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The Impact of Founders' Characteristics on Fundraising by Start-ups: A Study of Indian Start-ups

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Track: Entrepreneurship

Abstract

Founders play a major role in success and failure of any startup. In this study we are trying to do an empirical study on some of the characteristics of the founders and their impact on raising funds. The scope of this study is limited to Indian start-ups across industries. Our sample for the study comprises of 393 founders across 158 Indian start-ups. Since start-ups in our sample are in initial phase of their business there exists huge information asymmetry between start-ups and the investors. Therefore, investors carefully observe the possible factors (founder characteristics) that could lead to a successful start-up. Extant literature has examined how different characteristics of founders relate to the fund raised/valuation of the start-ups within different institutional contexts. This study considers the founder's characteristics (education level, prior experience, and gender) and observe their impact on fund raised by the start-ups across industries in India. This study would help entrepreneurs to consider the important factors to form a successful founding team for starting a start-up in India and would also help in the decision making process of the investors in Indian start-ups.

Keywords: Female Entrepreneurs, Founder's characteristics, Fund raising, Human capital, Start-ups

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Introduction

Becker (1964) developed human capital theory which says that education and experience attained by an individual helps to gain higher economic value. The studies on this human capital theory translates education and experience into knowledge and skills. Following the human capital-based studies, Bates (1990) and Robinson and Sexton (1994) found that educational attainment is correlated with the amount of fund raised by the entrepreneurial ventures. Bruederl et al. (1992) argued that there exist many empirical studies that prove that human capital of founders helps in the survival of the start-ups. Human capital can be considered as a resource for the organization. From the resource-based view perspective, human resources is expected to have a positive relationship with performance of the start-ups.

The studies have found that the number of founders, their experience, gender composition of the founding team and their educational level affect the valuation of start-ups (Hsu 2007; Miloud et al. 2012; Roche et al. 2020; Sievers et al. 2013; Wasserman, 2016). Gompers et al. (2010), claim that founders with prior founding experience do not receive higher valuations for their new ventures, while Falik et al. (2016) find that inexperienced Israeli entrepreneurs provide greater importance to valuation, considering their possible inferior bargaining position which might cause them to be more concerned with valuation. In contrast to the above arguments, Valliere and Peterson (2007) find that, regardless of their experience, entrepreneurs from the USA, Canada, and the UK consider valuation as the primary criterion for an investment deal. These results might be based on the cultural differences to explain the different findings regarding the importance entrepreneurs attach to the valuation of the start-ups. This study aims to contribute by performing a quantitative empirical investigation of the influence of founder's characteristics on the fund raised by Indian start-up firms.

Entrepreneurship and funding of start-ups

Entrepreneurs are the most important resource for any start-up in various research literature including venture capital investment (see, e.g. Tyebjee and Bruno 1984; MacMillan, Siegel, and Narasimha Subba, 1985), entrepreneurial firm performance and survival (see, e.g. Sandberg and Hofer 1987; Aspelund, Berg-Utby, and Skjevdal 2005) and top management team (TMT) effects (see, e.g. Eisenhardt and Schoonhoven 1996). The diversity of the founding team in terms of experience, education or function provides a signal to potential investors and is associated with a higher funding (Zimmerman, 2008). The theoretical work of Amit et al., (1990) has made the researchers to consider the ability of the founders as the key to the success of the start-ups. This is substantiated by Sievers et al. (2013) who believe that it is the founder's skill, experience and leadership that determine the success of the start-up. These authors assume that high-quality founding team increases the probability of raising funds. Founding team quality can be assessed based on various factors. They identify team composition, founding team size, management team size, CEO education, and team experience as the five key factors that indicate team quality. Education and experience of the founder positively impacts the fund raised by the start-up (Sathaworawong et al., 2018)

Prior Founding Experience of the Founders

Hsu et al., (2007) identify two main reasons for increasing interest in founders having prior founding experience in the study of new venture success. First, these individuals are a source of innovation. Second, experienced founders act as resource for the start-ups and the founding team in various aspects, for example providing them with angel funding and new venture business development advice. Founders with prior success in founding a start-up send a positive signal of entrepreneurial quality of the founders to the venture capitalist. Founders with prior founding experience are expected to have better negotiating position over the valuation of the start-up for their learning from the past founding experience acts as an important factor. These learnings can vary among the founders and range from ordinary learning to extraordinary learning but considering that there would most likely be some learning factor that would add value, cannot be denied. It is believed that successful prior founding experience would have better understanding and patience for favourable deals. Study conducted by Muzyka, Birley, and Leleux (1996) confirm that the venture capitalists believe that prior founding experience of the founders is an important predictor of new venture's success. Considering the importance of these effects, this study focuses on prior founding experience as an important element of high-quality founding team which may have implications for raising funds.

Hypothesis 1: Founders with prior founding experience are likely to have positive impact on the fund raised by the start-up.

Prior Managerial Experience of the Founders

Empirical studies by Shepherd (1999) and Muzyka et al., (1996) find that management ability is one of the most important factors influencing the investment decisions of venture capitalists. Considering human capital in terms of team experience (e.g. the management experience of the founders), it is found to be associated with superior firm performance (Macmillan et al., 1985; Cooper et al., 1994; Schefczyk and Gerpott, 2000). Many studies consider that experience is an important factor for high level of new ventures' growth (Cooper et al., 1994; Mai and Zheng,

2013; Littunen and Niittykangas, 2010; Baum and Bird, 2010). In their studies on previous work experience (Brüderl et al., 1992; Blanchflower and Oswald, 1998; Sorensen, 2007) scholars have found a positive association between prior managerial experience and success/performance of the new business venture (Gimeno et al., 1997). The previous organization, where the founder has worked, has provided him models of organization and practical skills which may be useful for his future tasks (Beckman, 2006).

Hypothesis 2: Founders with prior managerial experience are likely to have positive impact on the fund raised by the start-up.

Gender Composition of the Founders

Scholars agree that female entrepreneurs find difficulties in raising funds and have outlined them in their studies especially in the early-stage phases of a start-up (Rosa et al., 1996). Greenberg and Mollick (2015) studied about the gender homophily effects in raising fund, meaning women's willingness to support other women, and concluded that female founders receive less funding capital because of their small proportion in decision-making. Several other studies also investigated the role of gender in raising funds and is found that since gender signals trustworthiness of the initiators and females are considered to be more trustworthy as compared to males (Chaudhuri et al. 2013), funding results is expected to be positively related to females. Due to difference in linguistic styles and language used by women and men, women's success rate is expected to be higher (Gorbatai and Nelson, 2015).

Hypothesis 3: Founding team with at least one female founder is likely to have positive impact on the fund raised by the start-up.

Educational Qualifications of the founders

Higher education of the founders can be assumed to be proxy of the knowledge acquired by the founder before starting a start-up (Rauch and Rijsdijk, 2013). Education increases cognitive skills of an individual to adapt to the environmental changes (Hatch and Dyer, 2004). Studies have found formal education to be positively associated to superior performance for new ventures (Cooper and Gimeno-Gascon, 1992). More specifically, Brinckmann, Salomo and Gemuenden (2009) find that start-ups with founding team members having a background in management studies are likely grow faster. Cooper et al., (1994) claim education to be a source of knowledge, skills, discipline, motivation and self-confidence. Founders may also utilise their knowledge and the social contacts gained through the education system to acquire resources for the start-up and access to business networks (Shane and Khurana, 2003; Arenius and De Clercq, 2005). This is true especially in the case of higher level of education. The network of talents that a person may get through an MBA and/or specific training programs on startup's management could be crucial in the success of the new venture (Talai et al., 2016). Level of education has a positive impact on the funding of the startup (Pinneli et al., 2020). Increasing higher education in the founding team increases the probability of receiving funds for digital start-ups (Ratzinger et al., 2018).

Hypothesis 4: Founding team with at least one founder having an MBA degree is likely to have positive impact on the fund raised by the start-up.

Research Methodology

To examine the effect of different founder characteristics on the fund raised by the Indian start-ups, we are collecting data on the mentioned variables in context to the start-ups in India. Since start-up-based data are difficult to find, we performed hand-picked data collection method. We collected data of 393 founders across 158 Indian start-ups. We explored different sources for detailed profile of each start-up like CB insights for collecting data on industry, total fund raised by the startup, year of founding and date of latest funding. We gathered information on founders' profile like prior managerial experience, prior founding experience, gender of the founder and education of the founder, from LinkedIn website.

Dependent Variable

Total Fund Raised: Calculated in million US dollars.

Independent Variables

Education: At least one of the founders with MBA or related education are considered 1 and 0 otherwise.

Experience: Average years of work experience prior to starting the start-up of the founding team.

Prior Founding Experience: At least one of the founders having prior experience of founding a start-up in the founding team is considered 1 and 0 otherwise.

Gender: At least one female founder in the founding team is considered 1 and 0 otherwise.

Controls

Age: Age of the start-up in years from inception to latest funding year.

Industry: Industry in which the start-up operates.

Region: State in which the start-up operates.

Regression Model

$$\text{Log (Total Fund Raised)} = \beta_0 + \beta_1 \text{ Education} + \beta_2 \text{ Experience} + \beta_3 \text{ Prior Founding Experience} + \beta_4 \text{ Gender} + \beta_5 \text{ Age} + \beta_6 \text{ Region} + \beta_7 \text{ Industry}$$

Results

We ran a study on 158 start-ups and have incorporated the results of the analysis in Table 1, Table 2, and Table 3.

We found that only one of our main independent variables of study is significantly correlated with the dependent variable as per Table 2. Thus, we would consider only the correlated variable education to check for its significance in the regression result shown in Table 3. We find from the regression result that education is positively and significantly associated with the dependent variable. This finding aligns with our hypothesis 4. Thus, we may conclude that founding team with at least one founder having an MBA degree or related education have positive impact on the fund raised by the startup. While other independent variables like experience, prior founding experience and gender are not correlated to the dependent variable. Thus, we need not check their significance in the regression result.

Table 1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Log(FundRaised)	158	4.072	1.651	0	7.412
Education	158	.646	.48	0	1
Priorfoundingexp	158	.639	.482	0	1
Gender	158	.139	.347	0	1
Experience	158	7.332	4.544	0	20
Age	158	6.019	1.836	2	9

Table 2: Pairwise Correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) Log(FundRaised)	1.000					
(2) Education	0.192*	1.000				
(3) Priorfoundingexp	-0.012	0.022	1.000			
(4) Gender	-0.087	0.222*	0.074	1.000		
(5) Experience	0.018	0.269*	0.191*	0.173*	1.000	
(6) Age	0.320*	0.123	-0.136	0.066	-0.145	1.000

* $p < 0.05$,

Table 3: Regression Results

VARIABLES	(1) LogFundRaised	(2) LogFundRaised (Robust SE)
Education	0.797*** (0.304)	0.797*** (0.299)
priorfoundingexp	0.114 (0.284)	0.114 (0.263)
Gender	-0.672* (0.396)	-0.672** (0.339)
Experience	-0.0127 (0.0311)	-0.0127 (0.0357)
Age	0.239*** (0.0762)	0.239*** (0.0762)
Industry Fixed Effect	Yes	Yes
Region Fixed Effect	Yes	Yes
Constant	2.366*** (0.833)	2.366*** (0.892)
Observations	158	158
R-squared	0.256	0.256

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Future Direction

We are planning to further dig down to see if different levels of education like graduation, post-graduation and PhD have any impact or not. Further we are also planning to study the impact of heterogeneity in the education of the founders. The impact of premium institute alumni founders on their start-up funding and the number of prior start-ups founding experience could be interesting factor of founders' characteristics to study. Moreover, in this preliminary finding, our results which are contrary to the earlier findings in literature, would be looked and explained in terms of possible reasons/causes of variation. Since this is a developmental paper, we are looking forward to exploring further and expecting to seek advice from different participants and experts at the BAM conference to improve this work further.

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