# ARA 2

*by* Perpustakaan Referensi

# Financial Statement Comparability and Cash Holding: Moderated by ESG Performance in Indonesia


## Abstract

**Purpose** – The paper examines the impact of financial statement comparability on cash holding moderated by Environmental Social Governance (ESG) performance.
**Design/methodology/approach** – A panel dataset of all publicly listed Indonesian firms from 2009 to 2022, evaluated with panel data regressions controlled by year and clustered by firms. Then, a robustness test using alternative measurements, lagged variables, and additional analyses are performed.
**Findings** – The result shows that there is no moderating role of ESG performance on financial statement comparability toward cash holding among Indonesian firms; nonetheless, ESG performance strengthened the capacity of financial statement comparability to lower cash holding significantly for firms with high ESG performance scores and not significant otherwise. This interplay of variables is developed following the Financial Services Authority imposed the ESG regulation for publicly listed firms in Indonesia. Further, the analyses reveal that higher ESG performance can help firms achieve high market-based performance and make it easier to obtain external financing, hence lowering the necessity to hold more cash.
**Originality** – The study highlights the effect of financial statement comparability on cash holding, particularly moderated by ESG performance in a developing country where the agency cost is high and still very rare to be scrutinized. Additionally, to know the impacts prior and post-ESG regulation imposed in Indonesia.
**Practical implications** – The shareholders, investors, and analysts will have appropriate considerations to invest in a firm that is socially and environmentally conscious and governed by ethical conduct.



**Keywords**: Financial statement comparability, Cash holding, ESG performance


## 1. Introduction

Cash holding is considered significant for the firms as it is not only used for payment of the daily operating transactions but also for anticipating precautionary or financing frictions (Keynes, 1936) and the free cash flow problem due to agency conflict , which requires a larger amount than the norm. High capital costs, caused by adverse selection, are the direct consequence of information asymmetry on cash holdings which makes firms to keep more internal savings to avoid expensive external financing cost (Faulkender and Wang, 2006; Myers and Majluf, 1984). Due to its significance, there is a substantial body of empirical research that has been conducted in an effort to explain the driver of cash reserved held by corporations (Alomran, 2023; Bigelli and Sánchez-Vidal, 2012; Clarkson *et al*., 2020; Diaw, 2021; Dittmar and Mahrt-Smith, 2007; Guizani, 2017; Han and Qiu, 2007; Nguyen, 2022; Ozkan and Ozkan, 2004; Sun *et al*., 2012, 2023; Uyar and Kuzey, 2014)

One of the mechanisms to prevent higher information asymmetry from occurring and facilitate firms monitoring (Chauhan and Kumar, 2019; Chen *et al.*, 2018) is accounting comparability (De Franco *et al.*, 2011) through cost reductions in information processing and acquisition. De Franco et al. (2011) define accounting comparability as firms create similar response from having the same economic events. Financial Accounting Standards Board (FASB) classifies comparability as the first enhancing quality among three others that give the capacity of users of financial statements to recognize and comprehend the similarities and usefulness of accounting information across firms (FASB, 2018). This will decrease the information uncertainty and lower external financing constraints (Imhof *et al.*, 2017, 2022). As a result, the company holds less cash on hand.

Other studies also found consistent results of accounting comparability benefits delivered to capital markets related to such, corporate debt maturity (Do, 2020), stock liquidity (Majeed and Yan, 2022), tax avoidance and strategy (Hong *et al.*, 2023; Qingyuan and Lumeng, 2018), earnings (Chen *et al.*, 2020; Choi *et al.*, 2019) and earnings management strategies (Januarsi and Yeh, 2022), competition, and proprietary cost (Imhof et al., 2022), investment efficiency, environmental uncertainty during Covid-19 (Arianpoor et al. 2023) and cash holding (Ahn *et al.*, 2020; Habib *et al.*, 2017; Kim *et al.*, 2021). However, not many (Nguyen and Nguyen, 2021) examine the benefits of accounting comparability to cash holding in an emerging market that owns different investment environments, financial institutions, and business practices.

In recent times, firms been demanded to disclose corporate social responsibility (CSR) and governance or called as environmental, social, and governance (ESG) performance recently (Akhtar *et al.*, 2018) to let the public know that firms are heavily concerned with good governance practices, as well as being ecologically and socially conscious within different contexts and settings (Ghardallou, 2022; Hamdi *et al.*, 2022; Khandelwal *et al.*, 2023; Qureshi *et al.*, 2020; Park *et al.*, 2023; Li *et al.*, 2022; Narula *et al.*, 2024; de Villiers *et al.*, 2023; Al-Dhamari *et al.*, 2022; Rastogi *et al.*, 2023; Mohammad and Wasiuzzaman, 2021; Chulkov and Wang, 2023; Kareem Al Ani, 2021; Dimitropoulos, 2022; Habbash and Haddad, 2019; Palacios-Manzano *et al.*, 2021))

With respect to FSC compliance, we expect the impact of firms' comparability on cash holding to be more positive when there is good ESG activities conducted by the firms for the following reasons. First, the ability for managers to obtain better stakeholder commitment could be made possible by a high level of ESG activities; this, in turn, could result in a more effective utilization of the organization's resources (Donaldson and Preston, 1995) resulting in higher value of assets in the market currently (Bhattacharyya and Rahman, 2019) including cash (Ahn *et al.*, 2020). As a corollary, investors believe that businesses with a higher level of social responsibility make better use of their resources, including their cash resources, than those with a lower level of responsibility. Therefore, companies that prioritize CSR see an increase in their market value of liquid assets (Arouri and Pijourlet, 2017a; Choi and Ryu, 2021a; Lu *et al.*, 2017). Second, a strong ESG performance of a firm serves as evidence of diminished information asymmetry and market volatility (Chen *et al.*, 2023), which is also playing a role as monitoring mechanism to mitigate agency problems and protect shareholders. This agency conflicts can be reduced if there is a strong information symmetry related to the investment opportunities and it can cause firms to hold less cash (Nguyen and Nguyen, 2021). A sustainability report that is provided voluntarily is considered superior to one that is required by law because it contains more information (Thorne *et al.*, 2014).

While existing body of research presents adequate verification on the direct effect of FSC (Ahn *et al.*, 2020; Habib *et al.*, 2017; Kim *et al.*, 2021; Nguyen and Nguyen, 2021) or ESG performance (Atif *et al.*, 2022; Cheung, 2016; Hendijani Zadeh *et al.*, 2023; Liao *et al.*, 2023; Yin and Yang, 2023) on cash holding, the interaction between FSC and ESG performance on cash holding continues to be unknown empirical question.

The primary objective of this research is to know the role of ESG performance on the relationship between Financial Statement Comparability and cash holding. A priori, it is unclear as to whether ESG performance would aggravate or lessen the outcome of FSC on cash holding. Few studies in the past that focus on the interplay between Financial Statement Comparability and other variables on cash holding, such as with disclosure quality (Mehrabanpour *et al.*, 2020), financial reporting quality and corporate governance (Habib *et al.*, 2017), and capital expenditures (Kim *et al.*, 2021), but none concerned with ESG performance and this research fills the gap. To the best knowledge of the researchers, this is the first study that examines the moderating role of ESG performance on the relationship between Financial Statement Comparability to Cash Holding, particularly within a developing country setting like Indonesia. It examines the relationship between ESG performance to cash-holding as the current studies have limited empirical results for the countries with less developed financial markets and less investors protection (Liao *et al.*, 2023; Yin and Yang, 2023). In addition, continuing from past studies, it explores the sample into firms with high and low ESG performance score to know better how it enhance the relation and to know further about the impact before year 2017 when submission of sustainability reports for Indonesian firms were on voluntary basis compared to the time when the regulation of mandatory sustainability reports imposed by Indonesian Financial Services Authority for financial services institutions, issuers, and public firms in 2017.

The contribution of this research is as follows : 1)the research adds to established literature about comparability of financial statements' advantages on cash holding and how ESG performance strengthened or weakened the relationship, 2)to gain an insight into the practice of ESG in developing countries from the perspective of cash holding decision, 3)to inform the stakeholders whether the voluntary disclosures of ESG in Indonesia can bring a higher impact to investment environment due to lower cost of external financing.

Empirical study investigated all publicly listed firms in Indonesian Stock Exchange from 2009-2022, except financial firms by using panel data regression controlled by year and clustered by firms. The results show there is no moderating role of ESG performance on financial statement comparability toward cash holding among Indonesian firms. Nonetheless, ESG performance strengthened the capacity of financial statement comparability to lower cash holding significantly for firms with high ESG performance scores and no significant impact otherwise. Further, the analyses reveal that higher ESG performance can help firms achieve high market-based performance and make it easier to obtain external financing, hence lowering the necessity to hold more cash.

The subsequent sections of the paper are organized as follows. The hypothesis is formulated and the literature is reviewed in Section 2. In Section 3, our methodology and sample are detailed. In Section 4, the results are discussed, along with the robustness test and additional analyses. In summary, the paper is concluded in Section 5.

## 2. Literature review and hypothesis development

### *2.1 Financial Comparability and cash holding*

De Franco et al. (2011) define accounting comparability as firms create similar response from having the same economic events or Accounting information comparability is concerned with the similarity of financial reporting items across multiple companies in the same industry over a given time period (Zhang, 2018). Financial Accounting Standards Board (FASB) classify comparability as the first enhancing qualities among three others that given the ability of financial statements users to recognise and comprehend the similarities and usefulness of accounting information across firms (FASB, 2018). Firms that comply with FSC promote the availability of pertinent data and reduce uncertainty, thereby enhancing investors' capacity to evaluate firm performance as it lowers the need for subjective judgment. De Franco et al. (2011) posit greater FSC can improve a company's information environment significantly by increasing the whole quality and quantity of information related to the company and its competitors.

Improved comparability of financial statements serve as better benchmarks for one another, creating information acquisition and more informative share prices (Choi *et al.*, 2019), increasing efficiency in acquisition (Chen *et al.*, 2018) or investment (Alhadi *et al.*, 2020), stock liquidity (Majeed and Yan, 2022), debt maturity (Do, 2020) and earning management strategies (Januarsi and Yeh, 2022). Hence, FSC empowers individuals to understand and forecast economic occurrences and how they affect accounting performance (Chen *et al.*, 2020; Khuong *et al.*, 2022). Comparability expands the knowledge pool available to managers, facilitating data aggregation and reducing ambiguity in judgment. This is due to the fact that FSC compliance firms enable investors to draw conclusions regarding the performance of a company by analyzing its peers' performance and/or disclosures (Ahn *et al.*, 2020; De Franco *et al.*, 2011; Kim *et al.*, 2021).

The precautionary motive postulates that firms with strong investment prospects may keep a greater amount of cash on hand because it is more expensive for them to experience adverse shocks or recover from financial distress (Bates *et al.*, 2009). This arises due to information asymmetry, a distinct consequence of financial friction, and makes firms keep more internal savings to avoid expensive external financing costs (Faulkender and Wang, 2006; Gao, 2013; Myers and Majluf, 1984). When significant agency problems exist among corporate insiders and outsiders, managers have incentives to keep free cash flows and utilize them to their advantage at the expense of shareholders (Fama, 1980). However, financial statement comparability can help to alleviate free cash flow issues by allowing for increased monitoring by corporate outsiders (Habib *et al.*, 2020).

Using US firms in 1990-2013, Kim *et al.,* (2021) managed to mitigate the financial comparability and corporate resources, one of which is cash holding and able to show external shareholders place a higher value on corporate cash holding, capital expenditure makes a greater contribution to the value of shareholder, and acquiring companies possess greater abnormal stock returns throughout the announcement time for acquisitions. Nguyen and Nguyen (2021) mitigated the accounting comparability in dealing with asymmetry and agency cost for listed firms in Vietnam from 2010-2019 and exhibited that comparability is correlated positively with cash on hand, specifically for firms with high comparability. This ultimately results in firms requiring less cash on hand for precautionary and transactional purposes.

*2.2 Financial Comparability, ESG performance and cash holding*

As a result of the increasing prevalence of the ESG framework's incorporation into corporate development strategies and operational management procedures, the connection between ESG and financial performance has received a great deal of attention in the relevant academic literature (de Villiers *et al.*, 2023; Dimitropoulos, 2022; Ghardallou, 2022; Habbash and Haddad, 2019; Hamdi *et al.*, 2022; Kareem Al Ani, 2021; Khandelwal *et al.*, 2023; Mohammad and Wasiuzzaman, 2021; Li *et al.*, 2022; Narula *et al.*, 2024; Park *et al.*, 2023; Qureshi *et al., 2020*; Rastogi *et al.*, 2023; Bartov *et al., 2021*; Palacios-Manzano *et al., 2021*).

The stakeholder theory conjectures that instead of looking out only for their own interests, firms should consider the needs of their stakeholders as well (Freeman 1984; Jones 1995) including shareholders, employees, customers, supply chains, regulators and communities. This theory is consistent with the proposition made by Lian et al. (2023), which suggests that disclosing environmental and social information can assist a business in enhancing its reputation, market image, and stakeholder relationships. Firms with high levels of environmental and social capital are able to maximize shareholder value (Nguyen *et al.*, 2020), reduce the knowledge gap among managers and external stakeholders (Alduais *et al.*, 2022; Cui *et al.*, 2018). Last, it is better in resolving the conflicts and maintain positive stakeholder relationships, which acts as a form of insurance against adverse firm-specific events (Liem *et al.*, 2020). The integration of interests ought to lead to an increased assessment of the assets, cash included (Arouri and Pijourlet, 2017a; Yin and Yang, 2023)

Jensen and Meckling (1976) posit that the separation of ownership and control raises the possibility of managers misallocating corporate resources at the expense of shareholders. Hence, it is necessary for shareholders to facilitate monitoring to control managers to keep a considerable degree of cash reserves maintained as a result of self-interested conduct stemming from the pervasive presence of information asymmetry and agency problems (Dittmar *et al.*, 2003) which could be accomplished by corporate governance and voluntary disclosure (De Villers et al., 2018), including corporate social responsibility (CSR) or currently known as environmental social and governance (ESG) disclosures (Alduais *et al.*, 2022; Cui *et al., 2018;* Hamrouni *et al.*, 2022).

Firms with higher scores of ESG are more likely to reduce agency problems due to better governance mechanisms that lower the opportunity for managers to act in their own self-interest, thus directing the firms to hold less cash (Hendijani Zadeh *et al.*, 2023; Atif *et al.*, 2022; Liao *et al.*, 2023) and increase the value (Lu *et al.*, 2017). Prior studies suggest that higher engagement in ESG activities can benefit the firms by having a declining risk of financial default (Boubaker *et al.*, 2020), lower cost of equity (El Ghoul *et al.*, 2011; Imhof *et al.*, 2017), and lower cash volatility (Han and Qiu, 2007) which will address the adverse shocks and financial distress, or known as systematic risk (Cheung, 2016).

In addition, by compelling managers to pay out cash, preferably to shareholders, good corporate governance lowers the demand for cash reserves held by an organization (Dittmar and Mahrt-Smith, 2007). Supported by evidence gathered from multiple countries demonstrates who have lower cash holdings are associated with strong corporate governance, which is shown by increased shareholder rights (Dittmar *et al.*, 2003). In other words, when the firms disclose environmental and social information can effectively reduce information asymmetry (Alduais *et al.*, 2022; Cui *et al.*, 2018; Hamrouni *et al.*, 2022) and agency problems, limiting manager's opportunities to waste money for value-destroying projects (Yin and Yang, 2023), leading to increased information transparency among firms and lower financing costs.

As discussed earlier, financial statement comparability which is defined as how far to which firms record alike accounting transactions and create the same financial statements (De Franco *et al.*, 2011), is one of the regressors of cash holding to enhance the quality of financial statement. Using stakeholder theory, this relationship could be exacerbated by ESG performance since by disclosing ESG, the firms are able to establish and sustain their reputation among equity providers (Lian *et al.*, 2023). The higher the ESG performance, the more likely the firms are to conduct business in an honest, dependable, and ethical manner (Zadeh *et al.*, 2023), to maintain the positive stakeholder relationship which leads to the enhancement of the capability of FSC in obtaining lower external financing costs, thus firms do not necessarily hold higher cash. Besides, disclosing ESG will effectively reduce information asymmetry (Alduais *et al.*, 2022; Cui *et al.*, 2018; Hamrouni *et al.*, 2022) and act as a monitoring facility for agency problems (Alduais *et al.*, 2022; Cui *et al.*, 2018; Hamrouni *et al.*, 2022), imposing a stronger effect on the relationship between FSC and cash holding to reduce the opportunistic motive managers have for holding onto cash. This lead to the main hypothesis as follows :

H1: ESG performance acts as a moderating role between financial statement comparability and cash holding

## 3. Data and Methodology

### *3.1 Data*

Data is retrieved from Bloomberg database, firm's website, and Indonesian Stock Exchange (IDX) website for all publicly listed Indonesian firms from 2009-2022, except financial firms and banks. The year of 2009 is chosen due to the availability of the Indonesian ESG performance data is provided from 2016 and FSC calculation needs data from seven years backward.Originally there are 413 firm-year observations provided with ESG performance by Bloomberg, excluding the firms with no data (for variable of interest and control variables), then there are 266 firm year data used in this study and the details are in Table I. To reduce the potential effect of outliers and to ensure that the data remains within a reasonable range for analysis purposes, all continuous data are winsorized at 1% and 99%.

Insert Table I

### *3.2 Financial Statement Comparability Measurement*

The method proposed by De Franco et al. (2011) is utilized to assess accounting comparability. The subsequent model is estimated for every firm-year observation applying data from the past sixteen quarters:

$$Earnings_{it} = \alpha_i + \beta_i Return_{it} + e_{it} \tag{1}$$

where $Earnings_{it}$ is quarterly net income before extraordinary items scaled by market value of equity at the beginning of the year and $Return_{it}$ is the stock returns along the quarter. The parameters αi and βi proxy for the accounting structure of firm i are estimated. Similar procedures are iterated for companies j. By employing the estimated parameters and presuming the returns of firm i we forecast the earnings of firm j and firm i.

$$E(Earnings)_{iit} = \widehat{\alpha_i} + \widehat{\beta_i} Return_{it} \tag{2}$$

$$E(Earnings)_{jit} = \widehat{\alpha_j} + \widehat{\beta_j} Return_{it} \tag{3}$$

The negative sign of the absolute difference concerning anticipated earnings for firm i and firm j characterizes accounting comparability.:

$$AcctComp_{ijt} = -\frac{1}{16}\sum_{t-15}^{t} |E(Earnings_{iit}) - E(Earnings_{ijt})| \tag{4}$$

The comparative analysis is performed on every pair of companies i and j that belong to the equal two-digit industry classification as specified by the Global Industry Classification Standard (GICS). Higher values of $CompAcct_{ijt}$ pinpoint higher accounting comparability between firm-pairs. Consistent with Chen *et al.* (2018) this ▯ , we ranked the comparability measures into deciles for each year to lessen disturbances in the value of the estimate and standardize the deciles to scores between [0,1].

### *3.3 Model for ESG performance, Financial Statement Comparability and Cash holding*

To evaluate the effect of FSC on Cash holdings (Ahn *et al.*, 2020; Habib *et al.*, 2017), it involves the following estimation:

$$Cash_{it} = \beta_0 + \beta_1 CompAcct_{it} + \beta_j ControlVar_{it} + Year_{dummies} + +\epsilon_{it} \tag{5}$$

$Cash_{it}$ is referring to firm's cash ratio as proxy of firm i's cash holding in year t and two proxies are used to confirm robustness of our findings. First proxy is cash and marketable securities to total assets as Cash1 (Atif *et al.*, 2022; Clarkson *et al.*, 2020; Hendijani Zadeh *et al.*, 2023; Liao *et al.*, 2023). The second proxy is cash and marketable securities to total assets net of cash as Cash2 (Arouri and Pijourlet, 2017b; Atif *et al.*, 2022; Hendijani Zadeh *et al.*, 2023; Liao *et al.*, 2023; Opler *et al.*, 1999). $CompAcct_{it}$ is financial comparability based on De Franco *et al.* (2011) and succeeding priore studies, there are two kinds of comparability estimates of firm i's (Ahn *et al.*, 2020; Do, 2020), which are first, CompAcctMean means the average of financial statement comparability for all firms j in the same sub-industry (GICS) as firm i; second, CompAcctMed means the median of financial statement comparability for whole companies j in the same sub-industry (GICS) as firm. Comparability estimates are decile-ranked and rescaled to range between [0,1] (Ahn *et al.*, 2020; Chen *et al.*, 2018).

A group of variables on firm level as control variables ($ControlVar_{it}$) following (Hendijani Zadeh *et al.*, 2023; Yin and Yang, 2023; Atif *et al.*, 2022) are tabulated in Table II.

Insert Table II

While for the main model to capture the role of ESG performance on FSC on Cash holding as follows:

$$Cash_{i,t} = \beta_0 + \beta_1 CompAcct_{1,t} x\ ESGP_{i,t-1} + \beta_2 Div_{1,t} + \beta_3 RD_{i,t} + \beta_4 FSize_{i,t} + \beta_5 Lev_{i,t} + \beta_6 ROA_{i,t} + \beta_7 GR_{i,t} + \beta_8 NWC_{i,t} + \beta_9 OCF_{i,t} + \beta_{10} ESGP_{i,t-1} + Year_{dummies} + \varepsilon_{i,t} \quad (6)$$

$ESGP_{it-1}$ is overall ESG performance indicators for each firm i in time (t-1) issued by Bloomberg valued from (0-100) aggregated from each activity within environment, social and governance. Lagged $ESGP_{it}$ variable is used as ESG performance since influence on a company's cash holding decisions may require a period of time (Atif *et al.*, 2022)

## 4. Empirical Results and Discussion

### *4.1 Univariate Analysis*

Table III summarizes the descriptive statistics for all variables used in current study. The average value of CompAcctMean and CompAcctMed is -0.035 and -0.017. Variable ESGP indicates that among Indonesian listed firms that disclose ESG from 2016-2022 reports, merely achieve 70.114 as the highest score (of 100) and the lowest is 16.709, the governance factor displays the highest performance score among all individual characteristics in ESG. Cash1 and Cash2 exhibit similar percentage while the average of CompAcctMean is -0.035.

Insert Table III

Table IV exhibits Pearson correlations for the variables used in Equation (5)-(6). In general, the correlations between independent variables are relatively weak (0.8), suggesting that the occurrence of the multicollinearity problem in our multivariate models is improbable (Gujarati and Porter, 2010).

Insert Table IV

### *4.2 Multivariate Analysis*

#### *4.2.1 Baseline Regression*

Table V-VI reports the results from regressing measures of financial statement comparability and ESG performance on cash holding by using estimation equations (5) and (6). Pooled ordinary least squares (OLS) regressions with robust standard errors that controlled by year and clustered by firm (Baltagi, 2021). In the first column of Table V by using Cash1, we find that both CompAcctMean and CompAcctMeanxESGP (Model 1) are not significant and the results remain the same with Model 2 when the proxy of FSC changed to CompAcctMed (fourth column). However when the sample is separated into firms with high and low ESG performance scores (High-above average of ESGP performance during the year and Low-otherwise), based on previous research (Cheung, 2016; Liao *et al.*, 2023) that firms with high ESG scores incline to have low idiosyncratic risk and hold lower cash holdings, then firms with high ESG performance score shows significant results on direct and indirect effect between FSC, ESG performance and cash holding and the same outcomes with Model 2. The variable of interest is CompAcctMean x ESGP (0.239 at p-value<0.001) and CompAcctMean x ESGP (0.159 at p-value<0.05), which both exhibit positive coefficients and are significant. These results suggest that firms with high ESG performance scores are able to strengthen the relationship between FSC and cash holding significantly. Notably, the coefficient on FSC is negative and significant (Model 1, p-value<0.001; Model 2, p-value<0.01) indicating that, in the absence of ESG, the firm's comparability is able to lessen cash holding level (Habib *et al.*, 2017; Mehrabanpour *et al.*, 2020) and when ESG performance increases, the firm's comparability is perceived to be more powerful in enhancing the capability to address cash holding related problem.

Insert Table V-VI

Further, we find that in Table VI, by using different proxies of cash holding (Cash2), the coefficient on both CompAcctMean and CompAcctMeanxESGP (Model 1) is not significant, and the same outcome with Model 2 when we use different proxies for FSC (CompAcctMed). Similarly, based on (Cheung, 2016; Liao *et al.*, 2023) we partitioned the sample into firms with high and low ESG performance scores, thus firms with high ESG performance score shows significant results on direct and indirect effect between FSC, ESG performance, and cash holding and the same outcomes with Model 2 while low ESG performance firms exhibit otherwise. Specifically, the coefficient on both CompAcctMean x ESGP and CompAcctMed x ESGP is positive and significant (Model 1, p-value<0.001 and Model 2, p-value<0.01) that verifies our hypothesis that the relation between FSC and cash holding exhibits more favorable relationship for companies with higher ESG performance. These findings are consistent with the stakeholder theory signifying that firms with high levels of environmental, social, and government capital would be better at resolving conflicts and maintaining positive stakeholder relationships, which acts as a form of insurance against adverse firm-specific events (Liem *et al.*, 2020) including to reduce agency problem by lowering the opportunity for managers to act in their self-interest consequently directing the firms to hold less cash (Hendijani Zadeh *et al.*, 2023; Liao *et al.*, 2023; Atif *et al.*, 2022).

*4.2.2 Prior and Post-Regulation Imposed*

In addition, we run the analysis to know the interplay of the variables for high ESG performance since the enactment of Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the implementation of sustainable finance for financial services institutions, issuers, and public firms. These firms are required or mandatory by the regulation to publish sustainability reports. Aligned with Bigelli *et al.* (2023), the mandatory reporting of information that was previously voluntary likely compelled firms to place greater emphasis on ESG-related concerns while accommodating the preference of new investors for ESG investments. As a result, we anticipate that the average ESG score of Indonesian firms has increased substantially since the directive's implementation and affects the role of moderating towards FSC to cash holding. In Table VII, the outcomes document that the ESG performance is significantly differentiated prior to the implementation of regulation, and it also indicates that the interplay between FSC and ESG performance on cash holding developed significantly after the regulation is imposed, notably for high ESG performance firms.

Insert Table VII

*4.3 Robustness Test*

*4.3.1 Alternative Measurement of Cash Holding*

In the primary analysis, there are two measures of cash holding utilized, Cash1 (cash and marketable securities to total assets) and Cash2 (cash and marketable securities to net assets). To prove the robustness of our results we re-evaluate our analysis employing cash holding as natural logarithm of cash and marketable securities to net assets following previous research (Habib *et al.*, 2017; Hendijani Zadeh *et al.*, 2023). Using this modified measure of cash holding, we depict the result in Table VIII. Across columns, we discover that the coefficient of interest variable is statistically significant in the expected direction. Therefore, the findings exhibit a quantitative resemblance to the results presented in the preceding tables, substantiating the robustness of our results regarding this alternative measurement.

Insert Table VIII

*4.3.2 Lagged Variables*

Aligned with Uyar et al. (2023), Equation (5) with variable of interest (FSC) is set to 1-year lagged toward both cash holding proxies and moderating variable to reconfirm the causality. Reiterating the association between FSC and cash holding, the results detailed in Table IX largely corroborate the initial findings. An observation is made that the robustness test reveals an accelerating moderating effect on ESG performance, notably for firms with high scores.

Insert Table IX

*4.4 Additional Analysis*

*4.4.1 ESG Performance and Firm Performance*

Continuing the previous main analysis, we test further whether those firms with high (low) ESG performance besides making better (lower) use of their liquid resources (Arouri and Pijourlet, 2017b; Choi and Ryu, 2021b; Lu *et al.*, 2017), will also have higher (lower) firm value (Li *et al.*, 2022). Using the market-based performance ratio of the company in the fiscal year, Tobin's Q, which is calculated according to (Servaes and Tamayo, 2013), ESG performance and control variables, the OLS of this model is implemented to explore the economic value of ESG in the long run. The outcomes (Table X) reveal that ESG performance contributed significantly toward market-based firm performance, particularly for firms with high ESG performance and aligned with Li et al. (2022). Additional lagged of ESG performance is also evaluated to add robustness to the result.

Insert Table X

*4.4.2 Individual ESG Performance, FSC and Cash Holding*

Previously, based on baseline regression, those firms with low scores of ESG performance were unable to show a significant result of the moderating effect of ESG performance toward FSC and cash holding. Additional analysis is conducted by partitioning the attributes of ESG performance and FSC on cash holding to examine the further impact among these variables using OLS controlled by year and clustered by firms. The results (Table XI) show that individually, only governance attribute affects cash holding significantly (p-value<0.001) within firms with low ESG performance which means the environmental and social activities together with financial statement comparability are not able to bring the firms in utilizing their resources better and more efficient, moreover unable to play as a monitoring role to protect the stakeholders dan to reduce the agency problem which eventually make the firm to hold more cash. That which transpired subsequent to the implementation of the regulation by the Financial Services Authority in 2017 that listed firms should publish sustainability reports (Table XII).

Insert Table XI-XII

There are several reasons why these firms categorized as low ESG performance are reluctant to meet the environmental and social activities required in Indonesia. It is supported by the fact that only 40.64% of Indonesian customers considered disclosures for sustainable products related to carbon-neutral, eco-friendly, and recyclable as of January 2023 (Statista, 2023a). Besides, another survey about the most common concerns on the aspects of sustainable development goals (SDG) in Indonesia about environment is only 5.23%-17.71% (Statista, 2023b).

## 5. Conclusion

This study examines the role of ESG performance as a moderator between financial statement comparability on cash holding in an emerging economy which is known for high agency costs and low investor protection. Using panel data regressions controlled by year and clustered by firms, our findings suggest that the negative effect of financial statement comparability on cash holding is strengthened by ESG performance, particularly for firms with high ESG scores. Additional results imply that this result is more pronounced after the Financial Services Authority imposed the mandatory submission of ESG report regulation in 2017. We use several measures of comparability and cash holding in addition to the use of lagged variables to ensure the robustness of our results. Further analyses document that higher ESG performance can help firms achieve high market-based performance and these findings are consistent with the stakeholder theory as we present evidence ESG performance acts as a form of insurance against adverse firm-specific events (Liem *et al.*, 2020) including to reduce agency problem (Hendijani Zadeh *et al.*, 2023; Liao *et al.*, 2023; Atif *et al.*, 2022).

Practically, our study is imperative for offering firms an exhaustive analysis of the ways in which comparability influences the quality of information provided by managers, as well as the ways in which financial policy is reinforced by employing ESG activities. Second, it is also relevant and notable to stakeholders (including investors, standard setters, and regulators) that the imposed rules in 2017 about mandatory sustainability report submission are able to encourage firms to enlarge ESG transparency and able to impact the policy on cash management. In current study, we employ Bloomberg database to retrieve ESG scores. Even though our outcomes are robust to the use of alternative measurements and lagged variables, future studies can inspect whether our outcomes remain to hold by using different ESG rating scores, such as Sustainalytics that emphasize ESG risk rating, which is also used as the source of ESG Leaders Index in Indonesia. Besides, continuing the current study to find the causes of insignificant outcomes for low ESG performance firms can be considered in future research.

**References**


Ahn, H., Choi, S. and Yun, S.C. (2020), “Financial statement comparability and the market value of cash holdings”, *Accounting Horizon*, Vol. 34 No. 3, pp. 1–21, doi: 10.2308/horizons-18-008.

Akhtar, T., Tareq, M.A., Sakti, M.R.P. and Khan, A.A. (2018), “Corporate governance and cash holdings: the way forward”, *Qualitative Research in Financial Markets*, Vol. 10 No. 2, pp. 152–170, doi: 10.1108/QRFM-04-2017-0034.

Al-Dhamari, R., Al-Gamrh, B., Farooque, O.A. and Moses, E. (2022), “Corporate social responsibility and firm market performance: the role of product market competition and firm life cycle”, *Asian Review of Accounting*, Emerald Publishing, Vol. 30 No. 5, pp. 713–745, doi: 10.1108/ARA-07-2022-0179.

Alduais, F., Almasria, N.A. and Airout, R. (2022), “The moderating effect of corporate governance on corporate social responsibility and information asymmetry: an empirical study of chinese listed companies”, *Economies*, Vol. 10 No. 11, p. 280, doi: 10.3390/economies10110280.

Alhadi, A., Habib, A., Taylor, G., Hasan, M. and Al-Yahyaee, K. (2020), “Financial statement comparability and corporate investment efficiency”, *Meditari Accountancy Research*, Emerald Group Holdings Ltd., doi: 10.1108/MEDAR-12-2019-0629.

Alomran, A.A. (2023), “Blockholder ownership and corporate cash holdings: evidence from European firms”, *International Journal of Managerial Finance*, Emerald Publishing, doi: 10.1108/IJMF-07-2022-0303.

Arouri, M. and Pijourlet, G. (2017), “CSR performance and the value of cash holdings: International Evidence”, *Journal of Business Ethics*, Vol. 140 No. 2, pp. 263–284, doi: 10.1007/s10551-015-2658-5.

Atif, M., Liu, B. and Nadarajah, S. (2022), “The effect of corporate environmental, social and governance disclosure on cash holdings: Life-cycle perspective”, *Business Strategy and*

*the Environment*, John Wiley and Sons Ltd, Vol. 31 No. 5, pp. 2193–2212, doi: 10.1002/bse.3016.
Baltagi, B.H. (2021), *Econometric Analysis of Panel Data*, 6th ed., Springer International Publishing, Cham, doi: 10.1007/978-3-030-53953-5.
Bartov, E., Marra, A. and Momenté, F. (2021), "Corporate social responsibility and the market reaction to negative events: evidence from inadvertent and fraudulent restatement Announcements", *The Accounting Review*, Vol. 96 No. 2, pp. 81–106, doi: 10.2308/tar-2018-0281.
Bates, T.W., Kahle, K.M. and Stulz, R.M. (2009), "Why do U.S. firms hold so much more cash than they used to?", *Journal of Finance*, Vol. 64 No. 5, pp. 1985–2021, doi: 10.1111/j.1540-6261.2009.01492.x.
Bigelli, M., Mengoli, S. and Sandri, S. (2023), "ESG score, board structure and the impact of the non-financial reporting directive on European firms", *Journal of Economics and Business*, p. 106133, doi: 10.1016/j.jeconbus.2023.106133.
Bigelli, M. and Sánchez-Vidal, J. (2012), "Cash holdings in private firms", *Journal of Banking and Finance*, Vol. 36 No. 1, pp. 26–35, doi: 10.1016/j.jbankfin.2011.06.004.
Boubaker, S., Cellier, A., Manita, R. and Saeed, A. (2020), "Does corporate social responsibility reduce financial distress risk?", *Economic Modelling*, Vol. 91, pp. 835–851, doi: 10.1016/j.econmod.2020.05.012.
Chauhan, Y. and Kumar, S.B. (2019), "Does accounting comparability alleviate the informational disadvantage of foreign investors?", *International Review of Economics and Finance*, Elsevier Inc., Vol. 60, pp. 114–129, doi: 10.1016/j.iref.2018.12.018.
Chen, B., Kurt, A.C. and Wang, I.G. (2020), "Accounting comparability and the value relevance of earnings and book value", *Journal of Corporate Accounting & Finance*, Wiley, Vol. 31 No. 4, pp. 82–98, doi: 10.1002/jcaf.22459.
Chen, C.W., Collins, D.W., Kravet, T.D. and Mergenthaler, R.D. (2018), "Financial statement comparability and the efficiency of acquisition decisions", *Contemporary Accounting Research*, Wiley-Blackwell, Vol. 35 No. 1, pp. 164–202, doi: 10.1111/1911-3846.12380.
Chen, S., Song, Y. and Gao, P. (2023), "Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance", *Journal of Environmental Management*, Academic Press, Vol. 345, doi: 10.1016/j.jenvman.2023.118829.
Cheung, A. (Wai K. (2016), "Corporate social responsibility and corporate cash holdings", *Journal of Corporate Finance*, Vol. 37, pp. 412–430, doi: 10.1016/j.jcorpfin.2016.01.008.
Choi, H. and Ryu, H. (2021a), "Corporate social responsibility and the value of cash holdings: Evidence from the Korean Stock Market", *Sustainability*, Vol. 13 No. 22, p. 12689, doi: 10.3390/su132212689.
Choi, H. and Ryu, H. (2021b), "Corporate social responsibility and the value of cash holdings: Evidence from the Korean Stock Market", *Sustainability*, Vol. 13 No. 22, p. 12689, doi: 10.3390/su132212689.
Choi, J.H., Choi, S., Myers, L.A. and Ziebart, D. (2019), "Financial statement comparability and the informativeness of stock prices about future earnings", *Contemporary Accounting Research*, Wiley-Blackwell, Vol. 36 No. 1, pp. 389–417, doi: 10.1111/1911-3846.12442.

Chulkov, D. and Wang, X. (2023), “Corporate social responsibility and financial reporting quality: evidence from US firms”, *Studies in Economics and Finance*, Vol. 40 No. 3, pp. 445–466, doi: 10.1108/SEF-09-2022-0462.

Clarkson, P., Gao, R. and Herbohn, K. (2020), “The relationship between a firm’s information environment and its cash holding decision”, *Journal of Contemporary Accounting and Economics*, Elsevier Ltd, Vol. 16 No. 2, doi: 10.1016/j.jcae.2020.100201.

Cui, J., Jo, H. and Na, H. (2018), “Does Corporate Social Responsibility Affect Information Asymmetry?”, *Journal of Business Ethics*, Vol. 148 No. 3, pp. 549–572, doi: 10.1007/s10551-015-3003-8.

De Franco, G., Kothari, S.P. and Verdi, R.S. (2011), “The Benefits of Financial Statement Comparability”, *Journal of Accounting Research*, Vol. 49 No. 4, pp. 895–931.

de Villiers, C., Ma, D. and Marques, A. (2023), “Corporate social responsibility disclosure, dividend payments and firm value – Relations and mediating effects”, *Accounting and Finance*, John Wiley and Sons Inc, doi: 10.1111/acfi.13140.

Diaw, A. (2021), “Corporate cash holdings in emerging markets”, *Borsa Istanbul Review*, Borsa Istanbul Anonim Sirketi, Vol. 21 No. 2, pp. 139–148, doi: 10.1016/j.bir.2020.09.005.

Dimitropoulos, P.E. (2022), “Corporate social responsibility and earnings management in the EU: a panel data analysis approach”, *Social Responsibility Journal*, Vol. 18 No. 1, pp. 68–84, doi: 10.1108/SRJ-04-2020-0156.

Dittmar, A. and Mahrt-Smith, J. (2007), “Corporate governance and the value of cash holdings”, *Journal of Financial Economics*, Vol. 83 No. 3, pp. 599–634, doi: 10.1016/j.jfineco.2005.12.006.

Dittmar, A., Mahrt-Smith, J. and Servaes, H. (2003), “International corporate governance and corporate cash holdings”, *The Journal of Financial and Quantitative Analysis*, Vol. 38 No. 1, p. 111, doi: 10.2307/4126766.

Do, T.K. (2020), “Financial statement comparability and corporate debt maturity”, *Finance Research Letters*, Elsevier Ltd, doi: 10.1016/j.frl.2020.101693.

Donaldson, T. and Preston, L.E. (1995), “The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications”, *The Academy of Management Review*, Vol. 20 No. 1, pp. 65–91.

El Ghoul, S., Guedhami, O., Kwok, C.C.Y. and Mishra, D. (2011), “Does corporate social responsibility affect the cost of capital?”, *Journal of Banking & Finance*, Vol. 35 No. 9, pp. 2388–2406.

Fama, E.F. (1980), “Agency problems and the theory of the firm”, *Journal of Political Economy*, Vol. 88 No. 2, pp. 288–307.

FASB. (2018), *Statement of Financial Accounting Concepts No. 8*.

Faulkender, M. and Wang, R. (2006), “Corporate financial policy and the value of cash”, *Journal of Finance*, Vol. 61 No. 4, pp. 1957–1990, doi: 10.1111/j.1540-6261.2006.00894.x.

Gao, H. (2013), “Determinants of Corporate Cash Policy: Insights from Private Firms”, *Journal of Financial Economics*, Vol. 109 No. 3, pp. 623–639.

Ghardallou, W. (2022), “Corporate sustainability and firm performance: the moderating role of CEO education and tenure”, *Sustainability*, Vol. 14 No. 6, p. 3513, doi: 10.3390/su14063513.

Guizani, M. (2017), “The financial determinants of corporate cash holdings in an oil rich country: Evidence from Kingdom of Saudi Arabia”, *Borsa Istanbul Review*, Borsa Istanbul Anonim Sirketi, Vol. 17 No. 3, pp. 133–143, doi: 10.1016/j.bir.2017.05.003.

Habbash, M. and Haddad, L. (2019), “The impact of corporate social responsibility on earnings management practices: evidence from Saudi Arabia”, *Social Responsibility Journal*, Vol. 16 No. 8, pp. 1073–1085, doi: 10.1108/SRJ-09-2018-0232.

Habib, A., Hasan, M.M. and Al-Hadi, A. (2020), “Financial statement comparability and idiosyncratic return volatility”, *International Review of Finance*, Vol. 20 No. 2, pp. 383–413, doi: 10.1111/irfi.12227.

Habib, A., Monzur Hasan, M. and Al-Hadi, A. (2017), “Financial statement comparability and corporate cash holdings”, *Journal of Contemporary Accounting and Economics*, Elsevier Ltd, Vol. 13 No. 3, pp. 304–321, doi: 10.1016/j.jcae.2017.10.001.

Hamdi, K., Guenich, H. and Ben Saada, M. (2022), “Does corporate financial performance promote ESG: Evidence from US firms”, *Cogent Business & Management*, Vol. 9 No. 1, p. 2154053, doi: 10.1080/23311975.2022.2154053.

Hamrouni, A., Bouattour, M., Ben Farhat Toumi, N. and Boussaada, R. (2022), “Corporate social responsibility disclosure and information asymmetry: does boardroom attributes matter?”, *Journal of Applied Accounting Research*, Vol. 23 No. 5, pp. 897–920, doi: 10.1108/JAAR-03-2021-0056.

Han, S. and Qiu, J. (2007), “Corporate precautionary cash holdings”, *Journal of Corporate Finance*, Vol. 13 No. 1, pp. 43–57, doi: 10.1016/j.jcorpfin.2006.05.002.

Hendijani Zadeh, M., Magnan, M., Cormier, D. and Hammami, A. (2023), “Does corporate social responsibility transparency mitigate corporate cash holdings?”, *International Journal of Managerial Finance*, Vol. 19 No. 1, pp. 63–87, doi: 10.1108/IJMF-07-2021-0339.

Hong, H.A., Ryou, J.W. and Srivastava, A. (2023), “Financial Statement Comparability and Corporate Tax Strategy”, *European Accounting Review*, Vol. 32 No. 1, pp. 85–112, doi: 10.1080/09638180.2021.1926301.

Imhof, M.J., Seavey, S.E. and Smith, D.B. (2017), “Comparability and cost of equity capital”, *Accounting Horizon*, Vol. 31 No. 2, pp. 125–138, doi: https://doi.org/10.2308/acch-51710.

Imhof, M.J., Seavey, S.E. and Watanabe, O.V. (2022), “Competition, proprietary costs of financial reporting, and financial statement comparability”, *Journal of Accounting, Auditing and Finance*, SAGE Publications Ltd, Vol. 37 No. 1, pp. 114–142, doi: 10.1177/0148558X18814599.

Januarsi, Y. and Yeh, T.-M. (2022), “Accounting Comparability and Earnings Management Strategies: Evidence from Southeast Asian Countries”, *Emerging Markets Finance and Trade*, Vol. 58 No. 14, pp. 3913–3927, doi: 10.1080/1540496X.2022.2075258.

Jensen, M.C. and Meckling, W.H. (1976), “Theory of the firm: Managerial behavior, agency costs and ownership structure”, *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305–360, doi: 10.1016/0304-405X(76)90026-X.

Kareem Al Ani, M. (2021), “Corporate social responsibility disclosure and financial reporting quality: evidence from Gulf cooperation council countries”, *Borsa Istanbul Review*, Vol. 21, pp. S25–S37, doi: 10.1016/j.bir.2021.01.006.

Keynes, J.M. (1936), *The General Theory of Employment, Interest, and Money*, Macmillan and Co., Limited, London, doi: 10.1007/978-3-319-70344-2.
Khandelwal, V., Sharma, P. and Chotia, V. (2023), "ESG Disclosure and Firm Performance: An Asset-Pricing Approach", *Risks*, MDPI AG, Vol. 11 No. 6, p. 112, doi: 10.3390/risks11060112.
Khuong, N.V., Rahman, A.A.A., Meero, A., Anh, L.H.T., Liem, N.T., Thuy, C.T.M. and Ly, H.T.N. (2022), "The Impact of corporate social responsibility disclosure and accounting comparability on earnings persistence", *Sustainability (Switzerland)*, MDPI, Vol. 14 No. 5, doi: 10.3390/su14052752.
Kim, J., Li, L., Lu, L.Y. and Yu, Y. (2021), "Financial statement comparability and managers' use of corporate resources", *Accounting & Finance*, Vol. 61 No. S1, pp. 1697–1742, doi: 10.1111/acfi.12642.
Li, Y., De Villiers, C., Li, L.Z. and Li, L. (2022), "The moderating effect of board gender diversity on the relation between corporate social responsibility and firm value", *Journal of Management Control*, Vol. 33 No. 1, pp. 109–143, doi: 10.1007/s00187-022-00334-x.
Liao, J., Zheng, L. and Yuan, Y. (2023), "The impact of corporate environmental responsibility on corporate cash holdings: evidence from the most polluting listed companies in China", *Kybernetes*, Vol. 52 No. 1, pp. 262–283, doi: 10.1108/K-05-2021-0390.
Liem, N.T., Khuong, N.V. and Thu, P.A. (2020), "Social and environmental contributions, board size and cash holding: the case of energy firms", *International Journal of Energy Economics and Policy*, Vol. 10 No. 4, pp. 17–22, doi: 10.32479/ijeep.9018.
Lu, L.Y., Shailer, G. and Yu, Y. (2017), "Corporate Social Responsibility Disclosure and the Value of Cash Holdings", *European Accounting Review*, Vol. 26 No. 4, pp. 729–753, doi: 10.1080/09638180.2016.1187074.
Majeed, M.A. and Yan, C. (2022), "Financial statement comparability and stock liquidity: evidence from China", *Applied Economics*, Vol. 54 No. 47, pp. 5497–5514, doi: 10.1080/00036846.2022.2047597.
Mehrabanpour, M., Faraji, O., Sajadpour, R. and Alipour, M. (2020), "Financial statement comparability and cash holdings: the mediating role of disclosure quality and financing constraints", *Journal of Financial Reporting and Accounting*, Vol. 18 No. 3, pp. 615–637, doi: 10.1108/JFRA-12-2019-0167.
Mohammad, W.M.W. and Wasiuzzaman, S. (2021), "Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia", *Cleaner Environmental Systems*, Vol. 2, p. 100015, doi: 10.1016/j.cesys.2021.100015.
Myers, S.C. and Majluf, N.S. (1984), "Corporate financing and investment decisions when firms have information that investors do not have*", *Journal of Financial Economics*, Vol. 13, pp. 187–221.
Narula, R., Rao, P., Kumar, S. and Matta, R. (2024), "ESG scores and firm performance- evidence from emerging market", *International Review of Economics and Finance*, Elsevier Inc., Vol. 89, pp. 1170–1184, doi: 10.1016/j.iref.2023.08.024.
Nguyen, L.T. and Nguyen, K.V. (2021), "Accounting Comparability and Cash Holdings in Vietnam", *International Journal of Financial Studies*, MDPI AG, Vol. 9 No. 2, p. 27, doi: 10.3390/ijfs9020027.

Nguyen, P.-A., Kecskés, A. and Mansi, S. (2020), "Does corporate social responsibility create shareholder value? The importance of long-term investors", *Journal of Banking & Finance*, Vol. 112, p. 105217, doi: 10.1016/j.jbankfin.2017.09.013.

Nguyen, T.T. (2022), "State-owned holding company and value of cash holdings in Vietnam", *International Journal of Business and Society*, Universiti Malaysia Sarawak, Vol. 23 No. 3, pp. 1462–1481, doi: 10.33736/ijbs.5175.2022.

Opler, T., Pinkowitz, L., Stulz, R. and Williamson, R. (1999), "The determinants and implications of corporate cash holdings", *Journal of Financial Economics*, Vol. 52, pp. 3–46, doi: https://doi.org/10.1016/S0304-405X(99)00003-3.

Ozkan, A. and Ozkan, N. (2004), "Corporate cash holdings: An empirical investigation of UK companies", *Journal of Banking and Finance*, Vol. 28 No. 9, pp. 2103–2134, doi: 10.1016/j.jbankfin.2003.08.003.

Palacios-Manzano, M., Gras-Gil, E. and Santos-Jaen, J.M. (2021), "Corporate social responsibility and its effect on earnings management: an empirical research on Spanish firms", *Total Quality Management & Business Excellence*, Vol. 32 No. 7–8, pp. 921–937, doi: 10.1080/14783363.2019.1652586.

Park, D., Park, H. and Lee, J. (2023), "The Effect of ESG Performance on Corporate Credit Risk", *Asian Review of Financial Research*, Korean Finance Association, Vol. 36 No. 1, pp. 67–102, doi: 10.37197/ARFR.2023.36.1.3.

Qingyuan, L. and Lumeng, W. (2018), "Financial statement comparability and corporate tax avoidance", *China Journal of Accounting Studies*, Routledge, Vol. 6 No. 4, pp. 448–473, doi: 10.1080/21697213.2019.1612187.

Qureshi, M.A., Kirkerud, S., Theresa, K. and Ahsan, T. (2020), "The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity", *Business Strategy and the Environment*, Vol. 29 No. 3, pp. 1199–1214, doi: 10.1002/bse.2427.

Rastogi, S., Singh, K. and Kanoujiya, J. (2023), "Firm's value and ESG: the moderating role of ownership concentration and corporate disclosures", *Asian Review of Accounting*, doi: 10.1108/ARA-10-2022-0266.

Servaes, H. and Tamayo, A. (2013), "The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness", *Management Science*, Vol. 59 No. 5, pp. 1045–1061, doi: 10.1287/mnsc.1120.1630.

Statista. (2023a, April). *Most considered disclosures for sustainable products among consumers in Indonesia as of January 2023.* Statista. https://www.statista.com/statistics/1384127/indonesia-important-disclosures-for-sustainable-products/

Statista. (2023b, April). *Most common concerns on the aspects of sustainable development goals (SDG) in Indonesia as of January 2023.* Statista. https://www.statista.com/statistics/1384151/indonesia-concerns-on-sustainable-development-goals

Sun, Q., Yung, K. and Rahman, H. (2012), "Earnings quality and corporate cash holdings", *Accounting and Finance*, Vol. 52 No. 2, pp. 543–571, doi: 10.1111/j.1467-629X.2010.00394.x.

Sun, W., Yin, C. and Zeng, Y. (2023), “Precautionary motive or private benefit motive for holding cash: Evidence from CEO ownership”, *International Review of Financial Analysis*, Vol. 90, p. 102820, doi: 10.1016/j.irfa.2023.102820.

Thorne, L., S. Mahoney, L. and Manetti, G. (2014), “Motivations for issuing standalone CSR reports: a survey of Canadian firms”, *Accounting, Auditing & Accountability Journal*, Vol. 27 No. 4, pp. 686–714, doi: 10.1108/AAAJ-07-2013-1393.

Uyar, A. and Kuzey, C. (2014), “Determinants of corporate cash holdings: Evidence from the emerging market of Turkey”, *Applied Economics*, Vol. 46 No. 9, pp. 1035–1048, doi: 10.1080/00036846.2013.866203.

Yin, J. and Yang, X. (2023), “How Does Corporate Social Responsibility Affect Corporate Cash Holdings?”, *Emerging Markets Finance and Trade*, Vol. 59 No. 10, pp. 3201–3219, doi: 10.1080/1540496X.2023.2212841.

Zhang, J.H. (2018), “Accounting Comparability, Audit Effort, and Audit Outcomes”, *Contemporary Accounting Research*, Vol. 35 No. 1, pp. 245–276, doi: 10.1111/1911-3846.12381.

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