

Does Board Gender Diversity Moderatively Affect the Relationship Between Business Characteristics and Corporate Sustainability Performance?



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ABSTRACT: Business sustainability is a process of increasing the positive impacts, while at the same time, is expected reducing negative effects of operations in order to achieve sustainable economic, social, and environmental performance. This study aims to examine how company characteristics, company size and industry type, impact corporate sustainability performance refers to Triple Bottom Line concept. Further, whether the impacts are moderated by board gender diversity. Using partial least square – structural equation modeling (PLS-SEM) to assess the panel data consists of 18 Indonesian companies from participant of Asia Sustainability Reporting

Rating (ASRR) extracted on National Center Sustainability Reporting (NCSR) website during observation period 2017–2019. The empirical finding reveals that company characteristics – size and industry type, both significantly impact the performance of corporate sustainability in different ways. This shows a solid evidence that stakeholder demands has shifted business behavior through implementation of sustainability practices. In moderating role, the low percentage women on board shows no influence on corporate sustainability performance, as presence of female directors on corporate boards level only compliance role as corporate governance mechanism. Hence, we should consider to increase the proportion of women on board level as female chairperson offers new perspectives and skills set in business decision making process to enhance sustainable value in the long run.

KEYWORDS: Sustainability Performance, Business Characteristics, Gender Diversity

1. INTRODUCTION

Sustainable development have become a worldwide issue following global challenges and climate changes. As a consequence, business behaviour has completely shifted from micro into a macro-environment and social disclosure (Noorhayati & Amosh, 2018). The growing awareness among stakeholders regarding negative effects of business activities has raised demands for corporation's responsibility towards people and planet (Ferreira et al., 2010; Milne et al., 2009). This is reflected in the Triple Bottom Line concept developed by Elkington (1994) upon sustainable corporation that comprises of economic prosperity, environmental quality and social justice. In today's scenario, it is popularly known as corporate sustainability.

Aside the massive green operation initiatives in Indonesia, Nawawi et al. (2020) asserts that number of companies still showing resistance to engage in sustainability practices and sustainability report due to the limitation of resources. It is undeniable that implementing sustainability practices in daily operation incurs additional cost such as adoption of environmentally friendly practices, advanced health and safety regulations, community development programs, and social donations (Munir et al., 2019), while studies have shown that cost of sustainability performance strictly exceeds its advantages (Al-Matari et al., 2014a; De Klerk & De Villiers, 2012; Martínez-Ferrero & Frías-Aceituno, 2015).

This might be the reason that company size plays critical role in practicing the sustainability performance disclosure of a company. Companies with larger assets indicate to have better voluntary reports compared to the smaller ones (Aguilar-Fernández & Otegi-Olaso, 2018; Dissanayake et al., 2019; Safaeianpoor & Shoorvarzy, 2017; Wahyudi, 2017). For big businesses, sustainability disclosure is an investment strategy that brings financial gains (Hayatun et al., 2012; Reddy & Gordon, 2010) from the capital market and compete for international fund resources (Aguilar-Fernández & Otegi-Olaso, 2018). Aside the benefit of corporate sustainability disclosure, Bayoud et al. (2012), Nawaiseh (2015) and Hidayah et al. (2019) for instance, found that company size has a negative relationship with social or sustainability disclosure.

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Another determinant in implementing sustainability practices is industry type (Milne & Hackston, 1996). Stakeholders nowadays are concerned towards climate change that greenhouse gas (GHG) emission affecting the whole planet surface and it causes global warming and other environmental harms. Not to mention the excessive use of earth's natural resources and habitat loss and species exploitation (Machdar, 2019; Nguyen et al., 2018; Reddy & Gordon, 2010). Our planet is suffering from wide range business activities negative effects. Accordingly, corporations are tremendously encouraged to promote green management in their business operation. Some studies confirmed that companies whose industries associated with visible environmental impacts more likely have higher level of environmental disclosure (Brammer & Pavelin, 2006; Rudyanto & Veronica, 2016; Solikhah & Winarsih, 2016).

Prior studies showed differences in sustainability practices among industries. Hidayah et al., (2019), for instance, found that companies whose business operation categorized as high-profile type apparently have insignificant influence on sustainability disclosure. This result supported by Dissanayake et al., (2019) that apparently industry sector does not have strong influence on sustainability reporting. Other studies showed no correlation between industry type and environmental disclosure (see for examples: Mukherjee & Nuñez, 2019 and Bani-Khalid et al., 2017). Therefore, it can be said that prior study yielded mixed results.

Sustainability practices theoretically interlink to corporate governance. Gardazi et al. (2020) argued that corporate governance can engender high sustainability performance. The link can be performed by integrating three aspects in sustainability – economic, social and environmental dimensions into corporate practices and strategies by linking the corporate governance as fundamental control mechanism in order to assure the protection of stakeholder's interest. (García-sánchez, Suárezfernández, & Martínez-ferrero, 2018). By implementing good corporate governance mechanism, it enables the organization to continue their operation includes organization sustainable actions and integrate economic, social and environmental aspect into their business strategy and daily operation (Morioka et al., 2016).

However, corporate governance is not entirely effective without board diversity (Kilic, 2015). According to Alabede (2016), board balance comprising representation from diverse group such as different gender provides a more balanced board, that is likely to prevent an individual or a small group of individuals from dominating the decision-making process. This might be caused by greater diversity in board members leads to improvement organizational performance (Nguyen & Faff, 2006; Rose, Munch-Madsen, & Funch, 2013). Also it is possible that board members diversity in organizations creates new standard and a competitive advantage due to embrace experiences, skills, knowledge, insights, options, experiences, and specializations that can enhance company performance and strategic formulation (Bakar et al., 2019).

A study done by Al-qahtani & Elgharbawy (2020) found that female directors positively influence disclosures and management of greenhouse gas information. Similarly, Mallin & Michelon (2011) and Buallay et al. (2020) concluded that greater representation of female directors on board level has a positive impact on different measures of CSR and sustainability performance. In addition, Furlotti et al. (2019) revealed positive association between the presence of women in the role of chairperson and corporate sustainability report. Other study proved by Ong & Djajadikerta (2020) investigated Australian resources industry and found significant positive correlation between the extent of sustainability disclosure with female directors on board. Women believe in their value and pay attention to conflict management which is closely related to social environmental issues. Next supporting evidence, Wasiuzzaman (2019) found that the quality of environmental, social and governance (ESG) disclosure are significantly improved with the increasing of female on corporate boards level.

Conversely, different results pointed by Orazalin & Baydauletov (2020) assessed the European listed companies over the period 2009–2016 and found that corporate social responsibility strategy and environmental performance is negatively moderated by board gender diversity. Rose et al. (2013) and Darmadi (2013) documented no support for any performance impact relating to female board representation. Galbreath, (2011) found no evidence on the nexus women on the board and sustainability performance. Similar result goes to Zaid et al., (2020) assessed and highlighted insignificant association between women directors and corporate sustainability strategies. Other studies also posited by Al-Jaifi (2020) and Farida (2019). Aside from the results of the prior studies above, empirical evidences on company characteristics-board gender diversity-sustainability performance in Indonesia remains little.

Many highlighted the direct impact with respect to board gender diversity and sustainability performance, yet only little pointed out the role of board gender diversity as moderating role. Based on the inconclusive results of the previous studies, this study intends to re-examine whether the company characteristics contributes in improving corporate sustainability performance and whether these associations are moderated by board gender diversity.

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2. LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

Stakeholder Theory

Stanford Research Institute (1963) initially defines stakeholder as “those groups without whose support the organization cease to exist”. Later on, Freeman & Reed (1983) affirmed that there are other groups to whom the corporation is responsible in addition to stockholder: those groups who have a stake in the actions of the corporation. Henceforth the stakeholder widely referred as “any group or individual who can affect or is affected by the achievement of the organization’s objectives” Freeman (1984). More recently, Mitchell et al. (1997) addressed stakeholders as “those entities to whom managers should pay attention”. They are included internal (shareholders, employees), external (suppliers, lenders, competitors, customers) and intermediaries parties (regulators, press media, labor union, local communities, environmentalist).

Therefore, it can be summarized that stakeholder theory certainly proposes that business organization should be concerned about the interest of stakeholders when making strategic decision towards business goals. The purpose is in order to avoid the risks of their support to be withdrawn since the organization is dependent for its continued survival from their stakeholders (Mainardes et al., 2011). This theory emphasizes the idea about how management of the business organizations or corporations bring together those various group of stakeholders into the same direction and interest by integrating three components of sustainability.

Legitimacy Theory

Deegan (2002) interpreted legitimacy theory as a general perception that believes the actions of an entity are desirable, proper or appropriate with some socially constructed systems of norms, values, beliefs and definitions. Companies in running their business and to be able to sustain and obtain organizational survival, they must create value to the large society and obey the social standard or norms where the business is operated in order to gain social approval (Dowling & Pfeffer, 1975). Thus, according to Suchman (1985), to survive the business operation, companies must gain validation from society in order to be accepted. In order to be accepted in business environment, companies must show constant commitment and concrete actions in dealing with social issues and environmental damages caused by the business activity (Wahyudi, 2017).

The responsibility to contribute in preservation the habitat of species and ecosystem, encourages the corporations to adopt green initiative and engage in improvement of quality human beings. Sustainability report then represents those actions and is expected to increase corporate profits in the future since accounting business as a social practice is a habit and self-indulgence that involves and brings social pressures that lead entities to take certain measures and decisions in behalf of those social legitimacy.

Resource Dependence Theory

According to the Resource Dependence Theory, businesses' ability to exist is dependent on the resources in their surrounding environment (Pfeffer & Salancik, 1978). The dependence of an organization on the resources in its external environment will pose risks for the business. Hence, board of directors are recognized as internal company's linkage regarding their role to oversee top management since board of directors are believed as an integral component of the effective firm (Hillman et al., 2009; Kilic, 2015).

Corporate Sustainability Performance

Business sustainability is a process of increasing the positive impacts, while at the same time, reducing negative effects of operations on sustainable economic, social, and environmental performance. World Commission on Environment and Development (Keeble, 1988) defines

“*sustainability*” as the ability to meet present generation needs without sacrificing the ability of future generation to meet theirs. In order to achieve the long-term sustainable goal, corporate nowadays massively pay more attention towards their social and green practices and technological adaptation strategies as well, since according to Fauzi et al. (2010), no business agenda is complete without referring to the concept of “*sustainability*”.

According to Brocket & Rezaee (2012), corporations, as key actors, who have capability and adequate financial resources, therefore they are strongly encouraged to initiate green management in order to ensure long-term sustainable development of economy and society referring to Triple Bottom Line concept by Elkington (1994). The increasing public awareness worldwide towards sustainability development followed by the growing topic of sustainability. These initiatives then lead to the pressures and demands from stakeholders to perform business that is considered sustainable. Brocket & Rezaee (2012) pointed out criteria that business needed to be met in achieving sustainability. First and foremost, the business must create economic value. It means that without generating profit, no business can survive their operations in the long-term. Second, in order to gain social legitimacy and approval, business must increase public wealth with proper mechanism for its distribution.

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Following the prior studies, this study uses corporate sustainability measurement guidance issued by International Finance Corporation (IFC) Sustainability Framework, excluding the governance and ethical performance. Sustainability performance is measured by assessing economic growth, social impacts, and environmental principles (Delai & Takahashi, 2011; Munir et al., 2019).

From an economic growth perspective, companies are considered *performed* when generating highest profit. The traditional business believes the higher profit, the better the companies performance are. The amount of profit that is stated in financial statements reflects the economic performance of a company during reporting period. The maximum profit is aligned with shareholders economic interest.

Further, maximizing profit enables companies to expand market share, enhance company's value in capital market that attracts potential investors.

Meek et al. (1995) mentioned that stakeholders' are concerned towards society including company's social accountability. It's beyond merely regulatory requirements. Corporate social actions define as company's response to some popular social needs where they operate business (Robbins & Coulter, 2012:153). Those actions can be reflected by the availability of community development, company's support of community charities, existence of community support programs, customer relation, involvement of company's staff members in welfare-development activities, employees and managers training on sustainability practices, human capital development (Galbreath, 2011; Munir et al., 2019).

Corporate environmental action is the next indicator of sustainability. Corporations are urged to make a commitment to supporting the preservation of nature and biodiversity. Corporates have started taking into account how business activity affects the environment as part of their CSR and green management initiatives to achieve sustainable development (Robbins & Coulter, 2012). A company's commitment to environmental research and development, the design of technology to improve resource usage, emissions, and wastes, the board-level committee for addressing safety, social, and environmental issues, safety training programs for employees, policy for eco-efficiency as well as environmental footprint, and biodiversity are all indicators of how green the company is taking actions (Galbreath, 2011; Munir et al., 2019).

Business Characteristics

Studies define business characteristics as hallmark of which a business organization's possess that differs them among others. Theses characteristics can be symbolized by the size, the type of industry, company age, financial leverage, or company ownership (Bani-Khalid et al., 2017; Meek et al., 1995). The characteristics possessed by company sets how well the company performs and survives the business. It also supports the ability of companies to expand the business and their market share. In this study, the company characteristics that will be explored are company size and industry type, as follows:

Company Size

The size of company refers to how large the amount of assets are owned by the companies, sales volume, market capitalization, number of employees are hired, or else it might be ranked by index (Milne & Hackston, 1996; Roberts, 1992). In Indonesia, company's size classified into microenterprise, small enterprise, medium enterprise, and large enterprise according to UU No 20 of 2008 on Small Medium Enterprise Law. Company size is one of prominent determinants in undertaking sustainability practices since those practices incurs high cost. Thus, numerous empirical studies (Aguilar-Fernández & Otegi-Olaso, 2018; Munir et al., 2019) proved that only companies with great financial resources can constantly engage and commit to such practices. Prior studies conducted by Hidayah et al., (2019) pointed out that size has significant influence on sustainability reporting.

The company size in this study is proxied by total assets. The proxy is chosen regarding the nature of the assets is relatively stable. Further, assets is a company's financial resource that enables them to generate more profit. The larger assets they own, the bigger opportunity they have to invest in creating innovation (Milne & Hackston, 1996). By this, they can expand their market share which indirectly impact company's profitability. Therefore, the more assets owned by company, it enables them perform better in undertaking sustainability practices.

Industry Type

Global Industry Classification Standard (GICS) classifies economic into eleven sectors:

consumer discretionary, consumer staples, energy, materials, industrials, healthcare, financial, information technology, real estate, communication services, and utilities. Nonetheless, company industry has more specific definition. An industry is a group of companies that are related based on their primary business activities. According to Roberts (1992), industry type is classified into *high profile* and *low-profile* industry. Companies whom are classified as *high-profile* are companies whose run business in high sensitivity towards social exposure and environmental issues. These companies easily gain general public attention, including

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stakeholders, because if it is not managed well, their business operation can bring fatal environmental damage. Thus, they undeniably need social legitimacy to survive business operation. Meanwhile, *low-profile* companies are those whose business conversely to *high-profile* ones. Milne & Hackston (1996) and Meek et al. (1995) distinguished company industry into *high-profile* companies such as mining, automobile, airline, gas and oil, agriculture, liquor, tobacco and *low-profile* companies that include financial service, food, hotel, health and personal products, appliance and household products

Board Gender Diversity

The board of directors is chosen by the company's shareholders at the annual meeting of shareholders. Its duties include setting broad policies, directing corporate activities, and authorizing substantial expenditures. (Gitman & Zutter, 2015:54). Through their boards of directors, corporations can lessen environmental uncertainty, cut transaction costs associated with external exchange, and ultimately promote survival, continuity, and company performance. (Al-Matari, Al-Swidi, & Bt Fadzil, 2014a; Dewi, 2019). Pfeffer & Salancik (1978) enumerated four key benefits that boards of directors provide organizations. First, the board's guidance and counsel can be employed as sources of data. The board of directors also has access to channels of communication between environmental risks and the business, which is the second point. The third option is priority access to resources for the board. Finally, the board of the organization has the power to establish legitimacy.

Board diversity can draw a stronger and more diverse pool of candidates for the position of director and provide access to a greater range of perspectives, information, experiences, and abilities (Boyd, 1990). A diverse board will also be less obedient to management. The gender spectrum is one area of variety. Wood (2011:241) argued that in professional life, men figure are deemed superior with masculinity traits and rational logic that lead to the perception that men have the better ability to manage and lead, whereas women are associated in opposite ways because of their femininity and supportive behavior. Further insight in professional setting, social norms and cultural views judge men and women differently for enacting the same communication style in workplace. Unlike men who are independence, confidence, competitive and assertive, women tend to be more detail-oriented and intuitive when it comes to decision-making analysis (Buallay et al., 2020; García-sánchez et al., 2018). Consequently, both are complimentary.

Beyond social and culture context, inequality between women and men as well as reflected in the boardroom. Gender diversity composition refers to the existence of women on the board, as corporate governance mechanism. The idea of diverse board was emerged as mechanism of diversity of skills set and experts. Most of the time, boardroom are dominated by men as saying "*old boys club*" (Kilic, 2015). Women directors tend to be minority group as stated by The Higgs Review in Adams & Ferreira (2005) revealed that although approximately 30% of top executives corporate sector are women, but women hold only 6% of directors position.

In contrast to the cultural view of woman, Zaid et al., (2020) argued that the low presence of women directors on boards considered as the major reason for the weak impact on corporate sustainability decisions. The presence of women on board will increase the quality of the decision as women bring different opinion and working style. Women generally have details attitude and tend to be intuitive related to analysis of decision-making (Buallay et al., 2020; García-sánchez et al., 2018;)

Gender diversity among board members is one of good corporate governance mechanisms to prevent one group dominating another in business decision-making process (Ozordi, Eluyela, Uwuigbe, Uwuigbe, & Nwaze, 2020). The presence of female as chairperson is also deemed play important role in decision because a heterogeneous board composition can leverage on the diverse set of skills of board members (Anazonwu, Egbunike, & Gunardi, 2018a). Gender diversity also brings competitive advantage that can strengthen the companies compared to their competitors and give positive perception towards company' reputation. (Cox & Blake, 1991).

The Impact of Company Size on Corporate Sustainability Performance

As a matter of fact, implementing sustainability practices obviously incurs extra cost to undertake green practices and apply sophisticated technological adaptation in daily operation, which not every company can afford it. Not only due to limitation of resources but also the uncertainty whether these actions directly impact their financial performance. The financial resources which are owned by a company affects higher qualification and human skills, greater opportunities in developing community programs, greater health and safety management system and many more benefit in technological devices advancement which lead to the betterment of social environmental impact (Nawawi et al., 2020). Therefore, multiple empirical studies have proved company size has significant positive influence on corporate sustainability performance (Aguilar-Fernández & Otegi-Olaso, 2018; Dissanayake et al., 2019; Safaeianpoor & Shoorvarzy, 2017). However, numerous studies revealed conversely, Bayoud et al. (2012) and Nawaiseh (2015) found that the company size has negative relationship with social disclosure. Similar with Hidayah et al. (2019) reinforced that company size has a significant negative effect on sustainability report. These mix findings give rise to the following hypothesis:

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H1: Company size has significant positive impact on corporate sustainability performance

The Impact of Industry Type on Corporate Sustainability Performance

The nature and specificity of the industry sets the whole level how advance the company implement their sustainability practices (Imna, Amin, Rahmat, Khairi, & Asri, 2019). Companies in *high-profile* category tend to be environmentally friendly compared to the *low-profile* counterparts. This may due to the pollutions, emissions and other environmental harms caused by the business activities. Stakeholders nowadays are concerned that global warming affecting the whole planet surface and it causes climate change. Not to mention the excessive use of earth's natural resources and habitat loss and species exploitation (Machdar, 2019; Nguyen et al., 2018; Reddy & Gordon, 2010). Studies confirmed that companies whose industries associated with visible environmental impacts more likely have higher level of environmental disclosure (Brammer & Pavelin, 2006; Rudyanto & Veronica, 2016; Solikhah & Winarsih, 2016). UU No. 40/2007 states the obligation of public-listed companies whose business activity related to natural resources industry. This means companies in *high-profile* category tend to have broader sustainability disclosure. Accordng to this conclusion, then we can draw following hyphotheses:

H2: Industry type has significant positive impact on corporate sustainability performance

The Impact of Company Size on Corporate Sustainability Performance through Board Gender Diversity

The role of board diversity is needed to maximize the function of the control role of the board (Rasmini, Wirakusuma, & Yuniasih, 2014). Many highlight the potential benefits of board diversity in an uncertain and complex environment, however, what we usually neglect is potential costs arose by this diversity (Arnegger et al., 2014). The larger assets and financial resources of the company enables them to hire and appoint people or groups with better humans resource skills, greater educational background and broader perspectives, experiences, insights and expertise of the board. These attributes indirectly enhance the organization strategy formulation and decision making process, including sustainable development implication.

Mallin & Michelon (2011), García-sánchez et al., (2018), Furlotti et al. (2019) and Buallay et al. (2020) revealed that greater representation of female directors on the board has a positive impact on different measures of CSR and sustainability performance. The benefits of diversity in the board associated with the presence of women in supervisory and senior management positions. That is evidence how boards with greater female representation decrease the risk of impression management strategies on sustainability disclosure. Female directors are positively associated with more balanced, comparable and reliable information; although, they are also associated with detail-oriented traits and clear information, given their narrative character.

However, different results pointed by Orazalin & Baydauletov (2020) explained that corporate social responsibility strategy and environmental performance is negatively moderated by board gender diversity. Rose, Munch-Madsen, & Funch (2013) and Darmadi (2013) documented no support for any performance impact relating to female board representation. Musa et al. (2020) found no evidence on the nexus between nationality diversity and sustainability reporting.

These mix findings give rise to the following hyphotesis:

H3: Board gender diversity strengthens the correlation between company size and corporate sustainability performance

The Impact of Industry Type on Corporate Sustainability Performance through Board Gender Diversity

While most studies focus on the impact of board gender diversity on the sustainability performance, it remains few showing how board gender diversity on moderating role impacts the corporate sustainability practices. Imna et al., (2019) confirmed the importance of industry effect indicated by the variations of board diversity-sustainability performance association across industries. The result found that female directors are more prevalent in services and healthcare industry. This also supported by Furlotti et al., (2019) pointed that some industry sectors, for instance oil, gas, energy and mining and industry, require specific skills set which mostly is owned by male. Thereby, the board is dominated by male directors. This is how the type of industry sets the tone of the corporate board.

However, aside from the gender schema, wider diversity and experinces brings value to the board. In addition, the ability of board gender diversity to boost firms' performance could be affected by a specific nature of the industries evidenced by Musa et al., (2020) that increasing the representation of women directors in the boardroom may add a wealth of experience to the board. This also may lead to enrichment sustainability practices across industries. As such, the hypothesis can be stated as follows:

H4: Board gender diversity strengthens the correlation between industry type and corporate sustainability performance

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3. RESEARCH METHOD

Sample and Approach

Throughout the observation period of 2017–2019, the members of the Asia Sustainability Reporting Rating (ASSR) from Indonesia are observed and reviewed in this study. Sample of the study is equal to population that comprises of 6 mining companies, 4 financial services, 3 agricultures, 1 logistic, 1 energy, 2 oil and gas, and 1 chemical company. The population was chosen by taking into account the businesses that participated in the sustainability awards and served as the study's sample observation. Those attributes fit to assess the company characteristics on their corporate sustainability practices. Financial statements and annual reports served as the primary sources of secondary data for this study. The annual reports were extracted from <https://ncsr.id/> - the website of National Center Sustainability Reporting (NCSR) as host of ASSR, while financial statements were collected from www.idx.co.id – website of the Indonesia Stock Exchange. Data analysis process is done by *structural equation modeling-partial least square* (SEM-PLS) using software SmartPLS version 3.

Dependent Variables *Economic Growth*

Companies is considered *going-concern* when generating highest profit. In this study, the growth of economic performance is proxied by ROA and ROE. Those two measurements are selected in this study considering both of them reflect management's efficiency. When investors assess for future growth, ROA and ROE can be suitable measurements. (Galbreath, 2011; Munir et al., 2019).

Social Dimension & Environmental Initiative

Corporate social actions is defined as company's response to some popular social needs (Robbins & Coulter, 2012). It consists of company safety and training program, community development, human capital development program, safety training programs for employees. Company's environmental initiative is measured by commitment to environmental research and development, designing technology to enhance performance of resources usage, gas emissions, and wastes, the committee to address safety, safety training programs for employee, availability of policy for energy efficiency, environmental footprint, and preserve biodiversity (Galbreath, 2011; Munir et al., 2019). Following prior studies, there are 31 points in social and environmental aspect based on International Finance Corporation (IFC) Sustainability Framework guidance are used in this study.

Independent Variables

Company Size

The company size in this study is proxied by total assets. The proxy is chosen because the nature of the assets is relatively stable. Further, assets is a company's financial resource that enables them to generate more profit. The larger assets they own, the bigger opportunity they have to invest in creating innovation (Milne & Hackston, 1996). By then, they can expand their market share which indirectly impact company's profitability. As a result, the more assets a company owns, the better it may perform in terms of sustainability.

Industry Type

Industry type are distinguished into two classifications (Meek et al., 1995; Milne & Hackston, 1996). The first *high-profile* industry are comprised of automobile, airline, gas and oil, agriculture, liquor, tobacco, pharmacy, energy, mining, oil, metals, transportation, paper and pumps. And *low-profile* ones are consisted of food, hotel, health and personal products, appliance and household products, financial service. Thus, industry type in this study is classified using dummy variable, 1 for *high-profile* industry and 0 for *low-profile* industry.

Moderating Variable Board Gender

Prior studies define gender diversity indicates to the existence of woman on the board (Buallay et al., 2020; García-sánchez et al., 2018;). Board gender diversity in this study is calculated by calculating the number of women directors relative to total number of the board members.

The structural model is formulated as follows: $CSP = a_1Sz + a_2Type + a_3BGD + a_4SzBGD + a_5TypeBGD + e$

Where:

| | |
|------|--|
| CSP | = Corporate Sustainability Performance |
| Sz | = Company Size |
| Type | = Industry Type |
| BGD | = Board Gender Diversity |
| e | = error standard |

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4. FINDINGS & DISCUSSION FINDINGS

1. Outer Measurement Model

In the measurement of Structural Equation Modeling (SEM), all construct are assesed in two steps. Outer and inner model assesment. In outer model assesment consisted of validity test, average variance extracted, reliability test, and discriminant validity.

Loading Factor Validity Test

| | BGD | CSP | Sz | Type | Sz*BGD | Type*BGD |
|------------|-------|-------|-------|-------|--------|----------|
| BGD | 1,000 | | | | | |
| CSP_Env | | 0,977 | | | | |
| CSP_Soc | | 0,984 | | | | |
| Sz * BGD | | | | | 0,967 | |
| Type * BGD | | | | | | 1,182 |
| ROA | | 0,311 | | | | |
| ROE | | 0,267 | | | | |
| Type | | | | 1,000 | | |
| InAsset | | | 1,000 | | | |

In loading factor validity test, the result revealed that other variables are greater than 0,4 while ROA and ROE are invalid with respectively $0,311 < 0.4$ and $0,267 < 0.4$. Therefore both indicators are eliminated from analysis process, whereas other variables. This condition might be caused by the sample of this study comprises mostly with natural resources companies, such as coal mining, oil and gas, energy, and agricultural. Those type of industries take longer time to generate profit due to their business process, meaning to take deeper analysis we need longer observation period, whereas this study only observe and review for three years during 2017–2019. Besides, most of their assets consisted of intangible assets that can't be expected to earn profit in the short-term. Therefore, based on this analysis, we reach at an understanding point that to generate greater value for ROA and ROE, we shall review longer observation period.

Loading Factor Validity Test (phase 2)

| | BGD | CSP | Sz | Type | Sz*BGD | Type*BGD |
|------------|-------|-------|-------|-------|--------|----------|
| BGD | 1,000 | | | | | |
| Sz * BGD | | | | | 0,967 | |
| Type * BGD | | | | | | 1,182 |
| CSP_Env | | 0,997 | | | | |
| CSP_Soc | | 0,997 | | | | |
| Type | | | | 1,000 | | |
| Lnasset | | | 1,000 | | | |

Due to the lack of validity data from first phase earlier, then we conducted loading factor second phase to reload the loading factor and see whether those factors valid or not to be included in analysis process. Loading factor validity test (phase 2) shows all of loading values greater than 0.7 according to previous studies, those values have met the validity requirement based on loading value, meaning that those factor are valid to load in the next step (Galbreath, 2011; Munir et al., 2019).

Average Variance Extracted (AVE) Assesment

| | Average Variance Extracted (AVE) |
|------|----------------------------------|
| BGD | 1,000 |
| CSP | 0,994 |
| Sz | 1,000 |
| Type | 1,000 |

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| | |
|----------|-------|
| Sz*BGD | 1,000 |
| Type*BGD | 1,000 |

The average of variance extracted assesment is an indicator of convergent validity that measures the amount of variance that is captured by construct in relation to the amount of variance due to measurement error. Suggestion value for average variance extracted (AVE) test is greater than 0.5 (Ghozali & Latan, 2015). Result value of all constructs in this step are greater than 0.5 which means already met the validity requirement based on average variance extracted (AVE) assesment.

Realibility Assesment

| | Composite Reliability |
|----------|-----------------------|
| BGD | 1,000 |
| CSP | 0,997 |
| Sz | 1,000 |
| Type | 1,000 |
| Sz*BGD | 1,000 |
| Type*BGD | 1,000 |

Realitibility assesment in structural equation modeling (SEM) consisted of composite realibility (or construct realibility) in order to asses the realibility of the indicators of variable partially and simultaneously for each latent variable. The result showed that the value for composite realibility (CR) is greater than 0.7 (Ghozali & Latan, 2015). Therefore, all of values are met the requirement composite realibility (CR) test.

Discriminant Validity

In this step, average variance extracted *square root value* from laten variable is compared to correlation value among laten variables.

| | BGD | CSP | Sz | Type |
|------|--------|--------|--------|-------|
| BGD | 1,000 | | | |
| CSP | -0,482 | 0,997 | | |
| Sz | 0,156 | -0,052 | 1,000 | |
| Type | -0,450 | 0,830 | -0,205 | 1,000 |

From the table above we can conclude *square root value* average variance extracted (AVE) for each laten is greater compared to correlation value amongs laten variables. By that, the conclusion can be drawn that the data have been met the requirement discriminant validity assesment.

2. Inner Measurement Model

After all sample met the minimum requirement analysis process in validity and reliabilty assesment step, we then move forward to the next step in inner measurement consisted of hyphotesis testing and determination coefficient. This step is conducted to test whether there is appropriate correlation among variable of constructs.

Hyphotesis Testing

| | Original Sample (O) | Sample Mean (M) | Std Deviation (STDEV) | T Statistics (O/STDEV) | P Values |
|----------------|---------------------|-----------------|-----------------------|--------------------------|----------|
| BGD → CSP | -0,100 | -0,106 | 0,101 | 0,988 | 0,324 |
| Sz → CSP | 0,201 | 0,195 | 0,077 | 2,619 | 0,009 |
| Type → CSP | 0,684 | 0,681 | 0,180 | 3,808 | 0,000 |
| Sz*BGD → CSP | 0,000 | -0,005 | 0,081 | 0,006 | 0,996 |
| Type*BGD → CSP | 0,236 | 0,236 | 0,275 | 0,858 | 0,392 |

Source: SmartPLS version 3.0

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Based on table above, the structural model that may be formed is:

$$CSP = 0,201Sz + 0,684Type - 0,100BGD - 0,000SzBGD + 0,236TypeBGD$$

The interpretation and study discussion, as follows:

1. Company size (X1) significantly impact corporate sustainability performance (CSP) with T statistics 2,619 > 1,96 and P-value = 0,009 < 0,05 therefore H1 is **accepted**.
2. Industry type (X2) significantly impact corporate sustainability corporate (CSP) with T statistics 3,808 > 1.96 and P-value = 0,000 < 0,05 therefore H2 is **accepted**.
3. Board gender diversity as moderating variable shows no role in improving the correlation between company size on corporate sustainability performance with T statistics 0,006 < 1,96 and P-value = 0,996 > 0,05 therefore H3 is **rejected**.
4. Board gender diversity as moderating variable also shows no influence in improving the correlation between industry type on corporate sustainability performance with T statistics 0.045 < 1,96 and P-value = 0.964 > 0.05 therefore H4 is **rejected**.

Determination Coefficient (R²)

In structural equation modeling (SEM), the determination coefficient indicates the number of variance of the endogen variable on exogent variable.

| | R ² |
|-----|----------------|
| CSP | 0,770 |

Based on result on table above, we can describe *determination coefficient value (R²)* of corporate sustainability performance is 0,770 which means company size, industry type and board gender diversity (moderating variable) variance can simultaneously impact corporate sustainability performance approximately 77%.

DISCUSSIONS

The sample used in this study shows strong evidence there is significant impact of company characteristics on sustainability performance. This is reflected by the larger assets owned a company, it is not paralelly impact the economic growth. This more likely because business practitioners behavior nowadays have shifted, financial information no longer considered as business ultimate goal, but they pay more attention on social impacts and efforts in contribution on environmental preservation. The greater assets enable companies to undertake better sustainability practices within the organization. Moreover, the larger assets owned by a company, the more they are faced pressures and demands from all stakeholders. Management is required to perform in order to be transparent and accountable in all business aspects. Hence, sustainability performance shows management's concrete commitment in engaging social actions through employee welfare and community programs and protecting planet where the business operates as well. This finding is line with Dissanayake et al., (2019), Hidayah et al., (2019) and Bani-Khalid, Kouhy, Hassan (2017), but against Nawaiseh (2015) and Bayoud, Kavanagh, & Slaughter (2012), and (Roberts, 1992).

In industry terms, the nature and specificity of the industry sets the whole level how advanced the company implement their sustainability practices. Supporting this argument, the sample used in this study reveals solid result that *high-profile* companies slightly do not merely generate profit, *highprofile* companies also focus on social and environmental to perform in sustainably manner to gain legitimacy as they are monitored by public political exposure. Another determinant in adopting better green management is legal and government requirement in Indonesia in accordance with Limited Liability Company Law No. 40/2007 which states the obligation of public-listed companies whose business activity related to natural resources industry. This law forces companies in *high-profile* category tend to have broader sustainability report. The same result were found by Wicaksono & Septiani (2020), Mukherjee & Nuñez (2019) and Bani-Khalid, Kouhy, Hassan (2017).

In moderating role, women director does not strengthen the correlation between sustainability performance and company characteristics because on board level, female chairperson is still low percentage, regardless the size of the company and the type of industry. Resource dependence theory that believes board of directors are an integral component of the effective companies is irrelevant here because on size scale, either it's fully private company or state-enterprise, primary shareholders have absolute power in appointing board of directors. They possess attribute and valid claim to management and arrange the composition of board members. Thus resulting in appointing female directors only are considered as complement to comply corporate governance mechanism rather than truly benefit from board gender diversity.

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One more critical point to underline, till today, in Indonesia, there is no policy or regulation with respect to minimum gender quota women on board level. Unlike the legislative and executives women representation in Indonesia government politics, there is legal Law 31 Year 2002 and Law 12 Year 2003 towards political election that states minimum 30% quotas for female representation in parliament whereas in private sectors, there is no regulations yet. This evidence is supported by AlJaifi, (2020), Darmadi (2013) and Galbreath (2011). In industry effect, several industries consider female chairperons are seen less capable to be a leader, therefore these industries are dominated by male directors, hence the presence of women on top position is a minority group. It impacts women directors take less opportunity and participation compared to their male counterparts. This result confirms previous studies done by Anazonwu et al., (2018b), Farida (2019), A. A. Zaid et al., (2020), and Gallego-Sosa et al., (2020).

5. CONCLUSIONS

The sample used in this study delivers perspective on how company size and industry type respectively impact sustainability performance in different ways. On size scale, the larger assets owned by company leads to their ability to perform better in social actions and contribute more on environmental conservation. The information also backs up the assumption that "big size matters" when it comes to organizational survival. Corporations with enough financial resources are more likely to be able to implement more sustainable practices. There has also been a transition in corporate conduct among stakeholders from a profit-driven mindset to one that is more concerned with social and environmental issues. This means that, in order to be successful in the long run, business people must consider not just their own financial interests, but the needs of people and the environment as well.

Whereas in industry terms, the *high-profile* companies impact sustainability practices through stakeholder demands and pressures. Due to the public's attention, they pay attention to people and the environment, and conduct business in a sustainable manner in order to achieve social acceptability. This supports the notions of legitimacy theory in the first place that *high-profile* companies tend to have better and greater sustainability practices due to the risk of their business and related to social and environmental issues. Furthermore, *high-profile* companies are exposed by legal and government requirement to conduct business ethically. Those pressures then resulting in the form of excellent sustainability performance for *high-profile* companies.

Women directors do not strengthen the company characteristics and corporate sustainability performance regardless the size, because Indonesia does not have a policy or regulation of minimum gender quota women on board. Therefore, appointment of female directors are considered simply to comply corporate governance mechanism. As a result, the presence of female directors on the board tends to be seen as only a supplement to the corporate governance mechanism's requirements. This is backed by the fact that in Indonesia, whether a totally private corporation or a state-owned entity, key shareholders have significant influence over board of directors appointments. They have a legitimate claim to management and are in charge of determining the membership of the board of directors. In other words, this backs up the characteristics of the stakeholder point of view idea.

Further, the nature and specificity of industry effect plays huge part as well. Several industries require expertise and skill set possessed by male directors. As a result, some industries are dominated by male chairperson. Presence of women on top position becomes a minority group and only complement rather than truly benefit from board gender diversity itself. As a consequence, the role of female chairperson as resource dependence can not perform effectively. Therefore again, women participation on corporate board should be encouraged. Minimum gender quota on board level should be implemented, particularly in Indonesia, to gain more benefit from female leaders.

LIMITATIONS

This study is conducted to provide insights on how company characteristics impact corporate sustainability performance. There are few limitations of this study might be outcomes only represent 18 companies as sample of this study. Therefore, the results need to be carefully generalized. The length of period is limited only for three years from 2017 to 2019. Future studies may consider longer observation period to obtain wider and deeper analysis.

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