CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

Venture capital is a special kind of investment which generally invests in a business venture which offers handsome returns. VCs normally believe in high risk high return relationship in terms of their investment decisions, but at the same side it is also to be noted that VCs select very less business proposals for such kind of investment. There are number of factors which affect the investment decisions of VCs and because of these factors, there are asymmetric behavior in the decision process of VCs.

*The factors are as follows:*

![Figure 2.1: Factors affecting VC’s Decision](image)

In order to determine the selection criteria used by VCs while selecting firms for funding decision, various studies have been conducted in past. While selecting firms for investment decision, VCs consider an evaluation process (Barry, 1994; Fried & Hisrich, 1994). Various studies have concluded in their research that qualitative
factors like experience and personality of the entrepreneur and their team play most important role in the selection process of a firm for VCs funding decisions. Wells (1974), MacMillan et al. (1985), Ray (1991), Ray & Turpin (1993), Ramón et al. (2007) whereas MacMillan et al. (1985) and Muzyka et al. (1996) emphasized on a very different factor of selection criteria i.e. ownership and uniqueness of a product or service. Fried & Hisrich (1994) and Tyebjee & Bruno (1984) investigated and analyzed the significance of market growth and its link to competitive advantage. Poindexter (1976) and Pandey & Jang (1996) investigated the quantitative features of such kind of funding and emphasized on investment return as a key factor of funding decision. However previous studies have investigated the general purpose factors affecting selection of a venture but did not investigate the factors related to a concern economy and specific sector.

2.2 Selection Factors and Key Investment Objectives

Investment process describes the entire process of deal origination and its finalization. It is basically an activity which starts with origination of deal and proceeds to screening, evaluation, deal structuring and exiting (Tyebjee and Bruno 1984). Gompers and Lerner’s (1999) stated that this process actually starts when funds have been generated and ends when funds are returned under a venture capital cycle, which includes investing, monitoring, adding value and exiting. The investment process can also be termed as deal flow generation, investment, post-investment involvement and exit (Hall and Hofer 1993; Fried and Hisrich 1994). However the study did not disclose that this cycle is applicable for all sectors or not with reference to an economic condition.

The first work in the area of determining selection criteria was done by Well’s (1974). The study was conducted with eight venture capital companies using personal interviews and concluded that such kind of decision making is affected by factors like skills related to marketing, financial and manufacturing concern, plans related to exit of investment, managerial sincerely, aspects related to market and engineering skills.

Poindexter (1976) with a sample size of 97 firms investigated that quantitative and financial factors are the key factors of investment decision which are generally based on returns, rate of interest or dividends, tax factors and venture
development stage. However application of venture development stage is not disclosed for various sectors.

Tyebjee and Bruno (1981) through telephonic interview method with 46 VC firms analyzed that the main problem in the investment determination of venture capital was the less availability of opportunities for investment purpose, however Tyebjee and Bruno (1984) with same 46 companies highlighted some factors which VCs analyze while selecting a firm for funding decision such as management skill and history, market size, rate of return, market position, financial history, venture location, growth potential, barriers to entry, size of investment, market/industry expertise, venture stage and stake of entrepreneur. They categorized the criteria into five groups: market attractiveness (size of market, market need, market growth potential and access to market), product differentiation (uniqueness of product, technical skills, profit margins, and patentability of product), managerial capabilities (management skills, marketing skills, financial skills and references of entrepreneur), resistance to environmental threats (protection from competitive entry, protection from obsolescence, protection against downside risk and resistance to economic cycles), and cash-out method. They also determined that market attractiveness along with product differentiation are the indicators of return prospect and the managerial capabilities together with resistance to environmental threats are the indicators of risk level. However the outcome of classification of factors on the basis of firm’s valuation was not available in the work.

MacMillan, Siegel, and Subba Narasimha (1985) based on the work done by Tyebjee & Bruno (1981) grouped the selection criteria of VCs as the entrepreneur’s personality (capable of sustained intense effort, able to evaluate and react to risk well, articulate in discussing venture, attends to detail and compatible personality with investors), the entrepreneur’s experience (thorough familiarity with the market, leadership in past, track record relevant to venture, entrepreneur referred by trustworthy source and reputation), product/ service features (proprietary product, market acceptance of the product, development of functioning prototype and high-tech attribute of the product), market features (growth aspects, existing market, investors’ familiarity with the market, low threat of competition during the first three years and ability to create a new market), and financial considerations (at least 10
times return in 5 to 10 years, investment is easy to liquidate, at least 10 times returns within 5 years, subsequent investment and participation in later round of investment). The study was conducted using questionnaires method from 102 respondents who were members of the National Venture Capital Association (NVCA) and found ten most frequently rated criteria: capability for sustained intense effort, familiarity with the market, at least 10 times return in 5-10 years, demonstrated leadership, evaluates and reacts well to risk, investment can be made liquid, significant market growth, track record relevant to venture, articulates venture well and proprietary protection.

**MacMillan and Subba Narasimha** conducted a study along with **Zemann (1987)** to follow up their work of the year 1985 in continuation to figure out the evaluation criteria based on successful and unsuccessful ventures with 150 ventures consisting 25 screening criteria. Certain categories of criteria were investigated which broadly classified into following three classes:

i. Entrepreneurs who lack experience, staying power, a product prototype and a clear market demand.

ii. Entrepreneurs who in spite of good credentials face early competition.

iii. Entrepreneurs with exceptional staying power but who easily lose the market competition because of lack of product protection.

The study reveals various dimensions of entrepreneurs and explains the importance of entrepreneur’s track record in valuation process.

**Khan (1987)** took 36 venture capital companies as sample size and using questionnaire method found that towards a successful approval for a deal, it is more important to have a quality product followed by focus of investee towards the utmost desire of investment. Innovation and creativity are also to be considered as leading factors of venture’s success. It is to be noted that identified factors may or may not be relevant to all economic condition and may create less applicability on firm’s selection in such conditions.

**Fried and Hisrich (1994)** reinvestigated the selection and evaluation criteria and brought some significance clusters for existing evaluation criteria such as: concept, management and returns out of which concept was based on potential for earnings, growth, viability and novelty of the project, competitive advantage and
reasonable overall capital requirements. Several attributes that VCs want to see in managers are personal integrity, track record, realistic risk identification and risk dealing, strong work ethic, flexibility, awareness of business aspects, managerial expertise and leadership capabilities. Finally, the three components of returns that have been found include exit opportunity, potential for rate of return and complete returns. The consideration of risk and its type has been considered as an important part of return so that there should be a link between risk, its type and association with the return.

Muzyka, Birley, and Leleux (1995) emphasized on the various dimensions of management perspective and suggested that adequate preference should be given on availing an opportunities which tries to build up a sound management structure, financial concerns and other important variable based on branding and placing of market. However economic conditions and structure of target market should also be studied for a proper valuation process.

Most of the studies which primarily worked on the determination of selection criteria of VCs for selecting a firm for investment or funding decisions are based on a common practice and suggest almost same factors. Rah, Jung, and Lee (1994) replicated the study done by Tyebjee and Bruno (1984) and MacMillan (1985) where the significant factors of selection criteria were divided in to six groups based on managerial capabilities, market attractiveness, superiority of product and technology, financing ability, availability of raw materials and production capability.

Manigart, Wright, Robbie, Desbières & De Waele (1998) examined certain success factors related to valuation process of VCs in selecting a new business proposal and investigated that in order to make an investment decision; VCs first gather the required information from different sources, estimate the risk and evaluate expected returns.

Shepherd (1999) used conjoint analysis method considering 66 venture capital firms and analyzed certain important investment criteria and highlighted that industrial experience has high importance among all other selection factors and also stated that VCs pay more attention to most important factors and ignore least important factors during screening process. The study pointed out the importance of
least important and most important factors but did not disclose the intensity of this importance for different set of proposals.

**Zacharakis and Shepherd (2001)** emphasized on the importance of intuition as a factor and disclosed that VCs generally decide about the funding decision based on past track record of business venture which shows the successful or unsuccessful attributes related to funding decisions. The study highlighted that most of the experienced VCs use their intuition during screening process of a firm, if provided information is asymmetric (Khan, 1987; MacMillan et al., 1987; Zacharakis & Shepherd, 2001; Beim & Lévesque, 2004). It is to be noted that intuition is a qualitative factor and might differ among various investors during assignment of weights to various selection factors.

**Riquelme and Watson (2002)** examined the elements causing success and failure of ventures and discussed the key factors which describe the success of a venture which are related with various attributes such as managerial abilities, factors related to product orientations and financial aspects whereas inexperience of management team, poor planning of marketing aspects, financial aspects, unawareness of market and product orientation, adverse economic conditions are the factors which lead to failure of the venture.

**Riquelme and Watson (2002)** examined that VCs screen the conditions of venture about the attributes of their success and their funding decisions are based on these successful attributes. They further stated that previous empirical studies argued that the factors determined about the selection criteria are relevant and lead to success of venture; however it is necessary to highlight the success rate of these identified factors in the success of venture funding. The significant gap found in the study was related to the determination of key attributes of success and failure of investment decision related with sector and economic condition.

**Lerner (2004)** examined that in an attempt to get the success in the adverse business environment, entrepreneurs are required to adjust their processes as per the current condition and this flexibility might be considered as one of the important success factors for various ventures. Lerner (2004) followed up all relevant criteria determined in the previous empirical studies such as managerial capabilities, market
need, market size, use of technology and also stated that customer feedback, if taken, can also be considered as an important factor of venture success. The problem with the study was that it reviewed all relevant factors investigated in previous literature, but did not determine any new criteria pertaining to investment decision process.

**Meyer & Mathonet, 2005** investigated that in order to select a deal for investment purpose, investor return and management fee are the main components of such kind of decision process.

**Achleitner, Kaserer, Wagner, Poech and Brixner (2007)** discussed about the significance of innovative practices and accuracy in marketing timings as key factors of success of a venture and concluded that academic background may provide a better insight in the development and success of a venture.

**Beuselinck and Manigart (2007)** described the role of public intervention in the investment process and discussed that their intention is not so important from the return aspect of funding decision but they may be considered as a source of investment to the sectors who are not able to get financial facilities from private VCs.

**Hochberg, Ljungqvist and Lu (2007)** discussed about the significance of networking among the VCs in order to facilitate the performance of a fund. Study showed the positive relationship among the VC network and passion to work for survival of their portfolio companies. They also investigated that investment managers having excellent skills and able to perform the tasks with good background related to successful investment projects could strengthen the VC’s network position. However networking also depends on multiple other factors like market position, growth opportunity and past record.

By exploring the outcome of previous empirical literature which investigated the key aspects of VCs during selection process of a firm, **Worrall (2008)** discussed the attributes of pre and post term-sheet due diligence and highlighted the importance of due-diligence in the valuation process of a firm. However due-diligence related to a deal opens the question for success and failure of an investment decision.

**Petty (2009)** emphasized on certain limitations of VCs investment process which generally are affected by number of factors such as availability of finance (fund
capital), optimal portfolio construction, submission of investment proposal and its timing (because of the availability of required fund to be invested) and stated that these factors determine the selection criteria and its relative relevance. It is to be noted that risk associated with the financial factors also plays a vital role in the investment process of a deal.

Chen et al. (2009) examined two major factors of entrepreneurs related to decision making process and stated the significance of preparation of business plan and planning of project. However planning of project depends on pre phase of investment decision and thus should be based on different set of factors whereas business plan is based on process which should be based on different set of factors.

Kollmann and Kuckertz (2010) highlighted that factors determined in previous empirical studies may be useful to entrepreneurs in achieving their funding requirements from VCs but could not be useful to VCs while selecting a successful venture for funding decisions. They discussed the uniqueness of uncertainty with regard to valuation process of every factor which occurs during the investment process at different stages. The study opens the question to understand the difference between successful and unsuccessful ventures with regard to funding decisions.

Ljungqvist and Lu (2010) emphasized on the importance of link between local VCs and foreign VCs in order to make cross-border investments available for projects. In the process of funding a deal, local VCs identify and create a funding proposal and invite foreign VCs who wanted to make significant investment in the proposed deal.

Alperovych (2011) stated that it is important to select highly profitable projects in order to fulfill the return requirements of investors and hence selection of portfolio is to be considered as one of the important factor. However the determination of profitable project during startup is a matter of concern during selecting process of an investment decision.

Geronikolaou and Papachristou (2012) studied the relationship between VC investment and patents and investigated that VC investments do not impact patents but patents impact VC investment, which determines innovation as one of the
important factor of investment. The study emphasized the importance of patent in the investment process of VC and disclosed its impact.

**Gemson et al. (2012)** investigated the intensity of risk involved in the project along with the increase in the investment. According to the study, Private Equity backed projects are more successful as compare to non PE backed projects and it also helps in controlling the risk associated with project which also contributes in the economic growth. However key important factors related with financial considerations of private equity and non-private backed firms are still a point of discussion.

**Guo and Jiang (2013)** highlighted that there is no impact of VC’s investment in the overall dimensional activity of a firm which is related with growth and innovation. This could be due to the commercialize nature of VCs pertaining to firm’s growth (Engel and Keilbach, 2007). However there could be more factors related with growth and innovation aspects of a firm which could lead to the success of such kind of investment.

**Faria and Barbosa (2014)** determined the impact of investment stage in the process of VC investment, its relationship with firm’s creation and innovation. The study resulted that VC investment in later stage of the firm brings more innovative results and helps in positive growth in firm’s creation. Nevertheless, outcome leaves open a question regarding stage wise investment decision of VCs for different types of firms.

**Hellman and Thiele (2015)** determined the interrelationship between the Business Angels (BAs) and VCs and highlighted that there is an interdependencies in terms of funding and deal flow between these two types of investors. BAs are dependent on VCs for funding part whereas VCs needs BAs for deal flow.

**Dutta and Folta (2016)** analyzed the relationship between BAs and VCs and studied the impact of concerned firms on innovation in terms of patent applications. It has also been concluded that there is no impact of VC funding on the firms which have got funded by BAs in terms of innovation and growth and in some cases, VC funding has more valuable outcomes as compare to BAs funding. However this is a
point of discussion that whether this funding comparison will be applicable to all economic conditions pertaining to sector investment or not.

2.3 Research Gaps

Several studies in the past investigated important factors of selection criteria opted by VCs for selecting a firm for investment purpose. The studies are common in nature and brought the factors related to marketing, entrepreneurs and financial aspects, however no specific study found which focuses on country and sector specific target of VC firms for funding decision.

The present work aims to fulfill following gaps:

i. There seems to be no work which primarily focuses on key aspects of selection process opted by VCs in screening process of IT firms based on economy specific conditions hence we determined VC’s key selection criteria during screening process of IT firms in Indian scenario.

ii. Previous studies determined the key investment objectives of VCs for their investment decision but did not work on their classifications, hence in present study we classified key investment objectives based on social, economical and financial aspects.

iii. There seems to be no work which study about the relationship among the choice of factors and assignment of weights to each factor by different investors during screening process of IT firms in Indian context.

iv. There seems to be no study which offers a platform for making a sound business plan by IT firms in Indian context which includes key factors opted by VC firms during the selection process.

v. None of the work found which analyzed the other significant dimensions of VC’s management team related to their funding decision.