European Economic Letters
ISSN 2323-5233
Vol 13, Issue 4 (2023)
http://eelet.org.uk

Measuring the Effectiveness of Capital Structure on Firm Performance: A Comparative Analysis

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Abstract

The research serves as a striking example of how capital structure affects firm performance. In the research, a comparison of the capital structures of small, medium, and large-sized organizations are made. A brief backdrop for the research issue that highlights the impact of capital investment on small, medium, and large-sized businesses is highlighted in addition to this context. Archival articles are used in the research to gather a vast amount of pertinent data. This article also provides a thematic analysis of the informational data that was gathered. In order to fully understand the research topic,this article also discusses the Pecking Order Theory of Finance.

Keywords: Financial performance, capital structure, stock exchanges, asset quality, debt ratio, foreign investment, capital market

Introduction and Background

Capital structure significantly largely influences the firm performance globally, impacting financial stability, cost of capital, and risk. Capital investment has a profound effect on small, medium, and large-sized organisations in a global aspect that will be critically discussed in the research. Additionally, the optimum balance between equity and debt increases growth, competitiveness, and profitability, reflecting the fundamental relation between financial structure, and business outcomes.

Background

Capital investment considers the allocation of funds, typically for purchasing long-term assets such as technology, facilities, and machinery. It aims to generate future returns, expand business capabilities, and improve operational efficiency. As suggested by Spitsin et al. (2021), in the case of small-sized organisations, capital investment can boost profitability, creativity, and market competitiveness. It results in long-term growth, a larger market share, and enhanced financial stability, all aspects that are necessary for thriving in a cutthroat environment.

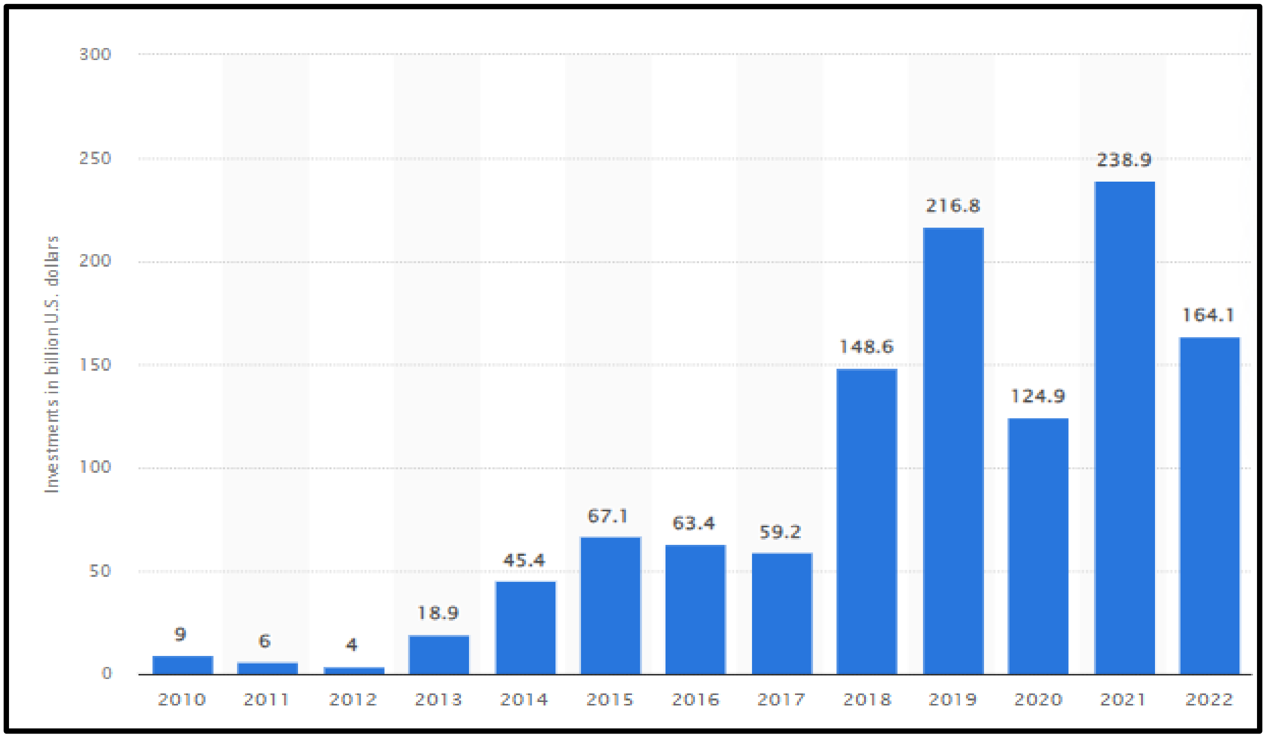

Figure 1: Total capital investments of FinTech companies worldwide from 2010 to 2022; (Source: Statista, 2023)

Figure 1 depicts the overall capital investments of FinTech companies worldwide from the year of 2010 to 2022. The average sale for JPMorgan Chase is $179.93 billion, and for Apple is $385.1 billion (Forbes, 2023). Additionally, in the case of medium-sized firms, the potential is to expand into new markets, create cutting-edge technologies, and boost production capacity through capital investment. It paves the path for quicker growth, increased profitability, and the capacity to seize untapped market opportunities. In contrast to that, as argued by Gajdka & Szymański (2019), in large-sized organisations, to preserve market leadership and long-term sustainability, capital investment is essential. Therefore, capital investment plays a pivotal role in enhancing profitability which in turn enhances annual sales. The aim of the research is to measure the effectiveness of capital structure on firm performance.

The research objectives are constructed according to the research topic, and aims to measure the effectiveness of capital structure on small, medium, and large-sized organisations and to evaluate the impact of capital structure on growth, profitability, and financial stability in small, medium, and large-sized firms

Literature Review

Capital structure impact on small, medium and large-sized firms' performance

The capital structure, or the ratio of debt to equity financing a firm uses, has a big impact on how well small, medium, and large-sized businesses operate globally. It is essential in establishing a firm's financial stability, risk profile, and general level of market competitiveness. As suggested by Ahmad et al. (2021), a balanced capital structure is essential for small businesses because they frequently do not have access to significant financial resources. Additionally, they can finance expansion efforts with the right balance of debt and equity, but too much debt might put them in a difficult financial situation. On the other hand, equity-heavy financing may restrict chances for expansion.

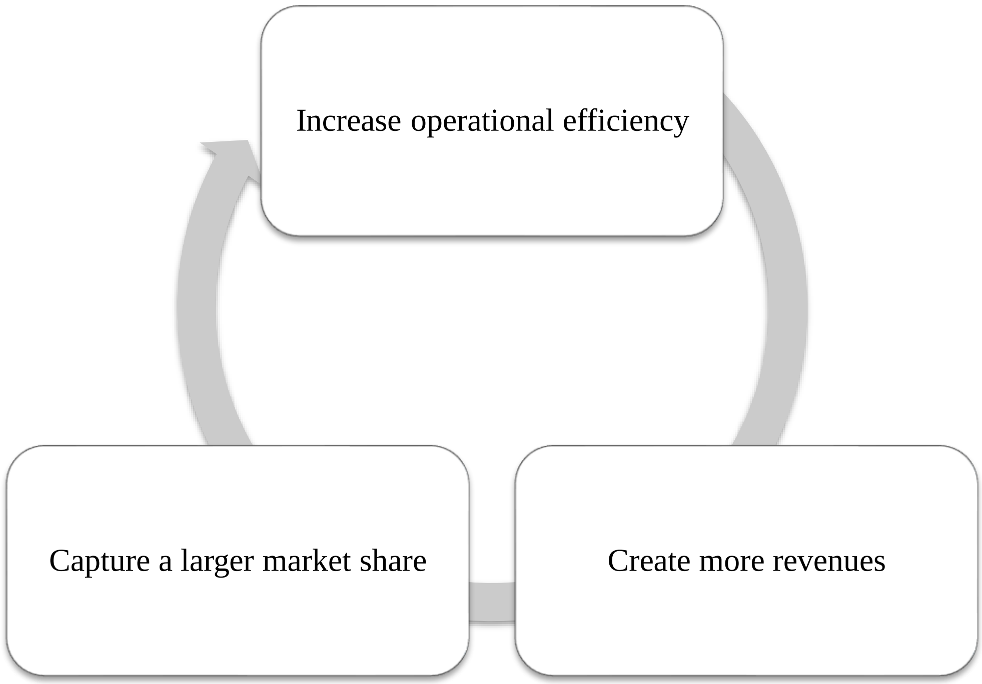

Figure 2: Impact of capital investments on firm's performance; Source: Influenced by Hakim & Naelufar, 2020

Figure 2 depicts the impacts of capital investment on the performance of small, medium, and large-sized firms. A balanced capital structure is advantageous for medium-sized businesses as well, but they frequently have better access to capital markets. As per the view of Hakim & Naelufar (2020), medium-sized organisations have growth potential that can be improved by a moderate degree of debt, but excessive leverage can result in higher interest expenses and greater risk. In contrast to that, as contradicted by Bajaher, Habbash & Alborr (2022), larger companies have more flexibility in their capital structures since they have more established activities and greater access to money. Moreover, they can use debt to finance growth and acquisitions, and because of their scale and stability, they frequently receive better terms. These actions also optimise operating efficiency and stimulate innovation. It is important to understand that the effect of capital structure differs among industries, economies, and geographical areas. Therefore, it enables diversification, strategic acquisitions, and the implementation of large-scale projects.

Comparative analysis across firm sizes

Comparative research of capital structure and investment strategies for small, medium, and large-sized firms reveals distinctive patterns that are influenced by their financial resources and expansion goals. As illustrated by Xu & Liu (2020), small businesses frequently lack substantial internal resources, thus they frequently rely on equity and short-term financing to reduce financial risk. However, due to their restricted access to outside finance, their investment strategy tends to focus on incremental growth and operational efficiency. On the other hand, medium-sized businesses need a balanced capital structure that combines long-term debt and equity since they have substantially better access to capital markets. Therefore, their investments are mostly focused on innovation, product diversity, and moderate market expansion.

Large businesses can use debt for strategic acquisitions, worldwide development, and large-scale innovation since they have access to adequate resources and simpler credit.

As opined by Oppong & Pattanayak (2019), risk tolerance also varies by the size of the business; small businesses prioritise survival, medium-sized businesses want expansion, and large businesses frequently pursue market dominance. Therefore, the ideal capital structure and investment plan need to be matched the firm's size, risk tolerance, and long-term goals, determining its course in the market.

Pecking Order Theory

The Pecking Order Theory in finance indicates that firms prioritise internal financing like retained earnings over external financing like equity to fund investment projects because of the information asymmetry. As suggested by Agyei, Sun & Abrokwah (2020), the pecking order framework further contends that firms select financing options based on those that have the least negative effects on their stock price. Additionally, the theory offers insights into how businesses manage financial risks, balance debt and equity, and match their capital structures with growth goals. Figure 3 shows the general aspects of pecking order theory along with illustrating aspects like access to capital markets, and risk tolerance.

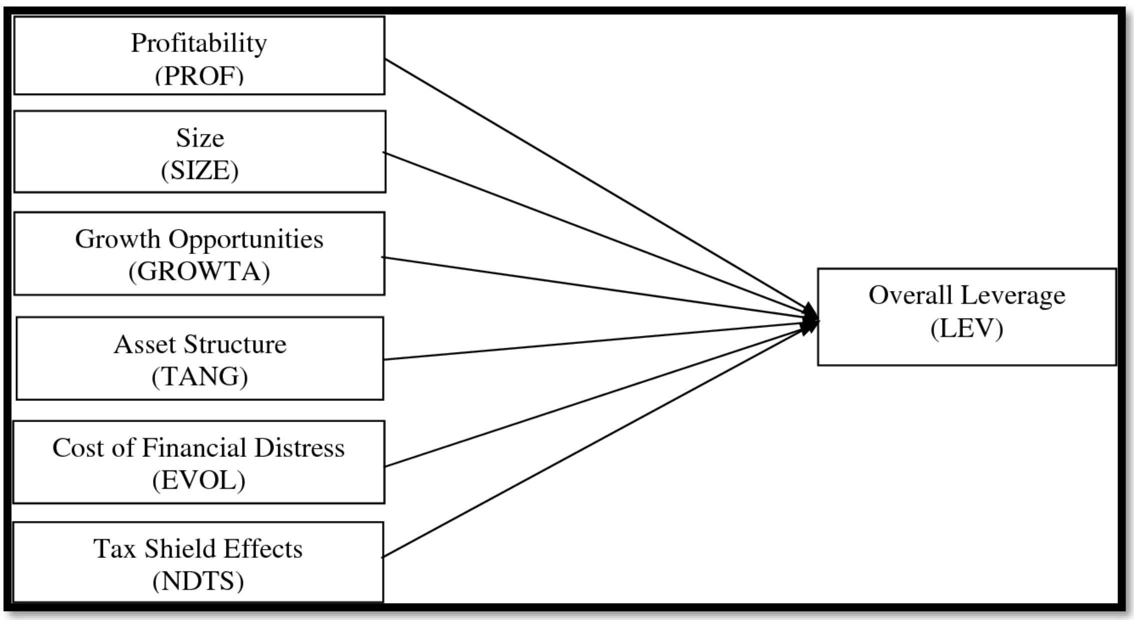

Figure 3: Pecking Order Theory; Source: Influenced by Agyei, Sun & Abrokwah, 2020

Literature gaps

The knowledge gap has been found as the major literature gap in previous studies. As suggested by Kong et al. (2023), this study's review of the literature on the capital structure and financial sustainability of non-financial firms probably leaves out a lot of information about industry-specific characteristics, and external macroeconomic influences. Therefore, the research is required to properly explain the aspects and impacts of capital structure on organisational performance.

Research method

ResearchGate and ProQuest have been used for collecting data on the "impact of capital structure on firm performance". Additionally, ten articles have been chosen by applying the inclusion, and exclusion criteria. Moreover, a systematic review has been applied as the data analysis to get secondary information. Therefore, a secondary qualitative research method has been followed in the research.

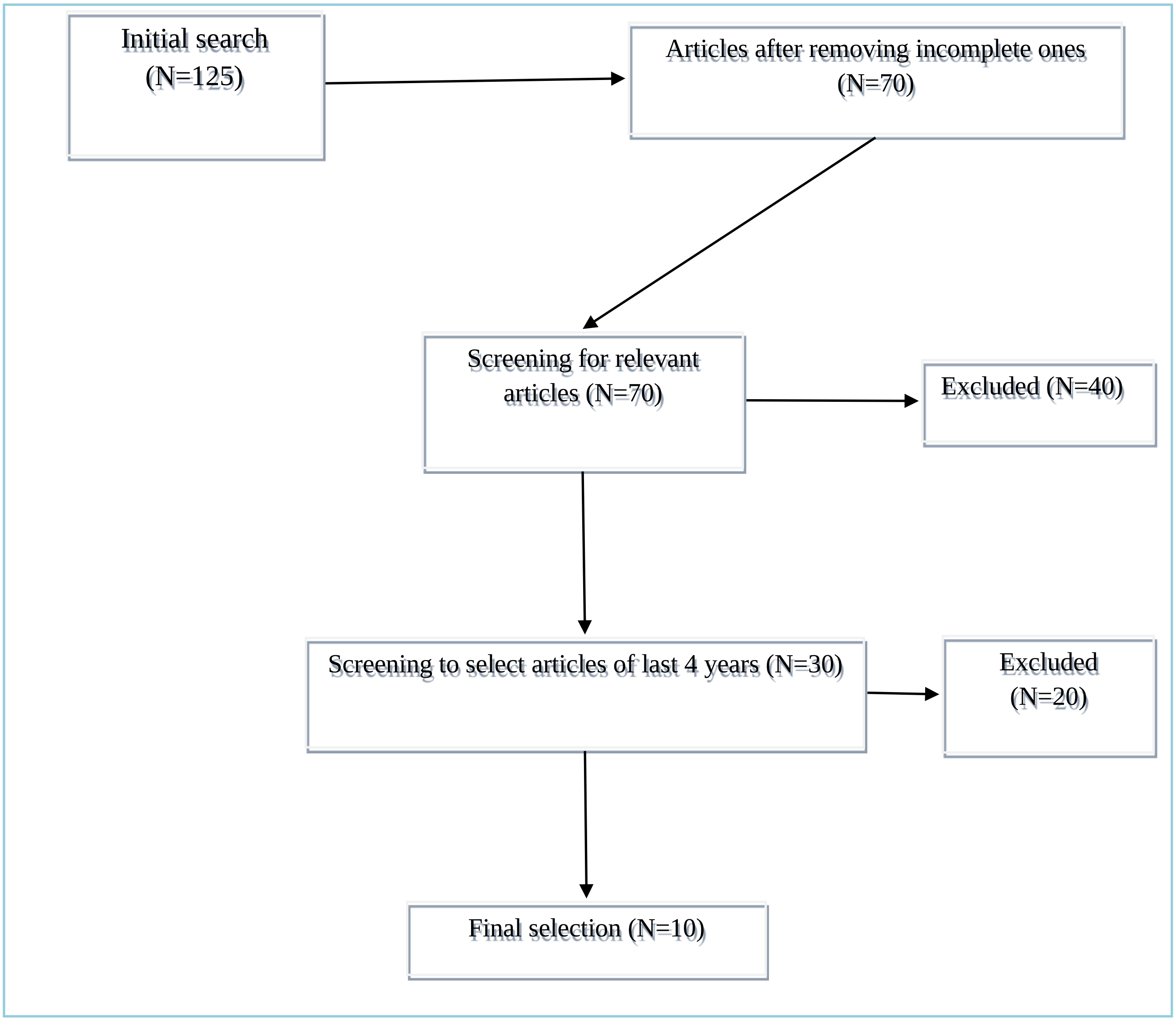

Figure 5: Prisma Diagram

Result

A comparative analysis has been performed of the impacts of capital structure on small, medium, and large-sized firms through a systematic review. A CASP table and thematic coding table have been prepared to check the quality of the chosen articles.

CASP Table

CASP Questions	Hakim & Naelufar, 2020	Spitsin et al. 2021	Basti & Bayyurt, 2019	Bajaher, Habbash & Alborr, 2022	Thanh & Trang, 2021	Olaoye & Dada, 2021	Sawitri, Lutfillah & Candrawati, 2022	Efendi, Murwanto & Ratnawati, 2022	Satrianto et al. 2019	AlMOM ANI et al. 2022
Q 1. Did the review address a clearly focused question?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q2. Did the authors look for the the right type of papers?	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q3. Do you think all the important, relevant studies were included?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Q4. Did the review's authors do enough to assess the quality of the included studies?	No	No	Can't tell	Yes	Yes	Yes	No	Yes	Yes	No

European Economic Letters
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Q5. If the results of the review have been combined, was it reasonable to do so?	No	Yes	Yes	Yes	Can’t tell	Yes	Yes	Yes	Yes	Yes
Q6. What are the overall results of the review?	Can’t tell	Yes	Yes	Yes	No	No	No	Yes	Yes	Can’t tell
Q7. How precise are the results?	Yes	Yes	Yes	Yes	Can’t tell	Yes	No	Yes	Yes	No
Q8. Can the results be applied to the local population?	Yes	Can’t tell	Can’t tell	Yes	Yes	Yes	Yes	Yes	No	Yes
Q9. Were all important outcomes considered?	Yes	Yes	Yes	Can’t tell	Yes	Yes	Yes	Yes	Yes	Yes
Q10. Are the benefits worth the harms and costs?	Yes	Yes	Yes	Yes	Can’t Tell	Yes	No	Yes	Yes	Yes

Table 1: CASP table

(Source: Created by author)

Thematic coding table

Author	**Keywords**	**Theme**
Hakim & Naelufar, 2020 Spitsin et al. 2021 Basti & Bayyurt, 2019	*Capital structure, liquidity, profits growth, earnings quality, profitability, transition economy, high-tech industries*	*"Theme 1: Optimal capital structure has a considerable impact on company size and profit quality."*
Bajaher, Habbash & Alborr, 2022 Thanh & Trang, 2021 Olaoye & Dada, 2021	*Financial performance, capital structure, stock exchanges, debt ratio, foreign investment, ownership structure, board governance, capital market*	*"Theme 2: Foreign investment and capital structure are two key aspects of improving financial performance."*
Sawitri, Lutfillah & Candrawati, 2022 Efendi, Murwanto & Ratnawati, 2022	*Capital structure, corporate social response, asset structure, company size, firm value, earning growth, earnings management*	*"Theme 3: Audit quality and asset structure influence to make capital investment decisions".*
Satrianto et al. 2019 AlMOMANI et al. 2022	*Firm size, profitability, capital structure, asset growth rate, debt ratio, financial growth rate*	*"Theme 4: Firm value relationship and capital structure are the salutary factors of enhancing asset growth."*

Table 2: Thematic coding table

Analysis

Thematic analysis

Optimal capital structure has a considerable impact on company size and profit quality

The ideal capital structure, which influences the correct balance between debt and equity financing, is crucial in determining the quantity and quality of a company's profits. As suggested by Hakim & Naelufar (2022), a solid capital structure can improve a company's capacity for expansion and opportunity exploitation. Additionally, a firm can use outside funding to support growth, R&D, and expansion by carefully selecting the right debt and equity ratios. This expands the company's market presence and eventually its size. On the other hand, as argued by Spitsin et al. (2021), depending too much on debt can also be harmful, as it can result in financial instability, greater interest costs, and restricted flexibility during tumultuous economic times. Therefore, small, medium, and large-sized organisations continually review and modify their capital structures to ensure they are in line with their goals for growth and risk tolerance.

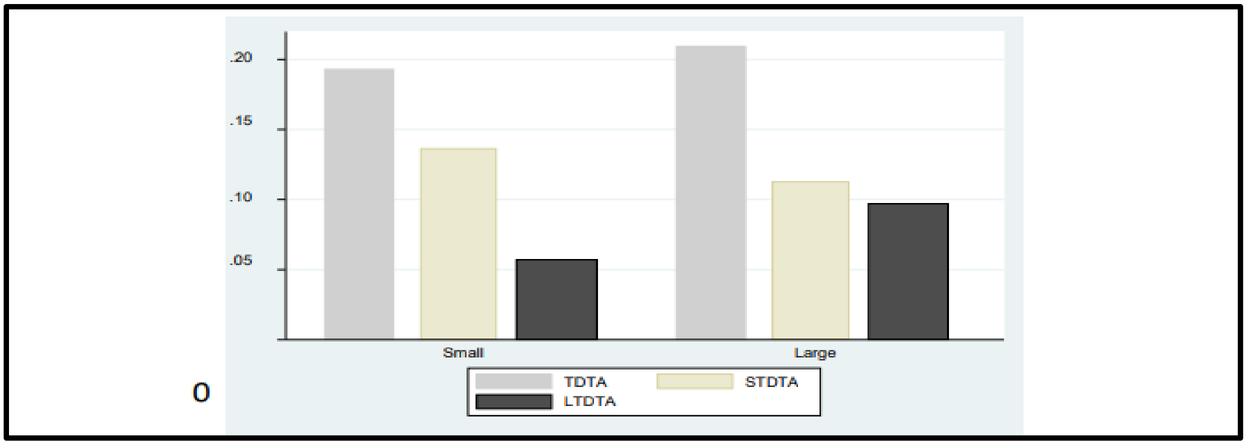

Figure 6: Average leverage ratios of small and large firms; Source: Influenced by Basti & Bayyurt, 2019

Figure 6 illustrates the average ratios of small and large companies. As illustrated by Basti & Bayyurt (2019), there is a sizable effect of capital structure on profit quality, and finding the right ratio of debt to equity can increase profitability while also helping to minimise financial risk. Therefore, capital structure is an important choice that influences both the size of the company and the long-term viability of its profits in small, medium, and large-sized organisations.

Foreign investment and capital structure are two key aspects of improving financial performance

Enhancing a company's financial performance requires both foreign investment and a clear capital structure. As stated by Bajaher, Habbash & Alborr (2022), capital markets, access to new markets, and growth potential are all brought about by foreign investment. However, foreign investments can infuse resources into an organisation that enables growth, innovation, and diversity, increasing income sources and improving overall financial health.

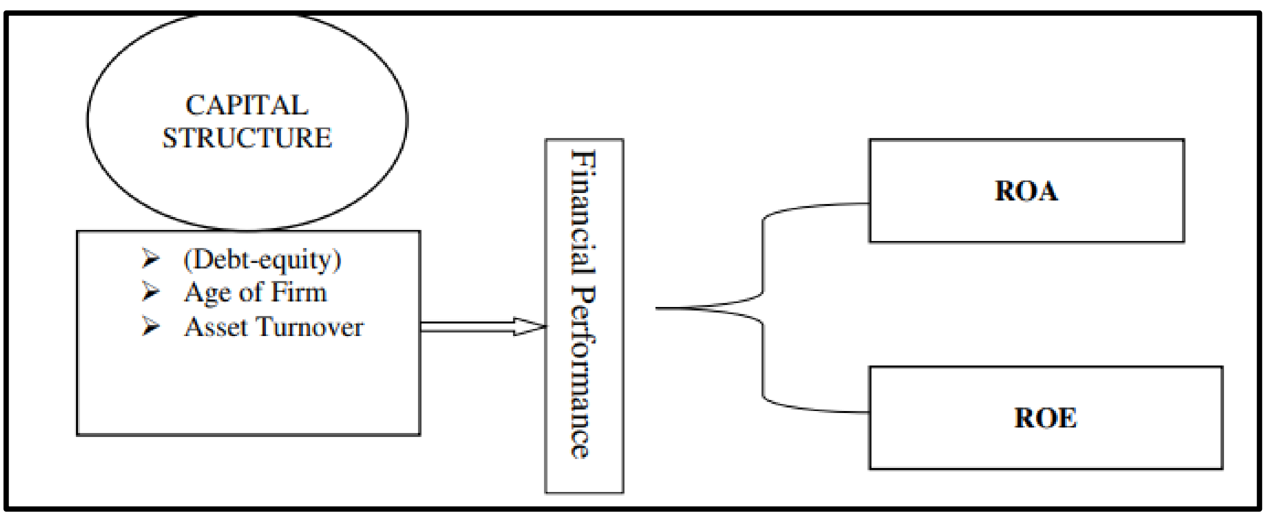

Figure 7: Relation between return on capital employed, return on assets, and assets turnover ratio; Source: Influenced by Olaoye & Dada, 2021

Figure 7 illustrates the connection between assets turnover ratio, return on capital employed, and return on assets. In addition, capital structure funded by debt and equity, is a key factor in maximising financial performance. As opined by Thanh & Trang (2021), an organisation can leverage debt for expansion while minimising financial risk with a well-balanced capital structure. Moreover, this combination affects profitability and the cost of capital since an effective structure can increase earnings while reducing interest costs. Contrarily, an ineffective capital structure with excessive debt may cause financial turmoil and prevent a company from investing in value-adding ventures, which would lead to lower-quality profits (Olaoye & Dada, 2021). Therefore, foreign investment and capital structure optimisation work together to give small, medium, and large-sized organisations a competitive edge and ultimately improve financial performance.

Audit quality and asset structure influence making capital investment decisions

Decisions about capital investments are significantly influenced by audit quality and asset structure. As stated by Sawitri, Lutfillah & Candrawati (2022), accurate financial information is ensured by high audit quality, which also reduces information asymmetry and boosts investor confidence. Additionally, for efficient capital allocation, it offers a better assessment of a company's financial stability, risk, and growth potential. In addition, the combination of a company's tangible and intangible assets, which is known as its asset structure, impacts its capacity to provide returns. A strong asset structure and effective resource management have a positive impact on investment decisions (Efendi, Murwanto & Ratnawati, 2020). As a result, small, medium, and large-sized organisations that have valuable, productive assets can able to draw investment and add value.

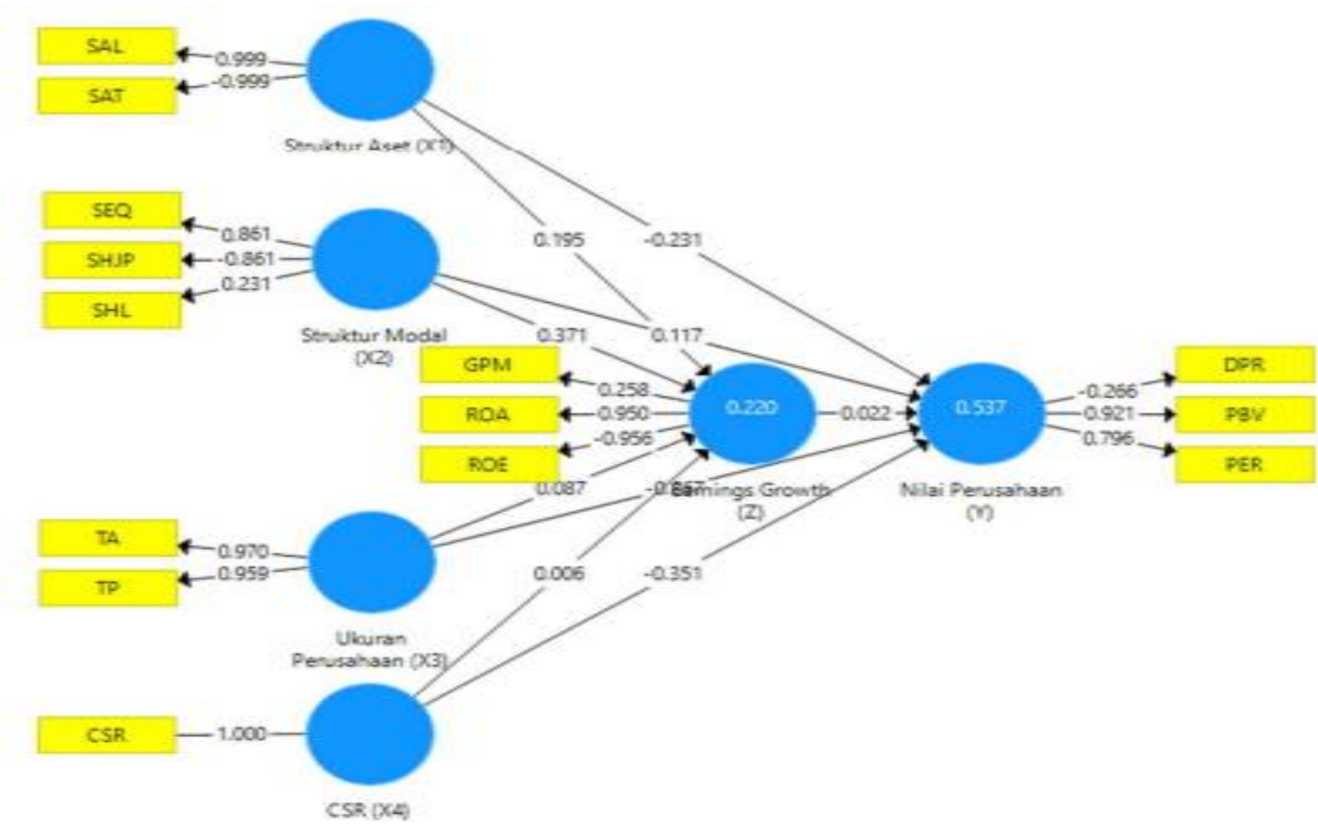

Figure 8: SmartPLS model for Asset Structure and return on capital assets; Source: Influenced by Efendi, Murwanto & Ratnawati, 2020

Firm value relationship and capital structure are the salutary factors for enhancing asset growth

The link between capital structure and business value is crucial for promoting asset growth. A capital structure that is well-optimized and has the right ratio of debt to equity can boost a company's worth (Satrianto et al. 2019). This opens up access to extra funds for strategic initiatives like business expansion, asset acquisition, or innovation funding. Furthermore, the increased business value brought on by an effective capital structure attracts investors and lowers the cost of capital. A structured capital structure enables businesses to invest in initiatives that have higher returns on investment, which raises profit margins (AlMOMANI et al. 2022). Thus, these synergistic elements operate as catalysts, accelerating asset growth in small, medium, and large-sized organisations. Figure 9 is showing heterokedacity illustrating the negative effect of profit on capital investment in a company.

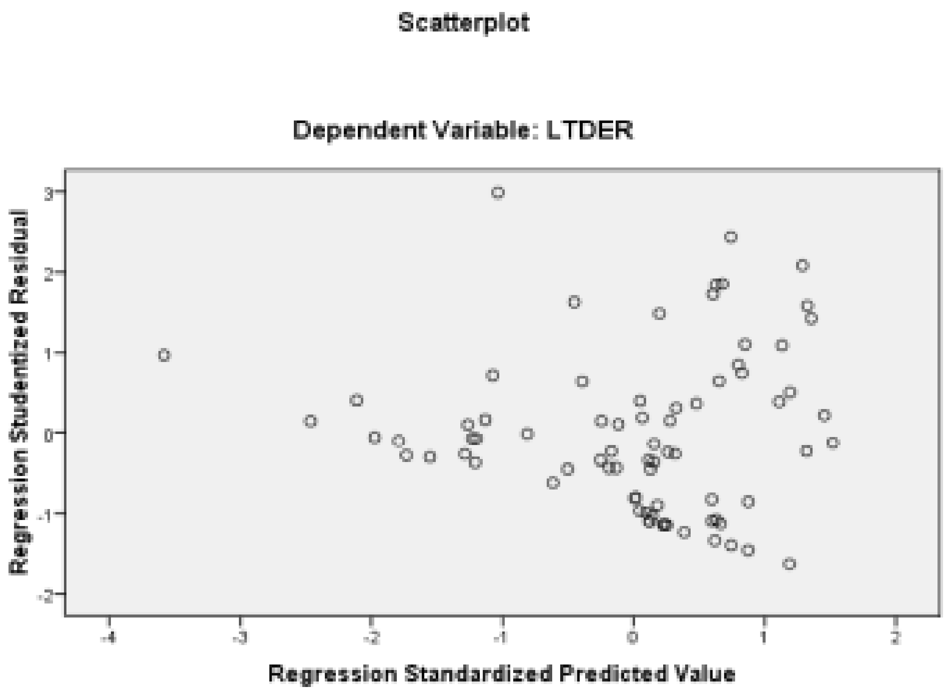

Figure 9: Heterokedacity Test; Satrianto et al. 2019

Discussion

The research aim is to "measure the impact of capital structure on firm performance", and offers a thorough framework for addressing the themes mentioned. In theme 1, the research tries to determine how the distribution of debt and equity influences these crucial elements, such as how the optimal capital structure affects the firm size and profit quality. On the contrary, as opposed by Kong et al. (2023), when choosing the ideal capital structure, businesses need to carefully understand risk tolerance, and growth goals to execute sustainably on a global scale. The role of foreign investment and capital structure in boosting financial performance is also highlighted by Theme 2.

Moreover, Theme 3 emphasises how asset structure and audit quality have an impact on decisions about capital investments. The research goal makes it easier to analyse how these factors affect the decisions businesses make about their capital investments. Theme 4 further emphasises the connection between asset growth, capital structure, and firm value. The research goal makes it possible to investigate how these elements interact to have a favourable impact on a company's overall asset growth. Therefore, the research aim significantly meets all the criteria of the themes.

Conclusion

The comparative analysis suggested that capital structure and investment significantly influence firm performance across small, medium, and large firms. Additionally, all firm sizes need to practice smart leverage management and optimal capital allocation. However, there could be subtle differences, including risk tolerance and resource availability. Regardless of the size of the company, balancing these aspects is essential for maximising success.

Future Scope

Future research scope focused on the effects of geographical variances, disruptive technologies, and industry-specific dynamics on capital structure and investment on small, medium, and large-sized business performance. As illustrated by Bhakuni (2022), corporate governance, environmental, social, and governance (ESG) elements, as well as the shifting nature of the world economy are all included in the global economic landscape. Additionally, longitudinal study and comparative analysis across diverse markets enhance the understanding of different-sized firms of how these factors interact and evolve. That leads to more structured strategies to optimise capital investment, and structure for driving sustainable firm performance.

References

[1] Agyei, J., Sun, S., & Abrokwah, E. (2020). Trade-off theory versus pecking order theory: Ghanaian evidence. *Sage Open*, *10*(3), 2158244020940987. https://doi.org/10.1177/2158244020940987

[2] Ahmad, Z., Mohamed Yousop, N. L., Ramdhan, N. A., Sipon, Z., A Latif, R., Hassan, S., ... & Ismail, U. M. (2021). The relationship of capital structure towards firm’s performance: focusing on the technological sector. *Voice of Academia (VOA)*, *17*(2), 210-224. https://ir.uitm.edu.my/id/eprint/50442/1/50442.pdf

[3] Almahairah, M. S., Bhakuni, S., Agyei, I. T., & Chatterjee, S. (2022). Co-Operative Business Models in Covid Era and Reformation of Society. *resmilitaris*, *12*(4), 765-774. https://resmilitaris.net/menu-script/index.php/resmilitaris/article/download/1825/1532

[4] Bajaher, M., Habbash, M., & Alborr, A. (2022). Board governance, ownership structure and foreign investment in the Saudi capital market. *Journal of Financial Reporting and Accounting*, *20*(2), 261-278. https://doi.org/10.1108/JFRA-11-2020-0329

[5] Bhakuni, S. (2022). Managing employees: Requirement of a humane approach. *International journal of research in finance and management*, *5*(1), 54-57. https://doi.org/10.33545/26175754.2022.v5.i1a.141

[6] Bhakuni S, & Saxena S. (2023). Critically analyzing the role of total rewards and compensation in increasing employee motivation. Change Management: An International Journal. 23(1), 85-103.

[7] Forbes, (2023). Net sales of global companies. Retrieved on 10th August 2023 from: https://www.forbes.com/lists/global2000/?sh=5766a96e5ac0

[8] Gajdka, J., & Szymański, M. (2019). Changes in the Capital Structure of Polish Companies During the Last Twenty Years (1997–2017). *Annales Universitatis Mariae Curie-Skłodowska, sectio H– Oeconomia*, *53*(4). doi:10.1111/jofi.12163

[9] Hakim, M. Z., & Naelufar, Y. (2020). Analysis of profit growth, profitability, capital structure, liquidity and company size of profit quality. *Jurnal Akademi Akuntansi*, *3*(1), 12-35. https://doi.org/10.22219/jaa.v3i1.10348

[10] Kong, Y., Donkor, M., Musah, M., Nkyi, J. A., & Ampong, G. O. A. (2023). Capital structure and corporates financial sustainability: evidence from listed non-financial entities in Ghana. *Sustainability*, *15*(5), 4211. https://www.mdpi.com/2071-1050/15/5/4211

[11] Oppong, G. K., & Pattanayak, J. K. (2019). Does investing in intellectual capital improve productivity? Panel evidence from commercial banks in India. *Borsa Istanbul Review*, *19*(3), 219-227. https://doi.org/10.1016/j.bir.2019.03.001

[12] Prasad, K. D. V., & Vaidya, R. (2023). CRITICALLY ANALYZING THE ROLE OF TOTAL REWARDS AND COMPENSATION IN INCREASING EMPLOYEE MOTIVATION FROM THE PERSPECTIVE OF RULES AND GOVERNMENT SERVICES. *Lex Humana (ISSN 2175-0947)*, *15*(1), 454-471. https://seer.ucp.br/seer/index.php/LexHumana/article/download/2446/3433

[13] Spitsin, V., Vukovic, D., Anokhin, S., & Spitsina, L. (2021). Company performance and optimal capital structure: evidence of transition economy (Russia). *Journal of Economic Studies*, *48*(2), 313-332.https://doi.org/10.1108/JES-09-2019-0444

[14] Statista, (2023). Investments into FinTech companies globally. Retrieved on 10th August 2023 from: https://www.statista.com/statistics/719385/investments-into-fintech-companies-globally/

[15] Xu, J., & Liu, F. (2020). The impact of intellectual capital on firm performance: A modified and extended VAIC model. *Journal of Competitiveness*, (1). https://pdfs.semanticscholar.org/6a86/72fbf849e963d3c479a070b7c8f96328013b.pdf

[16] Thematic coding references

[17] AlMOMANI, T. M., Obeidat, M. I. S., Almomani, M. A., & Darkal, N. M. A. M. (2022). Capital structure and firm value relationship: The moderating role of profitability and firm size: Evidence from Amman stock exchange. *WSEAS Transactions on Environment and Development*, *18*(1), 1073-1084. DOI: 10.37394/232015.2022.18.102

[18] Bajaher, M., Habbash, M., & Alborr, A. (2022). Board governance, ownership structure and foreign investment in the Saudi capital market. *Journal of Financial Reporting and Accounting*, *20*(2), 261-278. https://doi.org/10.1108/JFRA-11-2020-0329

[19] Basti, E., & Bayyurt, N. (2019). Factors affecting capital structure choice: new evidence from Turkish NON-financial listed companies. *Journal of Business Economics and Finance*, *8*(1), 53-70. http://doi.org/10.17261/Pressacademia.2019.1015

[20] Efendi, M. S., Murwanto, O., & Ratnawati, T. (2022). INFLUENCE OF ASSET STRUCTURE, CAPITAL STRUCTURE, COMPANY SIZE AND CORPORATE SOCIAL RESPONSIBILITY TOWARDS FIRM VALUE WITH EARNING GROWTH AS INTERVENING VARIABLE IN STATE-OWNED ENTERPRISES LISTED ON THE INDONESIA STOCK EXCHANGE (STUDY ON NON-BANK SOE S. *JMM17: Jurnal Ilmu ekonomi dan manajemen*, *9*(01), 79-93. https://jurnal.untag-sby.ac.id/index.php/jmm17/article/download/6446/4752

[21] Hakim, M. Z., & Naelufar, Y. (2020). Analysis of profit growth, profitability, capital structure, liquidity and company size of profit quality. *Jurnal Akademi Akuntansi*, *3*(1), 12-35. http://dx.doi.org/10.22219/jaa.v3i1.10348

[22] Olaoye, F. O., & Dada, O. D. (2021). EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF AGRO-ALLIED COMPANIES IN NIGERIA. *International Journal of Management (IJM)*, *12*(1). DOI: 10.34218/IJM.12.1.2021.136

[23] Satrianto, A., Candrianto, C., ayu Gusti, M., Juniardi, E., & Novenica, M. (2019, September). Analysis of the Effect of Asset Growth, Profitability, and Company Size on Capital Structure (Empirical Study in Mining Sector Companies in Indonesia Stock Exchange). In *Third Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2019)* (pp. 745-752). Atlantis Press. https://doi.org/10.1111/1468-5957.00370

[24] Sawitri, R. A. D., Lutfillah, N. Q., & Candrawati, T. (2022, December). The Influence of Firm Size, Ownership Structure, Leverage, and Audit Quality on Earnings Management. In *3rd Annual Management, Business and Economics Conference (AMBEC 2021)* (pp. 294-302). Atlantis Press. https://doi.org/10.2991/978-94-6463-026-8_34

[25] Spitsin, V., Vukovic, D., Anokhin, S., & Spitsina, L. (2021). Company performance and optimal capital structure: evidence of transition economy (Russia). *Journal of Economic Studies*, *48*(2), 313-332. https://doi.org/10.1108/JES-09-2019-0444

[26] Thanh, N. T. H., & Trang, H. L. (2021, December). Factors Affecting the Capital Structure of Pharmaceutical-Medical Companies Listed on Vietnam's Stock Exchanges. In *International Conference on Emerging Challenges: Business Transformation and Circular Economy (ICECH 2021)* (pp. 113-121). Atlantis Press. https://doi.org/10.2991/aebmr.k.211119.013