

## Does the Board of Commissioner Affect Sustainability Disclosure and Profitability (Empirical Evidence from the Indonesia Stock Exchange)

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**Key words:** Board of commissioner characteristics, sustainability disclosure level, profitability, gender diversity, disclosure level

**Abstract:** The purpose of this study was to examine the effect of the characteristics of the board of commissioner (independence, size and gender diversity) on the sustainability disclosure level and its implications for profitability. The population of this study is all companies listed on the Indonesia Stock Exchange during 2016-2019. Purposive sampling technique was used to determine the sample. Data from 41 companies were obtained for hypothesis testing. Path analysis with SPSS v. 26 is used to data processing. The results show that the board of commissioner independence has a significant effect on the level of sustainability disclosure. Meanwhile, the board of commissioner size and the board of commissioner gender diversity have no significant effect on the level of sustainability disclosure. Furthermore, the sustainability disclosure level and the board of commissioner independence have a significant effect on profitability, while the board of commissioner size and the board of commissioner gender diversity are found to have no significant effect on profitability.

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## INTRODUCTION

In the 21st century, the practice of sustainability reporting has become a common business practice in large companies in developed countries. Based on 2017 research, 78% of companies in the S&P 500 publish a sustainability report<sup>[1]</sup>. There are several benefits derived from the practice of sustainability reporting, namely: improving financial performance, facilitating access to capital, encouraging innovation, efficiency and waste reduction, improving risk management, improving company reputation and consumer trust and obtaining superior human resources in recruitment and increasing employee loyalty<sup>[2]</sup>.

In Indonesia, the level of sustainability disclosure is very low. A survey from the LSPR and USM<sup>[3]</sup> shows that among 7 ASEAN countries, Indonesia occupies the lowest position in sustainability disclosure (swa.co.id, 31/05/2016). Loh and Thomas<sup>[4]</sup> research shows that among 5 ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore and Thailand), the level of sustainability disclosure by Indonesian companies is in the lowest position. This is confirmed by the results of the Bumi Global Karbon<sup>[5]</sup> study of the 2018 and 2019 sustainability reports from 39 issuers on the Indonesia Stock Exchange (IDX), the average sustainability disclosure of these issuers is very low (investor.id, 17/11/2020).

Based on the above phenomena, we examine the effect of the board of commissioners characteristics (independence, size and gender diversity) on the sustainability disclosure level and its implications for profitability in the Indonesian context, especially for companies listed on the Indonesia Stock Exchange during 2016-2019.

## MATERIALS AND METHODS

**The stakeholder theory:** According to Freeman<sup>[6]</sup>, stakeholders are groups and individuals who have an influence on the company and managerial behavior in responding to them. Freeman and Reed<sup>[7]</sup> provide two perspectives on the notion of “stakeholders”, namely broad and narrow notions but show that from the point of view of corporate strategy, the concept should be considered in a broader sense. Thus, stakeholders are considered as “groups or individuals identified as being able to influence the achievement of company goals or who are affected by the achievement of company goals” such as shareholders, employees, government agencies, trade unions, competitors and others.

Gray<sup>[8]</sup> emphasizes the accountability aspect of stakeholder theory which is explained as disclosing information about responsibilities to stakeholders after determining what can be accounted for. This requires identifying and prioritizing the stakeholders who have the “right” to the information. In their research, Gray *et al.*<sup>[9]</sup> argue that the purpose of sustainability reporting is to correct the strength asymmetry between companies and their stakeholders. However, it is assumed that organizations will act in correspondence with their own original interests and thus are expected to provide only social information that will not jeopardize these interests<sup>[9, 8]</sup>. Therefore, sustainability reporting will have social value only when the interests of stakeholders are included in the interests of the company<sup>[8]</sup>.

**The legitimacy theory:** Legitimacy theory has wide applications in different corporate strategies, especially those related to reporting information to the public<sup>[10]</sup>. This theory presupposes that companies will always strive to ensure that they operate within the boundaries and norms of their respective societies<sup>[11]</sup>. Lindblom<sup>[12]</sup> defines legitimacy as a condition or status which exists when the firm’s value system is consistent with the values of the larger social system in which the firm operates. Furthermore, Suchman<sup>[13]</sup> provides a more comprehensive definition, according to which legitimacy is “a general perception or assumption that an entity’s actions are desirable, appropriate or in accordance with some socially constructed system of norms, values, beliefs and definitions”.

Legitimacy theory rests on the idea that firms operate in society through a “social contract” between the firm

and those affected by its operations<sup>[14, 11]</sup>. To gain legitimacy from society and in return for receiving goals, rewards and survival, companies are expected to comply with contractual requirements and carry out various socially desirable activities<sup>[14]</sup>. However, these terms are not fixed and can change over time which can lead to the so-called “legitimacy gap”. The legitimacy gap occurs when a company’s actual performance is inconsistent with the expectations of the “public” or stakeholders and is perceived as a threat to legitimacy<sup>[11, 15]</sup>. Maintaining legitimacy is very important for the existence of an organization because legitimacy is considered a resource that is relied on for its sustainability<sup>[10]</sup>.

**The board of commissioner independence:** An independent commissioner is a commissioner appointed by shareholders to represent the interests of shareholders in the company. Uniquely, independent commissioners are parties who have no business or familial relationship with the controlling shareholders, other members of the board of directors and commissioners as well as with the company itself. Independent commissioner together with other members of the board of commissioners are tasked with supervising and providing advice to the board of directors and ensuring that the company implements corporate governance in accordance with applicable regulations.

The existence of independent commissioner on the board of commissioner is an important element of corporate governance. Independent commissioner can strengthen the performance of the board of commissioners and ensure that the interests of investors and other stakeholders are protected. In addition, the independent commissioner is a supervisory instrument for management for the actions taken by management including actions related to sustainability initiatives and disclosures<sup>[16]</sup>. The supervisory function carried out by independent commissioner emphasizes the aspect of compliance with various applicable standards, laws and regulations<sup>[17]</sup>.

In this study, the board of commissioner independence is defined as the proportion of independent commissioner among all members of the board of commissioner<sup>[18-21, 17, 22-30]</sup>.

**The board of commissioner size:** The board of commissioner size represents the number of members of the board of commissioners in a company. The board of commissioner size is decided at the general meeting of shareholders. A strong, effective and efficient board of commissioner will improve the company’s reputation and performance by reducing risk and preventing management’s opportunistic behavior. Thus, the board of commissioner will lead to proactive managerial behavior in aspects of the company’s operations<sup>[31]</sup>. The larger the size of the board of commissioner will help the work of management by providing access to skills, experience and

resources in certain areas and providing better advice to management<sup>[31]</sup>. However, the size of the board of commissioners that is too large can make the company ineffective because the size of the board of commissioner is too large, it can interfere with the effectiveness of communication, coordination and decision making<sup>[17]</sup>.

In this study, the board of commissioner size is defined as the total number of commissioners who make up the board of commissioner<sup>[32, 33, 21, 23, 26, 28, 29, 34, 35]</sup>.

**The board of commissioner gender diversity:** Traditionally, the board of commissioner is dominated by male. However, due to the principle of gender equality and the capacity of female, currently many female occupy positions on the board of commissioner. The presence of female on the board of commissioner creates gender diversity<sup>[36]</sup>. The presence of female on the board of commissioner is unique and offers a different perspective, experience and work style where women tend to communicate and work in a participatory and process-oriented way<sup>[17]</sup> and female commissioners in companies can strengthen stakeholder engagement mechanisms and increase the credibility of company reports<sup>[37]</sup>. In addition, the presence of female is also very likely to improve team performance because with a diverse team composition the perspective becomes very broad and then results in better decisions<sup>[38]</sup>.

In this study, the board of commissioner gender diversity is defined as the proportion of female commissioners among all members of the board of commissioner<sup>[19, 39, 23, 40, 41, 42, 34, 35]</sup>.

**Sustainability disclosure level:** Gamerschlag *et al.*<sup>[43]</sup> define sustainability disclosure as information disclosed by a company about its environmental impact and its relationship with its stakeholders through relevant communication channels. Thus, sustainability disclosure can be understood as a basic component of the sustainability reporting process. In this context, De Villiers and Alexander<sup>[44]</sup> describe sustainability disclosure as the disclosure of social and environmental information in annual reports and on websites which are mostly voluntary. According to Michelon *et al.*<sup>[45]</sup>, sustainability disclosure is triggered by a company's sense of accountability to stakeholders with the aim of increasing transparency which results in sustainability reporting practices. This practice includes the preparation of stand-alone reports, the use of reporting guidelines and information disclosure aimed at improving the quality of information, ensuring its reliability and enhancing stakeholder engagement processes.

In this study, the sustainability disclosure level is defined as the proportion of information items disclosed by the company compared to information items that should be disclosed by the company in the sustainability report<sup>[46, 17, 21, 20, 33, 47, 48, 18, 49]</sup>.

**Profitability:** Profitability refers to the company's ability to generate profits that can be seen from various perspectives such as total assets, total investment and total equity. In this study, profitability is measured by Return on Assets<sup>[46-49]</sup>.

**The effect of the board of commissioner independence on the sustainability disclosure level:** The existence of independent commissioner is believed to affect the sustainability disclosure level because independent commissioner is commissioner who do not have any relationship with the company, other commissioners or company directors and are appointed based on their competencies and insights for the best interests of the company including the importance of sustainability disclosure for the survival and development of the company in the future. With this argument, it is believed that the existence of an independent commissioner will affect the sustainability disclosure level. This argument is supported by empirical evidence as shown by, among others: King'ori *et al.*<sup>[18]</sup>, Baalouch *et al.*<sup>[19]</sup>, Anatami *et al.*<sup>[20]</sup>, Alotaibi *et al.*<sup>[21]</sup>, Aliyu<sup>[17]</sup>, Tran<sup>[22]</sup>, Onuorah *et al.*<sup>[23]</sup>, Bansal *et al.*<sup>[24]</sup>, Wang<sup>[25]</sup>, Naseem *et al.*<sup>[26]</sup>, Issa<sup>[27]</sup>, Yusoff *et al.*<sup>[28]</sup>, Muktar *et al.*<sup>[29]</sup> and Haladu and Salim<sup>[30]</sup> which shows that the board of commissioner independence has a significant effect on the sustainability disclosure level:

- H<sub>1</sub>: the board of commissioner independence has a significant effect on the sustainability disclosure level

**The effect of board of commissioner size on sustainability disclosure level:** The board of commissioner size is also believed to be able to affect the sustainability disclosure level with the argument that the larger the size of the board of commissioner, the more diverse insights the board of commissioner have in managing the company including insight into the importance of sustainability disclosure for the sustainability and development of the company in the future. This argument is supported by empirical evidence as shown by, among others: Zhou<sup>[32]</sup>, Dissanayake and Nimalathasan<sup>[33]</sup>, Alotaibi *et al.*<sup>[21]</sup>, Onuorah *et al.*<sup>[23]</sup>, Naseem *et al.*<sup>[26]</sup>, Yusoff *et al.*<sup>[28]</sup>, Muktar *et al.*<sup>[29]</sup>, Majeed *et al.*<sup>[34]</sup> and Isa and Muhammad<sup>[35]</sup> which shows that the board of commissioner size has a significant effect on the sustainability disclosure level:

- H<sub>2</sub>: the board of commissioner size has a significant effect on the sustainability disclosure level

**The effect of the board of commissioner gender diversity on the sustainability disclosure level:** Gender diversity on the board of commissioner can also affect the level of sustainability disclosure with the argument that female board members have a stronger focus on processes and issues related to social and environmental aspects

such as sustainability disclosure. This argument is supported by empirical evidence as shown by among others: Baalouch *et al.*<sup>[19]</sup>, Bakar *et al.*<sup>[39]</sup>, Onuorah *et al.*<sup>[23]</sup>, Anazonwu *et al.*<sup>[40]</sup>, Dienes and Velte<sup>[41]</sup>, Muttakin *et al.*<sup>[42]</sup>, Majeed *et al.*<sup>[34]</sup> and Isa and Muhammad<sup>[35]</sup> which shows that the board of commissioners gender diversity has a significant effect on the sustainability disclosure level:

- H<sub>3</sub>: the board of commissioner gender diversity has a significant effect on the sustainability disclosure level

**The effect of sustainability disclosure level on profitability:** Sustainability disclosure is a mechanism/strategy carried out by the company to gain/increase legitimacy from stakeholders which in turn can increase the company's profitability. Thus, it is believed that the sustainability disclosure level has a significant effect on the company's profitability. This argument is supported by empirical evidence as shown by among others: Nguyen and Tran<sup>[50]</sup>, Johari and Komathy<sup>[48]</sup>, Gupta<sup>[47]</sup>, Al-Dhaimesh<sup>[46]</sup> and Ong *et al.*<sup>[51]</sup> which shows that the sustainability disclosure level has a significant effect on company's profitability:

- H<sub>4</sub>: the sustainability disclosure level has a significant effect on profitability

**The effect of the board of commissioner independence on profitability:** Independent commissioner is commissioners who are selected based on their competencies and insights in the hope of maintaining the survival and development of the company in the future, including in this case the company's profitability. Thus, the existence of an independent commissioner is believed to significantly affect the company's profitability. This argument is supported by empirical evidence as shown by, among others: Onyali and Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Palaniappan<sup>[54]</sup>, Naimah<sup>[55]</sup>, Isik and Ince<sup>[56]</sup>, Xavier *et al.*<sup>[57]</sup> and Bebeji *et al.*<sup>[58]</sup> which shows that the board of commissioner independence has a significant effect on the company's profitability:

- H<sub>5</sub>: the board of commissioner independence has a significant effect on profitability

**The effect of the board of commissioner size on profitability:** Commissioners have the competencies and insights that enable them to carry out effective oversight of the company's operations. The larger the size of the board of commissioners, the larger and more diverse the competencies and insights capacity it has that will enable it to effectively supervise the company's operations which in turn will have an impact on company's profitability. This argument is supported by empirical evidence as shown by, among others: Riyadh *et al.*<sup>[49]</sup>, Haris *et al.*<sup>[59]</sup>, Zidan<sup>[60]</sup>, Rashid<sup>[61]</sup>, Orozco *et al.*<sup>[62]</sup>, Onyali and

Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Kramaric *et al.*<sup>[63]</sup>, Palaniappan<sup>[54]</sup>, Kajola *et al.*<sup>[64]</sup>, Kalsie and Shrivastav<sup>[65]</sup>, Isik and Ince<sup>[56]</sup> and Bebeji *et al.*<sup>[58]</sup> which shows that the board of commissioner size has a significant effect on the company's profitability:

- H<sub>6</sub>: the board of commissioner size has a significant effect on profitability

**The effect of the board of commissioner gender diversity on profitability:** The female commissioner has a unique communication style and highly participatory culture. In addition, female commissioners are also more process-oriented and focus on details. With these characteristics, it is believed that the presence of female commissioner (gender diversity) on the board of commissioner has a significant effect on the company's profitability. This argument is supported by empirical evidence as shown by among others: Riyadh *et al.*<sup>[49]</sup>, Onyali and Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Kramaric *et al.*<sup>[63]</sup>, Dankwano and Hassan<sup>[66]</sup>, Solakoglu and Demir<sup>[67]</sup>, Kilic and Kuzey<sup>[68]</sup> and Tukur and Balkisu<sup>[69]</sup> which shows that the board of commissioner gender diversity has a significant effect on company's performance:

- H<sub>7</sub>: the board of commissioner gender diversity size has a significant effect on profitability

**Research methods:** The population of this study is all companies listed on the Indonesia Stock Exchange during 2016-2019. The purposive sampling technique was used to determine the sample. Data from 41 companies were obtained for hypothesis testing. Path analysis with SPSS v. 26 was used to data processing.

The board of commissioner independence is measured by dividing the number of independent commissioner by the total number of members of the board of commissioners<sup>[18]</sup>. The board of commissioner size is measured by calculating the total number of commissioners in the composition of the company's board of commissioners in a certain accounting period<sup>[32]</sup>. The board of commissioner gender diversity is measured by dividing the number of female commissioner by the total number of members of the board of commissioners<sup>[70, 49]</sup>. The sustainability disclosure level is measured by Sustainability Disclosure Indices (SDIs) which are calculated based on the disclosure standards of the Global Reporting Initiative<sup>[49]</sup>. Profitability is measured by Return on Assets<sup>[46-49]</sup>.

## RESULTS AND DISCUSSION

**Descriptive statistic:** This study uses data from 41 companies listed on the Indonesia Stock Exchange during the 2016-2019. The descriptive statistics of the data are presented in Table 1.

Table 1: Descriptive statistics

Description	Maximum	Minimum	Average	SD
Board of Commissioner Independence (BCI)	0.80000	0.00000	0.43346	0.13037
Board of Commissioner Size (BCS)	12.00000	2.00000	6.14634	1.75578
Board of Commissioners Gender Diversity (BCD)	0.33333	0.00000	0.05423	0.08466
Sustainability Disclosure Indices (SDIs)	0.72414	0.11856	0.39267	0.11538
Profitability (Profit)	0.44676	-0.50606	0.03777	0.08538

Data processing result (2021)

**Hypothesis testing:** To test the hypothesis, we used path analysis with SPSS v. 26. Based on the results of hypothesis testing, we find that: the board of commissioner independence has a significant effect on the sustainability disclosure level, the board of commissioner size has no significant effect on the sustainability disclosure level, the board of commissioners gender diversity has no significant effect on the sustainability disclosure level, the sustainability disclosure level has a significant effect on profitability, the board of commissioner independence has a significant effect on profitability, the board of commissioner size has no significant effect on profitability and the board of commissioners gender diversity has no significant effect on profitability.

**The effect of the board of commissioner independence on the sustainability disclosure level:** As expected, the results of hypothesis testing indicate that the board of commissioner independence has a significant effect on the sustainability disclosure level. These results are consistent with the previous studies conducted by, among others: King'ori *et al.*<sup>[18]</sup>, Baalouch *et al.*<sup>[19]</sup>, Anatami *et al.*<sup>[20]</sup>, Alotaibi *et al.*<sup>[21]</sup>, Aliyu<sup>[17]</sup>, Tran<sup>[22]</sup>, Onuorah *et al.*<sup>[23]</sup>, Bansal *et al.*<sup>[24]</sup>, Wang<sup>[25]</sup>, Naseem *et al.*<sup>[26]</sup>, Issa<sup>[27]</sup>, Yusoff *et al.*<sup>[28]</sup>, Muktar *et al.*<sup>[29]</sup> and Haladu and Salim<sup>[30]</sup>. The positive correlation indicates that the more independent the board of commissioner, the higher the sustainability disclosure level made by the company. These results indicate that the independent commissioners have succeeded in contributing their competencies and insights for the best interests of the company including the importance of sustainability disclosure for the company's survival and growth in the future.

**Effect of board of commissioners size on sustainability disclosure level:** Not as expected, the results of hypothesis testing indicate that the board of commissioner size does not have a significant effect on the sustainability disclosure level. These results are inconsistent with previous studies conducted by, among others: Zhou<sup>[32]</sup>, Dissanayake and Nimalathasan<sup>[33]</sup>, Alotaibi *et al.*<sup>[21]</sup>, Onuorah *et al.*<sup>[23]</sup>, Naseem *et al.*<sup>[26]</sup>, Yusoff *et al.*<sup>[28]</sup>, Muktar *et al.*<sup>[29]</sup>, Majeed *et al.*<sup>[34]</sup> and Isa and Muhammad<sup>[35]</sup>. However, this result is not surprising. Several previous studies have also shown that the board of commissioner size does not have a significant effect on

the sustainability disclosure level as shown by studies conducted by, among others: Aliyu<sup>[17]</sup>, Bansal *et al.*<sup>[24]</sup>, Wang<sup>[25]</sup>, Issa<sup>[35]</sup>, Haladu and Salim<sup>[30]</sup> and Dienes and Velte<sup>[41]</sup>.

Although, the average of the board of commissioners size of the companies sampled is quite large (6,14634), they do not seem to have sufficient competencies and insights about the importance of sustainability disclosure for the survival and growth of the company in the future. In addition, in many cases, the board of commissioners does not play an active role in setting policies and supervising the company's operations.

**Effect of board of commissioners gender diversity on sustainability disclosure level:** The results of hypothesis testing about the effect of board of commissioner gender diversity on the sustainability disclosure level also show results that are not as expected. The results show that the board of commissioner gender diversity has no significant effect on the sustainability disclosure level. These results are inconsistent with the previous studies conducted by, among others: Baalouch *et al.*<sup>[19]</sup>, Bakar *et al.*<sup>[39]</sup>, Onuorah *et al.*<sup>[23]</sup>, Anazonwu<sup>[40]</sup>, Dienes and Velte<sup>[41]</sup>, Muttakin *et al.*<sup>[42]</sup>, Majeed *et al.*<sup>[34]</sup> and Isa and Muhammad<sup>[35]</sup>. However, this result is not surprising. Several previous studies also show that board of commissioners gender diversity does not have a significant effect on the sustainability disclosure level as shown by the studies conducted by, among others: Naseem *et al.*<sup>[26]</sup>, Yusoff *et al.*<sup>[28]</sup>, Mahmood *et al.*<sup>[16]</sup> and Masud *et al.*<sup>[31]</sup>.

The average value of the board of commissioner gender diversity in the sampled companies is 5,423%. This value is a very low. This shows the low participation of female in the structure of the board of commissioner in Indonesian companies. This means that there are not enough opportunities for female to contribute their competencies, insights and characteristics, namely a stronger focus on processes and issues related to social and environmental aspects. The low female's participation on the board of commissioner is the reason why gender diversity does not affect the sustainability disclosure level in Indonesian companies.

**Effect of sustainability disclosure level on profitability:** As expected, the results of hypothesis testing indicate that the sustainability disclosure level has a significant effect

on profitability. These results are consistent with the previous studies conducted by, among others: Nguyen and Tran<sup>[50]</sup>, Johari and Komathy<sup>[48]</sup>, Gupta<sup>[47]</sup>, Al-Dhaimesh<sup>[46]</sup> and Ong *et al.*<sup>[51]</sup>. The sustainability disclosure level enables stakeholders to assess the extent to which the company pays attention to issues related to social and environmental, thus, enabling stakeholders (especially consumers) to give more legitimacy to the company in the form of consumption of goods and services produced by the company. The positive correlation indicates that the higher of sustainability disclosure level made by the company, the higher the potential for increased profitability that can be achieved by the company.

**The effect of the board of commissioner independence on profitability:** As expected, the results of hypothesis testing indicate that the board of commissioner independence of has a significant effect on profitability. These results are consistent with the previous studies conducted by, among others: Onyali and Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Palaniappan<sup>[54]</sup>, Naimah<sup>[55]</sup>, Isik and Ince<sup>[56]</sup>, Xavier *et al.*<sup>[57]</sup>, Bebeji *et al.*<sup>[58]</sup> and Arosa *et al.*<sup>[72]</sup>. The positive correlation indicates that the more independent the board of commissioner, the higher the company's potential to increase profitability. These results indicate that the independent commissioner has succeeded in carrying out objective supervision and assessment of the company's operations, risk management policies and control<sup>[73]</sup>. In addition, these results also show that independent commissioners can strengthen the performance of the board of commissioners and ensure the interests of stakeholders are protected and contribute their competencies and insights to the best interests of the company, primarily in the form of increasing profitability.

**The effect of the board of commissioner size on profitability:** Not as expected, the results of hypothesis testing indicate that the board of commissioner size has no significant effect on profitability. These results are inconsistent with the previous studies conducted by, among others: Riyadh *et al.*<sup>[49]</sup>, Haris *et al.*<sup>[59]</sup>, Zidan<sup>[60]</sup>, Rashid<sup>[61]</sup>, Orozco *et al.*<sup>[62]</sup>, Onyali and Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Kramaric *et al.*<sup>[63]</sup>, Palaniappan<sup>[54]</sup>, Kajola *et al.*<sup>[64]</sup>, Kalsie and Shrivastav<sup>[68]</sup>, Isik and Ince<sup>[56]</sup> and Bebeji *et al.*<sup>[58]</sup>. However, this result is not surprising. Several previous studies also show that the board of commissioner size does not have a significant effect on profitability as shown by the previous studies conducted by among others: Rana and Wairimu<sup>[74]</sup>, Naimah<sup>[55]</sup>, Alshetwi<sup>[75]</sup>, Muchemwa *et al.*<sup>[76]</sup> and Xavier *et al.*<sup>[57]</sup>.

Although, the average of the board of commissioners size of the companies sampled is quite large (6,14634), it is suspected that they failed to carry out effective supervision of the company's operations, so that, their existence does not have a significant effect on profitability.

**The effect of the board of commissioner size on profitability:** The results of hypothesis testing about the effect of the board of commissioner gender diversity on profitability also show results that are not as expected. The results of hypothesis testing indicate that the board of commissioner gender diversity has no significant effect on profitability. These results are inconsistent with the previous studies conducted by among others: Riyadh *et al.*<sup>[49]</sup>, Onyali and Okerekeoti<sup>[52]</sup>, Martin and Herrero<sup>[53]</sup>, Kramaric *et al.*<sup>[63]</sup>, Dankwano and Hassan<sup>[66]</sup>, Solakoglu and Demir<sup>[67]</sup>, Kilic and Kuzey<sup>[68]</sup> and Tukur and Balkisu<sup>[69]</sup>. However, this result is not surprising. Several previous studies show that the board of commissioner gender diversity does not have a significant effect on profitability as shown by previous studies conducted by, among others: Mohammad *et al.*<sup>[71]</sup>, Ionascu *et al.*<sup>[77]</sup> and Rana and Wairimu<sup>[74]</sup>.

The average value of the board of commissioner gender diversity in the sampled companies is 5,423%. This value is a very low. This shows the low participation of female in the structure of the board of commissioner in companies in Indonesia so that there is not enough space/opportunity for female to contribute their competencies, insights and characteristics that have a stronger focus on company performance, especially those related to profitability. The low participation of female on the board of commissioner is the reason why the board of commissioner gender diversity does not have a significant effect on the profitability of Indonesian companies.

## CONCLUSION

Based on the results and discussion above, we conclude that: the participation of female in the structure of the board of commissioner is very low, the sustainability disclosure level made by companies in Indonesia is still low, the board of commissioner independence has a significant effect both on the sustainability disclosure level and on profitability, the board of commissioner size and the board of commissioner gender diversity do not have a significant effect both on the sustainability disclosure level and on profitability.

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