Research Paper

How do interest rate changes influence capital structure decisions among SMEs in the technology sector in the Indian economy?

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Abstract

The Indian technology sector has played a vital role in driving economic growth and fostering innovation within the country. As small and medium-sized enterprises comprise the foundation of this sector, it is imperative to comprehend the effects of interest rate fluctuations on their capital structure.

Small and medium enterprises (SMEs) constitute a large proportion of economic activity and are among the major growth drivers for any economy in the world (Boocock & Shariff, 2005). The last decade has shown exponential growth in SMEs in India. In the last five years, these firms have grown at a stable rate of 4.5%1 According to the economic survey 2014, there are about 48 million SMEs, constituting 90% of the Indian industrial ecosystem.

This research aims to investigate the impact of interest rate changes on the capital structure of SMEs in the Indian tech sector, highlighting the challenges and opportunities they face in managing their financial resources in response to changing interest rates.

By focusing on this critical aspect, we can gain valuable insights into SMEs' financial decision-making process and contribute to a broader understanding of how macroeconomic factors influence the financial landscape of the Indian technology industry.

In this analysis, I will explore the impact of interest rate changes on the financial framework of SMEs operating within the Indian tech industry.

By examining the correlation between interest rates and SMEs' capital structure, I aim to offer valuable perspectives that can assist these businesses in making informed decisions and developing effective strategies.

INTRODUCTION

The Indian technology sector has played a vital role in driving economic growth and fostering innovation within the country. As small and medium-sized enterprises comprise the foundation of this sector, it is imperative to comprehend the effects of interest rate fluctuations on their capital structure.

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The IT-BPM sector has become one of the most significant growth catalysts for the Indian economy, contributing significantly to the country's GDP and public welfare. The IT industry accounted for 7.5% of India's GDP in FY23 and is expected to contribute 10% to India's GDP by 2025.

Over the past few years, the Indian technology industry has seen significant progress and development, with small and medium-sized firms playing a significant role in driving innovation and economic growth.

In such a highly competitive and rapidly evolving sector, SMEs' capital structure plays a critical role in their ability to fund their operations, invest in technology, and expand their business. Fluctuations in interest rates are a significant factor impacting the capital structure of SMEs.

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Small and midsize enterprises (SMEs) maintain revenues, assets, or several employees below a certain threshold. Each country has its definition of an SME. Specific size criteria must be met, and occasionally, the industry in which the company operates is also considered.

This study investigates the determinants of capital structure and prevailing capital structure theories in the Indian Small and Medium Enterprises (SMEs). Further, to investigate the difference in capital structure because of interest rates in tech.

Interest rates primarily influence a corporation's capital structure by affecting the cost of debt capital. Companies finance operations with either debt or equity capital. Equity capital refers to money raised from investors, typically shareholders. Debt capital refers to money borrowed from a lender. Common types of debt capital include bank loans, personal loans, credit card debt, and bonds.

Picture a bustling street in the heart of Bangalore, where a small tech startup is working tirelessly to bring its innovative ideas to life. This is just one of the countless small and medium enterprises (SMEs) that form the backbone of India's thriving technology sector. With their entrepreneurial spirit and agility, these firms have been instrumental in driving the country's economic growth and technological advancement (Ayyagari et al., 2011; Kathuria et al., 2010).

However, these SMEs face a constant challenge behind the scenes: managing their finances and securing the capital they need to fuel their growth. Their decisions about their capital structure—the mix of debt and equity financing—can make or break their future success (Berger & Udell, 1998). Moreover, one of the most significant factors influencing these decisions is interest rates.

When the Reserve Bank of India adjusts interest rates, it creates a ripple effect that reaches every corner of the economy (Mishkin, 2007). For SMEs in the tech sector, changes in interest rates can be the difference between accessing affordable loans to fund their expansion plans or struggling to keep up with the high cost of borrowing (Cassar & Holmes, 2003).

However, the relationship between interest rates and capital structure needs to be more straightforward. Studies have shown mixed results, and most have focused on large corporations rather than the unique challenges SMEs face (Jalilvand & Harris, 1984; Taggart, 1985). These smaller firms often operate in a different reality, with higher risk profiles, information asymmetries, and limited access to capital markets (Michaelas et al., 1999). Add in the fast-paced, capital-intensive nature of the technology sector, and you have a complex puzzle to solve (Hogan & Hutson, 2005).

That is where this research comes in. We aim to dive deep into the world of Indian tech SMEs and unravel the mystery of how interest rate fluctuations shape their capital structure decisions. We will ask tough questions: How do these firms adapt their financing strategies when interest rates change? What factors come into play? Moreover, how can they navigate the risks and opportunities that come with these shifts?

The answers we uncover could have far-reaching implications. For policymakers, a better understanding of these dynamics could inform more innovative monetary policies that support the growth of SMEs. For financial institutions, it could lead to more tailored lending products and services. Moreover, for the SMEs themselves, it could mean more effective strategies for managing their finances and achieving their ambitious goals.

So join us on this journey as we explore the intersection of interest rates, capital structure, and the future of India's tech SMEs. The following sections will review the existing literature, outline our research methodology, present our findings, and discuss what it means for the stakeholders involved. By the end, we hope to shed new light on this crucial topic and contribute to a brighter, more prosperous future for India's technology sector.

SMEs, or small and midsize enterprises, are businesses with revenues, assets, or a number of employees below a certain threshold. They play an important role in economic development by creating jobs, fostering innovation, and, most importantly, contributing to GDP growth.

However, since SMEs are small businesses, they often face difficulties in certain areas, such as not having enough resources. SMEs have very limited resources and face significant market competition from rival firms selling similar goods and services.

The government often provides SMEs with subsidies to help them grow and develop. These subsidies take various forms, including tax incentives, loans, or subsidies to help with research and development. SMEs

can use these to expand their business and also to stay ahead of their competition. SMEs that are able to go further in research and development and have more information can usually stay ahead of their competitors.

Additionally, SMEs help to promote entrepreneurship and job creation along with innovation and help with the economic development of that region. SMEs also have a low capital base, which is one of the significant challenges they face. The capital base refers to the financial foundation or resources a business, financial institution, or organisation has available to fund its operations, investments, and growth. SMEs usually have a small capital base. Their capital base comprises the financial resources available for their operations and growth, including the equity capital from investors and owners. If an SME has a large capital base, they can afford or invest in higher technological equipment, which can be used to help them in research and development.
Moreover, they will be able to resist financial challenges that they may have to face in the future and expand their business. This is another way government subsidies help SMEs, as they can enlarge their capital base. To add to the disadvantages faced by SMEs, they also have very limited access to technology, credit policy issues, inconsistent business services, and a lack of quality human resources.

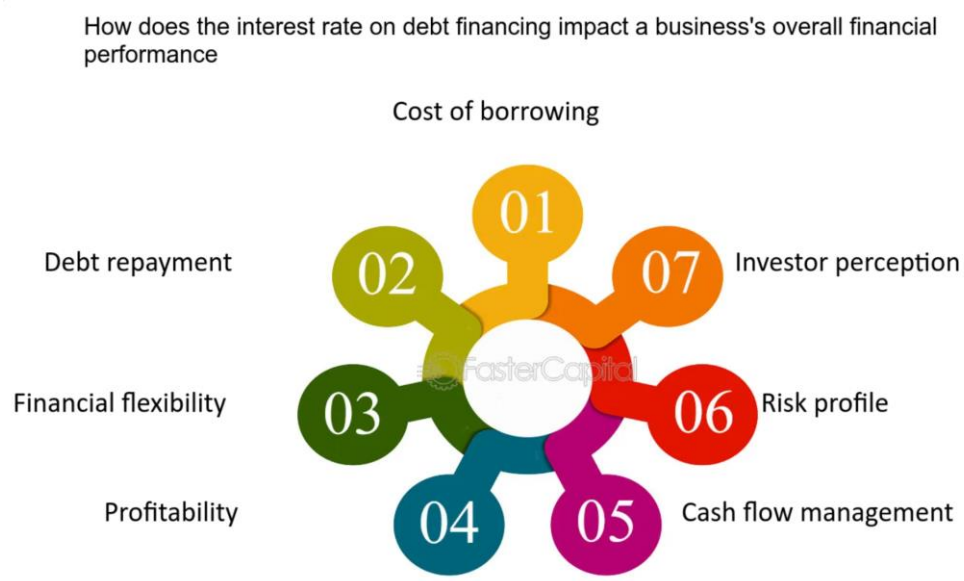
Capital structure is the combination of debt and equity a company uses to finance its overall operations and growth. A company's capital structure shows how it funds its operations and investments by using different funding sources. The capital structure of SMEs varies significantly based on factors such as industry, growth stage, risk profile, and access to financing. Internal factors and external factors also influence SMEs' capital structures. These internal factors comprise financial aims, risk disposition and growth intentions, and the external factors affecting SMEs' capital structures are regulatory constraints, funding availability, and market conditions. By examining the correlation between interest rates and SMEs' capital structure, my objective is to offer valuable perspectives that can assist these businesses in making informed decisions and developing effective strategies.

Understanding the impact of interest rate changes on SMEs' capital structure is essential.

In practical terms, capital structure means how companies finance their investments, achieving lower financing costs and increased profitability.
It is crucial to understand how changes in interest rates can affect SMEs' financial strategies, investment decisions, and overall stability.

Rising Interest Rates: SMEs that depend on external financing to fund operations, expansion, or capital investments face higher expenses when interest rates rise. This cost increase can be attributed to loans or credit lines. SMEs need to be aware of this impact, which helps them plan their finance management and mitigate the risks associated with increased costs.

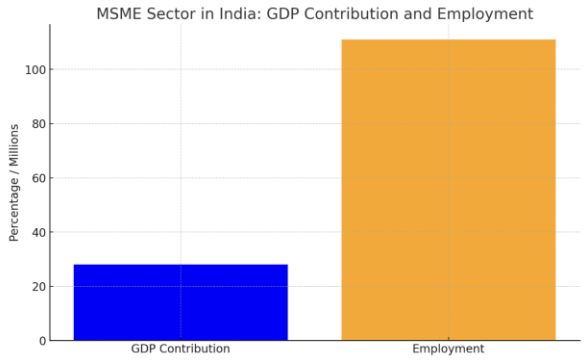
Decrease in Interest Rates: Conversely, a decrease in interest rates reduces the cost of borrowing, making it cheaper for SMEs to finance new projects or refinance existing debt.



This can lead to growth opportunities but also requires careful consideration to avoid over-leveraging. Moreover, changes in interest rates can also affect the value of existing debt and the overall capital structure of SMEs. For example, when interest rates rise, the value of outstanding fixed-rate debt may decrease, impacting the business's financial health.

Hence, it is essential to examine this correlation.

In India, the micro, small and medium-sized enterprise (MSME) sector accounts for over 28% of GDP while creating employment for about 111 million people (Annual et al. of MSME 2017-18 cited in Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 1). However, despite steps taken by the Government and Reserve Bank of India to address the issues faced by MSMEs, the sector remains informal and vulnerable to structural and cyclical shocks (Expert Committee on Micro, Small and Medium Enterprises, 2019, p. 1).



Theoretical implications

The trade-off theory of capital structure decisions in Indian tech SMEs deals with balancing different factors to maximise organisational outcomes. Including learner feedback loops, as suggested by (Atkinson et al. (Editors) et al.), highlights the importance of decision-makers aiming for high predictive accuracy while keeping things less complex.

This idea aligns with the complex trade-offs SMEs encounter when making capital structure choices during changing interest rates. Additionally, findings from (Cresswell et al.) offer insights into the forecasting abilities of individual-based risk trade-off frameworks, stressing the potential to predict population-level effects related to predator danger.

Similarly, Indian tech SMEs must manage a tangled network of financial risks and make strategic trade-offs in their capital structure choices to lessen negative consequences and improve long-term viability. The amalgamation of theoretical concepts and practical insights emphasises the value of incorporating trade-off theory to grasp intricate dynamics surrounding capital structure decisions amid fluctuations in interest rates within the Indian tech industry.

Factors Influencing Capital Structure Decisions in Tech SMEs

An intricate assessment of the variables impacting capital structure determinations in technology small and

medium-sized enterprises (SMEs) unveils a complex interaction between internal and external influences. Factors intrinsic to the organisation, such as its size, growth opportunities, and profitability, significantly affect whether debt or equity financing is selected (Andrade et al.). Furthermore, owner-manager personalities play a role; extraversion and conscientiousness can steer the cultivation of ambidextrous behaviours within these businesses, potentially moulding decisions on capital structure (Andrade et al.). Concurrently, the outer context marked by technological upheavals and market unpredictability introduces added intricacies to tech SMEs' choices regarding capital structure, underscoring adaptability and synchronisation with shifting situations (Andrade et al.). Grasping these manifold forces is critical for Indian tech SMEs to manage the repercussions of fluctuations in interest rates on their choices regarding capital structures, enabling knowledgeable and flexible financial tactics amidst a changeable commercial atmosphere.

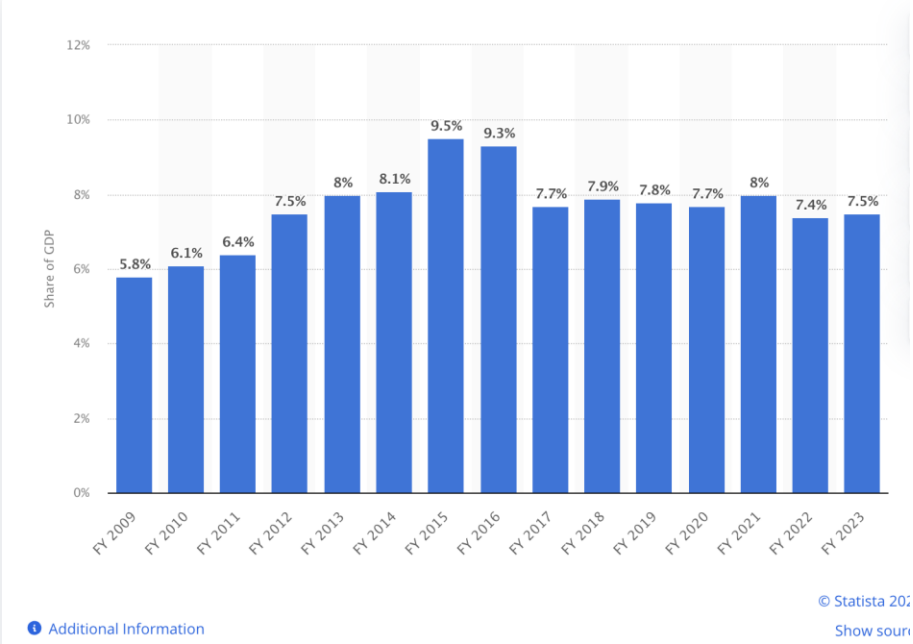
IT Industry

The Indian technology sector shapes India's future.
Economic development - The IT sector has majorly increased its impact on the GDP of India, going from 1.2% in 1998 to nearly 10% in 2019

Helps with innovating—The advancements within the IT sector and the government of India's liberalisation policies are necessary for the evolution of the technological industry.

Education—Skilled labourers have increased in India. Now, the top four largest companies in India, TCS, Infosys, Wipro, and HCL Tech, each employ more than 1 million employees. As of 2020, the Indian IT workforce accounts for 4.36 million employees.

Share of Information technology/business process management sector in the GDP of India from the financial year 2009 to 2023



Source: Statistia 2024

Conclusion

Small and midsize enterprises (SMEs) play a vital part in many economies around the world. Their innovation, flexibility, creativity, efficiency, and locality all contribute to their success. Through conscious consumer behaviour, government assistance, and reliance on their communities, SMEs have established themselves as an essential part of the broader economy.

Though small, SMEs play an essential role in an economy. They outnumber large firms, employ vast numbers of people, and are generally entrepreneurial, helping to shape innovation.

Small and midsize enterprises can exist in almost any industry but are more likely to reside within industries requiring fewer employees and smaller up-front capital investments. Common SMEs include legal firms, dental offices, restaurants, and bars.

SMEs are segregated from large, multinational companies because they operate differently. Large, complex firms may require advanced enterprise resource planning (ERP) systems—for accounting, supply chain management, financial reporting, and interconnectivity across offices around the world—or deeper organisational processes.

On the other hand, SMEs may require fewer systems, given their narrower scope of operations.

The present scenario reveals that Indian SMEs operate in a highly exigent atmosphere. The SMEs are struggling on multiple fronts, and among all these challenges, financing and credit are the major issues, as reported by industry experts and researchers. How to finance new investments or start-ups depends on the availability and accessibility of funds. Moreover, the role of finance has been cited as a major decisive aspect for the development of SMEs anywhere in the world (Cook, 2001).

In this research, we come across the factors that determine the capital structure that need to be understood to analyse the effect and influence of the capital structure of small businesses. This is why it is necessary to focus on the critical factors, including:

Control – The shareholder's type will determine the degree of control. If the company has more equity than preference shareholders, they will have control and higher voting rights.

Government Policies—As a small business, it is essential to stay informed about all government policies, as they influence your capital structure choice. If there are significant changes in fiscal and monetary policies, you may have to change your capital structure choice.

Cost of Capital—Small tech enterprises raise capital for their operations, and there are costs to do so. These costs are called the cost of capital. A company should generate enough revenue to negate this cost, and the growth can be sufficiently funded. One way of reducing the cost of capital is by balancing debt and equity to get an optimal capital structure.

Trading on Equity – To increase returns, startups borrow new funds using more equity as the source. When the rate of interest the startup pays on debt is less than the rate of return on the total capital or when the rate of interest is higher than the return, they choose to trade on equity.

Capital structure is the outcome of firms' financing decisions. The determination of a firm's capital structure has been a much debated issue in the literature on finance. Empirical studies on identifying significant factors responsible for a firm's financing decisions reveal that assessing a firm's capital structure needs to be more conclusive (Hariss & Raviv, 1991).

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investors, typically shareholders. Debt capital refers to money borrowed from a lender. Common types of debt capital include bank loans, personal loans, credit card debt, and bonds.

Small business owners are typically most concerned about interest rates when they are high because this causes the cost of debt to rise and makes running a business more expensive in general. Gates Little, President of the Southern Bank Company, explains, “In times of increasing rates, small businesses will benefit from reducing expenses and paying down debt as much as possible. These actions will help free cash flow and enable small businesses to survive until either rates come back down or the economy adjusts to a higher rate environment through higher prices and higher wages – changes that typically occur in gradual but random moves.”

In addition to paying down debts and reducing spending, below are some other tips for business owners concerned about the impacts of high interest rates.

Improve Cash Flow Management

Because interest rates can significantly impact the financial health of businesses, cash flow management is needed to secure your company’s financial future. While cash flow is essential during low and high interest rate cycles, it will likely feel more pressing to improve your cash flow during rate hikes.

There are several ways that you can improve your business’s cash flow, such as:

Restructuring your pricing
Shortening the invoice payment terms that you offer other businesses
Charging late payment fees
Reducing your inventory
Improving customer credit check processes
Negotiating better terms with vendors
Factoring your invoices

Review Customer Creditworthiness

A great way to protect your business from non-payment is by performing credit checks on your customers. Before extending credit to your clients, it is essential to evaluate:

Their payment history

Their business credit profile

Their profitability over time

By evaluating new clients before working with them and offering them terms, you can reduce the risk of fraud, late payments, and non-payment. This will help improve your overall cash flow and protect your business during times of economic uncertainty.

Evaluate Debtor Concentration

Debtor concentration is the distribution of accounts receivable owed across your debtors (or customers). For example, if one debtor owes all your outstanding accounts receivable, your debtor concentration would be 100%. However, if half of your accounts receivable is owed by one debtor, another owes the other half. Each debtor would have a concentration of 50%.

By evaluating your debtor concentration, you can focus on reducing the risk you take when extending credit to your customers, which can help protect your business when interest rates are high, borrowing is expensive, and cash flow is tight. You reduce your financial risk by diversifying your customer portfolio and shrinking your debtor concentration.

In summary, we can say that this research aims to analyse how changes in interest rates affect the capital structure choices of small and medium-sized businesses (SMEs) in the Indian technology industry. In India, SMEs are essential to innovation, economic expansion, and the creation of jobs. However, because small businesses frequently struggle to get and manage capital, their capital structure—which consists of debt and equity—is essential to their success. Throughout the research, we have learned more about all the implications and trends of small and medium-sized businesses in tech and suggested some recommendations that an enterprise can use for effective working capital management.

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