Chapter 2

Review of Literature

The current chapter has stated critical review of several studies in order to identify the existing research gap and justify the reason for conducting this study. The reviews mentioned below are not exactly matching with the title of thesis as the exit strategies by venture capital firms was identified as less explored area by past researchers. Before selecting the past studies to be included in this chapter, the researcher developed a strategy to identify the studies for literature review. The papers were downloaded from all reputed journals published by Elsevier, Sage, Springer, Inderscience, Taylor & Francis, Wiley, Emerald and others. The researcher used keywords like Venture capital, exit behavior of venture capital, exit route of venture capital, growth and development of venture capital industry, determinants of exit decision, and strategies for exit decision by venture capital etc. to find the relevant papers. More than 200 papers were downloaded matching the criteria mentioned by researcher. At the end, studies found more relevant meeting the objective of current research were shortlisted and a critical review of those studies has been given below in a chronological order. The chapter is concluded with identification of research gap and giving the statement of research questions addressed in further chapters.

Hammer et al. (2018) conducted an extensive study based on exit transactions by venture capital firms in 86 countries from 1997 to 2010. The authors searched for 7465 portfolio companies and 9548 venture deals. The final data consisted of a sub-sample of 5093 buyouts having all necessary information related to exit. The study examined the impact of performance orientation (PO) on operating performance. For this, 946 transactions were from twenty six European countries while 5093 transactions were global deals and linked to 67 countries. The high level of performance orientation can be
favorable or detrimental to buyout performance. The findings of the study showed that high level of PO was detrimental to buyout deals. The reason for this was “spillover” effect which was subsidized because of the owner of private equity firm. The cultural background may result in difference in PE performance and value creation process.

Chinchwadkar and Seth (2018) through this paper introduced the new category of factors ‘PE Investor Characteristics’ and they test if this category plays an important role in the choice of exit method. The analysis of marginal effect show that the size of the syndicate and financial services dummy are significant factors for all the exit outcomes except buyback. The presence of foreign investors in the syndicate matters only in case of buyback. The finding was that in buyout transitions, the probability of an IPO exit is less than that of a strategic sale.

Cristiano et al. (2017) conducted a study related to entrepreneurial finance. The study revealed that in addition to existing sources of funds like venture capital and angle investment, the new ventures can consider some new sources of finance too which includes, crowd funding, bootstrapping and tradition way of debt financing. The authors debated on use of traditional and new sources of entrepreneurial finance and how these can change the future of fund raising capacity of entrepreneurs.

Antonio (2017) focused on the Brazilian firms to study the factors causing success of venture capital firms and private equity firms. The researchers pointed out the role of limited partners in investment committees (ICs) to participate in investment process. The results exhibited that the existence of ICs was resulting in underperformance of various funds. It was also stated that the funds managed by some independent entities were over performing in comparison to those managed by bank affiliates. Another major finding of their study showed the positive impact of retention in equity control on the success of investee companies.
Elfenbein et al. (2017) in their report examined the behavioral mechanisms that cause delay to make decisions about when to exit a failing venture. The data collection was mostly done through game that was used to collect the reviews of participants that participated in it. As the assessment determined their compensation for belief that was recorded in all the games periods that were played. The findings that they suggested include the ways to reduce exit delay and they suggested that recruiting managers that are less susceptible to knowledge overconfidence as it is trait that they associated with exit delay.

Mishra and Bag (2017) in their report focus on which facets of VC deal leads to syndication decision in a deal. In first part they try to find out the determinants of syndication decision. In second part they analyze the distinguishing features of VC deal which catches the attention of other VC investors. They found out that the investors prefer to invest in stages in an uncertain business rather to put the entire fund at one time.

Pisoni and Onetti (2017) conducted a study on startups exit and compared strategies in Europe and the USA and concluded that startup acquirer both from Europe and the USA, are more inclined towards buying local companies. Geographical & spatial distance plays a major role in cross-border transactions. And also found that European startup ecosystem has shown signs of development and there has number of exits by European companies and US companies have shown a significant interest in European companies. Both the US and European companies are targeting early stage startups.

Azarmi (2016) has done of the prominent studies which have focused on the significant factors affecting the exit decision by venture capital firms. This study was based on Spanish venture capitalists for which the researcher formed a group of 15 members to apply Delphi method. These members were categorized into four major categories, i.e., investees, venture capitalists, entrepreneurs and last but not least, i.e., the
external environment. The findings of the study showed that the venture capitalists consider the suggested list of determinants of exit decision. Also, it was mentioned that the venture capital firms should not only consider the factors related to investee and VC firms. But, the external environment and entrepreneurs of the venture should also be given due importance while determining the exit decision. The study gave due importance to external environment while devising the exit decision.

Kong et al. (2016) conducted a study in Canada. Their study discussed the increasing interest on growth in flow of investment by foreign investors like US, Europe and Ireland. The study stated that the countries which are geographically situated near to Canada were investing large amount in comparison to other countries. The study highlighted the importance of relatively large venture capital provided by foreign investors than the domestic venture funds. Moreover the success rate of exit by foreign VCs was found more in comparison to domestic VC funds. The success rate of exit was measured through more availability of capital, IPOs and reduced time to exit. The researchers addressed the other side of the story too. Because of large investment by foreign VCs in Canada, the venture firms in Canada were getting less payment per dollar investment made by VC and it increased the risk of Canadian ventures/founders in monetary terms and at early stage of their ventures. The implications of exit through M&A were also discussed. The researchers highlighted many aspects of venture capital market in Canada. The authors considered five categories of exits, i.e., IPO, trade sale, secondary sale, reverse takeover and write off. The study also revealed that IPOs and trade sale were two most preferred routes of exits by both foreign VC syndication and domestic VC syndication. The VC-backed firms were more benefited by M&A exit route whenever these were financed by foreign VC syndication.
Blum (2015) examines the factors that contribute to independent venture capital successful exits. It focuses on due diligence and staging process. Four factors are detected for independent venture capital. Successful exit rate that are diseconomies of scale, quick exits rather than building long term sustainable companies, exit independent fund flows, financial and market forecasts that appear to trump market conditions. When the independent venture capital realizes return on investment, it is considered to be successful exit.

Cannice et al. (2015) made an attempt to see the relevance of research on venture capital on the decision of venture capitalists prevailing in market. The researchers used Delphi method to analyze the response of professional venture capitalists. The research also considered the issues like environment of venture capital industry, the most relevant topics of venture capital research and future of venture capital industry etc. It was clearly indicated by the findings of study that venture capital professionals want more of future research required on venture exits, strategies of venture exits, fund raising and performance of exit decision. The researcher also documented that the changing scenario of venture capital industry will help to shape the future research too. The major constraint of this study was its scope. The study was based on Silicon Valley only.

Cecile and Marc (2015) analyzed the investment harvest expectation of a large Canadian Angel Group. They used the classical Perspective, The Strategic Dimension, Regulation and market dimension and market conditions to determine the results for their research. The method used was respondents and data collections. The results of the study show that angels acting as group prefer more on the trade sale exit.

Espenlaub et al. (2015) studied the difference between exit timing of domestic investments and cross-border investments. Their study was primarily based on UK and Ireland to study domestic investments. The difference in timing to exit was examined for
two routes of exit, i.e., M&A and IPO. It was identified by researchers that the cross-border investments were taking less time to exit than the domestic investments. Although no significant difference was found in both exit timings of both the domestic investments.

Hain et al. (2015) studied the determinants of cross-border venture capital investments in emerging and developed economies and found that relational trust among foreign VCs has helped to bring foreign venture capital flow into developed countries. The emerging economies are seeking not only VC funds but more specifically foreign expertise. However, high cultural distance, under-developed investor, diverging business ethics & practices pose obstacles to the development of these economies.

Joshi and Subrahmanya (2015) aims to study the information asymmetry risks in venture capital investments and found that the transnational VC firms have inadequate local networks hence they prefer to invest in ventures that are run by entrepreneurs with some founding experience and syndicating with regional VC firms which mitigates their risk of inadequate local networks. Also, transnational VC’s don’t invest in early-stage deals since they have a great magnitude of information asymmetry associated with it. When it comes to India-specific transnational VC firms resist themselves from businesses which are owned by family and prefer to fund only first-generation entrepreneurs.

Cumming and Johan (2014) revealed that the more experienced is a venture capital firm, the more it has the capacity to reduce the information asymmetry. The difference in the experience of VCs results in biasness in the selection criteria of different VCs to take investment decision. An experienced VC has better diversified networks and geographical networks which reduced the information asymmetry. Therefore, a client company of a portfolio company which has close proximity to a VC syndicate have broader network has more chances of successful exits through exit routes like, Initial Public Offerings and mergers & acquisitions.
Kaur (2014) aims to study the venture capital mechanism, to know the working of venture capital firms and funds in India and to understand the present scenario of venture capital financing. Secondary data was used for this study i.e. books, newspapers, websites and journals. The various features of venture capital are long term investment, high risk, equity participation, investment is illiquid. In a country like India there is a lack of capability in accessing venture projects because of lack of prior experience. Venture capital plays an important role in developing countries by helping people with ideas in rehabilitation of risk. For safety there should be a legal agreement between the investor and the investee. The VCs should recognize business opportunities, develop business plans and find the candidates who most suitable for it. There should be a training programme for VC managers to avoid high risks.

Lee and Lee (2014) in their study explored the impact of the entrepreneur's pre-entry industry experience, past entry labor on entrepreneurial exit and general education. To achieve the objectives the author generated three hypothesis; (Entrepreneur industry experience is positively related to successful entrepreneurial exit of startup) (Entrepreneurial education level is positively related to successful entrepreneurial exit of a startup) (Entrepreneurlabor is positively related to successful entrepreneurial exit of a startup). The finding of the study indicated that industry experience and general education has no significant effect on SEE. The findings also showed that work hours of entrepreneur were related significantly to SEE , this highlighted that the importance of entrepreneurial labor in exiting the market through M and A.

Song et al. (2014) took a sample of Korean firms to study the alternative exit roots taken by startups. For this, data was collected from 2000-2010. The study focused on the preferred route by startups to get listed on the stock exchange. For this, the firms were asked to choose among IPOs, sellout and reverse takeover as their preferred route of exit.
The researcher further pointed out that the firms which opted for the reverse takeover were worse performer in comparison to those which preferred IPO for exit decision. There was no significant difference found in the performance of firms on the basis of whether they backed by VC funding or not. The authors found future scope of research in examining the impact of combination of reverse merger and PIPE (private investment in public entity) on the decision of going public by the startups.

Ewelt et al. (2013) in their report analyses the choice of exit channel pot of secondary buyout, trade sales, and public offering as it is of utmost importance. For this they created a sample which consists of 1435 European buyout exits with complete data during 1992 - 2010 period. Their sample also covers the peak of secondary buyout wave during the mid-2000s. Their analysis reveals that the economic context and conditions in the capital market significantly influence the choice of exit channel.

Ozmel et al. (2013) took a sample of 1899 venture backed bio-technology firms to study their impact on the exit decision of start-ups. The findings of the study indicate that the ventures capitalists invest more money in startups which are expectations to generate high financial returns at the time of exit. And the startups which have obtained more venture funding are expected to get more funds from alternative sources in future too. The central VCs having more networking, more channels of information and more syndicate financing can help their portfolio companies to enhance the possibility of successful exit.

Pierrakis (2013) conducted a study to examine the impact of economic/financial crisis of a country on the timing to exit by VC firms. The study revealed the impact of financial crisis on the life cycle of start-ups. The author took a sample of companies based on UK and the exits which took place from 2000 to 2009. The study considered various types of exits like acquisition, LBOs, MBOs, asset acquisition, MBOs and MBIs, IPOs, mergers, reverse mergers and public investment etc. It was identified that out of a total of
807 exits, sixty two percent of exits were in the form of acquisition, while 18 percent of exits were in the form of Public investment-IPO. Management buyouts and asset acquisitions were among other types of exits. The number of investments made by VC firms were more during 1997-2004 while the number of exits were maximum in the year 2005. The other important issue addressed by the researcher was related to time to exit from VC investment. The patterns obtained for different time periods were quite robust. It was identified that it took three more years to realize return from VC investment in comparison to the previous financial crisis. Because of this reason, VC firms were becoming more concentrating as time to exit was increased resulting in more rounds of funding by VCs.

Aizenman and Kendall (2012) discussed about the impact of quality of regulatory environment in exit markets. The authors identified that US and Western Europe were usually preferred to be exit markets due to prevailing quality of legal environment in these markets. The venture capital firms are also interested to know the nationality of co-investors and acquirer too as the regulatory environment of exit markets affects the exit decision.

Chandra & Sarkar (2012) the study aims to investigate into the funding mechanism of VCFs through the perspective provided by the fund manager of VCFs with special reference to Inventus Capital Partner. The study shows that the investment process of VCFs in India generally takes place in five stages (i) deal sourcing and initial screening (ii) comprehensive due diligence (iii) term sheet and negotiation (iv) project funding & monitoring (v) disinvestment & exit. And the most favored evaluation criteria are entrepreneur characteristic/ team characteristic and the least favored is personal reference.

DeTienne and Melissa (2012) define exit as founder intention to leave, moving away from ownership and decision making.
Haritha et al. (2012) in their research in 2012 analyzed to know the sources to finance the venture capital, different perspective areas of venture capital in Indian financial sector and to know the sectorial perspective regarding venture capitals. The report analyses that the need of advertising the different opportunities in all sectors and providing for Indian talent pool is there. They also propose that there is need of building brand image, opportunities in Indian market, Sustainability to build competitiveness and developing Indian economy in overall sector.

Ibrahim (2012) conducted a study on exit in venture capital. For this, the author debated the option of exit in venture capital. The alternatives other than IPOs and trade sales were discussed. The author studied the possibility of sale of individual owner’s share in start-ups and venture capital in secondary markets. The researcher discussed the role “VC secondary markets” were there where individual investors can trade their stocks in start-ups and LP stake in venture capital in increasing the liquidity for investors. It was a unique study of its kind where issues related to law and economic analyses were discussed which could result in increased entrepreneurial activities. The researcher put important issues related to VC secondary markets for academicians and policy makers. To develop such a market place, the author also highlighted the role of lawyers and law in making the broader framework. Further, discussing the prominent role to be played by the lawyers, the author talked about taxation issues, regulatory aspects and exiting security market regulations need to be carefully addressed by lawyers.

Panda (2012) in her study documented that how capital structure of the enterprises affect the investment decision by the venture capital firms. The study put forth interesting facts. First of all the framework of the study was established by elaborating various aspects of capital structure theories and evidences existing in past literature. With the help of this, the researcher proposed several variables to examine the capital structure of the
enterprises. The major finding of the study was that the venture capital firms were not found risk takers. The basic nature or feature of VC firms is their risk taking ability and investing in new ventures. But these were also found conservative like banks and other financial institutions that provide funding to new ventures based on their stringent criteria related to capital structure components. So, the study was a breakthrough in nature as it negated the general opinion that venture capital firms are high risk takers. In fact, the researcher revealed that these were just an alternative to financing by the entrepreneurs among several other existing in market place.

Annamalai and Deshmukh (2011) studied about the recent trends in the Indian Venture capital and private equity industry. During 2004-2008 a total of 1912 VCPE transactions involving 1503 firms were considered for analysis. This study analyse the investment lifecycle entirely from investments to monitoring, till the time of exit. There are short duration of investments in the VCPE industry. To achieve long term investments in the VCPE industry it is suggested that a strong domestic VCPE industry which can stay invested in Portfolio Company for longer term is required. For its growth in the country, early stage investments should be encouraged. And also there is need to increase the time intervals between the successive funding rounds. The investors should also co-invest with VCPE investors, if required.

Schertler and Tykvova (2011) stated that the risk involved in VC funding can be reduced by investing in cross-border ventures. The authors exhibited that the geographical risk can be diversified through investment in cross-border ventures. Also it signals the importance of quality of investment by selecting limited number of partners. It can enhance the capacity for future fundraising too.

Cumming and Johan (2010) conducted a study to examine the duration of VC exits. This study was based on more than 2000 VC exits of which 557 exits were in
Canada while 1607 exits happened in U.S. The duration of this research was 1991-2004. The findings of the study revealed there was agency problem between entrepreneurs and Venture Capital firms which was affecting the duration of investment by VCs. Further, the more a VC was able to add value to the enterprise, the longer the duration was found for investment by VC. The authors also compared Canadian VC market and U.S. VC market. The results thus obtained indicated that the Canadian VC market was behind U.S. market on several grounds. Although, IPOs was a successful route of exit by Canadian VCs but the number of IPO route was less in Canada when compared with US. Interestingly, the duration of investment in IPO exits was shortest duration in case of Canada relative to investment made by U.S. VCs. The study also revealed less involvement by Canadian VCs in comparison to U.S. VCs.

Cumming and Dai (2010) addressed the issue of cost involved in exit decision. Their study revealed that it is easy to consistently monitor an investee company which is located near to VC firms. It affects the overall cost of monitoring as well as affects the cost of exit too.

Burns et al. (2009) conducted a study on start-ups from bio-technology and medical devices sector and looking for finance from venture capital firms. It was an extensive study and based on 8663 start-ups related biotechnology and 889 start-ups related to medical devices. The start-ups for which data regarding financing, IPO dates and acquisition was available were a part of the study. The findings of the study showed that the venture capital firms were playing prominent role in executing the successful exit rather than to foster the entry of new firms. The size of venture capital firms in terms of investment was found increased in various sectors. It was also identified that with more number of successful exits in technology based firms, the investment in these sectors was also increasing and commercialized by venture capital firms.
Patzelt et al. (2009) this study aims to analyze differences between portfolio strategies of VC’s active in the life science industry in North America and Europe. The study shows that European life science VCs have a marginally lower tendency when it comes to investing in geographic proximity than North American VCs. The study also reflects that European VCs are more inclined towards investing in ventures assisting the established therapeutics and diagnostics markets, while North American VCs invest in medical technology & healthcare/IT firms.

Swildens Hans (2009) highlighted some of the challenges faced when investing in private equity and specifically, venture capital as well as the opportunities presented by the availability of secondary market solution. The author concluded that venture capital market faces the imbalance between the number of founded companies that have achieved an exit through the IPO and M and A markets. Due to the experience and specialization, secondary funds operating know how they have tailored investment solutions.

Ball (2011) analyzed whether market timing affect the exit choice for venture-backed startups and found market returns tend to be significantly lower, but remain positive, after an IPO than before. Highly valued startups tend to exit via IPOs. The study shows that VC’s can’t time market slowdowns across all industries. Also the chances that an exit takes in the form of IPO are correlated positively with the number IPO issues over the past three months.

Cumming and Johan (2008) conducted a study on all Canadian and US based venture-backed exits from 1991 to 2004. The authors examined the impact of information asymmetry on the exit outcomes. It was exhibited by the results of their study that the lesser the information asymmetry the more are the chances of successful exit. In addition to information asymmetry, the agency cost also affects the success of exit outcome. It was further stated that the information asymmetry and agency cost largely depends upon the
nature or characteristics of VC firm and the design or structure of the agreement between venture capital firm and enterprise. In addition to this, it was also documented that the corporate venture capital firms were more frequently related with acquisition as exit route, government backed venture capital firms for more often considering buybacks, secondary sales and write-offs as exit route and limited liability partnership venture capital firms were more associated with IPO route and acquisition route of exit. Also the write-offs were used more in case of small investment by corporate venture capital firms.

Dimov and Murray (2007) discussed about the determinants of seed investments. A large international sample of venture capital funds over a period of 1962-2002 (40 years) was taken for analysis. It was observed that established VC firms were able to extract higher benefits than young firms from making seed investments. On the other hand it was also observed that age has nothing to do with the number of seed investments for European funds. According to the study the fund year is positively associated with the proportion and number of seed investments.

Klonowski (2007) investigates the venture capital investment process in emerging markets of central and eastern and Europe (CEE). Including Poland, Romania, Russia, Slovakia, Hungry, Czech Republic. A two-phase interview process was conducted. This study confirms the existence of nine-stage model that is applied by the VCs. It provides a better definition for difference between the specific stages that occur during the evaluation of an investee firm. Document Channel, information channel and decision channel are the three basic channel that defines the model.

Cumming et al. (2006) studied various routes of exit. Their study reflected that out of given list of exit vehicles, the venture capital firms must consider the objective of maximizing the capital gain. The study also revealed an important aspect that while selecting the exit route or vehicles, the new owners’ ability to understand the information
asymmetry will be of great help to maximize the capital gain. The lower the level of information asymmetry, the higher is the chances of a profitable exit.

Liu and Chen (2006) discussed about the management of risk by Taiwanese venture capital firms operating in China. To analyze the data content analysis was used. From 13 venture capital principals, agents, and third parties qualitative and open ended responses were collected. It was drawn that the sequence of importance in risk management is exit, monitoring, investment, screening/analyzing, funds raisings and deal generation. It also provides solutions for global businesses which are attracted to the prospects of investing in mainland china.

Pearce and Barner (2006) found empirical evidences of duration of investment by venture capital firms. They said the venture capitalists invest the funds of their stakeholder for a period of 10 years in a portfolio of companies.

Chary (2005) conducted a study to know about the role of venture capital in promotion of new enterprises. The objective of the study is to understand the venture capital financing system of APIDC-VCL and also to find the industry, region and state-wise investment distribution of APIDC-VCL. This study is conducted from 1995-2000. The sample consists of Computer software, specialty chemicals, Milk products and operations and Management (O&M) of Ports which were randomly selected. Questionnaire and personal interview method is used followed to collect data. Statistical tools such as chi-square, likerts scale, ratios and percentages are applied. The study suggests the need for venturing programmes for the growth of this industry and buy back of shares as an exit option. APIDC-VCL should not give unrealistic growth projections.

Cumming et al. (2005)in their study examined the impact of existing liquidity position of the market on the investment decision taken by venture capitalists. For this, the
authors focused on the liquidity position of IPO exit markets. For this, an extensive data of 18,774 rounds of investment over a span to twenty years, starting from January 1985 till December 2004 was taken. The authors used multivariate regression model to meet the objectives of their study. The findings of the study indicated that the VCs give due importance to timing of exit while taking any exit decision. It was also revealed that liquidity conditions of the market affect the exit decision. In the situations of illiquid markets, the VCs prefer to postpone their exit requirement by selecting early-stage ventures and investment is made in them proportionately. And when markets are liquid, the VCs prefer to invest more in ventures which are at expansion-stage or later-stage and in such cases the time to exit is reduced in comparison to ventures which are at early-stage of their project. A negative relation was identified between possibility of investing in new start-ups at early stage and liquidity condition of exit markets.

Giot and Schwienbacher (2005) took a sample of 6000 ‘IPOs’, ‘liquidation’ and ‘trade sale’ deals of firms backed by venture capitalists after more than twenty thousands rounds of investment to study the timing of exit. These exits were related to biotechnology firms and internet firms. In case of an exit decision, both the type of exit and time of exit are of relevance. The researchers put light on both of these aspects. One of the attention grabbing finding was that in case of biotech and internet firms, the IPO exit was the fastest one. And regarding liquidation, the biotech firms were among the slowest ones and internet firms were the fastest ones to complete liquidation. The findings of the research suggested several aspects related to exit route and exit timings for venture capital firms.

Engel (2004) examined the performance of venture backed firms, the effect of venture capital company characteristics. It is evident that VC-backed performances differ a high variation of employment growth rates and a high share of exiting firms is evident. For the empirical analysis 770 venture backed firms were identified. A total of 921 observations
Cumming, Jeffrey and Macintosh (2003) conducted a study on the exit strategies of venture capital firms. In their study the issues related to partial exit in comparison to full exit were discussed. The findings of the study supported the hypothesis that the greater the information asymmetry between the selling VC and the buyer, the greater the likelihood of a partial exit to signal quality.

Manigart et al. (2002) provided the very first analysis of the internationalization of venture capital firms by analyzing risk assessment and information usage by venture capital firms in India. For this study executives from 31 i.e. 84% of the active venture capital firms were personally interviewed. This paper examines the behavior of venture capital firms in U.S., domestic venture capital firms in India and U.S. venture capital firms in India. In India foreign VC firms give more importance to product market factors and accountants reports. This study suggests that when foreign firms enter into emerging markets they should adapt local market conditions than replicating their own domestic strategies. According to the findings of the study different modes of operation are appropriate in different venture capital markets in which they seek to operate. It also draws attention to the importance of ways of accessing information and entry modes of venture capital firms in foreign markets.

Shepherd and Zacharakis (2001) studied the exit decisions and exit timings are affected by the geography or location of the start-up too. Various studies have shown that the venture capitalist firms prefer to invest in companies which have more proximity to them.
Sorenson and Stuart (2001) revealed that the start-ups having more proximity to VC firms are usually preferable choice for investment by VCs. The reason mentioned was simple to understand as geographical close clients result in reduced cost of exit decision.

Mitra (2000) conducted one of initial studies based on Indian venture capital industry. This study was based on data collected from Indian Venture Capital Association (IVCA) from 1993 to 1996. A sample of 17 members of IVCA was taken and in-depth interview was conducted to examine the Indian venture capital industry. The study considered several venture capital firms sponsored by financial institutions backed by state and central government along with venture capital firms run by private entities. The study revealed that state and central government sponsored VCs have received several incentives therefore these need to be examined separately. Also, the scale of investment by government sponsored VCs also varies from private entities therefore both these categories should be assessed separately. The authored put forth several interesting facts related to, regulatory and tax framework for venture capital firms in India, the features of Indian VCs in terms of raising funds, sources of capital/funds for venture capital firms, various stages of investment by VCs, methods and instruments of financing by these VCs, the criterion for project selection and appraisal by VCs, and involvement of VCs in investee companies. The major findings of the study exhibited that Indian VCs were conservative in taking investment decision specially the private VC firms. The private VCs were found risk averters and found less interested in funding start-ups at seed stage.

Gompers (1996) conducted an initial study related to venture capital exits. The study testing the grandstanding hypothesis and made an attempt to show that the young venture capital firms were capital firms were taking companies to IPO stage earlier than the older venture capital firms in an order to build reputation. Their study was based on a sample of 433 IPOs backed by venture capitalists. In order to study the difference in the
approach of younger and older venture capital firms, the whole sample was divided into young and old venture capitalists. The study concluded that timing decisions by venture capital firm was affected by their urge to build reputation. An interesting outcome of the study was, the younger venture capital firms were more concerned about the number of IPO exits it has in the past rather than the amount of fund required. Also, due to grandstanding hypothesis and signaling effect, a large number of new venture capital firms entered in the market after 1978 which resulted in reduced average returns to venture capital firms.

Carter & Van Auken (1994) conducted a study on venture capital firms’ preferences for projects in particular stages in development. To study this a survey of 69 VCs was conducted and found that respondents had preferences for projects in different development stages and those who are interested in early stage are less concerned about management of risk but are more concerned about liquidity. And early stage investor favour IPO as the means of exit from the project with the expectation of high return.

Camp and Sexton (1992) examined the trends in venture capital investment, implications for High technology firms. The period of analysis considered 11 years of growth. The study focuses on 3 main trends that are movement away from early stage investments, increase in disbursements to low and non-technology ventures as a percent of total investment and changes in industry placement of first round financing. The study presented that current trends raise concern about the economic stability of U.S. and global competitiveness.

The major areas of research on venture capital include their screening and investment process. Methods of valuation by VCs, risks associated in venture financing, governance issues in venture financing, life cycle study of venture financing and exit routes of VCs and success factors in exit strategies etc.
## Table 2

*Selected papers highlighting issues related to exit decision by venture capital firms*

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Major Finding(s)</th>
<th>Issues Emphasized, Limitation and Scope of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achleitner et al. (2014)</td>
<td>Venture capital received higher returns with lateral rather than synergic trade sale, horizontal trade sale yield better results</td>
<td>Asymmetric information, synergies, IPO 716 trade sales What are potential conflicts between venture capital and Entrepreneurial regarding selection?</td>
</tr>
<tr>
<td>Annamalai (2011)</td>
<td>Examined the growth of Venture Capital and Private Equity industry in India. This study was based on analyzing the investment life cycle in its entirety, from the time of investment by the VCPE fund till the time of exit.</td>
<td>The results identified significant differences in respect of the use of asset valuation, earnings before interest, depreciation and amortization (EBITDA) and options based valuation methods. Significant differences were also identified in respect of the use of various sources of information for valuation, notably the use of business plan data, own due diligence, sales and product information and information relating to entrepreneurs Further research and confirmatory study are needed to corroborate analysis of investment duration, type and durations of exit</td>
</tr>
<tr>
<td>Agnihotri (2013)</td>
<td>Impact Firm level determinants on firm’s decision to go for acquisition. try to answer Drivers of acquisitions</td>
<td>Strategic determinants, firm level determinants, earning volatility, business group affiliation; acquisition Six years 2004-2010 random effect model used What will be preferred exit strategy option with a given level of volatility</td>
</tr>
<tr>
<td>Bayar &amp; Chem manur (2011)</td>
<td>Competition in product market impact exit decision ; E can make exit decision alone or in concurrence with VC at any particular time</td>
<td>Market product Competition, Jointly controlled firms, strategic or financial buyers; IPO, trade sale</td>
</tr>
<tr>
<td>Cannice, Allen, and Tarrazo (2016)</td>
<td>Provided insight on existing research, expected changed in industry</td>
<td>VC seeks more research in exit strategies - Discussed the most relevant research topics – exits, structural changes</td>
</tr>
<tr>
<td>Conradson and Eskilsson (2016)</td>
<td>Presence of one or more VC prolonged the duration and possible exit through IPO, affinity towards trade sale. presence of local VC increases probability of exit in a country</td>
<td>Syndication – IPO and trade sale, 20 VC applied Weibull distribution with gamma frailty Actual ROI upon each exit type, effect of syndication on quality of exit</td>
</tr>
<tr>
<td>Cumming et al (2004)</td>
<td>An analysis of the impact of Legality on the exiting of venture capital investments. We</td>
<td>Legality is a central mechanism which mitigates agency problems between outside shareholders and entrepreneurs, thereby fostering the mutual development of IPO markets and venture capital markets sample of 468 venture-backed companies from 12 Asia-Pacific countries, and these countries’ venture capitalists’ investments in US-based entrepreneurial firms further work will explore to robustness in international contexts, and with additional details pertaining to the structure of VC transactions and the governance that VCs provide to their investees.</td>
</tr>
<tr>
<td>Reference</td>
<td>Financial Contracts</td>
<td>VC Exit Outcomes</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Cumming et al. (2005)</td>
<td>Proposition that VC adjust their investment and exit decision according to liquidity conditions. When exit markets are liquid, VC opt to exit</td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Description</td>
<td>Exit Strategies</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Felix et al. (2009)</td>
<td>Partial exit associated with signaling of investment quality and asymmetry information</td>
<td>Asymmetric information, Portuguese – 11 VC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comparative analysis with other markets</td>
</tr>
<tr>
<td>Felix et al. (2014)</td>
<td>Competing risk model used to study the exit characteristics. When VC is associated with Financial intermediaries generally have quicker exits, role of degree of asymmetric information on optimal duration</td>
<td>Asymmetric information, Characteristic of venture investor, high technological firms Convertible securities; IPO, trade sale, write off 20 countries, 1330 firms questionnaire sent, Competing risk model The degree of uncertainty and speed of resolution</td>
</tr>
<tr>
<td>Giotand Schwienbacher (2005)</td>
<td>Both dimensions of exit type and timing are discussed simultaneously in framework of competing risk and Survival analysis. Biotech and internet firms have fastest IPO exits</td>
<td>Industry, stage of development syndicate size, liquidity Survival analysis and Competing risk Model</td>
</tr>
<tr>
<td>Gompers (1996)</td>
<td>Young venture firms take companies public to build reputation</td>
<td>Reputation; IPO Mostly tested for US venture backed companies IPO underpricing and investment characteristics</td>
</tr>
<tr>
<td>Gompers and Lerner (1999)</td>
<td>VC add values and provide network assistance</td>
<td>Value addition, networks</td>
</tr>
<tr>
<td>Ibrahim (2012)</td>
<td>Secondary market sale of individual ownership in private startup and VC</td>
<td>VC and individual secondary Market</td>
</tr>
<tr>
<td>Nahata (2004)</td>
<td>Studied focuses on determinants in context to three routes IPO, trade sale and WSP;</td>
<td>VC reputation, syndication strategic objectives of CVC; IPO, trade sale WSP General theory of VC Exit; venture expert -1000 companies 1990-2001</td>
</tr>
<tr>
<td>Neus and Walz (2005)</td>
<td>Discussion on reputation building behavior on exits</td>
<td>Reputation building is the major drive of exit decision</td>
</tr>
<tr>
<td>Pierrakis (2013)</td>
<td>Time to exit has increased post crisis as result impact is seen on new investments. VC now holds company for longer duration and capital blocked for more duration</td>
<td>Time horizon IPO Management buy in, acquisition 2000-2009 time frame data collected for 807 exits</td>
</tr>
<tr>
<td>Poulsen and Stegemoller (2008)</td>
<td>Firms will move to public ownership through an IPO when they have greater growth opportunities. Financial constraints leads to sell off</td>
<td>Liquidity and ownership, growth; IPO unique sample of 366 sell-outs and 366 IPOs</td>
</tr>
<tr>
<td>Balakrishnan and Annamalai (2011)</td>
<td>Summarizes the study related to exit route and exit timing</td>
<td>IPO trade sale buy back, secondary sale</td>
</tr>
<tr>
<td>Seth and Chinchwadkar (2012)</td>
<td>Economic condition drive both exit and outcomes</td>
<td>Asymmetric information and agency cost on different variable of exits – Industry characteristic – High tech, financial services, deal specific characteristics; IPO and acquisition IPO Venture intelligence</td>
</tr>
<tr>
<td>Schwienbacher (2002)</td>
<td>Monitoring and value ads significantly affect exits decisions. Convertible securities are not much chosen exit choice for EU in comparison to US.</td>
<td>Stage financing, monitoring value ads; IPO and trade sale. Self-collected data set by 104 European and 65 US VCS. Shortening of financing venture capital cycle. This will bring in reduce liquidity risk with more exit options.</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Schwienbacher (2007)</td>
<td>Innovation as exit determinants, much talked entrepreneur bias - thrive innovation and exit strategy to remain independent; association between valuation and innovation.</td>
<td>Innovation and contracting - IPO, trade sale and liquidation. Vertical product differentiation framework to product market competition. Impact of effect cost on innovation and exits - alternate model to study.</td>
</tr>
<tr>
<td>Wang and Sim (2001)</td>
<td>IPO most preferred mode of exit, focus on returns, not type of exit, exits needs to be executed before the fund expiry, buoyant stock markets gives important support to VC process cycle.</td>
<td>Equity valuation, nature of industry, family owned investee company stage financing, age of venture capitalist; IPO. 9 venture capital firms, seven cooperate subsidiaries, two banks subsidiaries. Important to study determinants effecting other modes of exit, study exit appropriateness from investee perspective.</td>
</tr>
</tbody>
</table>

There is dearth of studies in past talking about exit of VCs. It is only after seeing more instances of failure in exits causing financial loss to investors of Venture Capital Funds, this issue has come to light.

The above-mentioned reviews of the literature have focused on a variety of aspects of venture capital screening, investment, and exit behavior. Multiple dimensions of research on venture capital firms have evolved over time in North American and European countries over various aspects e.g. fund-raising, investments, valuation, decision-making, firm selection, growth strategies and exits. In the case of India, the research on issues related to venture capital is going on and most of the existing literature contributes to the screening and investment criteria of VCs. There exist studies on exit behavior of Indian VCs but the scope of these studies is limited to one exit route only.

In light of the discussion in previous sections and outcome of the review of literature stated above, the following research gap has been identified to be addressed in future research.
1. There is a need to understand that how do Indian venture capital firms take decisions related to exit, viz., at what stage they prefer to take exit, is it always a full exit or partial exit etc.. There are various routes of exit for VCs but the majority of the research has focused only on one exit route at a given point in time. In order to understand the most preferred route by same VC, a more comprehensive research is required where all exit routes are addressed.

2. The determinants of an exit strategy are not extensively studies. Most of the research has focused on one theoretical model, i.e., entrepreneur characteristics, market liquidity, reputation and relationship between expected marginal cost and expected marginal benefit etc. A VC may consider more than one or all of these determinants into consideration while taking an exit route. Therefore, the determinants of exit strategy need to be addressed properly in future research.

3. Each exit route is influenced by certain determinants. These determinants may be common for some exit routes and can also be unique for a specific exit route. Therefore, research gap exists on the issue of determinants of various exit routes.

**Research Questions**

1. How do Indian venture capital firms take exit decision and what are the various exit routes followed by venture capital firms in India?

2. What are the determinants of exit strategies adopted by venture capital firms in India?

3. What is the order of priority of different determinants of exit strategies by venture capital firms in India?