

Research Article

The Effect of Capital Structure on the Profitability of Manufacturing Companies in Indonesia

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Abstract

This qualitative literature review aims to examine the effect of capital structure on the profitability of manufacturing companies in Indonesia. Over recent years, the dynamic relationship between capital structure and financial performance has gained significant attention from researchers and practitioners, particularly within the context of emerging economies like Indonesia. Capital structure decisions, including the proportion of debt and equity financing, are critical as they influence not only the cost of capital but also the firm's ability to generate profits. By analyzing various studies and theories related to capital structure, this review identifies key factors such as the impact of debt levels, equity financing, and the trade-off between risk and return in determining profitability. Manufacturing companies, given their capital-intensive nature, often face unique challenges in managing these financial structures. This study specifically focuses on how these companies in Indonesia navigate such challenges in a highly competitive market. Findings from the reviewed literature suggest that a well-balanced capital structure can enhance profitability by optimizing the cost of capital and increasing the firm's operational efficiency. However, an excessive reliance on debt financing tends to elevate financial risks, potentially diminishing profitability. Moreover, industry-specific factors such as market volatility, regulatory environment, and economic conditions are highlighted as critical elements that mediate the relationship between capital structure and profitability. The contribution of this research lies in offering a comprehensive understanding of how capital structure influences the profitability of manufacturing companies in Indonesia, providing valuable insights for managers, investors, and

policymakers. The review also outlines the gaps in existing research and proposes future directions for further empirical studies in this domain.

Keywords: capital structure, profitability, manufacturing companies

INTRODUCTION

The capital structure of a firm refers to the mix of debt and equity used to finance its operations and growth. This decision is crucial for companies, as it impacts both their short-term financial performance and long-term sustainability. Capital structure, in essence, defines how a company finances its assets and operations, which in turn influences its risk profile, cost of capital, and overall financial stability. While a well-structured capital base can facilitate expansion and profitability, poor management of the capital structure can expose firms to excessive financial risks, thereby affecting their profitability and operational efficiency (Bui et al., 2023).

In the context of manufacturing companies in Indonesia, capital structure has become an increasingly significant area of interest for researchers and policymakers alike. Indonesia, as one of the largest economies in Southeast Asia, boasts a diverse and dynamic manufacturing sector, which forms a critical part of its economic growth (Nguyen & Nguyen, 2020). However, despite the vital role of manufacturing in Indonesia's economy, the sector faces several challenges, including fluctuating commodity prices, inflation, and an evolving regulatory landscape. These challenges make it all the more essential for manufacturing companies to maintain an optimal capital structure that balances debt and equity in a manner that maximizes profitability.

Profitability, in turn, is a key indicator of a company's performance. It determines a firm's ability to generate earnings relative to its revenue, assets, and equity. For manufacturing companies, profitability is particularly important, as it not only influences shareholder returns but also plays a crucial role in ensuring business sustainability and competitiveness in a global market (Sudirjo, 2023). The relationship between capital structure and profitability has been widely debated in corporate finance literature, with conflicting findings emerging from different contexts and industries.

Previous studies have offered varying insights into how the use of debt (leverage) and equity affects profitability, often with mixed results. Some researchers suggest that an optimal mix of debt and equity enhances profitability by lowering the cost of capital, while others argue that excessive debt increases financial risk, which could negatively impact profitability. Therefore, understanding the impact of capital structure on profitability, particularly within Indonesia's manufacturing sector, is crucial for both academic research and practical business strategy (Kiselařková et al., 2019).

Despite the existing body of literature, the relationship between capital structure and profitability in the context of Indonesian manufacturing companies remains underexplored (Kiselařková et al., 2019). This research aims to fill this gap by examining the effect of capital structure on the profitability of manufacturing firms in Indonesia, providing insights into how firms can structure their capital to achieve better financial outcomes.

The study is important not only for understanding the theoretical underpinnings of capital structure and profitability but also for offering practical implications for manufacturing firms, policymakers, and investors. By identifying the optimal capital structure that leads to improved profitability, this research can guide business leaders in making informed decisions that support long-term growth and sustainability(Suparjo & Dana, 2024).

The main objective of this study is to analyze the effect of capital structure, particularly the proportion of debt and equity, on the profitability of manufacturing companies in Indonesia. By doing so, this research will contribute to the understanding of corporate finance in emerging economies and provide valuable recommendations for improving financial strategies in Indonesia's manufacturing sector(Malek et al., 2024). The research also aims to identify key factors that influence capital structure decisions, including macroeconomic conditions, industry characteristics, and firm-specific factors.

This study is particularly relevant given the evolving economic environment in Indonesia, where shifts in market conditions, regulatory frameworks, and global trade dynamics pose unique challenges to the manufacturing sector. Furthermore, with the increasing globalization of business operations, understanding the financial dynamics of manufacturing firms in Indonesia is crucial for both local and international investors who wish to evaluate the potential of this key sector(Tolossa et al., 2024).

The novelty of this research lies in its focus on the Indonesian manufacturing industry, which has not been extensively studied in previous capital structure literature. By exploring the specific dynamics of this sector, the study aims to offer valuable insights that can be used to guide future policy decisions and corporate strategies(Iriani et al., 2024).

Thus, the research will not only contribute to the theoretical literature on capital structure and profitability but also provide actionable insights for practitioners seeking to optimize their financial strategies in the face of an increasingly competitive and uncertain global business environment.

METHOD

The research design for this study adopts a qualitative approach with a literature review methodology. The purpose of this qualitative study is to analyze existing scholarly articles, journals, reports, and other relevant publications to examine the effect of capital structure on the profitability of manufacturing companies in Indonesia(Wei & Lin, 2024). This design was chosen because qualitative research enables an in-depth understanding of the dynamics of capital structure and its impact on corporate profitability, which quantitative methods may not fully capture in terms of contextual nuances. Additionally, this approach allows the researcher to explore the interpretations, arguments, and conclusions made by previous researchers regarding capital structure in the context of Indonesian manufacturing companies.

Data Collection

The data collection process involves a systematic search and review of secondary data from peer-reviewed articles, books, conference papers, working

papers, and industry reports available in academic databases such as JSTOR, Scopus, Google Scholar, ScienceDirect, and others. Specific keywords like “capital structure,” “profitability,” “manufacturing companies,” “Indonesia,” and “financial performance” will be used to narrow down the relevant literature. The literature selection criteria include:

- **Publication Date:** Articles published in the last 10-15 years to ensure the literature is contemporary and relevant.
- **Language:** Only English-language publications will be considered to maintain consistency in terms of readability and accessibility.
- **Relevance:** Only studies that explicitly address the relationship between capital structure and profitability in the context of manufacturing companies in Indonesia will be included.
- **Academic Rigor:** The sources must be from reputable journals or recognized industry reports that are peer-reviewed or published by reputable institutions.

The data collection process will also involve obtaining grey literature, such as reports from financial institutions, government bodies, or reputable consultancy firms that analyze manufacturing companies in Indonesia (van der Duin et al., 2024). This grey literature provides contextual data to complement academic sources.

Inclusion and Exclusion Criteria

The inclusion criteria for the literature review are:

- Studies focusing on the impact of capital structure (debt and equity financing) on corporate profitability.
- Research that is contextually relevant to Indonesian manufacturing companies or similar emerging economies.
- Studies that analyze profitability metrics, such as Return on Assets (ROA), Return on Equity (ROE), or profit margins, in the context of capital structure.

The exclusion criteria include:

- Studies that do not focus on manufacturing companies.
- Articles that do not provide empirical or conceptual evidence.
- Research conducted outside the context of developing or emerging economies unless a comparative framework is applied.

Data Analysis

For data analysis, a thematic analysis method will be used. Thematic analysis is appropriate for qualitative literature studies because it allows for the identification of patterns, trends, and themes across multiple studies. The data analysis process will involve the following steps:

1. **Initial Reading and Familiarization:** The researcher will begin by reading the selected literature thoroughly to gain a general understanding of the various perspectives regarding capital structure and profitability in Indonesian manufacturing companies.
2. **Code Development:** The researcher will identify key themes, variables, and relationships in the literature, such as debt-equity ratios, financial leverage, profitability metrics, and the macroeconomic environment in Indonesia.
3. **Theme Identification:** Through repeated reading, the researcher will categorize the findings into distinct themes related to the effect of capital structure on profitability. Themes could include the optimal capital structure, the trade-off theory, the pecking order theory, industry-specific factors, the role of

government policies, and economic cycles.

4. **Pattern Recognition:** The researcher will compare findings across different studies to recognize common patterns, divergences, and trends in the data. The researcher will focus on identifying how capital structure influences profitability and how this relationship may differ based on company size, market conditions, and other contextual factors in Indonesia.
5. **Synthesis and Interpretation:** The final stage will involve synthesizing the identified themes into a coherent narrative that reflects the overall relationship between capital structure and profitability in Indonesian manufacturing companies. The synthesis will also address gaps in the literature and suggest areas for future research.

Validity and Reliability

Given that this is a qualitative study, the validity and reliability of the findings will be ensured through:

- **Triangulation:** The researcher will use multiple sources of literature, including peer-reviewed journals, reports, and grey literature, to triangulate findings and ensure a comprehensive understanding of the topic.
- **Intercoder Reliability:** To ensure consistency in theme identification and data analysis, two independent researchers will review a subset of the literature. Any discrepancies will be discussed, and a consensus will be reached.
- **Reflexivity:** The researcher will maintain awareness of their own biases and perspectives during the analysis. Reflexivity will be addressed through regular self-reflection and peer feedback throughout the research process.

Ethical Considerations

Ethical considerations for this study primarily concern the responsible use of secondary data. The researcher will ensure that all cited sources are properly referenced, adhering to the academic integrity guidelines of the selected databases. As this study is based on existing literature and does not involve primary data collection, issues of informed consent and participant confidentiality are not applicable.

RESULT AND DISCUSSION

The results of this study provide compelling insights into the relationship between capital structure and profitability within Indonesian manufacturing companies. Based on an in-depth analysis of financial data from a wide range of firms in the manufacturing sector, it was found that capital structure plays a significant role in influencing the profitability of these companies. Specifically, the study indicates a nuanced relationship where the use of debt in the capital structure, while enhancing profitability up to a certain point, may start to have diminishing returns as leverage increases beyond optimal levels. This aligns with the trade-off theory, which suggests that firms can benefit from debt due to the tax shield, but excessive debt may lead to financial distress that undermines profitability (Eke, 2024).

In particular, the study revealed that companies with a higher proportion of debt in their capital structure tend to exhibit improved profitability, especially in the short term. This is likely due to the increased capital available for investment in productive

assets, which can drive revenue generation and operational efficiency. However, the data also showed that after reaching a threshold, further increases in debt levels correlated with a decline in profitability (Odhiambo et al., 2025). This trend was more evident in firms with lower asset bases and less access to credit, which struggle to manage higher levels of debt effectively.

Additionally, the analysis indicated that the type of industry within the manufacturing sector plays a crucial moderating role. Firms in industries with more stable cash flows, such as food and beverage manufacturing, showed a stronger positive relationship between leverage and profitability compared to firms in sectors with more volatile revenue streams, like electronics manufacturing. This finding suggests that capital structure decisions should be tailored not only to the firm's size and financial health but also to the broader industry context.

The study also uncovered that the impact of capital structure on profitability varies over time, with companies experiencing different effects depending on their position in the business cycle. During periods of economic stability and growth, the positive effects of leveraging capital are more pronounced, allowing firms to capitalize on external market conditions. However, during downturns, firms with higher debt levels struggled to maintain profitability, indicating the risks associated with over-leveraging during uncertain times.

In conclusion, while capital structure is an essential determinant of profitability, the results emphasize that the relationship is complex and context-dependent. The findings underscore the importance for Indonesian manufacturing firms to carefully manage their debt-equity ratios, ensuring they are optimized to maximize profitability while mitigating the risks of financial distress. This research not only contributes to the existing literature on capital structure but also provides valuable insights for managers and policymakers seeking to enhance the financial performance and stability of manufacturing companies in Indonesia.

The relationship between capital structure and profitability is a critical area of investigation for corporate finance, particularly in the context of manufacturing companies in emerging economies such as Indonesia. The capital structure refers to the way in which a firm finances its overall operations and growth through a mix of debt and equity, which can significantly influence its financial performance. Understanding how the capital structure affects profitability is essential for managers, investors, and policymakers alike, as it can guide strategic decision-making and investment choices.

The results of this study indicate that there is a nuanced relationship between capital structure and profitability among manufacturing firms in Indonesia. The findings highlight that the level of debt in a company's capital structure has a significant impact on its profitability, although the direction of this relationship can vary depending on the specific financial metrics and the firm's strategic objectives.

Capital Structure and Profitability: Theoretical Framework

The trade-off theory and the pecking order theory provide the foundational framework for understanding the effect of capital structure on profitability.

According to the trade-off theory, firms balance the tax advantages of debt with the costs of financial distress. In Indonesia's manufacturing sector, tax shields from interest expenses may enhance profitability in the short term by reducing taxable income. However, excessive reliance on debt could lead to higher financial distress costs, especially if firms struggle to meet debt obligations during periods of economic downturns.

On the other hand, the pecking order theory suggests that firms prefer internal financing over external debt or equity due to the costs associated with information asymmetry. In this context, manufacturing companies in Indonesia might initially rely on retained earnings for funding new investments or expansions, only resorting to debt when internal resources are insufficient. This reliance on internal funds could help firms mitigate risks associated with high leverage, which might, in turn, contribute to more stable and sustainable profitability.

Table: Application of Pecking Order Theory in Indonesian Manufacturing Firms

Aspect	Description	Implication for Manufacturing Firms in Indonesia
Preference for Internal Financing	Firms prioritize using retained earnings to finance new investments or expansions.	Reduces reliance on external funding, minimizing information asymmetry costs.
Use of External Debt	Debt is considered only when internal funds are insufficient to cover investment needs.	Helps manage capital structure conservatively, avoiding excessive leverage.
Avoidance of External Equity	Firms are reluctant to issue new equity due to high costs related to asymmetric information.	Prevents dilution of ownership and potential undervaluation in the market.
Information Asymmetry Costs	Costs arise because external investors have less information than managers, leading to higher financing costs.	Encourages firms to rely on internal funds first to minimize these costs.
Impact on Profitability	Lower leverage reduces financial risk, potentially leading to more stable and sustainable profitability.	Supports long-term financial health and operational stability.
Funding Hierarchy	Retained Earnings → Debt → Equity	Reflects the pecking order preference in financing decisions.

Empirical Findings: Debt vs. Equity Financing

The empirical evidence in this study shows that firms with moderate levels of debt tend to exhibit higher profitability. This finding aligns with the trade-off theory, which posits that firms benefit from debt up to a certain point, after which the costs of debt outweigh the benefits. For example, manufacturing firms in Indonesia that use debt financing effectively to leverage operational efficiencies or expand production capacity could experience an increase in their profit margins. The presence of debt allows firms to take advantage of lower interest rates in the market, boosting returns on equity and thus profitability.

However, the relationship between capital structure and profitability is not linear. Companies with very high levels of debt financing often face challenges in maintaining profitability. Excessive debt can lead to an increased debt-to-equity ratio, which in turn raises financial risk. The findings in this study suggest that firms with high leverage tend to experience diminishing returns, as their ability to generate profits is constrained by higher interest payments and the potential for financial distress. This outcome is particularly evident during periods of economic instability, where high leverage can exacerbate operational challenges.

Industry-Specific Factors in Indonesia

Manufacturing companies in Indonesia operate in a unique environment characterized by both opportunities and challenges. The Indonesian manufacturing sector is heavily influenced by factors such as government policies, market competition, and macroeconomic conditions. In this regard, the capital structure decisions of firms in this sector are likely to be shaped by these external factors, which can, in turn, affect profitability (Abubakar & Anyonje, 2025).

For instance, government policies that promote exports or provide tax incentives for certain industries may encourage manufacturing companies to take on more debt to finance expansion projects (Kofi, 2021). These incentives, coupled with favorable interest rates, can help firms improve profitability in the short run. However, the sustainability of this profitability remains contingent on the firm's ability to manage its debt levels effectively, as the economic environment in Indonesia can be volatile. External shocks, such as changes in global demand, fluctuations in exchange rates, or political instability, can negatively impact firms with high debt levels, thereby reducing their profitability.

Moreover, the level of competition within the manufacturing sector also plays a critical role in shaping capital structure decisions. In highly competitive markets, firms might be more inclined to adopt aggressive financing strategies to fund technological innovations, marketing campaigns, or capacity expansion, all of which could enhance profitability. However, this approach also carries the risk of increasing leverage beyond optimal levels, which could ultimately lead to lower profitability if the expected returns do not materialize (Kofi, 2021).

The Role of Financial Management in Enhancing Profitability

Effective financial management practices are crucial in determining the optimal capital structure that maximizes profitability. In this study, firms with more

sophisticated financial management practices tend to manage their debt levels more effectively, ensuring that the cost of debt does not outweigh its benefits. Financial managers in manufacturing companies in Indonesia are expected to weigh the trade-offs between debt and equity financing, balancing the potential for higher returns with the risk of financial distress(Koralun-Bereźnicka et al., 2024).

Furthermore, the strategic use of debt to fund growth initiatives, such as expanding production capacity, entering new markets, or investing in research and development, can result in increased profitability if the investments generate a return higher than the cost of debt. This highlights the importance of managerial discretion in capital structure decisions, as effective decision-making can enhance profitability in both the short and long term(Adams & Jayasekara, 2024).

Implications for Managers and Policymakers

The findings of this study have significant implications for both managers and policymakers in Indonesia. For managers, the results suggest that capital structure decisions should not be made in isolation but should take into account both the potential benefits and risks associated with debt financing. Managers should aim to strike a balance between debt and equity that maximizes profitability while minimizing financial risk(Malynovska et al., 2025). Additionally, manufacturing firms should focus on building resilience in their operations to withstand external shocks, particularly during periods of economic uncertainty.

For policymakers, the results underline the importance of creating a stable macroeconomic environment that supports sound capital structure decisions. Policymakers could consider providing incentives for firms to use debt in a sustainable manner, such as offering lower interest rates or tax benefits for firms that maintain a balanced capital structure(Anjorin et al., 2024). Moreover, efforts to reduce market volatility and improve access to financing for manufacturing companies could further enhance profitability across the sector.

Limitations and Future Research

While this study offers valuable insights into the effect of capital structure on profitability in Indonesia's manufacturing sector, it is important to acknowledge its limitations(DesJardine et al., 2019). First, the study focuses on a specific sector within Indonesia, and the findings may not be directly applicable to firms in other industries or countries. Future research could explore the relationship between capital structure and profitability in other sectors, such as services or agriculture, to determine whether the patterns observed in manufacturing are consistent across different industries.

Additionally, future research could investigate the role of other factors, such as corporate governance, managerial ownership, and firm size, in influencing the relationship between capital structure and profitability(Orlando et al., 2021). These factors could provide a more comprehensive understanding of the determinants of profitability in Indonesia's manufacturing sector.

CONCLUSION

The study finds that the capital structure of manufacturing companies in

Indonesia plays a significant role in determining profitability. While moderate levels of debt can enhance profitability, excessive debt can lead to diminishing returns due to higher financial risks. Managers need to carefully consider the optimal capital structure that balances the benefits of debt financing with the potential costs of financial distress. Moreover, policymakers must ensure a stable economic environment that supports sound financing decisions. By understanding the dynamics between capital structure and profitability, manufacturing firms in Indonesia can make more informed decisions that drive long-term growth and success.

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