

An Empirical Study of Sources of Early Stage Startup Funding for Innovative Startup Firms : A Study of Five States of India

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Abstract

Over the past few years, startups have been seen as a taste of the season for India. This has resulted into the materialization of a number of home grown new companies across the country. This development of a novel scenario has been due to the major contributions that led to the mega funding ploughed into most of these new companies between 2007 and 2015. This paper represented the growth of startup companies in India, their types, and possible sources of financing with special emphasis on financing these ventures in the country. In this research, we examined the defining stages of development for startups as well as their funding sources at each stage. The objective of this research paper was to investigate whether India made a shift from conventional to the modern methods of financing. Therefore, this research can be helpful in superior understanding about the funding strategies of entrepreneurial ventures. For conducting the research, a total of five states, that is, Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh were taken into consideration. This paper is primarily based on survey questionnaires, and the chi-square test was adopted to ascertain the results derived from the information gathered from the respondents. The results revealed that there is an urgent need to provide financial literacy to startups and increase awareness on the activities of angel/VC financing through greater involvement with educational/research institutions and incubation centres.

Keywords : venture funding, entrepreneurial activity, funding strategies, startups, funding

JEL Classification : L26, L31, L78, L98

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The world has been experiencing an entrepreneurial revolution in the recent years. The growing economy and the reality of an entrepreneurial ecosystem present a very supportive environment for materialization of entrepreneurship than ever before. Still, the raising of a startup capital for a business venture has always been a case of great concern and challenge, particularly for the knowledge based and innovative ventures. Since these industries depend on a pure knowledge base and often start with just an idea or a prototype, the asset/collateral - based instruments, adopted for the manufacturing industries, are not an option for such firms.

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In most of the cases, it has been observed that banks are reticent in providing loans to startups ; venture capitalists (VCs) become reluctant to take greater risks, and making a public offering always remains the feasible choice only for companies that promise for higher success ratio with good track records. Hence, there has been a credit crisis for small size of entrepreneurs those who are looking for a reasonable amount of startup capital. Given the critical importance of the early stage finance, this study makes an effort to investigate the preferences of young entrepreneurs of Odisha, West Bengal, Chhattisgarh, Jharkhand, and Madhya Pradesh towards financing their entrepreneurial ventures. For this study, innovative ventures that aim to operate in knowledge - based industries have been selected. This research is based on primary data collected with the help of a structured questionnaire. In the subsequent sections, the research methodology, analysis and interpretation, discussion, and conclusion have been discussed.

Literature Review

The significance of startup capital has been well established in entrepreneurship literature. Ho and Wong (2005) empirically studied the new business enterprises those that were provided with size and sufficiency of initial capital. Based on the information gathered, they pointed out that it improves the ability of these new firms to survive and earn higher profits that help them to grow. The difficulty in raising capital is more evident for the startups in the knowledge based sector as they frequently start with assets that are intangible, which restricts them to avail collateral based financing that does not suit them. On the contrary, it becomes very costly, and at times arguably difficult, to obtain capital from the external sources based on the high quality useful information on their activities and prospects resulting into lower level of capitalization. Unusual circumstances that arise from the lack of capital availability lead to stern moral hazard and the other problems that must be controlled by an investor, and that cannot effectively be dealt with contracts that are of pure debt - type. There are about 27,000 medium businesses and 1,50,000 small businesses in the country. Currently, 5% of manufacturing companies are SMEs, which represent 5% of the labor force, 5% of the sector production, and 5% of the GDP. SMEs provide important links to large companies, especially high - growth export sectors, and are part of core business activities in rural and urban areas. In many developing countries, the SME sectors are generally neglected and discriminated against by the government's attention, financing, management, and marketing experience and access to technology as compared to large companies. SMEs in Bangladesh have a significant contribution to increase production and job creation (Akterujjaman, 2010).

In general, to invest in a startup company, VCs can collect funds from multiple investors and sign contracts with each of their investors, depending on the size of the fund. The type of investors in India is spread across different categories which not only include Indian investors, but foreign investors also constitute a larger segment. As a financial intermediary, venture capitalists raise their funds from limited partners (LPs) and invest in potential ways where they have the opportunity to grow. For this, to avoid any disputes, they contract the association between them to avoid the agency problem and information asymmetry problem between VC and LP or VC and the entrepreneur firm (Mishra & Bag, 2016).

In order to tackle the above point of concerns in the context that suits India, creation of some institutional set ups have been observed and innovative financing instruments have been introduced. The effect of deliberations by various stakeholders on risk capital for MSMEs in India also caused a stress upon various risk capital choices available internationally and in India, it is the angel investors, venture capitalists, public listing, micro finance, loan funds, guarantee associations, etc. Actually, the difference is observed during the different growth phases as there would be different requirements for different SMEs. For SMEs characterized by intellectual property and high - tech information, during the startup stage, angel or venture capital finance classically meet their funding

requirements, while during the growth stage, asset backed finance will go well with their financing requirements (Underhill Corporate Solutions, 2011).

Mason and Harrison (2000) stated that after the bubble of Internet hype got busted, most of the venture capital companies started funding only at maturity level because they did not want to take any risk while funding the ventures.

An interesting observation came out from a study in 1994 by Brewer and Genay. They pointed out that the tangible assets are more likely financed by external private debt, while the intangible assets are financed by the venture capital finance, such as those that would be owned by new firms. Ho and Wong (2005) concluded that informal investments considerably influence the inclination to be entrepreneurs. Worldwide, there are many experiential and conceptual studies for risk capital ; mainly angel and venture capital. Silva (2004) pointed out that most of the academic research in the area of venture capital reveals the decision making process. Capital deployed across Series - A, Series - B, and Series - C funding into startups surged 73% year-on-year to \$850 million in the quarter ended March 31, and the number of deals rose from 30% to 76%. However, with fewer companies being set up, angel and seed funding for startups declined at the idea stage and in the subsequent period of fine-tuning the product to the market. Funding for these dropped 45% to 112 deals in the quarter. 2016-17 were notorious for a biting funding winter, when many startups failed to net funding and were shut, and the past 18 months have seen an improvement in sentiment. Many of these funds have expanded their reach so that more startups can blossom. Besides, top names heading India operations of marquee funds or in senior management roles at such entities have struck out on their own, making the talent pool deeper (Sachitanand & Goyal, 2018).

Jensen and Meckling (1976) developed a hypothesis and implied it to free cash flow. They showed that a free cash flow public firm always created an agency problem and leveraged buyout solved the problem between shareholders and managers. A public firm manager could misuse the firm's free cash flow for his/her own self-interest and shareholders were not satisfied because of these strategies. Leveraged buyouts are good tools because of high debt agency. Managers have the responsibility to reduce the debt as early as possible. These types of firms did better and showed better financial results without any problem.

In the Indian context particularly, there are very few studies brought to the notice while reviewing the literature on the venture capital investing process. By and large, the above studies mainly focus upon the decision criteria used by the Indian VCs for evaluation of the entrepreneurial firms, while there are virtually no studies yet on angel investors in the Indian context.

Thus, to mention in a nutshell, evaluation of the above stated national as well as international studies stated that majority of them had taken a larger or a macro view on funding strategies adopted by startups. They pointed out that the challenges are primarily faced by such new ventures and their possible financing solutions. Further, it is worth to mention that the studies on credit availability to SMEs are based on secondary information and are conducted by government agencies or consulting firms. However, funding preferences of startups in the knowledge sector of Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh have not been studied empirically. Hence, the present study attempts to empirically examine the funding choices of such startups in these states of India along with their awareness level for various alternative financing options other than the traditional debt funding.

Research Objectives

Broadly, the idea for undertaking this research is to investigate the funding preferences of new age entrepreneurs of India in specific to Odisha, West Bengal, Chhattisgarh, Jharkhand, and Madhya Pradesh and to highlight their familiarity with respect to various early stage financing options. The specific objectives can be described as :

- (1) To study the demographic and social variables like educational qualification, age, family background, and previous experience of the entrepreneurs for developing the personal profiles of new generation entrepreneurs.
- (2) To check the familiarity of the entrepreneurs towards incubation, angel and venture capital.
- (3) To examine the perception of these entrepreneurs towards equity investors.
- (4) To examine the funding pattern of the startups when these entrepreneurs started their ventures.
- (5) To understand the reasons for not raising external funding in the relevant cases.
- (6) To analyze the experiences of the entrepreneurs towards bank funding in the relevant cases.
- (7) Lastly, to find out the preferred sources of funding by such entrepreneurs for expansion in future.

Hypotheses of the Study

On the basis of the objectives, the following hypotheses have been developed :

- ↪ **H01** : There is no significant difference in the support of family members to entrepreneurs with and without a family business background.
- ↪ **Ha1** : Support of family members differs significantly among entrepreneurs with and without a family business background.
- ↪ **H02** : Entrepreneurs do not find any variation as their familiarity with angel capital and venture capital is significant.
- ↪ **Ha2** : Entrepreneurs find variation as their familiarity with angel capital and venture capital is significant.

Research Methodology

This study is based on the descriptive research design. Only primary sources of information have been used in the research. Primary data for this study were collected from the entrepreneurs of the knowledge based ventures in states like Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh through a structured questionnaire. As most of the technology based startups use the knowledge pool where technology plays a prominent role, it was observed that the respondents were more keen and comfortable in responding to the survey electronically rather the physically. In few of the cases, the interviews were conducted over phone and we met few entrepreneurs personally in Bhubaneswar, Cuttack, Balasore, Ranchi, Kolkata, Indore, Gwalior, Bhopal, and Jamshedpur for the survey purpose.

To select the representative sample of the population, various relevant sources such as the student database of premier education institutes like IIMS in Kolkata, Indore, and Ranchi ; Xavier University, Bhubaneswar ; and Entrepreneurship Development Institute of India (EDI) located in these five states that are running various courses on entrepreneurship have been used. Further, incubation centres at Centre for Entrepreneurship and Innovation of IIM Kolkata ; Cliqué - the innovation and incubation centre for entrepreneurs of IIM Indore ; Entrepreneurship Cell of XLRI, Jamshedpur ; and Startup Incubation centre of ABV - IITM, Gwalior were also contacted. For this purpose, incubates who were availing the facilities of the incubation cells and those who had left these incubation centers were also contacted.

The placement cells of management institutes were also approached for enlarging the list of entrepreneurs. Particularly, placement data belonging to the above - mentioned institutes have been considered as these have

been very helpful in reaching to those students who have adopted entrepreneurship as a career option. In the process, a total of 17 management and technical institutes, including some IITs were taken into consideration. Apart from this, newspaper articles featuring the success story of entrepreneurs were regularly tracked, which aided the discovery of many such entrepreneurs from states like Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh. Besides, a kind of snowball sampling was followed, where the respondents were asked to identify others who belonged to the target population of interest and subsequent respondents were selected based on the referrals. Thus, by compiling all these resources together, a gross list of the entrepreneurs/startups was prepared.

The survey period was from September 2015 to August 2017. Without exception, the majority of the entrepreneurs approached for the survey was forthcoming with their responses and displayed significant interest and involvement. On the whole, it was possible to generate the responses from 67 startups from these five states ; 84% of these responses came from the cities like Bhubaneswar, Cuttack, Balasore, Ranchi, Kolkata, Indore, Gwalior, Bhopal, and Jamshedpur.

Analysis and Results

This section presents the analysis of the responses from 67 young and new age entrepreneurs from five major states of Central and Eastern India, that is, Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh with respect to funding preferences for their ventures (see Table 1).

Further, this study reports two kinds of entrepreneurs - the first type of entrepreneurs with family businesses and the second type of entrepreneurs without family businesses. Out of the total 67 entrepreneurs surveyed, 33 of them had family business background, and the remaining 34 entrepreneurs were without prior background of family business. Out of the 33 entrepreneurs, 11 entrepreneurs had joined their respective family businesses and the remaining 22 entrepreneurs had started their own businesses without joining their family businesses (Table 2). Mann - Whitney *U* test is performed to address the differences in the family support extended to these entrepreneurs .

Table 1. Personal Details of Entrepreneurs Surveyed

Personal Details of Entrepreneurs	Observed Statistics in the Research
Gender	Majority of the entrepreneurs covered under this study were men except seven women.
Age (years)	About 85% of the entrepreneurs surveyed belonged to the age group of either below 30 years or 30 - 40 years. This age distribution facilitated getting valuable insights into funding preferences of the young and new age entrepreneurs of Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh.
Level of Education	Majority of these young entrepreneurs were either post-graduates (62%) or graduates (38%). Education is a pre-condition for starting ventures in knowledge intensive sectors. All these entrepreneurs surveyed had specific business ventures in knowledge intensive areas and as such they are expected to have sound education background for practising entrepreneurship in these sectors.
State of Origin	The survey was conducted in Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh.
Previous Work Experience	Nearly 46% of the entrepreneurs had worked for some time ranging from 3 months to 3 years before practising entrepreneurship to learn the intricacies of managing a business.

Table 2. Ranks of Support of Family Members to Entrepreneurs

Particulars	Entrepreneurial Background	N	Mean Rank	Sum of Ranks
Family	Yes	33	41.42	869.78
Support	No	34	27.57	606.59
	Total	67		

Table 3. Test Statistics of Support of Family Members to Entrepreneurs

Particulars	Family Support
Mann-Whitney <i>U</i>	215.590
Wilcoxon <i>W</i>	606.590
Z value	-3.630
Asymp. Sig. (2-tailed)	0.029

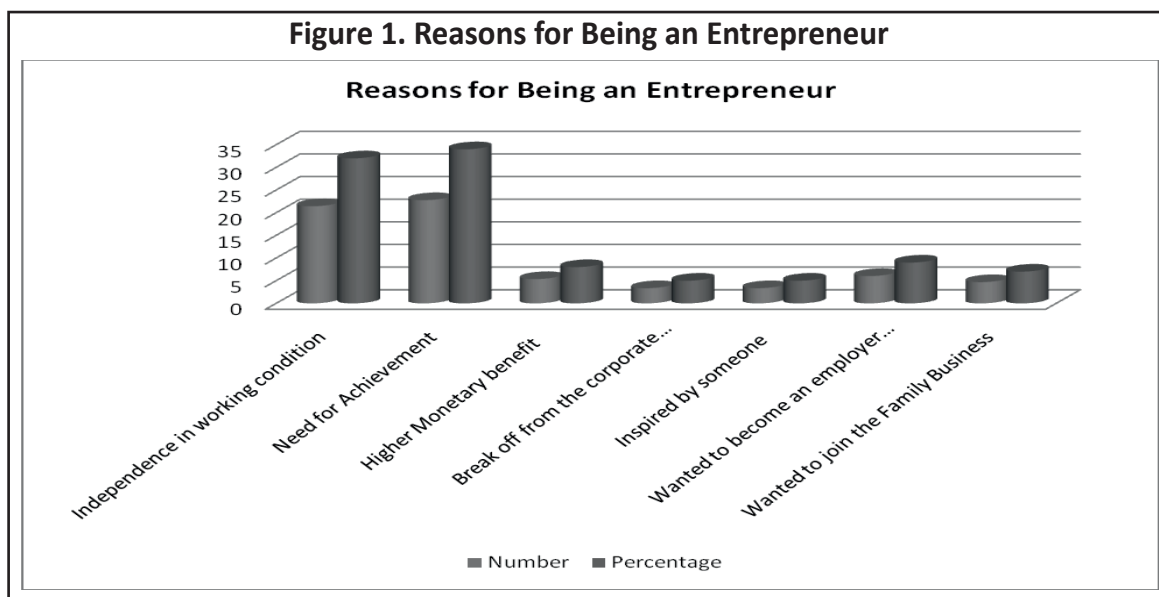
From the Table 3, it is observed that the two - tailed asymptotic significance value is 0.029, which is less than the significance value of 0.05, that is, $0.029 < 0.05$. Hence, H_0 is rejected. Therefore, it may be inferred that there are significant differences between the family support to these two kinds of entrepreneurs. The higher mean ranks of the entrepreneurs with family business suggest that their family members were quite supportive as compared to their counterparts, whose families were never in business.

(1) Reasons for Being an Entrepreneur : There are multiple motivating triggers for being an entrepreneur. As seen from the Figure 1, which is the pictorial depiction of Table 4, the contribution of internal factors such as need for achievement and being independent in working conditions are 34% and 32%, respectively and these two factors account substantially among other factors such as wanted to become an employer rather than an employee, whose contribution is 9% and higher monetary benefit as the cause accounts for 8%. In this case, the reasons for being an entrepreneur are tested in which the total 67 respondents were asked questions based on seven heads, which were considered to be the causes for the respondents to choose becoming entrepreneurs, and the information is provided in the Table 4.

(2) Reasons for Starting Ventures in the Five States Considered : As a significant number of entrepreneurs of Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh had set up their ventures in their native

Table 4. Reasons for Being an Entrepreneur

Reasons for Being an Entrepreneur	Number	%
Independence in working condition	21	32
Need for achievement	23	34
Higher monetary benefit	5	8
Break off from the corporate routine	3	5
Inspired by someone	3	5
Wanted to become an employer rather than an employee	6	9
Wanted to join the family business	5	7
Total	67	100



states, the reasons for setting up the ventures have been analyzed. As per the findings, the entrepreneurs who set up their ventures in these five states preferred these states as they have the availability of raw materials (26%) followed by familiarity with the state (20%). Out of the total 67 respondents, a total of 17 respondents who had their businesses in their respective areas were not from the same state, that is, they hailed from other states. When these respondents were asked about the cost associated with starting up a business, it is observed that they believed that these states are less costly to start a business as compared to their own states (17%) ; there is presence of target customers (14%) ; a strategic location (9%) ; friendly regulations (8%) ; and less government interference (6%).

(3) Familiarity of the Entrepreneurs for Angel and VCs : As mentioned in the research methodology, for conducting this study, ventures with specific innovations in the knowledge based sectors were selected. All these ventures qualified for equity funding by the investors, that is, angels or VCs. As many of these ventures are at the initial stages and expressed their willingness to raise external funding in future, there is a considerable potential for equity investors to invest their funds in Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh.

Table 5. Descriptive Statistics of Entrepreneurs' Familiarity About Incubation

Particulars	Mean	Median	Mode	Std. Deviation
Familiarity towards incubation centers	4.86	4.67	7.79	2.38

Table 6. Ranks of Entrepreneurs' Familiarity for Angel and VC

Particulars	Ranks	N	Mean Rank	Sum of Ranks
Familiarity with venture capital - angel capital	Negative Ranks	0	.00	.00
	Positive Ranks	34	17.91	394.21
	Neutral	33		
	Total	67		

Table 7. Test Statistics of Entrepreneurs' Familiarity for Angel and VC

Particulars	Familiarity with Venture Capital - Angel Capital
Z	-6.530
Asymp. Sig. (2-tailed)	.000

Therefore, the study checks the familiarity of the entrepreneurs with respect to the angels and VCs. In order to study the differences in their familiarity for such equity funding, the Wilcoxon signed rank test is performed.

As per the test statistics provided in the Table 7, the 2-tailed significance value is 0.000, which is less than the significance value of 0.05, that is, $0.000 < 0.05$. Hence, H_0 is rejected. Higher mean ranks for the positive differences indicate that the entrepreneurs knew a fair amount regarding VCs.

Research Implications

The following are some of the points that we suggest the policy makers to implement so that the startup entrepreneurs can successfully attract the attention of venture capitalists.

- (i) The government should help the startups by giving training to them at EDI centers about the venture funding process.
- (ii) The MSME department should act proactively in giving the entrepreneurs every information about venture funding and the process to obtain the funding too.
- (iii) The respective state governments should direct their commerce departments to arrange venture funding events every year so that the startups can participate in the events and the startups those attract the venture capitalists in the events can be further provided funding facility.

Conclusion

Based upon the survey results of entrepreneurs in Odisha, Chhattisgarh, Jharkhand, West Bengal, and Madhya Pradesh, the following findings emerge. Personal demographics of the new age entrepreneurs suggest that majority of them were men in the age groups of below 30 years and 30 - 40 years. They all had a good professional educational background with relevant work experience. Even though nearly half of the entrepreneurs had the backup of family businesses, many of them preferred starting their own businesses with novel ideas in the knowledge - based areas. The family members were also quite supportive and accepted their decision of becoming an entrepreneur whole heartedly. The higher acceptance of entrepreneurship again shows the changing nature of the social structure, where risk-taking is not suppressed due to the fear of failure.

Thus, there is an urgent need to provide financial literacy to startups and increase awareness on the activities of angel/VC financing through greater involvement with educational/research institutions and incubation centres. Venture funds of different kinds, other financing institutions, and incubation centres should encourage entrepreneurship promotion and education schemes designed to find, assist, and train new technology entrepreneurs. There is a need to significantly increase the number of business incubation opportunities for entrepreneurship by comprehensively exploring various policy options.

Limitations of the Study and Scope for Further Research

The following are the limitations of this research :

- ✦ Since this research is limited to five states, the results cannot be used for other states.
- ✦ Reasons for being an entrepreneur are limited to certain defined factors, but there are more factors responsible that guide people to become an entrepreneur.
- ✦ The government departments were not considered for gathering information, which limits the findings of the research to a certain extent.

The following areas can be considered to extend this study by future researchers :

- ✦ Further research can be carried out to test why entrepreneurs strive for independence in working conditions.
- ✦ Why there is a need for achievement for every entrepreneur can be an area of research.
- ✦ Do higher monetary benefits drive the entrepreneurs to stay with the business activity is another area that can be explored.

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