



Managerial Ownership's Impact on Tech Firms' Financial Distress Risk

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ABSTRACT

This study aims to examine how profitability and leverage influence the likelihood of financial distress among technology companies listed on the Indonesia Stock Exchange (IDX) from 2022 to 2024, and whether managerial ownership moderates these relationships. Using a quantitative research design with 102 firm-year observations, panel data regression analysis was employed to test the hypotheses. The results show that higher profitability significantly reduces the risk of financial distress, while higher leverage increases it. Notably, managerial ownership strengthens both of these relationships—intensifying the protective effect of profitability and exacerbating the risk-enhancing effect of leverage. These findings suggest that while profitability supports financial stability, excessive debt remains a critical risk factor, and managerial ownership plays a dual role that can amplify both positive and negative outcomes. This highlights the importance of balanced financial policies and effective corporate governance in navigating the volatile, innovation-driven technology sector.

Keywords: *profitability, leverage, financial distress, managerial ownership, technology firms*

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1. INTRODUCTION

The rapid development of technology in the past two decades has encouraged the growth of various technology-based companies in Indonesia. The Indonesia Stock Exchange (IDX) has recorded an increase in the number of technology companies conducting initial public offerings (IPOs), especially since 2020. This reflects the market's confidence in the potential of the technology sector to create added value and contribute to national economic growth. However, amidst the great opportunities, technology companies also face serious financial challenges. One of the main challenges faced by technology companies is the risk of financial distress, a condition in which the company experiences significant financial pressure and has the potential to lead to bankruptcy (Eugene F. Brigham & Phillip R. Daves, 2018). This phenomenon is increasingly relevant when several large technology companies experience a significant decline in share value and losses in the period 2022-2024, such as PT GoTo Gojek Tokopedia Tbk (GOTO) and PT Bukalapak.com Tbk (BUKA). Factors such as market volatility, high innovation costs, and aggressive expansion strategies render technology companies more vulnerable to financial instability than many other sectors.

From a financial management perspective, various studies have highlighted the importance of internal financial factors in understanding and predicting financial distress. Some fundamental factors that are consistently used in various empirical studies to predict the likelihood of financial distress are profitability and leverage (Ayu Permata Sari & Nera Marinda Machdar, 2023). These variables represent important aspects of corporate financial management: the ability to generate profits, the level of dependence on debt, and the adequacy of short-term funds to meet financial obligations. Profitability reflects the company's ability to generate profits from its operational activities (Minanari, 2022). Profitability is not only an indicator of financial performance but also a reflection of the company's operational efficiency and resilience in the face of external pressures such as economic fluctuations, regulatory changes, and industry competition. In this context, a company with a high level of profitability is assumed to have sufficient financial resources to support its business continuity and to overcome possible temporary and long-term financial disruptions.

Leverage, on the other hand, captures the extent to which a firm relies on borrowed funds to finance its activities. In addition, profits can also be used to pay debt obligations, fund business expansion, or be kept as cash reserves to deal with future uncertainties. Thus, profitability not only serves as a performance measure but also as a financial risk mitigation tool. Research conducted (Aditya Kusuma Wardhana, 2021; Daffa Jundan Mahasin et al., 2025) shows a negative relationship between profitability and financial distress. For example, companies with high Return on Assets (ROA) tend to be more financially stable because they are able to manage their assets efficiently to generate revenue. Conversely, companies with low profitability indicate problems in operational strategy, cost efficiency, or ability to sell products/services, all of which have the potential to push the company towards financial distress.

Meanwhile, leverage is an indicator that describes the extent to which a company uses borrowed funds (debt) to finance its operational and investment activities. Leverage is a crucial element in capital structure management because it is directly related to the company's financial risk (Fitriana et al., 2024) (Fitriana et al., 2021). A high leverage ratio indicates that most of the company's assets are financed through debt rather than equity, which means that the company bears interest expenses and periodic debt repayment obligations. The use of a certain amount of debt can indeed increase shareholder returns through the multiplier effect (financial leverage), especially if the rate of return on investment is higher than the cost of debt. However, if the company's financial condition weakens or cash flow is insufficient to pay the debt burden, high leverage can backfire. In such a scenario, the company faces the risk of default, increased interest expenses, and possible loss of confidence from investors and creditors, all of which lead to financial distress.

In financial distress experienced by large companies, including in the technology sector, excessive leverage is one of the main causes. Companies that are too aggressive in using debt without considering their ability to pay in the future, especially when not offset by increased revenue or cost efficiency, will face serious financial pressure (Riza Fauziyah & Esti Handayani, 2020). Therefore, leverage is often used as one of the early indicators in bankruptcy prediction analysis. In the context of a company, liquidity shows the company's ability to meet its short-term obligations, such as salary payments, debt installments, and routine

operating costs. Financial distress remains a major challenge for Portuguese SMEs in high-tech sectors, driven by low profitability, high debt, and limited intangible assets. Despite high liquidity, many firms still face failure, indicating poor financial efficiency. These issues suggest that there are better early warning models tailored to SME conditions in Portugal (Yehui Tong & Zélia Serrasqueiro, 2021). A high liquidity ratio indicates that the company has sufficient cash and current assets to cover its short-term liabilities, thus providing room for maneuver in maintaining operational continuity.

Profitability and leverage factors are closely related in their influence on the company's financial condition (Indarti et al., 2020). For example, companies that are not profitable tend to increase debt to cover operational deficits, which then worsens the leverage ratio. On the other hand, companies that have high profitability and liquidity may not need to rely heavily on debt, thus maintaining a healthy capital structure. The combination of the three creates a holistic system of assessing a company's financial health, where an imbalance in one aspect can have negative implications for the others. Particularly in the technology industry, company characteristics are often different from the non-technology sector. Many technology companies operate with a business model based on rapid growth, but often at the expense of short-term profitability (Sari et al., 2024). In the early growth phase, these firms may exhibit high leverage as they rely on external financing for expansion, while profitability and leverage are still limited. This makes technology companies more vulnerable to financial distress if not managed wisely (Ichwan Syahrul Gunawan et al., 2023).

The relationship between these financial factors and financial distress is not always linear or consistent. In this context, managerial ownership can be a moderating variable that plays an important role. Managerial ownership describes how large a portion of the company's shares are owned by management (Kalbuana et al., 2022). Agency theory states that the higher the managerial ownership, the greater the management's interest in company performance, thus encouraging more careful and efficient decisions. Managerial ownership is believed to be able to encourage management to make more prudent, efficient, and long-term-oriented decisions, including in managing profitability and using leverage. As an illustration, managers who own shares in the company will be more careful in adding debt and will try to maintain profitability so that there is no financial pressure that harms the value of the company and their own ownership (Balboula & Shemes, 2025). Thus, the role of managerial ownership can be key in strengthening or weakening the effect of internal financial variables on the risk of financial distress. Thus, managerial ownership can strengthen or weaken the relationship between financial factors and the likelihood of financial distress.

In this study, an analysis of the effect of these variables on financial distress is very relevant to be carried out, especially for technology companies listed on the Indonesia Stock Exchange (IDX) for the period 2022-2024. This period covers the post-COVID-19 pandemic period, which has put significant pressure on the financial performance of many companies, as well as the post-pandemic period, which is characterized by uneven economic recovery. This study aims to determine how firms' internal financial characteristics affect their financial resilience amid these macroeconomic dynamics. The novelty of this research lies in its focus on technology companies in Indonesia in the post-pandemic period, which has received little quantitative research to date. Furthermore, the analysis of managerial ownership moderation contributes to the study of corporate governance in emerging markets, particularly when internal ownership is relatively low but still influences strategic financial decisions. By exploring the effect of profitability and leverage on the likelihood of financial distress, it is hoped that this study can provide a more comprehensive understanding of the factors that need to be considered by management in maintaining the company's financial stability. In addition, the results of this study can also provide useful information for investors, financial analysts, and other stakeholders in conducting risk assessment and making investment decisions.

2. LITERATURE REVIEW

Agency Theory

Agency theory has an important role in the corporate world because it provides a basis for managers to submit reports to shareholders, with the aim of controlling costs efficiently and preventing financial problems (Dirvi Surya Abbas & Putri Ambar Sari, 2019). This theory is also the basis for implementing governance mechanisms that function to oversee the role of agents in

companies whose ownership is held by many parties (Panda & Leepsa, 2017). In the process of resolving conflicts between managers and owners, agency costs or other forms of costs will arise as compensation for potential losses incurred by the manager (Baklouti et al., 2016). Agency theory also emphasizes the importance of separation of functions between the board of directors and the board of commissioners (Coles et al., 2001). If a CEO doubles as chairman of the board of directors (CEO duality), the supervisory function of management becomes weak, which in turn can reduce company performance (Hanjani & Kusumadewi, 2023). Suboptimal supervision due to duality triggers an increase in agency costs and reduces board independence, which has a negative impact on the effectiveness of supervision and overall company performance.

Financial Distress

Financial distress is a condition in which a company is experiencing serious financial difficulties, which can be characterized by the inability to meet short-term and long-term obligations. (Altman, 1968) developed the Z-score model as a bankruptcy prediction tool, which is still widely used in research. According to (Platt & Platt, 2002), financial distress is the initial stage of the process leading to bankruptcy, which is characterized by declining profits, negative cash flow, or a decline in the value of the company's equity. Financial distress is important to study because it is an early indicator of possible business failure.

Profitability

Profitability is the company's ability to generate profits from its operational activities. Commonly used measures of profitability are Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). According to (Eugene F. Brigham & Phillip R. Daves, 2018), profitability reflects the efficiency of management in managing the company's assets and operations. High profitability indicates a healthy financial condition and minimizes the possibility of financial distress. Several previous studies (Maulidia & Asyik, 2020) show that profitability has a negative effect on financial distress.

Leverage

Leverage refers to the use of borrowed funds to finance the company's operational activities. The most commonly used ratios are Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR). According to (Sartono, 2016), a high level of leverage increases the company's financial risk due to interest expense and debt payment obligations. Companies with high leverage are more vulnerable to financial pressures, especially if revenues are unstable. The results of research by (Hastuti, 2020) and (Santosa, 2021) show that leverage has a positive effect on financial distress.

Managerial Ownership

Managerial ownership is the percentage of company shares owned by management. Agency theory states that the existence of differences in interests between managers (agents) and owners (principals) can lead to conflicts. According to (Jensen & Meckling, 1979), share ownership by managers can reduce agency conflicts because managers will be encouraged to increase company value. In the context of financial distress, managers who own shares tend to avoid high-risk policies such as excessive debt financing. Therefore, managerial ownership can moderate the relationship between leverage, profitability, and liquidity on financial distress.

Conceptual Framework

Profitability is a key indicator in assessing a company's financial performance. Companies that have a high level of profitability are assumed to have the ability to generate profits on an ongoing basis so that they are better able to fulfill their financial obligations, both short and long term. Therefore, companies with high profitability tend to have a lower risk of financial distress (Eugene F. Brigham & Phillip R. Daves, 2018). (Wulandari et al., 2020) and (Salsabila & Rahmiyatun, 2025) found that Return on Assets (ROA) and Return on Equity (ROE) negatively affect financial distress in manufacturing and property sector companies. Thus, this hypothesis is built on the assumption that profitable technology companies have better resistance to financial stress. Then the hypothesis in this study is

H1: Profitability has a negative effect on financial distress in technology companies listed on the IDX for the 2020-2024 period.

Leverage shows how much the company uses borrowed funds to finance its operational and investment activities. The higher the level of leverage, the greater the interest expense and repayment obligations that must be borne by the company. In situations of declining revenue or disrupted cash flow, high leverage will increase the likelihood of financial distress (Eugene F. Brigham & Phillip R. Daves, 2018; Platt & Platt, 2002). Empirical research by (Santosa, 2021) and (pradipta, 2020) shows that companies with high debt-to-asset or capital ratios have a greater tendency to experience financial difficulties. This is relevant for technology companies, which generally require large financing in the early phases of development but do not necessarily generate profits in the short term. So the hypothesis in this study is

H2: Leverage has a positive effect on financial distress in technology companies listed on the IDX for the 2020-2024 period.

Managerial ownership refers to the proportion of company shares owned by management. Based on agency theory (Jensen & Meckling, 1979), when managers also act as shareholders, there will be an alignment of interests between management and shareholders. Thus, managers have a greater incentive to increase profitability and avoid conditions that can harm firm value, including financial distress. (Hastuti, 2020) shows that managerial ownership can strengthen the effect of profitability in reducing the risk of financial distress, because management is more careful in managing operational and financial risks. Therefore, this hypothesis states that managerial ownership acts as a moderating variable that can strengthen the negative relationship between profitability and financial distress. Then the hypothesis in this study is

H3: Managerial ownership moderates the effect of profitability on financial distress in technology companies.

In addition to moderating the relationship between profitability and financial distress, managerial ownership is also believed to be able to influence the way management uses debt as a source of financing. According to (Jensen & Meckling, 1979), the greater the portion of shares owned by managers, the greater their incentive to avoid high-risk financing decisions. Therefore, companies with significant managerial ownership tend to be more selective in the use of debt and more careful in considering its impact on the company's financial health. (Kalash, 2023) supports this hypothesis by showing that the effect of leverage on financial distress can be influenced by the level of internal ownership. In the context of technology companies that tend to be aggressive in expansion, the role of managerial ownership is important to maintain prudence in financial management. So the hypothesis in this study is

H4: Managerial ownership moderates the effect of leverage on financial distress in technology companies.

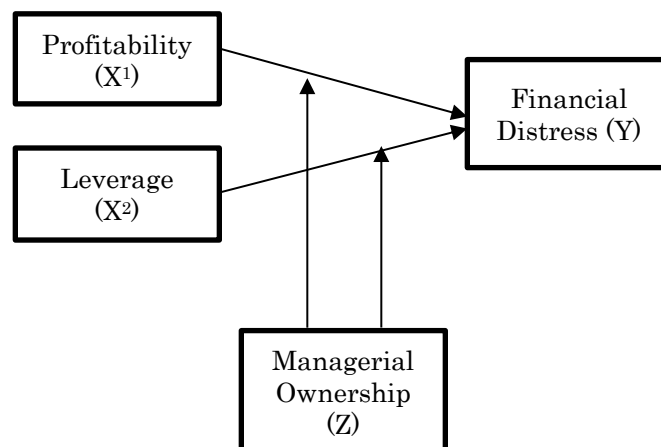


Figure 1. Research Framework

3. RESEARCH METHOD

This study uses a quantitative approach with a population of technology sector companies listed on the IDX for the period 2022-2024. Data was obtained from the official IDX and company websites. A purposive sampling technique based on strategic considerations, including data availability, industry relevance, and the contextual urgency of the post-pandemic period, selected 34

companies whose companies had been listed on the IDX at least since 2022 or earlier, resulting in 102 observation data. Financial distress (Y) was operationalized using the Altman Z-score model, adapted for emerging markets (Wibowo & Hidayah, 2023). The formula applied was

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$$

X₁ = working capital/total assets, X₂ = retained earnings/total assets, X₃ = EBIT/total assets, X₄ = market value equity/book value of liabilities, and X₅ = sales/total assets. Firms with Z-scores < 1.81 were classified as financially distressed, while scores > 2.99 indicated safety; scores between these thresholds were considered 'grey zone.'

Data analysis was conducted using SPSS, including classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation) and hypothesis testing (Sugiyono, 2018). Tests include the R² test, individual parameter significance tests, and moderated regression analysis (MRA) to analyze the role of moderator variables. According to (R. Hery Koeshardjono et al., 2019), the equation model that can be used in the MRA test is as follows:

Model 1: $Y = a + b_1X_1 + b_2X_2 + e$

Model 2: $Y = a + b_1X_1 + b_2Z + b_3X_1.Z + e$

Model 3: $Y = a + b_1X_2 + b_2Z + b_3X_2.Z + e$

Description:

X₁ = Profitability

X₂ = Leverage

Y = Financial Distress

Z = Managerial Ownership

Moderation testing is done by comparing the coefficient of determination (R²) in model 1 (Y = a + b₁X₁ and Y = a + b₁X₂) with model 2 and model 3. Terms of the results:

a. If the R² of model 1 is lower than the R² of model 2 and model 3, then the moderating variable (Z) strengthens the relationship between X and Y.

If the R² of model 1 is higher than the R² of model 2 and model 3, then the moderating variable (Z) does not strengthen the relationship between X and Y.

4. RESULTS AND DISCUSSION

4.1 RESULTS

Table 1 | Descriptive Statistics

Variables	N	Min	Max	Mean	Std. Deviation
Profitability (X1)	102	-0.150	0.290	0.085	0.072
Leverage (X2)	102	0.120	1.850	0.765	0.395
Financial Distress (Y)	102	-5.200	2.500	-1.320	1.435
Managerial Ownership (Z)	102	0.000	0.230	0.045	0.061

Source : Data processed (2025)

Based on the results of the descriptive statistics presented, the profitability variable (X₁) has an average value of 0.085 with a minimum value of -0.150 and a maximum of 0.290. This shows that the average level of profitability of technology companies in the research sample is relatively positive, although there are several companies that record negative profitability values of up to -0.150, which indicates a loss in a certain period. The variability of the profitability data is also relatively small,

with a standard deviation of 0.072, which indicates that the profitability values are not too far spread from the average value.

For the leverage variable (X2), the average value is 0.765 with a minimum value range of 0.120 to a maximum of 1.850. This positive and quite large leverage value indicates that most companies use a funding structure with a varying portion of debt, with some companies having a very high level of leverage. The standard deviation of leverage of 0.395 indicates a significant variation in the use of leverage between companies. Meanwhile, the financial distress variable (Y) has an average value of -1.320 with a minimum value of -5.200 and a maximum of 2.500. This negative average value indicates that most companies are in a relatively safe condition from the risk of financial distress, but there are several companies with very low (negative) financial distress values, which reflect a fairly serious level of financial difficulty. The high standard deviation of financial distress, which is 1.435, indicates that there is considerable variation between companies in terms of financial distress risk.

Finally, the managerial ownership variable (Z) has an average of 0.045 with a minimum value of 0.000 and a maximum of 0.230. This indicates that in general, managerial ownership in technology companies is relatively small with limited variation between companies. The standard deviation of 0.061 indicates that the distribution of managerial ownership tends to be concentrated and not spread too widely. Overall, this data provides an overview of the financial characteristics of the technology companies under study, with considerable variation in terms of profitability, leverage, and risk of financial distress, as well as managerial ownership that tends to be low but diverse among the analyzed companies.

Classical Assumption Test

Table 2 | Classical Assumption Test Results

Assumption Test	Testing Criteria	Results	Conclusion
Normality	Sig. Kolmogorov-Smirnov > 0.05	Sig. = 0.200	Data is normally distributed
Multicollinearity	Tolerance > 0.10 and VIF < 10	Tolerance: 0.682-0.845 VIF: 1.184-1.466	No multicollinearity
Heteroscedasticity	Sig. Glejser > 0.05	Sig. = 0.188-0.412	No heteroscedasticity
Autocorrelation	Durbin-Watson close to 2 (around 1.5-2.5 for cross-section data)	DW = 1.925	No autocorrelation

Source : Data processed (2025)

The results of classical assumption testing show that the regression model used has met the eligibility requirements. The normality test with a Kolmogorov-Smirnov significance value of 0.200 (> 0.05) indicates that the data is normally distributed. The multicollinearity test shows a tolerance value between 0.682-0.845 and a Variance Inflation Factor (VIF) value between 1.184-1.466, which is within safe limits (tolerance > 0.10 and VIF < 10), so it can be concluded that there is no multicollinearity between the independent variables. The heteroscedasticity test with the Glejser method produces a significance value between 0.188-0.412 (> 0.05), indicating that no heteroscedasticity occurs. Furthermore, the results of the autocorrelation test show a Durbin-Watson value of 1.925 which is in the range of 1.5-2.5, so there is no autocorrelation in the model.

Multiple Linear Regression

Table 3 | Multiple Linear Regression Analysis Results

Variables	Unstandardised Coefficient (B)	Description
(Constant) (α)	-0.834	
Profitability (X1)	-3.247	Negative Relationship
Leverage (X2)	1.519	Positive Relationship

Source : Data processed (2025)

Based on the results of linear regression analysis, it is obtained that profitability (X1) has a regression coefficient of -3.247 which shows a negative relationship to financial distress, while leverage (X2) has a coefficient of 1.519 which shows a positive relationship to financial distress.

Test t

Table 4 | Results of the t-test

Variables	Sig. (p-value)	t count	t table ($\alpha = 0.05$)	Description
Profitability (X1)	0.000	-4.548	1,983	Has a significant negative effect on financial distress
Leverage (X2)	0.000	5.293	1,983	Has a significant positive effect on financial distress

Source : Data processed (2025)

The t-test results reinforce this, with the significance value of each variable at 0.000 (<0.05), as well as the calculated t values of -4.548 for profitability and 5.293 for leverage which are greater than the t table (1.983). This shows that both profitability and leverage have a significant effect on financial distress, where profitability has a significant negative effect and leverage has a significant positive effect.

Moderation Test

Table 5 | Moderation Test Results of the Relationship between Profitability and Financial Distress with Managerial Ownership as a Moderating Variable

Model	R Square	Predictors
1	0,095	(Constant), Profitability (X1)
2	0,347	(Constant), Profitability (X1), Managerial Ownership (Z), X1*Z

Source : Data processed (2025)

The moderation test results show that managerial ownership is able to strengthen the relationship between profitability and financial distress. This is indicated by an increase in the R-squared value from 0.095 (in the model without moderating variables) to 0.347 after including the moderating variable of managerial ownership and its interaction with profitability (X1*Z). This indicates that the presence of managerial ownership as a moderating variable strengthens the negative effect of profitability on financial

distress, which means that the greater the managerial ownership, the stronger the effect of profitability in reducing the level of financial distress of the company.

Table 6 | Moderation Test Results of the Relationship between Leverage and Financial Distress with Managerial Ownership as a Moderating Variable

Model	R Square	Predictors
1	0,003	(Constant), Leverage (X2)
3	0,153	(Constant), Leverage (X2), Managerial Ownership (Z), X2*Z

Source : Data processed (2025)

The moderation test results show that managerial ownership has a role as a moderating variable in the relationship between leverage (X2) and financial distress. In the first model, which only involves leverage as a predictor, the R-squared value of 0.003 indicates that leverage alone only explains 0.3% of the variation in financial distress; however, when the moderating variable managerial ownership (Z) and its interaction with leverage (X2*Z) are included in the model (Model 3), the R-squared value increases to 0.153. This increase in R-squared indicates that managerial ownership strengthens the effect of leverage on financial distress. Thus, it can be concluded that managerial ownership is able to moderate the positive relationship between leverage and financial distress, where the greater the managerial ownership, the stronger the effect of leverage on financial distress. The results indicate that managerial ownership strengthens the effect of leverage on financial distress. However, because the average managerial ownership is relatively small (<5%), this result may reflect risk sensitivity rather than effective alignment of interests. It should be noted that such ownership is symbolic and does not reflect substantial managerial control.

4.2 DISCUSSION

The results directly support all four hypotheses. For H1, profitability exhibited a significant negative coefficient ($B = -3.247$; $t = -4.548$; $p < 0.001$), confirming that higher profitability reduces the likelihood of financial distress. For H2, leverage showed a significant positive coefficient ($B = 1.519$; $t = 5.293$; $p < 0.001$), indicating that higher debt levels increase distress risk. Regarding moderation, H3 was supported, as the inclusion of managerial ownership and the interaction term (profitability \times managerial ownership) increased the R^2 from 0.095 to 0.347, strengthening the negative relationship between profitability and distress. Similarly, H4 was supported, with the interaction between leverage and managerial ownership increasing the R^2 from 0.003 to 0.153, highlighting that managerial ownership amplifies the impact of leverage on financial distress. These statistical outcomes confirm that the chosen analytical approach effectively tested the proposed relationships, providing empirical evidence consistent with the theoretical expectations and previous research.

This means that the higher the level of profitability of a company, the lower the possibility of the company experiencing financial difficulties. This finding is consistent with theory and previous research (Jouali et al., 2024), which states that companies with good profits have greater internal resources to meet short- and long-term obligations, making them more resistant to financial pressure. In contrast, leverage is shown to have a positive and significant effect on financial distress. Companies with high levels of debt tend to have greater financial burdens (such as interest and installments), which in turn increase the risk of not being able to meet financial obligations. This is in line with the views of (Poursoleyman et al., 2023) that debt-based funding structures need to be managed carefully so as not to worsen financial conditions.

Two other important findings come from the moderation test. First, managerial ownership strengthens the negative relationship between profitability and financial distress. This means that when management owns shares in the company, they tend to be more efficient and prudent in managing profits, so the positive impact of profitability in suppressing financial risk becomes

greater. Second, managerial ownership also strengthens the positive effect of leverage on financial distress. This means that in companies with high managerial ownership, the negative effect of high leverage on financial risk becomes more pronounced. This can be interpreted to mean that managers who own shares are more sensitive to debt risk because it involves the value of the shares they own. Overall, the role of managerial ownership as a moderating variable shows the importance of corporate governance mechanisms in strengthening or weakening the relationship between financial characteristics and corporate financial risk.

5. CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that profitability has a significant negative effect on financial distress, which indicates that technology companies with high levels of profit tend to be better able to avoid financial difficulties. Conversely, leverage has a significant positive effect on financial distress, which means that the higher the level of corporate debt, the greater the potential for the company to experience financial stress. This study also found that managerial ownership acts as a moderating variable that strengthens the relationship between profitability and leverage on financial distress. The greater the proportion of shares owned by management, the stronger the influence of these two financial variables on the possibility of financial distress. These findings underscore the importance of sound financial performance management and the role of corporate governance, particularly in terms of share ownership by management, in maintaining the financial stability of technology companies operating in a dynamic and risky business environment.

6. LIMITATION AND IMPLICATION

6.1 Limitations

This study did not control for potential endogeneity, including the possibility of reverse causality between managerial ownership structure and financial performance. For example, management may increase ownership after performance improves. Further research is recommended using an instrumental variables (IV) or two-stage least squares (2SLS) approach to increase causal validity, with several limitations that must be considered when interpreting its results. First, the sample is limited to technology companies listed on the Indonesia Stock Exchange (IDX) from 2022 to 2024, which may restrict the generalizability of the findings to other industries or markets with different financial characteristics. Second, the model includes only two key internal financial variables—profitability and leverage—and one moderating variable, managerial ownership. This limited variable selection does not capture other possible financial or non-financial determinants of financial distress, such as liquidity, cash flow, firm size, or external macroeconomic shocks. Third, the study relies on secondary data from financial statements, which may not fully reflect the underlying operational risks, managerial decisions, or governance practices that influence financial outcomes.

Additionally, the distribution of managerial ownership in the sample was relatively low and narrow, which may limit the detection of its true moderating effect. The analysis also assumes linear relationships, not accounting for possible nonlinear or threshold effects. Endogeneity concerns, such as reverse causality between financial performance and ownership structure, were not addressed, which may bias the regression results. Finally, this study does not track the long-term evolution of financial distress and ownership over time due to its cross-sectional approach.

6.2 Practical Implications

Despite these limitations, the findings of this study offer valuable insights for corporate stakeholders. For managers, the evidence emphasizes the importance of maintaining strong profitability and managing leverage carefully to reduce the risk of financial distress. It also suggests that increasing managerial ownership may help align managerial interests with shareholder goals, thus encouraging more prudent financial decisions. For investors and creditors, the results highlight the usefulness of internal financial metrics—especially profitability and leverage—as early warning indicators of potential financial problems in

technology companies.

Moreover, policymakers and regulators may consider promoting corporate governance structures that encourage ownership alignment and financial transparency, particularly in high-risk sectors such as technology. Future corporate disclosures and monitoring systems should pay closer attention to ownership patterns and leverage trends as part of financial health assessments. These practical implications can support more informed decision-making among internal and external stakeholders, ultimately contributing to the financial stability and sustainability of innovation-driven firms.

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