

CORPORATE INVESTMENT EFFICIENCY: THE ROLE OF ESG DISCLOSURE, FINANCIAL REPORTING QUALITY AND DEBT MATURITY

Anisa¹

dosen02385@unpam.ac.id, Accounting, Pamulang University

Stevanny²

liestevanny7@gmail.com, Accounting, Pamulang University

Abstract

This study examines how Environmental, Social, and Governance (ESG) disclosure, financial reporting quality, and debt maturity influence corporate investment efficiency in non-financial companies listed on the Indonesia Stock Exchange during the 2019–2023 period. Drawing on Agency Theory, the research explores whether transparency mechanisms and debt structure function as governance tools capable of reducing agency conflicts and improving corporate investment decisions. While prior studies tend to examine these factors separately, this study integrates financial and non-financial governance mechanisms within a single empirical framework, particularly in the context of an emerging market. Using purposive sampling, 63 firms were selected, resulting in 315 firm-year observations. Panel data regression analysis was employed to assess both the individual and joint effects of the variables. The findings indicate that ESG disclosure and financial reporting quality do not significantly affect investment efficiency on a standalone basis. This suggests that, in the Indonesian context, sustainability disclosure and accounting quality may not yet operate as effective monitoring mechanisms. In contrast, debt maturity shows a significant effect, indicating that short-term debt can serve as a disciplinary mechanism that encourages more prudent and efficient investment decisions. When considered simultaneously, the three variables collectively influence investment efficiency, underscoring the complementary role of governance mechanisms. The study contributes to the agency-based corporate governance literature by highlighting the stronger disciplinary role of debt structure relative to disclosure mechanisms in emerging markets. From a policy standpoint, the results suggest the need for stronger ESG reporting enforcement and materiality standards, as well as more strategic debt management practices to enhance capital allocation efficiency.

Keywords : ESG Disclosure; Financial Reporting Quality; Debt Maturity; Investment Efficiency.

INTRODUCTION

In today's competitive digital economy, investment efficiency is a critical determinant of corporate sustainability and long-term growth. It reflects how effectively firms allocate capital to generate optimal returns. At the macro level, investment efficiency is commonly proxied by the Incremental Capital Output Ratio (ICOR), where higher values indicate inefficiency. Based on BPS data, Indonesia's ICOR fluctuated between 2019 and 2023 and remained relatively high

compared to neighboring countries, suggesting persistent inefficiencies. This condition underscores the importance of strengthening corporate-level governance mechanisms to improve capital allocation decisions.

Table 1. ICOR Data for Indonesia, 2019-2023

Incremental Capital Output Ratio (ICOR)	
Year	Value
2019	6.87
2020	-15.12
2021	8.66
2022	6.02
2023	6.33

Source: BPS, 2023

Indonesia experienced fluctuations in ICOR values from 2019 to 2023. In 2021, ICOR reached 8.66, dropped to 6.02 in 2022, and rose again to 6.33 in 2023. When compared to neighboring countries, Indonesia's ICOR is relatively high. For instance, Malaysia's average ICOR between 2021–2022 was 5.4%, the Philippines recorded 4.1%, and Vietnam 3.7%. In developing nations, an ideal ICOR usually ranges between 3% and 4%. This condition demonstrates inefficiencies in investment usage at both macro and firm levels. At the company level, inefficiency may result from limited ESG transparency, weak financial reporting, or poorly managed debt structures. Grounded in Agency Theory, investment inefficiency arises from agency conflicts and information asymmetry between managers and shareholders, leading to overinvestment or underinvestment. Governance mechanisms such as ESG disclosure, financial reporting quality, and debt maturity are expected to mitigate these conflicts. ESG disclosure enhances transparency, financial reporting quality reduces information distortion, and debt maturity serves as a monitoring mechanism that disciplines managerial behavior.

Investors show heightened interest in ESG (Environmental, Social, and Governance) data, as it highlights how organization manage long-term sustainability risks and capitalize on emerging opportunities. ESG transparency has been shown to reduce information asymmetry and enhance market confidence, ultimately driving investment efficiency (Fatemi et al., 2018). Alongside ESG disclosure, financial reporting quality is vital, as reliable financial statements facilitate accurate investment decision-making (Dechow et al., 2010). In contrast, misleading reports may misdirect capital allocation. Furthermore, effective debt maturity management sustains financial stability and supports better investment decisions (Hardiyanti & Nurcholisah, 2023). A well-designed debt structure reduces borrowing costs and mitigates financial risks (Brigham & Houston, 2018). Consequently, ESG disclosure, financial reporting quality, and debt maturity together play an important role in strengthening corporate investment efficiency.

Previous research has examined these relationships with mixed outcomes. Yudha and Rahman (2024) revealed that while ESG disclosure generally has a positive influence, its individual dimensions—environmental, social, and governance—were not statistically significant. Meanwhile, Septiana and Ikhsan (2019), indicates a positive relationship between financial reporting quality and investment efficiency in consumers sector. Alternatively, their

findings suggested that debt maturity was not significant, possibly resulting from the high local interest rates at the time.

Methodologically, earlier studies frequently rely on sector-specific samples or test individual governance variables in isolation. Such approaches may not fully capture the interaction and complementary roles among governance mechanisms. In contrast, this study integrates ESG disclosure, financial reporting quality, and debt maturity within a unified panel data regression model covering non-financial firms listed on the Indonesia Stock Exchange over the 2019–2023 period. By employing a multi-year panel framework, this research provides a broader and more comprehensive examination of investment efficiency determinants.

Therefore, this study aims to fill both a theoretical and methodological gap by examining the joint and individual effects of sustainability disclosure, accounting information quality, and debt structure on investment efficiency within an emerging market context. The findings are expected to enrich the agency-based corporate governance literature and offer practical insights for managers, investors, and regulators in strengthening governance mechanisms to improve capital allocation efficiency.

LITERATURE REVIEW

Agency Theory

Jensen and Meckling, (1976), assert that agency theory delivers a framework for understanding the exchanges between agents and principals. Such interactions can take place among individuals, groups, or organizations and often result in information asymmetry (Lekok & Rusly, 2021).

Investment Efficiency

Investment efficiency refers to a condition in which a company does not experience underinvestment or overinvestment relative to its established targets. An investment is considered efficient when the outcomes align with expectations and plans, without the occurrence of either underinvestment or overinvestment (Marsya & Dewi, 2022).

ESG Disclosure

The ESG framework functions as a tool to assess corporate sustainability and accountability in the modern business environment. Its three interrelated dimensions—environment, social, and governance—serve as the main basis for evaluating corporate responsibility. As stated by Ghazali & Zulmaita (2020), ESG disclosure is a means to measure the level at which companies communicate their impact on ESG issues.

Financial Reporting Quality

Financial reporting quality illustrates the accounting procedures involved in revealing a firm's financial condition and performance through reports compiled at period's end, later utilized by stakeholders for informed decision-making (Suaidah et al., 2020).

Debt Maturity

Debt maturity refers to the period specified for a company's debt repayment. It represents a strategic decision in determining the repayment schedule for debts used to support operational activities (Sutikno, 2019).

Research Hypothesis

Influence of ESG Disclosure on Investment Efficiency

From the perspective of Agency Theory, ESG disclosure can function as a monitoring mechanism that reduces information asymmetry between managers and shareholders. By disclosing environmental, social, and governance practices, firms provide signals regarding long-term sustainability orientation and risk management. Prior research suggests that such transparency may improve capital allocation by aligning managerial decisions with shareholder interests (Ellili, 2022; Hake & Shanti, 2024). However, the effectiveness of ESG disclosure may depend on the institutional environment and the maturity of sustainability practices. In emerging markets, where ESG reporting is still evolving and often compliance-driven, disclosure may not always reflect substantive governance quality. In such contexts, the relationship between ESG disclosure and investment efficiency may be weaker or contingent upon regulatory enforcement and investor awareness. Therefore, the subsequent hypothesis is created:

H1: ESG disclosure is expected to influence investment efficiency.

Influence of Financial Reporting Quality on Investment Efficiency

High quality financial reporting reduces agency conflicts by providing reliable and timely information that supports rational investment decision-making. According to Agency Theory, transparent accounting information limits managerial opportunism and enhances monitoring effectiveness. Empirical evidence suggests that better financial reporting quality is linked to improved investment efficiency (Dedat et al., 2021). Nevertheless, in markets characterized by concentrated ownership structures or limited investor protection, financial reporting quality may not fully translate into more efficient investment outcomes. Investment decisions may also be influenced by strategic considerations, macroeconomic uncertainty, or managerial discretion beyond accounting signals. Considering this information, the hypothesis can be expressed as:

H2: Financial Reporting Quality is expected to influence Investment Efficiency.

Influence of Debt Maturity on Investment Efficiency

Debt maturity structure represents another governance mechanism within the agency framework. Short-term debt, in particular, can serve as a disciplinary tool by subjecting managers to more frequent monitoring and refinancing pressures. This mechanism may reduce overinvestment and encourage more selective capital allocation (Marsya & Dewi, 2022). However, the impact of debt maturity on investment efficiency may not always be linear. Excessive reliance on short-term debt could increase liquidity risk and constrain productive investment, while longer maturities may reduce refinancing pressure but weaken monitoring intensity. Therefore, the effectiveness of debt maturity depends on how firms balance financial discipline and flexibility. From the aforementioned, the ensuing hypothesis is presented:

H3: Debt Maturity is expected to influence Investment Efficiency.

Influence of ESG Disclosure, Financial Reporting Quality, and Debt Maturity on Investment Efficiency

Agency Theory suggests that governance mechanisms rarely operate in isolation. ESG disclosure, financial reporting quality, and debt maturity may function as complementary monitoring and disciplinary tools. In emerging markets, where formal governance enforcement may be uneven, the interaction among financial and non-financial mechanisms becomes particularly relevant. Rather than assuming a purely additive linear effect, this study considers that the joint presence of transparency and financial discipline may collectively shape investment efficiency outcomes. In lights of this argument, the forthcoming hypothesis is outlined:

H4 : ESG Disclosure, Financial Reporting Quality, and Debt Maturity are expected to have an impact on Investment Efficiency

Referring to the hypotheses outlined earlier, the conceptual framework of the research model is presented as follows:

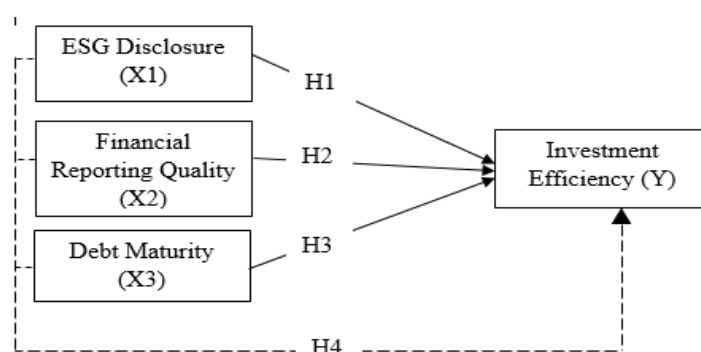


Figure 1. Conceptual Framework
 Source : Processed by the author, 2025.

METHOD

This project implements a quatitative methodology with secondary data extracted from publicly available financial reports and ESG metrics acquired form bloomberg terminal. The dataset comprises all non-financial entities registered on the IDX between 2019 to 2023. Samples were selected through purposive sampling with these criteria:

1. Non-financial companies that disclosed ESG scores on Bloomberg Terminal during 2019–2023.
2. Non-financial companies that consistently published financial reports throughout 2018–2024.

Based on these requirements, 63 companies were included, generating 315 firm-year observations. The analysis in this sudy utilized panel data, combining cross-sectional data (63 companies) with time series data over five years.

The Measurements of Each Variabel

This analysis uses a quantitative research approach and conducts panel data regression to investigate the links among the variable. The analysis involved two categories of variables: the dependent variable (investment efficiency) and the independent variables (ESG disclosure,

financial reporting quality, and debt maturity). The operational definitions of all research variables are summarized in table 2, presenting their measurements.

Table 2. The Measurements of Key Variable

No	Variable	Measurement	Scale
1	Investment Efficiency	$INVES_{i,t} = \beta_0 + \beta_1 * SalesGrowth_{i,t} + \varepsilon_{i,t}$ Source : Biddle at al (2009)	Ratio
2	ESG Disclosure	ESG Scores from Bloomberg Terminal Source : Aryonanto dan Dewayanto (2022)	Interval
3	Financial Reporting Quality	$WCA_{i,t} = \beta_0 + \beta_1 CFO_{i,t-1} + \beta_2 CFO_{i,t} + \beta_3 CFO_{i,t+1} + \varepsilon_{i,t}$ Source : Dechow dan Dichev (2002)	Ratio
4	Debt Maturity	$STDebt = \frac{\text{Short-term debt}}{\text{Debt Total}}$ Source : Septiana dan Ikhsan (2019)	Ratio

Source: Processed by the author, 2025

This study includes testing to determine the appropriate panel data model and conducting classical assumption tests. In addition, the connection between the independent and dependent variables is analyzed through panel data regression, as represented by the following equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Explanation :

- Y is the dependent variable (investment efficiency)
- X1, X2, X3 adalah independent variable (ESG disclosure, financial reporting quality, and debt maturity)
- α adalah constanta term
- $\beta_1, \beta_2, \beta_3$ represent the coefficients of independent variables in regression
- ε indicates the random error term (disturbance)

RESULT AND DISCUSSION

Descriptive Statistic

The statistical table provides details on the distribution of the variables examined in this study. Table 3 presents the descriptive statistics:

Table 3. Results of Descriptive Statistical Analysis

Variable	N	Mean	Median	Maximum	Minimum	Std. Dev.
Investment Efficiency	315	0.05523	0.02634	1.366716	0.00000215	0.121102
ESG Disclosure	315	45.3733	45.63	74.85	18.43	11.31651
Financial Reporting Quality	315	0.10772	0.06782	3.467347	0.001041	0.212956
Debt Maturity	315	0.60445	0.60594	0.967822	0.140894	0.211922

Source : Secondary data processed using EViews 12, 2025

Descriptive statistics were generated from 315 firm-year observations. Investment Efficiency (Y) showed an average of 0.05523 with a standard deviation of 0.121102. The ESG Disclosure variable (X1) had a mean score of 45.3733 and a standard deviation of 11.31651. For

Financial Reporting Quality (X2), the average was 0.10772 with a standard deviation of 0.212956, In contrast, the mean of Debt Maturity (X3) was 0.604449, while its standard deviation stood at 0.211922.

Panel Data Model Selection

Chow Test

The chow test evaluates which model, either the common effect model (CEM) or fixed effect model (FEM), better explains the panel data analysis results. Table 4 presents the results:

Table 4. Results of Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.818	(62,249)	0.8257
Cross-section Chi-square	58.40	62	0.6060

Source : Secondary data processed using EViews 12, 2025

Presented in table 4, the chow test results in a cross-section Chi-square probability of 0.6060, which exceeds the 0.05 threshold, leading to the acceptance of H0. As a result, the common effect model (CEM) is seen as optimal, suggesting no substantial individual effects. Since the chow test favors the CEM, applying the hausman test is not required. The subsequent stage is to perform the lagrange multiplier test.

Lagrange Multiplier Test

Researches apply the lagrange multiplier (LM) test to assess if the random effect model (REM) is better suited than the common effect model (CEM). Table below displays the findings of the LM test:

Table 5. Results of Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	1.437727	0.283934	1.721661
	(0.2305)	(0.5941)	(0.1895)

Source : Secondary data processed using EViews 12, 2025

The LM test results show that the Breusch-Pagan cross-section value (0.2305) is greater than 0.05, implying that H0 remains valid and the Common Effect Model (CEM) must be utilized. As a result, the outcomes of the chow dan lagrange multiplier tests reveal that the CEM is ideal specification for this reseacr.

The selection of the Common Effect Model is theoretically grounded in the assumption that companies exhibit relatively uniform fundamental characteristics and lack significant individual variation in the panel data structure (Gujarati & Porter, 2009). The CEM is also considered appropriate when the research objective focuses on examining the general relationship between variables rather than differences across entities. Therefore, employing the Common Effect Model facilitates model simplification while maintaining the validity of the analysis of the relationships between the studied variables.

Classical Assumption Test

Table. 6 Classical Assumption Test Results

Testing	Normality Jarque- Bera	Multicollinearity Correlation	Heteroscedasticity Glejser	Autocorrelation Common Effect
Investment Efficiency (Y)	0.000	<0.80	>0.05	2.550720
ESG Disclosure (X1)	0.000	<0.80	>0.05	2.550720
Financial Reporting Quality (X2)	0.000	<0.80	>0.05	2.550720
Debt Maturity (X3)	0.000	<0.80	>0.05	2.550720

Normality test result show the data deviate from normality. This may be attributed to the large variation across 63 companies over five years, amounting to 315 observations. Nevertheless, this study proceeds with regression analysis based on the Central Limit Theorem (CLT). Confirm that a sufficiently large sample size ($n > 30$) causes the mean's sampling distribution to resemble a normal distribution, regardless of whether the population exhibits a normal distribution (Gujarati & Porter, 2013). Therefore, the regression model can still be validly applied and estimated.

For the Autocorrelation test result the model employed in this analysis is the common effect model which overlooks error correlations throughout time or between individuals. Therefore, autocorrelation is not the main concern. This is consistent with Gujarati & Porter (2009) who state that autocorrelation testing is not mandatory in pooled models because they do not represent time-series structures. Similarly, Basuki (2021) emphasizes that in panel data analysis, the primary diagnostic tests concern multicollinearity and heteroskedasticity.

Hypothesis Test

Partial Hypothesis Test (t-Test)

We utilized the t-test to determine how independent variables affect the dependent variable. The decision criterion is based on the p-value, where alternative hypothesis is accepted if the p-value is below 0.05. The data from the incomplete hypothesis testing are compiled in the following table:

Table 7. Results of Partial Hypothesis Testing (t-Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.1577554	0.033708	4.674097	0.0000
ESG Disclosure (X1)	-0.000446	0.000588	-0.758429	0.4488
Financial Reporting Quality (X2)	0.008649	0.031304	0.276292	0.7825
Debt Maturity (X3)	-0.137330	0.031455	-4.365884	0.0000

Source : Secondary data processed using EViews 12, 2025

The interpretation of the partial t-test results shown in the table is as follows:

1. Influence of ESG Disclosure on Investment Efficiency

The outcomes from the partial hypothesis test confirm that the observed t-value ($|0.758429| < \text{the t-table value } (1.967572)$), while the p-value (0.4488) exceeds the 0.05 significance level. Accordingly, H1 is rejected, indicating that ESG Disclosure has no significant effect on Investment Efficiency.

2. Influence of Financial Reporting Quality on Investment Efficiency

The panel data regression results show that the calculated t-value ($|0.276292|$) < the t-table value (1.967572), and the p-value (0.7825) > 0.05. Consequently, H2 is dismissed, indicating that Financial Reporting Quality does not significantly influence on Investment Efficiency.

3. Influence of Debt Maturity on Investment Efficiency

The panel data regression results indicate that the calculated t-value ($|-4.365884|$) exceeds the t-table value (1.967572), while the p-value (0.0000) falls below the 0.05 threshold. Therefore, H3 is accepted, demonstrating that Debt Maturity exerts a significant partial effect on Investment Efficiency.

Simultaneous Hypothesis Test (F-Test)

The F-test is used to evaluate the combined effect of ESG disclosure, financial reporting quality, and debt maturity on investment efficiency. When the p-value is below 0.05, it implies there three independent variables greatly affect the dependent variable collectively. The data is presented in the following table:

Table 8. Results of Simultaneous Hypothesis Testing (F-test)

F-statistic	6.63558
Prob(F-statistic)	0.000234

Source : Secondary data processed using EViews 12, 2025

As presented in Table 8, the F-test produced a value of 6.63558 with a corresponding probability of 0.000234, confirming the model's statistical significance. The F-table value is obtained from the F-distribution table at a 0.05 significance level with $df_1 = 3$ and $df_2 = 311$, resulting in a value of 2.63364. Results demonstrate that the derived F-statistic (6.63558) > F-table (2.63364) and the Prob(F-statistic) (0.000234) < 0.05, thus H4 is confirmed. This illustrates how ESG disclosure, financial reporting quality, and debt maturity collectively affect investment efficiency in an important way.

Coefficient of Determination Test (R^2)

The R-squared measure reveals the extent of variation in the dependent variable explained by the independent variables. The conclusions are detailed in the list below:

Table 9. Results of Coefficient of Determination Test (R^2)

R-squared	0.060158
Adjusted R-squared	0.051092

Source : Secondary data processed using EViews 12, 2025

The coefficient of determination indicates that the R-squared and Adjusted R^2 values are 0.060158 and 0.051092, respectively. This implies that just 5.11% of the variation in investment efficiency can be accounted for by ESG disclosure, financial reporting quality, and debt maturity, whereas 94.89% results from additional variables not integrated in the model. The relatively low explanatory power may be due to the exclusion of relevant variables, such as profitability, liquidity, leverage, or external macroeconomic influences. Nevertheless, according to Ghazali (2019), explains, a low R-squared does not invalidate the model in complex economic studies.

The F-test confirms that the model is still significant simultaneously, despite the limited contribution of the three variables.

Discussion

Influence of ESG Disclosure on Investment Efficiency

The empirical findings show that ESG disclosure does not significantly influence investment efficiency. Rather than merely indicating the absence of an effect, this result invites deeper reflection on the evolving role of ESG practices in emerging markets. From an agency theory perspective, ESG disclosure is expected to function as a transparency mechanism that reduces information asymmetry and aligns managerial decisions with shareholder interests. However, the non-significant coefficient suggests that ESG disclosure in the Indonesian context may not yet operate as a substantive governance instrument.

One possible interpretation is that ESG reporting remains largely compliance-oriented, driven by regulatory expectations or reputational considerations rather than embedded strategic commitment. When disclosure is symbolic rather than performance-based, it may fail to alter managerial investment behavior. This finding may reflect a transitional phase in which ESG practices are gaining visibility but have not fully matured into effective monitoring mechanisms. This finding supports Zaky & Hendrawati (2025), who argue that the impact of ESG disclosure is context-dependent in developing economies. However, it contrasts with Hake & Shanti (2024), suggesting that the effectiveness of ESG may vary across sectors, time periods, or measurement approaches. Therefore, the result contributes to the ongoing debate regarding whether ESG disclosure functions as a substantive governance tool or remains largely symbolic in emerging markets.

Influence of Financial Reporting Quality on Investment Efficiency

The results also indicate that financial reporting quality does not significantly affect investment efficiency. While agency theory posits that high-quality accounting information reduces managerial opportunism, the absence of a significant relationship suggests that accounting transparency alone may be insufficient to discipline investment decisions in this context. This outcome may reflect structural characteristics of emerging markets, such as concentrated ownership structures, relational financing, or strategic investment behavior that is not solely driven by accounting signals. In such environments, investment decisions may be shaped more by controlling shareholders, business groups, or external economic uncertainty than by incremental improvements in accrual quality.

Another interpretation relates to the measurement dimension. Financial reporting quality, as proxied by accrual-based measures, captures reliability in accounting numbers but may not fully represent broader informational transparency, strategic disclosure, or forward-looking communication. Consequently, its direct link to investment efficiency may be limited. Importantly, the non-significant coefficient encourages reconsideration of the assumption that improving accounting quality automatically enhances investment discipline. It suggests that governance effectiveness depends not only on information availability but also on how that information is utilized within the broader institutional framework. This finding aligns with Marsya & Dewi (2022), yet differs from Dedat et al. (2021), reinforcing the idea that the role of financial reporting quality may vary depending on firm characteristics and economic conditions.

Influence of Debt Maturity on Investment Efficiency

In contrast to the previous variables, debt maturity shows a significant effect on investment efficiency. This result strengthens the agency theory argument that debt can function as an external disciplinary mechanism. Shorter debt maturities increase refinancing frequency and creditor monitoring, thereby constraining managerial discretion and reducing inefficient investment decisions. Unlike disclosure based mechanisms, which rely on transparency and investor interpretation, debt structure imposes direct financial discipline. The significant coefficient suggests that in the Indonesian context, contractual governance mechanisms may be more effective than voluntary disclosure mechanisms in influencing managerial behavior.

This finding offers an important insight: when institutional enforcement and market-based monitoring are still developing, creditor monitoring may play a more immediate and tangible governance role. The result differs from Ananda & Aryati (2025) but supports Kharisma & Kania (2023), indicating that the governance effect of debt maturity may depend on refinancing dynamics and creditor oversight intensity.

Influence of ESG Disclosure, Financial Reporting Quality, and Debt Maturity on Investment Efficiency

The simultaneous test confirms that ESG disclosure, financial reporting quality, and debt maturity collectively influence investment efficiency. This suggests that governance mechanisms do not operate in isolation but may function in a complementary manner. Transparency and financial discipline together form a broader governance ecosystem influencing investment outcomes. However, the relatively low explanatory power of the model (Adjusted $R^2 = 5.11\%$) deserves careful consideration. Rather than weakening the study, this modest value reflects the multifaceted nature of investment efficiency. Capital allocation decisions are influenced by numerous internal and external factors, including growth opportunities, macroeconomic conditions, ownership concentration, firm size, and industry dynamics.

The low R^2 highlights that governance mechanisms represent only one dimension within a complex institutional environment. It also underscores the importance of integrating structural and contextual variables in future research. In emerging markets, where economic volatility and institutional heterogeneity are common, investment efficiency may be shaped more by external shocks and structural constraints than by governance variables alone. Therefore, the findings collectively suggest that while governance mechanisms contribute to disciplining managerial behavior, their effectiveness is context-dependent and embedded within a broader economic framework. This nuanced interpretation advances the understanding of agency theory in emerging markets by demonstrating that not all governance tools exert equal influence on investment efficiency.

CONCLUSION

This study concludes that individually, ESG disclosure and financial reporting quality do not significantly affect investment efficiency, while debt maturity does. Simultaneously, all three variables together significantly influence investment efficiency. This highlights the importance of corporate governance practices that integrate transparency, accountability, and prudent debt management.

LIMITATIONS AND SUGGESTIONS

This analysis has distinct limitations that ought to be considered when assessing the results and outlining possibilities for subsequent studies: ESG disclosure measurement uses a disclosure index based approach that assesses the existence of information, but does not fully capture the substantive quality or level of ESG integration in the company's strategy. Thus, the insignificant results may reflect the proxies' limitations in distinguishing between symbolic and truly strategic disclosures. The quality of financial reporting is proxied through an accrual approach that focuses on the reliability dimension of accounting figures. These proxies do not necessarily fully represent the transparency of information as a whole, including the quality of narrative, prospective disclosure, and timeliness of reporting. The relatively low value of the model explains shows that investment efficiency is a multidimensional phenomenon that is not only influenced by internal and contractual governance mechanisms, but also by external factors such as macroeconomic conditions, industrial structures, ownership concentrations, and institutional characteristics of emerging markets. This study focuses on non financial companies listed on the Indonesia Stock Exchange in a given observation period, so generalization of results to other sectors or countries with different institutional characteristics needs to be done carefully.

Considering these constraints, the author offers various suggestions for upcoming research: Future research could use more comprehensive ESG measurements, such as third-party based ESG scores or separate Environmental, Social, and Governance dimensions to identify more specific influences. Subsequent studies may include contextual variables as moderation variables, such as company size, ownership structure, institutional ownership, or growth opportunities, to capture conditional effects that may explain the insignificant results in this study. Subsequent research may consider alternative methodological approaches to address the potential for endogeneity, or use a non linear approach to look at variations in influences at different levels of investment efficiency. Cross country or cross regional comparative studies in emerging markets can provide a broader institutional perspective and help identify whether the effectiveness of governance mechanisms is universal or highly dependent on the quality of the regulatory environment and capital markets.

REFERENCE

- Basuki, A. T. (2021). Analisis Data Panel Dalam Penelitian Ekonomi dan Bisnis. *PT Rajagrafindo Persada*, 1–161.
- Brigham, E. F., & Houston, J. F. (2018). *Dasar-dasar manajemen keuangan* (14 ed.). Jakarta : Salemba Empat.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2–3), 344–401. <https://doi.org/10.1016/j.jacceco.2010.09.001>
- Dedat, M., Akasumbawa, D., & Haryono, S. (2021). Pengaruh Kualitas Laporan Keuangan Dan Debt Maturity Terhadap Efisiensi Investasi Dengan Good Corporate Governance Sebagai Variabel Moderasi : *Studi Pada Perbankan Go Publik*. 11(1), 28–42.
- Ellili, N. O. D. (2022). Impact of ESG disclosure and financial reporting quality on investment efficiency. *Corporate Governance (Bingley)*, 14 June 2022. <https://doi.org/10.1108/CG-06-2021-0209>
- Fajri Yudha, & Rahman, A. (2024). Pengaruh Pengungkapan Environmental, Social, and

- Governance (Esg) Terhadap Efisiensi Investasi. *KRISNA: Kumpulan Riset Akuntansi*, 15(2), 251–262. <https://doi.org/10.22225/kr.15.2.2024.251-262>
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45–64. <https://doi.org/10.1016/j.gfj.2017.03.001>
- Ghazali, A., & Zulmaita. (2020). Pengaruh pengungkapan environmental, social, and governance (ESG) terhadap tingkat profitabilitas perusahaan (studi empiris pada perusahaan sektor infrastruktur yang terdaftar di bursa efek Indonesia). *Prosiding SNAM PNJ*, 1–13.
- Ghozali, I. (2019). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, N. D., & Porter, C. D. (2009). *Basic Econometrics* (5th ed). McGraw-Hill Education.
- Hake, S. N. R., & Shanti, S. (2024). Pengaruh Pengungkapan Environmental, Social, and Governance (Esg) Terhadap Efisiensi Investasi. *Jurnal Ilmiah Mahasiswa Akuntansi*, 13(1), 1–9. <https://doi.org/10.33508/jima.v13i1.5025>
- Hutabarat, D. N., & Naimah, Z. (2025). Penerapan Esg Dalam Bisnis: Tinjauan Bibliometrik Dan Perspektif Utilitarianisme. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, 12(1), 129–146. <https://doi.org/10.30656/jak.v12i1.9558>
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader, Third Edition*, 283–303. <https://doi.org/10.1017/CBO9780511817410.023>
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *Accounting Review*, 91(6), 1697–1724. <https://doi.org/10.2308/accr-51383>
- Kharisma Hardiyanti, & Kania Nurcholisah. (2023). Pengaruh Kualitas Pelaporan Keuangan dan Debt Maturity terhadap Efisiensi Investasi. *Jurnal Riset Akuntansi*, 1–10. <https://doi.org/10.29313/jra.v3i1.1759>
- Lekok, W., & Rusly, V. (2021). Audit Report Lag Pada Perusahaan Manufaktur Di Bursa Efek Indonesia. *Media Bisnis*, 12(2), 139–152. <https://doi.org/10.34208/mb.v12i2.919>
- Marsya, M., & Dewi, R. (2022). Pengaruh Kualitas Laporan Keuangan, Debt Maturity, dan Kinerja Profitabilitas Terhadap Efisiensi Investasi. *Neraca Keuangan : Jurnal Ilmiah Akuntansi dan Keuangan*, 17(1), 43–53. <https://doi.org/10.32832/neraca.v17i1.6916>
- Septiana, G., & Ikhsan, Y. L. (2019). Pengaruh Kualitas Laporan Keuangan Dan Debt Maturity Terhadap Efisiensi Investasi Perusahaan Manufaktur Sektor Konsumsi Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Manajemen dan Bisnis*, 8 No. 2, 342–353. <https://doi.org/10.34006/jmbi.v8i2.121>
- S Suaidah, R., Sebrina, N. (2020). Pengaruh Kualitas Laporan Keuangan dan Tingkat Jatuh Tempo Utang Terhadap Efisiensi Investasi (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2015-2017). *Jurnal Eksplorasi Akuntansi (JEA)*, 2(2), 2693–2710.
- Sutikno, S. (2019). Pengaruh kualitas pelaporan keuangan dan debt maturity terhadap efisiensi investasi pada perusahaan manufaktur di Bursa Efek Indonesia Periode 2012-2017. <https://doi.org/10.29313/JRA.V3i1.1759>