This chapter starts with the identification of the problem, the research gap and the scope of the study and then puts forth the various steps through which this study has been carried out.

4.1 Identification of the problem
Firstly, as shown in previous chapters, Uttar Pradesh is an economically backward state. Promoting industrialization has been identified as a means to increase the prosperity of the state (Uttar Pradesh Development Report, 2007). Furthermore it has been shown that industrialization would require large amount of funds and that raising funds for business ventures in general poses problems to entrepreneurs.

Secondly, though the concept of Venture capital is new for the state of Uttar Pradesh but as discussed in the literature review (mainly, section 3.1), venture capital through funding and providing value added services could help in economic development of a region.

Thirdly, as discussed earlier (section 1.6), literature related to the evolution of Venture capital highlights the peculiar problems it faced in different parts of the world and the pivotal steps that led to its establishment.

To sum up, there is a need of capital in Uttar Pradesh, venture capital can play a developmental role and there are problems faced in venture capital. In view of the above points this study looks into the prospects and problems of venture capital in the state of Uttar Pradesh.

4.2 Research Gap
As detailed in literature the review, a number of researches have been carried out on the different aspects of venture capital. These researches have mainly focused on the
evaluation criteria used by venture capitalist, the issues involved in venture capital funding, problems faced by entrepreneurs in raising capital and the developmental role of venture capital.

Previous researches have established that the issues in venture capital funding and evaluation criteria used by Venture Capitalists differs from one place to another. They have shown that legal or cultural differences can change the way players in the market behave (Cumming & MacIntosh, 2002; Black & Gilson, 1998). As differences in economic and social structures and legal and fiscal environments lead to variations in the importance of criteria and issues in Venture Capital Funding a research on the Problems and Prospects of venture capital market in Uttar Pradesh may give insights that are different from the previous foreign and Indian researches.

Black & Gilson (1998) illustrated how differences in capital market organization and regulation affects the development and behavior of the venture capital industry. Thus studying a nascent venture capital market such as Uttar Pradesh might also give more general knowledge about how venture capital markets are created and in doing so what are the difficulties and opportunities.

As most of the researches on venture capital have been carried out abroad, consequently for India in general and Uttar Pradesh in particular there is a lack of earlier researches. Due to a lack of prior research on venture capital in Uttar Pradesh there exits a research gap, which can be fulfilled by this study.

4.3 Scope of the study
The following aspects related to the problems and prospects of Venture Capital in Uttar Pradesh are covered:

1. Venture capitalists have certain evaluation criteria, which they use while judging the suitability of an investment proposal. This study tries to find how far investment proposals from Uttar Pradesh fulfill the investment criteria laid down by a venture capitalist.

2. This study also tries to find out how venture capital can help in making Uttar Pradesh a more economically developed state
3. In view of its developmental role, governments in many countries have played a direct and indirect role in promoting venture capital. This research studies the role, which the government of Uttar Pradesh can play in promoting venture capital. Yet, as we still know very little about what government policies can help create active venture capital markets, this study contributes a step towards filling this gap.

4. The effect of syndication in promoting venture capital investments in Uttar Pradesh is studied.

5. Entrepreneurs face problems in raising capital (a funding gap exist for new and small entrepreneurs, as discussed in literature review). The problems faced by entrepreneurs in raising capital in Uttar Pradesh are studied.

6. The scope of study also covers the problems faced by entrepreneurs in raising venture capital.

7. Entrepreneurs expect financial and non-financial help from venture capitalist. The expectations of entrepreneurs in Uttar Pradesh from venture capital are also studied.

8. The sector-wise and stage-wise interest of venture capitalist is also studied for Uttar Pradesh.

The following aspect of study are not covered

1. Empirical analysis of the above mentioned points in the scope of study have not been performed.

2. All the issues in venture capital funding have not been studied.

4.4 Objectives of the study

Previous studies conducted for Uttar Pradesh have highlighted the reasons for its industrial backwardness and have also identified some problems being faced by entrepreneurs in raising capital. This study tries to highlight problems of Venture Capital Financing in Uttar Pradesh and its prospects in terms of how it can open up new avenues for growth and thereby aid in the economic growth of Uttar Pradesh. The objective of the study is to find the perspectives of venture capitalist and entrepreneurs as related to the problems and prospects of venture capital in Uttar Pradesh.
The perspectives of venture capitalist are studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the importance of the various investment criteria used in evaluation of proposals such as attributes of entrepreneurs, products and services, target market, deal and region and to ascertain how far the proposals in Uttar Pradesh meets these criteria.
2. To decipher the role which venture capital, can play to make Uttar Pradesh a more economically developed state.
3. To probe the role which government of Uttar Pradesh can undertake in order to promote venture capital in the state.
4. To find out the sector-wise and stage-wise areas of interest in Uttar Pradesh.

The perspective of entrepreneurs of Uttar Pradesh is studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the problems faced in raising Equity, Debt and Venture Capital.
2. To study the importance of the various types of help sought from a venture capitalist.

4.5 Hypotheses development

**Hypothesis 1 (Evaluation criteria)**

Most of the prior studies of VCs' (Venture Capitalist) decision making (reported in Table, 3.5, 3.6 and 3.7) have focused on extracting from interviews and surveys of VCs a list of criteria VCs employ to evaluate ventures for a possible financing. The decision to invest depends on a number of criteria. To find out if investment proposals in Uttar Pradesh fulfill the criteria of venture capitalist we the following null Hypotheses:

**Characteristics of entrepreneurs**

**Overall Significance test**

**H1null:** There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.

**Significance test for differences in individual variables**

**H1alt:** There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.
H1_{a2o}: There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.

H1_{a3o}: There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.

H1_{a4o}: There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.

H1_{a5o}: There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.

H1_{a6o}: There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.

H1_{a7o}: There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.

H1_{a8o}: There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.

Characteristics of products
Overall Significance test
H1_{bo}: There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.

Significance test for differences in individual variables
H1_{b1o}: The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

H1_{b2o}: The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

H1_{b3o}: The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

H1_{b4o}: The presence of superiority in products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

Characteristics of target market
Overall Significance test
H1_{co}: There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market characteristics required by a venture capitalist.
Significance test for differences in individual variables

H1_{c10}: There is no difference in the market size in proposal from Uttar Pradesh and the market size as required by a venture capitalist.

H1_{c20}: There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.

H1_{c30}: There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.

Features of deal

Overall Significance test

H1_{d0}: There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.

Significance test for differences in individual variables

H1_{d10}: The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

H1_{d20}: The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

H1_{d30}: The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.

H1_{d40}: The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

H1_{d50}: The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

H1_{d60}: The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

H1_{d70}: The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

Features of region

Overall Significance test

H1_{e0}: There is no difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.

Significance test for differences in individual variables

H1_{e10}: There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.
H1e2o: The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.

H1e3o: The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.

H1e4o: The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.

H1e5o: The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.

H1e6o: The law and order in Uttar Pradesh is as per the requirement of venture capitalists.

Data for testing of the above Hypotheses was obtained from questions no. 1 and 2 of the questionnaire for Venture Capitalist.

Hypotheses 2 and 3 (Role of venture capital and government)

As discussed earlier in literature review, recognizing the potential role which venture capital has played in USA in innovation, job creation and economic growth, governments in many parts of the world have taken a number of initiatives to promote venture capital investments in their regions (refer section 3.1 and 3.5). To find out the role of venture capital and government for the state of Uttar Pradesh we have null

Hypotheses:

H2ao: Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.

H2bo: Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.

H3c: Government cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypotheses was obtained from questions 4, 5 and 6 of the questionnaire for Venture Capitalist

Hypothesis 4 (Syndication)

As discussed in literature review (section 3.4.5) syndication of venture capital funding has a number of advantages. In this study we try to find the perspectives of venture
capital with regards to the various benefits of syndication in promoting venture capital investments in Uttar Pradesh. Therefore, Null Hypothesis

H4o: Syndication cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypothesis was obtained from question no.7 of the questionnaire for Venture Capitalist.

Hypothesis 5 (Problems in equity and debt capital)
Debt and Equity are the two most commonly used methods for raising capital for business ventures (Berger & Udell, 1998). To find the perspectives of entrepreneur in Uttar Pradesh with regards to the problems faced in raising equity and debt capital we have null hypotheses:

H5a0: Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.
H5b0: Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.
H5c0: Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.
H5d0: The problems faced in raising equity capital does not differ age-wise.
H5e0: The problems faced in raising debt capital does not differ age-wise.
H5f0: The problems faced in raising equity capital does not differ location wise.
H5g0: The problems faced in raising debt capital does not differ location wise.
H5h0: Problems faced in raising equity capital does not differ gender wise.
H5i0: Problems faced in raising debt capital does not differ gender wise.

Data for testing of the above Hypotheses was obtained from question 2 (part a and b) of the questionnaire for Entrepreneurs of Uttar Pradesh.

Hypothesis 6 (Problems in venture capital)
This study tries to find out the perspectives of entrepreneurs from Uttar Pradesh with regards to the problems faced in raising venture capital. Therefore, Null Hypotheses

H6a0: Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.
H6b0: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.
H6c0: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.
H6<sub>do</sub>: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise.

Data for testing of the above Hypotheses was obtained from question 4 of the questionnaire for entrepreneurs of Uttar Pradesh.

**Hypothesis 7 (Assistance of venture capitalist)**

Apart from financing, venture capitalists also provide a number of value added services (Gorman & Sahlman, 1989). This study tries to find out the perspectives of entrepreneurs of Uttar Pradesh with regards to the assistance expected from venture capitalist. Therefore, Null hypotheses

H<sub>7ao</sub>: Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist.

H<sub>7bo</sub>: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.

H<sub>7co</sub>: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise.

H<sub>7do</sub>: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise

Data for testing of the above Hypotheses was obtained from question 5 of the questionnaire for Entrepreneurs of Uttar Pradesh.

In all 54 hypotheses were tested, 37 from the questionnaire of venture capitalist and 17 from the questionnaire of entrepreneurs of Uttar Pradesh.

4.6 Research Design

This research study is descriptive in nature. Descriptive studies are concerned with specific descriptions, with narration of facts and characteristics concerning individuals, groups or situations. This descriptive study has been conducted with venture capitalist and entrepreneurs in Uttar Pradesh.

Lack of prior research work on Venture Capital in Uttar Pradesh prompted the use of an exploratory study design. But in view of the previous researches (related to this
study which have been carried out in India and abroad, refer literature review) this study is descriptive.

4.7 Sources of data
For the purpose of conducting the present study relevant data and important information have been collected from both primary and secondary sources.

4.7.1 Secondary data
Under this category various sources of data are used, Reserve Bank of India, Uttar Pradesh Government’s Statistical Department, Indian Venture Capital Association, Indian Industries Association, Ministry of Micro, Small and Medium Enterprises, Confederation of Monitoring of Indian Economy were the important sources of statistical data.

For the purpose of literature review and gaining insights on the research topic the researcher consulted books and similar studies carried out in India and abroad on venture capital.

4.7.2 Primary sources
Primary data were the main source of study. There are two sources of primary data, venture capitalist in India and entrepreneurs of Uttar Pradesh.

4.8 Populations defined
The list of entrepreneur in Uttar Pradesh came from the entrepreneurs registered with Indian industry association (IIA). IIA is primarily composed of members from the state of Uttar Pradesh. Past researches have also used such state specific industrial association to collected data on entrepreneurs (Barriera, 2004). It is assumed that only companies, which are active, would register themselves in such organization.

The list of venture capitalist came from the Indian Venture Capital and Private Equity association, New Delhi (Details of Indian Industry Association and Indian Venture Capital Association are enclosed in the appendix).
4.9 Sample size determination

Venture capitalist: In view of the limited number of venture capitalist in India, all the venture capitalist who are members of the Indian Venture capitalist and Private Equity Association (IVCA) were selected (Except venture capital funds that are state specific, as they entertain investment proposals only from their respective states). Previous studies on venture capital such as Mishra (2003) have also used the list of IVCA to identify the venture capitalist.

Entrepreneurs: As the numbers of entrepreneurs in Uttar Pradesh was large, a sample size was determined using the method suggested by Nargundkar (2008). For interval scaled variables the following formula given by Nargundkar (2008) is used

\[ N = \left( \frac{ZS}{E} \right)^2 \]

Where, \( N = \) Sample Size

\( Z = \) Confidence Level

\( S = \) Population standard deviation for the variable which we are trying to study.

\( E = \) Tolerable error, expressed in the same units as the variables being measured.

The researcher decides the values of \( Z, S \) and \( E \). In our case we have taken the values as follows,

1. The value of \( Z \) - At 95% confidence level, \( Z = 1.96 \)

2. The value of \( S \) - Is estimated by diving the range of the scale by the 6, i.e. \( S = \frac{\text{Range}}{6} \). The logic of using 6 is that range equals 6 standard deviations for most of the variables. Therefore, range when divided by 6, should give a fairly good estimate of the standard deviation. In our questionnaire we have used a 5-point scale, the maximum value being 5 and minimum value being 1, therefore range is \( 4(5-1=4) \). Therefore, \( S = \frac{4}{6} \)

3. Value of \( E \) is taken as 0.07. Substituting the values of \( Z, S, \) and \( E \) in the above formula we find the sample size to be 348 (Approximately). In this study we have taken a sample size of 386, to be on safer side.

4.10 Sampling method

For entrepreneurs in Uttar Pradesh -

Systematic sampling was used to select the names of the respondent. The database of Indian industry association (IIA) shows the listing of its member's district wise. From
each district of Uttar Pradesh the respondent entrepreneurs were chosen using skip interval. Systematic sampling enables the representation of the entire population and is simple to administer (Burns & Bush, 2007). In our study systematic sampling enabled a proportional representation of entrepreneurs from each district of Uttar Pradesh.

4.11 Survey instrument
Since no public data was available on the research topic, necessary data for this study had to be first collected. For collection of data, survey was conducted on the venture capitalists in India and entrepreneurs of Uttar Pradesh. A survey involves collection of data from a large number of respondents using a pre-designed questionnaire. The survey research methodology is appropriate for this research project as it helps to make broad generalizations from a sample and these generalizations in turn would facilitate drawing inferences through hypotheses. By reviewing thoroughly relevant research related to the problems and prospects of venture capital and identifying the commonalities in these literatures the questionnaire were prepared to test the various hypotheses. Many previous studies on venture capital have also used surveys research methodology (refer table 3.5, 3.6 and 3.7). Two different sets of questionnaires have been employed one for the venture capitalist and the second one for entrepreneurs.

4.11.1 Process of Questionnaire Development
Questionnaire was developed following the procedures suggested by Churchill (1979); Gerbing & Anderson (1988). A three-stage process illustrates how the questionnaire items were developed before conducting the final survey. Each process is detailed below:

Stage 1: Literature search
The questions for entrepreneurs and venture capitalist were based on the findings of previous researches and studies. (Refer table 3.4, 3.5 and 3.6 for the summary of findings in previous studies in India and abroad). After the problems were identified an extensive review of literature was done for identifying the scales for measures relevant to this study.

Stage 2: In depth interviews
In depth interviews with 20 entrepreneurs and 3 venture capitalists were conducted to gain broader knowledge about the issue involved and to evaluate the content validity
and wordings of individual scale items. Content validity is concerned with the adequacy with which the domain of the characteristic is captured by the measure (Churchill 1999).

**Stage 3: Pre-test**

Items pertaining to a questionnaire were pre-tested, including layout, length, response format, sequence, meaning of words and question difficulty (Hunt, Sparkman & Wilcox 1982). After completing the questionnaires, each respondent was asked to comment whether the instructions were precise and whether any ambiguity or difficulty occurred in answering any of the questions. According to the respondents, a few questions needed better phrasing. The final versions were generated after minor modifications to the suggested questions.

**4.11.2 Structure of questionnaire**

Some previous studies have employed structured interviews or questionnaires for data collection (section 3.4, 3.5 and 3.6). For this study a structured, undisguised questionnaire was also used. Two different sets of questionnaires were administered through mail to the venture capitalist and the entrepreneurs of Uttar Pradesh. Both dichotomous and five-point scales were used.

The responses to the dichotomous close-ended question were in the form on Yes/No. For more information on the attributes under study a five-point scaled responses is used, where the respondent venture capitalists and entrepreneurs were asked to rate their perspectives with regards to the various attributes related to the problems and prospects of venture capital in Uttar Pradesh. For instance venture capitalist were asked to rate the criteria in evaluating an investment proposal on a five-point scale.

Structured questionnaire was decided for this study upon realizing that the participants only had a limited amount of time available for the interviews. By using a structured questionnaire it was concluded that it would aid in keeping to the tight time schedule as well as assuring that all the questions were asked.

Apart from the demographic data, the questionnaires for venture capitalist had 8 questions running into 7 pages while the questionnaire that was for the entrepreneur
had 5 questions running into 5 pages. A copy of both the questionnaires is enclosed in the annexure.

4.11.3 Data collection

The three most common methods of data collection are mail surveys, face-to-face interviews and telephone surveys, and each of these has inherent advantages and disadvantages. Several factors were taken into account while choosing the mail survey method for this research. Though a mail survey is a less expensive method than telephone interview and personal interview, but a low response rate is the most obvious disadvantage of mail survey (Burns & Bush, 2007).

For Questionnaire no.1 (the venture capitalist), questions were sent through mail and Internet and later on at a prefixed date and time response was sought through Internet and telephone. But for, Questionnaire no.2 (the entrepreneur), in view of the large and geographically dispersed sample size the questionnaire was mailed.

4.11.4 Techniques to Increase Response Rate

Total Design Method (TDM), as described by Dilman (1978), is used for implementing this survey. The theory underlying the TDM is social exchange, which suggests the likelihood that individuals will respond to a survey questionnaire is a function of how much effort is required to respond, and what they feel they are likely to get in exchange for completing the questionnaire.

1. Along with the questionnaires a personalized covering letter was also sent to persuade the venture capitalists.
2. The questionnaires were designed and pre-tested to ensure that it took approximately 8-10 minutes to give the response.
3. The entrepreneurs and venture capitalists were motivated to respond as the survey was related to an area of their interest. They were further motivated to respond as all respondents could get a copy of the results which can be used by them.
4. The chapter chairpersons of the various districts of the Indian Industry Association (IIA) were personally met/called up. They were persuaded to help in the survey by requesting the respondent members (entrepreneurs) in their respective district to fill the questionnaire.
4.11.5 Mailing Process

There were altogether three mailings administered to the VCs and the entrepreneurs in the survey of this study. First, mailing consisted of a covering letter and the questionnaire to 45 venture capitalist and 993 members of the Indian Industries Association. A week later a reminder cards were sent as suggested by Dilman (1978). Four weeks later, the final third mailing was sent to non-respondents.

Out 45 Venture Capitalist 16 responded, this translates into a response rate of 36 %. The total number of entrepreneurs firms, which responded, was 352. In order to persuade responses from entrepreneurs they were contracted by telephone and 34 more responses were sought making the total number of response at 386. This translates into a response rate of 39%.

The above response rate can be considered acceptable given that management time is a critically scarce resource (Gaedeke & Tootelian (1976) forecasted a 20 percent response rate from top executives).

4.11.5 Response Pattern

The profile of respondents in terms of their location and age are given in the following sections below

Location and age of venture capitalists

As can be seen from the table and graph given below the maximum numbers of respondents were from Mumbai, which was followed by the city of Bangalore. The maximum numbers of venture capitalist were between 6 to 10 years old.

<table>
<thead>
<tr>
<th>Location</th>
<th>No. Of venture capitalist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangalore</td>
<td>6</td>
</tr>
<tr>
<td>Chennai</td>
<td>1</td>
</tr>
<tr>
<td>Delhi</td>
<td>2</td>
</tr>
<tr>
<td>Mumbai</td>
<td>7</td>
</tr>
</tbody>
</table>
Figure 4.1  Location of Venture Capitalist

No. of Venture Capitalist-Citywise

- Bangalore: 43%
- Chennai: 13%
- Delhi: 13%
- Mumbai: 6%

Figure 4.2  Age of Venture Capitalist

Age of Venture Capitalist

- Upto 5 Years: 37%
- 6-10 Years: 31%
- 11-15 Years: 13%
- Above 15 Years: 19%
Locations of entrepreneurs
The district wise break up of location of entrepreneurs is shown in the table below.

Table 4.2  District-Wise Responses from Entrepreneurs of Uttar Pradesh

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>City</th>
<th>No. of Respondent</th>
<th>Sr.No</th>
<th>City</th>
<th>No. of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agra</td>
<td>17</td>
<td>15</td>
<td>Hapur</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Allahabad</td>
<td>8</td>
<td>16</td>
<td>Hardoi</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Ambedkarnagar</td>
<td>3</td>
<td>17</td>
<td>Jhansi</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Azamgarh</td>
<td>2</td>
<td>18</td>
<td>Kanpur</td>
<td>99</td>
</tr>
<tr>
<td>5</td>
<td>Barabanki</td>
<td>3</td>
<td>19</td>
<td>Lucknow</td>
<td>82</td>
</tr>
<tr>
<td>6</td>
<td>Bareilly</td>
<td>32</td>
<td>20</td>
<td>Meerut</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>Bijnor</td>
<td>3</td>
<td>21</td>
<td>Modinagar</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Bulandsahar</td>
<td>2</td>
<td>22</td>
<td>Rae Bareily</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Deoband</td>
<td>3</td>
<td>23</td>
<td>Shahjahanpur</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Deoria</td>
<td>3</td>
<td>24</td>
<td>Sitapur</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Faizabad</td>
<td>5</td>
<td>25</td>
<td>Sultanpur</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Farrukhabad</td>
<td>1</td>
<td>26</td>
<td>Unnao</td>
<td>7</td>
</tr>
<tr>
<td>13</td>
<td>Gautambudh Nagar</td>
<td>10</td>
<td>27</td>
<td>Varanasi</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Ghaziabad</td>
<td>7</td>
<td>28</td>
<td>Others</td>
<td>1</td>
</tr>
</tbody>
</table>

The maximum numbers of respondent entrepreneurs were from Kanpur, which was followed by Lucknow and Meerut.

Age and gender of entrepreneur
The age of the respondent entrepreneurs in depicted in the pie chart below. Most of the entrepreneurs were in the age group of 40-50 years, which was followed by the age groups 30-40 years, 20-30 years and lastly above 50 years.

Of the 386 respondents, 31 were females and 355 were males. The gender of entrepreneurs has also been depicted in the graph below.
Figure 4.3  Age of Entrepreneur

Figure 4.4  Gender of entrepreneur
4.12 Non Response Analysis

Test was conducted to test the non-respondent bias. The responses from early and late respondents were compared. This was done to provide evidence of the potential non-response bias. Late respondent have been argued to be more representative of those in the sample who did not respond than are earlier respondent (Armstrong & Overton, 1977). The differences between the responses of the early (first 60) and late (last 60) respondent entrepreneurs was tested, for the problems faced in raising equity, debt and the assistance expected from venture capital.

Table: 4.3 Test of difference between early (first 60) and late (last 60) respondents

<table>
<thead>
<tr>
<th></th>
<th>First 60</th>
<th></th>
<th>Last 60 Respondent</th>
<th></th>
<th>T</th>
<th>Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem in raising equity</td>
<td>26.33</td>
<td>3.35</td>
<td>27.15</td>
<td>3.31</td>
<td>-1.34</td>
<td>0.18</td>
</tr>
<tr>
<td>Problem in raising debt</td>
<td>27.06</td>
<td>3.27</td>
<td>27.43</td>
<td>3.34</td>
<td>-0.61</td>
<td>0.55</td>
</tr>
<tr>
<td>Assistance from venture capital</td>
<td>21.73</td>
<td>3.38</td>
<td>21.80</td>
<td>3.06</td>
<td>-0.11</td>
<td>0.91</td>
</tr>
</tbody>
</table>

The test results are presented in table 4.3. As per the independent sample T-test; the corresponding two-tailed p value is 0.18, 0.55 and 0.91. The results show that there was no difference between the early and late respondents.

4.13 Follow-up survey

In order to check the reliability and stability of measures, a follow up survey was administered six months after the original survey in March 2008 (Carmines & Zellar, 1979, Litwin 1995, Nunnally 1978). The follow up survey was administered to the entrepreneurs. 100 entrepreneurs were sent questionnaire through email out of which 48 entrepreneurs responded. The responses of the follow up survey were tested with the main survey in order to see if there was any difference in the responses. The responses on the problems faced in raising equity, debt and the assistance expected from venture capital were tested. The result of the test is presented in table 4.4.
Table: 4.4  Test of differences in the earlier responses and follow-up responses

<table>
<thead>
<tr>
<th></th>
<th>Earlier Response</th>
<th></th>
<th>Follow-up Response</th>
<th></th>
<th>T</th>
<th>Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem faced in equity</td>
<td>26.33</td>
<td>3.35</td>
<td>27.15</td>
<td>3.31</td>
<td>0.30</td>
<td>0.76</td>
</tr>
<tr>
<td>Problem faced in debt</td>
<td>27.06</td>
<td>3.27</td>
<td>27.43</td>
<td>3.34</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Assistance from venture capital</td>
<td>21.73</td>
<td>3.38</td>
<td>21.80</td>
<td>3.06</td>
<td>0.22</td>
<td>0.82</td>
</tr>
</tbody>
</table>

As per the independent sample T-test, the corresponding two-tailed p value is 0.76, 1.00 and 0.82. The results indicated that there was no statistical difference between responses from main and the follow-up survey.

4.14 Data Analysis Techniques

The data collected through the two questionnaires were coded, tabulated and analyzed. The analysis of data was done with the help of software of Statistical Package for Social Sciences version 16.0 (SPSS).

1. **Descriptive statistics** - numerical and graphical methods were used to summarize data and bring forth the underlying information. The numerical methods included measures of central tendency and measures of variability.

2. **Statistical test** - in this study the data is obtained from a sample and not through census. Therefore hypothesis testing is done in order to draw inferences (Cooper & Schindler 2001). The following test were used for hypothesis testing;

   i) **T-test**- these were used to compare means of two samples or between some standard value and the mean of one sample. In this study different varieties of t-tests, have been used, depending on the design of the study or the nature of data.

   ii) **Chi-squares analysis** - examines the frequencies for two nominal scaled variables in a cross-tabulation table to determine whether the
variables have a non-monotonic (unvarying quality) relationship, i.e. Chi-squares test for independence is used to test whether two categorical variables are independent of each other.

iii) ANOVA- analysis of variances is used to compare the means of more than two populations. It investigates the differences between group means to ascertain whether sampling error or true population differences explain their failure to be equal.

4.15 Reliability and Validity of data
In this dissertation a considerable amount of attention has been given to ensure the reliability and validity of the results. As mentioned the hypotheses have been developed based on received theories. Related earlier research has been used while developing the constructs and measurement items. Reliable data source have been used, and re-testing is used to validate the primary data used. Statistical methods have been carefully selected and employed after ensuring fulfillment of assumptions. Finally, results and conclusions have been carefully analyzed to ensure their feasibility.

4.15.1 Reliability
Reliability is the consistency of measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In short, it is the repeatability of measurement. A measure is considered reliable if score on the same test given twice is similar. Test/retest is a method to estimate of reliability. Simply put, the idea behind test/retest is to get the same score on test 1 as you do on test 2. In this study, a follow up was conducted six months after the previous (first) one. Apart from the test-retest procedure, several other methods were used to ensure reliability. The two dimensions of reliability namely reliability of empirical data and reliability of constructs have been ensured.

Reliability of empirical data was ensured in the following
i) As a single informant answered the survey questionnaire, it was important that the respondent is knowledgeable as to the operations of the firm. In order to maximize the reliability of data in this study, the survey was administered to key informants as suggested by John & Reeve 1982.
ii) Questionnaires were carefully designed with several rounds of revisions. Several interviews and pre-testing of the questionnaire gave confidence that the respondents would not have problems in understanding the questions and that they would be knowledgeable about the issues covered by the questionnaire. Spector (1992) suggested this method to ensure reliability of data.

iii) A follow-up survey was conducted after six months as suggested by Carmines & Zeller, 1979. The responses were compared by analysis (Table 4.4), which showed no difference in the response in the main and follow-up survey.

iv) The reliability of the constructs, which refers to the extent the measurement of the construct can be considered as reliable, was also ensured. Firstly, multi-item scales were used to measure the constructs (Spector, 1992). Secondly, apart from the test-retest method, Cronbach’s Alpha was also used to measure the reliability. Cronbach’s Alpha measures the inter-item reliability of construct and refers to the extent measurement items are co-related with each other.

The results of Cronbach’s Alpha test are presented in the table 4.5. The common threshold value of 0.70 is considered as acceptable. (Nunnally, 1978; Gaur & Gaur, 2006). As shown in table all multi-item constructs appear to be reliable are above 0.70 except the construct for problems in venture capital that is 0.635.

4.15.2 Validity
Validit y is the strength of our conclusions, inferences or propositions. More formally, it as the "best available approximation to the truth or falsity of a given inference, proposition or conclusion." In short, are we right? (Cook & Campbell, 1979). The following dimensions of validity were used:

1. Face validity
It refers to the extent the construct corresponds to the common understanding of the related concept. Face validity was ensured in several ways.

i) An extensive review of literature was carried out in order too understand the relevant concepts both in theory and in practice.
ii) The constructs and measurement items were developed on the basis of previous research as far as possible.

iii) The questionnaire was developed and pre-tested with entrepreneurs and Venture Capitalist to ensure that the measures were in line with the common understanding of the of the concepts.

Table 4.5  Cronbach's alpha Coefficients

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of items</th>
<th>Cronbach's alpha</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Characteristics of entrepreneurs</td>
<td>8</td>
<td>0.708</td>
<td>16</td>
</tr>
<tr>
<td>2 Features of product</td>
<td>4</td>
<td>0.733</td>
<td>16</td>
</tr>
<tr>
<td>3 Features of target market</td>
<td>3</td>
<td>0.731</td>
<td>16</td>
</tr>
<tr>
<td>4 Features of deal</td>
<td>7</td>
<td>0.742</td>
<td>16</td>
</tr>
<tr>
<td>5 Features of region</td>
<td>6</td>
<td>0.739</td>
<td>16</td>
</tr>
<tr>
<td>6 Venture capital and economic development</td>
<td>8</td>
<td>0.764</td>
<td>16</td>
</tr>
<tr>
<td>7 Venture capital and industrial development</td>
<td>7</td>
<td>0.728</td>
<td>16</td>
</tr>
<tr>
<td>8 Role of government</td>
<td>10</td>
<td>0.785</td>
<td>16</td>
</tr>
<tr>
<td>9 Role of venture capital in syndication</td>
<td>5</td>
<td>0.704</td>
<td>16</td>
</tr>
<tr>
<td>10 Problems faced in equity capital</td>
<td>8</td>
<td>0.702</td>
<td>386</td>
</tr>
<tr>
<td>11 Problems in debt capital</td>
<td>8</td>
<td>0.738</td>
<td>386</td>
</tr>
<tr>
<td>12 Help from venture capital</td>
<td>7</td>
<td>0.714</td>
<td>386</td>
</tr>
<tr>
<td>13 Problems in venture capital</td>
<td>8</td>
<td>0.635</td>
<td>386</td>
</tr>
</tbody>
</table>

2. Content validity

It refers to the extent to which the construct covers all relevant facets (Venkatraman & Grant 1996). For ensuring content validity, the following steps were undertaken:

i) An extensive review of literature was carried out in order to understand the relevant concepts both in theory and practice.
Previous studies on venture capital, Uttar Pradesh and the problems faced by entrepreneurs in raising funds were consulted. Thereafter the constructs were developed based on previous research and discussion with venture capitalist and entrepreneurs.

ii) The constructs were operationalized using multiple measurement items in order to improve content validity. Content validity was kept in mind when developing the construct and items measuring the construct.

iii) Questionnaire were developed and pre-tested with several venture capitalist and entrepreneurs.

3. **Construct validity**

It refers to whether the constructs measures the concept it is supposed to measure. Construct validity was ensured in the following ways:

i) Earlier validated constructs and measurement items were used where ever possible.

ii) New construct and measurement items were developed on the basis of theory and earlier related research.