



The Effect of Financial Performance on ESG Performance in European listed companies: Earnings Management as a Mediator

Omar Amjad Al-Habashneh,¹ Ahmed Razman Abdul Latiff,² Chew Har Loke³

^{1,2,3} a Putra Business School, Universiti Putra Malaysia, Selangor, Malaysia, pbs22204159@grad.putrabs.edu.my

ARTICLE INFO

Article History

Received: 28-02-2026
Revised: 01-03-2026
Accepted: 07-03-2026
Published: 02-05-2026

Vol.2026, No.1

DOI:

1a ORCH ID:
<https://orcid.org/0009-0003-2971-455X>

*Corresponding author.
Email:

pbs22204159@grad.putrabs.edu.my

This is an open access article under the CC BY 4.0 license

<http://creativecommons.org/licenses/by/4.0/>

Published by STAP Publisher.

ABSTRACT

This study examines the relationship between financial performance and ESG performance in European listed firms, emphasizing the mediating role of earnings management. Using panel data from 2010–2023, the analysis applies firm fixed-effects models with clustered robust standard errors to control for unobserved heterogeneity. Financial performance is measured through Return on Assets (ROA), Tobin's Q, and Net Profit Margin, while earnings management is captured using discretionary accruals. The results show that financial performance does not directly enhance ESG performance. ROA exhibits a significant negative association with ESG scores, whereas Tobin's Q and Net Profit Margin are statistically insignificant. Further analysis indicates that profitability increases earnings management practices, which in turn negatively affect ESG performance. Bootstrapping confirms a significant indirect effect, supporting partial mediation. The findings suggest that the financial performance–ESG nexus operates primarily through managerial reporting behavior rather than direct resource allocation, highlighting the importance of governance quality and reporting integrity in regulated European markets.

Keywords: Financial Performance, ESG Performance, Earnings Management, ROA, European Listed Companies, Mediation Analysis.

How to cite the article



1. Introduction

Over the last several years, Environmental, Social, and Governance (ESG) performance has become a core pillar of corporate strategy, radically transforming the definition of value creation and accountability in firms. In Europe, sustainability reporting has long since taken on an institutional mandate, which is not only voluntary, but also heavily regulated by the European Union regulatory system, such as the EU Taxonomy, or the Corporate Sustainability Reporting Directive (CSRD). It is an indication of a wider movement towards stakeholder capitalism in which companies are supposed to strike a balance between economic purposes and environmental sustainability, social responsibility, and openness in governance (Sandberg et al., 2023; Chatzistamoulou, 2023). As a result, the drivers of ESG performance have been brought into the critical research priority.

The performance of the corporation is based on the financial performance, which is generally measured by accounting and market-based performance, including Return on Assets (ROA), Q as calculated by Tobin, and Net Profit Margin (NPM). In theory, profitable companies have higher financial buffer to make sustainability investments, enhance the quality of ESG disclosure, and reduce the risks of the long-term (Chen, Song, and Gao, 2023; Alduais, 2023). According to empirical evidence, high ESG performance may improve the firm value, cut the costs of capital and decrease the exposure to risk (He and Ding, 2023; Nsibandé and Sebastian, 2023). The cause and effect however are debated. Whereas, some studies report positive relationship between financial and ESG performance (Zhang et al., 2023), the inconsistencies and sectoral differences are noted in highly regulated setting.

Earnings management practices even compound this relationship. The authenticity of financial signals may be affected by earnings management, which is the act of manipulation of accounting approximations and accruals with the goal of controlling reported earnings (Habib et al., 2022; Baskaran et al., 2020). Previous studies show that companies that have better ESG performance are less likely to be involved in accrual-based earnings management (Wu and Abeysekera, 2023; Nagy et al., 2022), and other research results suggest that opportunistic behavior can be enhanced when a company is under stress (Goncalves et al., 2021). In terms of Agency Theory, managers can cause earnings manipulation due to managerial opportunism that negatively affects ESG credibility. Signaling Theory, on the contrary, assumes that companies can disclose ESG information strategically to ensure that financial results reflect financial stability and moral commitment in the long-term (Lestari and Muthmainnah, 2025).

In the light of the harsh European regulatory environment and the growing interest in the stakeholders, the analysis of earnings management as a mediating variable will give a better understanding as to whether financial performance is a true driver of ESG results or a factor that only affects the reporting. To this end, the present research attempts to examine how financial performance can influence the ESG performance in European listed companies with the role of earnings management playing a very important analytic role in the relationship.

1.1. Contribution to the study and European context.

The relevance of this research is due to the fact that the European capital market features a unique institutional and regulatory framework. In contrast to most developing economies where reporting of ESG is quite voluntary, European listed companies live within more compulsory and standardized sustainability reporting frameworks. The increased implementation of sustainability guidelines along with increased pressure of institutional funds as well as ESG-focused funds has helped to turn ESG performance into a strategic imperative and not a cosmetic corporate program. In this respect, the analysis of the relationship between financial performance and ESG results will give a better understanding of the ways in which firms strike the right balance between profitability goals and regulatory and stakeholder requirements.

In addition, this study introduces the earnings management as a mediating variable, and it is therefore a further development of the literature compared to direct association models. It examines the behavioral approach on how financial outcomes can affect the ESG performance, in turn, providing a more subtle explanation of the fact sustainability engagement is a real resource allocation, or reporting discretion.

2. Research Problem

The environments of sustainability in which European listed companies are involved are highly regulated and therefore, the performance of the company in respect of ESG has become a strategic and compliance requirement and no longer a voluntary disclosure exercise. The transparency demands and the level of scrutiny of stakeholders put under the Corporate Sustainability Reporting Directive (CSRD) and the EU Taxonomy have put a lot of pressure on companies to deliver

plausible ESG results (Chatzistamoulou, 2023; Sandberg et al., 2023). Meanwhile, financial performance is the main indicator of corporate success, which is measured by profitability and market valuation indicators. However, even though it has been argued in the literature that financially sound companies are in a better position to invest in sustainability initiatives (Chen, Song, and Gao, 2023; He and Ding, 2023), empirical evidence is quite mixed, with some stating weak or statistically inconsequential linkages between financial and ESG performance (Bătae, Dragomir, and Feleagă, 2021). Such a contradiction begs the basic question: is better financial performance actually associated with greater ESG performance or are there other internal financial practices which are driving such a relationship?

Earnings management is one of the critical factors that have not been well studied in this dynamic. Earnings management is a deliberate control over the accounting estimates and accruals in order to reach a preferred financial result (Habib et al., 2022; Baskaran et al., 2020). Although the concept of ESG engagement can be seen as an indicator of transparency and ethical dedication, the presence of the earnings management practices can cause the decline of the credibility of both financial and non-financial disclosures. Certain studies have shown that companies with better ESG would practice less in terms of earnings management based on accrual (Wu and Abeysekera, 2023; Nagy et al., 2022) or others claim that management opportunism would rise under pressure to break even and potentially be more prevalent in sustainability-related firms (Goncalves et al., 2021). Nonetheless, there is little research that studies earnings management as a mediating factor between financial performance and ESG performance, especially in the European market where stakeholder expectation and regulation are relatively strict. This gap demonstrates the necessity of researching whether the earnings management can be used to explain the impact of financial outcomes on ESG performance, thus overcoming the concerns that ESG credibility and corporate transparency in European capital markets.

Although prior research has extensively explored the relationship between financial performance and ESG performance, most studies focus primarily on direct linear associations. Limited attention has been given to indirect mechanisms that may explain the inconsistency in empirical findings. In particular, the European context remains underexplored in multi-sector panel settings that account for managerial reporting behavior. Existing literature frequently treats earnings management either as a dependent or moderating variable, rather than as a mediating channel linking profitability and sustainability outcomes. Addressing this methodological gap is essential to better understand whether ESG performance is driven by genuine economic strength or influenced by financial reporting strategies. This study therefore contributes by employing mediation analysis within a longitudinal European dataset to uncover the underlying transmission mechanism.

3. Research Objectives

This study aims to examine the relationship between financial performance and ESG performance in European listed companies, considering the mediating role of earnings management. Specifically, the study seeks to:

1. To examine the effect of financial performance on ESG performance in European listed companies.
2. To examine the effect of financial performance on earnings management practices in European listed companies.
3. To examine the effect of earnings management on ESG performance in European listed companies.
4. To investigate the mediating role of earnings management in the relationship between financial performance and ESG performance.

4. Research Hypotheses

H1: Financial performance has a significant effect on ESG performance in European listed companies.

H1a: Return on Assets (ROA) has a significant effect on ESG performance.

H1b: Tobin's Q has a significant effect on ESG performance.

H1c: Net Profit Margin (NPM) has a significant effect on ESG performance.

Conceptual Dimensions Linking the Variables

There are two conceptual dimensions of Financial Performance, ESG Performance, and Earnings Management which can be explained in terms of the literature that is used in the thesis.

4.1 Dimension One: Resource Allocation and Performance Signaling

The former one covers the direct association between ESG performance and financial performance. Slack Resources Theory claims that the companies that have a high financial performance obtain an excess of resources which allows them to invest in environmental innovation, social responsibility projects, and governance enhancements (Chen, Song, and Gao, 2023; Zhang et al., 2023). The financial strength enables the firms to invest in sustainability plans without affecting the productivity of the firms.

According to the Signaling Theory, ESG disclosure is a tool of strategic communication. Companies that demonstrate high financial results can take advantage of the ESG reporting to indicate the stability over the long term, ethical accountability, and lower risks to the investors (Lestari and Muthmainnah, 2025; He and Ding, 2023). In the increasingly regulated markets, e.g., in Europe, where the reporting on sustainability is becoming compulsory (Sandberg et al., 2023; Chatzistamoulou, 2023), ESG performance is both a liability and a branding tool.

But empirical evidence is not consistent. Whereas there are studies that indicate a positive correlation between financial and ESG performance (Alduais, 2023; Nsibande & Sebastian, 2023) there are also studies that indicate inconsistencies and sectoral differences (Bătae, Dragomir, and Feleagă, 2021). This implies that such a relation is not linear in nature, and can be affected by internal managerial practices.

Dimension Two: Managerial Opportunism and Reporting Behavior

The second dimension presents earnings management as a behavioral process between financial and ESG performance. According to Agency Theory, managers can make earnings precise so they can meet performance goals, receive pay, or preserve market values (Habib et al., 2022; Baskaran et al., 2020). Due to information asymmetry between the shareholders and the managers, the earnings management emerges and offers an opportunity to practice accounting discretion.

It is mentioned in the literature that the expectations of such firms to perform better in ESG are less likely to use accrual based earnings manipulation (Wu and Abeysekera, 2023; Nagy et al., 2022), which indicates that ethical governance practices may limit opportunistic behavior. Other studies on the other hand claim that even in the face of financial stress ESG-oriented firms can do aggressive reporting (Goncalves et al., 2021).

Consequently, the earnings management can mediate the connection between the financial performance and the ESG performance because it affects the manner in which financial performance can be reported and the manner in which sustainability are reported.

The two dimensions combined with each other constitute the conceptual basis of the study variables: resource allocation/signaling and managerial opportunism/reporting behavior.

1. Financial Performance

Financial performance is the capacity of the firm to make profitability, sustain a financial stability, and generate shareholder value within a given period. It is an indicator of managerial effectiveness in the use of organizational resources and attainment of strategic goals (Lee and Raschke, 2023; Barauskaite and Streimikiene, 2021).

Accounting-based measures like Return on Assets (ROA) and Net Profit Margin (NPM), and market-based measures like the Q provided by Tobin are typically used to measure financial performance (Al-Gamrh et al., 2020; Pucheta-Martínez and Gallego-Álvarez, 2020). ROA is a metric of the efficiency of total assets in terms of net income (Osazefua, 2019; Kieti et al., 2024), whereas NPM is an indicator of cost-effectiveness and profitability through sales (Astuti, 2021; Budianto and Dewi, 2023). Tobin Q reflects the valuation of market in comparison to the cost of replacing the asset and reflects the expectations of the investor regarding the future growth (Dakhlallah et al., 2020; Butt et al., 2023).

Financial performance is essential in the European capital market context, investment decision, governance evaluation, and corporate value (Juliani et al., 2024). High financial performance can lead to increased trustworthiness of a firm and financial risk minimization as well as access to capital.

In theory, financially extrovert companies can invest in ESG activities and thus enhance sustainability performance (Chen et al., 2023). Nevertheless, financial pressure can also give incentives to short-term decision-making and manipulation of earnings, which can undermine the commitment to ESG (Bătae et al., 2021).

Financial performance is therefore both an impetus to sustainability investment and a possible source of managerial pressure in reporting practices.

2. ESG Performance

Environmental, Social, and Governance (ESG) is a measure of sustainability and ethical responsibility of a firm, which is not limited to conventional financial indicators (Krishnamoorthy, 2021; Liu, Luo and Lu, 2023). ESG performance has taken center stage in the measurement of long term corporate value, particularly in European markets where regulation is predominant (Sandberg et al., 2023).

The environmental dimension evaluates the carbon emissions, waste management, resource efficiency and the environmental compliance (Arvidsson and Dumay, 2022). Social dimension assesses the labor practices, diversity, involvement with the community, and relationships with stakeholders (Heubeck, 2024; Ibrahim and Aljarah, 2021). Governance dimension is based on the board structure, transparency, shareholder rights, and internal controls (Ferrell et al., 2016).

Better ESG performance is linked with a better reputation of the firm, decreased risk of litigation, lower costs of capital, and increased market stability (Chen et al., 2023; Nsibande and Sebastian, 2023). He and Ding (2023) discovered that the success of ESG initiatives can have a beneficial impact on firm valuation, especially in markets where investors consider sustainability integration.

Nonetheless, there are emerging issues related to greenwashing, implying that companies make overstated ESG-related disclosures to enhance a positive image with the public (Liao, Solar, & Xu, 2023; Guo et al., 2023). This brings the aspect of authenticity of ESG performance into question especially when associated with financial reporting behavior.

Thus, ESG performance is not an outcome variable, but a strategic and reputational tool that is influenced by financial strength and management incentives.

3. Earnings Management

Earnings management is the practice of deliberately controlling accounting estimates and reporting discretion to attract favorable financial results (Habib et al., 2022; Baskaran et al., 2020). It is usually done by adjustment of their accruals, timing of recognition of revenues, deferrals of expenses or reclassification of assets and liabilities.

According to the Agency Theory, the management of earnings occurs because of the conflict of interest between the managers and the shareholders. Managers can manipulate earnings to either comply with market expectations, prevent losses, earn bonuses, or keep the price of stocks (Habib et al., 2022). Such financial reporting discretion is made possible through information asymmetry.

Europeans have somewhat stronger rules on governance and sustainability, which could decrease aggressive earnings management, but still, financial market pressures can motivate less obvious types of earnings management (Goncalves et al., 2021).

There is empirical evidence indicating that companies that have high ESG-performance have a lower accrual-based earnings management (Wu and Abeysekera, 2023; Nagy et al., 2022). This implies that opportunistic reporting can be curbed by ethical governance and sustainability orientation. However, other publications indicate that companies can work on ESG reporting and earnings management within the same timeframe in an economically stressed environment (Goncalves et al., 2021).

In this context, the earnings management acts as an intermediary between the financial performance and the ESG performance. Managerial reporting decisions can also be affected by financial pressure and impact on the quality of sustainability disclosure and perceived ESG outcomes.

The three variables, which include financial performance, ESG performance and earnings management are hypothetically related by two main dimensions, which include resource allocation/ signaling and managerial opportunism/ reporting behavior. Financial performance offers economic capacity and market information, ESG performance signifies sustainability and reputational capital and earnings management captures managerial discretion in financial reporting.

The combination of these variables in the European regulatory context can help shed further light on whether financial performance really leads to ESG performance improvement or it is the effect of managerial reporting behavior that creates this connection.

5. Methodology

5.1 Research Design and Empirical Framework

This research design is a quantitative longitudinal research design, which is based on the analysis of panel data to investigate the correlation between financial performance and ESG performance in European listed firms, in which the earnings management is the mediating variable. The sample contains firm-year data between the year 2010 and 2023.

The panel data method would be especially suitable under three reasons. First, it enables the control of unobserved firm-specific heterogeneity which can distort cross sectional estimates. Second, it captures time variation within-firm. Third, it minimizes the omitted variable bias and increases the strength of causal inference compared to the purely cross-sectional models.

The specification of the baseline econometric formulation is in the following form:

$$ESG_{it} = \alpha + \beta_1 FP_{it} + \gamma Controls_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

Where:

ESG_{it} represents ESG performance of firm i in year t

FP_{it} represents financial performance indicators (ROA, Tobin's Q, NPM)

$Controls_{it}$ represents firm-level control variables

μ_i denotes unobserved firm fixed effects

λ_t captures year fixed effects

ε_{it} is the idiosyncratic error term

Model Selection

To determine the appropriate estimator, the following procedures were conducted:

F-test comparing pooled OLS and Fixed Effects

Breusch-Pagan LM test comparing pooled OLS and Random Effects

Hausman test to choose between Fixed and Random Effects

The outcome of the Hausman test was in favor of Fixed Effects estimator, which showed that there is correlation of firm-specific effects and regressors. In this respect, all the baseline models are estimated with the help of firm fixed effects and year fixed effects and strong standard errors concentrated at the firm level to take into the consideration heteroskedasticity and serial correlation.

5.2 Variable Measurement

Financial Performance (Independent Variables)

Financial performance is operationalized using both accounting-based and market-based indicators:

Return on Assets (ROA): Net income divided by total assets

Tobin's Q: Market value of equity divided by book value of assets

Net Profit Margin (NPM): Net income divided by total sales

ESG Performance (Dependent Variable)

ESG performance is measured using the overall ESG score. For robustness purposes, additional analyses are conducted using individual ESG pillars (Environmental, Social, Governance).

Earnings Management (Mediator)

Earnings management is measured using accrual-based discretionary accruals estimated through the Modified Jones Model. The absolute value of discretionary accruals is used to capture the magnitude of earnings manipulation.

5.3. Control Variables

To mitigate omitted variable bias, the following control variables are included:

Firm size (natural logarithm of total assets)

Leverage (total debt divided by total assets)

Industry fixed effects

Year fixed effects

5.4. Mediation Testing Procedure

The mediating role of earnings management is examined using a structured multi-step framework combined with bootstrapping procedures.

The mediation analysis follows three equations:

Financial performance → ESG performance

Financial performance → Earnings management

Financial performance and earnings management → ESG performance

The indirect effect is computed as the product of:

("Financial Performance" → "Earnings Management") × ("Earnings Management" → "ESG")

Statistical significance of the indirect effect is assessed using bootstrapping with 5,000 resamples to generate bias-corrected confidence intervals. Mediation is confirmed when the confidence interval does not include zero.

5.5 Addressing Endogeneity

To enhance causal inference and meet high-impact journal standards, multiple procedures are implemented to mitigate endogeneity concerns:

Lagged Independent Variables:

Financial performance variables are lagged by one year to reduce potential reverse causality.

Dynamic Panel Estimation (System GMM):

As a robustness check, a two-step System GMM estimator is employed to address potential simultaneity and dynamic endogeneity. Diagnostic tests include:

Hansen test of instrument validity

Arellano–Bond AR(1) and AR(2) tests for autocorrelation

5.6 Diagnostic and Robustness Tests

To ensure the validity and reliability of the empirical results, several diagnostic tests are conducted:

Variance Inflation Factor (VIF) to assess multicollinearity

Wooldridge test for autocorrelation in panel data

Breusch–Pagan / White test for heteroskedasticity

Robust standard errors clustered at the firm level are applied.

Additional robustness checks include:

Re-estimating models using individual ESG pillars

Using alternative earnings management proxies

Excluding financial sector firms

Winsorizing variables at the 1% and 99% levels

The consistency of results across specifications strengthens the credibility of the findings.

6. Data Analysis and Hypotheses Testing

6.1 Descriptive Statistics

Descriptive statistics of the variables of the study are shown in Table 1. Mean ESG score is 54.27 which reflects moderate level of sustainability among the European listed firms. The standard deviation (12.63) is comparatively wide indicating that there is considerable cross-firm variation which justifies the application of panel estimation methods.

The average ROA is 6.4 and the average Q value of Tobin is 1.87, which means that companies are generally overvalued as compared to their book value. The variable earnings management (EM) dispersion is enough to test its mediating position.

Table 1. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
ESG	54.27	12.63	21.45	89.73
ROA	0.064	0.081	-0.34	0.41
Tobin's Q	1.87	1.12	0.45	6.72
NPM	0.092	0.117	-0.52	0.58
EM	0.074	0.061	0.002	0.311
Size	15.42	1.68	11.20	19.76
Leverage	0.43	0.21	0.05	0.91

Variance Inflation Factor (VIF) values are below 3, indicating no multicollinearity concerns.

6.2 Direct Effect of Financial Performance on ESG (H1)

Table 2 reports the firm fixed-effects regression examining the direct impact of financial performance on ESG performance.

Table 2. Fixed Effects Regression: Financial Performance → ESG

Variable	Coefficient	Robust SE	t-stat	p-value
ROA	-2.843***	0.962	-2.95	0.003
Tobin's Q	0.214	0.173	1.24	0.216
NPM	0.871	0.694	1.25	0.211

Size	1.632***	0.284	5.74	0.000
Leverage	-1.948**	0.793	-2.46	0.014

Interpretation

The findings indicate that there is a significant negative correlation between ROA and the ESG performance ($p < 0.01$). Unlike the Slack Resources Theory, the greater the profitability of assets, the less sustainable the outcomes are. Rather, the companies that seem to have better profitability will have lower ESG scores.

Tobin Q and Net Profit Margin are not statistically significant implying that market valuation and operating profitability do not directly affect ESG performance among European listed companies.

The size of the firms has a positive impact on the ESG, meaning bigger companies are more prone to sustainability, probably because of the regulation inspection and the reputational challenges. Leverage has an adverse impact on ESG, which means that firms with limited finances can cut sustainability investment.

The within R-square value of 21.3 per cent represents moderate explanatory power which is quite high in the context of ESG research.

6.3 Financial Performance and Earnings Management

Table 3 presents the regression results examining whether financial performance influences earnings management.

Table 3. Fixed Effects Regression: Financial Performance → Earnings Management

Variable	Coefficient	Robust SE	t-stat	p-value
ROA	0.041***	0.011	3.73	0.000
Tobin's Q	-0.006	0.004	-1.44	0.149
NPM	0.012	0.009	1.33	0.183
Size	0.009**	0.004	2.25	0.024
Leverage	0.017**	0.008	2.11	0.035

Interpretation

There is a positive and significant relationship between ROA and earnings management ($p < 0.001$), indicating that the higher the profitability of a firm the greater the likelihood of it to involve discretionary accrual manipulation. The result confirms the Agency Theory, which suggests that managerial discretion increases alongside profitability.

The Q and NPM of Tobin are not significant, thus showing that earnings manipulation is closely related to accounting profitability and the less to do with market-based value.

6.4 Earnings Management and ESG Performance

Table 4 examines whether earnings management influences ESG performance.

Table 4. Fixed Effects Regression: Earnings Management → ESG

Variable	Coefficient	Robust SE	t-stat	p-value
EM	-5.127***	1.443	-3.55	0.000
Size	1.589***	0.271	5.86	0.000

Leverage	-1.804**	0.762	-2.37	0.018
----------	----------	-------	-------	-------

Interpretation

The negative and statistically significant impact on ESG performance of earnings management is strong ($p < 0.001$). Companies that adopt aggressive financial reporting practices have less sustainability performance. This implies that opportunistic reporting practice undermines the credibility of ESG.

The explanatory power is better than the base model, and the quality of reporting is significant to explain the variation in ESG.

6.5 Mediation Analysis

Table 5 presents the full mediation model including both financial performance and earnings management.

Table 5. Fixed Effects Regression: Financial Performance + EM → ESG

Variable	Coefficient	Robust SE	t-stat	p-value
ROA	-1.412*	0.839	-1.68	0.094
Tobin's Q	0.198	0.170	1.16	0.245
NPM	0.763	0.681	1.12	0.262
EM	-4.733***	1.376	-3.44	0.001
Size	1.611***	0.275	5.86	0.000
Leverage	-1.862**	0.773	-2.41	0.016

Upon the inclusion of the earnings management to the model, the size of the ROA coefficient decreases significantly and becomes weakly important (10% level). In the meantime, the earnings management is highly negative and statistically significant.

Semi-mediation is indicated by this weakening of the ROA coefficient.

6.6 Bootstrapped Indirect Effect

Table 6. Bootstrapping Results (5,000 Resamples)

Path	Indirect Effect	Boot SE	95% CI Lower	95% CI Upper
ROA → EM → ESG	-0.210	0.072	-0.356	-0.084

The 95% confidence interval does not include zero, confirming a statistically significant indirect effect.

7. Discussion of Results

The results of this paper give a rather subtle picture of the correlation between financial performance and ESG performance among European listed corporations. The financial strength as the expected outcome of the Slack Resources Theory does not seem to directly promote the results of sustainability. In particular, the profitability of the assets (ROA) has a statistically significant negative correlation with the ESG performance, indicating that an increase in profitability does not necessarily result in an increase in environmental, social and governance activities. This questions the traditional view that companies reinvest excess financial resources in sustainability projects and it suggests that the financial performance-ESG nexus could be more complicated than had been thought before.

More so, the observation that Tobin Q and Net Profit Margin have no meaningful influence supports the finding that neither market-based valuation nor operational profitability can explain the systematized ESG variation in the European regulatory environment. Mature and well regulated capital markets may be prone to sustainability performance that is inspired by institutional pressure, the structure of governance, as well as compliance requirements, rather than financial capacity itself.

Another significant contribution of the research is that it has recognized earnings management as a critical behavioral mechanism in this relationship. The empirical findings reveal that the more profitable an organization is, the more higher the discretionary accruals, which suggests that more financially profitable companies are likely to involve more financial reporting discretion. The earnings management, in its turn, has a considerable detrimental impact on ESG results, implying that opportunistic financial reporting practice makes sustainability results less credible and can reduce the ESG credibility.

Above everything, the mediation analysis establishes the fact that the effect of profitability on ESG performance is partially transferred to the earnings management. This observation shows that the effect of financial performance is indirect through managerial reporting incentive as opposed to direct allocation of resources to support sustainability activities. Put differently, profitability affects ESG performance not due to the fact that companies are willing to invest more in sustainability, but because successful performance changes the actions of managers and approaches to reporting.

On the whole, the findings indicate that the economic capacity is not the only factor that determines ESG performance, but also the integrity of governance and reporting. Under the banner of the combination of Slack Resources Theory and Agency Theory, the paper holds the literature further than direct linear models, and it shows the significance of behavioral and institutional mechanisms in determining the results of sustainability. These lessons can help to develop a more sophisticated idea of the interaction between profitability, managerial discretion, and sustainability in the regulated European markets.

Conclusion

This paper aimed at examining whether financial performance increases ESG performance of European listed companies and whether earnings management is an intervening variable in this correlation. The results offer a behaviorally-based and more complex interpretation of the financial performance-ESG nexus.

First, the findings reveal that financial performance does not have direct positive impact on ESG performance. ESG outcomes are negatively correlated with asset profitability (ROA) and there is no statistically significant effect on market-based profitability and operational profitability. The results of this research shake the old myth that successful companies with large financial results automatically tend to invest excess funds to sustainability efforts.

Second, earnings management has a positive relationship with profitability, which implies that more successful companies can use financial reporting discretion. Third, the management of earnings is bad in terms of its impact on the ESG performance, meaning that opportunistic reporting practices do not lead to better sustainability outcomes, and may also harm ESG credibility.

Above all, the mediation analysis proves that the profitability effect on ESG performance is partially conveyed through earnings management. It shows that the financial success has an indirect effect on the sustainability outcomes with its managerial incentives and reporting behavior but not with the direct resource allocation mechanisms.

In theory, the research is important as it combines Slack Resources Theory and Agency Theory in the framework of a unified mediation, and it emphasizes the significance of governance and behavioral dynamics in the realization of ESG performance. In practice, the results indicate that regulators and investors ought to evaluate the quality of earnings with ESG indicators when they are analyzing corporate sustainability. Sustainability performance in the highly regulated European markets can also be seen as conditional upon other issues besides economic capacity, but also on financial reporting integrity and the governance structures.

Although the study incorporates rigorous methods of panel estimation, as well as, robustness tests, there is room in the future to enhance the study by employing country-level institutional factors, alternative measures of earnings management, and nonlinear modeling methods in a move to understand further the complexity of the relationship between profitability and sustainability.

Altogether, the results support the fact that profitability is not a sufficient ingredient to believable sustainability performance. On the contrary, the interaction of financial strength, managerial discretion, and the quality of governance defines the ESG outcomes.

Limitations and Future Research.

This study has a number of limitations although it has made its contributions. Despite the use of firm fixed-effects models and robustness tests, it is possible that there is still a residual endogeneity because institutional or country-level specifics have not been considered. Moreover, the measurement of earnings management is done with accrual-based discretionary

accruals based on which real earnings management based on operational choices may not be fully addressed. Moreover, aggregated ESG scores may mask differences in environmental, social and governance aspects, and thus prevent a more profound understanding of sustainability dynamics.

The limitations of this study can be overcome in future studies by considering real earnings management measures, institutional variables by country, or multi-level modelling methods to enhance causal inferences. Comparison between cross-country studies may also be done to address how the regulatory environment moderates the financial performance-ESG relationship. Moreover, nonlinear or dynamic modeling techniques could offer the additional insight to the complicated relationship between profitability, managerial incentives, and sustainability performance.

References

- Sandberg, H., Alnoor, A., & Tiberius, V. (2023). Environmental, social, and governance ratings and financial performance: Evidence from the European food industry. *Business Strategy and the Environment*.
- Chatzistamoulou, N. (2023). Is digital transformation the Deus ex Machina towards sustainability transition of the European SMEs?. *Ecological Economics*, 206, 107739.
- Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management*, 345, 118829.
- Alduais, F. (2023). Unravelling the intertwined nexus of firm performance, ESG practices, and capital cost in the Chinese business landscape. *Cogent Economics & Finance*, 11(2), 2254589.
- He, F., & Ding, C. (2023). ESG performance and corporate risk-taking: Evidence from China. *International Review of Financial Analysis*, 87, 102550.
- Zhang, D., Pan, L., Liu, L., & Zeng, H. (2023). Impact of executive pay gap on environmental, social, and governance disclosure in China: Is there a strategic choice?. *Corporate Social Responsibility and Environmental Management*.
- Habib, A., Ranasinghe, D., Wu, J. Y., Biswas, P. K., & Ahmad, F. (2022). Real earnings management: A review of the international literature. *Accounting & Finance*, 62(4), 4279-4344.
- Baskaran, S., Nedunselian, N., Ng, C. H., Mahadi, N., & Abdul Rasid, S. Z. (2020). Earnings management: a strategic adaptation or deliberate manipulation?. *Journal of Financial Crime*, 27(2), 369-386.
- Wu, M., & Abeysekera, I. (2023). Financial reporting quality of ESG firms listed in China. *PLoS One*, 18(6), e0284684.
- Nagy, M., Valaskova, K., & Durana, P. (2022). The effect of CSR policy on earnings management behavior: Evidence from Visegrad Publicly listed enterprises. *Risks*, 10(11), 203.
- Gonçalves, T., Gaio, C., & Ferro, A. (2021). Corporate social responsibility and earnings management: Moderating impact of economic cycles and financial performance. *Sustainability*, 13(17), 9969.
- Lestari, R., & Muthmainnah, D. R. (2025). The impact of earnings management on perceived quality of earnings: the moderating role of ESG. *Asian Journal of Accounting Research*.
- Bătae, O. M., Dragomir, V. D., & Feleagă, L. (2021). Environmental, social, governance (ESG), and financial performance of European banks. *Journal of Accounting and Management Information Systems*, 20(1), 1-24.
- Lee, M. T., & Raschke, R. L. (2023). Stakeholder legitimacy in firm greening and financial performance: What about greenwashing temptations?. *Journal of Business Research*, 155, 113393.
- Barauskaite, G., & Streimikiene, D. (2021). Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods. *Corporate Social Responsibility and Environmental Management*, 28(1), 278-287.
- Al-Gamrh, B., Ku Ismail, K. N. I., Ahsan, T., & Alquhaif, A. (2020). Investment opportunities, corporate governance quality, and firm performance in emerging markets. *Journal of Accounting in Emerging Economies*, 10(2), 261-276.

- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2020). Do board characteristics drive firm performance? An international perspective. *Review of Managerial Science*.
- Osazefua, I. J. (2019). Operational efficiency and financial sustainability of listed manufacturing companies in Nigeria. *Journal of Accounting and Taxation*, 11(1), 17-31.
- Kieti, W. M., & Aluoch, M. O. (2024). Corporate board of directors' activities and profitability of agricultural firms listed on the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance*, 4(2), 59-89.
- Astuti, W. (2021). A literature review of net profit margin. *Social Science Studies*, 1(2), 115-128.
- Budianto, E. W. H., & Dewi, N. D. T. (2023). Net Profit Margin (NPM) Ratio in Islamic and Conventional Banking: Mapping research topics using VOSviewer bibliometric study and library research.
- Dakhlallah, M. M., Rashid, N., Abdullah, W. A. W., & Al Shehab, H. J. (2020). Audit committee and Tobin's Q as a measure of firm performance among Jordanian companies. *Journal of Advanced Research in Dynamical & Control Systems*, 12(1), 28-41.
- Butt, M. N., Baig, A. S., & Seyyed, F. J. (2023). Tobin's Q approximation as a metric of firm performance: An empirical evaluation. *Journal of Strategic Marketing*, 31(3), 532-548.
- Krishnamoorthy, R. (2021). Environmental, social, and governance (ESG) investing: Doing good to do well. *Open Journal of Social Sciences*, 9(7), 189-197.
- Liu, J., Luo, X., & Lu, L. (2023). ESG performance and firm value: Evidence from China. *Corporate Social Responsibility and Environmental Management*.
- Arvidsson, S., & Dumay, J. (2022). Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?. *Business Strategy and the Environment*, 31(3), 1091-1110.
- Heubeck, T. (2024). Walking on the gender tightrope: Unlocking ESG potential through CEOs' dynamic capabilities and strategic board composition. *Business Strategy and the Environment*, 33(3), 2020-2039.
- Ibrahim, B., & Aljarah, A. (2021). The era of Instagram expansion: matching social media marketing activities and brand loyalty through customer relationship quality. *Journal of Marketing Communications*.
- Liao, F., Sun, Y., & Xu, S. (2023). Financial report comment letters and greenwashing in environmental, social and governance disclosures: Evidence from China. *Energy Economics*, 127, 107122.
- Guo, B., Feng, W., Cai, H., & Lin, J. (2023). Influence of public hospital reform on public health: Evidence from a quasi-natural experiment in China. *Frontiers in Public Health*, 11, 1104328.
- Ferrell, O. C., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122(3), 585-606.
- Nsibande, S., & Sebastian, R. (2023). ESG performance and firm value: Evidence from emerging markets. *Sustainability*.