

Predicting Financial Distress in Infrastructure Companies Using Cash Ratios, Asset Profitability, and Managerial Agency Costs

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Article Info	Abstract
Keywords: ○ Cash Ratio; ○ Return On Assets; ○ Managerial Agency Cost; ○ Financial Distress	Purpose – This study aims to examine and analyze the relationship between Cash Ratio, Return on Asset, and Managerial Agency Cost on Financial Distress. Design/methodology/approach – This study uses quantitative data. The sample used in this research consists of infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period, selected using purposive sampling with specific criteria to ensure relevance to the research objectives. The analysis technique employed to test the hypotheses is multiple regression analysis using E-Views 9 software. Findings – The results of this study indicate that the Cash Ratio variable has a positive and statistically significant effect on Financial Distress. This finding suggests that higher cash holdings in infrastructure sector companies during the post-pandemic period (2022–2024) may reflect uncertainty in investment opportunities, which paradoxically increases the risk of distress. The Return on Assets variable has a negative and statistically insignificant effect on Financial Distress, indicating that profitability alone does not provide sufficient protection against financial difficulties in this context. Meanwhile, the Managerial Agency Cost variable has a positive and statistically insignificant effect on Financial Distress, implying that inefficiencies in managerial decision-making may contribute to distress but are not decisive. Research limitations/implications – This research is limited to the 2022–2024 observation period and infrastructure sector companies listed on the Indonesia Stock Exchange (IDX), and examines cash ratio, return on assets, and managerial agency costs as determinants of corporate financial distress. The practical implication of this research is that the findings may serve as a reference for management and investors in assessing and anticipating the risk of financial distress in infrastructure sector companies.
Article History	
Received: 05 – 01 – 2026 Revised: 30 – 01 – 2026 Accepted: 19 – 08 – 2026 Published: 31 – 08 – 2026	
DOI	
https://doi.org/10.65440/aasf.v2i2.190	
	
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INTRODUCTION

Every company inevitably experiences periods of improving and declining performance, including increases and decreases in financial conditions. Financial distress refers to a condition in which a company's financial performance deteriorates continuously over a certain period. For companies, this situation is one of the most common factors that can lead to bankruptcy. Unlike normal profit fluctuations, losses arising from financial distress can reach significant levels, thereby disrupting the continuity of a company's operational activities (NISP, 2023). In general, financial distress is not only an issue faced by individual firms but also has the potential to threaten macroeconomic stability. This was reflected in the 2008 global financial crisis, when liquidity and credit problems in the financial sector triggered a worldwide recession (Indonesia, 2009)

In promoting national economic growth, the infrastructure sector—which includes transportation infrastructure, heavy construction and civil engineering, telecommunications, and utilities—plays a strategic role in strengthening regional connectivity, enhancing national productivity, and facilitating the movement of goods and services. Indonesia's economy continues to face pressures from various directions, including the substantial financing requirements for national infrastructure development. As reported by Kontan (2025), as of September 8, 2025, the realization of infrastructure budget spending funded by the State Budget (APBN 2025) had reached approximately IDR 142.1 trillion, or about 35% of the total infrastructure budget ceiling of IDR 402.4 trillion. This realization includes expenditures through ministerial and institutional spending, transfers to regional governments, and financing for various types of infrastructure projects such as housing, roads, bridges, and ports. The realization percentage, which remains below half of the allocated budget, indicates the need to accelerate budget absorption in order to achieve the infrastructure development targets for the fiscal year.

Kontan (2025) also reported that the infrastructure funds are allocated to support five priority programs of President Prabowo Subianto's administration, which include housing development, connectivity enhancement, strengthening food and energy security, as well as other supporting sectors. The government emphasizes that infrastructure spending is not solely focused on physical construction, but is also aimed at improving interregional connectivity, reinforcing food and energy resilience, and expanding access to housing for low-income communities.

The role of the infrastructure sector has become increasingly central in addressing growing economic challenges. Adequate infrastructure not only supports economic activities but also serves as a key factor in attracting investment, improving the efficiency of goods and services distribution, and expanding access to both domestic and global markets. Effective infrastructure development is widely believed to promote national economic growth and improve societal living standards (Antara, 2025). However, despite its potential, the infrastructure sector faces significant financing challenges. The relatively low budget realization compared to the allocated ceiling indicates obstacles in project implementation, which may arise from various factors such as cash flow mismatches, operational risks, financing constraints, and inefficiencies in resource management. This context underscores the importance of the financial health of infrastructure sector companies in executing their

projects.

Unhealthy financial conditions in infrastructure companies can trigger financial distress, a condition in which business entities experience difficulties in meeting their short-term and long-term obligations. Factors such as the cash ratio as an indicator of liquidity, return on assets (ROA) as a measure of profitability, and managerial agency costs as a representation of conflicts of interest and the efficiency of managerial decision-making play an important role in maintaining corporate financial stability. These factors can influence a company's ability to sustain solvency and operational continuity amid economic pressures and substantial project financing requirements.

Several factors influence financial distress, including cash ratio, return on assets, and managerial agency costs, which are relevant variables for analysis. The cash ratio is used to assess a company's ability to meet its short-term obligations using available cash. This ratio reflects the extent to which a company's cash resources can be immediately utilized to settle current liabilities without relying on other assets; the higher the ratio, the greater the company's capacity to cope with financial difficulties. Return on assets (ROA) is often referred to as economic profitability, as this indicator demonstrates how effectively a company utilizes its total assets to generate profits (Kariyato, 2017). Managerial agency costs refer to expenditures incurred to monitor agents' actions, including activities such as evaluating, supervising, and controlling agent behavior. The main components of managerial agency costs consist of monitoring costs, bonding costs, and residual losses (Albanjari, 2023, as cited in (Sari & Maharani, 2024).

Previous studies examining the cash ratio include research by Arsyad et al. (2025) in the food and beverage sub-sector and Fadila et al. (2021) in the mining sector, both of which find that the cash ratio has a positive effect on financial distress. In contrast, studies by Burnika et al. (2024) in the consumer cyclical sector and Khotimah et al. (2025) in the textile and garment sector report a negative effect of the cash ratio on financial distress. Meanwhile, Martha and Sari (1829) in the consumer non-cyclicals sector find that the cash ratio has no significant effect on financial distress.

In addition, return on assets is also one of the factors influencing financial distress. A study by Yuliani and Anggaradana (2021) in the agriculture sector shows that return on assets has a positive effect on financial distress. Meanwhile, research conducted by Silvia and Yulistina (2022) in the construction and building sub-sector and Seingo et al. (2023) in the textile and garment sector indicates that return on assets has a negative effect on financial distress. In contrast, studies by Maulana and Suhartati (2022) in the chemical sub-sector and Mukaromah et al. (2022) in the transportation sector report that return on assets has no significant effect on financial distress.

Furthermore, managerial agency costs are also considered one of the factors influencing financial distress. Studies conducted by Sari and Maharani (2024) in the infrastructure, utilities, and transportation sectors, Septiani and Bambang (2024) in the banking sub-sector, and Puspasari et al. (2023) in the transportation and logistics sector report that managerial agency costs have a positive effect on financial distress. In contrast, research by Lifia et al., (2020) in the property and real estate sector and Salim & Vaya (2021) in the agriculture sector finds that managerial agency costs have no significant effect on financial distress.

Previous studies have identified several other variables that influence financial distress.

These include *Gross profit margin* (Arsyad et al., 2025), *Debt to asset ratio* (Arsyad et al., 2025; Mukaromah et al., 2022; Silvia & Yulistina, 2022), *Total asset turnover* (Arsyad et al., 2025; Burnika et al., 2024; Mukaromah et al., 2022), *Debt to equity ratio* (Burnika et al., 2024; Seingo et al., 2023), *Profitability* (Fadila et al., 2021; Khotimah et al., 2025; Sari & Maharani, 2024; Septiani & Bambang, 2024), *Financial leverage* (Fadila et al., 2021; Khotimah et al., 2025), *Current ratio* (Martha & Sari, 2025; Mukaromah et al., 2022; Seingo et al., 2023; Silvia & Yulistina, 2022), *Quick ratio* (Martha & Sari, 2025), *Net profit margin* (Martha & Sari, 2025; Yuliani & Anggaradana, 2021), *Operating profit margin* (Martha & Sari, 2025), *Firm Size* (Khotimah et al., 2025; Maulana & Suhartati, 2022; Salim & Vaya, 2021), *Sales growth* (Khotimah et al., 2025; Lifia et al., 2020; Puspasari et al., 2023), *Likuidity* (Yuliani & Anggaradana, 2021), *Gender diversity* (Salim & Vaya, 2021; Sari & Maharani, 2024), *Operating capacity* (Puspasari et al., 2023; Sari & Maharani, 2024), *Cash Flow* (Septiani & Bambang, 2024), *Institutional Ownership* (Puspasari et al., 2023; Septiani & Bambang, 2024), *Managerial Ownership* (Puspasari et al., 2023), *Solvability* (Lifia et al., 2020), dan *Capital Structure* (Salim & Vaya, 2021).

The findings of this study are expected to contribute to the literature by providing additional insights into the factors leading to financial distress in the infrastructure sector, while also serving as a reference for management and regulators in maintaining financial system stability. Based on existing conditions and prior studies examining the relationships among variables, this study is motivated to investigate infrastructure sector companies in order to determine whether cash ratio, return on assets, and managerial agency costs affect financial distress. This research specifically focuses on infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. Therefore, this study is conducted under the title “The Effect of Cash Ratio, Return on Assets, and Managerial Agency Costs on Financial Distress.”

LITERATUR REVIEW

Signaling Theory

Signaling theory was first introduced by Spence (1973), explaining that under conditions of information asymmetry between two parties—such as job seekers and employers—individuals possessing certain characteristics or abilities will attempt to send signals to other parties to convey their quality. These signals take the form of observable actions that can be perceived by the receiving party, even though the underlying traits or abilities cannot be directly observed. Signaling theory illustrates how observable actions can be used to reduce information asymmetry and assist other parties in making more accurate decisions in the market.

Signaling theory arises due to the existence of information asymmetry between corporate management and external investors. In practice, managers often possess more complete and accurate information regarding the company's condition and future prospects compared to outsiders. This imbalance of information has important implications for financing decisions and capital structure. Managerial actions can serve as signals for investors to assess the company's internal condition. For example, when a company has very good prospects, management tends not to issue new shares, as doing so would reduce the returns that should be enjoyed by existing shareholders. Conversely, companies with less

favorable prospects are more likely to issue new shares so that part of the potential losses can be borne by new shareholders. It can therefore be concluded that financing decisions through the issuance of new shares are often interpreted by the market as a negative signal regarding the company's prospects (Brigham & Houston, 2017).

Agency Theory

Agency theory was first introduced by Jensen & Meckling (1975), which explains that an agency relationship is a contractual arrangement between two parties: the party that grants authority (the principal) and the party that receives authority (the agent). In this relationship, the principal or shareholders delegate certain decision-making responsibilities to the agent or manager. Agency conflicts arise when the agent's interests do not always align with those of the principal.

The divergence of interests between agents and principals can give rise to agency costs, namely expenses incurred from efforts to monitor, control, and align managers' actions with the owners' interests. To mitigate these costs, organizations may implement various control mechanisms, such as performance-based incentive systems, enhanced information transparency, and oversight through independent boards of directors and capital market mechanisms. In this context, accounting plays a crucial role as a means of providing relevant and reliable information for monitoring and bonding processes. Financial statements function not only as tools for evaluating managerial performance but also as a form of stewardship, representing managers' accountability to the company's owners (Godfrey, 2010)

Financial Distress

According to Ihsan (2019), financial distress describes a condition in which a company's financial position begins to weaken or enters a crisis phase. This situation arises before a company actually experiences bankruptcy. Financial distress is generally understood as a condition in which a company is no longer able to meet its obligations to creditors due to insufficient funds to operate or sustain its business activities. As a result, the company's primary objective of generating profits cannot be achieved. Profits are a crucial source for repaying loans, financing operational activities, and fulfilling various corporate obligations through earnings or owned assets. Furthermore, financial distress can also be interpreted as a stage of declining financial health that occurs prior to bankruptcy or liquidation. Symptoms of this condition are often reflected in delays in product delivery, declining product quality, and postponed payments of liabilities to banks. By identifying early signs of financial distress, companies can promptly take corrective actions to avoid more severe conditions such as bankruptcy or liquidation.

Cash Ratio

The cash ratio is a measure used to assess the amount of cash available to cover a company's short-term obligations. This cash includes cash on hand as well as cash equivalents, such as demand deposits or savings accounts that can be withdrawn at any time.

Therefore, this ratio reflects a company's immediate ability to meet its current liabilities. However, an excessively high cash ratio is also considered unfavorable, as it indicates the presence of idle or unproductive funds. Conversely, when the cash ratio falls below the industry average, it is regarded as less desirable because the company must first rely on the liquidation of other current assets to generate cash. Moreover, the cash ratio serves as a conservative indicator of liquidity, as it only considers the most liquid assets. This characteristic makes the cash ratio an important tool for evaluating a company's ability to withstand short-term emergencies or financial pressures. Consequently, this ratio is widely used by management, creditors, and investors to assess a company's financial security before making economic decisions (Kasmir, 2019).

Return On Assets

Return on assets (ROA) is a ratio that indicates the extent to which profits are generated from the use of a company's total assets. Although there are several variations in its formulation, return on assets essentially has two main interpretations: first, it measures how effectively a company utilizes its assets to generate profits; and second, it reflects the returns earned by all parties providing funds to the company, including both creditors and investors (Prihadi, 2019).

Managerial Agency Cost

Managerial agency costs refer to expenditures borne by company owners to control and monitor managerial performance in order to ensure that managers act in accordance with the company's objectives and interests Fadhilah 2013 as cited in (Yustika, 2015).

Hypotheses development

The cash ratio is a ratio that measures the availability of cash to settle short-term obligations based on cash and cash equivalents. Excessive cash holdings that are still insufficient to cover current liabilities indicate unproductive cash that is not utilized effectively. Moreover, companies may face difficulties in meeting short-term obligations if management fails to manage available cash efficiently.

This hypothesis is consistent with previous studies by (Burnika et al., 2024; Khotimah et al., 2025; Martha & Sari, 2025), which state that the cash ratio has a negative effect on financial distress. These studies explain that companies with a tendency to generate negative profits are more likely to experience financial distress.

H₁: Cash Ratio has a negative effect on Financial Distress.

Return on assets (ROA) is an indicator used to assess a company's ability to generate profits from its assets. The level of profitability achieved reflects the company's performance prospects and future growth. When a company records low profits, it may be considered less attractive as an investment option. A financially healthy company is expected to provide favorable returns to investors. When a company generates positive profits, it tends to be more resilient in facing economic pressures or crises. Conversely, if the profits earned are negative,

the company is more likely to experience financial difficulties, particularly during periods of economic downturn.

This hypothesis is consistent with previous studies by (Mukaromah et al., 2022; Seingo et al., 2023; Silvia & Yulistina, 2022), which state that return on assets has a negative effect on financial distress. Return on assets plays an important role in supporting corporate sustainability; a low return on assets indicates that the company's assets are not being utilized optimally to generate profits. This condition may hinder the company's ability to obtain internal funding for investment needs, thereby increasing the likelihood of bankruptcy.

H₂: Return on Assets has a negative effect on Financial Distress

Managerial agency costs refer to expenditures incurred to supervise managerial actions, including activities related to the measurement, monitoring, and control of agent behavior. These costs consist of monitoring costs, bonding costs, and residual losses. Various studies examining the effect of managerial agency costs on financial distress have been conducted; however, the findings remain varied and inconclusive.

This hypothesis is consistent with previous studies by (Puspasari et al., 2023; Sari & Maharani, 2024; Septiani & Bambang, 2024), which state that managerial agency costs have a positive effect on financial distress. Managerial agency costs arise due to the separation of roles between principals and agents, in which agents are expected to act in order to maximize principals' welfare. However, in practice, agents may exploit agency costs to pursue personal interests. This indicates that the higher the managerial agency costs incurred by a company, the greater the likelihood of experiencing financial distress.

Managers acting as agents of shareholders tend to be more exploitative in utilizing corporate resources. This behavior leads to an increase in managerial agency costs and may potentially result in financial difficulties. The higher the managerial agency costs borne by a company, the lower its Altman Z-Score, thereby increasing the risk of financial distress. Excessive use of resources without corresponding improvements in performance may give rise to moral hazard. When resource allocation is disproportionate and overly excessive, such conditions can disrupt corporate stability (Fadhilah & Syafruddin, 2013, as cited in (Salim & Vaya, 2021).

H₃: Managerial Agency Cost has a positive effect on Financial Distress

RESEARCH METHOD

This study aims to identify the potential relationship between the independent variables—cash ratio, return on assets, and managerial agency costs—and the dependent variable, financial distress. The research is designed to test hypotheses that explain the relationships among two or more factors within a specific context. This study is conducted in a natural setting, in which the operational activities of the research subjects continue as usual without direct intervention from the researcher. The unit of analysis is the organization, specifically companies in the infrastructure sector. The level of researcher involvement is minimal, as the researcher does not directly participate in the activities of the research objects but instead relies on secondary data to support the analysis. The sampling technique

employed is non-probability sampling using a purposive sampling approach, whereby samples are selected based on specific criteria relevant to the research objectives. The data utilized consist of panel data, which combine cross-sectional and time-series data, and are analyzed using a quantitative approach to test the proposed hypotheses. This method is consistent with the data analysis guidelines proposed by Ghozali, (2016).

Table 1. Operationalization of Research Variable

Type	Variable	Dimension / Formula	Source
Independent Variable	Cash Ratio	$CR = \frac{\text{Cash and Cash Equivalents}}{\text{Current Liabilities}}$	(Fadila et al., 2021)
	Return On Assets	$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$	(Yuliani & Anggaradana, 2021)
	Managerial Agency Cost	General and Administrative Expenses/Sales	(Salim & Vaya, 2021)
Dependent Variable	Financial Distress	$FD = 6,56 X_1 + 3,26 X_2 + 6,72 X_3 + 1,05 X_4$ Description: $X_1 = \frac{\text{Working Capital}}{\text{Total Assets}}$ $X_2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$ $X_3 = \frac{\text{Earnings Before Interest and Taxes (EBIT)}}{\text{Total Assets}}$ $X_4 = \frac{\text{Book Value of Equity}}{\text{Book Value of Total Liabilities}}$	(Arsyad et al., 2025)

Population

The population of this study consists of 73 infrastructure sector companies listed on the Indonesia Stock Exchange, which serve as the primary objects in determining the research sample.

Sample

Based on the established criteria, out of a total population of 73 infrastructure companies listed on the Indonesia Stock Exchange, 35 infrastructure companies during the 2022–2024 period were selected as the sample for this study. The elimination process was

conducted as follows: one company was excluded because it was unlisted during the observation period, 11 companies were excluded due to the absence of annual reports, and 26 companies were excluded because they reported losses in the 2022–2024 period. Consequently, only 35 companies that consistently reported profits and provided complete annual reports were retained as the final sample, resulting in 105 firm-year observations.

Data Sources

This study uses secondary data obtained from the annual reports of infrastructure sector companies included in the research sample. The data were collected from the official websites of each company and the official website of the Indonesia Stock Exchange for the 2022–2024 period.

RESULTS

Descriptive Analysis

Table 1. Descriptive Statistic

Variable	N	Min	Max	Mean	Std. Dev
CR	105	0.000	25.396	1.012	3.051
ROA	105	0.000	0.242	0.048	0.040
MAG	105	0.000	0.811	0.097	0.114
FD	105	-34.385	69.821	4.807	11.121

Description:

CR = Cash Ratio, ROA = Return on Assets, MAG = Managerial Agency Cost, FD = Financial Distress

Source: Processed Data (2025)

The table above shows that there are 105 balanced observations during the research period from 2022 to 2024. The Cash Ratio variable has a minimum value of 0.000 and a maximum value of 25.396, with an average value of 1.012. The company with the highest Cash Ratio is Sumber Mas Konstruksi Tbk (SMKM) in 2022, while the lowest value is observed in Garuda Maintenance Facility Aero Asia Tbk (GMFI) in 2022. Furthermore, the standard deviation is 3.051, indicating a high level of data variability, which reflects inconsistency in the data.

The Return on Assets (ROA) variable has a minimum value of 0.000 and a maximum value of 0.242, with an average value of 0.048. The company with the highest ROA is Paramita Bangun Sarana Tbk (PBSA) in 2023, while the lowest value is observed in LCK Global Kedaton Tbk (LCKM) in 2023. Furthermore, the standard deviation is 0.040, which is relatively close to the mean, indicating that the data are widely dispersed or exhibit high variability.

The Managerial Agency Cost variable has a minimum value of 0.000 and a maximum value of 0.811, with an average value of 0.097. The company with the highest Managerial Agency Cost is Bukaka Teknik Utama Tbk (BUKK) in 2023, while the lowest values are

observed in companies within the telecommunications services sub-sector during the 2022–2024 period. Furthermore, the standard deviation is 0.114, indicating a higher degree of data variability, which reflects inconsistency in the data.

Finally, the Financial Distress variable has a minimum value of -34.385 and a maximum value of 69.821 , with an average value of 4.807 . The company with the highest Financial Distress value is Sumber Mas Konstruksi Tbk (SMKM) in 2023, while the lowest value is observed in Meratus Jasa Prima Tbk (KARW) in 2022. Furthermore, the standard deviation is 11.121 , indicating a high level of data variability, which reflects inconsistency in the data.

Panel Data Regression Model Selection Chow Test

Table 3. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.416080	(34,67)	0.0000
Cross-section Chi-square	222.404279	34	0.0000

Source: Processed Data (2025)

Based on the results of the Chow test using EViews 9, the probability value of the profitability Cross-Section F statistic is 0.000 , which is lower than the significance level ($\alpha = 0.05$). This indicates that the Fixed Effect Model (FEM) is the most appropriate model to be used. Therefore, the analysis proceeds to the Hausman test to determine the most suitable model between the Fixed Effect Model and the Random Effect Model.

Hausman Test

Table 4. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.059009	3	0.0700

Source: Processed Data (2025)

Based on the results of the Hausman test, the probability value is 0.0700 , which is higher than the significance level ($\alpha = 0.05$). This indicates that the Random Effect Model (REM) is the most appropriate model to be used.



Lagrange Multiplier Test

Table 5. Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	62.19747 (0.0000)	0.635367 (0.4254)	62.83283 (0.0000)

Source: Processed Data (2025)

Based on the results of the Lagrange Multiplier test, the significance value of the Breusch-Pagan statistic is 0.0000, which is lower than the significance level ($\alpha = 0.05$). This indicates that the Random Effect Model (REM) is the most appropriate model to be used.

Hypothesis Test

Table 6. Partial Test (Random Effect Model)

$$FD = \alpha + \beta_1 CR + \beta_2 ROA + \beta_3 BAM$$

Variable	Predictions	Coefficient	T-Statistic	Prob
C		3.1910	2.0914	0.0390
CR	-	2.0360	87404	0.0000*
ROA	-	-12.5196	-0.7596	0.2246
MAC	+	1.6520	0.3617	0.3591
R-Square				0.4213
Adjusted R-Square				0.4042
F-Statistic				24.5193
Prob (F-Statistic)				0.0000*

Description:

* = 5% Significance level

CR = Cash Ratio, ROA = Return on Asset, MAC = Managerial Agency Cost, FD = Financial Distress

Source: Processed Data (2025)

Partial Test (t-test)

The partial test aims to determine whether each independent variable has a significant individual effect on the dependent variable. Based on the results of the analysis using the

Random Effect Model (REM), the following conclusions can be drawn:

1. Cash Ratio has a significant effect on Financial Distress

The first hypothesis (H_a) formulated in this study states that the Cash Ratio has an effect on Financial Distress. However, the results indicate a relationship that is contrary to the proposed hypothesis, meaning that an increase in the Cash Ratio is actually followed by an increase in the level of Financial Distress. This finding is inconsistent with the initial hypothesis, which predicted that a higher Cash Ratio would lead to a lower level of Financial Distress. this study employs a one-tailed hypothesis test which is directional in nature, whereas the probability value generated by EViews-9 by default represents a two-tailed p-value. Therefore, the probability value must be divided by two to align with the direction of the hypothesis testing, resulting in $0.0000/2 = 0.0000$, which is lower than the significance level of $\alpha = 0.05$ (5%). In addition, the t-test result for the Cash Ratio variable yields a calculated t-value of 8.7404, which is greater than the critical t-value of 1.66008, indicating a significant effect. Accordingly, H_0 is rejected and H_a is accepted. the presence of this coefficient indicates that firms with high liquidity are not always in a healthier financial condition. In the context of the infrastructure sector, a high Cash Ratio may occur because firms retain cash to anticipate cash flow risks or as a result of low investment activity. This condition may reflect inefficiencies in cash management or operational pressures that instead increase the risk of financial distress.

2. Return on Assets has no significant effect on Financial Distress

The second hypothesis (H_a) formulated in this study states that Return on Assets has no effect on Financial Distress. This study employs a one-tailed hypothesis test which is directional in nature, while the probability value generated by EViews-9 by default represents a two-tailed p-value. Therefore, the probability value must be divided by two to match the direction of the hypothesis testing, resulting in $0.4493/2 = 0.2246$, which is greater than the significance level of $\alpha = 0.05$ (5%).

In addition, the t-test result for the Return on Assets variable shows a calculated t-value of -0.7596, which is smaller than the critical t-value of 1.66008. This indicates that the effect is statistically insignificant; thus, H_0 is accepted and H_a is rejected. This condition suggests that although Return on Assets theoretically tends to reduce the level of financial distress, the calculated t-value being lower than the critical t-value indicates that the relationship is not statistically significant. In other words, the effect of Return on Assets on Financial Distress is not strong enough to serve as a basis for drawing conclusions within the context of this study.

3. Managerial Agency Cost has no significant effect on Financial Distress

The third hypothesis (H_a) formulated in this study states that managerial agency costs have an effect on Financial Distress, implying that an increase in managerial agency costs would lead to a higher level of Financial Distress. This study employs a one-tailed hypothesis test which is directional in nature, whereas the probability value generated by EViews-9 by default represents a two-tailed p-value. Therefore, the probability value must be divided by two to match the direction of the hypothesis testing, resulting in $0.7183/2 = 0.3591$, which is greater than the significance level of $\alpha = 0.05$ (5%).

Furthermore, the t-test result for the managerial agency cost variable shows a calculated t-value of 0.3617, which is smaller than the critical t-value of 1.66008, indicating an

insignificant effect. Thus, H_0 is accepted and H_a is rejected. Although increases in costs arising from conflicts of interest between managers and owners may theoretically raise the risk of Financial Distress, the probability value exceeding 0.05 and the calculated t-value being smaller than the critical t-value indicate that this relationship is not statistically significant. In other words, although the direction of the effect suggests that managerial agency costs have the potential to increase Financial Distress, the empirical evidence in this study is not strong enough to conclude that this effect consistently occurs across the sampled companies.

Coefficient of Determination Test (Adjusted R-Squared)

Based on the regression test results, the Adjusted R-Square value of 0.4042 indicates that 40.42% of the variation in the Financial Distress variable can be explained by the independent variables used in this study, namely Cash Ratio, Return on Assets, and Managerial Agency Costs. The remaining 59.58% is explained by other factors outside the model, which were not included in this study, such as *Gross profit margin* (Arsyad et al., 2025), *Debt to asset ratio* (Arsyad et al., 2025; Mukaromah et al., 2022; Silvia & Yulistina, 2022), *Total asset turnover* (Arsyad et al., 2025; Burnika et al., 2024; Mukaromah et al., 2022), *Debt to equity ratio* (Burnika et al., 2024; Seingo et al., 2023), *Profitability* (Fadila et al., 2021; Khotimah et al., 2025; Sari & Maharani, 2024; Septiani & Bambang, 2024), *Financial leverage* (Fadila et al., 2021; Khotimah et al., 2025), *Current ratio* (Martha & Sari, 2025; Mukaromah et al., 2022; Seingo et al., 2023; Silvia & Yulistina, 2022), *Quick ratio* (Martha & Sari, 2025), *Net profit margin* (Martha & Sari, 2025; Yuliani & Anggaradana, 2021), *Operating profit margin* (Martha & Sari, 2025), *Firm Size* (Khotimah et al., 2025; Maulana & Suhartati, 2022; Salim & Vaya, 2021), *Sales growth* (Khotimah et al., 2025; Lifia et al., 2020; Puspasari et al., 2023), *Liquidity* (Yuliani & Anggaradana, 2021), *Gender diversity* (Salim & Vaya, 2021; Sari & Maharani, 2024), *Operating capacity* (Puspasari et al., 2023; Sari & Maharani, 2024), *Cash Flow* (Septiani & Bambang, 2024), *Institutional Ownership* (Puspasari et al., 2023; Septiani & Bambang, 2024), *Managerial Ownership* (Puspasari et al., 2023), *Solvability* (Lifia et al., 2020), dan *Capital Structure* (Salim & Vaya, 2021). these findings highlight the importance of including additional variables in the analysis of financial distress so that the research results can provide a more comprehensive and accurate picture of the factors influencing a company's financial difficulties.

DISCUSSIONS

The Effect of Cash Ratio on Financial Distress.

The results of the first hypothesis (H_a) test indicate that the Cash Ratio has a positive and statistically significant effect on Financial Distress, thus supporting the first hypothesis (H_a). This finding suggests that the higher a company's Cash Ratio, the greater the likelihood that the company experiences Financial Distress. In other words, firms with high liquidity may indicate cash accumulation that has not been optimally utilized for productive activities (Fadila et al., 2021).

In the infrastructure sector, cash availability plays a crucial role in maintaining smooth

operational activities, given the industry's characteristics, which require substantial funding and long-term project continuity. The Cash Ratio reflects a company's ability to meet short-term obligations using the most liquid assets. According to signaling theory, the level of Cash Ratio can convey important information to both internal and external stakeholders regarding the company's financial condition. The finding that the Cash Ratio positively and significantly affects Financial Distress indicates that a high level of liquidity does not necessarily reflect a safer financial condition. In the context of the infrastructure sector, a high Cash Ratio may signal cash accumulation due to limited project realization or suboptimal utilization of funds. This condition has the potential to reduce company efficiency, as cash is not immediately allocated to productive activities that could generate future cash flows.

This study was conducted on infrastructure companies characterized by capital-intensive operations, dependence on long-term projects, and high exposure to external pressures, such as construction cost fluctuations, changes in government policies, project delays, and cash flow uncertainty. These conditions require firms to maintain substantial cash reserves to support operational continuity and the completion of strategic projects. The study period covers 2022–2024, a post-pandemic period when economic activity began to recover and infrastructure projects gradually resumed. In this economic recovery context, companies tend to retain cash as a precautionary measure against future uncertainties. However, excessive cash accumulation without optimal utilization can reflect inefficiencies in liquidity management.

These findings contrast with the initial hypothesis, which expected a negative effect. Instead, the results show that increased liquidity in the form of cash and cash equivalents does not necessarily indicate better financial health. In the context of infrastructure companies, a high Cash Ratio may reflect cash accumulation that is not promptly used for productive operational or project investment activities. This situation indicates inefficiencies in cash management, where firms are unable to optimally utilize their liquid resources. This empirical explanation aligns with agency theory, which posits that management holding large amounts of cash without productive allocation may create potential conflicts of interest between management and shareholders due to inefficient use of funds (Jensen & Meckling, 1975). In the infrastructure sector, characterized by long-term and capital-intensive projects, excess cash without effective utilization can increase opportunity costs and reduce profitability, indirectly raising the risk of Financial Distress.

Furthermore, the infrastructure industry often faces project delays, licensing changes, and policy uncertainties, which may result in cash being held for extended periods without generating significant operational cash flow. This condition contrasts with traditional liquidity theory, which assumes that high cash levels always signal positive financial health, highlighting that the relationship between Cash Ratio and Financial Distress is contextual and influenced by specific industry dynamics.

These findings are consistent with the study by Arsyad et al., (2025) on manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange (IDX) during 2019–2023, which found that Cash Ratio has a positive and significant effect on Financial Distress. Similarly, Fadila et al. (2021) in a study on mining companies listed on the IDX during 2015–2019 reported that Cash Ratio does not significantly affect Financial Distress.

The Effect of Return on Assets on Financial Distress.

The results of testing the second hypothesis (H_a) indicate that return on assets has no effect and is statistically insignificant on financial distress; therefore, the second hypothesis (H_a) is rejected.

Although ROA, measured as net income over total assets, aligns with theoretical expectations that firms more efficient in managing their assets are likely to face a lower risk of financial distress, this relationship is not strong enough to serve as a primary indicator within the context of the infrastructure sector studied. This finding is consistent with previous studies that show profitability variables such as ROA often do not significantly affect Financial Distress in infrastructure companies, despite being theoretically important as a measure of financial performance, and this is consistent with the Trade-Off Theory, which emphasizes that a firm's financing decisions are determined more by the balance between the tax benefits of debt and the costs of distress, rather than solely by profitability (Kraus & Litzenberger, 1973).

This phenomenon can be better understood by considering the characteristics of the infrastructure industry. Infrastructure companies typically have very large, long-term asset structures, wide project scopes, and reliance on long-term contracts and external financing. As a result, operational profitability measures such as ROA often do not directly reflect liquidity pressures or the ability to meet short-term obligations. In many cases, infrastructure companies can maintain operations even with relatively low ROA because they continue to rely on long-term contracts, investment support, and financing structures that are not focused on short-term profitability. This makes ROA a less sensitive indicator of financial distress compared to other variables, such as liquidity and capital structure, which several studies suggest have a more tangible effect on Financial Distress in this sector (Ramadhanti et al., 2023).

Macroeconomic conditions and the dynamics of the Indonesian infrastructure sector further support this explanation. While some large infrastructure companies have demonstrated stable performance as reported in recent economic news, this stability is more closely associated with the ability to manage cost pressures and market dynamics rather than solely improving operational profitability. For example, news reports indicate that several infrastructure companies maintained stable performance amid economic fluctuations in 2025, reflecting financial and operational management strategies that sustain stability without relying on significant improvements in asset profitability alone (A. News, 2025).

This view is also consistent with industry case reports showing that although some toll roads still incur losses due to traffic below expectations, these pressures do not necessarily translate into high profitability or lower financial distress risk during a given period. This highlights that factors such as financing, long-term contracts, and public policy support can play a critical role in sustaining infrastructure operations (Kontan, 2025).

These findings are consistent with previous research by Maulana & Suhartati (2022) on chemical subsector companies listed on the Indonesia Stock Exchange (IDX) from 2016–2019, which reported that ROA does not significantly affect Financial Distress.

The Effect of Managerial Agency Cost on Financial Distress.

The results of the third hypothesis (H_a) test indicate that managerial agency costs have a positive but statistically insignificant effect on Financial Distress, resulting in the rejection of the third hypothesis (H_a). This suggests that, theoretically, an increase in agency costs is associated with a higher risk of Financial Distress. Although the empirical data show a positive trend, the effect of agency costs in explaining the variability of Financial Distress in the infrastructure sector is not statistically strong enough to reject H_0 .

Theoretically, agency costs arise from conflicts of interest between managers (agents) and company owners (principals), especially in firms with complex ownership structures and long-term projects. These conflicts can lead to suboptimal investment decisions, the consumption of company resources for managerial personal gain, or inefficient risk-taking, ultimately increasing financial pressure and the risk of Financial Distress.

In the infrastructure sector, the capital-intensive nature of operations and high reliance on external financing and long-term contracts make agency costs a less dominant indicator of Financial Distress. Infrastructure companies typically have complex financing structures, high project risks, and close interactions with government policies or public and private financing institutions. These factors can obscure the direct effect of agency costs on acute financial conditions. Empirical studies in Indonesia also indicate that managerial agency costs do not consistently have a significant effect on Financial Distress, including in non-infrastructure sectors such as property and manufacturing, suggesting that agency costs alone may not be a primary determinant of financial strain when more dominant industry-specific factors are at play (Lifia et al., 2020).

External pressures faced by the Indonesian infrastructure sector provide further context for why agency costs do not show strong significance. Positive reports, such as increased net income from infrastructure financing institutions like PT Indonesia Infrastructure Finance (IIF), indicate profit growth amid global economic uncertainty, reflecting that some sector players maintain financial performance through funding strategies and operational efficiency rather than solely through improved agency costs (News, 2025). Conversely, financial analyst reports show that the infrastructure sector still faces operational pressures and challenging prospects, including large projects with high cost pressures and unstable revenue expectations. These conditions suggest that financial stress is more influenced by external project dynamics and market conditions than by agency costs alone (Kontan, 2025).

Other reports even show that large infrastructure projects, such as the Jakarta-Bandung high-speed rail line, fail to meet traffic projections and face growing debt burdens, providing a concrete example of project- and consortium-level Financial Distress. Although these reports do not directly measure agency costs, they illustrate that external factors and large-scale project financing structures are far more significant in determining financial pressure than internal agency costs alone (J. P. News, 2025).

Overall, the findings indicate that, while the positive relationship between managerial agency costs and Financial Distress aligns with agency theory, its statistical insignificance highlights the limitations of using agency costs as a standalone indicator in the infrastructure sector. An industry heavily influenced by financing structures, macroeconomic conditions, and large-scale project dynamics requires a more comprehensive model that incorporates additional variables.

CONCLUSIONS

Based on the results of the analysis and discussion presented in the previous chapter, this study concludes that Cash Ratio has a significant positive effect on Financial Distress, indicating that higher liquidity in the form of cash and cash equivalents does not necessarily reflect a healthier financial condition, particularly in infrastructure companies. In contrast, Return on Assets (ROA) does not have a significant effect on Financial Distress, suggesting that profitability, as measured by ROA, is not a primary determinant of financial distress in the context of infrastructure firms with long-term, capital-intensive projects. Similarly, Managerial Agency Costs have a positive but statistically insignificant effect on Financial Distress, indicating that while agency costs theoretically increase the risk of financial distress, they are not a dominant factor in determining financial distress in infrastructure companies. Overall, these findings suggest that in capital-intensive sectors like infrastructure, liquidity plays a more critical role in financial distress than profitability or managerial agency costs, highlighting the need to consider industry-specific characteristics when assessing financial risk.

Suggestions

This study is expected to serve as a preliminary reference for future research, taking into account several aspects that were not optimally addressed in this study, as follows: Future studies could use a longer time period to capture the long-term impact of a company's financial condition on Financial Distress. Additionally, future research could compare the infrastructure sector with other sectors, such as basic materials, consumer non-cyclicals, transportation & logistics, energy, properties & real estate, financials, healthcare, technology, industrials, and consumer cyclicals, to examine whether these variables have a negative or positive effect on Financial Distress across different sectors. Future studies may also include additional variables, such as Gross Profit Margin, Debt to Asset Ratio, Total Asset Turnover, Equity Ratio, Current Ratio, firm size, and others, to explore their relationships and effects on Financial Distress, and include non-financial variables such as corporate governance quality, project reporting transparency, and managerial factors that may influence financial sustainability.

Implications

Based on the conclusions presented previously, this study provides several implications for academics, companies, and regulators.

For Academics

This study is expected to contribute to the development of literature in the field of financial accounting, particularly regarding sustainability issues in infrastructure sector companies. The focus of this research is to understand how Cash Ratio, Return on Assets, and Managerial Agency Costs affect Financial Distress in infrastructure companies listed on the

Indonesia Stock Exchange (IDX) during the period 2022–2024.

By examining fundamental variables in corporate financial management, such as Cash Ratio, Return on Assets, and Managerial Agency Costs, this study provides an additional perspective that internal financial factors and corporate governance play an important role in explaining Financial Distress. The findings, which show diverse effects—both positive and negative, as well as partially insignificant—open further discussion in the literature that the relationship between financial performance, managerial efficiency, and financial distress risk is not always direct and can be influenced by company conditions, sector characteristics, and market responses during the study period.

The results of this study can serve as a foundation for future research to conduct more comprehensive analyses, either through longitudinal approaches or by incorporating additional relevant variables that were not covered in this study. Accordingly, this study is expected to serve as an initial reference while encouraging subsequent researchers to develop deeper, adaptive, and contextual investigations in accounting, particularly in understanding the factors that influence financial distress from various financial and corporate governance perspectives.

For Companies

This study is expected to provide significant contributions to infrastructure sector companies, particularly in evaluating internal factors that potentially influence Financial Distress. Through the analysis of Cash Ratio, Return on Assets, and Managerial Agency Costs, companies are expected to understand the importance of proper liquidity management, enhancing profitability performance, and efficiently controlling agency costs. Thus, these aspects are not only viewed as financial performance indicators but also as part of managerial strategies that play a critical role in maintaining financial stability and ensuring the long-term sustainability of the company's operations.

Given the crucial role of companies in maintaining performance sustainability and financial stability, infrastructure companies also bear a significant responsibility in managing resources and financial risks arising from their operational activities. Infrastructure companies should align cash flow availability with project deadlines to avoid the accumulation of unproductive cash. This practice will help companies maintain efficiency in fund utilization while enhancing the financial sustainability of projects. Therefore, this study aims not only to contribute academically but also to encourage infrastructure sector companies to continuously evaluate their financial policies and strategies, particularly concerning liquidity management, profitability, and agency costs. Consequently, companies are expected to strengthen their position as entities that are not solely profit-oriented but also committed to safeguarding financial health and ensuring long-term operational sustainability.

For Regulators

For regulators and policymakers, the results of this study indicate that the financial condition of companies in the infrastructure sector still requires special attention, particularly regarding liquidity management, profitability, and managerial agency costs. Although

companies have made efforts to improve financial performance and internal management efficiency, the impact on reducing the risk of Financial Distress has not yet shown fully consistent and significant results. and regulators should establish transparency standards for infrastructure project financial reports, particularly for national strategic projects. These standards may include mandatory disclosure of project cash flows, completion schedules, and financing risks faced by companies. With more detailed and consistent reporting standards, regulators can enhance the accountability of infrastructure companies while providing clearer information to investors and stakeholders.

This highlights the importance of an active role for regulators, such as the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX), in promoting greater transparency and standardization of financial performance and corporate governance reporting. Regulations governing financial information disclosure and the implementation of good corporate governance have been positive initial steps, but the effectiveness of their implementation still needs to be strengthened. Therefore, regulators are expected to consider more comprehensive policies, including clarifying reporting standards for financial health indicators related to Financial Distress risk, providing incentives for infrastructure sector companies that maintain liquidity, improve profitability, and reduce managerial agency costs, and offering educational programs for management and investors on the importance of effective financial management and corporate governance. With proper and long-term oriented regulatory support, corporate financial management is expected not only to be viewed as a reporting obligation but also as an integral part of business strategy to maintain financial stability and the sustainability of infrastructure sector companies.

REFERENCE

- Arsyad, B. S., Santoso, B. C., & Nurmansyah, A. (2025). Pengaruh Profitabilitas (Gpm), Likuiditas (Cash Ratio), Solvabilitas (Dar) Dan Aktivitas (Tato) Terhadap Financial Distress. *Jurnal Sains Manajemen & Akuntansi*, 17(1), 127-143.
- Ati Lathifah, H. (2020). Pengaruh Efektivitas Sistem Pengendalian Internal Dan Whistleblowing System Terhadap Pencegahan Kecurangan (Studi Empiris pada Pegawai Pemerintah Kota Yogyakarta). 8(75), 147-154.
- Brigham, E. F., & Houston, J. F. (2017). *Fundamentals Of Financial Management* (9th ed.).
- Burnika, E., Pahala, I., & Handarini, D. (2024). Analisis Rasio Keuangan Untuk Memprediksi Kondisi Financial Distress Perusahaan Consumer Cyclicals. *Jurnal Akuntansi, Perpajakan, Dan Auditing*, 5(2), 348-365.
- Fadila, A., Nugraheni, S., & Utami, K. (2021). Financial Distress In Mining Industry In Indonesia. *Jurnal Ilmiah Manajemen*, 9(1).
- Ghozali, I. (2016). *Desain Penelitian Kuantitatif Kualitatif untuk Akuntansi, Bisnis, dan Ilmu Sosial Lainnya*.
- Godfrey, et al. (2010). *Accounting Theory* (7th ed.).
- Ihsan, H. dkk. (2019). *Proceedings of the 1st International Conference on Applied Social Sciences, Business, and Humanity*.
- Indonesia, B. (2009). *Laporan Perekonomian Indonesia Tahun 2008*.
<https://share.google/hl0DrAXVcmXkYqhMf>

- Jensen, M. C., & Meckling, W. H. (1975). Theory of the Firm : Managerial Behavior , Agency Costs and Ownership Structure Theory of the Firm : Managerial Behavior , Agency Costs and Ownership Structure. *Journal Of Financial Economics*, 4.
- Kariyato. (2017). *Analisa Laporan Keuangan*.
- Kasmir. (2019). *Kasmir ALK 2019*.
- Khotimah, N. L., Suhasto, N. R. I., & Wibawa, D. K. (2025). Pengaruh Profitabilitas, Likuiditas, Leverage, Ukuran Perusahaan, dan Sales Growth Terhadap Financial Distress. *Journal Of Economic, Accounting and Management*, 3(2), 1062–1080.
- Kontan. (2025a). *DPR Soroti Sepinya Jalan Tol Manado-Bitung, Negara Rugi Ratusan Miliar per Tahun*. <https://share.google/R4Tkn8EzeWh8Wutoa>
- Kontan. (2025b). *Hingga September 2025, Realisasi Anggaran Infrastruktur Baru 35% dari Pagu*. <https://amp.kontan.co.id/news/hingga-september-2025-realisasi-anggaran-infrastruktur-baru-35-dari-pagu>
- Kontan. (2025c). *Sektor Infrastruktur Masih Tertekan, Simak Prospek dan Rekomendasi Analisis*. <https://share.google/ke2RCO9TgloCgRnAN>
- Kraus, A., & Litzenberger, R. H. (1973). A State-Preference Model of Optimal Financial Leverage. *The Journal of Finance*, 28. <https://doi.org/https://doi.org/10.2307/2978343>
- Lifia, S., Gurendrawati, E., Fauzi, A., & Jakarta, U. N. (2020). Pengaruh Solvabilitas , Pertumbuhan Penjualan , Dan Biaya Agensi Manajerial Terhadap Financial Distress : Studi Empiris Pada Perusahaan Sektor Properti Dan Real Estate. 1(2), 179–194.
- Martha, R. A., & Sari, S. P. (2025). Model Grover Prediksi Financial Distress Dengan Metode Binary Regression Logistic. 14(1), 40–50.
- Maulana, J., & Suhartati. (2022). Pengaruh Return On Asset (ROA), Dan Ukuran Perusahaan Terhadap Financial Distress Pada Perusahaan Sub Sektor Kimia Yang Terdaftar Di Bursa Efek Indonesia. *Land Journal*, 3(1), 102–113.
- Mukaromah, N. L., Anam, H., & Migang, S. (2022). Pengaruh Current Ratio, Return On Asset, Total Asset Turnover dan Debt To Total Asset Ratio Terhadap Financial Distress pada Perusahaan Transportasi di BEI 2014-2017. *Jurnal Mdedia Riset Ekonomi*, 1(2), 43–54.
- News, A. (2025). *Infrastructure development must affect economic growth: President*. https://en.antaranews.com/news/345389/infrastructure-development-must-affect-economic-growth-president?utm_source=chatgpt.com
- News, J. P. (2025). *Proyek Kereta Cepat Jakarta-Bandung Diduga Rugikan Negara*. <https://share.google/U8Xc6FN7ZW1z1UWmJ>
- NISP, R. O. (2023). *Financial Distress: Jenis, Penyebab & Cara Mencegahnya*. <https://share.google/kUyguL00Q9IYXGWCg>
- Prihadi, T. (2019). *Analisis Laporan Keuangan Konsep Aplikasi (Toto Prihadi) (Z-Library).pdf*.
- Puspasari, O. R., Zahra, S., Purnama, D., & Embuningtiyas, S. S. (2023). Operating Capacity , Sales Growth , Managerial Agency Costs , and Ownership Structure on Financial Distress in Indonesian Companies. 13(Desember), 77–88.
- Ramadhanti, D. N., Astuti, D. D., & Sari, N. K. (2023). Faktor - Faktor Yang Memengaruhi Financial Distress Perusahaan Sektor Infrastruktur. *Jurnal Riset Ekonomi, Manajemen, Business, Dan Akuntansi*, 1(1), 1–17.
- Retno, M. (2023). Pengaruh Islamic Work Ethics, Compensation, dan Whistleblowing System terhadap Fraud Prevention. *Galang Tanjung*, 2504, 1–9.
- Salim, S. N., & Vaya, J. D. (2021). Pengaruh Ukuran Perusahaan, Biaya Agensi Manajerial,

- Struktur Modal dan Gender Diversity Terhadap Financial Distress. *Jurnal Ilmiah Manajemen, Ekonomi, Dan Akuntansi*, 5(3), 182–198.
- Sari, K. S., & Maharani, R. (2024). Profitabilitas, Keragaman Gender, Managerial Agency Cost, Dan Kapasitas Operasi Terhadap Financial Distress. *Jurnal Akuntansi*, 4(1), 131–156.
- Seingo, A. S., Gesmani, R., Ekonomi, F., Kristen, U., & Yogyakarta, I. (2023). *Analisis Pengaruh Current Ratio , Debt To Equity Ratio dan Return On Assets Terhadap Financial Distress pada Perusahaan Tekstil dan Garmen Yang Terdaftar di Bursa Efek Indonesia pada Periode 2016-2020*. XVII(1), 43–50.
- Septiani, R., & Bambang, S. (2024). Financial Distress Menurun Akibat Biaya Agensi Manajerial Pada Perusahaan Perbankan di BEI. *Jurnal Ekonomi Trisakti*, 4(1), 895–904.
- Silvia, D., & Yulistina. (2022). Pengaruh Current Ratio, Return on Asset, Debt To Asset Terhadap Financial Distress Selama Masa Pandemi. *Global Financial Accounting Journal*, 06(01), 89–99.
- Spence, M. (1973). Job Market Signaling. In *Quarterly Journal Of Economics* (Vol. 87). Academic Press, Inc. <https://doi.org/10.1016/B978-0-12-214850-7.50025-5>
- Yulian Maulida, W., & Indah Bayunitri, B. (2021). The influence of whistleblowing system toward fraud prevention. *International Journal of Financial, Accounting, and Management*, 2(4), 275–294. <https://doi.org/10.35912/ijfam.v2i4.177>
- Yuliani, K. N., & Anggaradana, N. (2021). Pengaruh Net Profit Margin, Return On Asset, Likuiditas Terhadap Financial Distress. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 6(1), 1–9.
- Yustika, Y. (2015). Pengaruh Likuiditas, Leverage, Profitabilitas, Operating Capacity, dan Biaya Agensi Manajerial Terhadap Financoal Distress. *Faculty of Economics*, 2, 1–15.