

# Understanding the role of investment decisions, free cash flow, and asset intensity in financial distress

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## Abstract

This study examines the effect of investment decisions, free cash flow, and asset intensity on financial distress in manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2024 period. Using panel data from 141 firms with 564 observations, financial distress is measured by the Altman Z'-Score and analyzed through multiple linear regression employing the Random Effect Model. The results indicate that asset intensity has a significant negative effect on financial distress, while free cash flow has a significant positive effect, whereas investment decisions show no significant effect. These findings highlight the importance of asset utilization efficiency and effective oversight of free cash flow in reducing the risk of financial distress, and they support Agency Theory regarding the role of managerial monitoring in the management of corporate assets and cash. The study contributes to the literature by providing empirical evidence from a post-pandemic context, where firms face structural adjustments in financial and operational strategies.

Keywords: Financial Distress, Investment Decisions, Free Cash Flow, Capital Intensity, Agency Theory

## Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh keputusan investasi, free cash flow, dan intensitas aset terhadap financial distress pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2021–2024. Penelitian ini menggunakan data panel dari 141 perusahaan dengan total 564 observasi. Financial distress diukur menggunakan model Altman Z'-Score dan dianalisis melalui regresi linear berganda dengan pendekatan Random Effect Model. Hasil penelitian menunjukkan bahwa intensitas aset berpengaruh negatif dan signifikan terhadap financial distress, sementara free cash flow berpengaruh positif dan signifikan. Di sisi lain, keputusan investasi tidak menunjukkan pengaruh yang signifikan terhadap financial distress. Temuan ini menegaskan pentingnya efisiensi pemanfaatan aset serta pengawasan yang efektif terhadap free cash flow dalam menurunkan risiko financial distress, sekaligus mendukung Agency Theory terkait peran mekanisme pengawasan manajerial dalam pengelolaan aset dan kas perusahaan. Studi ini berkontribusi pada literatur dengan memberikan bukti empiris dari konteks pasca-pandemi, di mana perusahaan menghadapi penyesuaian struktural dalam strategi keuangan dan operasional.

Kata kunci: Financial Distress, Keputusan Investasi, Free Cash Flow, Intensitas Aset, Agency Theory.

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## 1. Introduction

Global economic uncertainty is a condition that can emerge abruptly and exert significant pressure on corporate performance and sustainability. The Covid-19 pandemic provides a clear example of how external shocks intensify economic and policy uncertainty, leading firms to postpone investment, slow business expansion, and adopt more cautious financial management practices (Baker et al., 2016). In Indonesia, the pandemic disrupted global supply chains, reduced access to imported raw materials, and weakened household purchasing power, which directly contributed to declining corporate sales. If such conditions persist, they may push firms into financial distress (Dirman, 2020).

Under normal circumstances, firms are expected to maintain liquidity, manage assets efficiently, and make optimal investment decisions to support long-term sustainability. However, heightened uncertainty complicates financial decision-making. Trade-off theory suggests that financial decisions involve balancing conflicting benefits and costs (Frank et al., 2009). Efforts to preserve cash flow through cost efficiency may conflict with the need to invest and sustain operational competitiveness. Baker et al. (2016) show that during periods of high uncertainty, firms tend to delay investment, even though such decisions may suppress future revenue growth.

Financial decision-making pressures intensify when uncertainty becomes structural. Pastor and Veronesi (2013) argue that economic and policy uncertainty increases business risk and the cost of capital, thereby placing additional strain on firms' financial structures. This issue is particularly relevant for manufacturing firms, which are capital-intensive and heavily reliant on fixed assets. According to Statistics Indonesia, the manufacturing sector contributed approximately 18.98% of Indonesia's Gross Domestic Product, indicating that financial distress within this sector may generate systemic economic effects (bps.go.id, 2024).

Financial distress refers to a condition in which firms experience financial pressure characterized by declining performance, constrained cash flows, and an increased risk of failing to meet financial obligations (Dirman, 2020). While external shocks play an important role, internal firm-specific factors are also critical. Widarno and Irawan (2021) find that investment decisions and financing policies influence financial distress, whereas Sianturi et al. (2021) highlight the role of liquidity and cash flow in determining firms' vulnerability to financial difficulties. Investment decisions determine the allocation of long-term resources, free cash flow reflects managerial discretion over excess funds, and asset intensity captures the extent to which firms rely on fixed assets to generate revenue. In capital-intensive industries such as manufacturing, inefficient asset allocation, excessive managerial discretion over cash, or suboptimal investment expansion may directly weaken financial resilience. Therefore, these three variables are theoretically and practically relevant to explaining financial distress in the Indonesian manufacturing context.

Empirical evidence of financial distress among Indonesian manufacturing firms can be observed in several cases. PT Pan Brothers Tbk (PBRX) faced severe financial

pressure due to negative operating cash flows and high fixed asset burdens, resulting in debt payment failures and credit rating downgrades (Khomarul Hidayat & Nur Qolbi, 2021). Similarly, PT Century Textile Industry Tbk (CNTX) conducted a voluntary delisting from the Indonesia Stock Exchange after experiencing declining sales, operating losses, and negative equity (Ahmad Nabhani, 2024; Zetta Hannany et al., 2024). These cases illustrate that large asset ownership does not necessarily indicate financial resilience when it is not supported by effective cash flow management and sound investment decisions.

Previous studies report inconsistent empirical findings regarding the effects of investment decisions, free cash flow, and asset intensity on financial distress. Several studies report that investment policy reduces financial distress because productive asset growth enhances operational efficiency and long-term profitability. However, other studies find a positive or insignificant relationship, particularly in sectors characterized by overinvestment or agency conflicts, where asset expansion increases fixed costs and financial rigidity. Adi et al. (2022) find that investment policy negatively affects financial distress, while Widarno and Irawan (2021) document a positive relationship in certain sectors. Regarding free cash flow, Dirman (2020) reports no significant effect, whereas Suranta et al. (2023) and Meryana and Setiany (2021) find significant effects, and Suwarno and Putri (2022) identify a positive association.

These Mixed results are also observed for asset intensity, as reported by Agustria et al. (2024) and Bachtiar and Handayani (2022). In some studies, high free cash flow strengthens liquidity and reduces financial risk. In contrast, agency theory suggests that excessive free cash flow may encourage managerial overinvestment and inefficient spending, thereby increasing financial distress risk, especially in environments with weaker governance mechanisms. Divergent results are also found for asset intensity. In capital-intensive firms, higher asset intensity may support stable production capacity and revenue generation, however, in periods of demand contraction, heavy fixed asset structures may increase financial pressure due to high maintenance and depreciation costs.

These inconsistencies indicate that the relationship between investment decisions, free cash flow, asset intensity, and financial distress is highly context-dependent and cannot be generalized across sectors and economic conditions. Most prior studies were conducted either before the pandemic or across mixed industry samples, limiting their ability to capture the structural changes experienced by Indonesian manufacturing firms during the post-pandemic recovery period. The 2021–2024 period represents a critical phase characterized by financial restructuring, shifts in capital allocation strategies, and adjustments in asset utilization efficiency.

Re-examining these determinants in this specific context is therefore essential to understand whether internal financial policies serve as risk-mitigating mechanisms or instead intensify vulnerability under recovery pressures. By focusing on capital-intensive manufacturing firms during a period of structural economic adjustment, this study does not merely replicate prior tests of influence but seeks to provide

contextualized empirical evidence that clarifies the conditional role of investment growth, managerial cash discretion, and asset structure in shaping financial distress risk within emerging market settings.

## **2. Literature Review**

### **Agency Theory**

Agency theory explains the contractual relationship between shareholders as principals and managers as agents, in which management is delegated authority to manage corporate resources with the objective of maximizing firm value (Jensen & Meckling, 1976). In practice, differences in interests between principals and agents often give rise to agency conflicts, particularly when managers prioritize personal objectives over shareholders' welfare.

These conflicts are exacerbated by information asymmetry, where managers possess superior information relative to shareholders. Such conditions create opportunities for opportunistic behavior, including inefficient investment decisions or biased financial reporting. Jensen (1986) emphasizes that agency conflicts generate agency costs that ultimately reduce firm efficiency and weaken financial performance.

In emerging markets such as Indonesia, agency conflicts may become more pronounced due to concentrated ownership structures, varying governance quality, and differences in monitoring effectiveness across firms. Manufacturing companies, which manage substantial fixed assets and operational cash flows, provide managers with relatively high discretion over investment expansion and cash allocation. This condition increases the relevance of agency theory in explaining how internal governance weaknesses may translate into financial distress.

Agency theory also provides the conceptual foundation for this study. Inefficient investment decisions may reflect managerial self-interest, while excessive free cash flow can encourage overinvestment that reduces firm value (Jensen, 1986). Moreover, high asset intensity may increase fixed cost burdens when assets are not utilized optimally, thereby elevating the risk of financial distress. Consequently, agency theory offers a robust framework for explaining the relationship between managerial decisions and corporate financial distress.

### **Financial Distress**

Financial distress refers to a condition in which firms experience financial pressure characterized by declining performance, limited cash flows, and an inability to meet financial obligations (Dirman, 2020). In addition to external factors, financial distress is closely related to the effectiveness of internal financial management, particularly liquidity and cash flow control (Sianturi et al., 2021).

From an agency perspective, financial distress can be viewed as a consequence of managerial decisions that diverge from shareholders' interests. financial distress may arise when managerial decisions deviate from value-maximizing objectives. Unproductive investments and inefficient use of free cash flow may weaken a firm's financial position and increase the likelihood of financial distress (Jensen & Meckling,

1976). Thus, financial distress is not solely triggered by external economic shocks but also shaped by internal financial policies, particularly investment allocation, free cash flow management, and asset structure decisions.

### **Investment Decisions**

Investment decisions reflect corporate policies in allocating funds to productive assets with the aim of enhancing firm value (Pristiana & Istiono, 2020). However, inappropriate investment choices such as selecting high-risk projects with low expected returns may instead increase the firm's financial burden.

Within the agency theory framework, conflicts of interest and information asymmetry allow managers to engage in overinvestment for personal motives, even when projects generate negative economic value (Jensen & Meckling, 1976). Such behavior increases agency costs and may lead firms toward financial distress. Empirically, Adi et al. (2022) find that investment decisions have a negative effect on financial distress. Under Agency Theory, managers may pursue empire-building strategies to increase personal prestige or compensation, even when projects yield negative net present value (Jensen & Meckling, 1976). In capital-intensive manufacturing firms, excessive asset growth increases depreciation, maintenance costs, and financial rigidity. Therefore, when investment growth reflects productive expansion aligned with operational capacity, it may reduce financial distress. Accordingly, the following hypothesis is proposed:

H1: Investment decisions have a significant negative effect on financial distress.

### **Free Cash Flow**

Free cash flow (FCF) represents residual cash available after fulfilling operational and capital expenditure requirements. Empirical findings are inconsistent. Some studies report that high FCF strengthens liquidity and reduces financial distress risk. However, Suwarno and Putri (2022) document a positive association, suggesting that excess cash may intensify agency conflicts.

Jensen and Meckling (1976) argues that high FCF increases managerial discretion, potentially leading to overinvestment or inefficient spending. In Indonesian firms, where monitoring mechanisms may vary across companies, excess internal funds can reduce financial discipline. Misallocation of free cash flow may weaken future profitability and increase financial vulnerability. Given agency-based arguments and empirical evidence showing that excessive free cash flow may trigger inefficient investment behavior, this study proposes:

H2: Free cash flow has a significant positive effect on financial distress

### **Asset Intensity**

Asset intensity reflects the proportion of fixed assets used to support operational activities and sales. Capital intensity serves as an indicator of asset utilization efficiency, as it shows the amount of assets required to generate revenue (Brigham et al., 2022). A higher proportion of fixed assets increases depreciation and maintenance costs, which may place pressure on corporate cash flows (Agustria et al., 2024).

From an agency perspective, large fixed asset ownership may trigger agency conflicts when managers maintain capital-intensive structures without optimal utilization (Jensen & Meckling, 1976). High fixed costs reduce financial flexibility and increase cash flow pressure, potentially leading to financial distress. Conversely, when assets are managed efficiently, high capital intensity may help stabilize financial performance. This argument is supported by Bachtiar and Handayani (2022), who find that asset intensity has a negative effect on financial distress. Thus, the third hypothesis is proposed:

H3: Asset intensity has a significant negative effect on financial distress.

### 3. Research Method

This study employs a quantitative approach using panel data regression to examine the effects of investment decisions, free cash flow, and asset intensity on financial distress. Panel regression is chosen as it accommodates cross-sectional and time-series variations simultaneously, resulting in more efficient estimations (Ghozali, 2018). Data analysis was conducted using STATA 12. The regression model is specified as follows:

$$FD = \alpha + \beta_1 FCF + \beta_2 CI + \beta_3 AG + e,$$

Where FD denotes financial distress. Statistical significance is determined at a 5% level (Ghozali, 2018). To determine the most appropriate panel data model, several diagnostic tests were conducted. The Chow test was performed to compare the Common Effect Model and Fixed Effect Model, assessing whether individual heterogeneity should be considered. The Hausman test was subsequently applied to evaluate the consistency of the Fixed Effect and Random Effect estimators, thereby determining whether individual effects were correlated with the independent variables. In addition, the Lagrange Multiplier (Breusch–Pagan) test was used to compare the Common Effect Model and Random Effect Model.

These diagnostic procedures are essential to ensure that the selected regression model provides consistent and efficient parameter estimates. Based on the results of these tests, the Random Effect Model (REM) was determined to be the most appropriate specification for this study.

The population consists of manufacturing firms listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. Manufacturing firms are classified into basic materials, consumer non-cyclicals, and consumer cyclicals sectors. Samples were selected using purposive sampling based on data availability, completeness of financial statements, absence of trading suspension or delisting, and the use of Indonesian Rupiah (IDR). From 211 firms, 141 firms were selected, yielding 564 firm-year observations.

#### Operational Definition and Variable Measurement:

1. Financial Distress (FD) is defined as a condition in which firms face difficulties in meeting short-term and long-term financial obligations, potentially leading to

bankruptcy (Dirman, 2020). This study measures financial distress using the Altman Z'-Score model developed by (Altman & Hotchkiss, 2010). The Z'-Score is selected because it uses book value of equity, making it more suitable for emerging markets such as Indonesia where market-based measures may be less stable due to stock price volatility and varying liquidity levels. Compared to other bankruptcy prediction models, the Z'-Score is widely applied in manufacturing sectors as it integrates profitability, liquidity, leverage, and activity ratios, providing a comprehensive assessment of financial condition. Therefore, it offers a reliable and contextually appropriate measure for Indonesian manufacturing firms and has been proven effective in detecting financial distress (Bachtiar & Handayani, 2022; Rashid et al., 2023).

$$Z' = 0.717 WCTA + 0.847 RETA + 3.107 EBITTA + 0.420 BVTL + 0.998 STA$$

Description:

WCTA	= Working Capital / Total Assets
RETA	= Retained Earnings / Total Assets
EBITTA	= EBIT / Total Assets
BVTL	= Book Value of Equity / Total Liabilities
STA	= Sales / Total Assets
Working Capital	= Current Assets – Current Liabilities

Evaluation Criteria:

$Z < 1.23$	= Financial distress.
$1.23 < Z < 2.90$	= Grey Area
$Z > 2.90$	= Non-financial distress.

- Free Cash Flow is measured by comparing operating cash flow after capital expenditures to total assets. Normalizing FCF by total assets enables comparability across firms of different sizes (Septiarni et al., 2025). The formula used is:

$$\text{FCF Ratio} = \frac{\text{Operating Cash Flow} - \text{Capital Expenditure}}{\text{Total Asset}}$$

- Asset Intensity is measured using the Capital Intensity Ratio (CIR), which reflects the efficiency of asset utilization in generating sales. Lower CIR values indicate more efficient asset use, while higher values suggest greater asset requirements to generate revenue (Bachtiar & Handayani, 2022). The ratio is calculated as follows:

$$\text{Capital Intensity (CI)} = \frac{\text{Total Assets}}{\text{Sales}}$$

- Investment Decisions are measured using Asset Growth (AG), which reflects asset expansion as an indicator of corporate investment policy. Positive AG values indicate asset expansion, while negative values reflect asset contraction (Cooper et al., 2008). The formula is as follows:

$$AG = \frac{\text{Total Asset}_t - \text{Total Asset}_{t-1}}{\text{Total Asset}_{t-1}}$$

## 4. Results and Discussion

### 4.1. Results

#### Descriptive Statistics

Based on Table 1, the dataset consists of 564 observations derived from 141 manufacturing firms listed on the Indonesia Stock Exchange during the 2021–2024 period.

Table 1. Descriptive Statistics Test Results

Statistik	FD	AG	FCF	CI
Mean	3.279176	0.1084006	0.0062062	23.78269
Min	-5.231462	-0.7846243	-1.23714	0.143898
Max	217.5297	6.044425	0.4767544	9668.257
Standar Dev	11.65113	0.4646949	0.140223	420.1111

Overall, all variables exhibit standard deviation values exceeding their respective means, indicating heterogeneous and well-dispersed data. Financial distress (FD) shows a minimum value of  $-5.231$  and a maximum of  $217.530$ , with an average of  $3.279$ , suggesting that most firms are positioned within the safe zone. Asset growth (AG) ranges from  $-0.785$  to  $6.044$ , with a mean of  $0.108$ . Free cash flow (FCF) records a mean value close to zero ( $0.006$ ), indicating relatively balanced cash conditions across firms. Asset intensity (CI) displays substantial variation, reflecting differences in firms' asset utilization structures.

#### Model Selection

Tabel 2. Chow Test Results

Model selection	Probability
Chow Test	0.0373
Hausman Test	0.5784
Lagrange Multiplier (LM)	0.0378

The Chow test yields a probability value of  $0.0373$  ( $< 0.05$ ), indicating that the pooled OLS model is rejected in favor of the Fixed Effect Model due to firm-specific intercept differences. The Hausman test reports a probability value of  $0.5784$  ( $> 0.05$ ), indicating no significant correlation between individual effects and explanatory variables. Therefore, the Random Effect Model (REM) is preferred over the Fixed Effect Model. The LM test produces a probability value of  $0.0378$  ( $< 0.05$ ), confirming that the Random Effect Model is superior to the Common Effect Model. Based on these results, the Random Effect Model is selected as the most appropriate and efficient estimation method.

#### Classical Assumption Tests

Table 2. Normality Test Result

Variabel	FD	AG	FCF	CI
Skewness	0.8564598	1.018232	-0.4323016	1.666548
Kurtosis	3.364567	3.73126	3.016521	5.482745

Normality testing using skewness and kurtosis values indicates that all variables fall within acceptable thresholds (skewness  $< 3$ ; kurtosis  $< 10$ ), confirming normal

distribution. The winsorization process further stabilizes the data by mitigating the influence of extreme outliers.

Table 3. Multikolinieritas Test Results

Variabel	VIF	Tolerance
FCF	1.05	0.952503
CI	1.05	0.952708
AG	1.00	0.999149
Mean VIF	1.03	

Multicollinearity testing shows tolerance values above 0.10 and VIF values below 10 for all independent variables, indicating no multicollinearity issues.

Heteroskedasticity and autocorrelation are addressed through the Generalized Least Squares (GLS) estimation embedded in the Random Effect Model, ensuring efficient and consistent parameter estimates.

### Model Feasibility and Goodness of Fit

Table 4. Results of Simultaneous and R-Squared

Probability F	0.0048
R-Squared	0.0504

The simultaneous test (F-test) reports a probability value of 0.0048 ( $< 0.05$ ), indicating that investment decisions, free cash flow, and asset intensity jointly have a significant effect on financial distress. The coefficient of determination ( $R^2$ ) is 0.0504, implying that the independent variables explain 5.04% of the variation in financial distress, while the remaining 94.96% is influenced by other factors outside the model.

### Hypothesis Testing

Table 5. Multiple Linear Regression Results -RE Model

Variable	Hypothesis	Coefisien	z	P> z	Result
AG	H1: -	-0.3087215	- 0.920	0.358	Rejected
FCF	H2: +	0.8910403	1.467	0.096	Accepted
CI	H3: -	-0.2028177	- 2.520	0.012	Accepted
Constanta		2.913832	16.140	0.000	

At a 10% significance level, investment decisions (AG) do not significantly affect financial distress. Conversely, free cash flow (FCF) has a positive and significant effect, indicating that higher FCF is associated with increased financial distress. Asset intensity (CI) exhibits a negative and significant effect, suggesting that higher asset utilization efficiency reduces financial distress risk.

Based on the results of the multiple linear regression analysis using the Random Effect Model (REM), the following equation is obtained:

$$FD = 2.913832 - 0.3087215AG + 0.8910403FCF - 0.2028177CI$$

The constant value of financial distress is 2.913832, indicating that when all independent variables (investment decisions, free cash flow, and asset intensity) are assumed to be zero, the firm's financial distress level is 2.913832

1. The investment decision variable (AG) has a negative regression coefficient of  $-0.3087215$ , implying that a one-unit increase in AG, holding other independent variables constant, is predicted to reduce financial distress by  $0.3087215$ . However, this effect is not statistically significant.
2. The free cash flow (FCF) variable has a positive regression coefficient of  $0.8910403$ , indicating that a one-unit increase in FCF, ceteris paribus, is associated with an increase in financial distress of  $0.8910403$ .
3. The asset intensity variable (CI) has a negative regression coefficient of  $-0.2028177$ , meaning that a one-unit increase in CI, assuming other independent variables remain constant, is expected to reduce financial distress by  $0.2028177$ , and this effect is statistically significant.

## **4.2. Discussion**

### **Investment Decisions and Financial Distress**

The empirical results indicate that investment decisions proxied by Asset Growth (AG) do not significantly affect financial distress. Although the coefficient is negative, the effect is statistically insignificant. This finding suggests that asset growth in Indonesian manufacturing firms during the 2021–2024 period does not automatically reflect either financial improvement or deterioration. This result may be explained by the structural characteristics of manufacturing firms. In capital-intensive industries, asset growth often represents routine capital maintenance, modernization of machinery, or replacement of depreciated equipment rather than aggressive expansion. Consequently, asset growth may not substantially alter financial risk exposure. This explanation aligns with Meryana and Setiany (2021), and Pristiana and Istiono (2020), who argue that asset expansion does not necessarily lead to financial distress when investment decisions are aligned with operational capacity.

The finding contrasts with studies suggesting that overinvestment increases financial vulnerability. However, the insignificant effect observed in this study indicates that, during the post-pandemic recovery period, investment decisions among Indonesian manufacturing firms were relatively cautious and efficiency-driven rather than expansionary. From an agency perspective, this may reflect improved internal monitoring or conservative capital allocation strategies following economic uncertainty. Therefore, asset growth in this context does not appear to intensify agency conflicts or financial rigidity to a level that significantly affects distress risk.

### **Free Cash Flow and Financial Distress**

The results reveal that free cash flow (FCF) has a positive and significant effect on financial distress at the 10% level. This finding is particularly noteworthy, as free cash flow is commonly perceived as an indicator of financial strength. However, the positive association suggests that excess cash may instead increase financial vulnerability. This result strongly supports Jensen (1986) free cash flow hypothesis, which argues that high discretionary cash flow enhances managerial opportunism. When firms generate substantial internal funds, managers may engage in overinvestment, empire-building, or projects with suboptimal returns. In such cases, free cash flow reduces

external financing discipline and weakens capital allocation efficiency. Over time, inefficient investment decisions may erode profitability and increase financial pressure.

The Indonesian context further explains this relationship. Variations in corporate governance quality and monitoring mechanisms may allow managerial discretion over internal funds to remain insufficiently constrained. Unlike firms operating under strict external financing discipline, companies relying heavily on internal cash may face fewer scrutiny pressures from creditors. Consequently, high free cash flow does not automatically strengthen financial stability but may instead increase agency costs and financial rigidity.

This finding is consistent with Suranta et al. (2023), who report a positive association between free cash flow and financial distress. It contrasts with studies suggesting that free cash flow enhances liquidity and reduces bankruptcy risk. The divergence may arise from differences in governance environments and capital allocation efficiency. In the context of Indonesian manufacturing firms during a structural adjustment period, excess cash appears to amplify agency problems rather than serve as a protective liquidity buffer.

### **Asset Intensity and Financial Distress**

The analysis shows that asset intensity (CI) has a negative and significant effect on financial distress. This indicates that firms with higher and efficiently utilized fixed asset structures tend to experience lower financial distress risk. This finding supports prior research by Bachtiar and Handayani (2022), who argue that productive asset utilization enhances operational stability. In manufacturing firms, fixed assets represent core production capacity. When assets are efficiently managed, they generate stable revenue streams and improve cost absorption, thereby reducing liquidity pressure.

From an alternative perspective, Trade-Off Theory suggests that high fixed costs may increase financial risk during demand contraction, the negative relationship observed in this study indicates that asset intensity among sampled firms reflects productive capacity rather than excessive rigidity. In other words, asset ownership in this context appears to function as a stabilizing factor rather than a financial burden.

Overall, while Agency Theory perspective, this result suggests that asset utilization efficiency may mitigate agency costs. When managers allocate resources productively, high capital intensity strengthens operational performance and reduces financial vulnerability. Thus, in Indonesian manufacturing firms, asset intensity serves as a protective factor against financial distress rather than a source of financial rigidity.

## **5. Conclusion**

This study concludes that investment decisions proxied by asset growth do not significantly affect financial distress, indicating that asset expansion in manufacturing firms tends to reflect operational adjustments rather than increased financial vulnerability. In contrast, free cash flow has a positive and significant effect on financial distress, suggesting that excessive internal funds, when not effectively monitored, may lead to inefficient allocation and heightened financial risk. Meanwhile, asset intensity

negatively and significantly influences financial distress, confirming that productive asset utilization strengthens operational stability and reduces financial pressure.

These findings imply that firms should reinforce governance mechanisms to control managerial discretion over free cash flow and ensure that investment and asset allocation decisions are aligned with long-term financial capacity. Investors and financial analysts may consider free cash flow and asset intensity as important indicators in assessing distress risk. Regulators are encouraged to enhance disclosure standards and monitoring systems to minimize agency-related inefficiencies in the capital market. For future research, expanding the analysis to other industries and extending the observation period would provide broader empirical evidence and improve the generalizability of findings across different sectoral characteristics and economic conditions.

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