Eduvest – Journal of Universal Studies
Volume 6 Number 8, August, 2026
p- ISSN 2775-3735- e-ISSN 2775-3727

Financing Decisions and Capital Structure Dynamics in Cross-Border Acquisitions: A Case Study of an Indonesian Pharmaceutical Company

Sugianto
Universitas Indonesia, Indonesia
Email: sugianto41@ui.ac.id

Keywords
Financing Decision;
Capital Structure;
Cross Border Acquistion.

ABSTRACT

This research examines financing decisions and capital structure dynamics in cross-border acquisitions undertaken by Indonesian pharmaceutical firms. Cross-border acquisitions in the pharmaceutical industry present high complexity and financial risk, yet limited research has explored how emerging market firms finance such transactions and manage post-acquisition capital structure adjustments. This research aims to analyze funding strategies, leverage changes, financial risk implications, and post-acquisition capital structure adjustments in Indonesian pharmaceutical companies. Using a multiple case study approach, the research evaluated three Indonesian pharmaceutical companies that conducted cross-border acquisitions in different countries, with analysis covering one year before to three years after the transaction. The findings reveal that funding strategies vary significantly across companies, ranging from internal funding to debt-based and combined debt-equity financing. Debt-based funding increases post-acquisition leverage and financial risk, potentially leading to financial distress in the short term, while internal funding maintains financial stability despite international expansion. The results also show that capital structures continue to undergo adjustments through deleveraging and cash flow optimization. The study contributes to the literature on financing decisions and capital structure in cross-border settings, particularly in the context of emerging markets and the highly regulated pharmaceutical industry, and offers practical recommendations for company management in designing balanced funding strategies between growth and financial stability.

INTRODUCTION

Economic globalization and international market integration have encouraged companies to expand their business activities beyond domestic borders as part of their long-term growth strategy (Ali et al., 2025; Ebabu et al., 2026; Kormakova et al., 2023; Tariq, 2025; Teece, 2022; Yang & Zhao, 2024; Zahra & Hashai, 2025). One of the increasingly dominant expansion mechanisms is through cross-border mergers and acquisitions. These activities have increased significantly in recent decades as trade liberalization, technological advances, and increased global capital mobility (UNCTAD, 2023).

Among various industry sectors, the pharmaceutical industry is one of the sectors that is most actively expanding internationally through acquisitions (Almeman, 2024; Bala et al., 2023; Ozalp et al., 2022). The characteristics of the pharmaceutical industry that are capital-intensive, innovation-based, and highly regulated make companies need access to technology, product pipelines, international standard manufacturing facilities, and global distribution networks that are difficult to obtain through organic growth (Deloitte, 2023). Therefore, cross-border acquisitions are an efficient strategy to accelerate the improvement of the global capabilities and competitiveness of pharmaceutical companies.

In addition to growth factors, geopolitical and global health dynamics are also driving the consolidation of the pharmaceutical industry. The COVID-19 pandemic has exposed the vulnerability of highly concentrated pharmaceutical drug and raw materials supply chains in several countries, so many governments and companies are trying to diversify production sources and strengthen national pharmaceutical resilience (World Bank, 2022). This condition increases cross-border investment activities, including through the acquisition of pharmaceutical companies in various jurisdictions.

However, cross-border acquisitions in the pharmaceutical industry present a much higher complexity than domestic acquisitions. Companies must face differences in health regulations, product quality standards, intellectual property rights protection, legal systems, and drug price policies that vary between countries (OECD, 2021). The differences in characteristics between domestic and cross-border acquisitions indicate the existence of additional risk dimensions in international transactions, such as exchange rate risk, geopolitical risk, and the complexity of compliance with cross-jurisdictional regulations. Exchange rate risk, for example, can affect the value of transactions as well as the structure of liabilities in foreign currencies, thereby increasing exposure to cash flow volatility (Erel, Liao, & Weisbach, 2012). As shown, cross-border acquisitions involve a higher level of uncertainty and complexity than domestic acquisitions. This condition has implications for greater funding needs and higher financial risks, so decisions about financing sources become a strategic factor in the success of cross-border transactions (PwC, 2022).

Pharmaceutical company acquisitions generally require large amounts of funding because they involve high-tech assets, state-of-the-art production facilities, and long-term research and development investments. Therefore, the selection of funding sources is a strategic decision that determines the company's capital structure, leverage level, and the company's ability to face financial risks after the transaction (Damodaran, 2015). Debt funding can provide benefits in the form of tax shields and avoid dilution of ownership, but increases the risk of financial distress if post-acquisition cash flow is inadequate. On the other hand, equity issuance can strengthen the capital structure but has the potential to cause dilution of ownership and negative signals to investors. In practice, companies often use a combination of various financing instruments, including bank loans, bonds, and internal funding (Brigham & Houston, 2019). Thus, the acquisition funding decision is not only a technical financial decision, but also a strategic decision that has long-term implications for the financial stability of the company.

The phenomenon of global expansion through acquisitions is also happening in Indonesia. Several Indonesian pharmaceutical companies listed on the Indonesia Stock Exchange have made cross-border acquisitions to expand the market and enhance technological capabilities, such as expansion into the Middle East, Southeast Asia, and Australia. These cases show that cross-border acquisitions are not only investment decisions, but also strategic financial decisions that can significantly change a company's capital structure. Acquisition financing that uses large amounts of debt can trigger a sudden increase in leverage or leverage

\

shock, which has the potential to increase the company's financial risk in the short term. In the medium term, companies typically need to readjust their capital structure to achieve a balance between growth and financial stability (IMF, 2021).

Several previous studies have examined financing decisions and capital structure dynamics in the context of cross-border acquisitions. Martynova & Renneboog (2009) investigated what determines the financing decision in corporate takeovers, finding that the choice between cash and stock as a means of payment is influenced by the cost of capital, agency problems, and the acquirer's growth opportunities. Their study emphasized that firms with high growth opportunities tend to use stock financing, while firms with low growth opportunities prefer debt financing. Erel, Jang, & Weisbach (2022) examined cross-border mergers and acquisitions and found that country-level characteristics such as accounting standards, shareholder protection, and cultural differences significantly affect transaction volume and financing structures. Shimizu et al. (2004) provided a comprehensive review of theoretical foundations of cross-border M&A, highlighting that financial factors, including availability of internal funds and access to capital markets, are critical determinants of acquisition success.

In the pharmaceutical industry context, Cockburn (2007) demonstrated that pharmaceutical firms face unique financing challenges due to high R&D intensity, long product development cycles, and regulatory uncertainty, which influence their capital structure decisions. Golec & Vernon (2006) found that European pharmaceutical price regulation affects firm profitability and R&D spending, which in turn influences financing capacity for international expansion. More recently, Deloitte (2023) reported that pharmaceutical companies are increasingly using cross-border acquisitions to access innovation pipelines and manufacturing capabilities, with financing structures varying significantly between developed and emerging market acquirers.

Empirical studies on financing decisions in emerging markets have also been conducted. Hu & Yang (2016) examined determinants of cross-border mergers and acquisitions by Chinese firms, finding that state-owned enterprises tend to use more debt financing than private firms due to easier access to bank loans. Rajan & Zingales (1995) provided evidence that capital structure determinants vary across countries, with firms in emerging markets relying more heavily on debt financing due to limited equity market access. In the Indonesian context, however, studies specifically examining financing decisions and capital structure dynamics in cross-border acquisitions by pharmaceutical companies are still scarce. Most existing research focuses on domestic acquisitions or uses quantitative approaches based on aggregate data that are unable to capture the contextual complexity of managerial decision-making processes.

The limited research on financing decisions and capital structure dynamics in cross-border acquisitions is particularly evident in the pharmaceutical industry in developing countries such as Indonesia. The characteristics of the pharmaceutical industry that are capital-intensive, highly regulated, and limited access to funding in emerging markets cause the financing strategies used by companies in developed countries to be different from companies in developing countries. In addition, most previous studies still use quantitative approaches based on aggregate data that are less able to contextually explain the dynamics of managerial decisions and the process of adjusting the post-acquisition capital structure. Therefore, research is needed that can provide a deeper understanding of how Indonesian pharmaceutical companies determine funding sources in cross-border acquisitions and how the financial implications of these decisions develop after the transaction is made. This study uses a qualitative approach with a multiple case study method to longitudinally analyze the dynamics of leverage, financial risk, and capital structure adjustments in several Indonesian pharmaceutical companies that make cross-border acquisitions.

Based on these problems, this study aims to analyze the funding strategies used by Indonesian pharmaceutical companies in cross-border acquisitions, identify changes in leverage and post-acquisition capital structure, analyze the impact of leverage changes on financial risk and company performance, and examine the process of adjusting capital structure after transactions. This research is expected to make a theoretical contribution to the development of the literature on funding decisions and capital structure in the context of cross-border acquisitions in emerging markets and the pharmaceutical industry. In addition, this research also makes a methodological contribution through the use of a multiple case study approach that allows contextual and longitudinal analysis of post-acquisition capital structure changes. In practical terms, the results of the research are expected to be a reference for company management in designing a balanced funding strategy between growth and financial stability, as well as providing insight for regulators regarding the financial risk implications of domestic companies expanding internationally.

METHOD

Research Design

This research used a qualitative approach with multiple case study methods. This approach was chosen because the phenomenon of cross-border acquisition financing is complex, contextual, and inseparable from the specific conditions of each company. In addition, the limited number of Indonesian pharmaceutical companies making global acquisitions has made quantitative approaches based on large samples less relevant.

Multiple case studies allow longitudinal analysis of changes in the company's capital structure, financial risk, and performance before and after the acquisition. By comparing several cases, this study can identify common patterns and significant differences, resulting in a more comprehensive understanding of the phenomenon being studied (Yin, 2018).

Data Types and Sources

This study uses secondary data obtained from various public sources. The data includes the company's annual financial statements and annual reports, information disclosure documents to the Indonesia Stock Exchange, prospectuses and acquisition transaction documents, analyst reports, industry publications, the company's official website, as well as reports from regulators and international institutions.

The use of various data sources aims to increase the depth of analysis while allowing triangulation of information, so that research findings do not depend on one source alone. The data used includes both financial and non-financial information to obtain a comprehensive picture of the impact of cross-border acquisitions on the company.

Data Collection Techniques

Data is collected through a documentation study of written sources relevant to the acquisition transaction and the company's financial condition. The documentation technique was chosen because the case study allows the use of multiple sources of evidence, including financial statements, annual reports, official company publications, as well as other publicly available documents (Yin, 2018).

This approach allows researchers to obtain accurate historical data and understand the strategic context behind acquisition decisions. In addition, the use of official documents increases the reliability of the data because the information has gone through an audit or verification process by related parties.

Data Analysis Techniques

Data analysis in this study was carried out through several stages to gain an in-depth understanding of the company's financial dynamics before and after cross-border acquisitions. The study uses a case-study-based longitudinal approach with an analysis period covering one year before the acquisition, the year of the acquisition, up to one to three years after the transaction, as per the availability of public data. The analysis was conducted using various financial indicators such as leverage ratio, profitability, liquidity, Interest Coverage Ratio, and Altman Z-Score to evaluate changes in capital structure, financial risk, and post-acquisition company performance. The analysis stage includes within-case analysis to understand the characteristics of each case individually, cross-case analysis to compare patterns between companies, pattern matching to match empirical findings with research proposals based on the literature, and explanation building to prepare a systematic explanation of the relationship between cross-border acquisition funding strategies and corporate financial dynamics. In addition to quantitative data, this study also considers non-quantitative findings related to the institutional environment, operational integration process, and realization of strategic synergies obtained from annual reports, management reports, and company publications to produce a more comprehensive understanding of the factors that affect the company's financial condition post-acquisition.

RESULT AND DISCUSSION

Within-Case Analysis

PT Kimia Farma Tbk: Acquisition of Dawaa Medical Limited Company

PT Kimia Farma Tbk is a state-owned pharmaceutical company (SOE) that is engaged in an integrated manner in manufacturing, distribution, and health services. In order to expand the international market and increase global competitiveness, the company acquired Dawaa Medical Limited Company in Saudi Arabia in March 2018 through a share subscription worth around SAR 38 million or equivalent to Rp139.8 billion. This transaction gives Kimia Farma a majority ownership of 60% and is the first step in the company's expansion into the Middle East region.

From the perspective of the external environment, this expansion decision is inseparable from the context of PESTEL, especially political, legal, and economic factors. The Middle East region offers great market potential, but it also has high regulatory and licensing complexity in the pharmaceutical sector. In addition, geopolitical factors and differences in institutional systems increase the level of investment uncertainty. This condition makes cross-border acquisitions a strategy that is not only growth-oriented, but also carries significant risks.

Table 1. Financial Analysis of PT Kimia Farma Tbk

Year	Total Assets	Total Debt	Equity	Net Profit	THE	LENGTH	ROE	Interest Coverage
2017	6.096 T	2.020 T	1.552 T	326,8 M	1,30	5,36%	13,02%	7,63x
2018	9.460 T	4.040 T	3.109 T	415,9 M	1,30	4,40%	12,99%	5,19x
2019	18.353 T	8.297 T	5.612 T	−12,7 M	1,48	−0,07%	−0,18%	1,16x
2020	17.563 T	7.761 T	5.263 T	17,6 M	1,47	0,10%	0,25%	1,16x
2021	17.760 T	8.024 T	5.742 T	302,2 M	1,40	1,70%	4,23%	1,69x

Source: Company financial reports (2017–2021), processed by the authors

Acquisition Funding Decision

The acquisition of Dawaa was funded through the issuance of Medium-Term Notes (MTN), which are medium-term debt instruments issued through private placements to institutional investors. This decision shows that companies are opting for debt-based external funding over internal and equity funding.

Nominally, Kimia Farma had cash and cash equivalents of around Rp989.6 billion in 2017, which is theoretically enough to finance the acquisition. However, the cash does not fully reflect free cash flow, considering that the company has significant short-term liabilities, including short-term debt of around IDR 2.37 trillion. In this context, the use of cash for acquisitions has the potential to disrupt the company's operational liquidity and working capital.

From PESTEL's perspective, economic factors (limited liquidity and the need to maintain operational stability) as well as political and strategic pressure factors (the encouragement of global expansion of SOEs) also influence funding decisions. Therefore, companies choose to maintain cash and use external funding.

The choice of MTN over bank loans also reflects strategic considerations. MTN allows companies to obtain large amounts of funds relatively quickly, with the flexibility of payment structure and without strict collateral requirements (clean basis). For state-owned companies, the level of investor confidence is also a supporting factor in access to these instruments.

This decision is consistent with the Pecking Order Theory, where companies choose debt after internal funds are deemed not optimal to use, especially in conditions of high external uncertainty.

Changes in Capital Structure and Leverage

Longitudinal analysis of the 2017–2021 period shows that acquisitions were followed by significant increases in the size of the company's balance sheet and leverage. Total assets increased from around IDR 6.10 trillion in 2017 to IDR 9.46 trillion in 2018, and jumped to IDR 18.35 trillion in 2019.

On the other hand, total debt increased from around IDR 2.02 trillion in 2017 to IDR 4.04 trillion in 2018, and reached IDR 8.30 trillion in 2019. The DER ratio increased from 1.30 to 1.48 in 2019 before experiencing a moderate decline in the following period.

This phenomenon indicates a leverage shock, which is a significant increase in debt to support strategic expansion. From PESTEL's perspective, this condition can be understood as a response to:

\

1. Expansion Needs in High Potential Markets (Economic Opportunity)
2. global competitive pressures (strategic pressure) as well as institutional complexity in destination countries (legal & political factors).

Financial Risks

Increased leverage is followed by deteriorating financial risk indicators. The interest coverage ratio decreased from 7.63 times in 2017 to 1.16 times in 2019, which indicates that operating profit is barely enough to cover interest expenses.

This condition reflects an increased risk of financial distress, which is reinforced by external factors within the PESTEL framework, including:

1. global economic uncertainty
2. Exchange rate fluctuations
3. Cross-Border Operational Complexity

In the perspective of Trade-Off Theory, the benefits of using debt in the form of tax shields must be balanced with the increased risk of bankruptcy. The data shows that in the early stages of the post-acquisition, the company faced significant financial pressures due to increased interest expenses.

Impact on Company Performance

In terms of profitability, the short-term negative impact is obvious. The increased net profit in 2018 turned into a loss in 2019, followed by a significant decline in ROA and ROE.

This decline in performance can be explained through a combination of factors:

1. increased interest expense due to high leverage
2. Post-acquisition integration costs
3. as well as operational challenges in new markets

In PESTEL's perspective, social factors (differences in business culture) and legal (market regulation) also contribute to the slow realization of synergy. This suggests that the success of cross-border acquisitions depends not only on financial decisions, but also on the company's ability to manage the complexity of the external environment.

Despite the recovery in 2021, profitability levels have not yet returned to pre-acquisition levels, indicating that the strategic benefits of the acquisition will take time to realize.

Post-Acquisition Capital Structure Adjustment

After a period of significant increase in leverage, the company showed efforts to stabilize the capital structure. Total debt began to decline in 2020, while profitability gradually improved.

The decline in the DER ratio from its peak in 2019 indicates a partial deleveraging process, which can be done through:

1. Debt repayment from operating cash flow
2. Increased equity through retained earnings

This process reflects the company's efforts to return to a more sustainable capital structure. Nevertheless, the company's leverage level remains higher than pre-acquisition conditions, indicating that the impact of funding decisions is long-term.

PT Kalbe Farma Tbk: Acquisition of Alliance Pharma Co., Ltd

PT Kalbe Farma Tbk is the largest private pharmaceutical company in Indonesia with integrated business activities that include the production of prescription drugs, consumer health products, nutrition, and pharmaceutical distribution. With a strong financial position and extensive business diversification, Kalbe has the capacity to conduct international expansion independently. In order to expand its regional presence in Southeast Asia, Kalbe through its subsidiary, Kalbe International Pte. Ltd., acquired a 49% stake in Alliance Pharma Co., Ltd. in Thailand in 2024.

The acquisition is minority, so it does not give Kalbe full control over the target company, but allows Kalbe to gain access to the Thai market and regional distribution network. This characteristic is different from majority acquisitions which usually require large and high-risk investments. Therefore, the financial impact on the parent company is expected to be relatively limited.

Table 2. Financial Analysis of PT Kalbe Farma Tbk

Indicator	2023 (FY)	2024 (FY — Year of Acquisition)	2025 (TTM)
Total Assets	± Rp27.06 trillion	± IDR29.43 trillion	± IDR 8.27 trillion*
Total Debt	± IDR 0.62 trillion	± IDR 0.56 trillion	very low
Equity	Very large	Increase	Stay big
Who & Setara Who	very high	Stay high	height
Net Profit	Height	Increase	increased
THE ER	very low	lower	very low
LONG	± 10.2%	± 11.0%	± 23.9%
ROE	± 12.9%	± 14.2%	± 23.9%
Interest Coverage	very high	very high	very high

Source: Company financial reports (2023–2025), processed by the authors

Acquisition Funding Decision

There is no indication that Kalbe Farma issued public debt or increased capital through a rights issue to fund the acquisition of Alliance Pharma. The balance sheet structure indicates that the company had a very large amount of cash and cash equivalents prior to the transaction, so funding is likely to come from internal funds as well as available credit facilities.

The use of internal funds is consistent with the Pecking Order Theory, which states that companies prefer internal funding over using debt or equity. In addition, the minority ownership structure shows that the need for funds is relatively small compared to the size of the company. Thus, Kalbe does not need to significantly increase leverage to make this strategic investment.

In-house funding also allows companies to avoid emission costs, additional interest liabilities, as well as the risk of dilution of ownership. This strategy reflects financial conservatism and the company's ability to maintain financial flexibility.

Changes in Capital Structure and Leverage

Analysis of financial statements shows that Kalbe's total assets increased from around IDR 27.06 trillion in 2023 to IDR 29.43 trillion in 2024. This increase reflects the expansion of investment, including the contribution of the acquisition of Alliance Pharma.

However, total debt actually decreased from around IDR 618 billion in 2023 to IDR 559 billion in 2024. Equities increased as earnings growth was held. The debt-to-equity (DER) ratio is at a very low level and tends to decline after the acquisition, indicating that the company's capital structure remains conservative.

\

In the 2025 TTM period, leverage remains low and does not show a significant increase in debt. This indicates that the company is able to absorb investment without substantially changing its funding policy.

Financial Risks

PT Kalbe Farma Tbk's financial risk indicators show very stable conditions after the acquisition. In 2024, the company's total debt will only be around IDR 559 billion compared to total assets of around IDR 29.43 trillion, so the debt-to-assets ratio is in the range of around 2%. The debt-to-equity ratio is also very low, indicating that the company's funding structure is dominated by equity.

In addition, the company's ability to meet interest obligations is very strong. Operating profit (EBIT) which reached several trillion rupiah far exceeded the relatively small annual interest expense, so the interest coverage ratio is at a very high level, estimated tens to hundreds of times. This condition shows that the company has a huge ability to meet interest payment obligations without experiencing liquidity pressure.

With relatively small debts compared to total assets and equity, the risk of a company's default can be categorized as very low. There is no indication of an increased risk of post-acquisition financial distress, in contrast to companies that finance acquisitions through large amounts of debt. In the perspective of Trade-Off Theory, Kalbe is at a low level of leverage with minimal risk of bankruptcy and high financial flexibility.

Overall, PT Kalbe Farma Tbk is an example of an emerging market pharmaceutical company that has a strong financial capacity and a conservative international expansion strategy. These characteristics make the company relevant as a research object in the analysis of cross-border acquisition financing, especially as a comparison to companies that make acquisitions with higher levels of leverage.

Impact on Company Performance

In terms of profitability, Kalbe's performance remained strong after the acquisition. Net profit increased from 2023 to 2024, and profitability ratios such as ROA and ROE also show a positive trend. In the 2025 TTM period, profitability remains high, indicating that investments do not put pressure on short-term performance.

The stability of this performance can be explained by several factors, including the relatively small scale of investment compared to the size of the company, the minority acquisition structure, and the company's ability to fund investments without increasing the debt burden.

Post-Acquisition Capital Structure Adjustment

There is no indication that Kalbe Farma needs to make significant adjustments to its capital structure after the acquisition. Cash remains at a high level, debt remains low, and profitability remains strong. This shows that the company has great financial flexibility to expand without sacrificing financial stability.

In the perspective of Trade-Off Theory, Kalbe appears to be at an optimal level of leverage with a very low risk of bankruptcy. Meanwhile, within the framework of the Pecking Order Theory, the use of internal funds indicates that the company has adequate internal funding capacity to finance strategic investments.

PT Pyridam Farma Tbk: Acquisition of Probiotec Limited

PT Pyridam Farma Tbk is a national pharmaceutical company that focuses on the production of prescription drugs, health supplements, and other pharmaceutical products. In an effort to expand production capacity and strengthen its position in the global market, the company acquired Probiotec Limited, an Australian-based pharmaceutical company engaged in contract manufacturing and development of pharmaceutical products. This acquisition is strategic as it provides access to international standard production facilities and a global distribution network.

In contrast to the minority acquisition made by Kalbe Farma, Pyridam acquired the majority of Probiotec shares with a large transaction value relative to the size of the company. Therefore, the financial impact on the parent company is significant, especially related to funding needs and changes in capital structure.

Acquisition Funding Decision

The financing of the acquisition of Probiotec was carried out through a combination of external funding sources, including the issuance of new shares through a rights issue and additional debt. This strategy reflects the enormous need for funds compared to the company's internal funding capacity.

Within the framework of the Pecking Order Theory, the simultaneous use of equity and debt indicates that the company's internal funds are insufficient to finance the transaction. In addition, the relatively smaller size of companies compared to large pharmaceutical companies limits access to low-cost funding, so companies must leverage a variety of external funding sources.

Equity-based funding through rights issues reduces interest payment pressures, but leads to dilution of ownership. Conversely, the use of debt increases leverage and fixed payment obligations. The combination of the two shows that the company is taking an aggressive funding strategy to support international expansion.

Changes in Capital Structure and Leverage

Analysis of the financial statements shows that Pyridam Farma's capital structure has undergone drastic changes after the acquisition. In the 2025 TTM period, the company's total debt reached around IDR 5.06 trillion, while equity was only around IDR 0.73 trillion. This condition results in a debt-to-equity ratio of around 6.9 times, which indicates a very high level of leverage.

The company's total assets increased to around IDR 6.92 trillion, reflecting the consolidation of Probiotec's assets. However, the increase in assets is dominated by debt financing, so the capital structure becomes very risky.

In the perspective of Trade-Off Theory, too high leverage can increase the benefits of tax shields but significantly increase the risk of bankruptcy and financial distress. Pyridam's condition shows that the company is at a level of leverage well above the conservative limits of the industry.

Financial Risks

Pyridam Farma's financial risk indicators show significant pressure in the post-acquisition period. Operating profit (EBIT) was recorded negative at around IDR 0.09 trillion, while interest expense reached around IDR 0.32 trillion. As a result, the interest coverage ratio

\

is at a negative level, which means that operating profit is not enough to cover interest obligations.

In addition, the company recorded a net loss of around IDR 0.48 trillion, resulting in a return on assets ratio of around -7% and return on equity of around -66%. This condition shows a significant decrease in profitability and potential risk of financial distress.

Extremely high leverage combined with negative profitability increases the risk of a company's inability to meet its financial obligations.

In the context of Agency Theory, this condition can also increase conflicts between shareholders and creditors

Impact on Company Performance

Pyridam Farma's financial performance came under pressure in the post-acquisition period. Although the company's revenue reached around IDR 2.82 trillion, the company was unable to generate a positive operating profit. This shows that the integration of acquisition and the realization of synergies have not been fully achieved.

Significant net losses and high interest expense indicate that the strategic benefits of the acquisition have not been able to offset the increase in financial costs. This condition is common in large acquisitions that take time to achieve operational efficiency and business integration.

In the short term, these acquisitions have a negative impact on the company's profitability and financial stability. But in the long run, the success of the acquisition will largely depend on the company's ability to increase revenue and operational efficiency.

Post-Acquisition Capital Structure Adjustment

With a very high level of leverage, Pyridam Farma may need to make adjustments to its capital structure to reduce financial risks. Deleveraging strategies that can be carried out include debt repayment using operational cash flow, increasing equity through the issuance of additional shares, and optimizing owned assets.

The company's cash and cash equivalents in the TTM 2025 period are relatively small, which is around IDR 0.16 trillion, so the company's ability to repay debt in the short term is limited. Therefore, the stabilization of the capital structure will depend heavily on improved operational performance and the ability to generate positive cash flow.

Within the framework of the Trade-Off Theory, companies are likely to seek to reduce leverage to a more optimal level to reduce the risk of bankruptcy and increase financial flexibility.

Cross-Case Analysis

This study uses a multiple case study approach to explore how cross-border acquisition funding decisions affect a company's capital structure, financial risk, and performance. After an in-depth analysis of each case is carried out, the next stage is cross-case analysis to identify common patterns and significant differences between companies.

The three Indonesian pharmaceutical companies that were the object of the study showed different characteristics of funding strategies in conducting cross-border acquisitions, namely PT Kimia Farma Tbk, PT Kalbe Farma Tbk, and PT Pyridam Farma Tbk. These differences provide an opportunity to understand how financial capacity and choice of funding sources affect the post-acquisition financial impact.

Comparison of Acquisition Funding Strategies

The acquisition funding strategies of the three companies show significant variation. PT Kalbe Farma Tbk financed the acquisition through internal funds, PT Kimia Farma Tbk used medium-term debt instruments (Medium Term Notes), while PT Pyridam Farma Tbk used a combination of debt and equity through a rights issue.

These differences in strategies are closely related to the size of the company, cash flow capacity, and access to financial markets. Kalbe Farma, as a company with a strong cash position and high profitability, can fund investments without increasing leverage. On the other hand, Kimia Farma and Pyridam Farma have limited internal funds so they are more dependent on external funding.

Table 3. Comparison of Funding Strategies

Company	Acquisition Targets	Funding Strategy	Features
Kimia Farma	Dawaa Medical (Arab Saudi)	Debt (MTN)	Debt-financed acquisition
Kalbe Farma	Alliance Pharma (Thailand)	Dana internal	Internal-funded acquisition
Pyridam Farma	Probiotec (Australia)	Debt + equity	Highly leveraged acquisition

Source: Company financial reports (2024–2025), processed by the authors

Impact on Capital Structure and Leverage

Differences in funding strategies result in different changes in capital structure in each company. Kimia Farma experienced a significant increase in leverage after the acquisition, reflecting the use of large amounts of debt. Pyridam Farma exhibits a very high level of leverage due to a combination of debt funding and equity limitations. In contrast, Kalbe Farma maintains a conservative capital structure with low leverage.

This comparison shows that debt-based funding tends to increase financial risk substantially, especially in companies with limited financial capacity. In contrast, companies with high liquidity can expand without significantly changing their capital structure

Post-Acquisition Financial Risks

Post-acquisition financial risks also differ markedly between cases. Kalbe Farma shows low financial risk with a very strong interest payment capability. Kimia Farma experienced increased financial pressure, mainly due to increased interest expenses. Pyridam Farma faces the highest risks, indicated by its very high leverage as well as negative profitability in the post-acquisition period.

These findings indicate that the level of leverage is a major factor influencing the risk of financial distress after cross-border acquisitions. Companies that use large amounts of debt tend to be more susceptible to integration uncertainty and cash flow fluctuations.

Impact on Company Performance

In terms of performance, Kalbe Farma maintained stable profitability and even showed an upward trend after the acquisition. This shows that the investment does not pose significant financial pressure. In contrast, Kimia Farma experienced a decline in performance in the post-acquisition period, while Pyridam Farma recorded considerable losses.

This difference shows that the impact of acquisitions on performance is strongly influenced by the company's funding strategy and ability to manage operational integration and financial expenses.

\

Capital Structure Adjustment

Companies that experience increased leverage tend to make adjustments to the capital structure after the acquisition to reduce financial risk. Kimia Farma shows indications of efforts to stabilize the capital structure through liability management and improved operational efficiency. Pyridam Farma is expected to deleverage in the medium term to reduce financial risks. On the other hand, Kalbe Farma does not require significant adjustments because the capital structure remains stable.

Implications for Research Propositions

Cross-case findings show that funding strategy is a key factor determining the financial impact of cross-border acquisitions. The use of large amounts of debt increases leverage and financial risk, which in turn can depress a company's performance in the short term. In contrast, funding through internal funds allows companies to maintain financial stability despite international expansion.

In addition, the company's initial financial capacity also plays an important role in determining the chosen funding strategy. Companies with strong cash flow and high liquidity have greater flexibility to avoid debt-based funding.

Conclusion of Cross-Case Analysis

Cross-case analysis shows that the financial impact of cross-border acquisitions is not only influenced by the characteristics of the transaction, but also by the financial condition of the company prior to the acquisition as well as the funding strategy used. Companies with strong capital structures and high liquidity tend to be able to expand internationally without significantly increasing financial risk. In contrast, companies that rely on large amounts of external funding face a higher risk of financial distress as well as the potential for a decline in performance in the short term.

These findings confirm that funding decisions are a strategic factor that determines the financial success of cross-border acquisitions, especially for companies in emerging markets such as Indonesia

Bankruptcy Risk Analysis (Altman Z-score)

To complete the analysis of the financial impact of cross-border acquisitions, this study uses the Altman Z-Score model as an indicator of the probability of a company's bankruptcy. This model is an analytical tool widely used in the financial literature to assess the financial health of public manufacturing companies through a combination of liquidity, profitability, leverage, solvency, and activity ratios. The use of Z-Score in this study aims to provide a comprehensive quantitative measure of the company's financial stability after international expansion.

The calculation was carried out using the Altman Z-Score model for non-financial public companies. Based on Altman's criteria, companies with a Z value above 2.99 are in the safe zone, between 1.81 and 2.99 are in the grey zone, and below 1.81 are in the distress zone.

Table 4. Altman Z-Score Third Post-Acquisition Company

Company	Analysis Period	Z-Score	Category
PT Kimia Farma Tbk	± 2019	1,04	Distress Zone
PT Kalbe Farma Tbk	2024	6,30	Safe Zone

PT Pyridam Farma Tbk	2025 (TTM)	0,37	Distress Zone

Source: Company financial reports, processed by the authors using Altman Z-Score model

The results of the calculation show that the three companies have very different levels of risk of bankruptcy after making cross-border acquisitions.

PT Kalbe Farma Tbk shows a very strong financial condition with a Z-Score value of around 6.30, which places it far in the safe zone category. This value reflects high profitability, low leverage, and adequate liquidity. Acquisition funding carried out using internal funds allows the company to maintain financial stability without significantly increasing its debt burden. These findings are consistent with previous analyses which showed that Kalbe Farma did not experience an increase in post-acquisition financial risk.

On the other hand, PT Kimia Farma Tbk has a Z-Score value of around 1.04, which indicates that the company is in the distress zone. This value indicates a relatively high risk of bankruptcy, in line with increased leverage due to the use of debt-based funding to finance acquisitions. Rising interest expenses and pressure on profitability have made the company's financial condition more vulnerable to cash flow fluctuations.

PT Pyridam Farma Tbk showed the most risky condition among the three cases, with a Z-Score of around 0.37. This value reflects a very high level of distress, influenced by very large leverage, negative profitability, and limited ability to meet financial obligations. The combination of debt and equity funding to finance acquisitions has led to a very aggressive capital structure, increasing vulnerability to financial distress.

A comparison of the three companies shows that funding strategies have a significant influence on the risk of cross-border post-acquisition bankruptcy. Companies that use internal funds are able to maintain stable financial conditions, while companies that rely on large amounts of external funding tend to experience increased financial risks.

Explanation Building

The final stage of analysis in this case study research is explanation building, which is the preparation of a systematic explanation of the relationship between cross-border acquisition financing and the company's financial dynamics in the post-transaction period. In contrast to proposition testing which focuses on the fit between empirical findings and theories, explanation building aims to develop a more comprehensive understanding of the causal mechanisms underlying the phenomena under study.

Based on an analysis of three Indonesian pharmaceutical companies that made cross-border acquisitions, it can be seen that the financial impact of the acquisition is not homogeneous. Differences in funding strategies, the company's initial financial capacity, and the scale of the investment resulted in different financial dynamics in the post-acquisition period. Therefore, the financial success of cross-border acquisitions is determined not only by the potential for operational synergies, but also by the company's ability to manage its capital structure and financial risks

Mechanism of Influence of Funding Strategy on Leverage and Risk

The findings of the study show that funding strategy is a major factor that determines changes in capital structure after cross-border acquisitions. Companies that use large amounts

\

of debt experience a significant increase in leverage, which directly increases interest payment obligations and the risk of financial distress.

In the case of PT Kimia Farma Tbk, the use of medium-term debt instruments led to increased leverage and pressure on the company's cash flow. This condition suggests that although debt provides benefits in the form of tax shields, increased financial obligations can reduce financial flexibility in the short term.

In the case of PT Pyridam Farma Tbk, the combination of debt and equity funding resulted in a highly leveraged capital structure. High levels of leverage coupled with negative profitability cause companies to face the most significant financial risk among the three cases. This suggests that the use of large amounts of debt in companies with limited financial capacity may increase vulnerability to post-acquisition integration uncertainty.

On the other hand, PT Kalbe Farma Tbk, which uses internal funds, did not experience a significant increase in leverage or financial risk. This shows that in-house based funding can maintain the stability of the capital structure even as the company expands internationally

The Role of the Company's Initial Financial Capacity

In addition to the funding strategy, the company's initial financial capacity plays an important role in determining the financial impact of the acquisition. Companies with high liquidity, strong profitability, and conservative capital structures have a greater ability to absorb large investments without significantly increasing financial risk.

Kalbe Farma, as a company with a strong cash position and low debt, is able to fund acquisitions without significant changes in capital structure. In contrast, Kimia Farma and Pyridam Farma have limited internal funds and therefore rely on external funding, which ultimately increases leverage and financial risk.

These findings suggest that the financial impact of cross-border acquisitions is determined not only by the characteristics of the transaction, but also by the company's condition prior to the acquisition. In other words, companies with strong financial capacity tend to be more resilient to the risks arising from international expansion.

The Impact of Leverage on Post-Acquisition Performance

Increased leverage is shown to correlate with a decline in the company's performance in the short term. High interest expense can reduce net income and limit a company's ability to make additional investments. In addition, fixed payment obligations increase the sensitivity of companies to fluctuations in operating cash flows.

Pyridam Farma showed the most significant impact, with negative profitability and inability to cover interest expense through operating profit. Kimia Farma is also under pressure on performance, although not as extreme as Pyridam. On the other hand, Kalbe Farma was able to maintain stable performance because it did not face an increase in financial burden.

These findings indicate that the financial success of acquisitions depends not only on the potential business synergies, but also on the funding structure used to finance the transaction.

Capital Structure Adjustment and Financial Stability Restoration

Companies that experience increased leverage tend to make adjustments to the capital structure after the acquisition to reduce financial risk. These adjustments can be in the form of debt repayment, increased equity, or increased operational efficiency to improve cash flow.

Kimia Farma shows indications of stabilization of the capital structure in the post-acquisition period, while Pyridam Farma is expected to require a deleveraging strategy in the medium term to reduce the risk of financial distress. Kalbe Farma does not require significant adjustments because the capital structure has remained stable since the beginning.

This shows that the dynamics of the post-acquisition capital structure are adaptive and influenced by the financial pressures faced by the company.

Integrative Explanatory Model

Based on the findings of the study, the relationship between cross-border acquisition financing and company performance can be explained through a mechanism that involves several stages. The funding strategy determines the level of leverage generated, which further affects the company's financial risk. These financial risks then have an impact on operational performance and financial stability in the post-acquisition period. In the next stage, the company can make adjustments to the capital structure to restore financial balance.

Thus, the financial impact of cross-border acquisitions can be understood as a dynamic process influenced by the interaction between the funding strategy, initial financial capacity, and the company's ability to manage business integration.

Kesimpulan Explanation Building

Explanation building in this study shows that funding decisions are a key factor that determines the financial dynamics of companies after cross-border acquisitions. Debt-based funding increases leverage and financial risk, which can negatively impact performance in the short term. In contrast, funding through internal funds allows companies to maintain financial stability despite international expansion.

These findings confirm that the financial success of cross-border acquisitions is determined not only by the potential for operational synergies, but also by the company's financial readiness and the funding strategies used. For companies in developing countries, limited access to low-cost financing can increase the financial risks of international expansion, making the selection of a funding structure a very important strategic decision.

This bankruptcy risk analysis provides quantitative evidence that supports the causal mechanism identified in the study, namely that funding strategies affect the level of leverage, which then determines the financial risk and performance of post-acquisition companies. Thus, Z-Score serves as an integrative indicator that links funding decisions to the company's financial stability

CONCLUSION

Based on the results of the study, it can be concluded that the macro environmental analysis and the feasibility analysis of cross-border acquisitions have an influence on funding decisions and the dynamics of the capital structure of Indonesian pharmaceutical companies in conducting cross-border acquisitions. External factors such as economic conditions, regulations, political stability, exchange rate risk, and the institutional characteristics of the destination country affect the risk perception and financing strategy of the company. The results also show that the use of debt and external funding in acquisition financing increases the company's post-acquisition leverage, which on the one hand supports strategic expansion and tax shield benefits, but on the other hand increases financial risk and pressure on the company's financial flexibility. The impact of leverage on a company's performance is dynamic, with some companies experiencing cash flow pressure and financial distress risks at the beginning of the post-acquisition period, but in the medium- and long-term acquisitions are

\

able to support revenue growth, market expansion, and strengthening the company's strategic position. The study also shows that capital structures in cross-border acquisitions are dynamic and continue to undergo adjustments through deleveraging, funding restructuring, cash flow optimization, and adjustment of investment strategies in response to changes in risk and post-acquisition financial conditions. Theoretically, the results of the study support Trade-Off Theory, Pecking Order Theory, and Agency Theory in explaining corporate funding decisions, as well as emphasizing the importance of macro environmental analysis and acquisition feasibility in the cross-border financing decision-making process. Based on these findings, several recommendations can be proposed. For pharmaceutical companies in Indonesia, it is recommended to conduct a comprehensive macro-environmental and feasibility analysis before making acquisition financing decisions, as external factors such as economic conditions, regulations, political stability, exchange rate risk, and institutional characteristics of the target country significantly influence risk perception and financing strategy, while companies with strong cash positions like Kalbe Farma should prioritize internal funding to avoid increased leverage, and those with limited financial capacity like Pyridam Farma should be more cautious in using debt, as excessive leverage (DER 6.9x) with negative profitability can substantially increase bankruptcy risk (Z-Score 0.37); strengthening risk management and post-acquisition integration is also crucial, and companies experiencing increased leverage should make gradual capital structure adjustments through deleveraging, debt repayment, equity increases, or cash flow optimization. For future researchers, it is recommended to expand the research object to other sectors, employ quantitative approaches with larger samples, add intervening variables such as integration quality and operational synergies, conduct comparative studies across Southeast Asian countries, and explore factors influencing post-acquisition integration success, as these efforts are expected to enrich the understanding of cross-border acquisition financing behavior and contribute to corporate finance strategies in emerging markets.

REFERENCES

Ali, A., Iram, W., & Alam, M. (2025). Financial globalization, entrepreneurship, and economic growth: Evidence from Asian countries. *Journal of Social Signs Review, 3*(7), 174–191.

Almeman, A. (2024). The digital transformation in pharmacy: Embracing online platforms and the cosmeceutical paradigm shift. *Journal of Health, Population and Nutrition, 43*(1), 60.

Bala, S., Garg, D., Sridhar, K., Inbaraj, B. S., Singh, R., Kamma, S., Tripathi, M., & Sharma, M. (2023). Transformation of agro-waste into value-added bioproducts and bioactive compounds: Micro/nano formulations and application in the agri-food-pharma sector. *Bioengineering, 10*(2), 152.

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.

Cockburn, I. M. (2007). Is the pharmaceutical industry in a productivity crisis? *Innovation Policy and the Economy, 7*, 1–32.

Deloitte. (2023). *2023 global life sciences outlook: Reimagining life sciences in the decade ahead*. Deloitte Insights.

Ebabu, E. A., Yu, H., Weikang, Z., Yixiong, H., & Ambelu, A. A. (2026). Navigating sustainable digital transformation in South-South cross-border e-commerce: Insights on cultural adaptation, green marketing strategy, and inclusive business model innovation.

International Review of Economics & Finance, 104907.
Erel, I., Jang, Y., & Weisbach, M. S. (2022). Cross-border mergers and acquisitions. *Journal of Finance, 77*(3), 1469–1510.
Erel, I., Liao, R. C., & Weisbach, M. S. (2012). Determinants of cross-border mergers and acquisitions. *Journal of Finance, 67*(3), 1045–1082.
Golec, J. H., & Vernon, J. A. (2006). *European pharmaceutical price regulation, firm profitability, and R&D spending* (NBER Working Paper No. 12676). National Bureau of Economic Research.
Kormakova, I., Kruhlyanko, A., Peniuk, V., Ursakii, Y., & Verstiak, O. (2023). Actual strategies for businesses penetrating foreign markets in the modern economy: Globalisation aspect. *International Journal of Professional Business Review, 8*(5), 117.
Martynova, M., & Renneboog, L. (2009). What determines the financing decision in corporate takeovers: Cost of capital, agency problems, or the means of payment? *Journal of Corporate Finance, 15*(3), 290–315.
OECD. (2021). *Pharmaceutical innovation and access to medicines*. OECD Publishing.
Ozalp, H., Ozcan, P., Dinckol, D., Zachariadis, M., & Gawer, A. (2022). "Digital colonization" of highly regulated industries: An analysis of big tech platforms' entry into health care and education. *California Management Review, 64*(4), 78–107.
PwC. (2022). *Global pharma and life sciences deals insights: Year-end 2022*. PwC.
Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance, 50*(5), 1421–1460.
Shimizu, K., Hitt, M. A., Vaidyanath, D., & Pisano, V. (2004). Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future. *Journal of International Management, 10*(3), 307–353.
Tariq, M. U. (2025). Strategic place marketing in cross-border regions: Enhancing territorial cooperation and economic growth. In *Cross-border regions cooperation and implications for organizations* (pp. 107–136). IGI Global Scientific Publishing.
Teece, D. J. (2022). A wider-aperture lens for global strategic management: The multinational enterprise in a bifurcated global economy. *Global Strategy Journal, 12*(3), 488–519.
UNCTAD. (2023). *World investment report 2023*. United Nations.
World Bank. (2022). *Global economic prospects*. World Bank.
Yang, W., & Zhao, K. (2024). Cross-border capital flows and low-carbon economic development: Examining the impact of foreign shareholding. *International Review of Financial Analysis, 96*, 103652.
Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
Zahra, S. A., & Hashai, N. (2025). Contemporary transitions in the international activities of startups and their policy implications. *Journal of International Business Policy, 8*(4), 391–405.