

ANALYSIS FINANCIAL AND NON FINANCIAL FACTORS AFFECTING DEBT RATING

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Abstract: Bonds are an important form of funding for companies to improve their operations, therefore the issuance of corporate bond securities has increased year after year. This study aims to examine the influence of financial and non-financial factors on debt ratings. Financial factors are measured by financial risk and profitability, while non-financial factors are measured by ESGRisk. The sample used in this study were companies that issued bonds and received bond ratings and had ESGRisk scores. From the sample selection, 62 companies were selected. Data analysis used ordinal regression analysis techniques with the help of SPSS version 26. The results showed that financial risk had no effect on debt ratings, while profitability and ESGRisk had a positive effect on debt ratings.

Keywords: Debt Rating, Financial Risk, Profitability, ESGRisk

1. Introduction

Bonds are debt instruments issued by companies or governments to obtain additional external funding for operational improvements or expansion. For investors, investing in bonds can be more attractive for several reasons: regular interest payments, capital gains, and the possibility of a return on the bond. Bond investments generally carry lower risks than stocks. Bond investment risks include default risk and interest rate risk. Therefore, bond investors need to understand bond performance, as information can be used to assess bond performance by examining bond ratings.

For bond investors, paying attention to bond ratings is crucial for assessing the risks inherent in bonds issued by issuers, enabling them to make informed investment decisions. In Indonesia, several bond rating agencies exist, such as PT Pemeringkat Efek Indonesia (PEFINDO) and PT Fitch Ratings Indonesia. A higher rating indicates better company performance and lower investment risk. PEFINDO assigns ratings ranging from idAAA (very strong capacity to repay debt obligations) to idD (failure to repay debt obligations).

In the investment sector, bonds rated below BB are generally classified as junk grade, or high-risk bonds, which are speculative in nature. This is because junk bonds are generally issued by companies facing financial difficulties and carry a high risk of default, either in meeting interest obligations or repaying principal.

The PT Waskita Karya case prompted a bond rating agency to downgrade its bond rating due to the failure of PT Waskita Karya (WSKT) to fulfill its obligations, namely the PUB Bond IV Phase I Year 2020 Series B worth IDR 135.5 billion with a fixed interest rate of 10.75% per annum, a three-year term, and maturing on August 6, 2023, for which PT Bank Mega Tbk. (MEGA) acts as trustee. Due to this interest payment failure, several media outlets reported on Monday (May 8) that PT Pemeringkat Efek Indonesia (Pefindo) planned to review Waskita's bond rating. Previously, in a release on February 16, 2023, Pefindo had downgraded the rating

of WSKT and its Shelf-Registered Bonds III and IV from idBBB- to idCCC. The rating outlook remains on CreditWatch status with negative implications. (Aprilia, 2024).

The quality of a bond's rating depends on both financial and non-financial factors. The identified financial factors influencing bond ratings are financial risk and profitability, while the non-financial factor is ESG.

Financial risk is the risk of failure to meet obligations. Financial risk can include failure to meet both short-term and long-term obligations. Financial risk can arise from various factors, including market fluctuations, interest rate changes, credit risk, liquidity risk, operational risk, legal risk, and political risk. Financial risk management focuses on identifying these risks, measuring their impact, and implementing appropriate risk management strategies. (Anugrah, 2023)

Another financial factor identified as influencing bond ratings is profitability. The profitability ratio indicates a company's ability to generate profits from its assets/equity. A high level of profitability indicates good performance, which will increase the bond rating, meaning the possibility of default by the issuing company is very small, thus lowering bond risk.

The identified factor influencing bond ratings is ESG (Environmental, Social, and Governance). ESG will create long-term business sustainability through better risk management and corporate governance, thereby enhancing reputation and attractiveness to investors, while also having a positive impact on the environment and society. The implementation of ESG also appeals to younger generations and prospective employees who care about sustainability, and opens up opportunities for access to greater financing capital from ESG-focused institutions. This study aims to examine the influence of financial risk, profitability, and ESG on bond ratings.

2. Literature Review

Bond Rating (Debt Rating)

Bond ratings are a guide for investors to assess the risk of investing in bonds. This is crucial because, before deciding to invest, investors must assess the company's risk of default. A bond credit rating is an independent opinion provided by a credit rating agency regarding the ability of a bond issuer (e.g., a company or government) to meet its financial obligations, particularly regarding timely interest and principal payments.

In general, a bond rating is a measure of the quality and safety of a bond, determined by the financial condition of the issuer. According to Hartono & Jogiyanto (in Darmawan et al., 2020), this rating is expressed in the form of symbols assigned by the rating agency to indicate the level of risk inherent in the bond. More specifically, this bond rating serves as a proxy for bond risk. PEFINDO assigns bond ratings with symbols ranging from idAAA to idD, indicating bonds with the lowest risk of default.

The main objective of this rating process is to present accurate information regarding the financial performance and business position of the bond issuing company to potential investors in the form of a concise rating

Financial Risk

Financial risk, as measured by financial distress, is a condition in which a company is unable to repay its debts or financial obligations to other parties, putting it at risk of bankruptcy. Financial distress can arise from both internal and external influences. Internal factors include cash flow difficulties, high debt levels, and losses from operating activities over several years.

External factors include government policies that increase the company's burden, and rising interest rates, which increase the company's interest expense. (Shahwan, 2015)

The higher the level of financial distress, the greater the risk of default faced by the company, resulting in a lower bond rating

H₁: Z-Score has a negative effect on Debt Rating.

Profitability

Profitability is a ratio that indicates a company's ability to generate profits from its assets or equity (Hanafi and Halim, 2016). High profitability indicates a healthy company that is expected to survive and generate sufficient profits. Companies with this level of profitability have a low risk of defaulting on their obligations, thus resulting in a high bond rating.

H₂: Return on Equity (ROE) has a positive effect on Debt Rating.

ESG Risk

ESG Risk is a set of standards focused on three main dimensions: Environmental, Social, and Governance, used to measure sustainability (Indonesia Stock Exchange, 2022a, cited in Aulia and Mutasowifin, 2024). ESG is now a globally recognized consideration among investors when making investment decisions. The 2022 PwC Global Investor Survey found that ESG is among investors' priorities in business, with effective corporate governance (49%) ranking third and greenhouse gas emission reduction (44%) ranking fifth (PwC, 2022).

Several global institutions, including Morningstar Sustainalytics, MSCI, Thomson Reuters (Refinitiv Eikon), and Bloomberg, publish ratings to evaluate a company's Environmental, Social, and Governance (ESG) performance (Tarmuji et al., 2016; Stiadi, 2023). In collaboration with Sustainalytics, the Indonesia Stock Exchange (IDX) uses an ESG risk rating as one of its benchmarks for ESG implementation. This ESG risk rating measures a company's exposure to various ESG-related risks and evaluates how effectively the company manages those risks. According to Widyantoro et al. (2022), this rating essentially assesses the extent to which a company's economic value could be threatened by ESG issues. The final result is a score that represents the total risk of each ESG issue if the company fails to manage it effectively (Sustainalytics, 2021a).

H₃: ESG Risk has a negative effect on Debt Rating.

Research Model

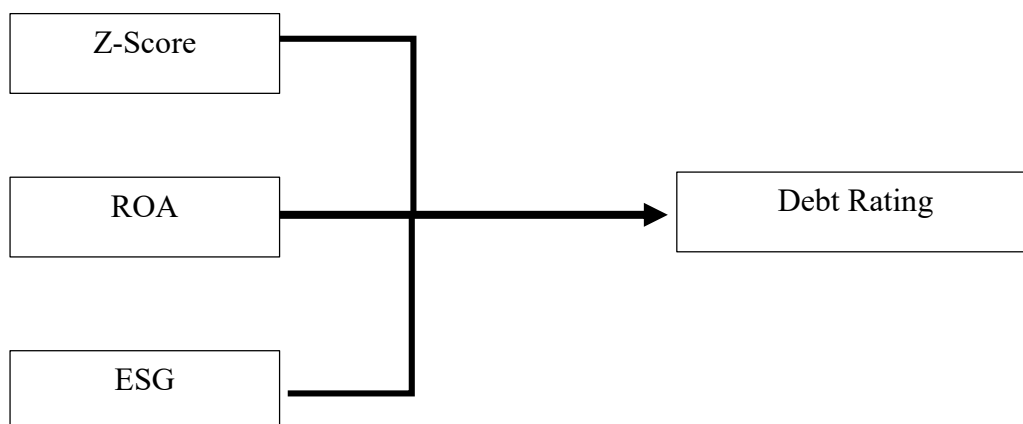


Figure 1: Model

$$\text{DebtRating} = a + b_1\text{ZScore} + b_2\text{ROE} + b_3\text{ESGRisk} + e$$

3. Method

This research is a quantitative study, with a population of all companies listed on the Indonesia Stock Exchange (IDX). Purposive sampling was used, with the criteria being companies issuing bonds and having a bond rating and an ESG risk rating issued by the IDX in 2025. These criteria resulted in a sample of 62 companies. The dependent variables in this study are financial risk, measured using the Altman Z-Score, profitability, measured by return on equity (ROE), and ESG risk, measured by the ESG risk rating. Data for calculating the Altman Z-Score, ROE, and ESG risk were taken from the IDX website, while the debt rating variable was taken from PEFINDO and S&P. Bond ratings are categorized as low risk (Investment Grade), medium risk, and high risk (Junk Bond). The following are bond risks and their values:

Types of Risk	Score
Low Risk (investment Grade)	3
Medium Risk	2
High Risk (Junk Bond)	1

Data analysis was carried out using ordinal regression with the help of SPSS version 26.

4. Result and Discussion

Results of Descriptive Statistical Testing

Descriptive statistical testing was conducted using SPSS, with the following results

Table 1
Result of Descriptif Statistical Testing
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	62	-.212	.705	.11939	.104834
ESG	62	9.84	50.30	28.1216	7.81549
Z-Score	62	.297	25.704	3.14700	3.604605
Skor	62	1	3	2.76	.502
Valid N (listwise)	62				

Source: Secondary data processed by the author, 2025

Based on the results of descriptive statistical tests for data processing with a sample of 62 observations, the following descriptive values were obtained:

1. The results of the Profitability variable, proxied by Return on Equity (ROE), show that the Return on Equity (ROE) of the 62 sample companies has a minimum value of -2.12%, a maximum value of 0.75%, a mean of 0.12%, and a standard deviation of 0.10%.
2. The results of the ESG Risk variable show that the ESG Risk value of the 62 sample companies has a minimum value of 9.84%, a maximum value of 50.30%, a mean of 28.12%, and a standard deviation of 7.82%.
3. The results of the Financial Risk Prediction variable, proxied using the Z-Score, show that the Z-Score for the 62 sample companies has a minimum value of 0.297%, a maximum value of 25.704%, a mean of 3.15%, and a standard deviation of 3.60%.
4. The results of the Debt Rating variable, proxied using the score, show that the scores for the 62 sample companies have a minimum value of 1%, a maximum value of 3%, a mean of 2.76%, and a standard deviation of 0.502%.

Multicollinearity Test Results

The multicollinearity test is a classic assumption test in multiple regression analysis to detect high correlations between independent variables. This multicollinearity test ensures there are no perfect or very strong linear relationships between the independent variables in the regression model, ensuring the model's reliability. This detection is typically performed by examining the Variance Inflation Factor (VIF) and Tolerance values. A VIF value above 10 or a Tolerance value below 0.10 indicates multicollinearity.

Table 2
Result of Multikolenierity Testing
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	t		Tolerance	VIF
1 (Constant)	3.100	.240		12.910	.000		
ROE	1.407	.565	.294	2.489	.016	.988	1.012
ESG	-.019	.008	-.302	-2.559	.013	.991	1.009
Z-Score	.011	.016	.080	.677	.501	.996	1.004

a. Dependent Variable: Score

Source: Secondary data processed by the author, 2025

The results of the multicollinearity test indicate that all independent variables have a tolerance greater than 0.10 and a VIF (Variance Inflation Factor) less than 10. This indicates that there are no multicollinearity issues in the regression model used. Thus, each independent variable can function independently in explaining its effect on the dependent variable, without excessive correlation between variables. This is important because the presence of multicollinearity can interfere with estimation accuracy and complicate the interpretation of regression coefficients. These findings align with Budiman and Cahyani (2022), who stated that multicollinearity arises when there is a very strong relationship between predictor variables, resulting in the variables losing their independence. A similar view was expressed by Aurora and Sufiyati (2024), who asserted that a regression model is considered free from multicollinearity if the tolerance is above 0.10 and the VIF is below 10. Therefore, it can be concluded that the model in this study does not face multicollinearity issues.

Table 3
Output Case Processing Summary

		N	Marginal Percentage
Skor	High Risk	2	3.2%
	Medium Risk	11	17.7%
	Low Risk	49	79.0%
Valid		62	100.0%
Missing		0	
Total		62	

Source: Secondary data processed by the author, 2025

Based on the results of the Case Processing Summary test, of the 62 companies sampled in the study, 2 companies (3.2%) were in the high-risk category, 11 companies (17.7%) were in the medium-risk category, and 49 companies (79.0%) were in the low-risk category. All data could be analyzed further because no missing values were found. This distribution shows that the majority of companies are classified as low-risk, with a proportion approaching 80%, while the number of companies categorized as high-risk is very small, at only 3.2%. This reflects that the risk level in the majority of companies tends to be low and in a relatively well-maintained condition.

The concentration of companies in the low-risk category indicates a good level of stability. This condition aligns with the concept of risk management, which states that the dominance of low-risk companies indicates the effectiveness of risk control systems and the soundness of financial structures (Hartono & Jogiyanto, 2017). This finding also aligns with research by Aurora and Sufiyati (2024), which emphasizes the importance of fundamental company factors, such as size and capital structure, in reducing risk while providing positive signals to investors. Furthermore, Darmawan et al. (2020) emphasize that good corporate governance practices can reduce financial risk and increase market confidence. Meanwhile, Fadah et al. (2020) found that profitability positively contributes to bond ratings, so the stronger a company's profitability, the lower its risk level.

Therefore, the dominance of companies in the Low-Risk category suggests that the majority of sample companies have a sound financial foundation and good governance. This condition minimizes the possibility of default or extreme financial risk, while strengthening the company's position in maintaining stability and increasing investor confidence.

Overall Mode Fit Test Result

Table 4
Output Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	74.840			
Final	60.973	13.867	3	.003

Link function: Logit.

Source: Secondary data processed by the author, 2025

Based on the results of the Model Fitting Information test, it shows that the -2 Log Likelihood value in the initial model that only uses constants is 74.840, then decreases to 60.973 after the independent variables are entered into the model. The difference between the two values produces a Chi-Square of 13.867 with a degree of freedom (df) of 3 and a significance level of 0.003. Because the significance value is far below 0.05, it can be concluded that the addition of independent variables significantly improves the model's capabilities. Thus, the logistic regression model used is proven to be appropriate (fit) and worthy of further analysis.

These results support Hosmer and Lemeshow (2000) that a significant chi-square value in the Model Fitting Information test indicates the model's ability to better explain the dependent variable. Furthermore, these findings support Aurora and Sufiyati (2024), who found that a company's fundamental factors significantly contribute to risk prediction. Darmawan et al. (2020) also emphasized that the implementation of good corporate governance can strengthen the model's validity in explaining financial risk. Meanwhile, Fadah et al. (2020) demonstrated that financial performance, particularly profitability, plays a significant role in improving the

accuracy of predictive models for risk assessment and bond ratings, thus, the results of the Model Fitting Information test indicate that the developed model is adequate and can be used to further analyze the influence of independent variables on a company's risk level.

Coefficient of Determination Test Result

Table 5
Output Pseudo R-Square

Cox and Snell	.200
Nagelkerke	.286
McFadden	.185

Link function: Logit.

Source: Secondary data processed by the author, 2025

Based on the results of the Pseudo R-Square test, the Cox and Snell value was 0.200, Nagelkerke was 0.286, and McFadden was 0.185. The Nagelkerke R^2 value indicates that the logistic regression model is able to explain approximately 28.6% of the variation in the dependent variable, while the remaining 71.4% is influenced by other factors outside the model. This indicates that the model's ability to explain data variation is at a moderate level, but can still be considered adequate because it is in accordance with the criteria of Hosmer and Lemeshow (2000) which states that the Pseudo R^2 value in the range of 0.20–0.40 already reflects a model that is suitable for use in logistic regression.

These results are consistent with research by Aurora and Sufiyati (2024), which emphasized that a company's fundamental factors play a significant role in reducing potential financial risk, although external factors remain influential. Furthermore, Darmawan et al. (2020) found that the implementation of good corporate governance, an aspect of ESG risk, can improve the quality of risk assessments because good governance fosters investor confidence while reducing uncertainty. Similarly, Fadah et al. (2020) and Dewi and Utami (2020) demonstrated that financial performance indicators, particularly profitability, influence bond ratings, suggesting that companies with higher profitability tend to receive higher debt ratings. Thus, although the pseudo-R-Square value is not large, the model remains relevant for analyzing the influence of profitability, predicted financial risk, and ESG risk on debt ratings. This is because the model is able to capture the role of both fundamental and non-financial variables, as demonstrated by previous research, despite the presence of other external factors that influence the results.

Hypothesis Test Result

Table 6
Parameter Estimates Test Results

Parameter Estimates Test Results								
Estimate			Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Skor = 1]	-5.999	1.815	10.929	1	.001	-9.555	-2.442
	[Skor = 2]	-3.362	1.551	4.702	1	.030	-6.402	-.323
Location	ROE	11.832	4.665	6.432	1	.011	2.688	20.975
	ESG	-.115	.047	5.878	1	.015	-.207	-.022
	ZScore	.044	.142	.097	1	.756	-.234	.323

Link function: Logit.

Source: Secondary data processed by the author, 2025

The results of the Parameter Estimates test indicate that the ROE variable has a significant positive effect on the Debt Rating, with a significance value of 0.011. This means that the higher a company's profitability, the greater the likelihood of obtaining a better debt rating. This finding is consistent with research by Fadah et al. (2020) and Dewi and Utami (2020), which demonstrated that profitability positively contributes to bond ratings. Therefore, strong profitability is a key indicator of a company's ability to meet its debt obligations.

The ESG variable, measured by ESGRisk, has a significant negative effect on debt ratings, with a coefficient of -0.115 and a significance level of 0.015. This study found that ESG risk has a significant negative effect on debt ratings, meaning the higher the ESG risk, the lower the quality of a company's debt rating. This finding aligns with Lestari and Pebriyani (2025), who stated that high ESG risk weakens financial performance and reduces market confidence. The findings of Rahmawati (2023) and Aleksandra and Petrov-Nerling (2023) also support that high ESG risk increases company uncertainty, thus impacting credit rating downgrades. This is reinforced by the S&P Global report (2024), which confirms that ESG risk issues contribute significantly to rating downgrade decisions. Therefore, companies with high ESG risk tend to be perceived as riskier and therefore vulnerable to receiving low debt ratings.

The Z-Score variable, representing Financial Risk, did not significantly influence Debt Ratings, with a significance value of 0.756. This indicates that the potential for financial distress, as measured by the Z-Score, is not a major factor in determining debt ratings. This research disagrees with Aurora and Sufiyati (2024), who emphasized that Financial Risk should play a role in influencing investor perceptions. Therefore, these results indicate that rating agencies in Indonesia still place greater emphasis on Profitability (ROE) indicators than on bankruptcy risk indicators in determining Debt Ratings.

Discussion

Impact Financial Risk to Debt Ratings

The financial risk significantly influences the bond rating. The higher the financial risk, the lower the bond rating, increasing the likelihood of default. Conversely, a high rating indicates a lower risk of default, making investors feel safer investing in the bond. However, this study found insignificant results. The hypothesis that financial risk, as measured by the Z-Score, negatively impacts debt ratings was rejected, indicating that financial risk is not a primary factor determining debt ratings. Descriptive statistics indicate that the average company is considered healthy, with an average Z-Score of 3.15, indicating a low likelihood of default.

These results align with those of Fadah et al. (2019) and Dewi and Utami (2020), who found that leverage, which indicates financial risk, has no impact on debt ratings. However, they contradict the findings of Aurora and Sufiyati (2024), who found evidence that leverage impacts debt ratings.

The Effect of Profitability on Debt Rating

The results of the profitability variable test on debt rating showed a significant positive result, confirming the hypothesis that profitability has a positive effect on debt rating. High profitability indicates a healthy company that is expected to survive and generate sufficient profits. Companies with this condition have a low risk of defaulting on their obligations, thus resulting in a high bond rating.

The results of this study are consistent with those of Fadah et al. (2020) and Dewi and Utami (2020), which demonstrated that profitability positively contributes to bond ratings. Therefore, strong profitability is a key indicator of a company's ability to meet its debt obligations.

The Effect of ESG Risk on Debt Ratings

The test results for the effect of ESG Risk on debt ratings yielded a significantly negative result, indicating that the hypothesis stating that ESG Risk negatively impacts debt ratings is accepted. This finding aligns with Lestari and Pebriyani (2025), who stated that high ESG Risk weakens financial performance and reduces market confidence. The findings of Rahmawati (2023) and Aleksandra and Petrov-Nerling (2023) also support that high ESG Risk increases corporate uncertainty, resulting in credit rating downgrades. This finding is reinforced by an S&P Global report (2024), which confirms that ESG Risk issues significantly contribute to rating downgrade decisions. Therefore, companies with high ESG Risk tend to be perceived as riskier and therefore more susceptible to receiving lower debt ratings.

5. Conclusions

This study examined the effect of Profitability (ROE), Financial Risk (Z-Score), and ESG Risk on Debt Ratings in companies listed on the Indonesia Stock Exchange. The results showed that ROE has a significant positive effect on Debt Ratings, meaning that the higher a company's profitability, the greater the likelihood of obtaining a high debt rating. This finding aligns with research by Fadah et al. (2020) and Dewi & Utami (2020), which demonstrated that profitability positively contributes to improving bond quality.

The ESG Risk variable has a significant negative effect on debt ratings. This means that the higher a company's ESG risk, the lower its debt rating. This finding is consistent with research by Lestari and Pebriyani (2025), Rahmawati (2023), and Aleksandra and Petrov-Nerling (2023), which shows that high ESG risk negatively impacts financial performance and reduces market confidence, thus undermining a company's credibility. The S&P Global report (2024) further supports this finding by confirming that ESG risk is a key driver of credit downgrades. Financial risk variables, as measured by the Z-Score, have no effect on debt ratings. This indicates that prediction of potential financial risk is not a primary consideration in determining corporate debt ratings in Indonesia. This finding contrasts with research by Aurora and Sufiyati (2024), which asserted that financial risk should influence bond ratings. Therefore, it can be concluded that rating agencies in Indonesia still place greater emphasis on profitability and ESG risk indicators than bankruptcy risk in determining debt rating quality.

Suggestions

Further research should add other variables related to financial factors, such as liquidity and solvency, and non-financial factors, such as auditor's opinion and macroeconomic factors.

References

- Aprilia, Z. (2023, 12 Mei). Gagal bayar utang, rating Waskita Karya makin jeblok. CNBC Indonesia. Diakses pada 15 September 2025, pukul 10.00 WIB, dari <https://www.cnbcindonesia.com/market/20230512075406-17-436727/gagal-bayar-utang-rating-waskita-karya-makin-jeblok>
- Aulia, F. N., dan Mutasowifin, A. (2023). Pengaruh ESG risk rating terhadap kinerja dan nilai perusahaan di Indonesia. *Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi (JMBI UNSRAT)*, 12(2), 1007–1033
- Aurora, R. M., dan Sufiyati. (2024). Faktor-faktor yang mempengaruhi peringkat obligasi. *Economic Reviews Journal*, 3(3), 2556–2570.
- Azani, P. K., dan Khairunnisa. (2015). *Pengaruh likuiditas, leverage dan pertumbuhan perusahaan terhadap peringkat obligasi (Studi empiris pada perusahaan non keuangan dan non perbankan yang diperingkat oleh PT. PEFINDO tahun 2011–2015)*. Telkom University.

- Bursa Efek Indonesia. Laporan Keuangan dan Tahunan. Diakses pada 18 September 2025, pukul 12.34 WIB, dari <https://www.idx.co.id/id/perusahaan-tercatat/laporan-keuangan-dan-tahunan>
- Chen, J. (2025, June 12). What are bond ratings? Definition, effects, and agencies. Investopedia. Diakses pada 10 September 2025, pukul 11.55 WIB dari <https://share.google/22Poy29XmwFNaoJzd>
- Darmawan, A., Al Fayed, Y. F., Bagus, F., dan Pratama, B. C. (2020). Pengaruh profitabilitas, likuiditas, leverage, umur obligasi dan ukuran perusahaan terhadap peringkat obligasi pada sektor keuangan yang terdapat di BEI tahun 2015–2018. *Derivatif: Jurnal Manajemen*, 14(1), 99–114
- Dewi, M. S., dan Utami, E. M. (2020). The influence of profitability and liquidity to bond rating and the impact on the bond yield. *International Journal of Research in Business and Social Science*, 9(4), 215–219.
- Dwi, A. (2023, 26 Mei). Manajemen risiko keuangan. Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Sumatera Utara.
- Egorova, A., dan Petrov-Nerling, G. (2023). Systemic ESG risks: Industrial analysis. *Procedia Computer Science*, 221, 1110–1114.
- Fadah, I., Ayuningtyas, A., Puspitasari, N., dan Yuswanto, I. B. (2020). Analysis of financial and non-financial factors affecting bond ratings. *IOP Conference Series: Earth and Environmental Science*, 485(1), 012019
- Fitch Ratings. Indonesia region. Diakses pada 12 September 2025, pukul 16.00 WIB, dari <https://www.fitchratings.com/region/indonesia>
- Hanafi, M. M., dan Halim, A. (2016). Analisis laporan keuangan. Yogyakarta: UPP STIM YKPN.
- Lestari, G., dan Pebriyani, D. (2025). Pengaruh environmental, social, governance (ESG) risk terhadap kinerja keuangan perusahaan: Studi empiris pada perusahaan yang terdaftar di Bursa Efek Indonesia tahun 2023. *Jurnal Nuansa Karya Akuntansi*, 3(1), 62–73.
- Pefindo. Rating history. PT Pemeringkat Efek Indonesia. Diakses pada 10 September 2025, pukul 11.55 WIB, dari <https://www.pefindo.com/rating-action-reports/rating-history>
- Purba, V. C. M., dan Syarief, A. D. (2023). The effect of liquidity, leverage, profitability, and company size on bond ratings in banking sector companies in Indonesia 2017–2020. *Journal of Economics, Finance and Management Studies*, 6(7), 3319–3323.
- PwC. (2022). Global Investor Survey 2022. Diakses pada 18 September 2025, pukul 13.54 WIB, dari <https://www.pwc.com/gx/en/global-investor-survey/PwC-Global-Investor-Survey-2022.pdf>
- S&P Global Ratings. (2024, March 13). *ESG in credit ratings deep dive: ESG factors drove 13% of corporate and infrastructure rating actions since 2020*. S&P Global.
- Shahwan, T. M. (2015). The effects of corporate governance on financial performance and financial distress: Evidence from Egypt. *Corporate Governance*, 15(5), 641–662.
- Tarmuji, I., Maelah, R., dan Tarmuji, N. H. (2016). The impact of environmental, social and governance practices (ESG) on economic performance: Evidence from ESG score. *International Journal of Trade, Economics and Finance*, 7(3), 67–74.
- Widyantoro, T., Hamsal, M., Simatupang, B., Furinto, A., dan Kartono, R. (2022, July 19–21). The effect of ESG reporting to performance of company moderated by board gender diversity in publicly listed companies under Indonesia Stock Exchange ESG Leader Index. In Proceedings of the 3rd South American International Industrial Engineering and Operations Management Conference, Asuncion, Paraguay. IEOM Society International