Journal of Economics, Entrepreneurship, Management Business and Accounting, 2026, 4(3),53-66.
https://doi.org/10.61255/jeemba.v4i3.914

Capital Expenditure and Environmental Disclosure: Profitability's Role in Driving Financial Performance

Yohanna Thresia Nainggolan*, Andhika Januardyh , Truly Wulandari, Ferica Christinawati Putri, Rizky Agusriyanti Irna

Department of Economics, Faculty of Economics and Business, Universitas Borneo Tarakan, Tarakan, 77123, Indonesia

ABSTRACT

Purpose – This study investigates financial performance determinants, focusing on capital expenditure (capex) and environmental management accounting practices in cost allocation and disclosure, with profitability acting as a mediating variable.
Design/methodology/approach – A quantitative approach was applied using secondary data from 30 property and real estate companies listed on the Indonesia Stock Exchange (IDX) during 2021–2023. Data analysis employed the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method to assess both direct and mediating relationships.
Finding/Results – The results reveal that capex and environmental disclosure do not significantly affect financial performance. Moreover, profitability fails to mediate the relationship between capex, environmental disclosure, and financial performance. These findings highlight that investments in capital and environmental initiatives may require a longer-term horizon before influencing profitability and financial performance.
Originality/Value – This research introduces a novel perspective by integrating capex and environmental disclosure into one analytical framework and testing profitability as a mediator in the Indonesian property sector context, which remains underexplored.

ARTICLE INFO

Keywords:
Resource Based View, Financial, Capex, Environmental Accounting, Sustainable

Article Information:
Received: 04/04/2026
Revise: 17/04/2026
Accepted: 27/04/2026

ISSN:
2985-3168 (Online)
2985-3222 (Print)

*Corresponding Author at: yohannathresia@borneo.ac.id
Department of Economics, Faculty of Economics and Business, Universitas Borneo Tarakan, Jalan Amal Lama No.1, Tarakan, 77123, Indonesia
E-mail address: yohannathresia@borneo.ac.id (Yohanna Thresia Nainggolan)

1. Introduction

The decision to allocate capital expenditure reflects a strategic deployment of corporate resources intended to achieve business objectives, enhance firm value, and ultimately maximize shareholder wealth. Capital Expenditure (Capex) is a substantial component with expectations of generating future returns that improve financial performance and strengthen corporate value (Jack & Ngozi, 2024). Achieving sustainable corporate value requires continuous investments to maintain competitiveness in the future. Through the disclosure of environmental performance management, stakeholders increasingly demand accountability regarding the company's responsibility for environmental impacts (Andrefe & Kurniawati, 2024).

Sustainability has become a fundamental principle of modern business, characterized by responsibility, innovation, resilience, and the creation of positive impacts on society and the environment (Nafis, 2024). In line with this, Monge, Jordá, and Infante (2025) emphasize that Capex in non-manufacturing companies correlates strongly with short-term market movements, serving as a forward-looking indicator and signaling growth and innovation to market participants. Conversely, in the manufacturing sector, large-scale capital investments face inherent challenges in translating into immediate market value. Capex can, however, safeguard companies from decline and support sustainable growth stages (Juniarti & Toly, 2021).

To strengthen these practices, sustainability disclosures have become increasingly integrated into corporate reporting, offering deeper insights into risk prioritization, opportunities, and long-term perspectives. The Indonesian Institute of Accountants (2024) has issued the Sustainability Disclosure Standards Map as a strategic guideline for preparing quality sustainability reports that align with national competitiveness. The theoretical foundation of this discussion lies in the Resource-Based View (RBV), which asserts that a firm's resources, including capital investment, represent strategic options to achieve sustainable competitive advantage (Wernerfelt, 1984). Environmental management practices serve as distinctive and valuable resources that complement financial growth objectives.

High-performing companies are not only active in environmental, social, and governance initiatives but also integrate these efforts into their corporate strategies alongside growth and profitability targets (Doherty et al., 2023). Financial performance, in this sense, functions as a key parameter of success, measured through operational efficiency, liquidity, solvency, and profitability (Pardede et al., 2025).

From a methodological perspective, modern approaches such as SmartPLS are increasingly utilized in predictive and exploratory models to capture the complexity of relationships among Capex, environmental accounting, and profitability. These models allow researchers to incorporate multiple variables, generate robust interpretations, and iteratively refine frameworks (Sarker et al., 2024). Thus, the combination of Capex and Environmental Management Accounting (EMA) in relation to profitability provides a comprehensive and timely avenue for empirical investigation.

Previous research, however, has produced mixed results. Several studies confirm the positive role of EMA in enhancing financial and environmental outcomes by integrating sustainability into strategic decisions (Deb et al., 2023; Mondal et al., 2024; Rahman et al., 2024). Others demonstrate that environmental disclosure and green innovation improve economic performance through efficiency and long-term value creation (Cahyaningsih & Ihroma, 2024; Oktadifa & Widajantie, 2024). Yet, contrasting evidence indicates that environmental costs and

green accounting practices do not significantly affect profitability, although CSR disclosure yields operational benefits (Okterianda et al., 2025; Widiyanti et al., 2024).

Similarly, findings on Capex remain inconclusive. While evidence from the energy sector suggests that Capex significantly improves financial indicators, returns on profitability are less immediate (Silaban et al., 2024). Broader analyses in real estate and property industries reveal that Capex and firm growth positively influence firm value and profitability, although profitability often fails to mediate these relationships (Adelin et al., 2023). Meanwhile, long-term studies highlight Capex as a "game changer" in sustaining competitiveness, though with limited short-term impact (Kwistiasnus & Juniarti, 2022).

Moreover, profitability itself remains a central determinant of financial performance, particularly when measured by return on assets (ROA) (A. Haryono et al., 2025). Taken together, these findings suggest that while Capex and EMA are critical strategic tools, their effectiveness in enhancing financial performance is context-dependent and profitability does not always serve as an effective mediator.

2. Literature Review & Hypothesis Development

This study is based on the Resource-Based View (RBV), which explains that firm resources and capabilities are key to achieving competitive advantage (Wernerfelt, 1984). Capital expenditure (Capex) reflects strategic resource allocation aimed at increasing firm value and supporting long-term performance (Jack & Ngozi, 2024; Juniarti & Toly, 2021). However, in capital-intensive sectors, the benefits of Capex are often not immediately realized due to long investment cycles (Kwistiasnus & Juniarti, 2022).

Environmental Management Accounting (EMA) integrates environmental cost management and sustainability practices into corporate decision-making. EMA is expected to enhance transparency and efficiency, although its impact on profitability is often limited in the short term due to early-stage implementation (Burritt et al., 2023).

Financial performance reflects the firm's ability to achieve its financial objectives, while profitability indicates the firm's capability to generate earnings and is often used as a mediating variable (Pardede et al., 2025). However, empirical findings suggest that profitability does not always effectively mediate the relationship between strategic investment and financial performance.

Based on these arguments, the hypotheses are formulated as follows:

H1: The effect of capital expenditure (Capex) on profitability

Capital Expenditure (Capex) represents a strategic investment in long-term assets that supports company growth and operational capacity. Capex reflects future-oriented decision-making in resource allocation and is expected to enhance firm value and profitability. However, due to its long-term nature, Capex often does not directly generate short-term profitability, especially in capital-intensive industries (Kwistiasnus & Juniarti, 2022; Siagian et al., 2025).

H2: The effect of environmental management accounting (EMA) on profitability

Environmental Management Accounting (EMA) is used to identify, measure, and manage environmental costs in supporting sustainable business practices. EMA is expected to improve operational efficiency and profitability through better resource management and environmental responsibility. However, empirical findings show inconsistent results depending on the level of implementation and industry context (Oktadifa & Widajantie, 2024; Okterianda et al., 2025; Widjaya & Nursiam, 2024).

H3: The effect of profitability on financial performance
Profitability reflects the company's ability to generate earnings and is a key indicator of financial performance. Higher profitability indicates better efficiency in utilizing company resources, which can enhance firm value and investor confidence. Previous studies show that profitability has a significant influence on financial performance (Alriadi & Setyabudi, 2024; A. Haryono et al., 2025; Nurhayati et al., 2025).
H4: The mediating role of profitability between Capex and financial performance
Capital Expenditure is expected to improve financial performance through increased profitability as a result of effective asset utilization. However, the success of Capex depends on how well the investment is managed and translated into profit. Therefore, profitability plays a mediating role in linking Capex to financial performance (Silaban et al., 2024).
H5: The mediating role of profitability between EMA and financial performance
EMA is expected to influence financial performance through profitability by improving efficiency and enhancing corporate reputation. Environmental disclosure and sustainability practices can attract investors and increase firm value. Empirical studies indicate that profitability can mediate the relationship between environmental practices and financial performance (Deb et al., 2023).

3. Methodology

This study employed a quantitative causal-comparative design to examine the relationship among capital expenditure (Capex), environmental management accounting (EMA), profitability, and financial performance, using secondary data derived from financial statements, annual reports, and sustainability reports of property and real estate companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Judgment sampling, or purposive sampling, was applied to determine the research samples, with the criteria including: (1) companies from the property and real estate sector listed on the IDX during the observation period; (2) companies that complied with sustainability disclosure standards through the publication of either integrated or stand-alone annual or sustainability reports; and (3) companies that disclosed environmental management costs in accordance with the Financial Services Authority Circular Letter (SEOJK) No. 16/SEOJK.04/2021 concerning the format and content of annual reports for issuers or public companies. The description of the company selection criteria is attached in Table 1.

Table 1. Sample Selection

No.	Criteria	Total
1.	Real Estate and Property Sector Companies Listed on the IDX	94
2..	Companies without disclosure of sustainability values reflected in compliance publish annual reports or sustainability reports, either integrated or separate, for the 2021-2023 period.	(29)
3.	Environmental management costs are not disclosed based on the format of the issuer's annual report, as per the Financial Services Authority Circular Letter (SEOJK) Number 16/SEOJK.04/2021.	(35)
4.	Number of selected sample companies	30
5.	Observation Period (2021-2023)	3
6.	Total Sample (Selected x Years)	90

Source: (Processed data, 2025)

To analyze the data, Structural Equation Modeling with Partial Least Squares (SEM-PLS) was employed using SmartPLS software, which enables the testing of complex relationships, mediation effects of profitability, and the combined influence of Capex and EMA on financial performance. The analysis consisted of two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model).

The outer model assessed the reliability and validity of the constructs by testing convergent and discriminant validity. Convergent validity was evaluated through the Average Variance Extracted (AVE), with acceptable ≥0.50 for AVE (Hair et al., 2017). Discriminant validity was examined using cross-loadings, ensuring that each construct was distinct and not excessively correlated with others. Reliability was measured through Cronbach's Alpha and Composite Reliability, with CR expected to exceed CA to indicate internal consistency. Model fit was tested using the Standardized Root Mean Square Residual (SRMR), with values <0.10 indicating acceptable model fit.

The inner model evaluated the structural relationships among latent variables. Predictive accuracy was assessed using R^2 values, where ≥0.75 indicates strong, ≥0.50 moderate, and ≥0.25 weak explanatory power (Chin, 1998). Effect sizes (f^2) were calculated to measure the contribution of each exogenous variable, with thresholds of 0.02 (small), 0.15 (medium), and 0.35 (large) (Cohen, 1988). Path coefficients were estimated to determine the strength and direction of causal relationships, and significance was tested through bootstrapping, with T-statistics ≥1.96 or p-values ≤0.05 considered significant at the 5% level.

The variables in this study consist of independent, dependent, and mediating constructs. The independent variables are Capital Expenditure (Capex) and Environmental Management Accounting (EMA). Capex refers to company expenditures for acquiring or maintaining long-term tangible assets and was measured as the ratio of capital expenditure to total assets (Capex/TA), reflecting the firm's capital allocation strategy. EMA is defined as the integration of monetary and non-monetary measures related to environmental management within internal accounting practices, particularly disclosures of environmental management costs and sustainability-related reporting. The dependent variable is financial performance, which represents the extent to which a company achieves its financial objectives. This was assessed through accounting-based indicators such as profitability, solvency, and operational efficiency, serving as a proxy for shareholder value creation and alignment with corporate governance practices. Finally, profitability, measured primarily by Return on Assets (ROA), was incorporated as a mediating variable to capture the firm's ability to generate earnings and to examine its role in bridging the effects of Capex and EMA on financial performance. The detailed definitions, measurement indicators, and references for each variable are presented in Table 2.

Table 2. Variable Definitions and Measurement Indicators

Variable	Indicators	Scale	Reference
Independent	Capital Expenditure: CapX1 = Total Capital Expenditure (PP&E (Current Year) – PP&E (Previous Year) (from the Balance Sheet) + Depreciation) / Total Assets	Ratio	(Moussa & Elmarzouky, 2023; Ullah et al., 2021; Vipond, 2023)

	CapX2 = Total Fixed Assets/Assets	Ratio	(Desvita & Rahma, 2025; Widiyati, 2023)
	Environmental Management Accounting: EMa1 = Ln (Environmental Costs)	Ratio	(Nababan & Hasyir, 2019)
	EMa2 = $\frac{\Sigma Number\ of\ fulfilled\ EMA\ indicators}{Total\ Indicators}$	Ratio	(Kong et al., 2022)
Dependent	Financial Performance: KinJ1 (Tobins'Q) = $\frac{Market\ Value+Total\ Debt}{Total\ Asset}$	Ratio	(Widiatami et al., 2024)
	KinJ2 (MVA) = $\frac{Number\ of\ Outstanding\ Shares\ x\ Share\ Price}{(Total\ Debt+Equity\ )-Short-term\ Debt}$	Ratio	(Ikatan Akuntan Indonesia, 2015)
	KinJ3 (Market to Book Value) = $\frac{Market\ Capitalization}{Book\ Value\ Of\ Equity}$	Ratio	(Corporate Finance Institute, 2024)
Intervening	PRof1 (ROA) = $\frac{Net\ Income}{Total\ Assets}$	Ratio	(Juniartin & Aji, 2025; Nurhayati et al., 2025; Sudana, 2015)
	PRof2 (ROE) = $\frac{Net\ Income}{Total\ Equity}$	Ratio	(Migliaccio & Palma, 2024; Sudana, 2015)
	PRof3 (ROI) = $\frac{Net\ Income+Capital\ Expenditure}{Total\ Assets}$	Ratio	(Silaban et al., 2024; Sudana, 2015)

Notes: CapX = Capital Expenditure, EMa = Environment Management Accounting, KinJ = Financial Performance, dan PRof = Profitability
Source: (Processed data, 2025)

4. Result and Discussion

Capex and EMA as Today's Strategic Approaches

Findings highlight that Capital Expenditure (Capex) and Environmental Management Accounting (EMA) hold substantial promise as strategic instruments for achieving sustainable corporate growth. Although the direct influence of Capex on financial performance is relatively weak, its small-to-moderate effect on profitability suggests that capital investment can gradually enhance firms' productive capacity and operational efficiency. Over time, effective Capex management may contribute to improving long-term firm value and strengthening competitiveness in the property and real estate sector. Similarly, the modest but positive effect of EMA on financial performance indicates that companies are beginning to integrate sustainability and environmental responsibility into their financial decision-making processes. This trend demonstrates increasing awareness among Indonesian firms toward

aligning investment and reporting practices with global sustainability standards, as guided by the Financial Services Authority (SEOJK) and the Sustainability Disclosure Standards Map issued by the Indonesian Institute of Accountants.

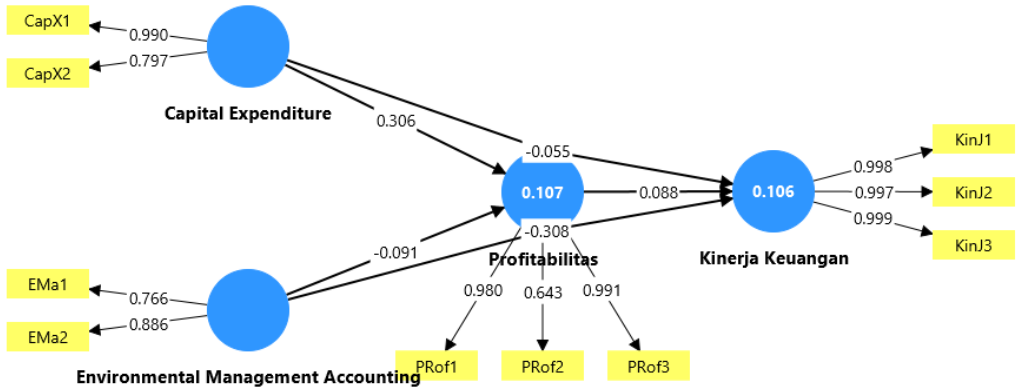
However, the study also reveals several problems and challenges that hinder the full realization of these potentials. The low R^2 and f^2 values indicate that both Capex and EMA contribute only marginally to explaining variations in profitability and financial performance. This suggests that sustainability-oriented investments have yet to translate into substantial financial returns, likely due to delayed capital recovery periods, limited integration of environmental metrics in strategic decision-making, and weak institutional enforcement of disclosure standards. Moreover, profitability fails to function effectively as a mediating variable, implying that the financial benefits of environmental initiatives are not yet internalized in corporate operating models. Sectoral characteristics—such as long project cycles, high capital intensity, and market volatility—further reduce the short-term visibility of returns from sustainability-oriented expenditures.

Overall, while the implementation of Capex and EMA demonstrates emerging potential for strengthening financial sustainability, Indonesian property and real estate firms still face significant obstacles in converting environmental and investment commitments into tangible financial outcomes. Strengthening managerial capabilities, refining sustainability measurement frameworks, and extending investment horizons are necessary to optimize both financial and environmental performance outcomes.

Analysis of SEM-PLS Data

The data analysis followed the established research procedures, consisting of two main stages: the evaluation of the outer model (measurement model) and the inner model (structural model). Each stage was analyzed using SmartPLS version 4 to test the validity, reliability, and significance of the causal relationships among the variables.

Figure 1. Latent Variable Testing Model Design



Source: (Processed Data SmartPLS 4, 2025)

Convergent validity assesses the degree to which a set of indicators correlates with their corresponding construct. The primary assessment criterion is the outer loading factor of each indicator. According to (Chin, 1998), loading values between 0.60 and 0.70 are acceptable, while (S. Haryono, 2016) suggests that loadings of ≥ 0.50 may still be retained, and those ≤ 0.40 should be eliminated. As presented in Tabel 3, all indicators associated with Capital Expenditure (Capex), Environmental Management Accounting (EMA), Profitability, and

Financial Performance exhibit loading values above 0.600, confirming that the indicators are strongly correlated with their constructs and establish good convergent validity.

Table 3. Convergent Validity (AVE)

Variabel	Average Variance Extracted (AVE)	Desc
Capex	0,808	Valid
EMA	0,686	Valid
Profitabilitas	0,996	Valid
Kinerja Keuangan	0,785	Valid

Source: (Processed Data SmartPLS 4, 2025)

Discriminant validity ensures that each construct is distinct and not highly correlated with other constructs. This was evaluated using the Fornell-Larcker criterion, which compares the square root of the Average Variance Extracted (√AVE) for each construct with its correlations with other constructs. As shown in discriminant validity was confirmed for all variables. For every construct, the √AVE exceeds its correlations with other variables, indicating sufficient distinctiveness: Capex (√AVE = 0.8989): correlations with other variables (–0.094, 0.002, 0.315), EMA (√AVE = 0.8283): correlations with other variables (–0.094, –0.314, –0.120), Financial Performance (√AVE = 0.9980): correlations with other variables (0.002, –0.314, 0.108), Profitability (√AVE = 0.8860): correlations with other variables (0.315, –0.120, 0.108). These results confirm that all constructs meet the discriminant validity requirements, ensuring the model effectively distinguishes among the latent variables.

Table 4. Hypothesis Test Result

Variable Relationship	Coefficient	T-Statistic	P-Value
Capex → Financial Performance	-0,055	0,928	0,353
Capex → Profitability	0,306	1,838	0,066
EMA → Financial Performance	-0,308	2,303	0,021
EMA → Profitability	-0,091	0,577	0,564
Profitability → Financian Performance	0,088	0,455	0,649
Capex → Profitability → Financial Performance	0,027	0,429	0,668
EMA → Profitability → Financial Performance	-0,008	0,166	0,868
R^2 (Financial Performance) = 0,106			
R^2 (Profitability) = 0,107			

Notes: A path is considered significant when T-statistic ≥ 1.96 at a 5% level (two-tailed) and P-value ≤ 0.05

Source: (Processed Data SmartPLS 4, 2025)

Then, hypothesis testing applies bootstrapping procedures to evaluate the direct and indirect relationships between Capital Expenditure (Capex), Environmental Management Accounting (EMA), Profitability, and Financial Performance. Based on the results of the Structural Equation Model, it was found.

$$\text{Profitability} = \beta_0 + 0.306(\text{Capex}) - 0.091(\text{EMA}) + \varepsilon_1 \text{ and } \text{Financial Performance} = \beta_0 - 0.055(\text{Capex}) - 0.308(\text{EMA}) + 0.088(\text{Profitability}) + 0.027(\text{Capex} \times \text{Profitability}) - 0.008(\text{EMA} \times \text{Profitability}) + \varepsilon_2$$

After testing and interpreting the data, analyzes the causal relationships between Capital Expenditure (Capex) and Environmental Management Accounting (EMA) toward Financial Performance, with Profitability acting as the mediating variable. Integrating the empirical

findings with the Resource-Based View (RBV) as the grand theory and Agency Theory as the supporting framework.

The Effect of Capital Expenditure (Capex) on Profitability

The results indicate that Capital Expenditure (Capex) has no significant effect on Profitability (β = 0.306; T = 1.838; P = 0.066). Although the T-statistic approaches the threshold of 1.96, it does not meet the 5% significance criterion, leading to the rejection of the first hypothesis (H1). This finding is consistent with (Siagian et al., 2025) and (Adelin et al., 2023), who also found an insignificant relationship between Capex and profitability, but contrasts with (Inrawan et al., 2022), who reported a positive effect.

From the RBV perspective, Capex represents a strategic investment in valuable and rare resources, such as land and large-scale property development. However, these resources must be transformed into productive capabilities before generating competitive advantage. During the 2021–2023 observation period, many firms—such as SMRA and MKPI—allocated Capex toward long-term investments like land banking and property expansion. These assets had yet to produce immediate financial returns, explaining the lack of short-term profitability effects.

Meanwhile, under Agency Theory, excessive capital spending may reflect empire-building behavior, where managers pursue prestige and firm expansion rather than maximizing shareholder value. Such misalignment between managerial actions and shareholder objectives leads to inefficiencies in capital allocation, thereby weakening the relationship between Capex and profitability.

The Effect of Environmental Management Accounting (EMA) on Profitability

The analysis reveals that Environmental Management Accounting (EMA) does not significantly affect Profitability (β = -0.091; T = 0.577; P = 0.564), resulting in the rejection of H2. This outcome aligns with (Okterianda et al., 2025) but contradicts (Widjaya & Nursiam, 2024) and (Oktadifa & Widajantie, 2024), who reported a positive relationship.

According to the RBV, environmental management practices are a form of emerging capability that requires substantial initial investment before delivering measurable financial returns. During the 2021–2023 period, most property companies were still at the early implementation stage of EMA—focusing on environmental certifications, sustainability reporting, and waste management systems. These costs, being immediate expenses, have not yet transformed into sources of competitive advantage.

Examples include BAPA and BCIP, which recorded environmental expenditures mainly for waste and site maintenance without strategic follow-up, and BEST, which allocated environmental capital but failed to realize corresponding profitability gains. From an Agency Theory lens, some firms may engage in greenwashing—disclosing environmental actions primarily for legitimacy purposes rather than operational effectiveness—thereby increasing costs without improving financial results. Hence, while EMA adoption aligns with global sustainability objectives, the short-term financial implications remain limited as the capability has not matured into a value-creating strategic asset.

The Effect of Profitability on Financial Performance

The third hypothesis (H3) testing the relationship between Profitability and Financial Performance was also rejected (β = 0.088; T = 0.455; P = 0.649). This finding diverges from studies by (A. Haryono et al., 2025), (Nurhayati et al., 2025), and (Alriadi & Setyabudi, 2024), which found significant positive associations. This inconsistency stems primarily from the difference in performance measurement. Previous studies predominantly relied on

accounting-based metrics such as Return on Assets (ROA), while this study uses a market-based measure (Tobin's Q) that reflects investor perception of firm value.

From the RBV viewpoint, firm value in the property sector is heavily influenced by the potential of strategic resources—such as extensive land banks and development prospects—rather than immediate profit outcomes. Simultaneously, Agency Theory explains that information asymmetry may cause managerial focus on accounting profits, while investors emphasize future growth and resource strength. Consequently, profitability does not necessarily translate into improved market-based financial performance.

The Mediating Role of Profitability between Capex and Financial Performance

The mediating effect of Profitability on the relationship between Capex and Financial Performance was found to be insignificant (P = 0.668 > 0.05), leading to the rejection of H4. Since both direct effects—Capex → Profitability and Profitability → Financial Performance—are statistically insignificant, Profitability cannot serve as an effective mediating variable. This suggests that while firms invest heavily in long-term strategic assets, these investments have not yet translated into short-term profit generation or enhanced financial outcomes.

For example, firms such as ASRI, BAPA, BCIP, CTRA, and BSDE increased fixed assets and land holdings during the study period but did not achieve commensurate profitability. From an RBV perspective, these expenditures contribute to resource accumulation but have not yet evolved into value-generating capabilities. Under Agency Theory, managerial priorities may lean toward long-term asset expansion rather than immediate profitability, diluting the mediating effect of Profitability on firm value.

The Mediating Role of Profitability between EMA and Financial Performance

The final hypothesis (H5), which posits that Profitability mediates the relationship between EMA and Financial Performance, was rejected (P = 0.868 > 0.05). This finding contrasts with (Deb et al., 2023) and (Mukti & Priyawan, 2025), who reported positive indirect effects through profitability. Both mediation pathways failed in this study. The first path, EMA → Profitability, was insignificant (P = 0.564), indicating that environmental initiatives and sustainability expenditures did not enhance profitability. The second path, Profitability → Financial Performance, was also insignificant (P = 0.649), implying that even when profits were earned, they did not improve market-based performance.

Examples such as GMTD, BIPP, and DUTI show that environmental spending was confined to compliance and operational maintenance rather than strategic transformation. In line with RBV, the "green" capabilities of these firms remain underdeveloped and have not become sources of competitive advantage. From an Agency Theory standpoint, investors may not yet perceive environmental commitments as financially material—especially in the absence of mandatory sustainability reporting regulations—leading to weak market responses

5. Conclusion and Suggestion

This study examines the causal relationship between Capital Expenditure (Capex), Environmental Management Accounting (EMA), Profitability, and Financial Performance in property and real estate companies in Indonesia from 2021 to 2023. The results show that neither Capital Expenditure nor EMA has a significant direct or indirect effect on Financial Performance, and Profitability does not mediate the relationship. While Capital Expenditure contributes to resource accumulation and strategic expansion, its long-term nature delays financial returns. Similarly, EMA practices—while aligned with sustainability principles—are still in the investment and compliance phase, not yet generating measurable profitability

impacts. Profitability itself was found not to significantly drive Financial Performance, indicating that investors in this sector are more focused on long-term asset and growth potential rather than short-term accounting profits.

Compared to previous research, this study offers a contrasting perspective. Although some studies report a positive relationship between Capital Expenditure, EMA, Profitability, and firm performance, this study highlights that the relationship may not hold true in capital-intensive sectors undergoing post-pandemic recovery. The novelty of this research lies in the integration of Resource-Based View (RBV) and Agency Theory to explain why strategic investments and environmental initiatives have not matured into performance-enhancing capabilities. Empirically, this research highlights the temporal gap between resource allocation and financial realization—suggesting that value creation from sustainability and capital efficiency is still an evolving process. Thus, this study contributes to the understanding that in emerging markets such as Indonesia, sustainable financial performance depends not only on resource investment, but also on the company's ability to transform those resources into competitive capabilities that balance profitability and stakeholder alignment.

6. Limitations and Future Research

This study is limited by its relatively short observation period (2021–2023), which may not fully capture the long-term effects of capital expenditure and environmental management accounting on financial performance. In addition, the sample is restricted to property and real estate companies, which may limit the generalizability of the findings to other sectors. Furthermore, the study employs a limited number of variables, which may not comprehensively explain variations in financial performance.

Therefore, future research is recommended to extend the observation period in order to better capture long-term impacts. It is also suggested to include a broader range of sectors to enhance generalizability. Moreover, incorporating additional variables such as corporate governance, firm size, and market-related factors may provide a more comprehensive understanding of financial performance. Future studies may also consider applying alternative analytical methods to improve the robustness and reliability of the findings.

Reference

Adelin, N., Rinofah, R., & Kusumawardhani, R. (2023). Pengaruh Struktur Modal, Pertumbuhan Perusahaan dan Capital Expenditure terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening pada perusahaan yang terdaftar di BEI. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, *5*(9), 2402–2419.

Alriadi, P. W., & Setyabudi, T. G. (2024). Pengaruh Profitabilitas, Pertumbuhan Perusahaan dan Ukuran Perusahaan Terhadap Kinerja Keuangan. *Jurnal Ilmu Dan Riset Akuntansi*, *13*(2), 1–20.

Andrefe, A. C., & Kurniawati, E. P. (2024). Pengaruh Kinerja Lingkungan Terhadap Kinerja Keuangan dengan Reputasi Perusahaan Sebagai Pemoderasi. *Among Makarti*, *17*(1), 1–16.

Burritt, R. L., Schaltegger, S., & Christ, K. (2023). Environmental Management Accounting - Developments Over the Last 20 years from a Framework Perspective. *Australian Accounting Review*, 336–351.

Cahyaningsih, & Ihroma, F. U. (2024). Environmental Accounting Disclosure, Green Process Innovation, and Environmental Management Accounting Improving Economic Performance. *AFRE Accounting and Financial Review*, *7*(2), 107–116.

Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equating Modeling. In G. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295–336). Lawrence Erlbaum Associates.

Corporate Finance Institute. (2024). *Market to Book Ratio*. https://corporatefinanceinstitute-com.translate.goog/resources/valuation/market-to-book-ratio-price-book/?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=tc

Deb, B. C., Rahman, M. M., & Rahman, M. S. (2023). The Impact of Environmental Management Accounting on Environmental and Financial Performance: Empirical Evidence from Bangladesh. *Journal of Accounting & Organizational Change*, *19*(3), 430–446.

Desvita, L., & Rahma, Y. (2025). The Effect of Capital Expenditure, Environmental Performance, Environmental Management System, Institutional Ownership and Independent Board of Commissioners on Carbon Emission Disclosure. *Jurnal Akuntansi Bisnis*, *18*(1), 126–145.

Doherty, R., Kampel, C., Koivuniemi, A., Pérez, L., & Rehm, W. (2023). *The Triple Play: Growth, Profit, and Sustainability*. https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-triple-play-growth-profit-and-sustainability

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

Haryono, A., Julius, J., Abimanyu, S., Gouw, C., Sutanto, K. A., & Bwarleling, T. H. (2025). Pengaruh Profitabilitas, Leverage dan Sustainability Report terhadap Kinerja Keuangan Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia. *INNOVATIVE: Journal Of Social Science Research*, *5*(3), 5689–5707.

Haryono, S. (2016). *Metode SEM untuk Penelitian Manajemen: AMOS, LISREL & PLS*. Intermedia Personalia Utama.

Ikatan Akuntan Indonesia. (2015). Modul Chartered Accountant. In *Manajemen Keuangan Lanjutan* (Ikatan Aku, pp. 1–132).

Inrawan, A., Lie, D., Nainggolan, L. E., Silitonga, H. P., & Sudirman, A. (2022). Pengaruh Inflasi, Suku Bunga, Kurs, Pertumbuhan Ekonomi, Capital Expenditure, dan Leverage terhadap Profitabilitas (Studi Pada Perusahaan Indeks LQ 45 Yang Terdaftar di Bursa Efek Indonesia). *Seminar Nasional Hasil Riset Dan Pengabdian Universitas Sahid Surakarta*, 136–155.

Jack, O. T.-O., & Ngozi, A. E. (2024). Capital Expenditure Decisions and Market Value of Quoted Food and Beverages Firms in Nigeria. *Finance & Accouting Research Journal*, *6*(4), 556–566.

Juniarti, & Toly, A. A. (2021). Does the Market React to the Reputation of Capital Expenditure? *Asian Economic and Financial Review*, *11*(10), 781–793.

Juniartin, I. T., & Aji, S. S. B. (2025). The Impact of Corporate Social Responsibility Reporting and Environmental Expenditures on Financial Performance. *Jurnal Akuntansi Bisnis*, *18*(1), 90–109.

Kong, Y., Javed, F., Sultan, J., Hanif, M. S., & Khan, N. (2022). EMA Implementation and Corporate Environmental Firm Performance: A Comparison of Institutional Pressures and Environmental Uncertainty. *Sustainability*, 1–25.

Kwistiasnus, H., & Juniarti. (2022). The Long-Term Performance of Capital Expenditure from a Fundamental Perspective: Evidence from Indonesia. *Asian Economic and Financial Review*, *12*(7), 1027–1039.

Migliaccio, G., & Palma, A. De. (2024). Profitability and Financial Performance of Italian Real

Estate Companies: Quantitative Profile. *International Journal of Productivity and Performance Management*, 122–160.

Mondal, M. S. A., Akter, N., & Ibrahim, A. M. (2024). Nexus of Environemntal Accounting, Sustainable Production and Financial Performance: An Integrated Analysis Using PLS-SEM, fsQCA and NCA. *Environmental CHallenges*, *7*, 1–13.

Monge, M., Jordá, J. A., & Infante, J. (2025). Capital Expenditure Decisions in the Private Sector and Their Impact on Uk Stock Market Performance A Fractional Integration Analysis. *Journal of Posthumanism*, *5*(1), 1338–1353.

Moussa, A. S., & Elmarzouky, M. (2023). Does Capital Expenditure Matter for ESG Disclosure? A UK Perspective. *Journal of Risk and Financial Management*, 1–19.

Mukti, C. F. C., & Priyawan, S. (2025). Pengaruh Green Process Innovation, Green Product Innovation dan Environmental Performance Terhadap Kinerja Keuangan Dengan Akuntansi Manajemen Lingkungan sebagai Variabel Intervening pada Perusahaan Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek. *Jurnal Riset Akuntansi Dan Keuangan (JRAK)*, *11*(1), 37–48.

Nababan, L. M., & Hasyir, D. A. (2019). Pengaruh Environmental Cost dan Environmental Performance Terhadap Financial Performance (Studi Kasus pada Perusahaan Sektor Pertambangan Peserta PROPER Periode 2012-2016). *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 259–286.

Nafis, A. W. (2024). *Sustainability in Business: Sebuah Keniscayaan*. https://iaisyarifuddin.ac.id/sustainability-in-business--sebuah-keniscayaan

Nurhayati, S., Nuridah, S., & Kusumaningtyas, D. S. (2025). Pengaruh Rasio Likuiditas dan Rasio Profitabilitas terhadap Kinerja Keuangan pada Perusahaan Manufaktur Sub Sektor Farmasi Tahun 2019-2022 yang terdaftar di Bursa Efek Indonesia. *J-CEKI: Jurnal Cendekia Ilmiah*, *5*(2), 2308–2320.

Oktadifa, R. M., & Widajantie, T. D. (2024). Pengaruh Penerapan Green Accounting, Material Flow Cost Accounting, dan Environmental Performance terhadap Profitabilitas Perusahaan. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, *6*(3), 2896–2909.

Okterianda, Y., Pentiana, D., & Nurmala. (2025). Pengaruh Green Accounting dan Kinerja Lingkungan Terhadap Profitabilitas Perusahaan Pertambangan di Bursa Efek Indonesia Tahun 2019-2023. *ECo-Fin: Economics and Financial*, *7*(1), 1–10.

Pardede, R. H. S., Siregar, H., & Andati, T. (2025). Pengaruh Pengelolaan Modal Kerja Terhadap Kinerja Perusahaan Jasa Konstruksi PT Waskita Karya (Persero) Tbk. *Owner: Riset & Jurnal Akuntansi*, *9*(2), 1123–1133.

Rahman, M. M., Saha, S., & Hoque, M. (2024). Unveiling the Link between Environmental Management Accounting, Energy Efficiency and Accountability in State-Owned Enterprises: An Integrated Analysis Using PLS-SEM and fsQCA. *Environmental Challenges*, *8*, 1–14.

Sarker, B. K., Sarker, D. K., Shaha, S. R., Saha, D., & Sarker, S. (2024). Why Apply SPSS, SmartPLS and AMOS: An Essential Quantitative Data Analysis Tool for Business and Social Science Research Investigations. *International Journal of Research and Innovation in Social Science (URISS)*, *8*(11), 2688–2699.

Siagian, A. S., Ramadhan, R. R., & Nofirda, F. A. (2025). Pengaruh Growth Opportunity, Net Working Capital, dan Capital Expenditure Terhadap Profitabilitas. *Jurnal Ilmiah Mahasiswa Merdeka EMBA*, *3*(1), 437–447.

Silaban, J. F. R., Firli, A., & Yunita, I. (2024). A Financial and Operational Impact Analysis of

Capital Expenditure (CAPEX) Prioritization: A Case Study of PT PLN (Persero) from 2019 to 2023. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, *10*(2), 165–179.

Sudana, I. M. (2015). *Manajemen Keuangan Perusahaan Teori dan Praktik* (2nd ed.). PT Gelora Aksara Pratama.

The Indonesian Institute of Accountants. (2024). *IAI Luncurkan "Peta Jalan Standar Pengungkapan Keberlanjutan" Mewujudkan Transparansi dan Menjaga Daya Saing Nasional*. https://web.iaiglobal.or.id/Berita-IAI/detail/iai_luncurkan_peta_jalan_standar_pengungkapan_keberlanjutan_mewujudkan_transparansi_dan_menjaga_daya_saing_nasional#gsc.tab=0

Ullah, S., Irfan, M., Kim, J. R., & Ullah, F. (2021). Capital Expenditures, Corporate Hidging and Firm value. *The Quarterly Review of Economics and Finance*, 1–17.

Vipond, T. (2023). *Capital Expenditure (CapEx)*. https://corporatefinanceinstitute.com/resources/accounting/capital-expenditure-capex/

Wernerfelt, B. (1984). A Resource-Based View of The Firm. *Strategic Management Journal*, *5*(2), 171–180.

Widiatami, A. K., Khasanah, N., Aeni, I. N., & Nurkhin, A. (2024). The Implication of Profitability as a Moderating in The Relation of Environmental Certification and Financial Performance to Market Reaction. *Jurnal Riset Akuntansi Kontemporer*, *16*(1), 65–76.

Widiyanti, A., Shafa, S. D., & Kusumawardani, N. (2024). Pengaruh Pengungkapan Environmental Cost dan Corporate Social Responsibility Terhadap Profitabilitas Perusahaan Manufaktur Sektor Industri Dasar dan Kimia yang Terdaftar pada Bursa Efek Indonesia Periode Tahun 2018-2022. *Jurnal Akuntansi Dan Keuangan*, *9*(2), 182–193.

Widiyati, D. (2023). Contributing Factors of Carbon Emission Disclosure: Evidence From Transportation Companies in Indonesia. *Atestasi: Jurnal Ilmiah AKuntansi*, 377–390.

Widjaya, W., & Nursiam. (2024). Pengaruh Environmental Cost, Green Accounting, dan Corporate Social Responsibility Terhadap Profitabilitas Perusahaan (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun 2020-2022). *Management Studies and Entrepreneurship Journal*, *9*(1), 6593–6602.