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The Effect of Environmental Management Accounting on Firm Value Through Managerial Performance

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Abstract: Since Environmental Management Accounting (EMA) has gained attention as companies face environmental concerns and the need for efficient resource management, its relationship with Firm Value remains inconsistent. This study examines the relationship between EMA and Firm Value, with Managerial Performance as a mediating variable among companies listed on the Indonesia Stock Exchange. A quantitative approach was employed using secondary data from 175 companies selected through purposive sampling. Data were analyzed using regression analysis and the Sobel test. EMA measured by the eco-efficiency ratio, Managerial Performance measured by ROA, and Firm Value measured by Tobin's Q. The findings indicate that EMA positively and significantly association with Managerial Performance, while Managerial Performance positively and significantly association with Firm Value. However, EMA has a significant negative direct association with Firm Value. Managerial Performance also does not significantly mediate the relationship between EMA and Firm Value. These findings indicate that although EMA contributes to managerial performance, its benefits are not necessarily reflected in higher Firm Value through managerial performance. This study contributes empirical evidence by examining both the direct and indirect relationships of EMA on Firm Value through Managerial Performance.

Keyword: Environmental Accounting, Firm Value, Environmental Management Accounting, Managerial Performance.

Abstrak: Semenjak Akuntansi Manajemen Lingkungan (EMA) semakin mendapat perhatian seiring meningkatnya kepedulian terhadap lingkungan dan kebutuhan perusahaan akan pengelolaan sumber daya yang efisien, sementara hubungannya dengan Nilai Perusahaan masih menunjukkan hasil yang tidak konsisten. Penelitian ini bertujuan menguji pengaruh EMA terhadap Nilai Perusahaan dengan Kinerja Manajerial sebagai variabel mediasi pada perusahaan yang terdaftar di Bursa Efek Indonesia. Penelitian menggunakan pendekatan kuantitatif dengan data sekunder dari 175 perusahaan yang dipilih melalui purposive sampling. Data dianalisis menggunakan analisis regresi dan uji Sobel. Hasil penelitian menunjukkan bahwa EMA berpengaruh positif dan signifikan terhadap Kinerja Manajerial, sedangkan Kinerja Manajerial berpengaruh positif dan signifikan terhadap Nilai Perusahaan. Namun, EMA berpengaruh negatif dan signifikan secara langsung terhadap Nilai Perusahaan. Kinerja Manajerial juga tidak memediasi secara signifikan hubungan antara EMA dan Nilai

Perusahaan. Temuan ini menunjukkan bahwa meskipun EMA berkontribusi terhadap Kinerja Manajerial, manfaat tersebut belum tentu tercermin dalam peningkatan Nilai Perusahaan melalui Kinerja Manajerial. Penelitian ini memberikan bukti empiris dengan menguji pengaruh langsung dan tidak langsung EMA terhadap Nilai Perusahaan melalui Kinerja Manajerial.

Kata Kunci: Akuntansi Lingkungan, Nilai Perusahaan, Akuntansi Manajemen Lingkungan, Kinerja Manajerial.

INTRODUCTION

Firm value is one of the main concerns for most investors in forecasting the future. A higher value of a firm reflects greater investor confidence, in which the information required not only part of the financial statement but also non-financial aspects such as environmental responsibility (Doruk, 2025). In addition, managerial performance plays the roles of decision-making, operating management, and finding the future direction of the company (Cao *et al.*, 2025). In the Indonesian context, increasing environmental concerns highlight the importance of environmental management in corporate activities (Kementrian PPN/Bappenas, 2023; UNESA, 2025).

Based on greenhouse gas (GHG) emission data, Indonesia was the sixth-largest GHG emitter globally in 2024, with emissions increasing by nearly 5% compared with 2023 (Crippa *et al.*, 2025; Neilson, 2025). This phenomenon indicates the low effort of environment awareness in Indonesia, which delivers this aspect to affect the society's public health and economy condition (Kusuma, 2022). Global warming conditions have reduced the efficiency of managerial performance but also the stakeholder's satisfaction in firm value, which include both market and non-market approaches such as one of national policy in Indonesia carbon tax, as regulated under "Article 13 of Law Number 7 of 2021" (Santoso, 2022). Implementation of this policy has affected economic activities to adapt environmentally friendly technology and green innovation (Pinasti, 2024). Global warming conditions have reduced the efficiency of managerial performance but also the stakeholder's satisfaction in firm value (Anggraini, 2019).

Environmental issues disclosed in sustainability reports may influence company performance by encouraging improvements in quality and management. The attention issue is not only intended as fulfilment of governance regulation but also a contribution to improving management planning effectiveness (Arif & Handayani, 2024). Despite this, Arif and Handayani indicate that investors still tend to focus more on financial information that provides stable returns, while non-financial information such as environmental aspects receive less attention. Strategic planning and decision making are essential aspects of managerial performance as the quality may improve company performance and increase investor confidence as well as the firm value. This condition highlights the importance of implementation of environmental aspects into business activities (Burritt *et al.*, 2021). The concept of Environmental Management Accounting (EMA) provides managerial support in efficiencies by considering the environmental aspect.

Limited business knowledge, low awareness, and insufficient government support may prevent environmental aspects from being fully considered. This condition reflected operational with weak environmental culture within organization and society, as result the implementation of EMA continues to be relatively low (Elhossade *et al.*, 2022; Mukwarami *et al.*, 2023). Stakeholder Theory by Freeman (2009) suggests that companies should consider the interests of various stakeholders. EMA provides environmental information to support managerial decision-making and resource efficiency, which may improve Managerial Performance. Effective managerial performance and environmental management practices may further contribute to Firm Value by supporting efficient resource utilization and addressing stakeholder interests.. Several previous studies have reported inconsistent findings

regarding the relationships between EMA, Managerial Performance, and Firm Value. The finding revealed that EMA was found to have an insignificant negative effect on managerial performance (Wahyuni *et al.*, 2024). Other results also state EMA has an insignificant negative effect on firm value (Aldama, 2022; Budiono, 2025; Okta *et al.*, 2022). On the other hand, Gerged *et al.* (2024), explain that EMA had a positive and significant effect on firm performance. Similar findings are also stated by other research (Effendi, 2021; Putri & Dewi, 2025; Sari & Gantino, 2022), which agreed with state EMA had a positive and significant effect on firm value.

Based on the research gap of previous research results, this indicates an inconsistent effect of EMA. The condition equivalent to the effect of EMA does not occasionally affect the firm value which in this case research uses managerial performance output as an intervening model. This research examines the relationship of direct effect and indirect effect of EMA and firm value through managerial performance. The implementation of Environmental Management Accounting is expected to improve managerial effectiveness in managing organizational resources, resulting in improved managerial performance. Indicating better managerial performance is expected to enhance firm value. The phenomenon and the differences in previous research findings, the purpose of this study is to analyze the relationship effect of EMA, managerial performance, and firm value with secondary data of companies listed on the Indonesia Stock Exchange, which was analyzed using EViews software. This study also aims to examine the role of managerial performance in the relationship between EMA and firm value.

Literature Review

Stakeholder

The stakeholder theory, explaining that a company should consider relationships with all related parties, rather focusing only on shareholders (Freeman, 2009). Theory state successful of organization depend on company abilities to creating value for all variety of stakeholder groups. Individual and organization must contribute over another which means in terms of achieving organization goals a company no longer being independent entities, but one of interconnected networks whose changes depend on business environment and external development (Freeman & McVea, 2001). This approach also does not focus primarily on profit-oriented goals, but emphasizes sustainability in balancing various stakeholder interests that often conflict with one another. The network of relationship influences organizational performance and long-term sustainability.

Firm Value

Interaction between internal factor and external factor reflected the risk and opportunity which was affected by cashflow expectation So, this research using the Tobin's Q method a concept by James Tobin which state ratio of capital market price (qp) connection with production cost (p) and it reflected by $q < 1$ is undervalue, $q = 1$ is equal, $q > 1$ is overvalued (Tobin, 1969). But in 1982 a research conduct by Hayashi, he stated a critique to Tobin's due to limited information to marginal q (Hayashi, 1982). argue the older version of Tobin's finding was irrelevant anymore despite the era's development and limited information for the past. Firm value was measured using Tobin's Q, calculated as the ratio of year-end closing share price $\times$ shares outstanding plus total liabilities, then divided by total assets (Chung & Pruitt, 1994).

Environmental Management Accounting

A system to identify, measure, and tracing information about environmental aspects to support the decision-making process (Burritt *et al.*, 2021). This research utilized EMA as independent measures with Eco-Efficiency, the book has stated the concept of eco-efficiency came from the awareness of the environmental crisis to applies implementation in increasing

efficiency of natural resources and reducing the effect to nature (Schmidheiny, 1993). Eco-efficiency has flexible model which mean this concept indicator will depend on the needs of individual decision makers (WBCSD, 2005). Environmental management accounting was proxied by eco-efficiency, measured as environmental costs divided by sales. A higher environmental cost-to-sales ratio indicates lower eco-efficiency, lower eco-efficiency ratio indicates more efficient environmental cost management and better environmental accounting performance (Wahyuni *et al.*, 2024).

Managerial Performance

Process to maintain and enhance efficiency of company performance with mechanism of feedback (Giamos *et al.*, 2024). Managerial performance act as mechanism supported by environmental information to optimized decision making in order to improving organization efficiency. Effective managerial performance can be reflected through generating of operational outcomes such as earning from assets such as the effectiveness of managing natural resources (Wahyuni *et al.*, 2024). In this study, managerial performance is proxied by Return on Assets (ROA), as ROA indicates how effectively management utilizes the company's assets to generate earnings (Wahyuni *et al.*, 2024). ROA is measured as net income divided by total assets (Brigham & Houston, 2019).

METHODS

Secondary information from company annual reports and sustainability reports serves as the basis for the quantitative approach used in this research. Data were collected through the official website of Indonesian Stock Exchange (IDX) and website of each company that highlighted the theory which was analyzed using *Eviews 14* software. The population of this study consisted of all companies listed on the IDX in 2025, totaling 1,062 companies. Data were collected in June 2026 from the official website of the Indonesia Stock Exchange (IDX) and the respective company websites. The study used data for the 2025 fiscal year. The data used to construct the research variables included environmental costs and sales for EMA, net income and total assets for Managerial Performance, and year-end closing share price, shares outstanding, total liabilities, and total assets for Firm Value. Sampling in this study used purposive sampling technique with criteria of: (1) companies listed on the IDX in 2025; (2) companies that published annual and sustainability reports; and (3) companies that disclosed environmental costs. Outlier detection: Tukey fences method and influence statistics. This study obtained samples of 175 company data. All 175 sampled companies had audited annual financial statements and the required sustainability disclosures available for the 2025 fiscal year. Research used mediation analysis as a data analysis technique to process the research data. This study consists of descriptive statistical analysis, classical assumption tests, Coefficient of Determination (R^2), Model Fit Test (F-Test), t-Test (Partial Test), and Sobel Test (Mediation Test).

$$\begin{aligned} \text{Model 1: } MP &= \alpha_1 + \beta_1 EMA + \varepsilon \\ \text{Model 2 : } FV &= \alpha_2 + \beta_2 MP + \beta_3 EMA + \varepsilon \end{aligned}$$

Source: Research Results
Figure 1. Regression Models

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1. Descriptive Statistics

Variable	N	Min.	Max	Mean	Std. Deviation
FV	175	0.0597	1.7764	1.0417	0.3445
EMA	175	0,0000	0.0037	0.0007	0.0009
MP	175	-0.2493	0.4425	0.0304	0.0733

Source: Data processed by EViews 14, (2026)

According to the descriptive statistics above, firm value (Tobin' Q) has average value of 1,0417 with standard deviation of 0,3445 which refer to the data of firm value exhibits relatively low variability because its standard deviation is smaller than its mean. The maximum value of firm value is 1,7764 and the minimum value is 0,0597. EMA (Eco-Efficiency) has average value of 0,0007 with standard deviation of 0,0009 this condition refer to data of environmental managerial accounting are varied due to the average lower than the standard deviation, the maximum value is 0,0037, and the minimum value is 8.29×10^{-7} . Managerial performance (Return on Asset) has average value of 0,0304 with standard deviation of 0,0733. The standard deviation exceeds the mean, indicating substantial variability in managerial performance among the sampled firms. The maximum value of firm value is 0,4425, and the minimum value is -0,02493.

Classical Assumption Tests

Normality Test

Table 2. Normality Test

Test	Value
JB	4.4927
Prob.	0,1057

Source: Data processed by EViews 14, (2026)

Based on Jarque and Bera (1987) normality test aiming to find the residual model indicating normally distributed or not. This study uses the *jarque-bera* (JB) normality test to refer to Lagrange Multiplier with criteria of probability higher than the significant level (0,05) which means the normality test are accepted. Testing of 175 observation of period 2025 produce value of 4.4927 and value of main indicator of this test show result of 0,1057. The data of this study indicating distributed normally based on JB probability value is $0,10 \geq 0,05$. The result stated that the residuals in the regression model have met the normality assumption.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test

Test	Prob.
Glejser	0,8366
EMA	0,6016
MP	0,7031

Source: Data processed by EViews 14, (2026)

This test role to find whether the residuals show unequal variances across observations with respect to other observations in the regression model (Glejser, 1969). Criteria of this test allocate every independent variable in auxiliary regression are $\geq 0,05$ which state the test is success. Based on the test result the *Glejser* probability is 0,8366, express the test result meet the requirement followed by EMA 0,6016 and managerial performance 0,7031.

Multicollinearity Test

Table 4. Multicollinearity Test

Variable	Centered VIF
EMA	1,0362
MP	1,0362

Source: Data processed by EViews 14, (2026)

Multicollinearity test assessed by variance inflation factor (VIF) which indicate variance of regression coefficient enlarged depend on strong relationship with the independent variables that can reduce the reliability (Gómez *et al.*, 2020). The criteria of the test VIF centered value is < 10 to indicate the observation are meet. Table 4 above present the result of the test shows that VIF centered value is 1,0362 indicating the absences of multicollinearity among independent variable.

Hypothesis Test

Hypothesis testing is performed to determine the statistical significance of the relationships between the independent and dependent variables (Hanck *et al.*, 2024). In this study utilized coefficients of determination (R^2), F-test, and t-test as the model test. Coefficient of determination (R^2) measures the capability of independent variables in contributing to the dependent variable (Hanck *et al.*, 2024)

Coefficient of Determination (R^2)

Table 5. Coefficient of Determination (R^2)

Path	Indicator	Value
EMA on MP	R-squared	0,0349
	Adjusted R-squared	0,0293
EMA & MP on FV	R-squared	0,0446
	Adjusted R-squared	0,0335

Source: Data processed by EViews 14, (2026)

The R^2 value are representing the proportion of independent variable contributions and the rest are shown by others outside the model. criteria of the measurement refer the value of R^2 the closer number to 1 means independent have higher contribution on dependent. (Hanck *et al.*, 2024). According to Table 5 the adjusted R^2 value is 0,029 or 2,93%, this result means regression model explains approximately 2.9% of the variance in managerial performance after adjustment. The remaining 97.1% of the variance is associated with other factors outside the model. Based on EMA & MP on FV path adjusted R^2 value is 0,033 or 3,35%, this result means predictors in the model explain approximately 3.3% of the variance in Firm Value after adjustment. The remaining 96.7% of the variance is associated with other factors outside the model.

Model Fit Test (F-Test)

Table 6. Model Fit Test (F-Test)

Path	Indicator	Value
EMA on MP	F-statistic	6,3687
	Prob (F-statistic)	0,0132
EMA & MP on FV	F-statistic	4,0155
	Prob (F-statistic)	0,0198

Source: Data processed by EViews 14, (2026)

This test aims to determine the statistical significance and goodness fit of the regression model in explaining the dependent variable. Based on the $\text{Prob}(F\text{-statistic}) < 0,05$ means the regression is fit or feasible (Hanck *et al.*, 2024). According to table 6 value of $\text{Prob}(F\text{-statistics})$ shows in EMA on MP path is $0,0132 < 0,05$ which indicate the model in this study is fit or feasible. In other hand the value of $\text{Prob}(F\text{-statistic})$ shows in EMA and MP on FV path is $0,0198 < 0,05$ which also indicate the model in this study are fit or feasible. Based on test result, both of the model paths are indicated feasible.

t-Test

Table 7. t-Test

Path	Coefficient	t-Statistic	Prob.
EMA on MP	14,8005	2,2037	0,0132
MP on FV	0,7388	2,0735	0,0396
EMA on FV	-64,4517	-2,2855	0,0235

Source: Data processed by EViews 14, (2026)

t-test used to find their significant effects between independent variables on dependent variables. Tests are conducted by exams with the coefficient significant of regression on every independent. If the significance is $< 0,05$ means the effect of the independent variable is affecting significance (Hanck *et al.*, 2024). Based on table 7 result of the first path EMA on MP indicating significant of $0,0132 < 0,05$ and coefficient of 14,8005 stating this path to have significant effect with positive direction. The second path MP on FV significant result of $0,0395 < 0,05$ and coefficient of 0,7388 meaning this path have significant effect and positive direction. The last path of EMA on FV stated a significant result of 0,0235 and coefficient of -64,4517 which mean this path has a significant effect but with negative direction. The relatively large coefficient of -64.4517 should be interpreted cautiously because EMA is measured using an eco-efficiency ratio with a relatively small numerical scale. Therefore, the coefficient magnitude should not be interpreted as a proportionally large economic effect on Firm Value, but rather as the estimated change associated with a one-unit change in the EMA ratio.

Sobel Test

Table 8. Sobel Test

Path	Coefficient	Std. Error
EMA on MP	14,8005	5,9113
MP on FV	0,7388	0,3563

Source: Data processed by EViews 14, (2026)

$$Z = \frac{14.8005 \times 0.7388}{\sqrt{(0,7388)^2 \times (5,9113)^2 + (14,8005)^2 (0,3563)^2}} = \frac{10.9346094}{6.8470} \approx 1,60$$

Source: Research Results

Figure 2. Sobel Test

Sobel test used to examine the significance of indirect effect of an independent variable on a dependent variable with a mediating variable as path (Sobel, 1982). The significance of intervening effect is considered as Z-value with criteria of 1,96 at 5% significance level. Based on data above, the indirect effect of EMA on firm value through managerial performance is 10,9347. The value of sobel standard error is 6,8470 However, Sobel Test produced a Z-value of $1,60 < 1,96$. This condition means the indirect effect is not statistically significant.

Discussion

Based on the results of the testing conducted, the revealed all three variables are interconnected but the relationship among them does not follow the expected path. The discussion addressing the hypothesis is as follows:

Based on the research results presented the significance value is 0.0132 (< 0.05), with a coefficient of 14.8, indicating that H1, “EMA has significant and positive effect on managerial performance” is positively supported. EMA has a positive effect on managerial performance and provides structured information to assist the managerial performance. These finding is consistent with previous research as the availability of environmental cost information enhances managerial decision making and operational efficiency (Swalih *et al.*, 2024). EMA operates as a provider of environmental information, natural sources, investment, and strategy to maintain the reliable information to increase efficiency of cost management that affects the increase of company performance. EMA helps organizations to identify, measure, and cost management of environmental aspects to enhance the efficiency of natural resources used and waste reduction to aim eco efficient operations (Barani *et al.*, 2025). This suggests that greater implementation of EMA is associated with better managerial performance, as environmental cost information supports more effective operational decision-making

Based on the research result present, significance of the model is $0,0396 < 0,05$ with coefficient value of 0,7388 for managerial performance in which state H2, “Managerial performance has significant and positive effect on firm value” is supported. Return on assets is expected to reflect management effectiveness in generating profit from company assets as the higher ROA means better operational performance (Brigham & Houston, 2019). Managerial performance enables companies to utilize efficiency to control operational cost and maximize profitability. In line with past study the profitability aspect can present managerial performance ability in generating effective operational outcomes in utilizing their resources (Wahyuni *et al.*, 2024). This study found the positive relation of managerial improvement does effect on external market perception. The descriptive statistics indicate a variety of managerial performance among sampled firms. These companies differ in capabilities of asset efficiency.

Based on the research results, H3 hypothesized as “EMA has significant and positive effect on firm value” with significance model of $0,0235 < 0,05$ with coefficient value of -64,4517 for EMA. Stating the result does not support H3 because, although the relationship is statistically significant, the negative coefficient indicates that the observed relationship contradicts the predicted positive direction. The relatively large coefficient should be interpreted cautiously since the eco-efficiency ratio measurement is relatively small numerical scale. Implementation of EMA provides environmental related information to improve accountability and information used to support managerial decision making (Burritt *et al.*, 2021). The implementation of EMA is expected to improve resource efficiency while reducing the environmental impact, relationship of both performances reflected environmental performance and resource utilization measured on organizational objective (Schmidheiny, 1993; WBCSD, 2005). However, the benefits of the environmental aspect can’t be immediately reflected. The market valuation due to environmental cost is often perceived as additional operation cost rather than investment (Friske *et al.*, 2022). Greater implementation and disclosure of environmental management practices affect increasing environmental expenditures which may reduce short-term financial returns (Budiono, 2025). Consequently, although EMA contributes to improving environmental management and resource efficiency, its economic benefits may require a longer period before being fully reflected in firm value.

Novelty

This study contributes empirical evidence from companies listed on the Indonesia Stock Exchange using 2025 fiscal-year data and operationalizes Environmental Management Accounting through an eco-efficiency ratio based on environmental costs relative to sales. This

study further examines the pathway from EMA to Managerial Performance and subsequently to Firm Value. The findings extend previous inconsistent evidence by showing that EMA is positively associated with Managerial Performance but has a significant negative direct association with Firm Value, while Managerial Performance does not significantly mediate this relationship. These findings provide a deeper understanding of the relationship between environmental management practices, internal managerial performance, and market valuation

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Referring to the research results and discussion, this study presents three principal findings regarding the relationships between EMA, Managerial Performance, and Firm Value. EMA has a positive and significant association with Managerial Performance. Managerial Performance has a positive and significant association with Firm Value. EMA also has a significant negative association with Firm Value, which contradicts the hypothesized positive direction. The indirect effect through managerial performance was not statistically significant, suggesting that Managerial Performance is not able to mediate the relationship between EMA and firm value. Although EMA supports internal environmental management, the implementation of environmental management practices has not yet been fully reflected in market valuation during the observation period. From the practical this finding suggests companies should view scope of EMA as managerial assistance in both environmental responsibility and business performance.

Limitations

The limitation of the study based on the coefficient of determination indicates that the proposed model explained only a minor proportion of variation in firm value and limited of one year observation period. Meaning the firm value is not fully affected with many other factors outside the model of this study.

Recommendations

As the extent for future studies are recommended to use serial mediation model and panel-based longitudinal model by create the strongest possible scientific proof of a causal chain between EMA and firm value. In addition, future researchers may expand the measurement of EMA beyond eco-efficiency by other environmental dimensions such as energy efficiency, carbon emission, and environmental accounting indicators. Future research could consider different time lags or panel data to provide more evidences, as variations in inflation may cause the effects of environmental costs to differ across periods. Alternative theoretical perspective such as signaling theory to provide broader explanations regarding how environmental management practices influence investor perception in firm value.

Author Contributions

All authors made significant contributions to this study. These contributions included research conceptualization, development of the theoretical framework, data collection, data analysis, interpretation of results, manuscript preparation, and final approval of the manuscript for publication. All authors confirm that they have read and approved the final version of the article.

AI Disclosure Statement

While drafting this manuscript, the author used ChatGPT (OpenAI) for language editing, grammar checking, translation, and assist in improving the academic writing. The author has thoroughly reviewed and edited the content and takes full responsibility for the entire content of this publication.

REFERENSI

- Aldama, N. (2022). Pengaruh Struktur Modal, Profitabilitas dan Akuntansi Manajemen Lingkungan Terhadap Nilai Perusahaan. *Jurnal Ilmiah Manajemen, Ekonomi Dan Bisnis*, 1, 91–105. <https://doi.org/10.51903/jimeb.v1i3.412>
- Anggraini, F. D. (2019). Pengaruh Pengungkapan Perubahan Iklim, Kinerja Lingkungan, dan Corporate Social Responsibility (CSR) Terhadap Kinerja. *Chemical Reviews*, 8(5), 55. https://eprints.perbanas.ac.id/6307/1/ARTIKEL_ILMIAH.pdf
- Arif, N. P., & Handayani, N. (2024). Financial Performance Mediates the Effect of Sustainability Reporting on Firm Value. *Jurnal Akuntansi Bisnis*, 22(2), 188–219. <https://doi.org/https://doi.org/10.24167/jab.v22i2.12192>
- Barani, O., Ahmed, A. D., Joshi, M., & Asiaei, K. (2025). How environmental management accounting drives performance: a meta-analysis considering national EMA maturity. *Journal of Accounting Literature*, 47(5), 416–443. <https://doi.org/10.1108/JAL-01-2025-0033>
- Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of FINANCIAL MANAGEMENT* 15e. Cengage Learning. <https://unitimesofficial.wordpress.com/wp-content/uploads/2021/09/fundamentals-of-financial-management-15th-edition.pdf>
- Budiono, S. (2025). Pengaruh Akuntansi Manajemen Lingkungan, Inovasi Hijau, dan Biaya Lingkungan Terhadap Nilai Perusahaan. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, 14(2), 194–214. <https://journal.uny.ac.id/index.php/nominal/article/view/82949>
- Burritt, D. R. L., Schaltegger, S., & Christ, D. K. (2021). Putting the Focus on Environmental Management Accounting. IFAC International Federation of Accounting. <https://www.ifac.org/knowledge-gateway/discussion/putting-focus-environmental-management-accounting>
- Cao, R. Q., Zhou, S. Bin, & Gu, V. C. (2025). Exploring the relationship between managerial ability and ESG performance: a stochastic data envelopment analysis approach. *Annals of Operations Research*. <https://doi.org/10.1007/s10479-025-06569-w>
- Chung, K. H., & Pruitt, S. W. (1994). Simple of Tobin ' s Approximation q. 23(3), 70–74.
- Crippa, M., Guizzardi, D., Pagani, F., Banja, M., Muntean, M., Schaaf, E., Quadrelli, R., Martin, A. R., Taghavi-Moharamli, P., Köykkä, J., Grassi, G., Rossi, S., Melo, J., Oom, D., Branco, A., Suárez-Moreno, M., Sedano, F., San-Miguel, J., Manca, G., ... Pekar, F. (2025). JRC Science for Policy Report Fossil CO₂ & GHG emissions of all world countries (Number October). <https://doi.org/10.2760/5917997>
- Doruk, Ö. T. (2025). Climate change exposure and firm value: Evidence from low and middle income economies. *Finance Research Letters*, 85(July). <https://doi.org/10.1016/j.frl.2025.107977>
- Effendi, B. (2021). Pengaruh Penerapan Akuntansi Manajemen Lingkungan Terhadap Nilai Perusahaan di Indonesia. *Owner*, 5(1), 72–82. <https://doi.org/10.33395/owner.v5i1.331>
- Elhossade, S. S., Zoubi, A. A., & Zagoub, A. A. (2022). Barriers of environmental management accounting practices in developing country. *Risk Governance and Control: Financial Markets and Institutions*, 12(1), 8–20. <https://doi.org/10.22495/rgcv12i1p1>
- Freeman, R. E. (2009). *Strategic management*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139192675>
- Freeman, R. E., & McVea, J. (2001). *A Stakeholder Approach to Strategic Management*. (01). https://www.researchgate.net/publication/228320877_A_Stakeholder_Approach_to_Strategic_Management
- Friske, W., Hoelscher, S. A., & Nikolov, A. N. (2022). The impact of voluntary sustainability reporting on firm value: Insights from signaling theory. *Journal of the Academy of Marketing Science*, 51(2), 372–392. <https://doi.org/10.1007/s11747-022-00879-2>

- Gerged, A. M., Zahoor, N., & Cowton, C. J. (2024). Understanding the relationship between environmental management accounting and firm performance: The role of environmental innovation and stakeholder integration – Evidence from a developing country. *Management Accounting Research*, 62(February 2021), 100865. <https://doi.org/10.1016/j.mar.2023.100865>
- Giamos, D., Doucet, O., & Léger, P. (2024). Continuous Performance Feedback : Investigating the Effects of Feedback Content and Feedback Sources on Performance , Motivation to Improve Performance and Task Engagement. *Journal of Organizational Behavior Management*, 44(3), 194–213. <https://doi.org/10.1080/01608061.2023.2238029>
- Glejser, H. (1969). A New Test for Heteroskedasticity. *Journal of the American Statistical Association*, 64(325), 316–323. <https://doi.org/10.1080/01621459.1969.10500976>
- Gómez, R. S., García, C. G., & Pérez, J. G. (2020). Detection of near-multicollinearity through centered and noncentered regression. *Mathematics*, 8(6), 1–17. <https://doi.org/10.3390/math8060931>
- Hanck, C., Arnold, M., Gerber, A., & Schmelzer, M. (2024). Introduction to econometrics with R. 400. <https://www.spusikkim.edu.in/downloads/files/n687f3b546cccf.pdf>
- Hayashi, F. (1982). Tobin ' s Marginal q and Average q : A Neoclassical Interpretation. 50(1), 213–224. <https://doi.org/10.2307/1912538>
- Jarque, C. M., & Bera, A. K. (1987). A Test for Normality of Observations and Regression Residuals. *International Statistical Review*, ns-9(225), 507–507. <https://doi.org/https://doi.org/10.2307/1403192>
- Kementrian PPN/Bappenas. (2023). Laporan Kajian Lingkungan Hidup Strategis Rencana Pembangunan Jangka Panjang Nasional 2025-2045. <https://lcdi-indonesia.id/wp-content/uploads/2024/01/Laporan-KLHS-RPJPN-Tahun-2025-2045.pdf#:~:text=Pada tahun 2025%2C skor lingkungan untuk sektor kualitas lingkungan hidup mencapai&text=Berdasarkan data Kementerian Lingkungan Hidup dan Kehutanan>
- Kusuma, A. N. (2022). the Effect of Environmental Pollution on the Quality of Public Health. *Jurnal Ekonomi*, 11(02), 1059–1066. <http://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/485>
- Mukwarami, S., Nkwaira, C., & van der Poll, H. M. (2023). Environmental Management Accounting Implementation Challenges and Supply Chain Management in Emerging Economies' Manufacturing Sector. *Sustainability (Switzerland)* , 15(2). <https://doi.org/10.3390/su15021061>
- Neilson, M. (2025). We can no longer predict the seasons': why Indonesia's coal mindset has to change. *The Guardian*. <https://www.theguardian.com/environment/2025/nov/20/indonesia-coal-mindset-climate-crisis-cop30?utm>
- Okta, S. L. J., Suaidah, M., & Antasari, D. W. (2022). PengaruhPengungkapanAkuntansiManajemenLingkungan, BiayaLingkungan, DanKinerjaLingkunganTerhadapNilaiPerusahaanSelamaMasaPandemi. *Jurnal Cendekia Akuntansi*, 3(2), 112–127. https://www.google.com/goto?url=CAESiwEB6zswFduxrgsZkFKXmle3_q9qanEs470_q10B9f3Z2cCSxcT7e-WBfITOiC-EOGLalhchr0h0mFhCMkSwelhGGEvBpPT5uPbLqRm9RZb1ouwTbPWxWhubOHms5glXY54RNIxTxu6NhNOX1S41MsI0j0M2XJCx1aClbfDT1xgi83D5LRSrq19rZz3EsI
- Pinasti, D. R. (2024). Pengaruh Kebijakan Pajak Karbon Terhadap Industri Manufaktur. *Pajakku*. <https://artikel.pajakku.com/pengaruh-kebijakan-pajak-karbon-terhadap-industri-manufaktur>
- Putri, A. I., & Dewi, R. R. (2025). Pengaruh Akuntansi Manajemen Lingkungan, Kinerja Lingkungan dan Pengungkapan Lingkungan Terhadap Nilai Perusahaan. 14(09), 1278–1293. <https://ejournal4.unud.ac.id/index.php/eeb/article/download/587/232>

- Santoso, T. H. (2022). Menyoal Perubahan Iklim Melalui Implementasi Pajak Karbon. DJP. <https://www.pajak.go.id/id/artikel/menyoal-perubahan-iklim-melalui-implementasi-pajak-karbon>
- Sari, N., & Gantino, R. (2022). Peran Akuntansi Manajemen Lingkungan dalam Memediasi Inovasi Ramah Lingkungan pada Nilai Perusahaan Terhadap Perusahaan di BEI. *Owner*, 6(3), 1377–1389. <https://doi.org/10.33395/owner.v6i3.974>
- Schmidheiny, S. (1993). A Global Business Perspective on Development and the Environment by Stephan Schmidheiny (Vol. 4, Number 1). https://books.google.com.bn/books?id=BDYGdfiAGtoC&hl=ms&source=gbp_navlinks_s
- Sobel, E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. 13(1982), 290–312. <https://www.jstor.org/stable/270723>
- Swalih, M. M., Ram, R., & Tew, E. (2024). Environmental management accounting for strategic decision-making: A systematic literature review. *Business Strategy and the Environment*, 33(7), 6335–6367. <https://doi.org/10.1002/bse.3828>
- Tobin, J. (1969). A General Equilibrium Approach To Monetary Theory. 1(1). [https://mail.tku.edu.tw/niehcc/paper/T\(1969-jmcb\).pdf](https://mail.tku.edu.tw/niehcc/paper/T(1969-jmcb).pdf)
- UNESA, Un. N. S. (2025). Krisis Sampah Plastik dan Arah Kebijakan Lingkungan 2025 Dari Daratan hingga Lautan Nusantara. <https://agridigi.fkp.unesa.ac.id/post/krisis-sampah-plastik-dan-arrah-kebijakan-lingkungan-2025-dari-daratan-hingga-lautan-nusantara#:~:text=Sampah plastik masih menjadi salah,%2C meningkat 14%25 dibandingkan 2020>.
- Wahyuni, E. D., Leniwati, D., & Salsabila, N. (2024). Akuntansi Manajemen Lingkungan, Inovasi Hijau, dan Dampaknya Terhadap Kinerja Manajerial. *Jurnal Reviu Akuntansi Dan Keuangan*, 14(2), 429–441. <https://doi.org/10.22219/jrak.v14i2.32141>
- WBCSD, W.-B.-C.-S.-D. (2005). Creating More Value with Less Impact. <https://docs.wbcsd.org/2006/08/EfficiencyLearningModule.pdf>