

# *The Impact of Capital Structure on the Firm Performance*

Xinyang Li<sup>1,a,\*</sup>

<sup>1</sup>*Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Selangor, 43600, Malaysia*

*a. P125065@siswa.ukm.edu.my*

*\*corresponding author*

**Abstract:** This paper mainly studies the impact of capital structure on enterprises. To gain a deeper understanding of this issue, this paper chose different sectors, such as capital-intensive and labor-intensive industries, which rely heavily on debt financing but face higher financial risks during a recession. This is in stark contrast to labor-intensive industries. In labor-intensive industries, equity financing may be more conducive to the operational flexibility and adaptability of enterprises. Find out the corresponding literature analysis, and summarize the commonness through concrete examples. The paper discusses the characteristics of capital structure of developed and developing countries and compares the differences of capital structure in different economic environments. Through the study of relevant literature, the characteristics and differences of capital structure in different industries and countries are summarized. Identifies areas for improvement, pointing out limitations in the current understanding of capital structures, such as industry-specific differences and changing market dynamics. At the same time, according to the characteristics of the industry, market conditions and risk tolerance, to provide constructive advice for enterprises to optimize the capital structure.

**Keywords:** Capital Structure, Industry Differences, Market Differences

## **1. Introduction**

The Company's capital structure is a combination of debt financing and equity financing used to fund the Company's operations and assets. Determining the optimal capital structure is a critical decision that has broad implications for a company's performance, stability and growth. The capital structure affects the cost of capital, which is the minimum return investors need to invest in a company. The capital structure affects financial risk, that is, the likelihood of defaulting on debt or facing financial distress.

The importance of a company's capital structure in determining its performance, stability and growth cannot be overstated. The decision-making process to determine the optimal capital structure is complex and far-reaching. The impact of capital structure on different sectors such as real estate, manufacturing and retail, as well as different countries in developed and developing countries, is a very important topic. Different factors, including firm-specific and country-level determinants, play a crucial role in shaping a company's capital structure. While corporate characteristics are the main determinant of capital structure, country-level characteristics also have an impact, particularly where there are differences between developed and developing countries. In addition, various empirical

studies reveal specific determinants of capital structure in different regions and industries. For example, a study of the Middle East and North Africa region highlights differences in capital structure determinants and legal sources across countries [1]. Similarly, a study of banking companies listed on the Indonesian Stock Exchange revealed the impact of capital structure on corporate value and emphasized the importance of debt-equity ratio [2]. These findings highlight the intricate relationship between capital structure and firm performance, confirming the complexity of the decision-making process. Overall, the existing research provides a comprehensive understanding of the numerous factors that influence capital structure decisions and their impact on firms in different industries and regions.

Capital structure is a dynamic strategic decision that determines a company's financial performance, risk profile, and long-term trajectory. Understanding the theoretical framework, potential impact and influencing factors of capital structure optimization is the key for enterprises to optimize capital structure and achieve sustainable growth.

## **2. Theoretical Basis**

Determining an optimal capital structure requires weighing risks and benefits, considering internal and external factors, and guiding theoretical insights in incomplete market realities.

M&M theory, which postulates a perfect scenario where there are no taxes, no transaction costs, market information is symmetrical, investors are perfectly rational, and there is no proxy conflict between shareholders and managers. This is impossible in real life, the deviation is large, and the practical significance is small. This concept emphasizes the importance of focusing on value creation through operational efficiency and strategic initiatives, rather than short-term manipulation of the capital structure. However, the theorem's assumptions about perfect markets and no transaction costs often deviate from reality. M&M theory is crucial for businesses to make financial decisions and other practical implications, especially when considering situations where theoretical assumptions may not be consistent with reality.

Enterprises need to take various factors into account, regularly evaluate and adjust the debt structure to adapt to the dynamic business environment and risk situation. Companies need to consider specific regulatory and cultural norms when deciding on their capital structure. A key factor affecting capital structure is corporate governance. Overall, the research landscape provides valuable insights into the complexity of capital structure decisions, including factors such as firm-specific attributes, regulatory compliance, and governance mechanisms. These insights highlight the importance of a comprehensive and adaptive approach to assessing and aligning their capital structure to effectively navigate the dynamic business environment.

In conclusion, capital structure is a complex decision, and by combining theoretical insights with practical considerations, companies can make trade-offs between debt and equity, prioritize value creation, and optimize their capital structure for sustainable long-term growth.

## **3. Capital Structure in Different Industries and Markets**

### **3.1. Capital-Intensive Industry**

Capital-intensive enterprises, such as real estate and manufacturing, have unique characteristics in terms of capital structure, which is a combination of debt and equity financed by operations. Here are some key common characteristics of this type of business. Capital-intensive businesses, which require large investments in land, machinery and other fixed assets, typically rely heavily on debt financing. This will reduce the initial cost of acquiring these assets and potentially increase return on equity (ROE). However, high debt levels also increase financial risk, making them vulnerable to interest rate fluctuations and economic downturns. Capital-intensive companies typically have high operating

leverage, and most of their costs are fixed. This can amplify the impact of changes in sales volume on profits. A balanced capital structure can help mitigate this risk by providing a buffer against volatile returns.

Capital structure refers to the way a company finances its assets through a combination of equity and debt and is a key aspect of the financial framework for capital-intensive firms in different industries. In the context of real estate and manufacturing, it is particularly important to understand the determinants and implications of capital structure. Grinchenko provides insights into the capital structure of small and medium-sized enterprises (SMEs), highlighting the financing characteristics of smes in Ukraine and Europe [3]. The study found that Ukrainian SMEs have higher levels of financial leverage and risk compared to larger enterprises, indicating that authorized capital is prevalent in their financial structures due to the challenge of attracting debt financing. Highlighting the specific dynamics of smes in the context of the capital structure provides a valuable perspective on the real estate and manufacturing sectors, where small businesses often play an important role. Shi made an in-depth study of the capital structure of listed real estate companies in China and described the non-linear relationship between leverage ratio and corporate performance in the capital-intensive real estate industry [4]. By examining the impact of capital structure on the performance of these listed companies, this study sheds light on the unique dynamics of capital-intensive industries, providing valuable implications for the real estate industry in the broader context of capital structure analysis. In addition, Du and Luo put forward an optimized research perspective on the capital structure of listed real estate companies in China, emphasizing the impact of enterprise scale, solvency and equity structure on the capital structure of real estate companies [5]. This detailed understanding of the factors that form the capital structure of the real estate industry facilitates a broader analysis of capital-intensive companies, providing specific insights into the financial dynamics of the real estate industry. Hussain et al. studied the impact of macroeconomic factors on capital structure decisions in the manufacturing sector, focusing on the growing manufacturing sector in Pakistan [6]. This study reveals the relationship between macroeconomic variables and financial leverage, and provides valuable implications for understanding the interaction between external economic factors and the capital structure of manufacturing capital-intensive enterprises.

In conclusion, the analysis of the general laws of the capital structure of capital-intensive enterprises, especially real estate and manufacturing, is conducive to taking into account the specific nuances of SMEs, the interaction between macroeconomic factors and capital structure, and the industry-specific dynamics within real estate and manufacturing from a multi-dimensional perspective. The cited papers make a significant contribution to this comprehensive understanding, providing nuanced insights into the complexities of the capital structure of capital-intensive firms, thereby enriching the ongoing discourse and research in the field. Although there are commonalities in the capital structure of capital-intensive enterprises, the optimal combination of debt and equity will naturally be different for different companies.

### 3.2. Labor-Intensive Industry

Labor-intensive enterprises rely heavily on human labor for production and require less upfront investment in machinery and equipment. This reduces the need for large-scale debt financing, and they prefer to raise funds through equity financing.

High reliance on manpower carries inherent risks, such as workforce volatility, skills gaps, and potential workforce disruptions. In this case, lower debt reduces vulnerability to financial distress. The general law of the capital structure of retail labor-intensive enterprises is an important research topic in the field of financial economics. The impact of artificial intelligence (AI) on the economy, particularly in labor-intensive industries, has also been studied in the context of Indian industry, which has been plagued by the pandemic [7]. This survey provides valuable insights into the changing

nature of work in the future, especially in labor-intensive economies, which is critical to understanding the evolving dynamics of the capital structure in these industries. In addition, a study on the impact of capital structure on the profitability of retail companies within the Romanian market provides important insights into the specific financial dynamics of the retail sector [8]. The findings of this study provide evidence of a significant positive correlation between retail capital structure and profitability, thus highlighting the correlation between capital decisions and financial performance. This comparative analysis provides important insights into changes in the capital structure of different industries, including the retail/wholesale sector, which is valuable for understanding the specific dynamics of capital decisions in the retail industry.

Taken together, this paper provides a comprehensive understanding of the capital structure dynamics of labor-intensive firms in the retail sector, providing valuable insights into the relationship between financial performance and firm value, and the impact of AI. These insights are of great significance to guide labor-intensive enterprises in retail industry to make effective capital decisions and improve corporate performance and competitiveness.

### 3.3. Technology Industry

Technology companies typically have a significant portion of their assets in the form of intellectual property (IP), such as patents, trademarks, and software. These assets are intangible and difficult to value, which can make it difficult for lenders to assess a company's creditworthiness, leading to higher borrowing costs. Currently, many tech companies are in a phase of rapid growth, which means they need to invest heavily in research and development (R&D) and marketing. Due to the unpredictability of products and services, tech companies can experience volatile cash flows. Due to their high growth potential and strong intellectual property rights, tech companies often have good access to capital markets.

The capital structure of science and technology enterprises has been widely studied in recent years. Kędzior et al. conducted an empirical study on Polish high-tech enterprises, analyzing factors such as internal and external innovation, enterprise size, liquidity, intangibility, age, profitability and growth opportunities [9]. The empirical results show that liquidity, age and innovation input determine the capital structure, which supports the tradeoff theory and pecking order theory. This study is particularly relevant because it sheds light on the specific determinants of capital structure in the context of technology companies. Tong and Serrasqueiro's research on the factors affecting the capital structure of medium and high technology smes in Portugal has provided valuable insights into the impact of firm size, profitability, establishment time and industry sector on capital structure [10]. This study helps to understand the details of the capital structure of the technology sector, especially SMEs. In addition, the study by Bhatia and Kumari examined inter-industry differences in the capital structure of leading Indian firms, including the information technology sector [11]. This comparative analysis reveals the difference of capital structure among different industry groups and provides a broader perspective for studying the particularity of capital structure of science and technology enterprises.

In summary, the above studies provide valuable insights into the capital structure of technology firms by examining determinants, network effects, inter-industry differences, and specific sub-industry analyses. These findings contribute to a comprehensive understanding of capital structure dynamics within the technology industry.

## **4. Capital Structure in Different Markets**

### **4.1. Developed Countries vs. Developing Countries**

Equity markets in developing countries tend to be less developed, leading to a reliance on bank debt financing. A lack of transparency and reliable financial information can discourage equity investment and limit access to cheaper forms of financing. Due to the high risk of repayment problems, inefficient legal systems and poor contract enforcement can hinder the signing of debt contracts.

Sakatan provides valuable insights into capital structures in developing countries, with a particular focus on Saudi Arabia [12]. The study reveals various factors that influence the capital structure of firms in the region, including firms' preference for internal financing, equity financing and short-term borrowing. Research contributes to understanding capital structure dynamics in developing countries and reveals the complexity of decision-making in these contexts.

Developed countries generally rely more on equity financing, with strong legal frameworks, efficient trading platforms and strong investor protection attracting investment in the form of stocks and shares. Mature companies in developed economies often prioritize long-term growth and stability, making equity financing more suited to their needs. With a developed financial system, domestic sources of capital are sufficient to meet a large part of investment needs, reducing reliance on foreign debt. Developed countries prefer long-term loans, such as bonds, to short-term loans because their interest rates are relatively stable. Strong government finances and mature corporate credit ratings have led to favorable lending conditions and lower borrowing costs for governments and companies.

Benink and Benston examine the future of banking regulation in developed countries, particularly in the European Union and the United States, and emphasize the need to change the regulatory framework to achieve banking stability. Their analysis highlights the importance of regulatory structures in influencing the stability and development of capital markets [13].

### **4.2. Differences Between Developed and Developing Countries**

The capital structures of developed and developing countries exhibit some key differences. There are multiple sources of funding in developed countries, including bank loans, bonds, corporate debt markets and venture capital. Bank lending tends to dominate in developing countries, while reliance on alternative sources such as equities and bonds remains limited. Developed countries have access to long-term debt instruments. This allows for better management of cash flow and risk. Short-term debt instruments for developing countries are more common. That could put pressure on companies to constantly refinance, discouraging long-term investment.

Government intervention in the financial sector in advanced countries has generally been limited, allowing market forces to drive capital allocation. Governments in developing countries often play a greater role in directing capital flows through state-owned banks, subsidies, and targeted lending programs. This can lead to distortions in resource allocation. Kahya et al. provided a new perspective for the study of the differences in the capital structure of firms in developed and developing countries by focusing on the homogeneous data set limited by the leverage screening rules of Islamic equity indices [14]. Together, these studies highlight the importance of environmental factors in shaping capital structure decisions, particularly in developing countries. The study provides insights into the intricate interplay between firm-specific attributes and the broader institutional context that determine the dynamics of capital structures in developed and developing countries.

## **5. Conclusion**

Capital structure is a key determinant of corporate performance, stability and growth trajectory. This paper highlights the importance of capital structure decisions across different industries and countries,

highlighting the complex interplay between the factors that influence these decisions. From real estate to the technology sector, and from advanced to developing economies, the dynamics of capital structure optimization are highly variable and require nuanced understanding and adaptive approaches. Theoretical frameworks such as M&M theory and empirical research provide valuable insights into the determinants and effects of capital structure decisions. However, actual deviations from ideal market conditions must be acknowledged, as well as the need for a comprehensive assessment of company-specific attributes, regulatory compliance and governance mechanisms.

Sector-specific analysis sheds light on the different capital structure dynamics among capital intensive, labor intensive, and technology sectors. From capital-intensive industries' reliance on debt financing to tech companies' preference for equity financing, understanding these nuances is critical for effective capital allocation and risk management. In addition, differences in financing sources, regulatory frameworks and institutional environments between developed and developing countries further highlight the complexity of capital structure decisions. While developed countries tend to rely more on equity financing and have access to long-term debt instruments, developing countries often face challenges related to the dominance of banks and limited access to alternative sources of financing.

Going forward, companies must adopt a dynamic approach to optimize their capital structure, taking into account industry-specific dynamics, regulatory compliance, and institutional contexts. The adoption of innovative financing mechanisms and the use of emerging technologies can enhance capital structure decision-making and risk management processes. Future research should aim to bridge the gap between theoretical insights and practical applications, especially in understanding the evolving dynamics of capital structure decisions in technology-intensive industries and emerging markets. The use of advanced analytical techniques and the use of interdisciplinary approaches allows for a deeper understanding of the determinants and impacts of capital structure optimization. Policy makers and regulatory authorities should strive to create an environment conducive to capital allocation and market development, especially in developing countries. Strengthening legal frameworks, strengthening investor protection mechanisms, and enhancing financial transparency are important steps to foster strong capital markets and promote sustainable economic growth.

In essence, by combining theoretical insights with empirical evidence and industry-specific analysis, companies can navigate the complexity of capital structure decisions, optimize their financial strategies, and promote long-term value creation in an increasingly dynamic and interconnected global economy.

## References

- [1] Hamouda, R. Z. B., Hamzaoui, N., & Jilani, F. (2023). *Capital Structure Determinants: New Evidence from the MENA Region Countries*. *International Journal of Economics and Financial Issues*, 13(1), 144–163.
- [2] Sonjaya, Y., & Muslim, M. A. (2023). *The effect of capital structure on firm value in banking companies listed on the Indonesia Stock Exchange*. *Golden Ratio of Finance Management*, 3(1), 44–55.
- [3] Grinchenko, V. (2016). *Capital structure of small and medium enterprises*. *Economy and Forecasting*, (1), 142-156.
- [4] Qi, S. (2023). *How the Capital Structure Affects the Firm Performance of Real Estate Listed Companies Between 2010 to 2020 in China*. *Advances in Economics Management and Political Sciences*, 7(1), 76–81.
- [5] Du, X., & Liu, Y. (2015). *Optimized research on capital structure of listed companies in Chinese real estate industry*. *Advances in Intelligent Systems Research*.
- [6] Thoa, H. T. K., Hùng, N. M., & Ha, P. T. H. (2022). *Factors affecting on the capital structure of real estate Joint-Stock companies listed on Vietnam's stock Exchange*. *Journal of Economics and Public Finance*, 8(2), 121.
- [7] Mukherjee, A. N. (2022). *Application of artificial intelligence: benefits and limitations for human potential and labor-intensive economy – an empirical investigation into pandemic ridden Indian industry*. *Management Matters*, 19(2), 149–166.
- [8] Maxim, L. G. (2023). *The Influence of the Capital Structure on the Profitability: Evidence from the Romanian Retail Industry*. *Bulletin of the Transilvania University of Brasov. Series V : Economic Sciences*, 109–120.

- [9] Kędzior, M., Grabińska, B., Grabiński, K., & Kędzior, D. (2020). *Capital Structure Choices in Technology Firms: Empirical Results from Polish Listed Companies*. *Journal of Risk and Financial Management*, 13(9), 221.
- [10] Tong, Y., & Serrasqueiro, Z. (2020). *The Influential Factors on Capital Structure: A study on Portuguese High Technology and Medium-High Technology Small and Medium-Sized Enterprises*. *International Journal of Financial Research*, 11(4), 23.
- [11] Bhatia, A., & Kumari, P. (2023). *Evidence on the existence of inter-industry differences in capital structure of leading Indian companies*. *Social Science Research Network*.
- [12] Sakatan, R. (2010). *The Capital Structure in Developing Countries: Saudi Arabia*. *Corporate Finance: Capital Structure & Payout Policies eJournal*.
- [13] Benink, H., & Benston, G. J. (2005). *The Future of Banking Regulation in Developed Countries: Lessons from and for Europe*. *Financial Markets, Institutions and Instruments*, 14(5), 289–328.
- [14] Kahya, E. H., Ersen, H. Y., Ekinici, C., Taş, O., & Simsek, K. D. (2020). *Determinants of capital structure for firms in an Islamic equity index: comparing developed and developing countries*. *Journal of Capital Markets Studies*, 4(2), 167–191.