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ANALYSIS OF CORPORATE GOVERNANCE AND CORPORATE SUSTAINABILITY PERFORMANCE IN THE INDONESIAN CONTEXT

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Abstract. This study aims to examine the effect of corporate governance on the Corporate sustainability performance. The samples of this study consist of publicly-traded primary and secondary sector companies in Indonesia for eleven years, from 2010 to 2020. This study discusses the effect of corporate governance on corporate sustainability performance, Corporate governance, and corporate sustainability performance. The data used in the study are hand-collected data sourced from annual financial and company sustainability reports. The findings of the study indicate that Corporate Governance (CG) is positively affecting the Corporate Sustainability Performance (CSP) and its dimensions (Economy, Environmental, and Social aspects) significantly. Furthermore, the findings of the study have also disclosed that the CG elements consisting of the rights of shareholders (Category A), The equitable treatment of shareholders (Category B), The role of stakeholders in corporate governance (category C), disclosure principles and transparency (category D), and the responsibilities of the board (Category E) relatively showing positive effects significantly towards the CG and its elements. However, different effects have been found in the elements B and D, where it is showing that the sample companies indicate the weaknesses in the practice of the equitable treatment of shareholders and Disclosure and transparency. This study is expected to contribute to or assist the companies' policymakers by creating regulations to improve the Corporate sustainability performance. Our research adds to the research on corporate governance and Corporate sustainability performance in analyzing the correlation between CG and CSP deeply and broadly by utilizing the instruments according to the developed OECD principles.

Keywords: corporate sustainability performance quality, corporate governance, rights of shareholders, the equitable treatment of shareholders, the responsibilities of the board, Indonesia.

JEL Classification: M41, G18, Q56.

Introduction

Sustainability has been a critical issue for all countries globally (Konadu et al., 2021; Salvioni et al., 2016; Pavláková Dočekalová et al., 2015). The issue has become crucial to discuss since the number of environmental damage, unethical behaviors of the companies, exploitation of child labor, as well as the economic, social, and other environmental issues increased (Ludwig & Sassen, 2022). Corporate sustainability is a corporate concept where the companies attempt to maintain the economy, social and environmental welfare to create sustainable effects in the long term (Formentini & Taticchi, 2016; Nawawi et al., 2020; Tjahjadi et al., 2021; Zarefar et al., 2022). Moreover, the countries that joined the United Nations (UN) have agreed to implement the Corporate Sustainability Performance (CSP) to solve the social, economic, and environmental issues. In this concept, the companies are advised to increase their care and operate the company responsibly in order to address the issues of human rights violations, global warming, minority discrimination, and child exploitation (Tjahjadi et al., 2021; Zahid et al., 2020; Kocmanová et al., 2016).

In addition, many global companies' scandals have badly affected the environment and community (Adekunle, 2021). In various discussion forums, the scholars have emphasized the destructive effects of the scandals, as shown in Enron, Worldcom, Artur Andersen, Bhopal, Exxon Valdez, and others, as something requiring immediate solutions (Lenssen et al., 2014; Mahmood et al., 2018). Moreover, according to the "Asia and the Pacific

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CSP Progress Report 2020", the Asia-Pacific region indicates bad performance in implementing corporate sustainability. In particular, the region is the lowest in utilizing renewable energy (United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], 2020). As a result, this phenomenon has demanded the management of the natural resources sustainably, an improvement in the management of the chemicals and waste, an improvement of its endurance towards the natural disasters, and adaptation to the harmful effects of the climate change through the coordinated and integrated policies (Lin et al., 2022).

The correlation between Corporate Governance (CG) and Sustainability Disclosure (CSP) has been previously studied. However, the results of the studies are inconsistent. Inekwe et al. (2021) discovered that the positive effects of their study in African countries indicate minor data limitations. Therefore, the possibility of differences in their studies will be very open. In addition, the study only focuses on the Ibrahim Index of African Governance (IIAG), the measurement of the Corporate Governance where it is only applicable in African countries. As a result, the applied measurement is not relevant in other countries. On the contrary, the negative findings have also been indicated (Tjahjadi et al., 2021) Board of Commissioners (BoC) regarding the economic and environmental dimensions. Meanwhile, no significant effects have been found in the social dimension. Hussain et al. (2018) have also found such findings where GCG shows no significant influence on CSP. The author highlights that generally, the previous studies only proxied Corporate Governance only to specific parts. For example, there has been a study connecting the characteristics of the board to the CSP (Dwekat et al., 2020; Hussain et al., 2018; Tjahjadi et al., 2021; Ibrahim & Hanefah, 2016), and other studies only highlight family firm as a proxy between CG and CSP (Zeng, 2020; Vazquez et al., 2020; Gavana et al., 2017). Furthermore, there have also been other studies proxying the ownership structure as CG and analyzing its correlation with CSP (Amidjaya & Widagdo, 2020; Alshbili et al., 2018; Panicker, 2017). Such findings indicate the limitation of the analysis; as a result, the finding fails to represent the assessment of the Corporate Governance practice in the firms where it results in the mixed results. The research gaps and limitations raise a research question, does CG have an effect on CSP? This is worthy of further investigation with a new measurement approach.

Moreover, the study will examine the influence of Corporate Governance on the quality of Sustainability Disclosure in primary and secondary sector firms registered on the Indonesian Stock Exchange for the period 2010 to 2020. The unique part of this study is relying on its comprehensive analysis of the CG by applying each element listed in the developed OECD instrument. The study applies CG elements consisting of 130 questions on two different levels. The first level consists of five parts of questions referring to the five CG OECD principals with 117 questions. While the second level consists of two-part of questions (bonus and penalty). The possible maximum score obtained from the first level is 100 points, while the possible minimum score obtained is 0 percent. In addition to the bonus and penalty, the firms can obtain a score above 100 or even under 100 points.

According to the author, the method in this study has never been applied to previous studies to relate it to the quality of Corporate Sustainability Performance. In addition, this study also enhances previous studies, which only analyzed CSP based on the whole and measured it as a dummy variable only (Bae et al., 2018; Shamil et al., 2014) and analyzed the aspect of the environmental sustainability (Chatti, 2021; Peng & Zhang, 2022). Moreover, this study is the first to analyze the correlation between CG and CSP by applying this method. This study contributes to the literature development discussing CG and CSP broadly and deeply. On the other hand, this study can practically serve as a consideration in the decision-making process by the firms and guide to create specific regulations for the government to achieve sustainable development.

The remainder of the paper proceeds as follows. Section 1 discusses the literature review and hypotheses development. Section 2 discussses the research design, including data, variables, and research method. Section 3 shows emprical result and discussion. Finnaly, last part of this paper includes conclusions, contributions, limitations, and suggestions.

1. Literature review and hypotheses development

1.1. Agency theory, corporate governance, sustainability

Agency theory (agency theory), proposed by Jensen and Meckling back in 1976, became the leading theory in explaining the correlation between Corporate Governance and Sustainability researchers (Rodriguez-Fernandez, 2016; Jagoda & Wojcik, 2019; Aldhamari et al., 2020). The agency theory is initially rooted in the conflict of interests between the principals and the agency due to the separation of ownership and control (Al-Najjar & Clark, 2017; Tjahjadi et al., 2021). Due to the separation of power, the information gap between the stakeholders (principals) and managers (agents) is unavoidable. Through this theory, the managers are assumed to tend to prioritize themselves, which in the end, leads to a conflict of interest with the principal (Said et al., 2017). As a result, the deviation in the firms is unavoidable. This theory also explains that the company's board has a vital role in every company activity.

Furthermore, CG plays a significant role in resolving the conflict between the principals and agents. Following corporate sustainability, agency theory emphasizes that the mechanism of the board implementing corporate sustainability will benefit the firms (Tjahjadi et al., 2021). Agency theory concludes that effective CG will enhance the ability of the firms to overcome the challenges and reduce agency conflicts (Hussain et al., 2018; Utama et al., 2017).

With that being stated, OECD Corporate Governance principle also indicates its role in minimizing the agency issues (OECD, 2015) through the following regulations:

1. The right of shareholders;
2. The equitable treatment of shareholders;
3. The role of stakeholders;
4. Disclosure and transparency; and
5. The responsibility of the board.

Based on the principles mentioned above, the first three principles aim to protect the principal, the fourth principle aims to minimize the agency issues, and the fifth principle aims to ensure proper monitoring and direction to the agents (Utama et al., 2017). Therefore, this principle provides comprehensive regulations regulating the mechanism of comprehensive corporate governance to achieve agency and sustainable issues.

In the Indonesian context, the Indonesian government and capital market regulators (OJK) support the improvement of CG practice. However, further, improvement is required. Various studies have found that Indonesia is considerably poor in implementing Corporate Governance. According to the survey from CLSA 2014, Indonesia is ranked as the lowest country in implementing Corporate Governance among the 12 countries assessed (Utama et al., 2017). The Asian Development Bank (ADB, 2014) has also stated the same claim. The average score of Indonesian issuer CG is relatively low compared to the average score of Malaysia, The Philippines, Singapore, and Thailand.

Moreover, in a more classical approach, managers are demanded to focus their efforts only on maximizing the shareholders' wealth. This approach claims that the decision to invest in environmental, social and governance activities is viewed as the manifestation of the managerial agency issues in the firms (Castillo-Merino & Rodríguez-Pérez, 2021; Ferrell et al., 2016). On the contrary, in the modern business upholding the sustainable concept, managers are demanded not only to maximize the wealth of the stakeholders through the economic aspect but also to resolve the social and environmental issues (So et al., 2021; Masud et al., 2018; Kouaib et al., 2021; Farooq et al., 2021; Kend, 2015). In the Indonesian context, the government started to regulate the implementation of social and environmental responsibilities through the Laws on Limited Companies in 2007 (Tjahjadi et al., 2021). According to law No. 40 of 2007 concerning Limited Companies on the Article 74 Paragraph 1, the companies in the natural resources management sector are required to implement sustainability performance.

Meanwhile, for companies whose sector is not closely related to natural resources management, the regulation has been regulated by the Financial Service Authority (OJK) in their regulation of POJK NO. 51/POJK.03/2017 (Aldhamari et al., 2020). Indonesia has a unique sustainability reporting. The companies listed on Indonesia Stock Exchange are obligated to include the sustainability reporting in their annual report, but they do not need to publish it separately. The regulation has encouraged the submission of separated sustainability reporting voluntarily in Indonesia. Therefore, according to Rudyanto and Siregar (2018), the delivery of sustainability reporting is considerably limited in Indonesia.

1.2. Hypothesis development

Corporate sustainability is the implementation of modern business. Corporations must be responsible not only to the shareholders but also to the environment and society since their activities indicate a broad impact (Dahlsrud, 2008; Salvioni et al., 2018; Nguyen et al., 2021). Furthermore, Corporate Sustainability does not only involve one generation but also between generations, and this concept ensures the equity of the environment and the environment efficiency (Christofi et al., 2012). The sustainability concept also refers to the corporation's ability to create impactful values and continue to work over a long period. In short, Corporate Sustainability is the corporate performance that maintains three elements; economic, social, and environmental to create sustainable elements in the operation of the corporations (Tjahjadi et al., 2021; Mahmood et al., 2018). Moreover, with the emergence of the shifting in awareness towards the relevant sustainability issues to the society and environment, the management of the corporations will make it a part of the crucial-made-decisions in the corporations such as accounting practice and company activity reporting (Cebrián et al., 2013; Windolph et al., 2014; Amidjaya & Widagdo, 2020).

The corporations publish their sustainability activities through the sustainability report as an integral part of the communication process between the business corporations and shareholders. Such activities are summarized in a separate sustainability report before being audited and delivered to the relevant shareholders (Dienes et al., 2016). In this report, the firms explain the information about the economic, social, and environmental aspects relating to the firms' business activities. In addition, the report also explains the company's vision and mission, both in the long and short term (Delgado-Márquez et al., 2017; Fernández-Gago et al., 2018; Bae et al., 2018). With that being stated, the disclosure of the sustainability performance will reduce the information asymmetry and increase the competitive advantage of the firms (Taj, 2016).

The success of the firms in implementing sustainable performance is very dependent on Corporate Governance. Effective Corporate Governance will maintain the trust of the stakeholders toward the firms (Aras et al., 2017; Hussain et al., 2018; Al-Gamrh et al., 2020). According to the Agency Theory (Jensen & Meckling, 1976), the corporate governance mechanism plays a significant role in overcoming agency issues in corporations. Corporate governance is a structure where the firms are directable and controllable (Mahmood et al., 2018). Therefore, the firms must fulfill five elements to achieve solid and efficient Good Corporate Governance. These elements include transparency, accountability, responsibility, independence, and fairness determined by the Board of Commissioners (Tjahjadi et al., 2021). Therefore, the corporations will have an effective and efficient system for achieving the goals of the corporations where the system can serve as checks and balances to minimize the information asymmetric to avoid deviation in the business operation of the corporations (Bae et al., 2018). Furthermore, corporate governance will serve as a checks and balances system for the firms in disclosing the sustainability performance as a crucial part of the firms (Adegboye et al., 2020). Therefore, weak corporate governance fails to communicate with different stakeholders, which in the future, it will increase the agency costs (Bae et al., 2018).

With that being stated, in the context of corporate sustainability, Good Corporate Governance can increase the exposure to the corporate sustainability (Maali et al., 2021) where it will cover the economic, social, and environmental aspects (Cancela et al., 2020; Jamil et al., 2021). Despite the findings stated by Cancela et al. (2020) that corporate governance indicates various influences towards the sustainability where it depends on the sustainability dimension. However, according to various literature, corporate governance will be able to increase corporate sustainability. The corporations implementing sustainable practices in their business operation will obtain legitimacy from the society and indicate a competitive advantage (Elsayed & Ammar, 2020; Ionescu, 2021; Lăzăroiu et al., 2020; May et al., 2021).

H1a. The implementation of Good Corporate Governance will increase Corporate Sustainability Performance.

H1b. The implementation of Good Corporate Governance will increase the economic dimension of Corporate Sustainability Performance.

H1c. Implementing Good Corporate Governance will increase the environmental dimension of Corporate Sustainability Performance.

H1d. Implementing Good Corporate Governance will increase the social dimension of Corporate Sustainability Performance.

Moreover, this study detailly highlights the influence of the main aspects on the OECD Principals. The assessment is joined in the first level of the assessment, where it consists of The rights of shareholders (Category A), The equitable treatment of shareholders (Category B), The role of stakeholders in corporate governance (Category C), Disclosure and transparency (Category D), The Responsibilities of the board (Category E). The improvement of the Corporate Sustainability Performance will be achieved if the corporations can apply each of the principles mentioned earlier.

H2a. Implementing categories A, B, C, D, and E of good Corporate Governance will increase Corporate Sustainability Performance.

H2b. The implementation of categories A, B, C, D, E from good Corporate Governance will increase the economic dimension of Corporate Sustainability Performance.

H2c. Implementing categories A, B, C, D, and E of Corporate Governance will increase the environmental dimension of Corporate Sustainability Performance.

H2d. Implementing categories A, B, C, D, and E of Corporate Governance will increase the social dimension of Corporate Sustainability Performance.

2. Research methods

2.1. Sample

The study samples are the primary and secondary sectors of corporations whose data has been completed for each of the research variables. The study covers the period from 2010 – to 2020. Primary and secondary industries have been chosen for the study since they indicate significant impacts on the environmental, social, and economic issues since the industries are managing and closely relating to the natural resources. On the other hand, the industries are highly regulated, affecting the correlation being tested in the study. The study involves 660 observations in total.

2.2. Empirical model tests

The study applies four equation models involving the Generalized Moments (GMM) method. The panel model regression technique was used for the analysis. The regression model was estimated using the generalized least squares (GLS) panel method. Ordinary least squares (OLS), which has two unique issues with autocorrelation and heteroscedasticity, are replaced by it. In order to address this issue, the STATA statistical tool was used to investigate the GLS panel estimation equations. With regard to the robustness test, we employ a number of models. The following models are used to analyse the effect of corporate governance on the Corporate sustainability performance:

$$CSP = \alpha + \beta 1CG + \beta 2REG + \beta 3ROA + \beta 4LEV + \beta 5SIZE + \beta 6AGE + \epsilon; \quad \text{(Model 1)}$$

$$CSP = \alpha + \beta 1\ CGA + \beta 2\ CGB + \beta 3\ CGC + \beta 4\ CGD + \beta 5CGE + \beta 6REG + \beta 7ROA\ \beta 8LEV + \beta 9SIZE + \beta 10AGE + \epsilon; \quad \text{(Model 2)}$$

$$ECO = \alpha + \beta 1CG + \beta 2REG + \beta 3ROA + \beta 4LEV + \beta 5SIZE + \beta 6AGE + \epsilon; \quad \text{(Model 3)}$$

$$ECO = \alpha + \beta 1\ CGA + \beta 2\ CGB + \beta 3\ CGC + \beta 4\ CGD + \beta 5CGE + \beta 6REG + \beta 7ROA\ \beta 8LEV + \beta 9SIZE + \beta 10AGE + \epsilon; \quad \text{(Model 4)}$$

$$ENV = \alpha + \beta 1CG + \beta 2REG + \beta 3ROA + \beta 4LEV + \beta 5SIZE + \beta 6AGE + \epsilon; \quad \text{(Model 5)}$$

$$ENV = \alpha + \beta 1\ CGA + \beta 2\ CGB + \beta 3\ CGC + \beta 4\ CGD + \beta 5CGE + \beta 6REG + \beta 7ROA\ \beta 8LEV + \beta 9SIZE + \beta 10AGE + \epsilon; \quad \text{(Model 6)}$$

$$SOC = \alpha + \beta 1CG + \beta 2REG + \beta 3ROA + \beta 4LEV + \beta 5SIZE + \beta 6AGE + \epsilon; \quad \text{(Model 7)}$$

$$SOC = \alpha + \beta1\ CGA + \beta2\ CGB + \beta3\ CGC + \beta4\ CGD + \beta5CGE + \beta6REG + \beta7ROA\ \beta8LEV + \beta9SIZE + \beta10AGE + \epsilon, \quad \text{(Model 8)},$$

where CSP indicates the Corporate sustainability performance, ECO is the economical category of sustainability, ENV is the environmental category of Corporate Sustainability Performance, and SOC is the social category of Corporate Sustainability Performance. CG is corporate governance, CGA is the Rights of Shareholders, CGB is the Equitable Treatment of Shareholders, CGC is a Role of Stakeholders, CGD is a Disclosure and Transparency, CGE is a Responsibilities of the Board. Subsequently, REG is regulation, ROA is a return on assets, LEV is leverage, SIZE is companies' size, and AGE is companies' age. The definition of each variable can be seen in Table 1.

2.3. Variables measurement

This study uses Corporate Sustainability Performance and its categories as the dependent variables. Sustainability disclosure in the study is measured by using the content analysis of the annual report of the corporations published on the Indonesian Stock Exchange's website. Meanwhile, the independent variables are measured using instruments referring to the developed OECD. Regulation is applied as the control variable in this study, where score 1 is for the corporations in the primary sector and score 0 is for non-primary sector corporations. Meanwhile, the leverage in the study is measured by dividing the total debt of the corporations by their assets. Corporations whose leverage is high are considered to have intense pressure to disclose their sustainability. The age of the firms indicates that a mature corporation is known to demonstrate a more established performance in its corporate governance and care about sustainability. The size of the firms, in addition, indicates that a big corporation will be able to increase the sustainability disclosure.

In addition, corporate profitability as a proxy for ROA is measured by dividing total net income by total assets. Corporations with good profitability will tend to indicate more flexibility in their finances. It will be able to encourage the corporations to disclose the sustainability reports (Hajawiyah et al., 2019). In addition, the year and type of company industry also affect sustainability disclosure because it shows differences in circumstances between years, and so does the company's industry.

Table 1. Definition of the variables

Name of the Variable	Definition of the Variable
Dependent Variable	
CSP	Corporate Sustainability Performance implementing the content analysis
ECO	Economic Category Sustainability Disclosure
ENV	Environmental Category Sustainability Disclosure
SOC	Social category Sustainability Disclosure
Independent Variable	
CG	Corporate Governance Index, content analysis
CGA	Corporate Governance Index
CGB	Corporate Governance Index
CGC	Corporate Governance Index
CGD	Corporate Governance Index
CGE	Corporate Governance Index
Control Variable	
REG	Regulation, 1 for primary corporations and 0 for non-primary corporations primer
LEV	Total debt divided by assets
FAGE	Age of the firms since the establishment
FSIZE	Natural logarithm of total assets
ROA	Profit to assets ratio
YEARS	Annual report data year
INDUSTRY	Type of the corporations' industry

3. Result and discussion

3.1. Descriptive statistic

Table 2 presents the descriptive statistics showing the variables used in this study. In short, it has been concluded that the level of Corporate Sustainability Performance is

Table 2. Descriptive statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
Dependant Variable					
CSP	660	.174	.063	.057	.459
SOC	660	.092	.053	.004	.364
ENV	660	.086	.081	0	.471
ECO	660	.184	.121	0	.821
Independent Variable					
GCG	660	41.233	14.714	1.923	69.904
A	660	3.715	1.829	0	10
B	660	2.252	2.338	0	7.778
C	660	8.032	3.527	0	15
D	660	10.145	3.271	1.923	19.318
E	660	15.787	6.241	0	29.63
Control Variable					
REG	660	.221	.415	0	1
ROA	660	.047	.106	-.579	1.08
LEV	660	1.181	1.755	-15.817	23.917
SIZE	660	29.035	1.709	24.952	32.726
AGE	660	34.689	12.776	6	78

Note: Corporate Sustainability Performance (CSP); Social (SOC); Environment (ENV); Economic (ECO); Good Coporate Governance (GCG); Regulations (REG); Return on Asset (ROA); Leverage (LEV).

considerably low. On average, the companies sampled in this study showed 17% in their Corporate Sustainability Performance, and so did each of the other categories. Furthermore, this issue should be the concern of the corporations since, from the total of the three categories listed in Corporate Sustainability Performance, environmental aspects show the lowest average score. In addition to Good Corporate Governance, an increasing trend is also occurring, although it needs improvement. The results in the following table show that in general, the companies that were used as research samples implemented good corporate governance in this study showed 41%. Each category has also confirmed such a result. As a result, the firms are not fulfilling the expected outcomes in implementing good corporate governance practices.

Table 3 shows the Corporate Sustainability Performance serves as the sample in this study, indicating fluctuation from year to year. However, there has been an increasing trend in the Corporate Sustainability Performance in the last three years. The increase in the trend is caused by the serious concern shown by the Indonesian government in creating the Corporate Sustainability Performance regulations.

Table 3. CSP per years

Variables	ECO	ENV	SOC.	CSP
2010	0.255	0.067	0.09	0.163
2011	0.257	0.072	0.097	0.17
2012	0.264	0.076	0.102	0.171
2013	0.267	0.08	0.109	0.179
2014	0.104	0.053	0.062	0.14
2015	0.101	0.055	0.064	0.143
2016	0.114	0.055	0.07	0.149
2017	0.122	0.066	0.075	0.157
2018	0.125	0.068	0.081	0.163
2019	0.133	0.072	0.084	0.166
2020	0.165	0.086	0.089	0.18

Note: Corporate Sustainability Performance (CSP); Social (SOC); Environment (ENV); Economic (ECO).

3.2. The effects of corporate governance on corporate sustainability performance

This study uses the GMM system as the main analysis in rejecting and accepting the proposed hypotheses and the balance panel and unbalanced panel OLS estimator analysis as a robustness test. Furthermore, to discover the correlation between corporate governance and corporate sustainability performance, this study has firstly examined the emergence of the endogeneity issues. Endogeneity is a common issue in the research model where accounting data and finance are used (Farooque et al., 2020). Furthermore, the study results confirm the emergence of the endogeneity issues that have occurred in Corporate Governance and Corporate Sustainability Performance. Therefore, the Arellano Bover/Blundell-Bond estimator (GMM system) was applied after overcoming the problem of endogeneity between endogenous independent and dependent variables in some instances where autocorrelation and uncertain heteroscedasticity were found. Additionally, GMM is the best estimator for overcoming endogenous issues (Nadeem et al., 2017; Madaleno & Vieira, 2020; Avci & Sungu-Esen, 2022). As listed in this study, Table 4 presents the estimator results of the GMM system for the correlation between corporate governance and corporate sustainability performance, where it proves that endogeneous issues always occur in every correlation between corporate governance and corporate sustainability performance.

As referred to in Table 4, when the corporate governance index is connected to the corporate sustainability performance and its dimension, it is concluded that the corporate governance index indicates a positive correlation significantly towards the corporate sustainability performance where it successfully reaches the score of $P < 0.001$. The same results are also shown by the regression results on the economic, environmental, and social dimensions, which means that the findings support H1a, H1b, H1c, H1d because they follow agency theory which states that the application of good corporate governance in companies will create an effective and efficient system. Reduce agency costs. In addition, the result of the GMM estimator has also confirmed that the principles of good corporate governance such as transparency, accountability, responsibility, independence, and fairness will increase the concern of the corporations towards the sustainability issues in Indonesia.

Moreover, as explained by the agency theory, the conflict of interest is the consequence of the control separation and ownership, which causes an information gap. Incorporations implementing good corporate governance and conflict of interest will minimize the predicted deviation. Good corporate governance will affect the competitive advantage of the corporations. Good corporate governance will serve as the check and balances system wherein the end, every business activity in the corporation is adequately controlled and carried out accordingly, including in the implementation of corporate sustainability. The corporations will respect and accommodate all stakeholders' interests to create balance.

Furthermore, in the economic and social dimensions, corporations will create added values for the society, reducing the number of unemployment, respecting Human Rights, not exploiting the employees, and providing fair salaries for the employees. As in the environmental dimension, the corporations reduce the adverse effects of their business operation on the environment by firstly analyzing the environmental impacts. In addition, the corporations will also be ready to optimize and reduce energy consumption while at the same time promoting the use of renewable energy. This study follows the research conducted by Mahmood et al. (2018) dan Ong and Djajadikerta (2020), disclosing that Corporate Governance increases Corporate Sustainability Performance.

Table 4. GMM Regression results

	CSRD		ECO		ENV		SOC	
	Independent variable							
GCG	0.000 (25.24)***		0.002 (31.89)***		0.000 (28.29)***		0.000 (21.56)***	
Category A		0.002 (7.331)***		0.005 (12.70)***		0.001 (6.91)***		0.001 (4.58)***
Category B		−0.001 (−6.481) ***		−0.002 (−4.07) ***		0.002 (7.65) ***		−0.001 (−4.18) ***
Category C		0.002 (10.14)		0.001 (3.02) ***		0.001 (9.69) ***		0.001 (7.67) ***
Category D		−0.000 (−2.69) ***		−0.002 (−4.82) ***		−2.28384e-05 (−0.09)		−0.000 (−3.06) ***
Category E		0.001 (8.70) ***		0.005 (19.16) ***		0.000 (1.40) ***		0.001 (10.03) ***
REG	0.009 (15.62)***	0.005 (2.96) ***	−0.004 (−1.64)*	−0.008 (−3.97) ***	0.013 (17.98)***	0.017 (16.00) ***	0.001 (1.32)	−0.001 (−1.01) ***
ROA	0.040 (13.53)***	0.038 (15.6) ***	0.112 (13.91)***	0.086 (7.66) ***	0.024 (7.04)***	0.056 (11.28) ***	0.034 (14.00)***	0.030 (7.07) ***
LEV	0.000 (0.487)	9.96769e-05 (0.28)	0.002 (4.62)***	0.002 (2.92) ***	−0.000 (−0.78)	−0.000 (−2.27) **	−0.000 (−0.63)	−0.000 (−0.41)
SIZE	0.001 (8.38)***	0.001 (2.37) **	−0.001 (−4.78)***	−0.001 (−1.83) *	0.000 (2.01)**	0.001 (3.97) ***	0.000 (1.63)	−0.000 (−0.59)
AGE	7.28920e-05 (2.22)**	−9.32327e-05 (−2.29) **	−0.000 (−2.37)**	−0.000 (−2.79) ***	5.14292e-05 (2.83)***	−3.63076e-05 (−1.01)	−2.37349e-05 (−0.65)	−9.98741e-05 (−2.74) ***
Constant	−0.031 −5.14***	−0.011 (−1.01)***	0.044 (4.51)***	0.021 (1.54)	−0.043 (−3.65)***		−0.010 (−1.65)*	0.006 (1.04)
Observation	660	660	660		660	660	660	660
R square	0.141	0.183	0.105	0.174	0.087	0.257	0.107	0.149
Prob > F	0	0.67	0.000	0.000	0.000	0.000	0.000	0.000
Industry effect control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Years effect control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CSPt-1	0.659 (269.6)***	0.639 (109.2)***						
ECOt-1			0.578 (151.2)***	0.592 (94.74)***				
ENVt-1					0.776 (651.2)***	0.704 (270.4)***		
SOCt-1							0.642 (236.4)***	0.632 (133.3)***
Arellano-Bond test for AR (1)	0.001	0.0009	0.015	0.0173	0.008	0.0090	0.0001	0.0001
Arellano-Bond test for AR (2)	0.936	0.8572	0.548	0.466	0.728	0.6959	0.2957	0.3231

3.3. The effects of Corporate Governance elements on Corporate Sustainability Performance

According to Table 4 on the correlation between each element of Corporate Governance and Corporate Sustainability Performance and the dimensions involved, it has been found that the elements of Corporate Governance show different impacts on the Corporate Sustainability Performance. However, the correlation indicates positive impacts significantly in general. In detail, the rights of shareholders (Category A) and the responsibilities of the board (Category E) are the elements of Corporate Governance that indicate a positive impact significantly towards Corporate Sustainability Performance. Meanwhile, the equitable treatment of shareholders (Category B) and

Disclosure and Transparency (Category D) indicate negative impacts significantly. Lastly, the role of stakeholders in corporate governance (Category C) shows no impact on the Corporate Sustainability Performance.

Furthermore, the findings show that companies are fragile in applying categories B and D. As for the economic dimension, the results show that corporate governance in categories A, C, and E has a significant positive effect on the Company's Sustainability Performance. On the contrary, the corporate governance in the category of B and D shows the opposite impacts. The same findings have also been found in the social dimension. Lastly, the environmental dimension indicates that all corporate governance categories significantly show positive impacts, except in Category B. With that being stated, H2a, H2B, H2C, and H2D are accepted.

In short, the findings explain that the corporations implementing good corporate governance in their elements will indicate good sustainability performance. As stated in the OECD principles, corporations that respect the rights of shareholders (Category A), maintain the equitable treatment of shareholders (Category B) and the role of stakeholders in corporate governance (category C), as well as implement the disclosure and transparency principles (category D), the responsibilities of the board (category E), will stimulate the corporations in carrying out their business activities while upholding the sustainability values.

Meanwhile, viewed from the economic and social aspects, the research sample companies have started through principals listed in categories A, B, and C. Furthermore, corporations no longer focus on financial gain and focus on caring for the values of all stakeholders. In addition, actors D and E have shown that companies are responsible for what they have done to the environment. With that being stated, the corporations that have implemented all of the five principles will indicate high sustainability performance. The results of this study support previous research which shows that corporate governance improves sustainability performance (Maali et al., 2021; Cancela et al., 2020; Jamil et al., 2021; Elsayed & Ammar, 2020).

3.4. Robustness check for corporate governance and its elements on corporate sustainability performance (ordinary least squares)

Table 5 presents the estimator results of OLS as the robustness check for Corporate Governance and its reported elements in the GMM as mentioned above system. According to the table, it has been found that Corporate Governance and each of its elements towards the Corporate Sustainability Performance and its dimensions show the same impacts as shown in previous GMM results. Hence, the results of this study are robust.

Table 5. OLS regression results

	CSRD		ECO		ENV		SOC	
	Independent variable							
GCG	.001 (6.48)***		.002 (6.36)***		.001 (4.06)***		.001 (6.11)***	
Category A		.004 (3.05)***		.006 (3.12)***		.003 (.079)*		.002 (2.02)**
Category B		−.005 (−4.45)***		−.005 (−2.61)***		−.002 (.346)		−.002 (−1.78)*
Category C		.003 (2.90)***		.006 (3.70)***		.002 (.073)*		.002 (2.59)***
Category D		0 (0.28)		−.004 (−2.29)***		0 (.778)		0 (0.20)
Category E		.002 (4.15)***		.004 (4.03)**		.001 (.325)		.001 (2.22)**
REG	.03 (2.78)***	.027 (2.53)***	.005 (0.26)	−.002 (−0.10)	.047 (3.25)***	.044 (.002)***	.001 (0.15)	−.001 (−0.09)
ROA	.122 (6.06)***	.11 (5.53)**	.067 (2.00)**	.06 (1.81)	.13 (4.79)***	.126 (0)***	.08 (4.43)***	.076 (4.17)***
LEV	−.002 (−1.72)*	−.002 (−1.54)***	.003 (1.60)	.003 (1.39)*	−.002 (−1.27)	−.002 (.208)	−.002 (−1.96)*	−.002 (−1.86)*
SIZE	.007 (5.48)***	.005 (3.92)	.013 (5.84)***	.011 (5.04)	.01 (5.41)***	.009 (0)***	.004 (3.20)***	.003 (2.48)**
AGE	0 (1.50)	0 (0.67)***	0 (−0.05)	0 (−1.13)***	0 (0.96)	0 (.542)	0 (0.92)	0 (0.41)
Constant	−.068 (−1.78)*	−.028 (−0.74)	−.145 (−2.32)**	−.107 (−1.72)*	−.217 (−4.25)***	−.202 (−3.89)***	−.026 (−0.76)	−.009 (−0.27)
Observation	668	668	668	668	668	668	668	668
R square	0.163	0.183	0.573	0.576	0.094	0.101	0.206	0.213

End of Table 5

	CSRD		ECO		ENV		SOC	
Industry effect control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Years effect control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Conclusions

The study examines the influence of Corporate Governance and its elements on Corporate Social Responsibility. The findings of the research indicate that good Corporate Governance is positively impacting Corporate Social Responsibility and its dimensions (Economic, Environmental and Social). The study has also found that overall, the CG elements have positive impacts on CSP and its dimensions. Furthermore, the study discusses and confirms that in the perspective of agency theory, the implementation of good CG will increase the CPS practice.

Theoretically, the study contributes to the development of accounting and finance studies on corporate governance and corporate sustainability performance by developing the measurement instruments on the CG while broadly and profoundly analyzing the CSP and its dimensions. Practically, the study indicates the implication to serve as the consideration for the policymakers both in the corporations and governmental level in Indonesia in stimulating the corporations to initiate sustainability practices. However, the study contains limitations; where the first limitation is that this study uses a relatively small number of samples and in the coverage of primary and secondary sectors in the Indonesian Stock Exchange, which they know to have strict regulations; as a result, further consideration for generalization in other sectors is considerably required. The last limitation of the stutabledy is that on the regional analysis of the correlation between CG and CSP. Therefore, it is strongly advised that future studies in this field analyze broader scope and samples by involving the participation sample across countries to create more comprehensive results. Lastly, an additional variable is required to be involved in the study where it is possible to serve as the mediation variable for both variables used in the study.

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