



Article

Firm Performance, Corporate Social Responsibility and the Impact of Earnings Management during COVID-19: Evidence from MENA Region

Sharif Mohammad Aqabna ^{1,*}, Mehmet Aga ¹ and Huthayfa Nabeel Jabari ²

- Department of Accounting and Finance, Cyprus International University, Northern Cyprus, Mersin 10, Lefkosa 99040, Turkey; maga@ciu.edu.tr
- Department of Accounting and Finance, Hebron University, Hebron P.O. Box 40, Palestine; huthayfa.n.j@gmail.com
- * Correspondence: sharefa@hebron.edu; Tel.: +972-598-92-46-56

Abstract: This study examines the relationship between corporate social responsibility (CSR) and firm performance in the MENA region before and after COVID-19. It also seeks to understand how earnings management moderates that relationship. The final study sample consisted of 661 firm-year observations from 2007 to 2021. This study employed the random effect estimation (RE) method to examine the relationships and used GMM regression for robustness to investigate the results' consistency. The RE findings demonstrate that environmental, social, and governance (ESG) scores have a favorable impact on return on assets (ROA), even after adjusting for COVID-19. Regarding the moderating effect of EM, the outcome shows that CSR has an insignificant positive impact on financial performance. However, the results demonstrate that ESG has little impact on ROE. Additionally, the findings show a strong positive link between ESG and Tobin's Q. This study provides policymakers, board directors, and managers with a set of recommendations that are relevant to the context by enabling a better understanding of how managers react to CSR disclosure and the impact of minimizing earnings manipulation on firm performance.

Keywords: corporate social responsibility; firm performance; ESG; earning management; COVID-19; Tobin's Q; MENA region



Citation: Aqabna, S.M.; Aga, M.; Jabari, H.N. Firm Performance, Corporate Social Responsibility and the Impact of Earnings Management during COVID-19: Evidence from MENA Region. *Sustainability* **2023**, *15*, 1485. https://doi.org/10.3390/ su15021485

Received: 15 December 2022 Revised: 8 January 2023 Accepted: 10 January 2023 Published: 12 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

A highly significant economy with extremely sizable commercial activity exists in the Middle East and North Africa (MENA) region. In the MENA region, business and commercial activities continue to have a big and important impact on society and the environment. As a result, in the MENA region, the concept of corporate social responsibility, which takes into account the effects on the environment, society, and the economy, has received an increasing amount of attention over the past ten years [1,2]. Numerous high-profile business instances have highlighted the negative effects of subpar corporate social responsibility (CSR) performance in MENA nations, and societal pressure on MENA corporations to improve their CSR performance is growing [3]. According to the legitimacy theory, public forces are the reason why businesses disclose their CSR activities. According to this, businesses should disclose their CSR operations to stakeholders in order to demonstrate their sustainability and to support their commitment to the interests of the community [4]. The primary aim of this study is to examine the relation between a firm's operational, financial, market performance, and CSR in the MENA region before and after the coronavirus, as well as the function of EM in moderating that relationship.

The COVID-19 pandemic is currently causing extensive losses to the economy and business establishments, particularly in developing countries. This has had a significant impact on the socially responsible actions that businesses have taken, which have also had

an impact on shareholders, consumer preferences, and business assurance. A difficult and fascinating topic to take note of with relation to underdeveloped countries is CSR during the COVID-19 epidemic. Implementing CSR activities has remained the largest barrier for many firms due to the hardship of pandemic travel limitations and social segregation practices; however, some organizations have devised solutions throughout the COVID-19 pandemic to achieve their CSR goals [5,6]. Despite the chaos, the pandemic has provided corporations with fresh perspectives and chances to consider adopting CSR operations in developing countries [7,8]. However, business groupings are not exceptional in this regard.

During a tough moment like the COVID-19 pandemic tragedy, which is followed by uncertainty and dread, people all over the world are deeply committed to assisting one another in any manner possible. They should continue to make multiple efforts to help their personnel, clients, and communities in this time of crisis through their various CSR programs, as they have in the past. In this perspective, CSR is seen as a good tool for attaining sustainable development by offering a win-win strategy [9]. Additionally, it helps companies perform better financially while also delivering a multitude of social benefits that can motivate people to endure during the COVID-19 pandemic era and weather catastrophes [10,11].

Depending on how CSR is viewed inside a specific social, political, economic, and institutional structure, the perception of CSR varies across a wide range of nations. Institutional structures and organizational cultures have an impact on how CSR is perceived and used [12]. CSR activities are significantly influenced by the general economic conditions, the level of competition that businesses face, pressure from regulators, and non-governmental organizations like civil society [13]. The state will probably establish CSR rules in many developing countries to encourage businesses to actively participate in raising social standards [14]. CSR is an alternative management paradigm that applies to businesses in the MENA region. It portrays the business as a web of connections that connects stakeholders or other interested parties (such as suppliers, employees, and customers) involved in the development of the entity, separating owners and managers [15]. In order to allay worries about managers misusing their information advantage, a prior study showed that theories of corporate social responsibility were based on the assumption that they all helped in a better understanding of the growth of non-financial reporting [16].

This study focuses on the MENA region, since it has seen rapid market and environmental changes in recent years. It found that there is a lack of understanding about CSR practices and CSR disclosure in the MENA region, with limited findings [17]. As a result, this is an area for exploration that is likely to add to current understanding and assist researchers in using the findings for future research. Based on what has been said so far, there is a need for more research, and the current state of the literature suggests that more research is needed in the MENA region [18,19].

In addition, the public's knowledge of larger business concerns, including climate change, human rights, and environmental degradation, has increased in tandem with the rapid development of new technologies and the accompanying societal shifts. Because of this, the roles that firms play in the economy and society have been given a higher priority, which has resulted in greater emphasis being placed on CSR [20]. However, the resources available to the company determine how well CSR is promoted and carried out, and it is still unknown how investing in CSR will affect operating costs, profits, and the motivation to manage earnings. To be successful, CSR depends on corporate resources [20].

The firm's profits is one of the most crucial pieces of information reported in the financial statements, because the company's earnings will define its destiny. If the firm's management uses their own discretion and judgment in determining the company's profitability, there may be manipulation or management of the company's earnings. This strategy is known as "earnings management". Income manipulation has a major impact on earnings quality [21]. The manner in which earnings are managed may have a long-term impact on the organization's worth. Because of its significance in determining firm profitability and future value, the corporate finance literature has expended considerable

effort in analyzing it [22]. Recently, the essential elements of successful organizations have been studied alongside their social practices [23,24]. Disclosure of a company's CSR initiatives may improve its reputation, offer it a competitive advantage in the market, boost transparency, permit comparisons with other organizations, and encourage employees to contribute toward the company's long-term growth [25–27]. Previous studies claim that better-performing businesses invest in CSR activities because they help them establish a reputation as ethical businesses [28,29]. CSR has a long history and has changed as businesses have grown and as societal requirements have arisen. CSR has primarily been studied and implemented in industrialized countries, such as Western nations [30]. All business activities that are discretionary and take into account the opinions of the government and other relevant stakeholders are collectively referred to as "CSR" [31].

Contrarily, according to one definition, CSR disclosure is when a company shares and disseminates information in its annual report on specific operations, activities, and program applications that are thought to have an influence on both the general public and other stakeholders [32]. Additionally, prior research has demonstrated that CSR disclosure significantly affects trust-building [33]. Thus, there is no universally agreed-upon definition of CSR that applies to all nations, including those in the Mediterranean [34]. Therefore, this study explores, in a unique way, the fundamental policy problems of why and how CSR affects corporate performance in the MENA region, as well as whether or not earning management moderates this relationship. Accordingly, this study seeks to answer the following questions: (1) To what extent does CSR affect business performance in the MENA region? (2) How much does EM impact firms' performance in MENA region? (3) Does the COVID-19 pandemic affect the relationship between CSR and EM on firms' performance? and (4) Does EM moderate the relationship between CSR and FP in the MENA region?

Consequently, the current study seeks to make the following contributions to the existing literature. Firstly, previous literature shows that the majority of prior research has focused on the connection between company performance and CSR. The impact of EM as moderating variables, on the other hand, was investigated in this study. Second, in addition to presenting reliable and consistent evidence, it will generate new data that have been recently updated based on previous research in the MENA region. Third, the significance of this study is bolstered by an examination of the connection between CSR, firm performance, and the management of earnings before and after the spread of COVID-19. In addition to this, the CSR practices of firms in the MENA region are investigated in this study, and actual evidence is provided to support the conclusions of the study. This research supports policymakers and all other consumers of financial statements in analyzing business performance. The goal of this assistance is to reduce the likelihood of making errors in the MENA region.

2. Literature Review and Hypotheses

The concept of CSR disclosure has recently gained significant attention from academics, practitioners, and those who create international standards [35–37]. A great deal of the existing literature is concerned with either the impact of CSR disclosure on corporate performance or the ways in which CSR affects company performance [38–40]. It is essential to point out that the majority of the research literature concentrates on the total environmental, social, and governance (ESG) score rather than dissecting the individual pillars that make up the ESG score. It is possible that each pillar will have a distinct kind of influence on the company, as well as a varying degree of that influence. Cek and Eyupoglu, for instance, show how the social and governance pillars have a positive and significant impact on the firm's economic performance [41,42]. As a result, the following are some categories in which the literature on the relationship between CSR, firm performance, and EM can be categorized.

Sustainability **2023**, 15, 1485 4 of 20

2.1. Firm Performance and CSR

Businesses that address social issues in their reports might earn social advantages. When viewed through the lens of the resource-based theory, businesses engage in activities of social responsibility with the intention of growing their resources in order to reap more rewards. According to institutional theory, businesses engage in social activities in order to satisfy the pressures of stakeholders [17,43]. The stakeholder theory contends that an organization's value and overall performance can be determined by the firm's activities in relation to the expectations and interests of its stakeholders and that it is the function of corporations to coordinate those interests [44].

Because the connection between CSR and firm performance (FP) has been the subject of investigation in numerous studies carried out in both developed and developing countries [37], the topic of CSR is not a recently emerging trend [45]. Some researchers find that CSR and FP have a positive association, a negative relationship, or no relationship at all [29]. These dubious conclusions open up a vacuum in the study, which paves the way for more examinations to be carried out in an effort to get outcomes that are acceptable.

Stakeholder theory posits that stakeholders have varying expectations, while legitimacy theory focuses on society's interests. Both theories assume that enterprises are accountable to parties other than their owners and predict that businesses will improve their CSR information in order to reduce information asymmetry and information cost to investors [4]. Investors have a more favorable impression of companies that are actively interested in environmental operations than they do of companies that are not as involved. The correlation between CSR and FP has been empirically investigated by a number of different academics. According to the findings of a study that looked at the cement industry, CSR has a favorable association with FP [46]. Participation in CSR, according to the findings of a variety of academics, can improve financial performance [29]. Using a sample of 50 different organizations, another study discovered a positive correlation between CSR and FP [47].

There are now two different theoretical underpinnings that compete with one another to explain the connection between CSR and FP. Some people believe that there is a negative link between CSR and FP because it is commonly believed that CSR causes an increase in costs for businesses, such as when they give money to charity, support social development initiatives, or establish policies to safeguard the environment. On the other hand, there are many who say that there is a positive correlation between CSR and FP, based on the fact that CSR increases job satisfaction and the image of the organization [48–51]. It is also mentioned that corporations may have easier access to financing if they participate in social activities because these activities have the potential to improve relationships with investors, government officials, and bankers [52]. Moreover, it is possible that social actions may improve affiliations with investors.

The research conducted up to this point confirms that CSR disclosure has the potential to improve FP [53–55]. Businesses that make a greater profit are more likely to provide social and environmental disclosure in their reports, demonstrating their commitment to society [56]. In addition, the social impact hypothesis proposes that CSR has a beneficial connection to FP and that it improves the social ties of businesses. A return on equity (ROE) was found to be important for CSR and financial planning in a study, and the literature confirms that ROE is widely used by businesses as a performance metric.

The vast majority of empirical studies that investigate the connection between CSR and FP make use of performance metrics that are based on accounting, including return on assets (ROA), revenue growth, and total assets. According to the conclusions drawn from these studies, there is a constructive connection between CSR and FP [57]. A structural equation modeling study that was carried out in Ghana demonstrated a favorable relationship between CSR and the success of businesses [58]. This study theorizes that CSR affects firm performance.

Sustainability **2023**, 15, 1485 5 of 20

2.2. Firm Performance and Earning Management

The agency theory emphasizes the fact that people will usually respond to opportunities in an opportunistic manner, which may include "managing earnings" to the extent that their activities would result in an increase in their wealth. Therefore, in light of agency theory, top management may perceive EM as a method that serves their own best interests [59]. Additionally, the positive accounting theory (PAT) corroborates this position by arguing that management is incentivized and given more leeway to use EM when they focus on a select few accounting approach options [60].

PAT suggests that this view is supported by the flexibility allowed by accounting standards [61]. PAT acknowledges the possibility of economic repercussions resulting from the selection of an accounting policy. These repercussions could either be opportunistic [62] or firm value maximizing, depending on whether or not managers act in a way that is most beneficial to shareholders [63]. For instance, CEOs may choose to inflate or underestimate their reported income in order to demonstrate positive performance by the company and thereby qualify for higher compensation tied to the firm's anticipated future stock performance [64]. Consequently, the way managers apply EM approaches can either have a positive or negative effect on how the organization runs [63]. As a result, there has been an increase in the demand for studies on the factors that lead to the manipulation of accounting measures as well as the implications that these factors have on the overall performance and stability of businesses. This is an effort to head off controversies in the future [45,65,66].

Recent research conducted by Mangala and Dhanda, examining the relationship between EM and the success of initial public offerings (IPOs) in India, came to the conclusion that EM for the issue year is a derivative of the post-issue performance of Indian IPO enterprises [67]. Another study found that EM positively impacts business value, with CG controlling the size of this effect [68]. In addition, a study conducted in 2021 found that Indonesian firms that go public use an EM approach to boost profits and distribute the resulting wealth to their shareholders [69]. Traditionally, the agency theory's prediction of a causal relationship between EM and company performance indicates that the chain of causation should run from EM to the performance of the company. This is because the agency theory assumes that EM has an effect on company performance. This conventional method has been called into question by a few recent investigations [70,71].

The investigation into the connection that exists between EM and the overall performance of firms is an ongoing topic of discussion [66,72]. On the other hand, the evidence that can be found in past literature concerning the connection between EM and company performance is contradictory. Some studies came to the conclusion that EM practice has a negative correlation with FP as assessed by ROA [54]. Another researcher conducted research on Malaysian companies between the years 2004 and 2010 to determine how acquisitions, effective management of earnings, and overall business performance are related to one another [73]. The following hypothesis can be formulated in the context of agency theory and is based on previous studies:

Hypothesis 2 (H2). Firm performance is positively related to the use of earnings management.

2.3. CSR and Earning Management

Given the scarcity of research on the relationship between corporate social responsibility and firm performance, as well as the role of earnings management in moderating the relationship [74], a review of the literature on the connection between corporate social responsibility and earnings management will be conducted. The previous research that has been conducted to investigate the connection between EM and CSR has produced conflicting findings. Some writers believe that managers take advantage of this image to hide less ethical behaviors, despite the fact that CSR is typically regarded as being connected with transparent and honest financial disclosures [75,76]. Some researchers argue that managers

Sustainability **2023**, 15, 1485 6 of 20

who want personal rewards utilize CSR strategically in order to hide their opportunistic actions [77,78]. However, the position that EM and CSR are inversely connected is the one that is held by the vast majority of people. This view asserts that businesses with a strong commitment to CSR disclose their financial results in a responsible manner and do not manipulate their earnings [78–80].

Prior studies have revealed that there is a negative link between earnings management and CSR. This finding is consistent with the premise that socially responsible activities are related to better ethical behavior. In addition, the perspective on social responsibility appears to have a significant dampening effect on REM, which may imply that managers make fewer uses of REM in order to ensure the firm will continue to be profitable in the long run [20,81,82].

There is certain research that shows a favorable association between CSR and EM, which supports the agency theory, even if the majority of previous studies show a negative relationship. That is, managers try to hide some practices by participating in social responsibility activities [83–85].

Some researchers make the point that earnings are kept under control by the management of companies with a focus on CSR by using accruals rather than actual operations in order to do so. This helps to ensure the continued profitability of the firm over the long run [86]. CSR activities also contribute to the generation of shareholder value, particularly those that improve a company's reputation [87]. The CSR-EM connection makes the assumption that CSR initiatives are carried out to enhance a company's reputation because management believes that increased sales are a result of a positive reputation [88].

According to other studies, the voluntary publication of CSR reports may imply more integrity than earnings reporting when combined with financial disclosures [80,89]. However, a researcher asserts that firm management uses CSR to get favorable media coverage, credibility from the community, and less scrutiny from employees and investors [77]. From this vantage point, CSR initiatives can be utilized to mask how certain corporate wrongdoing hurts a company's value. EM is one illustration of a strategic discretionary decision that management may attempt to hide behind CSR [90].

We contend that managers promote CSR initiatives as a means of avoiding stakeholder control in the corporate governance process by engaging in EM behavior. This will have a detrimental effect on the performance of the company. However, as the only goal of earnings management, these manipulative practices have a negative impact on business performance [91]. Additionally, the relationship between CSR and business performance will be significantly impacted by earnings management actions. The manager chooses which earnings management techniques to use based on the adaptability of accounting standards to advance CSR and business performance [77,92,93]. Thus, based on prior literature, this study theorizes the following hypothesis:

Hypothesis 3 (H3). The correlation between CSR and FP is moderated by EM.

3. Materials and Methods

3.1. Population and Sample

To test the above-mentioned hypothesis, this study focuses on firms in the MENA region as defined by the International Monetary Fund (IMF). The financial data and ESG scores were obtained from the Thomson Reuters database over the last fifteen years (2007–2021). The study used a long period to discover the trend of the relationship between the research variables. Because financial firms differ greatly from non-financial firms in many ways, we did not include them in the study sample. The model of EM that is best for non-financial corporations might not be the best choice for financial institutions.

The IMF's definition of the MENA region includes the following countries: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, and Yemen. However, many companies in the MENA region do not

Sustainability **2023**, 15, 1485 7 of 20

have enough disclosure in their annual reports. As such, the availability of financial data and the related ESG score for 15 years, from 2007 to 2021, served as the basis for selecting the study's final sample. As a result, and in line with Khoury's study [94], we limited our study to the countries shown in Table 1.

| | | | | | | | |) | (ear | | | | | | | |
|-------------------------|----|----|----|----|----|----|----|----|------|----|----|----|----|----|----|-------|
| Country | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | Total |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 7 |
| Egypt | 1 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 9 | 12 | 12 | 11 | 103 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| Kuwait | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 39 |
| Morocco | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 31 |
| Oman | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 30 |
| Qatar | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 8 | 8 | 8 | 10 | 16 | 21 | 22 | 21 | 133 |
| Saudi Arabia | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 11 | 11 | 13 | 26 | 30 | 32 | 32 | 32 | 228 |
| United Arab Emirates | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 5 | 8 | 8 | 11 | 14 | 13 | 13 | 87 |
| Total | 11 | 12 | 18 | 18 | 18 | 18 | 26 | 39 | 40 | 46 | 62 | 77 | 93 | 93 | 90 | 661 |

Table 1. Description of data sample. Number of firms in sample by country and year.

3.2. Models and Variables

3.2.1. Measurement of Firm Performance (FP)

The dependent variable is firm performance. In line with earlier studies, we used accounting and market data to gauge the firm's success. Thus, return on assets (ROA), returns on equity (ROE), and Tobin's Q were used to quantify financial success [95]. Since they enable us to take a variety of business issues into consideration, these metrics are frequently employed by academics. We applied the same measure in Adams and Mehran's work to calculate Tobin's Q [96]:

Tobin's Q = (Book value of assets — Book value of equity + market value of equity)/Total Assets

3.2.2. Measurement of CSR

Previous studies used unweighted and weighted indices to measure CSR. The former eliminates the bias that can be generated by a single score when it comes to assessing the significance of various items in a given context [97]. However, we used the ESG score index as a measure of CSR. Given that an ESG score is a multidimensional index created from the results of disclosures about the environment, social issues, and governance [17,98], we considered the overall ESG score from Thomson Reuters' database to measure the influence of CSR on FP.

3.2.3. Measurement of Earnings Management

EM metrics are classified into two types: accrual-based EM and real-based EM. We used the modified Jones model by Dechow et al. (1996) as a proxy for accrual-based EM [99,100]. Accruals-based EM is the part of accruals that is at your discretion. Discretionary and nondiscretionary accounting accruals are separated. Discretionary accruals are abnormal accruals, whereas nondiscretionary accruals are normal. Nondiscretionary accruals are those that are the outcome of regular business activities or a prior accounting transaction.

Modified Jones model:

$$\frac{TAC_{it}}{AS_{it-1}} = \beta_0 + \beta_1 \; \frac{1}{AS_{it-1}} + \beta_2 \; \frac{(\Delta Rv_{it} \; + \Delta Rec_{it} \;)}{AS_{it-1}} + \; \beta_3 \frac{PP\&E_{it}}{AS_{it-1}} + \epsilon_{it}$$

where:

TAC $_{it}$ is total accruals for current year AS_{it-1} are total assets β_0 , β_1 , β_2 , β_3 are coefficients ΔRv_{it} are current year revenue—previous year revenue ΔRec_{it} are current year receivable—previous year receivable $PP\&E_{it}$ are property, plant and equipments ϵ_{it} is error term for firm I and year t

3.2.4. Control Variables

As control variables, we also took into account the firm's age, size, financial leverage, board size, and independence of the board, as well as the Big Four, COVID-19, inflation, and GDP growth. Previous research that determined these variables are necessary control variables for examining the impact of ESG scores on FP can be used to support the selection of these control variables [38,101–103] (Table 2).

| Table 2. Explains he | ow the stud | v variables ha | ve been oi | perationally | defined. |
|-----------------------------|-------------|----------------|------------|--------------|----------|
| | | | | | |

| Abbreviation | Variable | Measurement |
|--------------|---------------------------------------|--|
| ROA | Operational performance | Net income divided by total assets [95] |
| ROE | Financial performance | Net income divided by shareholder's equity [95] |
| Tobin's Q | Market performance | (Book value of assets—Book value of equity + market value of equity)/Total Assets [96] |
| ESG | Environmental, social, and governance | ESG score index from Thomson Reuters' database as a measure of CSR [17,38] |
| DAAC | Discretionary accrual management | modified Jones model [99] |
| FS | Firm size | Natural log total assets at the end of the fiscal year [102] |
| FA | Firm age | The number of years since the company was established [101] |
| B.ind | Board independence | Percent of independent directors on the board [102,104] |
| B.size | Board size | Total number of directors in the board [104] |
| LEV | Leverage | Total debt divided by total assets at the end of the fiscal year [104] |
| Big Four | Refer to an audit firm | Dummy variables that equals 1 if firm's external auditor is one of the big four audit firms (KPMG, EY, PwC, Deloitte) and 0 if not [101]. Auditors are primarily responsible for determining the propriety of disclosures and assisting the protection of diverse stakeholders' interests [105]. |
| INF | Inflation rate | Consumer price index (2010 = 100) |
| GDP | GDP growth | GDP growth annual rate |
| COVID-19 is | Coronavirus pandemic | Dummy variable if firm reports during COVID-19 period (2020 and 2021) then equal to 1, otherwise 0. |

Based on the above, and after figuring out the study's variables, the following regression equations were used with models 1, 2, and 3 to test the proposed hypotheses:

$$FP_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 DAAC_{i,t} + \beta_3 FS_{i,t} + \beta_4 FA_{i,t} + \beta_5 B.ind_{i,t} + \beta_6 B.Size_{i,t} + \beta_7 LEV_{i,t} + \beta_8 Big four_{i,t} + \beta_9 INF_{i,t} + \beta_{10} GDP_{i,t} + \varepsilon_{i,t}$$

$$(1)$$

$$FP_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 DAAC_{i,t} + \beta_3 FS_{i,t} + \beta_4 FA_{i,t} + \beta_5 B.ind_{i,t} + \beta_6 B.Size_{i,t} + \beta_7 LEV_{i,t} + \beta_8 Big four_{i,t} + \beta_9 INF_{i,t} + \beta_{10} GDP_{i,t} + \beta_{11} COVID_{19} + \varepsilon_{i,t}$$

$$(2)$$

Sustainability **2023**, 15, 1485 9 of 20

$$FP_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 DAAC_{i,t} + \beta_3 DACC \times ESG_{i,t} + \beta_4 FS_{i,t} + \beta_5 FA_{i,t} + \beta_6 B.ind_{i,t} + \beta_7 B.Size_{i,t} + \beta_8 LEV_{i,t} + \beta_9 Bigfour_{i,t} + \beta_{10} INF_{i,t} + \beta_{11} GDP_{i,t} + \beta_{12} COVID_{19}$$

$$+ \varepsilon \cdot .$$
(3)

where FP is the dependent variable, which is measured by ROA, ROE, and Tobin's Q; ESG is environmental, social, and governance scores; DAAC stands for discretionary accrual management. FS is firm size, which is measured by log total assets; FA is firm age; B. in d is board independence; B. size is board size; LEV is leverage; the "Big Four" refer to an audit firm; INF is the inflation rate; GDP is GDP growth; COVID-19 is the coronavirus pandemic.

For the empirical analysis, the study employs pooled estimation (with clustered standard errors) to encounter any endogeneity problem. More specifically, the study estimates a random effects (RE) panel data model, including both firm and time effects. We chose RE (versus fixed effects) as the sample of this study does not represent an entire population, and we wished to use time invariant variables (COVID-19 and Big Four) in the analysis [106]. In addition, we employed Generalized Method of Moments (GMM) regression for robustness to investigate the result consistency between all pairs of the considered variables.

4. Results

4.1. Descriptive Statistics

Table 3 presents the descriptive statistics of dependent, independent, and control variables for the sample observations. With regard to the returns on assets (ROA), Table 3 shows that it ranges from -0.39 to 0.44 with a mean value of 0.06. The table also shows that during the COVID-19 period, firms in the study sample reported lower ROA as compared with the period before COVID-19 pandemic. In relation to the return on equity (ROE), the table shows that the lowest observation in the study sample is -0.98 while the highest is 2.88, with a mean value of 0.14. Similarly, the table shows that the ROE decreased sharply during COVID-19 period. In addition, the table shows that the firms in the study sample have an average Tobin's Q value of 1.56. However, the table shows that firms' value increased during COVID-19. With regard to the independent variables, Table 3 indicates that ESG values vary from 3 to 72, with a mean of 28.98. The table also shows that there has been an improvement in the level of ESG disclosure during the COVID-19 period. Regarding EM, the minimum value is -0.46, the maximum is 0.39, and the mean value is zero, the same before and during the COVID-19 period.

4.2. Correlation Coefficients

Table 4 shows the Pearson correlation coefficients between the study variables. All correlation coefficients are less than 0.80, as can be seen. Therefore, there is no multicollinearity problem [107].

4.3. Results of Random Effect Estimation (RE)

Tables 4–6 present the results of RE regression on the influence of ESG and earning management on firms' ROA, ROE, and Tobin's Q, respectively. Model 1 includes the main independent variables and control variables. Model 1 is cumulatively augmented by COVID-19 variable to obtain Model 2, which examines the influence of COVID-19 pandemic on firms' financial performance. Model 2 is augmented by the interaction variables to obtain Model 3, which shows the moderating effect of EM on the relationship between ESG and firms' financial performance.

 Table 3. Descriptive statistics of dependent, independent, and control variables.

| | Obs. | Mean | Min | Max | Median | Std. Dev. | Before COVID | During COVID |
|-------------|------|-------|-------|--------|--------|-----------|-----------------|-----------------|
| ROA | 659 | 0.06 | -0.39 | 0.44 | 0.05 | 0.08 | 0.07 | 0.05 |
| ROE | 659 | 0.14 | -0.98 | 2.88 | 0.13 | 3.35 | 0.34 | 0.11 |
| Tobin's Q | 652 | 1.56 | 0.46 | 6.31 | 1.23 | 0.92 | 1.54 | 1.61 |
| ESG score | 551 | 28.98 | 3.00 | 72.00 | 23.00 | 18.14 | 26.90 | 33.30 |
| DAAC | 514 | 0.00 | -0.46 | 0.39 | 0.00 | 0.08 | 0.00 | 0.00 |
| Firm age | 628 | 24.08 | 1.00 | 88.00 | 20.00 | 15.11 | 22.31 | 28.75 |
| COVID-19 | 661 | 0.28 | 0.00 | 1.00 | 0.00 | 0.45 | | |
| Big four | 661 | 0.82 | 0.00 | 1.00 | 1.00 | 0.38 | 0.83 | 0.78 |
| Board size | 550 | 9.36 | 1.00 | 25.00 | 9.00 | 2.92 | 9.54 | 8.99 |
| B.ind | 537 | 35.23 | 0.00 | 100.00 | 36.00 | 26.04 | 32.88 | 39.93 |
| INF | 646 | 3.05 | -4.86 | 29.51 | 2.30 | 4.90 | 3.46 | 1.90 |
| log ta (FS) | 661 | 22.32 | 17.92 | 27.07 | 22.29 | 1.55 | 22.41 | 22.05 |
| Leverage | 659 | 0.52 | 0.01 | 1.22 | 0.51 | 0.22 | 0.52 | 0.50 |
| GDP growth | 640 | 1.94 | -8.86 | 19.59 | 2.51 | 3.73 | 2.87 | -0.80 |

Table 4. Correlations coefficients.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| (1) ROA | 1.00 | | | | | | | | | | | | | _ |
| (2) ROE | -0.23 | 1 | | | | | | | | | | | | |
| (3) Tobin's Q | 0.67 | 0.02 | 1 | | | | | | | | | | | |
| (4) ESG score | -0.08 | -0.02 | -0.05 | 1 | | | | | | | | | | |
| (5) DAAC | 0.20 | -0.19 | -0.08 | -0.14 | 1 | | | | | | | | | |
| (6) Firm age | 0.06 | -0.04 | 0.07 | 0.12 | 0.05 | 1 | | | | | | | | |
| (7) COVID-19 | -0.09 | -0.04 | 0.05 | 0.16 | -0.02 | 0.24 | 1 | | | | | | | |
| (8) Big four | -0.18 | 0.01 | -0.18 | -0.07 | 0.15 | -0.32 | -0.03 | 1 | | | | | | |
| (9) Board size | 0.12 | -0.04 | 0.06 | -0.10 | -0.02 | 0.06 | -0.04 | -0.02 | 1 | | | | | |
| (10) B.ind | -0.04 | 0.05 | -0.03 | 0.06 | 0.04 | 0.09 | 0.12 | 0.03 | 0.09 | 1 | | | | |
| (11) INF | -0.04 | 0.00 | -0.06 | -0.11 | -0.02 | -0.18 | -0.16 | 0.08 | 0.10 | -0.24 | 1 | | | |
| (12) log ta(FS) | 0.06 | -0.01 | 0.13 | 0.18 | 0.01 | 0.36 | 0.02 | -0.13 | 0.06 | 0.04 | -0.05 | 1 | | |
| (13) Leverage | -0.49 | 0.13 | -0.29 | 0.14 | -0.11 | -0.20 | -0.08 | 0.02 | -0.14 | -0.06 | 0.25 | 0.02 | 1 | |
| (14) GDP | 0.18 | 0.03 | 0.05 | -0.15 | 0.09 | -0.23 | -0.48 | 0.04 | 0.09 | -0.18 | 0.36 | -0.01 | 0.10 | 1 |

 Table 5. The relationship between ESG, earning management, and ROA—random effect estimation.

| | (1) | (2) | (3) |
|-------------------|----------|-----------|-----------|
| | ROA | ROA | ROA |
| ESG score | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| DAAC | 0.33 *** | 0.33 *** | 0.28 * |
| | (0.09) | (0.09) | (0.14) |
| COVID-19 | | -0.07 *** | -0.07 *** |
| | | (0.02) | (0.02) |
| $DACC \times ESG$ | | | 0.00 |
| | | | (0.00) |
| Firm age | -0.00 | -0.00 | -0.00 |
| 9 | (0.00) | (0.00) | (0.00) |
| Big four | -0.04 ** | -0.04 ** | -0.04 ** |
| <u> </u> | (0.02) | (0.02) | (0.02) |
| Board size | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| B.ind | 0.00 * | 0.00 * | 0.00 * |
| | (0.00) | (0.00) | (0.00) |
| INF | 0.00 | 0.00 | 0.00 |

Table 5. Cont.

| | (1) | (2) | (3) |
|-------------------|-----------|-----------|-----------|
| | ROA | ROA | ROA |
| | (0.00) | (0.00) | (0.00) |
| Leverage | -0.13 *** | -0.13 *** | -0.13 *** |
| J | (0.03) | (0.03) | (0.03) |
| GDP growth | 0.00 *** | 0.00 *** | 0.00 *** |
| 0 | (0.00) | (0.00) | (0.00) |
| Total assets (FS) | -0.00 | -0.00 | -0.00 |
| ` , | (0.00) | (0.00) | (0.00) |
| Constant | 0.16 | 0.16 | 0.16 |
| | (0.10) | (0.10) | (0.10) |
| Observations | 439 | 439 | 439 |
| Country dummies | Included | Included | Included |
| Year dummies | Included | Included | Included |
| Within R2 | 0.40 | 0.40 | 0.40 |
| Between R2 | 0.34 | 0.34 | 0.34 |
| Overall R2 | 0.40 | 0.40 | 0.40 |
| Prob > F | 0.00 | 0.00 | 0.00 |

Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

 Table 6. The relationship between ESG, earning management, and ROE—random effect estimation.

| | (1) | (2) | (3) |
|-------------------|----------|----------|----------|
| | ROE | ROE | ROE |
| ESG score | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| DAAC | -0.35 | -0.35 | 0.18 |
| | (0.48) | (0.48) | (0.47) |
| COVID-19 | | -0.10 | -0.11 |
| | | (0.07) | (0.07) |
| $DACC \times ESG$ | | | -0.02 |
| | | | (0.02) |
| Firm age | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| Big four | -0.07 * | -0.07 * | -0.07 * |
| · · | (0.04) | (0.04) | (0.04) |
| Board size | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| B.ind | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| INF | 0.01 | 0.01 | 0.01 |
| | (0.01) | (0.01) | (0.01) |
| Total assets | -0.00 | -0.00 | -0.00 |
| | (0.01) | (0.01) | (0.01) |
| Leverage | 0.08 | 0.08 | 0.08 |
| | (0.16) | (0.16) | (0.16) |
| GDP growth | 0.01 ** | 0.01 ** | 0.01 ** |
| | (0.00) | (0.00) | (0.00) |
| Constant | 0.18 | 0.18 | 0.17 |
| | (0.28) | (0.28) | (0.28) |
| Observations | 438 | 438 | 438 |
| Country dummies | Included | Included | Included |
| Year dummies | Included | Included | Included |
| Within R2 | 0.12 | 0.12 | 0.12 |
| Between R2 | 0.22 | 0.22 | 0.22 |
| Overall R2 | 0.16 | 0.16 | 0.16 |
| Prob > F | 0.00 | 0.00 | 0.00 |

Standard errors in parentheses. * p < 0.10, ** p < 0.01.

4.3.1. Relationship between ESG, EM, and ROA

The results reported in Table 5 indicate that ESG has a positive influence on the ROA of the firms. This result supports the findings of a previous study [108]. However, the results were found to be insignificant, suggesting that the increase in the firm's social responsibility did not result in any significant change in its financial performance as measured by ROA.

In terms of earnings management, Model 1 shows that EM is positively related to firm ROA, and the relationship is significant at a p-value of less than 0.01, implying that firms that engage in more EM have higher ROA. This result is in line with the findings of a study conducted on listed companies in Nigeria [109].

The findings also indicate that ESG and EM effects persist even after controlling for the COVID-19 period, which indicates that the influence of ESG and EM on ROA is the same before and during the COVID-19 period.

Concerning the moderating role of EM, Model 3 reveals that the insignificant positive effect of CSR on the financial performance of firms does not change in the presence of earning management. This means that changes in the level of firms' EM do not affect the relationship between ESG and firms' financial performance.

4.3.2. Relationship between ESG, EM, and ROE

Table 6 shows the results for the relationship between ESG, EM, and firm ROE. This result holds after controlling for COVID-19 (Model 2) and taking EM into account as a moderator (Model 3), implying that the level of CSR has no effect on firm ROE even during the COVID-19 pandemic and at different levels of EM. This result is consistent with the findings of a prior study [110]. Similarly, Table 6 indicates that the influence of EM on the ROE of the firms is insignificant, even after controlling for the COVID-19 period, suggesting that engaging in earning management does not result in a higher level of ROE.

4.3.3. Relationship between ESG, EM, and Tobin's Q

Table 7 reports the results for the relationship between ESG, EM, and firms' financial performance as measured with the market-based variable (Tobin's Q). The results of Model 1 indicate that ESG has a positive influence on Tobin's Q, and the relationship is significant at a *p*-value < 0.10, implying that increasing the level of a firm's social responsibility increases its value. Model 2 shows that the relationship between ESG and Tobin's Q remained significant and positive, even after controlling for the COVID-19 period. These results support the findings of previous studies [111,112]. However, Model 3 indicates that EM does not alter the significant influence of ESG on Tobin's Q. In relation to the relationship between EM and Tobin's Q, the results reported in Table 7 are in accordance with prior studies, which found that EM has an insignificant influence on Tobin's Q [113].

4.4. Results of Generalized Method of Moments (GMM)

The difference GMM estimates are obtained using the Roodman [114] "xtabond2" module in Stata. In line with the Wintoki study [115], firm-specific variables are considered endogenous covariates, whereas the age of the firms, country-level control variables, and time and country dummy variables are regarded as exogenous. Table 8 reports the results for the relationship between ESG, EM, and financial performance. The main independent variables and control variables are included in models (1), (4), and (7). These models are cumulatively augmented by COVID-19 variable to obtain Models (2), (5), and (8), which control for the influence of COVID-19 pandemic on firms' financial performance. These models are augmented by the interaction variables to obtain Models (3), (6), and (9), which show the moderating effect of EM on the relationship between ESG and firms' financial performance.

Table 7. The relationship between ESG, EM, and Tobin's Q—random effect estimation.

| | (1) | (2) | (3) |
|-------------------|-----------|-----------|-----------|
| | Tobin's Q | Tobin's Q | Tobin's Q |
| ESG score | 0.01 * | 0.01 * | 0.01 * |
| | (0.00) | (0.00) | (0.00) |
| DAAC | 0.58 | 0.58 | 1.02 |
| | (0.56) | (0.56) | (1.13) |
| COVID-19 | , , | -0.54 | -0.55 |
| | | (0.49) | (0.49) |
| $DACC \times ESG$ | | , | -0.02 |
| | | | (0.03) |
| Firm age | 0.00 | 0.00 | 0.00 |
| O | (0.01) | (0.01) | (0.01) |
| Big four | -0.31 | -0.31 | -0.31 |
| O | (0.26) | (0.26) | (0.26) |
| Board size | 0.03 ** | 0.03 ** | 0.03 ** |
| | (0.01) | (0.01) | (0.01) |
| B.ind | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) |
| INF | 0.01 ** | 0.01 ** | 0.01 ** |
| | (0.01) | (0.01) | (0.01) |
| Leverage | 0.22 | 0.22 | 0.22 |
| · · | (0.31) | (0.31) | (0.31) |
| GDP growth | 0.01 * | 0.01 * | 0.01 * |
| Ü | (0.01) | (0.01) | (0.01) |
| Total assets | -0.21 *** | -0.21 *** | -0.21 *** |
| | (0.08) | (0.08) | (0.08) |
| Constant | 5.78 *** | 5.78 *** | 5.77 *** |
| | (1.67) | (1.67) | (1.67) |
| Observations | 438 | 438 | 438 |
| Country dummies | Included | Included | Included |
| Year dummies | Included | Included | Included |
| Within R2 | 0.19 | 0.19 | 0.20 |
| Between R2 | 0.29 | 0.29 | 0.29 |
| Overall R2 | 0.27 | 0.27 | 0.28 |
| Prob > F | 0.00 | 0.00 | 0.00 |

Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

The results presented in Table 8 reject the null hypothesis that the lagged endogenous variables (L.ROA, L.ROA, and L.ROA) are zero, except for models 1 and 3. These results support the implementation of the dynamic estimation method. Arellano and Bond [116] tested for the presence of first-order autocorrelation AR (1), and the absence of second-order autocorrelation AR (2) is reported at the bottom of the table. The results reject the null hypothesis of AR (1) and accept the null hypothesis of AR (2) for all models, indicating that the models are free from autocorrelation problems. In addition, Hansen test results were reported to determine the validity of instruments. The null hypothesis of the Hansen test is accepted for all models, indicating that the instruments are exogenous and valid.

| Table 8. ESG, EM, and firms' financial performance— | -GMM estimation. |
|--|------------------|
|--|------------------|

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---------------------------------|----------------------|----------------------|----------------------|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | ROA | ROA | ROA | ROE | ROE | ROE | Tobin's Q | Tobin's Q | Tobin's Q |
| L.ROA | -0.02 (0.09) | 0.45 *** (0.12) | 0.06 (0.09) | | | | | | |
| L.ROE | (0.03) | (0.12) | (0.03) | -0.31 *** (0.08) | -0.29 *** (0.09) | -0.28 *** (0.09) | | | |
| L.Tobin's Q | | | | (6.66) | (6.63) | (6163) | 0.78 *** (0.18) | 0.61 *** (0.12) | 0.70 *** (0.13) |
| ESG score | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 * (0.00) | 0.00 (0.01) | -0.01 (0.01) | -0.01 (0.01) |
| DAAC | 0.43 *** | 0.26 ** | 0.30 * | -0.18 (0.57) | -0.25 (0.56) | 0.21 (0.49) | 0.18 (0.88) | 0.54 (0.73) | 0.64 (1.38) |
| COVID-19 | (0.03) | 0.01 (0.01) | 0.03 * (0.01) | (0.07) | 0.04 (0.04) | 0.04 (0.04) | (0.00) | 0.03 (0.13) | 0.03 (0.15) |
| $DACC \times ESG$ | | (0.01) | 0.00 (0.00) | | (0.04) | -0.02 (0.02) | | (0.10) | -0.04 (0.05) |
| Firm age | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.01) | 0.00 (0.01) | -0.01 (0.01) |
| Big four | -0.08 (0.08) | -0.06 (0.05) | -0.08 (0.06) | -0.43 [*] (0.24) | -0.34 (0.22) | -0.40* (0.21) | 0.03 (0.98) | 0.32 (0.49) | -0.67 (0.66) |
| Board size | 0.00 * (0.00) | 0.00 | 0.00 ** (0.00) | -0.01 (0.01) | -0.00 (0.01) | -0.00 (0.01) | 0.01 (0.04) | 0.00 (0.02) | -0.01 (0.03) |
| INF | -0.00 (0.00) | 0.00 | -0.00 (0.00) | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) |
| Total assets | 0.02 ** (0.01) | 0.01 (0.01) | 0.02 ** (0.01) | 0.03 (0.04) | 0.01 (0.03) | 0.01 (0.03) | -0.35 (0.38) | -0.11 (0.08) | 0.00 (0.09) |
| Leverage | -0.14 ** (0.04) | -0.02 (0.05) | -0.15 *** (0.04) | 0.93 ** (0.42) | 0.84 * (0.45) | 0.81 * (0.44) | -0.77 (1.30) | -0.00 (0.44) | -1.86* (1.00) |
| GDP growth | 0.00 * | 0.00 | 0.00 *** | 0.01 * (0.01) | 0.01 ** (0.01) | 0.01 ** | -0.01 (0.02) | 0.00 (0.01) | -0.00 (0.02) |
| Constant | -0.36 * (0.21) | -0.12 (0.11) | -0.25 (0.18) | -0.78 (0.84) | -0.49 (0.75) | -0.47 (0.76) | 8.96 (9.66) | 2.91 (1.89) | 2.45 (2.22) |
| Observation | 449 | 449 | 449 | 447 | 447 | 447 | 445 | 445 | 445 |
| Country dummies Year dummies | Included Included | Included Included | Included Included | Included Included | Included Included | Included Included | Included Included | Included Included | Included Included |
| AR (1) AR (1) | 0.000 0.165 | 0.016 0.408 | 0.009 0.588 | 0.074 0.214 | 0.061 0.218 | 0.059 0.223 | 0.011 0.486 | 0.001 0.498 | $0.001 \\ 0.144$ |
| Hansen Prob > F | 0.305 0.00 | 0.585 0.00 | 0.191 0.00 | 0.254 0.00 | 0.243 0.00 | 0.261 | 0.552 0.00 | 0.504 0.00 | 0.683 |

Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

Model (1) shows that ESG does not significantly influence ROA, even after controlling for COVID-19 Model (2). Considering EM as a moderator Model (2), the result remained insignificant, which indicates that the earlier findings reported in Table 5 are robust. In relation to earning management (EM), Model (1) shows that EM is positively correlated with ROA, and the correlation is highly significant. The relationship remained significant after controlling for the COVID-19 period. However, Model (3) indicates that EM does not alter the positive relationship between ESG and ROA. These results also show that earlier findings reported in Table 5 are robust when considering dynamic estimation.

In relation to the relationship with ROE, Models (4) and (5) indicate that the influence of ESG on ROE is insignificant before and during the COVID-19 period. However, Model (6) provides evidence that the positive influences are significant at a p-value < 0.01. The overall results are consistent with those reported in Table 5.

Regarding the influence of ESG on Tobin's Q, unlike the results reported in Table 7, the results reported in Table 8 indicate the influence is insignificant before and during COVID-19 period. However, Model (9) confirms the earlier findings reported in Table 7, which indicated that EM does not alter the relationship between ESG and Tobin's Q. Concerning EM, the results presented in Table 8 confirm earlier findings reported in the static model that show a positive but insignificant influence of EM on Tobin's Q.

Sustainability **2023**, 15, 1485 15 of 20

5. Conclusions and Discussion

There is still a debate about the relationship between CSR and firm performance [29], and this is also true from the perspective of companies operating in the MENA region. A firm should safeguard the interests of all stakeholders, according to the stakeholder theory as a management tool, in order to achieve its necessary organizational goals and optional social welfare reasons. On the other hand, the intentions of managers related to CSR have been questioned. Many previous studies have shown some intentional implementation of CSR as a mechanism manipulated by managers, who use their discretionary tools as a means to show the results of their actions as they want [77,78]. Accordingly, this study investigated whether there is a role for EM in moderating the relationship between CSR and firm performance. Therefore, it is possible that managers are committed to social responsibility in order to avoid the negative effects of EM on their companies [75,76].

The current study examined the impact of CSR and EM on the performance of companies separately. On the other hand, we examined the impact of CSR on firm performance, considering EM as a moderating variable. To execute this study, we employed random effect regression. This methodology allowed us to assess the linkages between CSR, EM, and FP. In addition, we used GMM regression for robustness to investigate the consistency of the results between all pairs of the considered variables.

This study concluded that there is a positive relationship between CSR and return on assets (ROA) as a measure of corporate performance, given that the relationship between EM and ROA is also positive and that the relationship is significant. This suggests that company managers are more likely to engage in EM if the companies disclose a higher ROA. Prior studies suggested the same relationship [45,65,66]. It is important to note that the effect of ESG and EM on ROA is the same as before and during the COVID-19 period.

The results of the study showed that ESG does not significantly affect the return on equity. This result persisted after controlling for COVID_19 and considering EM as a moderator, which means that the level of CSR does not affect the return on equity for companies operating in the MENA region. It is noticeable that the issue of CSR in the MENA region is one of the issues still has not received as much attention as it has in developed countries.

Furthermore, the results of testing the relationship between ESG and EM and the companies' financial performance were measured with the market-based dependent variable (Tobin's Q). There is a note that ESG has a positive impact on Tobin's Q and that the relationship is significant, which means that an increased level of social responsibility for companies operating in the MENA region increases their value. This is consistent with the results of previous studies [4,17,117]. Additionally, the relationship between ESG and Tobin's Q remained significant and positive, even after controlling for the COVID-19 period. However, the results show that EM does not alter the significant influence of ESG on Tobin's Q regarding the relationship between EM and Tobin's Q. The results of this study are consistent with the results of a previous study conducted on Chinese companies in terms of the positive relationship between CSR and firm performance, but the results were opposite with regard to the role of earning management as a moderating variable [104].

6. Practical and Theoretical Implications

This study illustrates the specific implications that would have an impact on regulators, managers, and stakeholders by extending the literature on CSR knowledge generation and company performance in the context of an emerging economy, such as countries in the MENA region. Companies in the MENA region are expected to need stronger and more effective CSR disclosure if they want to play a significant role in the global financial system. Practitioners, as well as firms, should create fresh plans and make sure to include CSR in their reports. Firms can establish legitimacy for their operations and products. Since CSR disclosure has many benefits for businesses and society as a whole, policymakers should take into account enacting new laws that require it. Investors must consider the

social initiatives of the businesses they support because CSR may increase a company's market value.

Furthermore, the differences in CSR disclosure countries and earnings management will likely affect the firm's performance. Investors' decision-making over their investments will be affected by this, leading to more effective investments. If these things were better understood, it would be possible to pass laws that would make businesses and financial markets in the MENA region run more smoothly.

7. Limitations, Recommendations, and Future Research Direction

There are some limitations to the current investigation. First, the study's results are restricted to the MENA region. Second, secondary data were used in the study; however, primary data from chief executives and financial managers could be used in future research. Third, due to a lack of ESG score information, some MENA nations were left out of the sample. Finally, because companies from non-financial sectors were included in the sample, the results were only applicable to these industries.

According to a current paper, corporate social responsibility reporting needs to receive more attention from businesses as a motivator for better performance and transparency. Additionally, we urge all interested parties—including investors, creditors, and debtors—to learn more about ESG scores and how important they are in guiding a company's management. In order to ensure that trustworthy information is available to all stakeholders, we also advise regulators, whether governmental or non-governmental organizations, to take CSR disclosure into account.

Finally, we suggest that future CSR studies place more emphasis on issues including board characteristics, audit committee characteristics, and the quality of financial reporting that influence corporate social responsibility disclosure reports. We also recommend that such a study be conducted on a sample of financial companies in the MENA region as part of future studies. In the MENA region, more research on nonfinancial reporting and its effects on audit methodology, scope, and fees is also possible.

Author Contributions: Conceptualization, S.M.A. and M.A.; methodology S.M.A.; software, H.N.J.; resources, S.M.A.; data curation S.M.A. and H.N.J.; writing—original draft preparation, S.M.A.; review and editing, S.M.A., M.A. and H.N.J.; visualization, S.M.A.; supervision M.A.; project administration, M.A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The related data sets are available from the corresponding author upon request.

Conflicts of Interest: The authors declare no conflict of interest.

References

- 1. Khamis, N.I.; Wan Ismail, W.K. The impact of corporate social responsibility on corporate image in the construction industry: A case of SMEs in Egypt. *J. Sustain. Financ. Investig.* **2022**, *12*, 128–146. [CrossRef]
- 2. Alkayed, H.; Omar, B.F. Determinants of the extent and quality of corporate social responsibility disclosure in the industrial and services sectors: The case of Jordan. *J. Financ. Report. Account.* 2022, *in press.* [CrossRef]
- 3. Alizadeh, A. The Drivers and Barriers of Corporate Social Responsibility: A Comparison of the MENA Region and Western Countries. *Sustainability* **2022**, *14*, 909. [CrossRef]
- 4. Buallay, A.; Fadel, S.M.; Al-Ajmi, J.Y.; Saudagaran, S. Sustainability reporting and performance of MENA banks: Is there a trade-off? *Meas. Bus. Excell.* **2020**, 24, 197–221. [CrossRef]
- 5. Magd, H.; Karyamsetty, H. Assessing the Significance of Corporate Social Responsibility Actions to Achieve Sustainable Business and Organizational Performance during the COVID-19 Pandemic in Oman. *Glob. Bus. Manag. Res.* **2021**, *13*, 10–24.
- 6. García-Sánchez, I.-M.; García-Sánchez, A. Corporate social responsibility during COVID-19 pandemic. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 126. [CrossRef]

7. He, H.; Harris, L. The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *J. Bus. Res.* **2020**, *116*, 176–182. [CrossRef] [PubMed]

- 8. Popkova, E.; DeLo, P.; Sergi, B.S. Corporate social responsibility amid social distancing during the COVID-19 crisis: BRICS vs. OECD countries. *Res. Int. Bus. Financ.* **2021**, *55*, 101315. [CrossRef]
- 9. Mahmud, A.; Ding, D.; Hasan, M.M. Corporate social responsibility: Business responses to Coronavirus (COVID-19) pandemic. *SAGE Open* **2021**, *11*. [CrossRef]
- 10. Kucharska, W.; Kowalczyk, R. How to achieve sustainability?—Employee's point of view on company's culture and CSR practice. *Corp. Soc. Responsib. Environ. Manag.* **2019**, *26*, 453–467. [CrossRef]
- 11. Bapuji, H.; Patel, C.; Ertug, G.; Allen, D.G. Corona crisis and inequality: Why management research needs a societal turn. *J. Manag.* **2020**, *46*, 1205–1222. [CrossRef]
- 12. Matten, D.; Moon, J. "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Acad. Manag. Rev.* **2008**, *33*, 404–424. [CrossRef]
- 13. Matten, D.; Moon, J. Reflections on the 2018 decade award: The meaning and dynamics of corporate social responsibility. *Acad. Manag. Rev.* **2020**, *45*, 7–28. [CrossRef]
- 14. Campbell, J.L. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Acad. Manag. Rev.* **2007**, 32, 946–967. [CrossRef]
- 15. Adams, C.A. Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising. *Account. Audit. Account. J.* **2002**, *15*, 223–250. [CrossRef]
- 16. Zahid, R.; Khurshid, M.; Khan, W. Do Chief Executives Matter in Corporate Financial and Social Responsibility Performance Nexus? A dynamic Model Analysis of Chinese Firms. *Front. Psychol.* **2022**, *13*, 897444. [CrossRef] [PubMed]
- 17. Buallay, A.; Kukreja, G.; Aldhaen, E.; Al Mubarak, M.; Hamdan, A.M. Corporate social responsibility disclosure and firms' performance in Mediterranean countries: A stakeholders' perspective. *EuroMed J. Bus.* **2020**, *15*, 361–375. [CrossRef]
- 18. Fatemi, A.; Glaum, M.; Kaiser, S. ESG performance and firm value: The moderating role of disclosure. *Glob. Financ. J.* **2018**, *38*, 45–64. [CrossRef]
- 19. Li, Y.; Gong, M.; Zhang, X.-Y.; Koh, L. The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *Br. Account. Rev.* **2018**, *50*, 60–75. [CrossRef]
- Chen, R.C.; Hung, S.W. Exploring the impact of corporate social responsibility on real earning management and discretionary accruals. Corp. Soc. Responsib. Environ. Manag. 2021, 28, 333–351. [CrossRef]
- 21. Lo, K. Earnings management and earnings quality. J. Account. Econ. 2008, 45, 350–357. [CrossRef]
- 22. Surroca, J.; Tribó, J.A. Managerial entrenchment and corporate social performance. *J. Bus. Financ. Account.* **2008**, *35*, 748–789. [CrossRef]
- 23. Santoro, G.; Ferraris, A.; Vrontis, D. Open social innovation: Towards a refined definition looking to actors and processes. *Open Perspect. Manag. Innov.* **2018**, *36*, 25–42.
- 24. Franceschelli, M.V.; Santoro, G.; Candelo, E. Business model innovation for sustainability: A food start-up case study. *Br. Food J.* **2018**, *120*, 2483–2494. [CrossRef]
- 25. Demir, M.; Min, M. Consistencies and discrepancies in corporate social responsibility reporting in the pharmaceutical industry. *Sustain. Account. Manag. Policy J.* **2019**, *10*, 333–364. [CrossRef]
- 26. Agudelo, M.A.L.; Johannsdottir, L.; Davidsdottir, B. Drivers that motivate energy companies to be responsible. A systematic literature review of Corporate Social Responsibility in the energy sector. *J. Clean. Prod.* **2020**, 247, 119094. [CrossRef]
- 27. Aguilera, R.V.; Rupp, D.E.; Williams, C.A.; Ganapathi, J. Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Acad. Manag. Rev.* **2007**, *32*, 836–863. [CrossRef]
- 28. Tang, Z.; Hull, C.E.; Rothenberg, S. How corporate social responsibility engagement strategy moderates the CSR–financial performance relationship. *J. Manag. Stud.* **2012**, *49*, 1274–1303. [CrossRef]
- 29. Orlitzky, M.; Schmidt, F.L.; Rynes, S.L. Corporate social and financial performance: A meta-analysis. *Organ. Stud.* **2003**, 24, 403–441. [CrossRef]
- 30. Rahman, S. Evaluation of definitions: Ten dimensions of corporate social responsibility. World Rev. Bus. Res. 2011, 1, 166–176.
- 31. Hunter, L.M. *Editor Introduction*; Springer: Berlin/Heidelberg, Germany, 2008; Volume 30, pp. 1–2.
- 32. Chan, M.C.; Watson, J.; Woodliff, D. Corporate governance quality and CSR disclosures. J. Bus. Ethics 2014, 125, 59–73. [CrossRef]
- 33. Siebecker, M.R. Trust & transparency: Promoting efficient corporate disclosure through fiduciary-based discourse. *Wash. Univ. Law Rev.* **2009**, *87*, 115.
- 34. Albuquerque, R.; Koskinen, Y.; Zhang, C. Corporate social responsibility and firm risk: Theory and empirical evidence. *Manag. Sci.* **2019**, *65*, 4451–4469. [CrossRef]
- 35. Acar, E.; Çaliyurt, K.T.; Zengin-Karaibrahimoglu, Y. Does ownership type affect environmental disclosure? *Int. J. Clim. Chang. Strateg. Manag.* **2021**, *13*, 120–141. [CrossRef]
- 36. Usman, A.B.; Amran, N.A.B. Corporate social responsibility practice and corporate financial performance: Evidence from Nigeria companies. *Soc. Responsib. J.* **2015**, *11*, 749–763. [CrossRef]
- 37. Gerged, A.M. Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structures. *Bus. Strategy Environ.* **2021**, *30*, 609–629. [CrossRef]

38. Han, J.-J.; Kim, H.J.; Yu, J. Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian J. Sustain. Soc. Responsib.* **2016**, *1*, 61–76. [CrossRef]

- 39. Smith, M.; Yahya, K.; Amiruddin, A.M. Environmental disclosure and performance reporting in Malaysia. *Asian Rev. Account.* **2007**, *15*, 185–199. [CrossRef]
- 40. Barnett, M.L.; Salomon, R.M. Unpacking Social Responsibility: The Curvilinear Relationship between Social and Financial Performance. In *Academy of Management Proceedings*; Academy of Management: Briarcliff Manor, NY, USA, 2002; pp. B1–B6.
- 41. Cek, K.; Eyupoglu, S. Does environmental, social and governance performance influence economic performance? *J. Bus. Econ. Manag.* **2020**, *21*, 1165–1184. [CrossRef]
- 42. Paolone, F.; Cucari, N.; Wu, J.; Tiscini, R. How do ESG pillars impact firms' marketing performance? A configurational analysis in the pharmaceutical sector. *J. Bus. Ind. Mark.* **2021**, *37*, 1594–1606. [CrossRef]
- 43. Porter, M.E. Towards a dynamic theory of strategy. Strateg. Manag. J. 1991, 12, 95–117. [CrossRef]
- 44. Mahboub, R.M.; Fawaz, L.I. Impact of Corporate Social Responsibility Practices on Financial Performance: Evidence from Selected Mena Region Commercial Banks. *BAU J. Creat. Sustain. Dev.* **2022**, *3*, 3. [CrossRef]
- 45. Baird, P.L.; Geylani, P.C.; Roberts, J.A. Corporate social and financial performance re-examined: Industry effects in a linear mixed model analysis. *J. Bus. Ethics* **2012**, *109*, 367–388. [CrossRef]
- 46. Rehman, A.; Baloch, Q.; Sethi, S. Understanding the relationship between firm's corporate social responsibility and financial performance: Empirical analysis. *Abasyn J. Soc. Sci.* **2015**, *8*, 98–107.
- 47. Khan, A.; Muttakin, M.B.; Siddiqui, J. Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *J. Bus. Ethics* **2013**, *114*, 207–223. [CrossRef]
- 48. Ahamed, W.S.W.; Almsafir, M.K.; Al-Smadi, A.W. Does corporate social responsibility lead to improve in firm financial performance? Evidence from Malaysia. *Int. J. Econ. Financ.* **2014**, *6*, 126–138.
- 49. Malik, M.S.; Kanwal, L. Impact of corporate social responsibility disclosure on financial performance: Case study of listed pharmaceutical firms of Pakistan. *J. Bus. Ethics* **2018**, *150*, 69–78. [CrossRef]
- 50. Malik, M.S.; Nadeem, M. Impact of corporate social responsibility on the financial performance of banks in Pakistan. *Int. Lett. Soc. Humanist. Sci.* **2014**, *21*, 9–19.
- 51. Choongo, P. A longitudinal study of the impact of corporate social responsibility on firm performance in SMEs in Zambia. *Sustainability* **2017**, *9*, 1300. [CrossRef]
- 52. Li, F.; Li, T.; Minor, D. CEO power, corporate social responsibility, and firm value: A test of agency theory. *Int. J. Manag. Financ.* **2016**, *12*, 611–628. [CrossRef]
- 53. Haniffa, R.M.; Cooke, T.E. The impact of culture and governance on corporate social reporting. *J. Account. Public Policy* **2005**, 24, 391–430. [CrossRef]
- 54. Said, R.; Zainuddin, Y.H.; Haron, H. The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Soc. Responsib. J.* **2009**, *5*, 212–226. [CrossRef]
- 55. Scott, S. Corporate social responsibility and the fetter of profitability. Soc. Responsib. J. 2007, 3, 31–39. [CrossRef]
- 56. Jennifer Ho, L.C.; Taylor, M.E. An empirical analysis of triple bottom-line reporting and its determinants: Evidence from the United States and Japan. *J. Int. Financ. Manag. Account.* **2007**, *18*, 123–150. [CrossRef]
- 57. Javeed, S.A.; Lefen, L. An analysis of corporate social responsibility and firm performance with moderating effects of CEO power and ownership structure: A case study of the manufacturing sector of Pakistan. *Sustainability* **2019**, *11*, 248. [CrossRef]
- 58. Famiyeh, S. Corporate social responsibility and firm's performance: Empirical evidence. *Soc. Responsib. J.* **2017**, *13*, 390–406. [CrossRef]
- 59. Nollet, J.; Filis, G.; Mitrokostas, E. Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Econ. Model.* **2016**, *52*, 400–407. [CrossRef]
- 60. Al-Shahadah, A.R.; Al-Sraheen, D.A.-D.; Khudari, M. The Earnings Management in Jordanian Banks: Do Profitability Measures Matter? In Proceedings of the International Conference on Business and Technology, Istanbul, Turkey, 6–7 November 2021; pp. 305–318.
- 61. Schroeder, R.G.; Clark, M.W.; Cathey, J.M. Financial Accounting Theory and Analysis: Text and Cases; John Wiley & Sons: Hoboken, NJ, USA, 2022.
- 62. Healy, P.M.; Wahlen, J.M. A review of the earnings management literature and its implications for standard setting. *Account. Horiz.* **1999**, *13*, 365–383. [CrossRef]
- 63. Tang, H.-W.; Chang, C.-C. Does corporate governance affect the relationship between earnings management and firm performance? An endogenous switching regression model. *Rev. Quant. Financ. Account.* **2015**, 45, 33–58. [CrossRef]
- 64. Bornemann, S.; Kick, T.; Memmel, C.; Pfingsten, A. Are banks using hidden reserves to beat earnings benchmarks? Evidence from Germany. *J. Bank. Financ.* **2012**, *36*, 2403–2415. [CrossRef]
- 65. Cimini, R. How has the financial crisis affected earnings management? A European study. *Appl. Econ.* **2015**, *47*, 302–317. [CrossRef]
- 66. Debnath, P. Assaying the impact of firm's growth and performance on earnings management: An empirical observation of Indian economy. *Int. J. Res. Bus. Stud. Manag.* **2017**, *4*, 30–40.
- 67. Mangala, D.; Dhanda, M. Earnings management and performance of IPO firms: Evidence from India. *Indian J. Corp. Gov.* **2019**, 12, 39–58. [CrossRef]

68. Boachie, C.; Mensah, E. The effect of earnings management on firm performance: The moderating role of corporate governance quality. *Int. Rev. Financ. Anal.* **2022**, *83*, 102270. [CrossRef]

- 69. Hernawati, R.I.; Ghozali, I.; Yuyetta, E.N.A.; Prastiwi, A. The effect of income and earnings management on firm value: Empirical evidence from Indonesia. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 105–112.
- 70. Alexander, N. Factors affecting earnings management in the Indonesian Stock Exchange. *J. Financ. Bank. Rev.* **2017**, 2, 8–14. [CrossRef]
- 71. Sari, M.R.; Djohanputro, B.; Kountur, R. Past performance and earnings management: The effect of free cash flow. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 37–43.
- 72. Chakroun, S.; Amar, A.B. Earnings management, financial performance and the moderating effect of corporate social responsibility: Evidencefrom France. *Manag. Res. Rev.* **2021**, *45*, 331–362. [CrossRef]
- 73. Mahdavi Ardekani, A.; Younesi, N.; Hashemijoo, M. Acquisition, earnings management and firm's performance: Evidence from Malaysia. *J. Bus. Stud. Q.* **2012**, *4*, 91–110.
- 74. Mahrani, M.; Soewarno, N. The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable. *Asian J. Account. Res.* **2018**, *3*, 41–60. [CrossRef]
- 75. Ehsan, S.; Nurunnabi, M.; Tahir, S.; Hashmi, M.H. Earnings management: A new paradigm of corporate social responsibility. *Bus. Soc. Rev.* **2020**, 125, 349–369. [CrossRef]
- 76. Hickman, L.E.; Iyer, S.R.; Jadiyappa, N. The effect of voluntary and mandatory corporate social responsibility on earnings management: Evidence from India and the 2% rule. *Emerg. Mark. Rev.* **2021**, *46*, 100750. [CrossRef]
- 77. Prior, D.; Surroca, J.; Tribó, J.A. Are socially responsible managers really ethical? Exploring the relationship between earnings management and corporate social responsibility. *Corp. Gov. Int. Rev.* **2008**, *16*, 160–177. [CrossRef]
- 78. Choi, B.B.; Lee, D.; Park, Y. Corporate social responsibility, corporate governance and earnings quality: Evidence from Korea. *Corp. Gov. Int. Rev.* **2013**, 21, 447–467. [CrossRef]
- 79. Almahrog, Y.; Aribi, Z.A.; Arun, T. Earnings management and corporate social responsibility: UK evidence. *J. Financ. Report. Account.* **2018**, *16*, 311–332. [CrossRef]
- 80. Gonçalves, T.; Gaio, C.; Ferro, A. Corporate social responsibility and earnings management: Moderating impact of economic cycles and financial performance. *Sustainability* **2021**, *13*, 9969. [CrossRef]
- 81. Gaio, C.; Gonçalves, T.; Sousa, M.V. Does corporate social responsibility mitigate earnings management? *Manag. Decis.* **2022**, *60*, 2972–2989. [CrossRef]
- 82. Kim, Y.; Park, M.S.; Wier, B. Is earnings quality associated with corporate social responsibility? *Account. Rev.* **2012**, *87*, 761–796. [CrossRef]
- 83. Habbash, M.; Haddad, L. The impact of corporate social responsibility on earnings management practices: Evidence from Saudi Arabia. *Soc. Responsib. J.* **2019**, *16*, 1073–1085. [CrossRef]
- 84. Huynh, Q.L. A triple of corporate governance, social responsibility and earnings management. *J. Asian Financ. Econ. Bus.* **2020**, 7, 29–40. [CrossRef]
- 85. Garfatta, R. Corporate social responsibility and earnings management: Evidence from Saudi Arabia after mandatory IFRS adoption. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 189–199.
- 86. Mutuc, E.B.; Lee, J.-S.; Tsai, F.-S. Doing good with creative accounting? Linking corporate social responsibility to earnings management in market economy, country and business sector contexts. *Sustainability* **2019**, *11*, 4568. [CrossRef]
- 87. Gallego-Álvarez, I.; Prado-Lorenzo, J.M.; Rodríguez-Domínguez, L.; García-Sánchez, I.M. Are social and environmental practices a marketing tool? Empirical evidence for the biggest European companies. *Manag. Decis.* **2010**, *48*, 1440–1455. [CrossRef]
- 88. Lev, B.; Petrovits, C.; Radhakrishnan, S. Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strateg. Manag. J.* **2010**, *31*, 182–200. [CrossRef]
- 89. Dhaliwal, D.S.; Radhakrishnan, S.; Tsang, A.; Yang, Y.G. Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *Account. Rev.* **2012**, *87*, 723–759. [CrossRef]
- 90. Gonçalves, T.; Gaio, C.; Costa, E. Committed vs. opportunistic corporate and social responsibility reporting. *J. Bus. Res.* **2020**, *115*, 417–427. [CrossRef]
- 91. Yuan, K.; Zeng, D.; Yuan, X.; Lan, F. Real Earnings Management, Manipulation Incentives and Accounting Conservatism: Evidence from China. *Emerg. Mark. Financ. Trade* **2022**, *58*, 939–951. [CrossRef]
- 92. Chouaibi, Y.; Zouari, G. The effect of corporate social responsibility practices on real earnings management: Evidence from a European ESG data. *Int. J. Discl. Gov.* **2022**, *19*, 11–30. [CrossRef]
- 93. Palacios-Manzano, M.; Gras-Gil, E.; Santos-Jaen, J.M. Corporate social responsibility and its effect on earnings management: An empirical research on Spanish firms. *Total Qual. Manag. Bus. Excell.* **2021**, 32, 921–937. [CrossRef]
- 94. El Khoury, R.; Nasrallah, N.; Alareeni, B. The determinants of ESG in the banking sector of MENA region: A trend or necessity? Compet. Rev. Int. Bus. J. 2021, in press. [CrossRef]
- 95. Alareeni, B.A.; Hamdan, A. ESG impact on performance of US S&P 500-listed firms. Corp. Gov. Int. J. Bus. Soc. 2020, 20, 1409–1428.
- 96. Adams, R.B.; Mehran, H. Bank board structure and performance: Evidence for large bank holding companies. *J. Financ. Intermediation* **2012**, 21, 243–267. [CrossRef]
- 97. Tilakasiri, K.K. Corporate Social Responsibility and Company Performance: Evidence from Sri Lanka. Ph.D. Thesis, Victoria University, Footscray, Australia, 2012.

Sustainability **2023**, 15, 1485 20 of 20

- 98. Neitzert, F.; Petras, M. Corporate social responsibility and bank risk. J. Bus. Econ. 2022, 92, 397–428. [CrossRef]
- 99. Davidson, R.; Goodwin-Stewart, J.; Kent, P. Internal governance structures and earnings management. *Account. Financ.* **2005**, 45, 241–267. [CrossRef]
- 100. Becker, C.L.; DeFond, M.L.; Jiambalvo, J.; Subramanyam, K. The effect of audit quality on earnings management. *Contemp. Account. Res.* 1998, 15, 1–24. [CrossRef]
- 101. Hamdan, A.M.; Buallay, A.M.; Alareeni, B.A. The moderating role of corporate governance on the relationship between intellectual capital efficiency and firm's performance: Evidence from Saudi Arabia. *Int. J. Learn. Intellect. Cap.* 2017, 14, 295–318. [CrossRef]
- 102. Hamdan, A. Board interlocking and firm performance: The role of foreign ownership in Saudi Arabia. *Int. J. Manag. Financ.* **2018**, 14, 266–281. [CrossRef]
- 103. Sahut, J.-M.; Pasquini-Descomps, H. ESG impact on market performance of firms: International Evidence. *Manag. Int.* **2015**, *19*, 40–63.
- 104. Sial, M.S.; Chunmei, Z.; Khan, T.; Nguyen, V.K. Corporate social responsibility, firm performance and the moderating effect of earnings management in Chinese firms. *Asia Pac. J. Bus. Adm.* **2018**, *10*, 184–199. [CrossRef]
- 105. Abid, A.; Shaique, M.; Anwar ul Haq, M. Do big four auditors always provide higher audit quality? Evidence from Pakistan. *Int. J. Financ. Stud.* **2018**, *6*, 58. [CrossRef]
- 106. Wooldridge, J.M. Econometric Analysis of Cross Section and Panel Data; MIT Press: Cambridge, MA, USA, 2002; Volume 108, pp. 245–254.
- 107. Gujarati, D. Basic Econometrics; McGraw-Hill Education: New York, NY, USA, 2009.
- 108. Sung Kim, W.; Oh, S. Corporate social responsibility, business groups and financial performance: A study of listed Indian firms. *Econ. Res. Ekon. Istraž.* **2019**, *32*, 1777–1793.
- 109. Ado, A.B.; Rashid, N.; Mustapha, U.A.; Ademola, L.S. The financial determinants of earnings management and the profitability of listed companies in Nigeria. *J. Crit. Rev.* **2020**, *7*, 31–36.
- 110. Kamatra, N.; Kartikaningdyah, E. Effect corporate social responsibility on financial performance. *Int. J. Econ. Financ. Issues* **2015**, *5*, 157–164.
- 111. Conca, L.; Manta, F.; Morrone, D.; Toma, P. The impact of direct environmental, social, and governance reporting: Empirical evidence in European-listed companies in the agri-food sector. *Bus. Strategy Environ.* **2021**, *30*, 1080–1093. [CrossRef]
- 112. Khalil, M.A.; Khalil, R.; Khalil, M.K. Environmental, social and governance (ESG)-augmented investments in innovation and firms' value: A fixed-effects panel regression of Asian economies. *China Financ. Rev. Int.* 2022, *in press.* [CrossRef]
- 113. Asghar, A.; Sajjad, S.; Shahzad, A.; Matemilola, B.T. Role of discretionary earning management in corporate governance-value and corporate governance-risk relationships. *Corp. Gov. Int. J. Bus. Soc.* **2020**, 20, 561–581. [CrossRef]
- 114. Roodman, D. How to do xtabond2: An introduction to difference and system GMM in Stata. Stata J. 2009, 9, 86–136. [CrossRef]
- 115. Wintoki, M.B.; Linck, J.S.; Netter, J.M. Endogeneity and the dynamics of internal corporate governance. *J. Financ. Econ.* **2012**, 105, 581–606. [CrossRef]
- 116. Arellano, M.; Bond, S. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Rev. Econ. Stud.* **1991**, *58*, 277–297. [CrossRef]
- 117. El Khoury, R.; Nasrallah, N.; Alareeni, B. ESG and financial performance of banks in the MENAT region: Concavity—Convexity patterns. *J. Sustain. Financ. Invest.* **2021**, *13*, 406–430. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.