Beyond Sustainability: The ESG Performance Relationship on Earnings Management and Tax Avoidance

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ABSTRACT

The growing emphasis on Environmental, Social, and Governance (ESG) performance in the business landscape has triggered interest in exploring company practices beyond financial strategies, such as earnings management and tax avoidance while highlighting their role in long-term sustainability. This study examines how the complex relationships between ESG performance, earnings management, and tax avoidance contribute to comprehensive firm activities, specifically exploring the impact of a firm’s commitment to ESG on its decisions regarding earnings management and tax avoidance. This study uses 60 companies over five years, between 2018 - 2022, and EViews 12 software to conduct descriptive statistics, panel models, classical assumption tests, and hypothesis testing. This study unveils a significant negative relationship between ESG performance and tax avoidance and negative relationships between ESG performance and earnings management through accruals and absolute discretion. Investors and stakeholders may have greater confidence in companies with high ESG performance, as they are less likely to engage in tax avoidance, accrual, and actual earnings management practices that could compromise financial sustainability.

Keywords: ESG performance, earnings management, tax avoidance, sustainability

1. INTRODUCTION

In the evolving business landscape, companies and individual investors increasingly evaluate companies based on their performance in three crucial domains: environmental impact, social responsibilities, and internal management practices (Boffo & Patalano, 2020). This integrated set of criteria, Environmental, Social, and Governance (ESG) performance, signifies a shift beyond mere financial profits (Matos, 2020). Stakeholders now seek to comprehend the sustainability and societal consequences of a company’s operations, highlighting the increasing significance of ESG performance (Cucari et al., 2018).

The significance of ESG performance has risen significantly in recent years, reflecting a paradigm shift in evaluating business success (Daugaard & Ding, 2022). ESG encompasses the Environmental, Social responsibilities, and Governance, with interest in ESG growing fivefold since 2019, surpassing interest in Corporate Social Responsibility (Pérez et al., 2022). Numerous
companies in Indonesia are striving to enhance their ESG performance, with over 92% of 190 Listed Companies in IDX seeing ESG as one crucial aspect to consider in running their businesses to ensure long-term sustainability (Mandiri Institute, 2022).

Driven by new regulations on sustainable finance and global commitments to address climate change, Indonesia's ESG awareness has accelerated in the past three years (Tamara & Budiman, 2022). While there was a slight decrease in investments recently, sustainable funds outperform other investment types, indicating growing faith in ESG's impact on company performance (Pástor et al., 2021). ESG initiatives strive to integrate environmental and social concerns into business operations, aligning with responsible business practices (Pollman, 2021).

The existing literature has extensively discussed the importance of ESG initiatives and their implications for financial outcomes (Velte, 2017). However, there appears to be a research gap in understanding how the interplay between ESG performance, earnings management, and tax avoidance contributes to a company's overall dynamics. While some studies have examined the relationship between ESG and financial practices separately, there is an opportunity to delve into the complex interactions and potential trade-offs between these elements (Lanis & Richardson, 2018). Specifically, exploring how a company's commitment to ESG impacts its decisions regarding earnings management and tax avoidance remains a relatively understudied area (Stuart et al., 2022).

Tax avoidance refers to companies' legal methods to minimize tax liability (Huseynov & Klamm, 2012). Research has examined the relationship between a firm's ESG performance and its tendency to engage in tax avoidance (Fonseca, 2020). Some argue that high ESG Performance firms avoid aggressive tax avoidance due to reputation risks. In contrast, others suggest that lower ESG performances may prompt firms to utilize tax avoidance as a risk management tool (Thomas et al., 2022). Several studies have found a negative association between ESG performances and tax avoidance, supporting that socially responsible firms are less likely to participate in aggressive tax planning (Yoon et al., 2021). Earnings management involves skillful adjustments to financial statements for specific financial outcomes (Roychowdhury et al., 2019). Companies may manage earnings to meet financial targets, influence stock prices, or reduce tax liabilities (Neifar & Utz, 2019); (Toumeh et al., 2020). Some studies suggest that firms with higher ESG performances are less likely to manage earnings (Andriani & Arsjah, 2022); (Wu & Abeysekera, 2023).

This research explores how ESG performance, earnings management, and tax avoidance are linked and affect a company's overall performance. It considers factors like firm size, leverage, and profitability. Larger companies face pressure to be responsible environmentally and socially, leading to higher ESG performances (Giese et al., 2019). Firms with more debt manage risks better, improving reporting quality in these areas (Alareeni & Hamdan, 2020). Strong ESG-rated companies use their strengths for higher profits (Trisnowati et al., 2022). The study offers insights for companies, investors, and regulators. It reveals how choices in one area impact others, guiding decisions. Companies align with sustainability, investors balance returns and ethics, and regulators improve rules. Investors understand a company's performance better by seeing interactions and making choices aligned with values.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 Signaling Theory

The signaling theory reveals how individuals and entities strategically use actions to communicate hidden information, especially when there is an information imbalance (Connelly et al., 2011). This imbalance arises because companies possess more insights into their internal workings than
external parties, leading to uncertainties in decision-making (Fu et al., 2022). ESG performance covers environmental impact, social responsibilities, and internal practices, acting as signals companies use to display their commitment to responsible practices beyond financial gains. With ESG performance gaining importance to investors and stakeholders, companies adapt by taking actions that positively affect these areas. They aim to send positive signals through ESG actions, indicating their dedication to ethics, societal contributions, and robust Governance (Li & Wu., 2020). Strong ESG performance helps companies stand out, attracting investors who value sustainability. This mirror signaling theory, where actions shape external perceptions. Investors interpret these signals, using ESG performance as indicators of values, risk strategies, and sustainable potential (Schaltegger & Burritt, 2010). Companies with favorable ESG signals attract socially conscious investors, while weaker signals raise concerns among ethical investors (Hickman, 2020). Signaling theory emphasizes companies using actions to convey information, melding perceptions, and influencing decisions in a landscape with information gaps (Karasek & Bryant, 2012). As ESG investing grows, the alignment between ESG actions and investor preferences reflects signaling theory’s core principles in shaping perceptions and choices in the business world (Vasudeva et al., 2018).

2.2 ESG Performance

ESG performance comprehensively evaluates how companies handle environmental, social, and Governance responsibilities (Li & Polychronopoulos, 2020). These performances encompass energy efficiency, employee well-being, and ethical practices, resulting in an overall score that reflects a company’s ESG management (Berg et al., 2019). Embracing ESG performance provides proactive benefits as companies tackle challenges like carbon emissions and labor standards, improving their reputation and reducing potential risks (Chen et al., 2022). Strong ESG performance can enhance a company’s brand and attract conscious consumers and investors who prioritize sustainability (Dimson et al., 2020). ESG performance has broad investor appeal, allowing easy comparisons across environmental, social, and Governance dimensions. Organizations like Bloomberg ESG Data Services, MSCI ESG Research, and Sustainalytics use distinct criteria to assess this performance (Avramov et al., 2022). Performance scores offer insights into a company’s journey toward sustainable growth. Over time, ESG performance has become pivotal for sustainable strategies, risk management, reputation enhancement, and attracting value-driven investors (Zumente & Läce, 2021). ESG Performance helps firms evaluate and communicate their ESG practices, assessing its influence on financial prospects using qualitative and quantitative metrics (Clementino & Perkins, 2021).

2.3 Earnings Management

Earnings management involves companies strategically optimizing their financial statements to achieve specific goals (Zang, 2012). The reasons for earnings management include meeting expectations, skillfully managing stock prices, optimizing tax planning, maintaining debt covenant compliance, and creating smoother earnings patterns (Stentman, 2022). Managers use different accounting methods to make their profits seem steadier, aiming to show good financial health to investors and improve the company’s reputation (Yung & Root, 2019). Some methods are legal and correct, but others need careful handling to avoid misunderstandings (Demerjian et al., 2020). This happens often in companies whose stocks are traded publicly, where investors want to see earnings growing consistently, and where managers often benefit when earnings are high (Brown et al., 2015). Both investors and government agencies need to understand this because having correct financial statements is vital for making smart investment choices and good economic decisions. The methods can adjust how they recognize revenue or discretionary expenses (Cohen & Zarowin, 2010). When we think about a
company’s Environmental, Social, and Governance (ESG) performance, it tells us how much they care about being eco-friendly and ethical; earnings management can play a significant role (Serafeim, 2020). When companies openly manage earnings and follow ethical rules, it can help improve their ESG performance (Sial et al., 2018). This means their financial plans match their commitment to responsibly doing business.

2.4 Tax Avoidance

Tax avoidance involves carefully managing financial activities to effectively handle tax obligations while operating within the legal framework (Lietz, 2013). This practice is used by both companies and individuals to responsibly reduce their tax burdens while ensuring they follow tax rules (Sikka, 2012). The main goal of tax avoidance is to use resources efficiently while staying within the bounds of tax laws (Bird & Davis-Nozemack, 2018). For example, large companies might create subsidiaries in areas with favorable tax laws to manage profits and overall tax responsibilities (Zucman, 2014). The reasons for tax avoidance include making wise financial decisions, staying competitive, and supporting sustainable growth. Businesses aim to improve their financial performance by handling taxes efficiently (Tang & Firth, 2011). Although tax avoidance is legal, it can sometimes spark conversations about its impact on society and ethics, as it might affect government revenue and public services. Supporters argue that well-executed tax avoidance can stimulate economic growth and job creation, indirectly benefiting the public by boosting business expansion (Bernanke, 2011). The importance of tax avoidance has grown in the context of ESG performance, especially in the “G” (Governance) aspect. Companies’ tax approaches are part of their commitment to ethical Governance in ESG. Businesses that are transparent about their tax strategies and actively contribute to public finances can improve their ESG performance, appealing to investors who value ethical behavior and social responsibility (Steurer, 2010). As awareness of the overall effects of corporate actions grows, tax avoidance practices are evaluated for their financial outcomes and how well they align with values and sustainability goals (Kovermann & Velte, 2019).

2.5 Hypotheses Development

Recent research findings disclose the detailed relationship between ESG performance and tax avoidance behavior. Various studies show us how a company’s ESG performance could impact whether it tends to use tax avoidance. For instance, Juddoo et al. (2023) suggest that companies with higher ESG performance exhibit lower levels of tax avoidance, indicating a negative relationship between ESG performance and tax avoidance. Similarly, research by Carolina et al. (2023), Ismail & Laksito (2020), and Aliyani & Hadiprajitno (2023) shows that high ESG performance is associated with a reduced risk of tax avoidance, emphasizing the negative relationship between ESG performance and tax avoidance. On the other hand, the relationship between ESG performance and tax avoidance is not always apparent. Some studies propose that higher ESG performance does not necessarily deter tax avoidance practices, implying a limited impact of ESG performance on tax avoidance tendencies. Correia (2020) suggests a positive relationship between high ESG performance and tax avoidance, suggesting that creditors might favor companies that engage in high tax and ESG performance. Notably, the findings by Montenegro (2021) indicate that there might not be a significant relationship between ESG performance and tax avoidance. These mixed findings underscore the complexity of the relationship, emphasizing the need for further exploration to understand how ESG performance and tax avoidance behavior interact.

H1: ESG Performance has a negative relationship with tax avoidance

Furthermore, in the context of the relationship between ESG performance and
accrual earnings management, there are research findings by Wu & Abeysekera (2023), Şeker & Şengür (2021), Andriani & Arsjah (2022), Oktavianti & Prayogo, (2022), Yoon et al. (2021), Mohmed et al. (2019), Nagy et al. (2022) that suggest that companies with higher ESG performance are less likely to engage in accrual earnings management, indicating a negative relationship between ESG performance and accrual earnings management. However, Aqabna et al. (2023) imply that higher ESG performance does not always ensure lower accrual earnings management, suggesting no significant relationship between ESG performance and accrual earnings management. However, findings are not always consistent. Gonçalves et al. (2021) indicate that this relationship might change during economic crises or losses when companies with high ESG performance could be more likely to engage in aggressive accrual earnings management practices. These findings highlight the varied relationship between ESG performance and accrual earnings management practices, suggesting a need for further exploration to comprehend how ESG performance influences accrual earnings management behavior entirely.

H2: ESG Performance has a negative relationship with accrual earnings management

Moreover, concerning the relationship between ESG performance and real earnings management practices, research by Nguyen (2023) indicates that higher ESG performance is associated with less involvement in real earnings management. This points to a negative relationship between ESG performance and real earnings management. Similarly, Yoon et al. (2021) reveal that companies with higher ESG performance tend to be less likely to engage in real earnings management practices, emphasizing a negative relationship between ESG performance and real earnings management. Additionally, Adeneye and Kammoun (2022) suggest that lower ESG performance has a significant positive relationship with real earnings management, indicating a negative relationship between ESG performance and real earnings management. However, Gavana et al. (2022) findings contradict this pattern, showing that higher ESG performance correlates with more involvement in real earnings management. This suggests a positive relationship between ESG performance and real earnings management in this context. These research results provide a detailed view of the relationship between ESG performance and real earnings management practices, revealing both negative and positive relationships. Further investigation is necessary to fully understand how ESG performance is related to actual earnings management behavior.

H3: ESG performance has a negative relationship to real earnings management.

3. RESEARCH METHODOLOGY

In this study, the research methodology employed is a quantitative research approach. The sampling strategy utilized is purposive sampling, while secondary data serves as the method for data collection. Data analysis is conducted using regression analysis through EViews 12 software.

3.1 Population, Sample, and Data

This study procures data from secondary sources based on company financial statements and ESG performance scores provided by Thomson Eikon Refinitiv. The chosen methodology involves the implementation of purposive sampling, focusing on the financial years covering from 2018 to 2022. The study entails Indonesian companies listed on the Indonesia Stock Exchange. At the same time, it excludes those entities categorized within financial sectors by IDX-IC, such as banks, financial services, investment services, insurance, holdings, and investment companies. Moreover, the exclusion criteria comprise companies that still need to provide ESG scores as enabled by Thomson Eikon Refinitiv.
3.2 Research Model

The research model to answer research problems as well as test hypotheses 1, 2, and 3 are:

\[ ESG_{it} = \beta_1 BTD_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 LEVG_{it} + \epsilon_{it} \] (1)

\[ ESG_{it} = \beta_1 AEM_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 LEVG_{it} + \epsilon_{it} \] (2)

\[ ESG_{it} = \beta_1 REM_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 LEVG_{it} + \epsilon_{it} \] (3)

\[ ESG_{it}, \text{ known as ESG Performance, is a measure used to see how companies in Indonesia are performing in terms of their environmental sustainability, social responsibility, and corporate governance practices. BTD}_{it}, \text{ known as the Book-Tax Difference, is a measure used to see how companies in Indonesia manage discrepancies between their financial reporting and tax reporting information. It measures the variance between financial statements prepared for accounting purposes and those prepared for tax purposes, indicating the level of tax avoidance by company i. AEM}_{it} \text{ refers to the degree of earnings management through accruals employed by the company i. This AEM}_{it} \text{ measure refers to the model by Kothari et al. (2005). REM}_{CFO}_{it} \text{ (real earning management through abnormal cash flow from operations) represents the extent of earnings management through abnormal cash flow from operations by company i. The REM_PROD}_{it} \text{ (real earning management through overproduction) measures how much a company manipulates its earnings by producing more than necessary. It helps us understand the extent to which the company engages in overproduction to increase its reported earnings. REM_EXP}_{it} \text{ (real earning management through discretionary expenses) measures the extent of earnings management through discretionary expenses implemented by the company i.} \]

3.3 Variable Operationalization

3.3.1 ESG Performance

The Refinitiv ESG score, derived from their methodology, indicates a company’s environmental, social, and Governance (ESG) performance. Based on three pillars and ten categories, the ESG pillar score is computed using standardized, industry-dependent category weights, expressed as percentages from 0 to 100. This score is then translated into a grading scale ranging from A+ (highest) to D- (lowest) to signify ESG performance. This process involves data collection from Thomson Reuters Eikon, evaluating the company across environmental, social, and Governance pillars, calculating scores, and mapping them to the grading scale. Here is the equation model to measure the ESG Score by Refinitiv (2022).
The equation represents a multi-dimensional assessment framework for evaluating the sustainability performance of companies. This comprehensive model considers various aspects of a company’s operations over time, breaking them into different pillars and categories. Each component within the equation aligns with a specific evaluation measure. For instance, $EEm_t$ symbolizes the environmental score of a company in emission category in year t, reflecting the company’s impact on the environment through emissions. Similarly, $ERes_t$ implies the environmental score of resource use for the same company and year, measuring its resource consumption patterns, while $EInnov_t$ weighs the company’s innovation performance within the environmental pillar.

Regarding the social aspect, $Scom_t$ captures the score of a company’s community-related initiatives, while $SHuman_t$ assesses its compliance with human rights practices. $SProduct_t$ explores the evaluation of the company’s product responsibility efforts, and $SWork_t$ examines its performance in terms of workforce-related factors. The corporate governance dimension is also intricately considered. $GShar_t$ reflects the company’s score regarding shareholder-related practices, $GCSR_t$ evaluates its Corporate Social Responsibility (CSR) strategy, and $GMan_t$ measures its management quality within the corporate governance structure.

### 3.3.2 Tax Avoidance

Tax avoidance comprises various interpretations, levels, and extents of development. Based on Hanlon & Heitzman (2010), tax avoidance is measured through diverse approaches, including book-tax differences, effective tax rates (ETR), and Cash Effective Tax Rate. For this research, the measurement strategy adopted aligns with the methodology Lisowsky (2010) and Frank et al. (2009) proposed. This method centers on leveraging book-tax differences from fiscal and accounting income reported in companies’ financial statements. This choice is founded in its potential to capture the variations between financial and tax reporting, thus clarifying potential tax avoidance strategies.

\[
BTD_{it} = \frac{(Pretax \text{ Book Income}_{it} - Es \text{ Taxable Income}_{it})}{TASS_{it}}
\]

Where,

\[
Estimated \text{ Taxable Income}_{it} = \frac{Current \text{ Tax Expense}_{it}}{Corporate \text{ Income Tax Rate}_i}
\]

This equation captures the variable $BTD_{it}$ which quantifies the extent of tax avoidance strategies employed by companies in year t. Pretax Book Income signifies the earnings before tax for companies in year t. Furthermore, the concept of estimated taxable income pertains to the projected fiscal earnings derived from the current tax expense of company i in year t, divided by the corporate income tax rate applicable to company i in a specific year.

### 3.3.3 Accrual Earnings Management

In our analysis, we embrace a well-established approach for quantifying accrual earnings management, as introduced by (Kothari et al., 2005). These equations aid in assessing discretionary accruals attributed to managerial decisions. These discretionary accruals are deduced from the residual values derived from the total accrual equation initially proposed by Jones (1991). This methodology allows us to effectively measure and evaluate the extent of earnings management managed by management through discretionary accruals, building upon the foundational framework set by these distinguished studies.
\[
\begin{align*}
\frac{T\text{A}_{it}}{T\text{AS}_{it-1}} &= \beta_0 + \beta_1 \frac{1}{T\text{A}_{it-1}} + \beta_2 \frac{\Delta \text{REV}^t_{it}}{T\text{AS}_{it-1}} + \\
&+ \beta_3 \frac{\text{PPE}_{it}}{T\text{AS}_{it-1}} + \beta_4 \frac{\text{ROA}_{it}}{T\text{AS}_{it-1}} + \epsilon_{it}
\end{align*}
\] (7)

Within this equation, \( \frac{T\text{A}_{it}}{T\text{AS}_{it-1}} \) outlines the total accruals regarding company \( i \) within a specific year. This summation emerges through the deduction of net income, representing net income after expenditures, from operating cash flow, marking the cash inflow and outflow. The fraction is then attained by dividing this outcome by the company’s total asset value in the preceding year \( (T\text{AS}_{it-1}) \). This equation is a framework for capturing the company’s financial views. The term \( \frac{1}{T\text{A}_{it-1}} \) implies the total asset value from the last year, which denotes a temporal lag while comprising assets from the past year. It encourages us to evaluate the impact of preceding assets on current financial performance.

Meanwhile, the variable \( \frac{\Delta \text{REV}^t_{it}}{T\text{AS}_{it-1}} \) uncovers the engagement between a company’s revenue deviations and the total asset value from the previous year. This attribute enables an elaborate review of the coherence between revenue shifts and the comprehensive asset value. The variable \( \frac{\text{PPE}_{it}}{T\text{AS}_{it-1}} \) illustrates the part of a company’s assets evolving from fixed matters such as buildings and equipment (net fixed assets) regarding the prior year’s total assets. This element yields insights into the proportion of fixed assets relative to the inclusive asset base, thus emphasizing the company’s asset pattern. \( \frac{\text{ROA}_{it}}{T\text{AS}_{it-1}} \) signifies the ability of a company’s assets to produce earnings or profits each year. This metric examines the ratio of the company’s return on assets to its total assets from the previous year, disclosing the efficacy of asset utilization in generating earnings. Lastly, \( \epsilon_{it} \) means the residual value from regression analysis, including the extent of adjustments or discretionary accruals the company implements to manage earnings.

### 3.3.4 Real Earnings Management

To assess the extent of natural earnings management, we use a methodology by Roychowdhury (2006) that measures real discretionary earnings. These discretionary adjustments signal managerial interventions in the domain of actual earnings. Real earnings management comprises three distinctive disclosures, which revolve around managing abnormal cash flow from operations resulting from accelerated sales, escalated production costs, and intervening discretionary expenses.

\[
\begin{align*}
\frac{\text{CFO}_{it}}{T\text{A}_{it-1}} &= \beta_1 \left( \frac{1}{T\text{AS}_{it-1}} \right) + \beta_2 \frac{\text{REV}^t_{it}}{T\text{A}_{it-1}} + \\
&+ \beta_3 \left( \frac{\Delta \text{REV}^t_{it}}{T\text{AS}_{it-1}} \right) + \epsilon_{it}
\end{align*}
\] (8)

\[
\begin{align*}
\frac{\text{PROD}_{it}}{T\text{A}_{it-1}} &= \beta_1 \left( \frac{1}{T\text{A}_{it-1}} \right) + \beta_2 \frac{\text{REV}^t_{it}}{T\text{A}_{it-1}} + \\
&+ \beta_3 \left( \frac{\Delta \text{REV}^t_{it}}{T\text{A}_{it-1}} \right) + \beta_4 \frac{\text{REV}^t_{it-1}}{T\text{A}_{it-1}} + \epsilon_{it}
\end{align*}
\] (9)

\[
\begin{align*}
\frac{\text{DISEXP}_{it}}{T\text{A}_{it-1}} &= \beta_1 \left( \frac{1}{T\text{A}_{it-1}} \right) + \beta_2 \frac{\text{REV}^t_{it-1}}{T\text{A}_{it-1}} + \epsilon_{it}
\end{align*}
\] (10)

Within the context of these equations, the term \( \frac{\text{CFO}_{it}}{T\text{A}_{it-1}} \) represents the operating cash flow of a company in Indonesia for a specific year \( t \), divided by the total assets from the previous year \( t-1 \). This ratio provides insight into the efficiency of cash generation and the previous year’s asset base. Similarly, \( \frac{\text{PROD}_{it}}{T\text{A}_{it-1}} \) represents the production costs of the company in Indonesia for a given year \( t \), divided by the total assets from the previous year \( t-1 \). These production costs arise from integrating the total cost of goods sold and inventory. Furthermore, the variable \( \frac{\text{DISEXP}_{it}}{T\text{A}_{it-1}} \) measures discretionary expenses incurred by the company in Indonesia during year \( t \) relative to the total assets from the previous year \( t-1 \). This metric gives insight into the allocation of assets towards discretionary expenses. The variable \( \frac{1}{T\text{A}_{it-1}} \) symbolizes the lagged value of the company’s total assets in Indonesia from the previous year \( t-1 \) to the particular year \( t \). This aspect aids in assessing the influence of past assets on the current financial dynamics. \( \frac{\text{REV}^t_{it}}{T\text{A}_{it-1}} \) signifies the total revenue.
generated by the company in Indonesia during year \( t \), divided by the total assets from the previous year. This ratio provides an understanding of revenue generation relative to the asset base. Incorporating the change in revenue, \( \frac{REV_{t-1}}{TASS_{t-1}} \), reflects the alteration in a company’s revenue in Indonesia from the year before last to the previous year, divided by the company’s total assets in the previous year. This explains how revenue dynamics have evolved within the asset context. Finally, \( \frac{REV_{t-1}}{TASS_{t-1}} \) represents the total revenue generated by the company in Indonesia during the previous year \( t-1 \), divided by the total assets from the same year. This aspect provides insights into the revenue-to-assets relationship of the previous year. Lastly, the symbol \( \varepsilon_{it} \) frames fundamental discretionary factors resulting from each variable obtained from the regression analysis. It serves as an indicator of real earnings management, which can be attributed to various factors.

Roychowdhury (2006) initially employed three methods to assess real earnings management: examining abnormalities in cash flow from accelerated sales, increased production costs, and discretionary expenses. However, recent studies adopt an alternative approach, consolidating these methods into a single measure (Achleitner et al., 2014). While examining each method individually provides detailed insights, merging them offers a holistic perspective, similar to maintaining a balance between details and overall comprehension (Eng et al., 2019). This study aligns with the view that utilizing a unified measure is more effective than counting on solely on individual ones. This strategy enhances our capacity to comprehend REM more accurately. Integrating diverse aspects of REM is pivotal for achieving a comprehensive understanding (Chi et al., 2011). The process of calculating the combined REM measure involves specific steps. Initially, residuals from equations related to operational cash flow, discretionary expenses, and production costs are recalculated through a standardization process (Ghaleb et al., 2020). Subsequently, the standardized residuals from abnormal cash flow and discretionary expense factors are multiplied by \(-1\) and combined with abnormal production factors to produce the comprehensive REM measure (Francis et al., 2016).

\[
REM_{it} = -CFO_{it} + PROD_{it} - DISEXP_{it} \tag{11}
\]

### 3.3.5 Control Variables

This study employs three control variables: profitability, size, and leverage. Profitability is measured using the pretax return on assets, calculated by dividing pretax income by total assets. The formula involves taking the natural logarithm of the total assets to determine size. Additionally, leverage is assessed by dividing total debt by total equity.

### 3.3.6 Data Analysis Technique

In the context of this research, data analysis techniques incorporate a range of processes, including descriptive statistics, model testing, classical assumption testing, and hypothesis testing. Descriptive statistics are pivotal in portraying underlying patterns, fluctuations within the dataset, and connections among diverse information points. After employing descriptive statistics, subsequent stages involve conducting additional assessments. Integrating a panel model and classical assumption tests is applied to analyze the data deeper, enhancing understanding and validating conformity to specific assumptions. The panel test method aids in selecting an appropriate model, including options such as the ordinary least square, fixed effect, and random effect models (Ghozali & Ratmono, 2017). This requires conducting examinations like the Chow test, Lagrange multiplier test, and Hausman test. These evaluations significantly affirm the chosen model’s robustness and reliability for analyzing panel data. Subsequently, the classical assumption test is carried out to confirm the execution of distinct assumptions, embracing aspects such as the absence of multicollinearity and heteroscedasticity. The highest level of this process lies in the hypothesis testing phase, which covers assessments such as the \( F \), coefficient, and partial significance tests.
4. RESULTS AND DISCUSSIONS

4.1 Descriptive Statistics

Descriptive statistics outline key data characteristics, which include minimum and maximum values, means, medians, and standard deviations for each variable. Regarding the ESG variable, it ranges from 0.03 to 0.86, with an average ESG score of approximately 0.507. The positive mean suggests the company demonstrates a relatively positive ESG performance, indicating a commitment to responsible and sustainable practices. Moving to the BTD variable, the mean is approximately -0.0912. This negative value suggests that the fiscal profit is lower than the commercial profit, indicating that companies tend to use tax avoidance strategies. Transitioning to AEM, it has a positive mean of 0.467474, indicating that the company tends to enhance earnings through accruals, adjusting financial figures to boost reported earnings. Similarly, REM_CFO, REM_PROD, and REM_EXP all exhibit positive means, each approximately around 0.154835, 0.392883, and 0.00670, respectively. These findings suggest that management also employs actual accounting practices to enhance reported earnings.

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<th>Max</th>
<th>Mean</th>
<th>Median</th>
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<td>0.0000045</td>
<td>0.0000001</td>
<td>0.00000003</td>
<td>0.0000004</td>
</tr>
<tr>
<td>LEVERAGE</td>
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<td>1.9055630</td>
<td>0.50111</td>
<td>0.485916</td>
<td>0.221436</td>
</tr>
</tbody>
</table>

4.2 Results of Panel Method and Classical Assumption Test

First, we conducted the multicollinearity test and found that the overall variables do not exhibit multicollinearity issues. This suggests that each variable can be considered independently in the regression model. Second, the normality test results using the Kolmogorov-Smirnov test indicate that the p-value is less than alpha, leading us to reject the null hypothesis. This provides evidence that the overall dataset follows a normal distribution. Third, based on the results of the Breusch-Pagan test to assess the presence of heteroscedasticity, the p-value from the overall model exceeds 0.05. This indicates that heteroscedasticity is not present in the overall models. Additionally, the results of the panel model tests for models 1, 2, and 3 all exhibit probability values greater than 0.05 in the Chow test. This suggests that the suitable regression model to be considered is based on a standard model writing that the first paragraph at the beginning of a section or subsection is not indented.

4.3 Results of Hypothesis Testing

In this section, we tested the hypothesis using research model 1 to assess the relationship between ESG (Environmental et al.) performance and tax avoidance, as measured by book-tax differences. The null hypothesis posited a significant negative relationship between ESG performance and tax avoidance, suggesting that higher ESG performance would lead to lower tax avoidance. Research by Fonseca (2020) and Yoon et al. (2021) supports the finding that companies with higher ESG performances are less likely to avoid taxes. This relationship suggests that strong
ESG performance can indicate ethical tax practices, providing valuable insights for investors and regulators. The results are presented in the table. The results show that book-tax differences (BTD) exhibit a negative coefficient and a p-value below the alpha level. Therefore, our hypotheses are accepted, indicating that companies with a strong orientation toward ESG behavior also tend to reduce their level of tax avoidance. These findings align with earlier research by Yoon et al. (2021), which employed book-tax differences to measure tax avoidance.

Table 3 Hypothesis Testing Results ESG Performance with Tax Avoidance
Source: Processed by author

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTD</td>
<td>-0.025272</td>
<td>0.015966</td>
<td>-1.582845</td>
<td>0.0145</td>
</tr>
<tr>
<td>PROFITABILITY</td>
<td>0.334903</td>
<td>0.090864</td>
<td>3.685755</td>
<td>0.0003</td>
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<td>0.0127</td>
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<tr>
<td>LEVERAGE</td>
<td>-0.101856</td>
<td>0.049995</td>
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<td>0.0425</td>
</tr>
</tbody>
</table>

N: 300
R-squared: 0.295313
F-statistic: 7.769914
Prob (F-statistic): 0.000006

For the second null hypothesis, we aimed to determine a negative and significant relationship between ESG (Environmental, Social, and Governance) performance and accrual earnings management. The hypothesis test results revealed a negative coefficient and a p-value below the alpha level, providing strong evidence to support the acceptance of the null hypothesis. This indicates that companies with higher ESG performance are likelier to engage in accrual earnings management practices. In other words, ESG factors have a positive effect on reducing accrual earnings management practices. These findings align with earlier research led by Aqabna et al. (2023), Şeker & Şengür (2021), Andriani & Arsjah (2022), Oktavianti & Prayogo (2022) and Yoon et al. (2021).

Table 4 Hypothesis Testing Results ESG Performance with Accrual Earnings Management
Source: Processed by author

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
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<td>0.003756</td>
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<tr>
<td>PROFITABILITY</td>
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<td>0.0616</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>-0.121397</td>
<td>0.051271</td>
<td>-2.367762</td>
<td>0.0185</td>
</tr>
</tbody>
</table>

N: 300
R-squared: 0.194383
F-statistic: 7.686181
Prob (F-statistic): 0.000007
The third hypothesis was tested to provide evidence of a significant negative relationship between ESG (Environmental, Social, and Governance) performance and real earnings management. Research Model 3 was employed to observe and find coefficients and p-values to address this hypothesis. The results from hypothesis testing indicate a negative coefficient value and a probability value below the alpha level. This suggests that companies that prioritize ESG responsibilities and exhibit high ESG performance are less involved in earnings management practices through actual transactions, including abnormal cash flow, production costs, and discretionary expenses. The findings of this research align with Nguyen (2023), indicating that ESG practices can reduce the inclination towards earnings management via absolute accounting methods. This is attributed to their dedication to financial transparency, ethical accounting practices, and a focus on long-term sustainability.

### Table 5 Hypothesis Testing Results ESG Performance with Real Earnings Management

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>REM</td>
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<td>0.0253</td>
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<tr>
<td>N</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.290199</td>
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<td></td>
<td></td>
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<tr>
<td>F-statistic</td>
<td>7.311726</td>
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<td></td>
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<tr>
<td>Prob (F-statistic)</td>
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<td></td>
</tr>
</tbody>
</table>

### 5. CONCLUSIONS

This study explored the detailed relationships between Environmental, Social, and Governance (ESG) performance, earnings management, and tax avoidance. The results clarify various aspects within these domains and offer valuable insights for companies, investors, and regulators striving to navigate the evolving landscape of responsible business practices. Our analysis unveiled a significant negative correlation between ESG performance and tax avoidance. This underscores that businesses committed to ESG principles are making positive contributions to society and the environment and are likely to embrace elevated accountability and ethical tax management strategies. In accrual earnings management, our findings showed a substantial negative relationship between ESG performance and accrual earnings management. Companies with higher ESG performance scores were less inclined to engage in accrual earnings management practices. This suggests that companies prioritizing ESG factors are more inclined to present their financial statements in a manner that accurately reflects their performance rather than resorting to accrual adjustments for short-term financial gains.

Similarly, our research revealed a negative relationship between ESG performance and real earnings management. This interpretation underscores the alignment between presenting financial statements accurately and ensuring financial sustainability. Furthermore, investors and stakeholders may have greater confidence in companies with high ESG performance, as they are less likely to engage in tax avoidance, accrual, and real earnings management practices that could compromise financial sustainability.

### 6. IMPLICATIONS AND LIMITATIONS

#### 6.1 Implications

These findings have significant implications for companies, investors, and regulators. They emphasize the need for companies to adopt a
holistic approach to ESG, recognizing its potential impact on financial performance and tax and earnings management practices. This is important for companies and investors, as they can better assess a company’s overall financial health by considering the interactions between ESG performance and financial management.

For tax regulators and authorities, these findings show the need to improve guidelines and disclosure requirements to align with sustainable business practices. In order to encourage companies to improve their ESG (Environmental, Social, and Governance) performance, including tax governance and earnings management, the Directorate General of Taxes (DJP) and the Financial Services Authority (OJK) need to work together to promote the implementation of ESG. This includes tax governance and earnings management, which can be realized through implementing programs like the Tax Control Framework (TCF) related to tax and earnings management practices. This program integrates ESG aspects, including tax governance and earnings management, into the company’s financial reports and tax practices. In addition, it would be very beneficial if companies, such as corporate taxpayers, collaborate to achieve voluntary tax compliance. This means building a strong cooperative relationship between tax authorities and taxpayers, which, in the end, will promote better tax practices and good tax governance.

6.2 Limitations

This research has several limitations. Firstly, it is confined to research objects derived from secondary data rather than real-world practices. Secondly, it relies on using ESG performances from Refinitiv Eikon, accruals earnings management measurements following Kothari et al. (2005), and real earnings management in an aggregated form rather than individually examining each of the three methods. Future research endeavors should consider qualitative research through case studies, expand the scope of objects, encompass a broader range of years, and employ diverse measures for assessing ESG performances, accruals, and real earnings management.

REFERENCES


