

Article

Unveiling the Connection among ESG, Earnings Management, and Financial Distress: Insights from an Emerging Market

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Abstract: Earnings management continues to be a critical ethical concern faced by companies. The management that conducts earnings manipulation may adopt environmental, social, and governance (ESG) activities to safeguard themselves from stakeholders. Engagement in ESG is sometimes viewed as a type of managerial misconduct and as a means to cover up manipulative practices. Thus, the key aim of our study is to investigate the association between ESG disclosure and earnings management levels in the context of listed companies in Saudi Arabia. We also investigate the influence of financial distress on the above association. Data were obtained from 304 company-year observations for the years 2014–2021. The results showed that ESG disclosure had a positive and statistically significant effect on earnings management. In addition, financial distress significantly and positively enhanced this effect. This shows that financially distressed companies tend to disclose more ESG practices and engage in earnings management. Moreover, through the division of the three ESG components—environmental, social, and governance—the impacts of both environmental and social factors on earnings management were found to be positive and robust, while the governance score was negative. The results obtained using diverse regression techniques and further tests were robust. This study makes several contributions to the ESG and earnings management literature. It also minimizes the literature gap by focusing on the influences of financial distress on the ESG–earnings management relationship. The study findings have implications for several stakeholder groups, including regulators, decision makers, investors, and auditors. In particular, it warns policymakers that some practices focused on ESG enhancements may be a tool for preventing other questionable practices.

Keywords: environmental; social and governance; earnings management; financial distress; sustainability; Saudi Arabia



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1. Introduction

Recent financial scandals have led to the loss of trust and confidence in companies, which has, in turn, urged these companies to adopt socially responsible corporate conduct patterns and strategies to protect them against disciplinary actions and to secure their reputation and status [1]. This is a major reason behind the promotion of ESG awareness, adoption, and reporting, which has become one of the top and most popular business topics [2]. The issuance of ESG on a global scale calls for attention and participation from all stakeholders, with the topmost being companies. Companies are competing to promote their ESG commitment and provide sustainability reports [3]. To increase sustainability in worldwide capital markets, there are increasing calls for more investment in ESG [4]. In fact, global legislators place substantial emphasis on ESG disclosure and practices [5]. According to the Sustainable Stock Exchanges (SSE) [6], the United Nations recommends that all companies report their ESG practices by 2030. According to a report by the CFA Institute [7] on ESG components, 64% of investors placed the highest preference for the governance component, followed by the social component (30%) and the last environmental component

(24%). The report added that these ratios are estimated to increase by approximately 20% by 2022. In line with a PwC (2022) report [8], organizations aim to increase the related assets of ESG to \$33.9 trillion by 2026, which is an increase from the value of \$18.4 trillion reported in 2021.

The following four major motivations have been identified behind the ESG reporting of companies: investment performance, demand from clients, product strategy, and ethical considerations [9]. In relation to this, the management that manipulates earnings may use ESG initiatives to protect themselves against activism and vigilance from stakeholders [10].

For companies, the main source of information can be obtained from their financial reports, with earnings being the main metric of performance generally utilized by analysts and investors [11,12]. Completely aware of this fact, managers of companies turn to managing accounting and financial numbers to provide anticipated short-term outcomes [13], in which case earnings management is involved in managing financial reporting to receive private benefits [14].

Furthermore, earnings management refers to a commonly intended practice brought on by opportunistic behavior or informative aims that management carries out to display positive financial information that is in contrast with the actual information [15]. According to Kaplan [16], earnings management is the most crucial ethical issue that management faces during the process of financial reporting, and earnings management practices are rooted in the principal–agent conflict, wherein management uses unethical and deceptive accounting methods to garner personal benefits [17]. In this regard, this study addresses the effects of the ethical and sustainable practices of ESG in companies on earnings management.

The recent accounting scandals of companies such as Enron and WorldCom have made policymakers, investors, academics, and practitioners further concerned about earnings management. The issue of earnings management exists in listed Saudi companies. For example, previous studies (i.e., [18–21]) have reported the averages of earnings management as 17.4%, 7%, 10.3%, and 16.2%, respectively. Thus, the problem addressed in our study is related to the influence of ESG as an ethical behavior of companies on their earnings management. Our study highlights a concern for policymakers in Saudi Arabia, namely enhancing their efforts to present innovative policies to advance the business environment in the country.

In particular, this study examines whether companies adopting goods through ESG activities engage in creative accounting or earnings management. We are motivated to investigate this unexplored question to revalidate in a different context, i.e., Saudi Arabia, whether earnings management increases with the level of ESG disclosure. First, Saudi Arabia is a rapidly growing country that has recently realized major stock market improvements, corporate governance, and ESG reforms; nevertheless, it is still behind advanced countries in terms of ESG implementation. The Saudi Stock Exchange was linked with the SSE initiative in 2018 to increase ESG awareness among Saudi-listed companies. At the end of 2021, along with Morgan Stanley Capital International, the Saudi Stock Exchange published its first disclosure guidelines for ESG [22]. Therefore, the ESG–earnings management association is a debate that still exists, mainly as most global stock markets are beginning to offer investors different indexes related to sustainability. Consequently, examining this problem in Saudi Arabia remains an evolving field. Second, the efficiency of diverse corporate governance structures is impacted by variances in nations’ legal and governing structures, in addition to historic and cultural features [21]. Saudi Arabia’s governmental, economic, and societal schemes are based on Islam. It is a petroleum-based nation and a vital provider of oil and gas to the whole world. Thus, there is a substantial requirement for larger environmental sustainability [23]. This creates an environment with particular features that inspire research on issues such as ESG and earnings management.

The companies that declare their ESG engagement to preserve environmental, social, and governance activities are perceived by stakeholders as companies that are transparent and competent and have integrity [24]. However, previous studies have shown that companies engaging in ESG activities tend to have managerial opportunistic aims, which

causes a clash between management and stakeholders [25]. Considering the damage that earnings management can do [26], it becomes urgent to examine the ESG disclosure–earnings management relationship in light of an unethical policy that hides the actual financial data of a company.

Currently, several interactions have been noted between financial and nonfinancial reporting, with increasing discretion of management in financial reporting (i.e., earnings manipulation) and disclosing and reporting ESG activities (greenwashing), all of which are covered under the stakeholder communication strategy [27]. In other words, the quality levels of financial reporting and ESG reporting are linked as major management decisions.

Previous studies have advocated two contradictory perspectives to explain the association between ESG and earnings management. On one hand, the transparency and accuracy of financial reporting will increase as earnings management decreases. This is attributable to the ethical management of companies that conform strictly to regulations and ethics [28]. That is, outstanding sustainable management practices increase earnings accuracy. In fact, ethics encourage managers to be dependable and honest because this behavior is helpful for the company. On the other hand, many previous studies [29] have indicated that managers of companies engage in ESG only when such activities give them personal advantages. Companies' management conducts ESG practices to attain further media reporting, reduce thorough verification through stakeholders, and obtain the legitimacy of society [18]. According to Gargouri et al. [30], companies with managers adopting aggressive earnings management policies tend to engage in ethical and social policies to hide their true activities from shareholders. Such a positive relationship is attributable to managers' desire to gain stakeholders' confidence and support while mitigating dismissal risks that may stem from the adverse effects of earnings manipulation practices on the company's value and reputation in the marketplace. Thus, our study predicts that management can use ESG to conceal their misbehavior and prove to all stakeholders that the company is transparent.

Although some companies include sustainable initiatives in their business operations, empirical findings about sustainable disclosure practices, environmental and social performance, and earnings management have revealed inconsistent and mixed results (i.e., [31–33]). This stresses the urgency to examine contextual and moderating factors that may have a role in changing the ESG–earnings management relationship [2]. This study examines financial distress as a potential control mechanism underlying the abovementioned relationship.

Essentially, the financial distress level is considered the possibility of companies falling short of their financial obligations [34]. Financial distress is likely to affect earnings management practices in companies if there is an expected change in managers' incentives when facing adverse situations. This is common among emerging countries, with worse degrees of shareholder monitoring and minority investors' protection compared to their developed counterparts [35]. Notwithstanding the present robust disclosure standards, interest in corporate social responsibility (CSR)-related disclosure and regulatory demands in developing nations is still going strong [36], with companies facing a specific financial difficulty level that could modify their reporting behavior toward minimizing investors' negative reaction. According to Harymawan et al. [3], the extent of the desire to present qualified ESG reporting varies between companies that are financially distressed and those that are not.

By the end of the third quarter of 2022, the accumulated losses amounted to 10.8 billion Saudi riyals for 49 listed Saudi companies [37]. The management of financially distressed companies may expect that their advantages will be cut, they will be substituted, and their reputation will be damaged [38]. Therefore, this management may take the chance to hide such declining performance by adopting diverse accounting techniques that can increase the income and hide the loss. Given the importance of listed companies with accumulated losses and their impact on the performance and value of the financial market, identifying

their impact on the ESG–earnings management relationship contributes to empowering policymakers to make appropriate decisions to deal with this category of companies [39].

This study makes several contributions to the current body of knowledge. First, it extends the literature on ESG and earnings management. Past empirical evidence that focused on the ESG–earnings management relationship reported mixed results of heterogeneous theoretical perspectives and different ESG and earnings management measurements [40]. Such mixed results urged us to provide additional evidence using robust data culled from the current period. Our study used data from 2014 to 2021 to guarantee a large dataset that could contribute to the accuracy of the examination and findings. So far, the ESG disclosure–earnings management relationship remains open for discussion and examination, as past studies have indicated (i.e., [41]). We responded to the call by prior studies, such as [42], to investigate this relationship. In other words, this creates a considerable opportunity for further studies, such as the current one, to conduct a systematic examination of the relationship. Second, in this study, interest lies in examining the influence of not only ESG disclosure but also ESG subcomponents on managing earnings. We conducted an in-depth examination of the way the three elements (environmental, social, and governance) enhance the ESG–earnings manipulation relationship.

Third, this study builds on past studies, particularly those of Habbash and Haddad [31] and Garfatta [18]; however, it contributes to the literature by looking into whether financial distress affects the ESG–earnings management relationship. In this regard, past studies have highlighted that resource availability and the financial health of companies are prerequisites for ESG investment. This shows a gap in research as to the way the financial situation of the business affects ESG engagement decisions for earnings management. This study attempts to minimize the literature gap by responding to Githaiga’s [2] call to examine the contextual and moderating factors that may influence the ESG–earnings management relationship.

Fourth, Velte’s [41] literature review of the ESG–CSR and earnings management relationship showed that most past studies of this caliber were conducted in Western countries. Very few empirical studies have been conducted on the relationship between the two variables in the context of this global area—particularly in Gulf countries, such as Saudi Arabia [18]. This research gap is minimized by this study, as it focuses on listed companies in Saudi Arabia, a country in the Middle East. Saudi Arabia is a member of the G20 and a leading global oil exporter; it is aligned with its established Saudi Vision 2030. The Saudi capital market is experiencing extensive improvement, and the government is focusing all efforts on attracting foreign investments and shifting from an oil economy to one that is diversified. Notably, Vision 2030 focuses on sustainability concerns, incentivizing the Saudi Stock Exchange to improve ESG practices and disclosure adoption in the Saudi capital market. The aforementioned incentives and motivations make the Saudi Arabian market attractive for researchers to examine the issues surrounding corporate governance and the sustainability of companies. Hence, this is a unique study that contributes distinct findings from a particular context.

Finally, the study adopts the main theories utilized in the literature (agency, stakeholder, and legitimacy). This contribution enlarges the theoretical understanding of the ESG–earnings management relationship in emergent economies. Furthermore, while most of the simultaneous works related to ESG and earnings management have employed a qualitative measure of ESG, such as the Kinder, Lydenberg, Domini social ratings or Global Reporting Initiative standards [10,43,44], our study employs the ESG score of Bloomberg as a quantitative measure instead of a general disclosure index. Furthermore, this study offers helpful recommendations to many parties, such as regulators, companies, and investors, concerning the role of ESG in earnings management and the effect of financial distress on this relationship, thereby contributing to the enhancement of better green and sustainable improvement and more accurate financial reports.

The remainder of this article is structured as follows. Section 2 is dedicated to developing the theoretical framework of the study and to presenting the literature review upon which the study hypotheses are formulated. Section 3 presents the adopted research

methodology to achieve the study objectives, and Section 4 provides a discussion of the results. Section 5 delves into an additional robustness analysis, and finally, Section 6 enumerates the study conclusion, implications, limitations, and recommendations for further studies.

2. Literature Review and Hypothesis Development

2.1. Theoretical Underpinnings

There are two contrasting perspectives in the literature in terms of the ESG–earnings management relationship. To begin with, advocates of ESG are convinced that engagement in ESG activities positively affects earnings quality, as evidenced by stakeholder theory [45]. Based on this theory, companies need to consider the goals and interests of both stakeholders and shareholders to realize long-term profitability and competitiveness [46]. A company that fails to adopt such a strategy would not have a substantial influence on its sustainable performance [2]. The theory's ethical and moral extents are built on the basis of ESG and CSR [1]; thus, companies engaging in socially accountable activities develop strong and long-standing relationships with their stakeholders through their sustainable development and performance [47]. Aligned with stakeholder theory, companies that are committed to sustainability practices are not as likely to engage in earnings manipulation in that ESG practice adoption is incentivized by long-term objective achievement. Through engagement in sustainability disclosure, a company can illustrate that the environment and society matter to them, which makes the public perceive them as corporate citizens who are concerned with related issues [2].

In previous studies dedicated to ESG, CSR, and earnings management, empirical findings showed support for stakeholder theory. For example, Velte [32] revealed a negative ESG performance–earnings management relationship. Similarly, Gerged et al. [48], in their study of the connection between corporate environmental reporting and earnings management practices, also supported a negative relationship. Studies along this line showed that companies' engagement in socially responsible activities limits their earnings management and maintains a positive reputation among the stakeholders, while delivering high-quality accounting reports (i.e., [40,44,49,50]).

Along similar lines, the argument of societal legitimacy was raised by Prior et al. [10]. This signifies that involvement in earnings management can be a real threat that businesses' management will face from society. In fact, an increasing number of studies based on legitimacy theory have claimed that earnings management is a risk to companies' legitimacy [43]. According to legitimacy theory, as the practices of companies remain in line with prevailing societal ethics and values, they will gain societal legitimacy [51]. Thus, when companies report more ESG sustainability to society, it can diminish their earnings management. ESG activities in sustainability disclosure can inspire companies to be more truthful, enhance transparency and morale, and diminish the presence of information asymmetry that occurs between the company and stakeholders, in addition to decreasing the ability of management to practice earnings management [52].

In contrast, another argument states that managers may take advantage of ESG to carry out opportunistic behavior while enhancing their reputation among stakeholders and hiding their negative behavior, using a premise based on agency theory [17]. According to this theory, managers engage in ESG and CSR activities to obtain self-benefit [29]. It posits that opportunistic management behavior exists, and thus, there is a positive association between ESG and earnings manipulation. In other words, managers adopt ESG reporting and performance to cover their opportunistic earnings behavior [53], and if this happens, they might actively adopt earnings management [41]. For this reason, ESG management reflects reputational insurance, which enables the management of earnings and the presentation of negative-quality financial disclosure [44]. Moreover, the association between ESG disclosure and earnings manipulation can be viewed in light of engaging in earnings manipulation by management, after which the stakeholders' trust will be

decreased if not lost [41]. To address this issue, ESG reporting and performance should be transparent to stakeholder groups.

2.2. Direct Association between ESG and Earnings Management

Earnings manipulation could expose managers to the employees' rogue behavior, customers' misunderstanding, investors' pressure, partners' defection, legal action from regulators, activists' boycotts, illegitimacy from the community, and media exposure. These threats may eventually destroy the reputational capital of the company [54]. Stakeholder activism and vigilance can be defended by firing the manager, leading to a bad reputation for the company. Management needs to get protection from influential stakeholders. Furthermore, it requires legitimacy and stakeholder satisfaction. Thus, management engages in many environmental and social practices [55]. According to Prior et al. [10], managers are incentivized by stakeholders to do good by adopting CSR and ESG practices. The authors stated that managers who practice earnings management generally use socially responsible practices to maintain the support of stakeholders, and that activities that are geared toward sustainability can be used as a strong tool to gain support from financial information end-users.

In the context of Saudi Arabia, Habbash and Haddad [31] revealed a positive relationship between CSR and earnings management practices, indicating that Saudi companies that adopt such activities are more likely to engage in earnings manipulation. The authors indicated that these results would make additional sense in a marketplace with less strong rules and investor safeguards like Saudi Arabia besides emerging countries in general. Consequently, ESG may inflate agency problems by offering managers more motivation to conduct earnings management to hide their practices from outsiders. In a related study, Salewski and Zulch [56] reported a positive relationship between CSR and earnings management. The authors stated that investment in and reporting of CSR activities do not reflect financial reporting quality among European companies, and that companies with great sustainability indices have a higher tendency to manipulate earnings and report lower quality earnings. In addition, Chouaibi and Zouari [57] found that business ethics investments can be leveraged by executives to extend their discretionary power and manipulate earnings to create a positive bottom line in accounting. A reasonable clarification of this result is that managers need to get the support of stakeholders and decrease the probability of dismissal due to the adverse influence of practicing earnings management on a company's reputation and value.

Furthermore, Garfatta [18] indicated a positive CSR disclosure–earnings management practices relationship in support of agency theory. Thus, companies' management conducts ESG activities to conceal their misconduct and ensure that the company is transparent. Ethical codes are used by managers as a mechanism to realize their personal aims instead of the company's objectives. Similarly, Fritzsche [58] contended that ethical codes may be used by managers as a tool to achieve selfish means, and that managers can adopt CSR activities to gain more media focus, confine detailed monitoring by stakeholders, and ensure its legitimacy in the society and community. Belgacem [59] investigated Tunisian-listed companies in light of social disclosure and found it to be significantly and positively related to the degree of earnings management. The author concluded that social disclosure is generally adopted by managers as a tool to hide their earnings management activities and to support the legitimacy of their companies. Velt [32] reported that the performance of environmental practices (represented by carbon) leads to increasing real earnings management. Their results indicated that companies' management utilizes environmental (carbon) activities as a moral sign, with the intention of hiding their adverse effects on financial reporting.

In the Canadian context, Gargouri et al. [30] focused on the CSR activities that companies use to conceal questionable accounting activities. They contended that the social and environmental aspects positively influence the CSR–earnings management relationship, as the adoption of environmental plans and social activities leads to enhanced discretionary spending. This further leads to higher levels of earnings management and a negative influ-

ence on the financial performance of companies. In a South African study, Buertey et al. [60] reported a positive CSR–earnings management relationship using a sample of 118 Johannesburg Stock Exchange companies for the years 2012–2015. The outcome revealed the opportunistic employment of ESG by management. That is, ESG can be utilized to enhance the individual interests of management. In China, Zhang et al. [61] revealed that companies that adopted voluntary CSR disclosure had a greater inclination toward earnings management engagement using discretionary accruals. This led to a positive CSR–earnings management relationship, as the managers wanted to compensate for and internalize the opposing effects of the actions that would be taken by stakeholders. Jordaan et al. [62] found that when companies have improved their CSR activities, they are more inclined to be involved in earnings management. The management of these companies does this to escape undesirable inspections from stakeholders. In fact, management tries to “greenwash” the misreported financial outcomes. Similar results were reported by Pasko et al. [63], which are in accordance with the hypothesis of opportunistic financial reporting. They reported that companies’ directors employ CSR to protect their positions.

Overall, it appears that companies that are socially responsible reflect higher discretionary behavior through the promotion of actions that hide their actual financial and economic performance. Based on this perspective, managers engage in sustainability activities to gain personal advantages [60] and conceal unethical stakeholder activities. In other words, sustainability practices are a way of window-dressing or greenwashing the actual performance of companies [64]. Consequently, nonfinancial information disclosure is related to earnings manipulation, whereby earnings management constitutes an example of strategic discretionary decisions that management adopts to misdirect stakeholders through ESG [65].

Therefore, the basic assumption is that management that manipulates earnings is incentivized to present a socially friendly reputation, considering that ESG activities are a powerful mechanism to obtain and maintain stakeholders’ support. This mechanism can decrease the possibility of management being fired owing to pressure from stakeholders’ concerns or from those whose interests have been breached through engagement in earnings management practices. This mechanism involves management’s use of ESG to entrench themselves through earnings manipulation. Based on the literature and agency theory, this study proposes the following hypothesis:

Hypothesis 1 (H1). *ESG disclosure has a significant and positive impact on earnings management.*

2.3. Moderating Influence of Financial Distress on the ESG–Earnings Management Relationship

Following the establishment of a possible association between ESG disclosure and earnings management, the second step is to investigate the role of financial distress in this association. Based on this argument, executives may take advantage of sustainability initiatives and disclosure to conceal opportunistic behavior, a premise that is aligned with agency theory, which posits that managers facing financial difficulties think of reaping benefits for self-gain [66]. Past studies conducted on these lines, such as De Fond and Jiambalvo [67] and Jaggi and Lee [68], concluded that companies in financial crises conduct upward earnings manipulations. Moreover, according to Choi et al. [66], financial distress represents the failure of management to come out of difficulties brought on by bad investments and other serious cases that eventually result in bankruptcy. The expectation of financial distress to be short term increases the probability that management will engage in income-increasing discretionary accruals [69].

Thus, financially distressed companies attempt to enhance ESG disclosure to present high-performance signals from the viewpoint of market and financial entities. Such companies may also try to whitewash their reputation in front of their societal shareholders. This situation is leveraged by managers by maximizing returns and minimizing expected punishments, supporting their public image, and aligning with their sustainability social role, all of which could fail because of poor financial conditions [70]. Such incentives urge

the management of financially distressed companies to carry out impression management strategies, such as discretionary disclosure [71], which covers ESG reporting.

In previous studies, a positive relationship was found between financial distress and earnings management in the context of developing economies (i.e., [72,73]). Companies in this type of economy face high financial distress and are involved in earnings manipulation owing to their lack of mature regulatory infrastructure, high level of concentrated ownership, extensive corporate governance issues, and higher macroeconomic unsteadiness [35]. In the case of Korea, Choi et al. [66] focused on listed companies and their distress in relation to earnings management; similarly, Sweeney [74] confirmed the presence of income-increasing earnings management behavior among businesses that eventually foreclosed due to debt covenant violations. Linck et al. [75] found that financially constrained companies were more inclined toward earnings manipulation when faced with investment opportunities. In this case, management engages in earnings manipulation to open themselves up to investment opportunities, notwithstanding their struggles with external financing to borrow money and reach investment efficiency.

However, companies with good levels of socially responsible practices have a higher likelihood of survival when encountering adverse situations/decline phases, as they mitigate the risk from such situations [76]. As a result, ESG disclosure and earnings management are emphasized more among financially distressed companies; thus, this study proposes the following hypothesis:

Hypothesis 2 (H2). *Financial distress enhances the positive impact of ESG disclosure on earnings management.*

3. Study Methodology

3.1. Sample

The key aim of our study was to determine the association between the disclosure of sustainability issues (ESG) and earnings management in Saudi-listed companies in Tadawul, the Saudi stock market. In addition, we aimed to examine the moderating role that financial distress can play in the above association. Accordingly, the range of companies listed on Tadawul for the years 2014–2021 was scrutinized. This time period seemed suitable owing to the availability of comprehensive ESG data on the Saudi companies that were already available in the Bloomberg database in 2014. The time span was extended to 2021 to draw the most accurate findings and conclusions in terms of the potential influence of ESG disclosure on earnings management. The study sample consisted of 38 companies, which presents a significant sample of 304 company-year observations for the analysis.

3.2. Variables' Measurement

3.2.1. Earnings Management Measurement

The measurement of earnings management has been commonly reported in the literature using two models: the Jones model [77] and the modified Jones model [78]. However, some studies (i.e., [79]) have highlighted concerns regarding their inability to accurately explain company performance when measuring earnings management. This issue has been addressed by recent studies using the performance-matched accrual measure proposed by Kothari et al. [79] [80,81]. This measure considers the lagged return on assets to resolve heteroscedasticity issues and model misspecification prevalent in past models.

To begin with, the total accruals ($TACC_{i,t}$) for firm i in year t are calculated by taking the difference between the operating earnings ($EARN_{i,t}$) and the net cash flow from operations ($CFO_{i,t}$):

$$TACC_{i,t} = EARN_{i,t} - CFO_{i,t} \quad (1)$$

The next step entails calculating the annual industry sector estimates for the entire company in a single industry. This is achieved using the modified Jones model [79], in which the total accruals are scaled through lagged total assets ($Ta_{i,t-1}$), and its components, with an intercept, are exposed to regression analysis.

$$TACC_{i,t}/TA_{i,t-1} = \beta_0 + \beta_1 (1/TA_{i,t-1}) + \beta_2 [(\Delta REV_{i,t} - \Delta REC_{i,t})/TA_{i,t-1}] + \beta_3 (PPE_{i,t}/TA_{i,t-1}) + \beta_4 ROA_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

In the above equation, $TACC_{i,t}$ denotes the total accruals for company i in year t , while $TA_{i,t-1}$ denotes the total assets for company i at the end of year $t - 1$. In addition, $\Delta REV_{i,t}$ denotes the revenue change for company i in year t from year $t - 1$, and $\Delta REC_{i,t}$ denotes the accounts receivable change for company i in year t from year $t - 1$. Meanwhile, $PPE_{i,t}$ denotes the property, plant, and equipment value for company i at the end of year t , and finally, $ROA_{i,t-1}$ denotes the return on assets for company i at the end of year $t - 1$ (which is the net income over lagged total assets). The residuals are then considered ($\varepsilon_{i,t}$).

Through the coefficients β_0 , β_1 , β_2 , β_3 , and β_4 for each industry, the nondiscretionary accruals ($NDACC_{i,t}$) can be derived from Equation (2) as follows:

$$NDACC_{i,t} = \beta_0 + \beta_1 (1/TA_{i,t-1}) + \beta_2 [(\Delta REV_{i,t} - \Delta REC_{i,t})/TA_{i,t-1}] + \beta_3 (PPE_{i,t}/TA_{i,t-1}) + \beta_4 ROA_{i,t-1} + \varepsilon_{i,t} \quad (3)$$

In summary, the discretionary accruals of companies are obtained by deducting nondiscretionary accruals (Equation (3)) from the grand total of accruals (Equation (2)).

$$DACC_{i,t} = TACC_{i,t} - NDACC_{i,t} \quad (4)$$

$$ADACC_{i,t} = \text{absolute value of } DACC_{i,t} \quad (5)$$

Based on past studies, the ADACC, absolute discretionary accruals, size is utilized as a proxy for earnings management because managers are incentivized to adopt earnings management practices that can either heighten or minimize the reported income.

3.2.2. ESG Measurement

This study measured ESG disclosure using the ESG scores of the examined companies, ranging from 0% to 100%. This was obtained by analyzing the ESG-related information that the companies disclosed in Bloomberg. The scores were calculated using the companies' ESG index, and the relevance of individual ESG data points to the companies' industry sectors, whereby higher scores indicated more comprehensive ESG disclosure. The companies' ESG disclosure calculation above was followed by past studies (i.e., [22,82–84]).

3.2.3. Moderator Measurement

The capital market of Saudi Arabia categorizes distressed companies into three insolvency flag levels that depict the level of their financial distress severity. The flag colors yellow, orange, and red are incorporated into the listed companies' names on the stock exchange on the Tadawul website, indicating the investors of their accumulated capital losses of 20% or higher. The yellow flag denotes accumulated losses in the range of 20% to less than 35%, the orange flag denotes losses in the range of 35% to less than 50%, and the red flag denotes losses of 50% or more. The dummy variable of stress takes the value of 1 if the company's accumulated losses are higher than 20% of the average net worth, or otherwise 0 (The definition of a distressed company is taken from <https://cma.org.sa/en/Pages/default.aspx> accessed on 2 March 2023).

3.2.4. Measurement of Control Variables

The study accounted for potential factors that could affect earnings management by following past studies' inclusion of various control variables. Because smaller companies may have fewer resources to boost internal controls, company size was included as a factor in addressing the effects, as suggested by Gong et al. [85], and was calculated by the logarithm of total assets. In addition, the study considered scale effects and profitability—including return on assets (ROA), representing the return on assets; leverage (LEV), representing the total debts deflated by total assets; and operating cash flow (OCF), representing the operating cash flow. Both ROA and OCF are inversely associated with earnings management in

the literature [86]. Auditor quality may also affect earnings management practices as, based on Becker et al. [87], high-quality auditors are more able to limit earnings management and influence the internal controls structure. Thus, this study included a dummy variable (BIG4) to denote whether one of the major accounting firms audited the financial reports of the companies.

3.3. Model Specification

This study examined the ESG–earnings management association using discretionary accruals, considering the moderating role of financial distress in the association. Figure 1 presents the study’s theoretical framework. Specifically, as referenced in the literature [88, 89], this study used multivariate fixed-effects unbalanced panel regression models and controlled for company-specific factors. This approach is in line with that explained by Hair et al. [90] in their guidelines for assumptions of regression testing involving homoscedasticity of residue, linearity, multicollinearity, and normal distribution of the error term. STATA 17 was employed for regression statistics, and based on the results, a fixed-effects model was opted to acquire consistent coefficient estimates from the panel data, as suggested by the employed tests (i.e., the Durbin-Wu-Hausman test and the Breusch-Pagan Lagrangian multiplier test). The regression models used to test the hypotheses are as follows:

$$DACC_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 OCF_{i,t} + \beta_6 BIG4_{i,t} + Yr_{i,t} + FIRM_{i,t} + IND_{i,t} + \varepsilon_{i,t} \quad (6)$$

$$DACC_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 ESG_{i,t} \times DISTRESS_{i,t} + \beta_3 DISTRESS_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + \beta_6 LEV_{i,t} + \beta_7 OCF_{i,t} + \beta_8 BIG4_{i,t} + Yr_{i,t} + FIRM_{i,t} + IND_{i,t} + \varepsilon_{i,t} \quad (7)$$

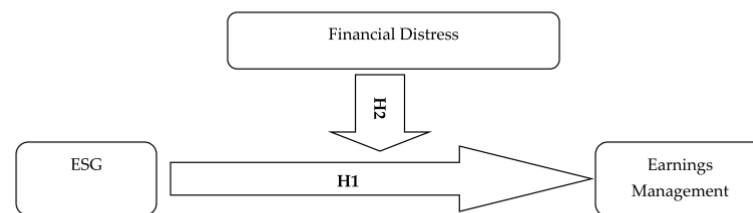


Figure 1. Conceptual framework.

In the above equation, *i* stands for companies, *t* stands for fiscal years, and ESG stands for environmental, social, and governance scores. In addition, DISTRESS denotes a dummy variable that is valued at 1 if the accumulated losses of the firm are higher than 20% of the average net worth of any year; otherwise, 0; SIZE indicates the logarithm of total assets; LEV indicates the total debts deflated by total assets; and OCF indicates the operating cash flow. In addition, BIG4 denotes a dummy variable that is valued at 1 if one of the four major accounting firms is auditing the financial reports of the firm, and otherwise at 0, and finally, ε denotes the error term. To explain the possibility of within-firm correlation, this study considered standard errors clustered at the company level.

4. Empirical Results and Discussion

4.1. Descriptive Statistics

The descriptive statistics results based on the study’s sample are presented in Table 1. As shown in the table, the mean and median value of DACC is 0.06, which indicates that managers use practices that increase profits. The ESG performance ranges from 0% to 100%, with a mean score of 19.93, indicating a contrasting scenario. Note that most companies have yet to disclose their sustainable practices. This result agrees with that reported by Chebbi and Ammer [22], in that a moderate level of ESG disclosure exists among Saudi-listed companies. The sustainability values indicate that Saudi companies have yet to achieve good ESG results, as the current values remain below 70% [91]. Regarding the ESG pillar scores, the environmental score is 12.13, the social pillar score is 14.67, and the governance

pillar score is 47.07. Based on these values, Saudi-listed companies' performance is lower for both SOC and ENV but higher for GOV performance, which is aligned with the results reported by Chebbi and Ammer [22].

Table 1. Descriptive statistics.

Variables	N	Mean	STD	Median	75th Percentile	95th Percentile
DACC	304	0.06	0.07	0.04	0.08	0.17
ESG	304	19.93	11.69	16.67	25.81	45.87
ENV	304	12.13	16.45	3.10	19.82	47.32
SOC	304	14.67	13.02	11.67	21.67	38.60
GOV	304	47.07	17.80	44.64	54.89	75.53
DISTRESS	304	0.27	0.45	0	1	1
SIZE	304	10.71	0.65	10.70	11.20	11.70
ROA	304	7.70	0.66	1.97	4.38	16.74
OCF	304	0.09	0.80	0.08	0.14	0.24
LEV	304	23.34	0.20	17.34	39.43	56.96
BIG4	304	0.37	0.48	0	1	1

The observations from the control variables indicate differences in SIZE, ROA, OCF, LEV, and BIG4 across the examined companies, as is clear from the high values of standard deviations (0.65, 0.66, 0.80, 0.20, and 0.48, respectively). A positive ROA value of 7.70 shows that most sampled companies do not have any problem with profitability, while the mean value of the debt-to-total assets ratio of 23.34 shows that most of the examined companies are leveraging debt. Moving on to the BIG4 mean value of 37%, it appears that the sample companies do enlist BIG4 auditing firms, which is aligned with past earnings management studies in Saudi Arabia (i.e., [92,93]).

4.2. Correlation Analysis

The Pearson correlation matrix results for the key study variables are presented in Table 2. Based on the table, a positive relationship is observed between ESG disclosure and DACC, supporting the main hypothesis and indicating that companies having higher ESG scores are more inclined toward engaging in manipulating earnings. Similarly, the components of ESG, namely ENV, SOC, and GOV, have positive relationships with DACC. To support these findings, the study also analyzed the potential influence of multicollinearity using a comprehensive assessment of the variance inflation factor. The results showed weak values, lower than the critical threshold of 10, with correlations lower than 0.80, indicating the absence of a multicollinearity issue. By addressing this potential issue, the analysis robustness is increased, and additional support is contributed to the findings' validity.

Table 2. Correlation matrix.

Variables	DACC	ESG	ENV	SOC	GOV	DISTRESS	SIZE	ROA	OCF	LEV	BIG4
DACC	1										
ESG	0.0689 *	1									
ENV	0.0695 *	0.3893 ***	1								
SOC	0.0154 **	0.4481 ***	0.7692 ***	1							
GOV	0.0344 **	0.5828 ***	−0.655	−0.0199	1						
DISTRESS	0.0124 **	−0.0154	−0.0285	−0.2111 ***	0.0037	1					
SIZE	0.0833 *	0.1420 **	0.2039 ***	0.1117 *	0.1109 *	−0.0888	1				
ROA	0.0220 *	0.0761	−0.0212	−0.0470	0.0827	−0.0848	−0.1486 **	1			
OCF	−0.0341	0.0634	−0.0784	−0.0142 **	0.0945	−0.0301	0.0503	−0.0221	1		
LEV	−0.0954	0.2230 ***	0.1709 ***	0.2646 ***	−0.0384	−0.0402	−0.4620 ***	−0.1000	0.0762	1	
BIG4	−0.0978 *	−0.0056	−0.1788 ***	−0.1943 ***	0.0496	0.0038	0.0475	0.0574	0.2047 ***	−0.0696	1

NOTE: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

4.3. Multivariate Analysis

4.3.1. Association between ESG and Earnings Management

A comprehensive multivariate regression analysis was conducted in this study to test the ESG disclosure–earnings management relationship represented by DACC. The results are presented in Table 3. As shown in the table, a probability value (Prob > F) of 0.000, with an F-value of 1.1, supports the significance of the study model. The adjusted R² of the model is 26.8%.

Table 3. Effect of ESG on earnings management.

Variables	DACC
INTERCEPT	0.1763 ** (2.27)
ESG	0.0044 ** (2.03)
SIZE	−0.0209 *** (−3.02)
ROA	−0.0019 *** (−2.74)
OCF	−0.0249 ** (−2.50)
LEV	0.0003 *** (2.79)
BIG4	−0.0109 (−1.33)
Year_FE	Yes
Industry_FE	Yes
Sample Size	304
F_statistic	1.10 ***
Adjusted R ²	0.268
Breusch-Pagan LM test	64.09 ***
Hausman Test	228.48 ***

NOTE: *** $p < 0.01$, ** $p < 0.05$.

Regarding the ESG–earnings management association, the result of the examination revealed a positive and significant coefficient, which indicates a positive correlation between the two variables, validating H1. This shows that with higher DACC levels, ESG disclosure scores also increase. This is a robust relationship, persisting in the face of controlled factors (company size, industry, and financial performance) that can influence ESG disclosure. This result is aligned with those reported in past studies (i.e., [10,18,31,43,60,61,89]). The alignment between the findings of this study and those of past studies contributes to research reliability and validity and emphasizes the relationship throughout different time periods and contexts.

In other words, the adoption of ESG activities can worsen a company’s managerial problems. Managers manipulate earnings to conceal their selfish actions from stakeholders [94,95], and in so doing, they are more inclined to present additional organizational information for distraction. This supports agency theory, which states that managers engaging in earnings management tend to carry out more ESG disclosures to achieve self-gains; such managers aim to conceal their misconduct and attract positive attention from stakeholders using made-up transparency [1,10,96]. Eventually, this ensures the entrenchment of management in the company through the use of ethical codes as a toll to achieve selfish goals as opposed to achieving the company’s goals. Their actions expose the entire company to the risk of lawful or disciplinary procedures by external investors [95], which is in contrast with the ethical viewpoint, which states that ESG and earnings manage-

ment should be negatively correlated. This result also indicates that corporate governance mechanisms are insufficient for preventing earnings management.

Therefore, Saudi companies that largely depend on earnings management practices to boost their earnings quality frequently adopt the ESG disclosure technique. It can be contended that within the study framework, ESG reflects a greenwashing scheme to reassure stakeholders. This hypothesis holds significance in markets with weak regulatory frameworks and limited safeguards for investors, such as Saudi Arabia and other emerging nations.

From the control variables examined in this study, only BIG4 had no statistical significance, which is attributable to the fact that 36% of the sample companies had their audits conducted by one of the Big4 firms. As for size, it had a negative and significant relationship with earnings management, which reveals that large companies engage less in earnings management compared to their smaller counterparts. This is consistent with past study results that illustrated how stakeholder scrutiny is higher in large companies, and thus, these companies are more disinclined to manipulate earnings [97]. Heavy borrowing companies tend to invite the scrutiny of loan providers; as a result, managers turn to earnings management methods to maintain steady performance. This is similar to the results obtained by prior studies [81] and to the expectations of agency theory. In this study, ROA and OCF both had a negative and significant relationship with earnings management.

4.3.2. Moderating Influence of Financial Distress on ESG–Earnings Management Relationship

The moderating influence of financial distress on the association between ESG and earnings management was investigated in our study using regression analysis (see Table 4 for results). The analysis results indicated that the estimated coefficients for ESG ($p < 0.05$) and DISTRESS ($p < 0.01$) were positive and significant. These results are aligned with past findings concerning financially distressed companies that may be encouraged to be involved in earnings manipulation to hide their actual financial issues and significant losses (e.g., [35,72–74,98]).

Table 4. Moderating effect of financial distress on the ESG–earnings management association.

Variables	
INTERCEPT	0.2124 (1.37)
ESG	0.0028 ** (2.32)
DISTRESS	0.1843 *** (2.43)
ESG × DISTRESS	0.0549 ** (2.21)
SIZE	−0.0212 (−1.52)
ROA	−0.0027 ** (−2.30)
OCF	−0.0459 (−0.65)
LEV	0.0002 (0.55)
BIG4	−0.0081 (−1.08)
Year_FE	Yes
Industry_FE	Yes

Table 4. Cont.

Variables	
Sample Size	302
F_statistic	1.28 ***
Adjusted R ²	0.1445
Breusch-Pagan LM test	60.56 ***
Hausman Test	256.89 ***

NOTE: *** $p < 0.01$, ** $p < 0.05$.

A notable result of this study is that the relationship between $ESG \times DISTRESS$ and $DACC$ was positive and statistically significant ($p < 0.05$), supporting the premise that financial distress has a moderating effect on the ESG disclosure–earnings management relationship, and thereby supporting H2. This indicates that, compared to stable companies, financially distressed companies or those faced with constraints have a higher likelihood of engaging in earnings manipulation through the disclosure of positive ESG information in order to hide losses or avoid them. In other words, such disclosure of information is carried out to maintain the good reputation of the company and to hide its weaknesses, which could steer clear of damaging market sanctions, falling stock prices, and mitigated compensation for management [99].

This result found in the Saudi market is attributable to the status of Saudi Arabia as an emerging market, with low oversight by shareholders and low protection levels for minority shareholders relative to their developed counterparts [35]. Generally, emerging markets have a positive relationship between the level of financial distress and income-increasing accruals-based earnings manipulation, considering that there are institutional factors (e.g., economies) that can form a conducive domain for financially distressed companies to manage their earnings [35].

Moreover, the agency conflict that arises between monitoring owners and minority investors—also referred to as the principal–principal agency issue present in evolving markets, such as the Saudi market—leads to entrenchment, enabling more shareholders to run the poor corporate governance system and constituting a weak board composition. This is achieved through the maintenance of weak internal control systems, which allow controlling shareholders to decide in their favor [100]. Weak internal controls for companies could bring about income-increasing earnings manipulation in financially distressed companies.

This result contributes to the literature as it underlines the significance of considering the context and circumstances under which companies divulge their ESG information and the relationship of such divulgence to their financial performance and management practices. This calls for investors, policymakers, and stakeholders to take a closer look at and analyze ESG data in terms of their credibility and reliability, particularly in financially distressed companies or other companies in challenging situations. The findings have important implications for both theory and practice in terms of the association between ESG disclosure and earnings management. They provide a clear picture for investors and decision makers who desire to improve their investments' sustainability and performance.

5. Additional Analysis and Robustness Check

5.1. Additional Analysis

The literature dedicated to the effect of ESG disclosure scores is built on the aggregate measure of ESG disclosure, but most studies have revealed that single elements or subscores (environmental, social, and governance) yield varying results [101]. Moreover, future studies should apply different measures to encapsulate the scores of each ESG dimension and to examine their relationship with earnings management practices. Hence, this study re-estimated the models following the replacement of the ESG disclosure score combined with its elements, namely ENV, SOC, and GOV.

This section presents an analysis of the association between the individual components of ESG and their effects on earnings management. We conducted a thorough analysis

to present the effects of ENV, SOC, and GOV on the financial decision-making of the companies. First, we employed fixed-effects regression to analyze the data (Table 5). Based on the results, the various components of ESG correlated significantly with earnings management; in particular, environmental disclosure and social disclosure scores positively affected earnings management, while governance disclosure had a negative effect. These results indicate that Saudi companies adopt environmental and social disclosures to hide their unethical financial practices, but the remaining result, which is the negative influence of governance disclosure on earnings management, is consistent with the results reported by Kolsi et al. [42] and raises some important questions. This result is attributable to the good governance structures established in the companies, which apply checks and balances and lead to lower earnings management levels. If so, then robust governance structures and associated procedures can be used to minimize the manager–stakeholder conflict.

Table 5. Effects of ENV, SOC, and GOV scores on earnings management.

Variables	ENV	SOC	GOV
INTERCEPT	0.2346 (1.47)	0.1655 (1.04)	−0.1452 * (−1.93)
ENV	0.0034 ** (1.98)		
SOC		0.0049 *** (4.25)	
GOV			−0.0011 ** (−3.81)
SIZE	−0.0251 * (−1.82)	−0.0177 (−1.21)	−0.0179 *** (−2.64)
ROA	−0.0029 * (−1.77)	−0.0022 (−0.87)	−0.0015 ** (−2.26)
OCF	−0.0396 (−0.57)	−0.0345 (−0.46)	−0.0256 (−0.52)
LEV	0.0004 (1.40)	0.0002 (0.51)	0.0002 ** (2.26)
BIG4	−0.0045 (−0.51)	−0.0144 * (−1.83)	−0.0089 (−0.09)
Year_FE	Yes	Yes	Yes
Industry_FE	Yes	Yes	Yes
Sample Size	258	289	297
F_statistic	1.12 ***	1.42 ***	1.78 ***
Adjusted R ²	0.0788	0.0845	0.0155

NOTE: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

5.2. Robustness Check

The fundamentals of regression analysis viewed from a new angle are presented in Tables 6 and 7. In Table 6, the main regression analysis is conducted for the second time, using the modified Jones (1995) model to measure earnings management. This approach was supported by Ni [102] and Wang et al. [103], both of which employed the discretionary accruals of the modified model for earnings management measurement. Moreover, as shown in Table 7, we used the Altman Z-score to identify financially distressed businesses, an approach based on Li et al.'s [73] and Zang's [104] studies. The same results were evidently reached.

Table 6. Effect of ESG on earnings management, as measured by the modified Jones (1995) model.

Variables	DACC
INTERCEPT	0.5115 (0.77)
ESG	0.0048 ** (2.00)
SIZE	−0.0050 ** (−2.09)
ROA	−0.0044 (−0.81)
OCF	−0.4739 (−1.34)
LEV	0.0012 ** (2.50)
BIG4	−0.1036 (−1.03)
Year_FE	Yes
Industry_FE	Yes
Sample Size	304
F_statistic	1.25 ***
Adjusted R ²	0.0259

NOTE: *** $p < 0.01$, ** $p < 0.05$.

Table 7. Moderating influence of financial distress on ESG–earnings management association using Z-score.

Variables	DACC
INTERCEPT	0.1798 (1.36)
ESG	0.0006 ** (2.86)
DISTRESS	0.0272 ** (2.84)
ESG × DISTRESS	0.0086 ** (2.96)
SIZE	−0.0213 * (−1.85)
ROA	−0.0019 * (−1.79)
OCF	−0.0254 (−0.36)
LEV	0.0003 (1.32)
BIG4	−0.0108 * (−1.88)
Year_FE	Yes
Industry_FE	Yes

Table 7. Cont.

Variables	DACC
Sample Size	304
F_statistic	1.20 ***
Adjusted R ²	0.0517

NOTE: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

6. Conclusions, Implications, Limitations, and Suggestions for Future Studies

6.1. Conclusions

Companies that adopt social responsibility practices are anticipated to act ethically toward their stakeholders, but empirical evidence is underscored by the inconclusive and conflicting results. The results do not clarify whether ESG performance can act as a limitation or an incentive for earnings manipulation engagement by management. This study mainly aimed to test the association between ESG disclosure and earnings management level; thus, it explored the premise that managers manipulate earnings to obtain self-gains, and such practices fall short of meeting stakeholders' interests. Stakeholders essentially want to have a say in the decisions of the company, and in so doing, managers may internalize the negative effects of their behavior and actions and try to cover them up by adopting ESG disclosure. This study also examined the role of financial distress in the ESG–earnings management association.

The required data were gathered from the Saudi stock market (Tadawul) for the years 2014–2021 and subjected to regression analysis. The results support a significant and positive association between ESG and earnings management, which means that a company's disclosure of environmental, social, and governance information maximizes the possibility that management engages in earnings manipulation. In essence, the disclosure of ESG levels by management is a ploy to maintain stakeholders' perceptions and hide their true behavior, which could lead to activism from partners and intense scrutiny of their actions. This is in line with past studies' results, which support agency theory assumptions. We conducted further checks of robustness, and the results remained the same for different measures of earnings manipulation and financial distress. The second examination involved the moderating role of financial distress in the ESG–earnings management association. The results indicate that financial distress plays a positive and significant role in improving the relationship between the two variables. This was further validated by the findings of the investigation and analysis of the three main ESG subfactors. Based on the results obtained for the three subfactors, governance had a negative significant influence on the earnings management proxy. This result is aligned with the perspective that corporate governance can mitigate the accounting misbehavior of management. As for the other two subfactors, companies that disclose higher social information tend to engage in higher earnings management, indicating that social actions such as workforce environment, human rights, and community participation, although ethically conducted, are merely utilized to hide earnings management practices. Finally, the environmental subfactor also had a significant and positive influence on the earnings management of the listed Saudi companies. This can be described by the fact that managers adopt environmental practices to maintain stakeholders' support. According to the results of this study, disaggregating the ESG disclosure scores into subfactors is significant in drawing distinct results.

6.2. Implications

6.2.1. Implications for Theory and Academics

The present study and its findings have several implications for both theory and practice. First, this study extends the literature dedicated to ESG, earnings management, and financial distress through the use of data from Saudi Arabia, an emerging economy. The study highlights the effects of ESG adoption in hiding the actual financial standing of a company marred by earnings management. This study presents evidence that supports past studies concerning the relationship between ESG and earnings management, reveal-

ing how socially accountable companies are more inclined toward engaging in earnings manipulation practices. In past studies, the general analysis was mainly conducted on the variables' relationships in the context of Western and developed economies. Considering that there are fewer studies of this caliber in developing and emerging markets, which are mainly known for their weak corporate governance structures and low level of ESG adoption, the analysis of such a relationship in the Saudi context presents a new perspective and paves the way for further analyzing earnings management practices. This study, therefore, is an extension of the topic that attempts to minimize the research gap and clarify inconclusive results. Moreover, the study addresses issues from previous findings concerning the lack of sufficient theoretical support. The results provide robust support for agency theory in that managers generally use ethical codes as a tool to serve their personal gains rather than those of the companies. Finally, the mixed results reported by prior studies are addressed by testing a moderating variable. This study further contributes by examining the moderating role of financial distress in the ESG–earnings management association. Results concerning this effect are a new addition to the academic literature whereby the ESG–earnings management relationship is examined under conditions of company distress.

6.2.2. Implications for Policymakers

Moving on to the implications for practice, the results are significant to many stakeholders, including regulators, managers, policymakers, and investors. For instance, regulators and policymakers may be made aware that earnings management leads to enhanced ESG as a tool to steer clear of experiencing pressure from stakeholders. Considering that accounting manipulations may damage the interests of stakeholders and shareholders, managers may adopt ESG to entrench themselves, develop alliances, and protect themselves from restive shareholders. Thus, policymakers need to establish guidelines to ensure that ESG is based on actual practices and is not just a greenwashing ploy. Alternative features of corporate governance may also be used to control ESG use, thereby limiting earnings management and improving financial reporting quality. There is a need for policy-making institutions and regulatory entities to improve monitoring for the enforcement of social compliance. The establishment of guidelines needs to be directed toward promoting the real motivation of socially responsible initiatives like ethical and moral concern resolution and developing a robust and important citizenship culture through shared values, without the deception of shareholders. Moreover, based on the obtained results of this study, the ESG–earnings management relationship may not be fully ethical considering that ESG is opportunistically utilized by management in times of distress. The balance and enhancement of governance policies' effectiveness in emerging economies can only be realized if regulators review the various weightings constituting the ESG score in order to be reflective of ethical and less opportunistic management behavior of concealment and to be valuable and relevant for the creation of sustainability strategies.

6.2.3. Implications for Industry

With regard to companies, knowledge of the effects of ESG on earnings management is crucial for identifying the strengths and concerns surrounding ESG. Thus, it is important for companies and managers to be aware of stakeholders' need to be involved in making business decisions. There is a need for them to be aware of the adverse effects of earnings management activities on the reputation and image of the company. Saudi companies, in particular, are expected to have robust ESG disclosure if they are inclined toward engaging in the global financial system. This means that companies need to enhance trust among investors through the disclosure of their actual financial reporting practices and by involving stakeholders in the decision-making process in light of ESG performance.

The outcomes of this study can be adopted as a guide among investors and shareholders regarding the company's participation in socially accountable practices, creative accounting practices, and financial disclosure consequences. Investors who are socially

responsible should have their guard up against companies with high ESG ratings, and such companies' ESG policies should be cautiously assessed, as they may be the incentive behind managers' engagement in earnings manipulation and the reason behind the presentation of less-transparent financial reports. Moreover, this study provides insights to investors concerning the earnings management strategies adopted by financially distressed companies. This is crucial for those who depend on financial reports for information and possible profitable investments.

6.3. Limitations and Suggestions for Future Studies

The results need to be cautiously interpreted due to the limitations of the study, the first being the nature of the sample and its small size, which leads to a confined generalization of results. In this regard, future studies could extend the sample to include diverse units. In addition, earnings management was estimated through discretionary accruals, which are known to be vulnerable to measurement errors. Thus, future studies may use other earnings management metrics, such as restatements and real earnings management, so that deeper insights can be obtained into the effects of ESG disclosure on earnings manipulation. Future studies may also link the variables of corporate governance with the relationship between ESG and earnings management, which includes sustainable management advantages and gender diversity. Another limitation of this study is the lack of consideration of managers' profiles in the research models, and since managers are in a central position when it comes to the financial and accounting policies of the company, this holds true for ESG dimensions. Therefore, future studies should take managers' profiles into consideration. Furthermore, future studies on ESG reporting may obtain an audit opinion of the ESG report as it is crucial in maintaining the actual intention behind it and its quality level. Additionally, exploring the potential bidirectional relationship between ESG and earnings management is an interesting avenue for future research. Finally, it is important to acknowledge the presence of endogeneity issues in the study. Addressing this concern through future research could involve employing techniques such as instrumental variable estimation, generalized method of moments, and simultaneous equations. These methodologies can help mitigate potential biases and enhance the validity of the findings. Through such additions, future studies could enhance the explanatory power of the study model.

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