

Role of Capital Structure on Cost and Risk of financing in start-up ventures: A Quantitative Study

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Abstract: Despite their importance to national economic progress, small and medium-sized businesses are prone to failure in their early phases. Therefore, newer companies have a higher failure rate than older ones due to the complexity of the problems they encounter. The liability of newness framework establishes this idea. Emerging organizations have a number of challenges that contribute to their precarious survival, as outlined by the liability of newness idea. These include, but are not limited to, problems with managing relationships among strangers, slow resource assembly, and inability to cope with challenging conditions. Regardless of all these factors, prior research indicates that small firms may and do attempt to lower the liability of being new by doing things like obtaining sufficient funding. This q study delves into the dynamic relationship between capital structure decisions, financing costs, and financial risk in the context of start-up ventures. As the entrepreneurial landscape continues to burgeon with innovation and growth aspirations, understanding the optimal mix of debt and equity that influences both cost and risk becomes imperative for sustainable development.. Additionally, this research supports the premise that successful organizations are productive and have solid financial footing, which means that new businesses that are very lucrative may reduce the risk associated with being new. Therefore, the purpose of the research was to investigate how early-stage SMEs' solvency is affected by factors including capital structure and profitability..

Keywords: *Capital Structure, Start-up Ventures, Financing Costs, Financial Risk, Entrepreneurship*

Introduction

A series of factors that have occurred gradually over time have led to the expansion of venture capital in India. The central government and organizations that are funded by the government were the ones who first proposed the concept of venture capital funding. The Committee on Development of Small and Medium Entrepreneurs, which was led by R.S. Bhatt and is commonly referred to as the Bhatt Committee, was the first to bring attention to the need for venture capital financing in 1972. This committee was responsible for bringing attention to the difficulties that new entrepreneurs and technologists face when establishing industries. It is a kind of long-term, stable finance that is supplied to start-up businesses that are in their early stages, have tremendous potential, and are experiencing growth. Generally speaking, venture capital funds invest in innovative and scalable business models or technologies in the technology industry. These sectors include software engineering, consumer internet, biotechnology, and other businesses associated with technology. Prior to making an investment, venture capital firms often demand proof of concept from potential investors. The subject knowledge and experience that venture capital firms contribute is invaluable [1]. Venture capital was described by Wright and Robbie (1998) as "the investment for long term by a number of investors in risky equity where their primary aim is eventual going and they are not interested in any periodical income or

dividends." Venture capital is an investment that is made over a lengthy period of time. With regard to venture capital, Cumming and Macintosh (2003) provided the following definition: "financial intermediaries who get capital investment from various institutional investors, high net worth people from the various economic sectors, and make investment of these pooled deposits in small and private businesses that have high technology and have a lot of potential for high growth." In a broad sense, we might define venture capital as money that is intended to be invested in a company that, despite its high level of risk, has the potential to see significant growth. A person who acts as a mediator between investors who provide their funds to be invested and new businesses that, on the other hand, get risk capital is known as a venture capitalist. All of the organizations that have a large number of investors are considered to be independent venture capital organizations. A large number of investors will have a diluted ownership stake. This group of investors is the primary source of financing for the capital. One kind of venture capital organization is known as a captive venture capital organization. These businesses are established by the parent corporations, and the resources are provided by the primary companies. Organizations that are considered to be semi-captive are those that are established by a single firm, but a significant amount of capital is contributed by investors from outside the corporation. Both [2] and [3]. Based on the information shown in figure 1, private equity may be divided into three distinct subgroups: informal venture capital, formal venture capital, and other private equity investors. If affluent people put their money in a venture company, this kind of investment is referred to as informal venture capital, and the investors who make this investment are known as business angels. In the context of formal venture capital, a corporation pools the cash contributed by a number of individuals and then invests those assets in venture enterprises.[4]: The enormous pool of business angels is managed by this organizational entity. When business angels put their personal money into venture enterprises, they often do so in the early stages away from the company's initial stage of development. According to Freear (2003), these business angels bring in a significant amount of profit for the business sector

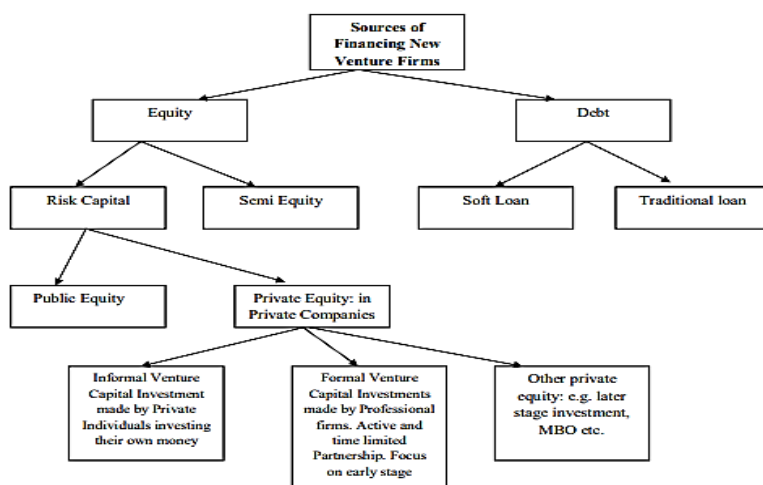


Figure – 1.1 Classifications of Sources of Financing New Venture Firms

All the potential funding options for a startup venture company are shown in figure 1. The following is an introduction to these sources: 1) Equity: For a financial investment, one may exchange a stake in the company for a stake in the company's ownership.[5] A part in the company's earnings is one perk of investing in equity, which gives the investor a piece of the ownership pie. A permanent investment in a business, equity cannot be returned by the business at a later time.

Venture capital financing stages

There are many stages of the investee companies which a venture capital company may choose to invest in. Management experts have different opinions about these stages because of the different economic environment. In figure 2, all the stages of venture capital financing have been shown

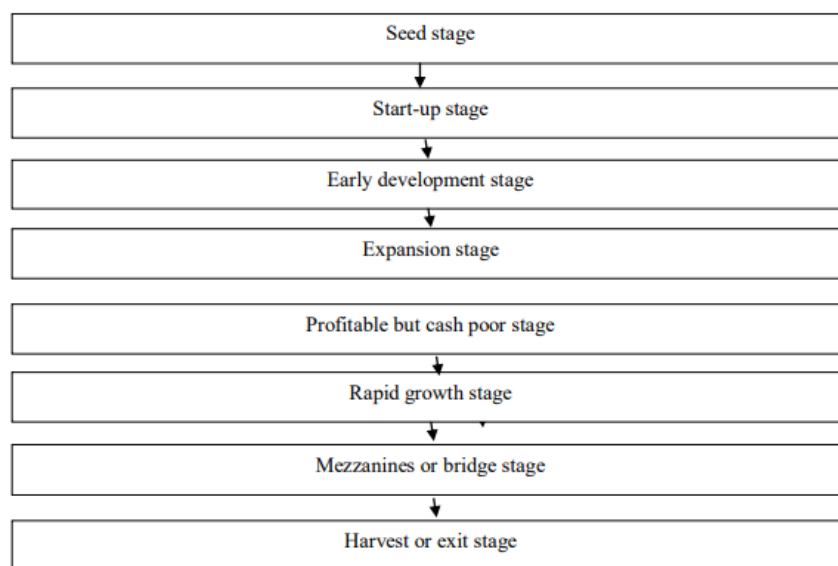


Figure 2. Venture Capital Financing Stages

First stage of development An aspiring entrepreneur will use their money to put their idea, discovery, or innovation to the test. If this doesn't work or if he needs more money than what he has on hand, he will ask his close circle of friends and family for help. But if the entrepreneur's idea is good enough to warrant further development, the costs of doing so will quickly exceed those of his immediate entourage and himself[8][9]. At this stage, initial funding is necessary. At this point, an entrepreneur has only begun to formulate ideas and formulate a plan for the Venture. So far First stage of development Stage of rapid expansion Successful yet short on funds stage Levels above or across the stage Initial phase Stage one of development Stage of expansion Gathering or leaving phase Due to the fact that real manufacturing does not begin at this stage, 12 entrepreneurs spend excellent time but less cash. The company owner or other "business angels" provide the capital. The number ten.

Initial phase Once the first round of seed funding is successful, the second phase may begin. In this phase, testing the prototype, assembling the management team, and refining the company concept established in the seed stage are the primary tasks. At this point, manufacturing does not

begin. However, a substantial sum of money is needed at this point due to the hard workload. Venture capital firms and angel investors provide funding. Eleven and twelve.

Stage one of development The completion of product development and market testing marks the beginning of what is essentially the first stage of investing. Companies move into commercial production and product sales at this stage, which means they need a lot of capital to invest in fixed-cost assets like plant and equipment. At this point, most funding comes from business angels.

Stage of expansion Andrew J. Sherman (1997) predicts that a company's capital requirements would rise in tandem with its expansion. Additional working capital, product and market development, or increased manufacturing capacity are all possible uses for money. Sales revenue and, hopefully, a profit have been generated at this point; nevertheless, the latter may not be sufficient to finance the former's growth. As a result, it could go back to its original investor for funding in the second or third stage[13][14]. At this point, the product has already achieved commercial success and the corporation sees enormous profit potential in the market. The capital investment needed for growth is large, but the cash inflow is modest at the moment. At this point, the stage's financiers include venture capitalists, banks, and the government. This is the moment when the enterprise aims to turn a profit, the mark at which it will no longer incur expenses. At this point, we are implementing a procedure to minimize costs [15].

Successful yet short on funds stage This is the point when venture capitalists find out whether the market has a lot of room to develop and make a lot of money. But at the moment, cash flow is very low, therefore it can't cover the huge capital expenditure needed for rapid growth. Currently, the market has three sources of funding: venture capitalists, banks, and retained profits [16].

The future of these cutting-edge businesses is heavily influenced by strategic financial choices made in the fast-paced and cutthroat world of start-ups. The capital structure, which is the ratio of debt to equity used to fund operations and drive expansion, is one such important decision[17][18]. The complex interplay between startup ventures' capital structure decisions and the resulting effects on financing costs and related financial risks is the subject of this quantitative research [19].

Background and Rationale:

When it comes to the financial environment, start-ups have special difficulties due to their nimbleness, creativity, and ambitions for quick expansion. These enterprises' capital structure selections are crucial in establishing the financial risk level and how cost-effective the financing channels are. The rising significance of comprehending how start-ups' financial dynamics are affected by the composition of their capital, especially in relation to financing costs and risk management, is the driving force behind this research.

Allocating resources strategically between debt and equity becomes critical for start-ups as they seek finance for their ambitious objectives. Theorizing about capital structures has been the

subject of much writing, but a specialized quantitative study is necessary to address the unique intricacies and facts surrounding start-ups. The purpose of this research is to add to what is already known about the effects of capital structure choices on the cost and risk aspects of startup funding by offering empirical insights into these topics.

Objectives of the Study:

Assessing Financing Costs: The primary objective is to assess how different capital structures influence the financing costs of start-up ventures. This involves a quantitative analysis of the impact of debt and equity components on interest rates, transaction fees, and the overall cost of capital.

Quantifying Risk Levels: The study aims to quantitatively measure the levels of financial risk associated with varying capital structures in start-ups. This includes evaluating the potential impact on credit ratings, default probabilities, and other risk indicators relevant to start-up financing.

Identifying Optimal Capital Structures: Through rigorous quantitative analysis, the research seeks to identify optimal capital structures that strike a balance between minimizing financing costs and effectively managing risk for start-up ventures.

Analyzing Industry Variations: Recognizing the diverse nature of start-ups across different industries, the study explores whether the impact of capital structure on cost and risk varies. Industry-specific considerations may reveal nuanced strategies for capital structuring in start-up financing.

Methodology:

The research will adopt a cross-sectional design, capturing a snapshot of data from a diverse sample of start-up ventures at a specific point in time. This approach allows for an examination of the relationship between capital structure, financing costs, and risk indicators in the context of the unique challenges faced by start-ups.

Sampling Strategy: Sampling Frame: The sampling frame will include start-ups from various industries, considering factors such as age, size, and geographical location.

Sampling Method: A combination of purposive and random sampling will be employed. Purposive sampling will ensure representation across different industries, while random sampling will provide diversity within each sector.

Data Collection: Financial Statements: Annual reports, income statements, and balance sheets of selected start-ups will be collected to extract financial data, including details of debt and equity components.

Funding Records: Information on funding rounds, types of financing, terms of financing agreements, and associated costs will be sourced from databases, official reports, and credible financial news sources.

Variables: Dependent Variables: Financing Costs: Measured by interest rates, transaction fees, and overall cost of capital.

Financial Risk: Indicators such as credit ratings, default probabilities, and other risk metrics.

Independent Variable:Capital Structure: Proportion of debt and equity in the financing mix.

Control Variables:Industry Type: To control for industry-specific characteristics.

Start-up Age: Recognizing that the impact of capital structure may vary with the maturity of the start-up.

5Quantitative Analysis:Regression Analysis: Multiple regression models will be employed to analyze the relationship between capital structure, financing costs, and financial risk. This analysis will identify the statistical significance and magnitude of the impact of different capital structure components on the dependent variables.

Correlation Analysis: Correlation coefficients will be calculated to assess the strength and direction of relationships between variables. This will help identify potential patterns and associations.

Industry-Specific Analysis: Sub-group analysis will be conducted to explore variations in the impact of capital structure within different industries, recognizing the unique features and challenges of each sector.

This study adopts a quantitative research approach, utilizing financial data from a representative sample of start-up ventures. Data will be collected from financial statements, funding records, and other relevant sources. Advanced statistical techniques, including regression analysis and correlation analysis, will be employed to derive meaningful insights from the data.

Conclusion

The study revealed that capital structure choices significantly influence financing costs for start-up ventures. The composition of debt and equity plays a crucial role in determining interest rates, transaction fees, and the overall cost of capital. Start-ups with a balanced capital structure demonstrated lower financing costs compared to those with skewed ratios. The maturity of start-ups proved to be a significant factor in the impact of capital structure decisions. Younger start-ups experienced different effects on financing costs and risk compared to more established counterparts. This highlights the need for nuanced financial strategies aligned with the stage of a start-up's lifecycle. This study significantly contributes to the understanding of how capital structure choices impact the cost and risk of financing in the start-up ecosystem. The empirical evidence presented serves as a foundation for further research, informing practical strategies for entrepreneurs, investors, and policymakers as they navigate the complexities of entrepreneurial finance.

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