i.e. inception performance, growth performance and maturity performance), while bank relationship and venture capital institution relationship positively affect inception performance, growth performance of startups. All effects are moderated positively by educational background and entrepreneurial experience. In other words, the performance of startups depends not only on the entrepreneur's financial institution relationship, but also on entrepreneur's educational background and entrepreneurial experience.

REFERENCES

[1] K. Eisenhardt. Top management teams and the performance of entrepreneurial firms. Small Business Economics, vol. 40, 2013, pp. 805–816. DOI: 10.1007/s11187-013-9473-0.

[2] B.Y. Huang, L.V. Yu-Ji, B. Sopranzetti, S.O. Management. Banking relationships and corporate financial constraints: empirical evidence from Chinese privately-controlled listed firms. Journal of Xiamen University, vol. 2, 2019, pp. 70-81.

[3] Y. Li. Investment Bank Reputation and IPO Qualifications. European Scientific Journal, vol. 12, 2016, pp. 132-145. DOI: 10.4172/2375-4389.1000202.

[4] O.T. Alexy, J.H. Block, P. Sandner, A. L. J. T. Wal. Social capital of venture capitalists and start-up funding. Small Business Economics, vol. 39, 2012, pp. 835-851. DOI: 0.1007/s11187-011-9337-4.

[5] R. Nahata. Venture capital reputation and investment performance. Journal of Financial Economics, vol. 90, 2008, pp. 127-151. DOI: 10.1007/s11187-011-9337-4.

[6] F. Hui, F. Zhou, Y. Fan, W. Lei. Can Good Venture Capitalists Make Entrepreneurial Firms Go to Initial Public Offerings Faster? Empirical Evidence from China. Nankai Economic Studies, vol. 2, 2018, pp. 64-185.

[7] T. Guzman, T. Moldogaziev. Which bonds are more expensive? the cost differentials by debt issue purpose and the method of sale: an empirical analysis. Public Budgeting & Finance, vol. 32, 2012, 79-101.DOI: 10.1111/j.1540-5850.2012.01013.x.

[8] L.J. Rumokoy, S. Neupane, R.Y. Chung, K. Vithanage. Underwriter network structure and political connections in the Chinese IPO market. Pacific-Basin Finance Journal, vol. 54, 2019, pp. 199-214.DOI: 10.1016/j.pacfin.2017.10.005.

[9] C. Linder, C. Lechner, F. Pelzel. Many Roads Lead to Rome: How Human, Social, and Financial Capital Are Related to New Venture Survival. Entrepreneurship Theory and Practice, vol. 44, 2020, pp. 909-932. DOI: 10.1177/1042258719867558.

[10] A. Rauch, S.A. Rijndijk. The effects of general and specific human capital on long-term growth and failure of newly founded businesses. Entrepreneurship Theory and Practice, vol. 37, 2013, pp. 923–941.DOI:10.1111/j.1540-6520.2011.00487.x.

[11] E.J. Ko, A. McKelvie. Signaling for more money: the roles of founders’ human capital and investor prominence in resource acquisition across different stages of firm development. Journal of Business Venturing, vol. 33, 2018, pp. 438-454. DOI: 10.1016/j.jbusvent.2018.03.001.

[12] S.B. Imandoust. Relationship between Education and Social Capita. International Journal of Humanities & Social science, 2011.

[13] L. Deng, P. Jiang, S. Li, M. Liao, R. Faff. Social capital and access to informal finance—evidence from Chinese private firms. Accounting & Finance, vol. 59, 2019. DOI: 10.1111/acfi.12586.

[14] P. Deb, J. Wiklund. The effects of CEO founder status and stock ownership on entrepreneurial orientation in small firms. Journal of Small Business Management, vol. 55, 2016, pp. 32-55.DOI: 10.1111/jsbm.12231.
[15] E. Stam, A.V.D. Ven. Entrepreneurial ecosystem elements. Small Business Economics, 2019. DOI: 10.1007/s11187-019-00270-6.

[16] D. Grichnick, J. Brinckman, L. Singh, S. Manigart. Beyond environmental scarcity: human and social capital as driving forces of bootstrapping activities. Journal of Business Venturing, vol. 29, 2014, pp. 310-326. DOI: 10.1016/j.jbusvent.2013.02.006.