ANALYSIS OF RISK IN VENTURE CAPITAL PORTFOLIO INVESTMENTS IN SOUTH INDIA

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Abstract

Investing in new ventures involves a high level of uncertainty as well as a high risk of failure. Venture capital investing is characterized by high variability in the outcomes of new ventures and in the performance of venture capital portfolios. The question of risk in venture capital investing has been addressed on an ad hoc basis in several empirical studies; there has been little effort to develop a theoretical framework of risk perceptions and risk-reduction strategies. Despite differences in investor experience, investment preferences, and tolerance of risk, venture capital managers share many common perceptions of the risks involved in investing in new ventures and distribution of those risks over the venture capital-funded phase of development. Venture capital managers also utilize many common behaviors' and strategies for controlling risk can, in theory, be used to construct a behavioral framework that can predict how venture capital managers will behave in choosing between various investment opportunities in order to minimize potential returns. Hence, the study has been undertaken to analyze risk involved in venture capital portfolio investments in South India. The paper is in analytical in nature.

Key words: *Venture Capital, Portfolio Investments, Risk, Return.*

Introduction

The venture capital market has drawn a great attention from the business world. It creates a lot of financing opportunities for those young but talented small firms and the specialized venture capitalist would give their assistance and help them to grow bigger and become more competitive in the future. So the success of a venture capital backed firms to some extent is pretty much affected by the capability of the venture capitalists. The better support they can provide, the more promising their portfolio companies are able to be strong. Venture capitalists and Private Equity funds are often considered experts at investing in high-risk projects and firms. To be successful investors, venture capitalists and private equity funds must therefore manage the many aspects of risk associated with investing in unlisted small and medium sized enterprises. Jaun (1986)his research revealed the differences between successful and unsuccessful firms, both successful and unsuccessful ventures targeted

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high growth markets, anticipated high gross margins had founders with over five years of relevant experience, had experienced venture capitalists on their boards, and were characterized by a wide range of founder equity shares. This study examines how Indian venture capital and private equity firms manage several dimensions of risk. We analyze risk management preferences in Indian venture capital and Private equity firms. The results are discussed in detail.

Review of Literature

Harry and Anil (1994) in their article *"Impact of Agency Risks and Task Uncertainty on Venture Capitalist-CEO Interaction"* this study examined the impact of agency risks and task uncertainty on venture capitalist-Chief executive officer interaction. Results from 51 VC-CEO indicate that the frequency of interaction depends on the extent of VC-CEO goal congruence, the degree of the CEO's new venture experience, the ventures stage of development, and the degree of technical innovation it is pursuing. However, contrary to conventional expectations, the degree of management ownership has no impact on the frequency of interaction.

Can and Jan (2000) in their article *"Risk Management in Private Equity Fund: A Comparative Study of Indian and Franco-German Fund"* studies VC and buy-out funds are often considered experts at investing in high-risk projects and companies. This study examines how Indian private equity funds manage several dimensions of risk in comparison to not-Anglo-saxon funds. They analyze risk management preferences in Indian and Franco-German funds in pre and post investment stage.

Sophie, Koen et al (2002) in their article titled *"Determinants of required return in Venture Capital Investments:AFive Country Study"* using two complementary theoretical perspectives, they develop hypotheses regarding the determinants of the return required by venture capitalists and test them on a sample of over 200 VC companies located in five countries. Consistent with resource-based theory, they find that early-stage specialists require a significantly higher return than other VC companies when investing in later stage ventures. Consistent with financial theory, they find that acquisition/buyout specialists require a significantly lower return than other VC companies when investing in expansion companies. Furthermore, in comparison to specialists, highly stage-diversified VC companies require a significantly higher return for early stage investments. Independent VC companies require a higher rate of return than captive or public VC companies.

SN Kaplan and Per Stromberg (2004) in their article titled *"Characteristics, Contracts, and Actions: Evidence from Venture Capitalist Analyses"* studies the investment analyses of 67 portfolio investments by 11 venture capital firms. Venture capitalists consider the attractiveness and risks of the business, management, and deal terms as well as expected post-investment monitoring. They also consider the relation of the analyses to the contractual terms. Greater internal and external risks are associated with more VC cash flow rights, VC control rights, and greater internal risk, also with more contingencies for the entrepreneurs, and greater complexity, with less contingent compensation.

M Ewens (2009) in his article *"A New Model of Venture Capital Risk and Return"* he formulate a model and estimator of VC returns

motivated by the entrepreneurial firms life cycle and the extreme return outcomes of typical venture capital investment. The model incorporates tail events and the estimator corrects for sample selection bias and endogenous investment holding periods. He fined that an asymmetric three-state mixture distribution is a better characterization of returns than the standard single-state model.

Objective

1. To analyze risk involved in venture capital portfolio investments in South India.

Scope of the Study

This study is conducted by using a survey method through questionnaire. The study is limited to South India. There are two respondents' venture capitalists and portfolio managers.

Research Methodology

Type of Study - Analytical

Type of Data - Primary

Sources and Tools Used for data Collection- structured questionnaire used for data collection in South India.

Descriptive Statistics

Table 1: Risk Evaluation using Mean and Standard deviation

Types of Risk	Mean	N	Std. Deviation
Uncertain Market Size and Growth	3.21	39	1.301
Uncertainty about Product and Technology	3.21	39	1.399
Risks in Business Strategy Model	3.28	39	1.234
UncertainCustomerAdoption	3.67	39	1.177
Riskycompetitiveposition	3.69	39	1.398
QualityofManagement	2.97	39	1.478
PreviousPerformance	3.03	39	1.305
HighValuation	3.26	39	1.332
ContractualStructure	3.36	39	1.530
NegativeInfluence	3.08	39	1.384
MonitorInvestment	2.62	39	1.184
FinancialMarketConditions	3.10	39	1.392
Monitortheportfoliocompanies	2.85	39	1.228
Moreriskyingetting	2.97	39	1.576

Risk evaluation of the investment by ventures capitals are varied as the respondents have estimated that uncertainty is a major challenge in ascertaining. The mean value of Uncertain Market Size and Growth is 3.21, Average standard deviation is 1.301.The mean value of Uncertainty about Product and or Technology is 3.21, Average standard deviation is 1.399. The mean value of Risks in Business Strategy Model is 3.28, Average standard deviation is 1.234. The mean value of Uncertain Customer Adoption is 3.67, Average standard deviation is 1.177. The mean value of Risky competitive position is 3.69, Average standard deviation is 1.398. The mean value of Quality of Management is 2.97, Average standard deviation is 1.478. The mean value of Previous Performance is 3.03, Average standard deviation is 1.305. The mean value of High Valuation is 3.26, Average standard deviation is 1.332. The mean value of Contractual Structure is 3.36, Average standard deviation is 1.530. The mean value of Negative Influence is 3.08, Average standard deviation is 1.384. The mean value of Monitor Investment is 2.62, Average standard deviation is 1.184.The mean value of Financial Market Conditions is 3.10, Average standard deviation is 1.392. The monitor the portfolio companies is 2.85, Average standard deviation is 1.228. The more risky in getting is 2.97, Average standard deviation is 1.576.

Uncertain Market Size and Growth	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Frequency	6	4	12	10	7	39

The respondents have agreed that uncertainty of market and size is an important factor in evaluating the risk with 17 of them agreeing.

Uncertainty about Productand or Technology	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Frequency	7	6	5	14	7	39

The respondents have agreed that uncertainty of Product or Technology is an important factor in evaluating the risk with 21 of them agreeing.

Risksin Business Strategy Model	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Frequency	5	4	11	13	6	39

The respondents have agreed that uncertainty of Risk Business is an important factor in evaluating the risk with 19 of them agreeing.

Uncertain Customer Adoption	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Frequency	3	3	8	15	10	39

The respondents have agreed that uncertainty of Customer Adopt is an important factor in evaluating the risk with 25 of them agreeing.

Risky competitive position	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Frequency	4	5	6	8	16	39

The respondents have agreed that uncertainty of Competitive is an important factor in evaluating the risk with 24 of them agreeing.

Conclusion

Investing in new ventures involves a high level of uncertainty as well as a high risk of failure. Venture capital investing is characterized by high variability in the outcomes of new ventures and in the performance of venture capital portfolios. Risk evaluation of the investment by ventures capitals are varied as the respondents have estimated that uncertainty is a major challenge in ascertaining. The respondents agree that risky competitive position and uncertainty of product and technology are the major two variables lead for risk in venture capitalists.

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