

## Board of Commissioners Educational Background And Sustainability Report Quality

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### Abstract

**Purposes:** This research aims to determine the relationship between the educational background of the board of commissioners on the quality of the sustainability report in companies listed on the Indonesia Stock Exchange.

**Methods:** Sources of research data consist of the annual reports, sustainability reports, global reporting websites (GRI), and Quacquarelli Symonds (QS) World University Ranking. The sampling method used was side purposive, in order to obtain as many as companies that had met the criteria to be used as research samples for 5 (five) years, 2015-2019 which is 258 companies. This study uses a multiple regression model with a cluster by the firm from STATA 14 software to determine the direction and magnitude of the influence of independent variables on the dependent variable.

**Findings:** This study found that the BOC educational background with undergraduate degree from reputable university showed a positive and significant relationship towards sustainability report quality. In contrast, educational background defined by level of education indicates insignificant effect towards sustainability report.

**Novelty:** The role of BOC in Indonesia is to supervise the quality of the company's report, therefore those results indicate that top-level universities have a role to form character and concern for environmental problems.

**Keywords:** *Sustainability Report Quality, Board of Commissioners, Educational Background.*

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## INTRODUCTION

With social and environmental concerns gaining increasing importance, traditional financial reporting, which primarily focuses on economic activities, is losing relevance. As a result, there is a growing momentum for corporate reporting that provides a comprehensive view of corporate performance considering the triple bottom line - economic, social, and environmental aspects. This type of reporting is commonly known as corporate sustainability (CS) reporting or triple bottom line reporting (Elkington, 1994). In today's rapidly changing global economy, CS reporting has emerged as a strategic tool for companies to ensure their growth and survival (Lo and Sheu, 2007), as it helps foster positive relationships with stakeholders (Lourenço et al., 2012).

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Conducting activities guided by long-term sustainability has become a voluntary practice of great importance for companies (Lacy et al., 2010), providing them with a competitive advantage over their competitors (Porter and Kramer, 2006; Lourenço et al., 2012). Currently, the Global Reporting Initiative (GRI) is widely recognized as one of the most accepted and standardized frameworks for sustainability reporting, as supported by various studies (Brown et al., 2009; Marimon et al., 2012; Laskar and Maji, 2016, 2017). GRI is known for its comprehensive, consistent, and reliable approach in evaluating sustainability activities. As a result, in this context, corporate social (CS) reporting, disclosure, and performance are often used interchangeably.

Since the early 2000s, the sustainability report is officially starting published by several companies in parts of the world. In Indonesia, this trend began 2006 when PT Kaltim Prima Coal published the report sustainability for the first time using GRI G2 guidelines. Sustainability report increasingly popular published by the company as a communication tool to express how development contributes to sustainability (Cantele et al. 2018; Tsalis et al 2018). From July 1st, 2018, companies in Indonesia started to produce sustainability reports using GRI Standards - replacing the latest GRI G4. It offers flexibility for companies to update individual standards in their fields. Since then, the number of companies that produce sustainability reports is increasing over the year.

Different from the one-tier system of the board of directors applied in the US, Indonesia has a two-tier system of the board of directors. The board consists of a supervising (or non-executive) board (called the board of commissioners or BOC) and an executive board (or simply called the board of directors). The Board of commissioners represents shareholders in a supervising board of directors (BOD) activities, decisions, and performance. CSR disclosure is closely linked to effective CSR management, with the board of commissioners playing a crucial role in monitoring and supervising company performance (Rao & Tilt, 2016; Ibrahim & Hanefah, 2016; Choi, 2020). As a corporate organ, the board of commissioners has the responsibility to ensure the company's compliance. Thus, when preparing a sustainability report based on GRI standards, it is under the supervision of the Board of Commissioners.

However, the mere existence of sustainability reports does not guarantee an increase in the quality of reported information (Junior et al., 2014). Studies by Simnett et al. (2009) show that assurance of sustainability reports enhances their credibility and reliability, which contributes to building corporate reputation. Previous research has also found that the quality of sustainability reports is significantly impacted by the effectiveness of the board of commissioners (Astrid and Sylvia, 2018). It is emphasized that the mere presence of commissioners is not sufficient; their effective functioning is crucial for ensuring the quality of company reports. Bowers and Seashore (1966) have argued that higher levels of education are associated with advanced technical and managerial skills in managers. Similarly, a previous study on the Indonesian banking industry has found a positive relationship between educational attainment of the board of commissioners and CSR disclosure (Swardani et al., 2021). According to Swardani et al. (2021), the educational background of the board of commissioners with diverse fields of expertise can provide more detailed and transparent information on corporate responsibility, which encompasses not only financial responsibility but also social responsibility towards the community, environment, and long-term sustainability of the company. Additional tests indicate that the impact of educational attainment on corporate social responsibility (CSR) disclosure is dependent on the ranking of the universities from which the degrees are obtained, as well as the independence of the board chairperson. However, having an MBA, accounting, or economics educational background has no significant relationship with CSR disclosure (Prabowo et al., 2017).

According to the Resource-Based Perspective (RBP), companies can gain a competitive advantage by effectively leveraging their scarce, valuable, and irreplaceable resources (Bowman and Ambrosini, 2003; Kraaijenbrink et al., 2010; Lourenço et al., 2012). Therefore, companies need to maintain positive relationships with stakeholders by disclosing their sustainability activities through sustainability reports, which ensure transparency of these resources (Roberts,

1992). High-quality sustainability reports demonstrate a company's commitment to managing its economic, social, and environmental impacts, and thus enhance transparency, which is crucial for maintaining positive stakeholder relationships (Carrots and Sticks, 2013; Laskar and Maji, 2016).

There are various proxies to measure the BOC's competence, such as experiences, networks, managerial skills, and educational background. The last proxy can be considered an objective one. Top universities and levels of education will contribute to one's way of thinking and behavior. Recent research in Chinese stated that CEO education on corporate environmental innovation are driven by corporate green research and development investment, as well as environmental responsibility (Zhou et al., 2021). In this context, the company's investment in green research and development, along with its commitment to environmental responsibility, play a crucial role in influencing the relationship between CEO education and corporate environmental innovation.

Previous research in Chinese done by Zhou et al., (2021) examines how the CEO's characteristics could be associated with globally corporate social responsibility (CSR) and specific areas of CSR. Another research by Astrid and Sylvia (2018) examine the effects of stakeholder pressure and corporate governance on the quality of sustainability report. There is still no research in Indonesia that examines the correlation of the educational background of a company's BOC towards Sustainability Report Quality. This research is a novelty that will complement previous research findings. This study gathered sample data of all listed companies on the Indonesia Stock Exchange (IDX) for the year 2015 – 2019.

The objectives to be achieved in this research are to obtain empirical evidence on how the board of commissioners' educational background influences the quality of sustainability reports done by the company. Consequently, this research makes several contributions to the sustainability report quality literature. First, the findings are expected to serve information that oversees the factors which affect the sustainability report quality of company listed in IDX in the last 5 years. With the increasing awareness of the topic of sustainable development, the results of this study can become a reference for companies when they want to appoint a board of commissioners to monitor the quality of the company's sustainability reports. Since the sustainability report nowadays becomes one of the top concerns by many firms, the findings can enrich the knowledge and can be used by the government as a reference when making a new policy concerning sustainability reporting practices.

The structure of this paper is as follows: Part 2 is the literature review and hypotheses development; Part 3 contains the explanation of the research methodology; Part 4 includes the results and discussion; Part 5 is the conclusion, including limitations, and suggestions for this research.

### **Resource Based View Theory**

Barney (1991) proposed that organizations that possess resources that are valuable, rare, and difficult to imitate or substitute can attain long-lasting competitive advantages. These competitive advantages can result in superior organizational performance compared to rivals that lack similar resources. The Resource-Based View (RBV) has been applied to conceptualize reputation and its link to performance (Roberts & Dowling, 2002; Rumelt, 1987; Shamsie, 2003), where reputation is defined as an organizational attribute and represented as a broad, multidimensional construct whose value is determined by the interactions and interrelationships among various internal and external attributes of the firm (Barney, 1991; Dowling, 2001).

In particular, the determinants of reputation are complex and often embedded within the firm, and they may be associated with high ambiguity, making replication difficult and creating opportunities for sustained profitability (Roberts & Dowling, 2002). As a result, reputation is considered one of the most important resources for an organization (Hall, 1992). An intangible resource in the form of knowledge is something unique, valuable, and difficult to replicate. Companies need to have excellent human resources to support the company in implementing

various policies. One of the most objective measures is to look at their educational background. Although many previous studies have examined the effects of university reputation on various things, there is still limited evidence on the relationship of the educational background of the board of commissioners, especially from reputable universities to the quality of sustainability reports.

### **Legitimacy Theory**

Legitimacy theory is a theory that spurs companies to implement social performance. Legitimacy theory focuses on the importance of community acceptance to ensure the survival of a company (Singh et al., 1986). This theory also assumes that companies can only prosper when they operate by community expectations (Gray et al., 1996). It also shows the relationship between corporate social disclosure and community concern so that management must react to community expectations and change (Juhmani, 2014). The Legitimacy Theory developed by O'Donovan (2002) explains that a way for companies to survive (Going Concern) is to provide something that is obtained from the community. Therefore, companies can implement social performance in the form of CSR disclosures and environmental performance to get good recognition from the public which can help companies capable of going concern. The application of social performance also aims to gain legitimacy for the company on running its business, so that it can make the public more respectful of the company and more interested in consuming a product or service that results.

### **Sustainability Report Quality**

According to PWC (2012), a sustainability report (SR) is a practice that involves measuring, disclosing, and being accountable to both internal and external stakeholders, showcasing a company's performance in relation to sustainable development goals. In Indonesia, the government does not mandate companies to issue SRs, making SR disclosure a voluntary practice. The objective of SR disclosure is to demonstrate a company's commitment to social and environmental responsibility in promoting sustainable development (Utama & Mirhard, 2016). The community's perception of the company depends on whether it can establish a mutually beneficial relationship with the environment. It is not just about following trends or demonstrating concern for the external environment, but also having a clear vision and mission to contribute to the development and enhancement of the environment and social sustainability. By issuing an SR, a company conveys its dedication to maintaining environmental balance, sustainability, minimizing social inequalities, and promoting economic prosperity within the community (Isnailita & Narsa, 2017).

Ideally, the sustainability report focuses on relevant issues in the context of a sustainable economy, social, firm environment, and all of the stakeholders. The most recent standard used was GRI Standards that effective immediately in Indonesia from July 1st, 2018 replacing the GRI G4. In general, there is no much difference when it comes to the content itself. The main difference is in the structure. The new GRI Standards separate the guidelines in a modular structure so it is easier for the company to update individual standards in their field of sustainability.

### **Educational Background of Board of Commissioners**

One of the important considerations in job promotion and employee remuneration is education. Hambrick (2007) shows that characteristics such as educational background could explain the firm performance according to the premise of bounded rationality which was previously studied by Cyert and March (1963).

The performance of a university is very dependent on reputation, a prestigious and well-known university is proven to have the highest performance in all aspects (Roxana-Diana Baltaru, 2019). Keith (2001) stated an underlying argument that good students self-select into reputable universities, employers give higher credit to graduates from prestigious universities, and last but not least, reputable universities continue to benefit from the historical networks and affiliations with other high-performing High Education Institutions (HEI). A recent study also stated that

CEOs holding degrees from prestigious domestic universities perform significantly better than those without such qualifications (Darmadi, 2013). An objective way to measure reputable universities is to look into the world university ranking. The author uses Quacquarelli Symonds (QS) World University Ranking as the proxy. The QS ranking is viewed as one of the three most widely read university rankings in the world. According to Alexa Internet, it is the most widely viewed university ranking worldwide. For hypothesis 2, another precursor in measuring educational background is the attainment of educational level. A good level of education has significance in raising the managers' prestige hence enabling them to give out optimum decisions (Certo 2003). Previous studies have found that CEOs with higher levels of education tend to exhibit stronger innovation and managerial skills (Lin et al., 2011). Education level is often used as a measurable characteristic to predict the strategic behavior of top managers (Hambrick and Mason, 1984). Specifically, research conducted by Papadakis and Barwise (2002) and Carpenter et al. (2004) showed that the level of education of top managers does indeed impact their decision-making approach.

**H<sub>1</sub>: There is an association between degree from reputable universities of BOC's and sustainability report quality.**

**H<sub>2</sub>: There is an association between the education level of BOC's and sustainability report quality.**

## **METHODS**

The research focused on all of the companies in Indonesia listed in IDX from 2015 to 2019 that have published a sustainability report. During the period from 2015 to 2019, companies focused on social and environmental responsibilities. This period can be considered an era in which sustainability reporting increasingly became the center of attention for various companies. Throughout this period, many organizations became aware of the importance of going beyond purely economic objectives and began prioritizing social and environmental responsibilities. All of the industrial sectors are selected to give better results to describe the relationship between the Board of Commissioners' educational background and sustainability report quality. The initial population used in this research is 409 companies. The sample in this study was selected through the purposive sampling method which aims to obtain a representative sample and by the criteria predetermined by the researcher. The total sample selected for this research is 258 observations. The following are the criteria used in sample selection, including:

1. All of the listed companies on the Indonesia Stock Exchange for the years 2015 - 2019.
2. Company has information and data that are related and relevant to the variables used in this research.
3. Company releases sustainability report in the year of 2015 - 2019.

## **Operational Variables Measurement**

This research uses secondary data to get information about the Board of Commissioners' (BOC) educational background and sustainability report quality of the companies that are listed in IDX, also university rankings measured by QS world university ranking. The needed data, namely annual report, sustainability report, global reporting websites (GRI), and Quacquarelli Symonds (QS) World University Ranking. It obtains directly from Database of idx.co.id, Website of the company, Database of topuniversities.com, and Database of globalreporting.org. According to the Global Reporting Initiative (GRI), a Sustainability Report (SR) is a description of activities in the form of reports issued by companies regarding the economic, social, and environmental impacts caused by company activities. SR is used as the dependent variable in this study and is proxied based on the Sustainability Report Disclosure Index (SRDI). SRDI assesses social responsibility

Variable	Definition	Source
<b>Dependent Variable</b>		
CSRDI	$CSRDI_j = \sum X_{ij} N_j$ CSRDI <sub>j</sub> : the index of corporate social responsibility $\sum X_{ij}$ : total items disclosed by the firm $N_j$ : number of disclosure items according to GRI	Sustainability Report
<b>Independent Variable</b>		
BOC_RANK	University rankings in year t and related them to the total number of universities considered in the indicator, then multiplied it with -1	Annual Report, QS World University Rank
BOC_LEVEL	$BOC\_LEVEL = \frac{\sum (\text{Score S1} + \text{Score S2} + \text{Score S3})}{\text{Number of commissioners}}$	Annual Report
<b>Control Variable</b>		
ROA	Net income (net income) by the company's assets as a whole (total assets)	OSIRIS
FIRMSIZE	Natural logarithm of total assets	OSIRIS
LEV	Total debt divided by total assets	OSIRIS

according to GRI criteria. In this study, the author uses GRI G4 guidelines for the 2015 - 2017 period, and the GRI Standards for the 2018 - 2019 periods were used.

The GRI G4 Guidelines reveal a total of 91 items from all categories. There is a slight change to the GRI Standard where the maximum pound of the disclosure will be measured per category so that one category will differ from one another in the calculation. The Sustainability Disclosure Index (SDI) for each company is calculated by adding the total disclosure score of all indicators divided by the maximum possible points, namely 91 for GRI G4, and for GRI Standard the maximum points are adjusted according to the disclosure category.

The formula for SRDI calculations is as follows:

$$SRDI = n / k$$

Information:

SRDI = Sustainability Report Disclosure Index

N = Number of Items Disclosed by the Company

K = Number of Items Expected

BOC educational background defined by University Rank (BOC\_RANK) is the university background of the board of commissioners ranked based on the QS World University Rank. We examined the university rankings in year t and related them to the total number of universities considered in the indicator. The measurement of the ranking is multiplied by -1. It has to multiplied by -1 because the higher the university ranking number means it positioned in lower rank, and vice versa. This study analyzes the ranking made by the QS World University Ranking, in order to see whether the results of the university ranking correlated with sustainability report quality.

This research measures the BOC's educational background defined by the Level of Education attended in University. Data are collected from the company's annual report. There are 3 levels on Indonesia university systems, Sarjana at the undergraduate level (Sarjana Strata 1 – S1), graduate-level (Sarjana Strata Dua – S2, commonly called Magister), and doctoral level (Sarjana Strata 3 – S3, commonly called Doktor). The type of the measurement of proxy level of education is using ratio.

The author assumes that a higher education level led to a better judgment made by the

$$\text{BOC\_LEVEL} = \frac{\sum (\text{Score S1} + \text{Score S2} + \text{Score S3})}{\text{Number of commissioners}}$$

BOC. This study analyzes the level of education to see whether the result correlated with the sustainability report quality.

Control variable is used to assure that there is no single variable which can explain the dependent variable is omitted in the research. There are several control variable used in this research, such as Firm Size (FIRMSIZE) which measured by natural logarithm of total assets, Leverage (LEV) which measured by total debt divided by total assets, Return on Assets (ROA) which by dividing net income (net income) by the company's assets as a whole (total assets).

The research utilized various analysis techniques, including descriptive statistics, Pearson correlation test, and independent t-test, with multiple regression model being employed to examine the relationship between the educational background of the board of commissioners and the quality of sustainability reports. Multiple regression analysis is conducted using 2 fixed effect variables, namely annual fixed effect and industry fixed effect. These fixed effect variables help ensure that the analysis results are not influenced by unobserved heterogeneity that may be present in the data. Prior to data analysis, each variable in the data was winsorized to mitigate the impact of potential outliers, as the data distribution in this research may contain a significant number of outliers. Winsorizing the data only modifies the behavior of data and addresses issues caused by outlier data, such as biased data and transcription errors, among others (Kettaneth et al., 2005). The regression model used in this research are:

Hypotheses (1):

$$\text{CSRDi,t} = \beta_0 + \beta_1 \text{BOC\_RANK}_{i,t} + \beta_2 \text{LEV}_{i,t} + \beta_3 \text{ROA}_{i,t} + \beta_4 \text{SIZE}_{i,t} + \beta_5 \text{Industry Fixed Effect}_{i,t} + \beta_6 \text{Year Fixed Effect}_{i,t} + \varepsilon$$

Hypotheses (2):

$$\text{CSRDi,t} = \beta_0 + \beta_1 \text{BOC\_LEVEL}_{i,t} + \beta_2 \text{LEV}_{i,t} + \beta_3 \text{ROA}_{i,t} + \beta_4 \text{SIZE}_{i,t} + \beta_5 \text{Industry Fixed Effect}_{i,t} + \beta_6 \text{Year Fixed Effect}_{i,t} + \varepsilon$$

## RESULTS AND DISCUSSION

The data utilized in this research is unbalanced, meaning that the distribution or proportion of data points among different categories or groups is not equal. The distribution of company samples by year, namely 258 research samples from 2015 to 2019. Distribution with the least frequency was 2016 with 26 companies, and in contrast, most frequencies were obtained in 2019 as many as 66 companies. Whereas in other years, the sample distribution shows several different numbers, namely in 2015 amounted to 59 companies, 2017 amounted to 56 companies, and 2018 showed 51 companies. Table 1 shows the descriptive statistics of 258 companies used in this study. Descriptive statistics in statistics terminology is aimed to give general information about variables used in this research i.e. Sustainability Report Quality (CSRDi,t), BOC educational background measured by university rank (BOC\_RANK), BOC educational background measured by the

**Table 1.** Descriptive Statistics

	Mean	Median	Minimum	Maximum
CSRDi,t	0.471	0.480	0.000	1.000
BOC_RANK	-3.930	-4.354	-9.571	0.000
BOC_LEVEL	2.074	1.571	0.167	128.750
ROA	0.113	0.088	-1.621	1.400
FIRMSIZE	23.463	23.546	18.627	26.587
LEV	0.171	0.167	-0.492	1.362

**Table 2.** Pearson Correlation

	CSRD	BOC_RANK	BOC_LEVEL	ROA	FIRMSIZE	LEV
CSRD	1.000					
BOC_RANK	0.145** (0.020)	1.000				
BOC_LEVEL	-0.090 (0.149)	0.052 (0.405)	1.000			
ROA	0.091 (0.145)	-0.163*** (0.009)	0.001 (0.986)	1.000		
FIRMSIZE	0.237*** (0.000)	-0.116* (0.063)	-0.098 (0.116)	0.086 (0.169)	1.000	
LEV	-0.059 (0.347)	0.061 (0.329)	-0.099 (0.113)	-0.506*** (0.000)	0.151** (0.015)	1.000

p-values in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

level of education (BOC\_LEVEL), firm size (FIRMSIZE), leverage (LEV), and return on assets (ROA). The information given by descriptive statistics is about the mean, median, minimum and maximum value of each variable.

Sustainability Report Quality (CSRD) is the result of the SRDI calculation model, the results find that Sustainability Report Quality (CSRD) has a maximum value of 1.000, a minimum value of 0.000, and an average value of 0.471. In the BOC variable educational background defined by university rank (BOC\_RANK) which is the result of the ranking taken from the QS World University Ranking, it shows a maximum value of 0.000, a minimum value of -9.571, and a mean value of -3.930. Whereas, BOC variable educational background defined by the level of education (BOC\_LEVEL) shows a maximum value of 128.750, a minimum value of 0.167, and a mean value of 2.074. ROA shows a maximum, minimum, and mean of 1.400, -1.621, and 0.113. FIRMSIZE shows a maximum, minimum, and mean of 26.587, 18.627, and 23.463. LEV shows a maximum, minimum, and mean of 1.362, -0.492, and 0.171.

Table 2 above is a Pearson Correlation table. Pearson's correlation test is parametric which generates a coefficient that is useful for measuring the correlation and direction of the linear relationship between two variables (Latan, 2014; Zhou et al., 2017). The significance level is shown with an asterisk symbol (\*) on its coefficient. The amount of asterisk depends on the significance level of the relationship between two variables. Single asterisk means the relationship is significant in the level of 10%, the double asterisk means its significant in the level of 5% and triple asterisks mean it is significant in the level of 1%.

In the table below, the variables related to Sustainability Report Quality (CSRD) as the main proxy for this study are BOC educational background defined by University Rank (BOC\_Rank), and Firm Size (FIRMSIZE) while the remainder does not show a significant relationship to Sustainability Report Quality (CSRD). A different relationship is seen in BOC educational background defined by University Rank (BOC\_RANK) with other variables, namely, there is a relationship with Return on Asset (ROA) and Firm Size (FIRMSIZE) while the rest shows no relationship. On the other hand, our independent variables, BOC educational background defined by University Level (BOC\_LEVEL) do not show any significant relationship towards any other variables.

According to Tabel 3, it can be observed that the educational background of BOC (Bank of Commerce) employees, as defined by their university rank, exhibits a positive association with



**Table 3.** Multiple Regression Model Result

	(1)	(2)
	CSR	CSR
BOC_RANK	0.014*** (3.55)	
BOC_LEVEL		-0.064 (-1.27)
ROA	0.001 (0.82)	0.000 (0.35)
FIRMSIZE	0.041*** (4.31)	0.037*** (3.84)
LEV	-0.067 (-1.14)	-0.074 (-1.24)
Industry Effect	Yes	Yes
Year Effect	Yes	Yes
_cons	-0.423* (-1.92)	-0.384* (-1.71)
r2	0.101	0.071
r2_a	0.184	0.189
N	258	258

t statistics in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

the quality of their Sustainability Report (CSR). The coefficient for this relationship is calculated to be 0.016, with a high level of statistical significance at the 1% level. This implies that Hypothesis 1, which posits that a higher university ranking is correlated with an increase in the quality of the sustainability report, is supported by the findings.

Meanwhile, it can be seen that the analysis of the data reveals that there is no significant association between BOC employees' educational background defined by the level of education and the quality of their sustainability reports. This implies that Hypothesis 2, which suggests that the level of education is not correlated with sustainability report quality, is not supported by the findings, and therefore, is rejected. The results suggest that factors other than the level of education, such as mandatory reporting requirements and the attention given to sustainability by company commissioners, may play a role in shaping the quality of sustainability reports in BOC.

### Discussion

The results suggest that BOC employees with a higher university rank tend to produce sustainability reports of higher quality. This may be indicative of the impact of education on the skills and knowledge of employees, which in turn influences the quality of their work. Employees who have obtained higher education from prestigious universities may possess a greater understanding of sustainability concepts, reporting standards, and best practices, which can positively affect the quality of their sustainability reports. This study further confirms previous research which states that the educational background of the board of commissioners affects CSR disclosure. As research has been proven by Astrid and Sylvia (2018) which states that the ability of good commissioners will guarantee the quality of the company's sustainability reports. It is very likely because BOC who graduated at the top rank university have more understanding and awareness about the quality of Sustainability Report Quality.

The analysis indicates that BOC employees' educational background defined by the level of education does not exhibit a significant association with the quality of their sustainability reports. These results suggest that other contextual factors, such as regulatory requirements and organizational practices, may have a stronger influence on sustainability report quality in the context of BOC. It underscores the need for a holistic approach that considers various factors when aiming to enhance sustainability reporting practices in organizations, and highlights the evolving nature of sustainability reporting in Indonesia. In Indonesia, sustainability reporting is not yet mandatory for companies, which means that it may not receive the same level of attention and emphasis from company commissioners as other reporting requirements. This could potentially explain the lack of significant association between the level of education and sustainability report quality, as education alone may not be the sole determining factor in shaping the quality of sustainability reports in the context of BOC.

## CONCLUSIONS

This research is aimed to analyze the association between BOC's educational background as the supervisory board for company reports and sustainability report quality. BOC's educational background defined by university rank is significant and positively associated with sustainability report quality. It means that commissioners who graduate from a higher rank of university will result in higher sustainability report quality. It is because the role of BOC in Indonesia is to supervise the quality of the company's report, therefore those results indicate that top-level universities have a role to form character and concern for environmental problems. From the overall conclusions above, this study contributes to the development of the literature regarding the relationship between BOC's educational background as measured by the QS World University Ranking on sustainability report quality. This study also contributes to the literature on the area that influences sustainability report quality. For policymakers, it is crucial to carefully select employees with a higher educational background, particularly from reputable universities, when building a team responsible for sustainability reporting. This can significantly contribute to the production of high-quality sustainability reports that align with the organization's sustainability goals, stakeholder expectations, and industry best practices.

The author acknowledges certain limitations in this study, including the small sample size due to the fact that less than 10% of companies in Indonesia registered in IDX adhere to sustainability reporting according to applicable standards. As a result, it was not possible to include these companies in the sample to minimize bias in the external audit of the sustainability report disclosure variable. Furthermore, the proxy for educational background used in this study is limited to university rank and level of education, which could be further improved by incorporating commissioners' degrees related to sustainable business issues.

Recommendations from this research are directed towards practitioners and other relevant stakeholders, both internal and external. These recommendations include considering the university ranking and educational background in the selection of board of commissioners to promote transparency and enhance sustainability reporting practices, while also preventing potential manipulative actions within the company.

## REFERENCES

- Ameer, R. and Othman, R. (2012), "Sustainability practices and corporate financial performance: a study based on the top global corporations", *Journal of Business Ethics*, Vol. 108 No. 1, pp. 61-79.
- Astrid Rudyanto, Sylvia Veronica Siregar, (2018) "The effect of stakeholder pressure and corporate governance on the sustainability report quality", *International Journal of Ethics and Systems*, Vol. 34 Issue: 2, pp.233-249, <https://doi.org/10.1108/IJOES-05-2017-0071>
- Bagley, S. S., & Portnoi, L. M. (2016). Higher Education and the Discourse on Global Competition: Vernacular Approaches Within Higher Education Policy Documents. In *Globalisation and Higher Education Reforms*. [https://doi.org/10.1007/978-3-319-28191-9\\_2](https://doi.org/10.1007/978-3-319-28191-9_2)
- Balkin, D. B., Markman, G. D., & Gomez-Mejia, L. R. (2000). Is Ceo Pay in High-Technology Firms Related To

- Innovation? *Academy of Management Journal*, 43(6), 1118–1129. <https://doi.org/10.2307/1556340>
- Baltaru, R. D. (2019). Do non-academic professionals enhance universities' performance? Reputation vs. organisation. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2017.1421156>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*. <https://doi.org/10.1177/014920639101700108>
- Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2020). Board Diversity and Corporate Social Responsibility: Empirical Evidence from France. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04522-4>
- Bowers, D. G., & Seashore, S. E. (1966). Predicting organizational effectiveness with a four-factor theory of leadership. *Administrative Science Quarterly*, 11(2), 238–263.
- Bowman, N. A., & Bastedo, M. N. (2009). Getting on the front page: Organizational reputation, status signals, and the impact of U.S. news and world report on student decisions. *Research in Higher Education*. <https://doi.org/10.1007/s11162-009-9129-8>
- Brown, H.S., de Jong, M. and Levy, D.L. (2009), "Building institutions based on information disclosure: lessons from GRI's sustainability reporting", *Journal Cleaner Production*, Vol. 17 No. 6, pp. 571-580.
- Boyd, B. K., Bergh, D. D., & Ketchen, D. J. (2010). Reconsidering the reputation-performance relationship: A resource-based view. *Journal of Management*, 36(3), 588–609. <https://doi.org/10.1177/0149206308328507>
- Burhan, A.H.N. and Rahmanti, W. (2012), "The impact of sustainable reporting on company's performance", *Journal of Economics Business and Accountancy Ventura*, Vol. 15 No. 2, pp. 257-272.
- Cantele, S., Tsalis, T. A., & Nikolaou, I. E. (2018). A new framework for assessing the sustainability reporting disclosure of water utilities. *Sustainability (Switzerland)*, 10(2), 1–12. <https://doi.org/10.3390/su10020433>
- Darmadi, S. (2013). Corporate governance disclosure in the annual report: An exploratory study on Indonesian Islamic banks. *Humanomics*. <https://doi.org/10.1108/08288661311299295>
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line o/21" century business*. Gabriela Island, BC: New Society Publishers.
- Fajarini, I., Wahyuningrum, S., Budihardjo, M. A., & Muhammad, F. I. (2020). [http://jssidoi.org/esc/home.8\(2\),1047-1061](http://jssidoi.org/esc/home.8(2),1047-1061).
- FINANCIAL SERVICES AUTHORITY REGULATION NUMBER 51 /POJK.03/2017 ABOUT SUSTAINABLE FINANCIAL APPLICATION FOR FINANCIAL SERVICE INSTITUTIONS, ISSUERS, AND PUBLIC COMPANIES
- Gibbons, B. (2013). Cyert and March (1963) at Fifty: A Perspective from Organization Economics. In NBER Working Group in Organizational Economics\*.
- Glembotskaya, G. T., Eremin, S. Y., & Chupandina, E. E. (2020). Scientific priorities and real prospects for cost optimization in formulation development. *Entrepreneurship and Sustainability Issues*, 7(3), 1484–1499. [https://doi.org/10.9770/jesi.2020.7.3\(4\)](https://doi.org/10.9770/jesi.2020.7.3(4))
- Gray, R., Owen, D., & Adams, C. (1996). *Accounting and accountability : changes and challenges in corporate social and environmental reporting*. Prentice Hall.
- Hall, R. (1992). The strategic analysis of intangible resources. *Strategic Management Journal*. <https://doi.org/10.1002/smj.4250130205>
- Hambrick, D. C. (2007). Upper echelons theory: An update. In *Academy of Management Review*. <https://doi.org/10.5465/AMR.2007.24345254>
- Harymawan, I., Putra, F. K. G., Agni, T. D. K., & Kamarudin, K. A. (2020). Sustainability report practices in Indonesia: Context, policy, and readability. *International Journal of Energy Economics and Policy*, 10(3), 438–443. <https://doi.org/10.32479/ijeep.8979>
- Hussain, N. (2015), "Impact of sustainability performance on financial performance: an empirical study of global fortune (N100), firms", Working Paper No. 1, Department of Management, Ca" Foscari University of Venice.
- Isnalita, & Narsa, I. M. (2017). CSR Disclosure, Customer Loyalty, and Firm Values (Study at Mining Company Listed in Indonesia Stock Exchange). *Asian Journal of Accounting Research*. <https://doi.org/10.1108/ajar-2017-02-02-b002>
- Juhmani, O. I. (2017). Audit Committee Characteristics and Earnings Management: The Case of Bahrain. *International Journal of Accounting and Financial Reporting*. <https://doi.org/10.5296/ijaf.v7i1.10447>
- Junior, R. M., Best, P. J., & Cotter, J. (2014). Sustainability Reporting and Assurance: A Historical Analysis

- on a World-Wide Phenomenon. *Journal of Business Ethics*, 120(1), 1–11. <https://doi.org/10.1007/s10551-013-1637-y>
- Karaman, A. S., Orazalin, N., Uyar, A., & Shahbaz, M. (2020). CSR achievement, reporting, and assurance in the energy sector: Does economic development matter? *Energy Policy*. <https://doi.org/10.1016/j.enpol.2020.112007>
- Keith, Bruce. (2001). Organizational Contexts and University Performance Outcomes: The Limited Role of Purposive Action in the Management of Institutional Status. *Research in Higher Education*. 42. 493-516. [10.1023/A:1011065225763](https://doi.org/10.1023/A:1011065225763).
- Kettaneh, N., Berglund, A., & Wold, S. (2005). PCA and PLS with very large data sets. *Computational Statistics and Data Analysis*, 48(1), 69–85. <https://doi.org/10.1016/j.csda.2003.11.027>
- KPMG, & UNEP. (2013). Carrots and Sticks Report. In Carrots and Sticks.
- Lacy, P., Cooper, T., Hayward, R. and Neuberger, L. (2010), “A New Era of Sustainability –UN Global Compact-Accenture CEO Study 2010”, Accenture, available at: [www.compromisorse.com/upload/estudios/000/53/AccentureUNGCStudy10.pdf](http://www.compromisorse.com/upload/estudios/000/53/AccentureUNGCStudy10.pdf) (accessed 12 November 2016).
- Laskar, N. (2018). Impact of corporate sustainability reporting on firm performance: an empirical examination in Asia. *Journal of Asia Business Studies*, 12(4), 571–593. <https://doi.org/10.1108/JABS-11-2016-0157>
- Laskar, N., & Gopal Maji, S. (2018). Disclosure of corporate sustainability performance and firm performance in Asia. In *Asian Review of Accounting* (Vol. 26, Issue 4). <https://doi.org/10.1108/ARA-02-2017-0029>
- Lourenço, C.L., Castelo, M.B., Curto, D.J. and Teresa, E. (2012), “How does the market value corporate sustainability performance?”, *Journal of Business Ethics*, Vol. 108 No. 4, pp. 417-428.
- Lo, S. F., & Sheu, H. J. (2007). Is corporate sustainability a value-increasing strategy for business? *Corporate Governance: An International Review*. <https://doi.org/10.1111/j.1467-8683.2007.00565.x>
- Luecking, R. G., & Certo, N. J. (2003). Integrating service systems at the point of transition for youth with significant support needs: a model that works. *American Rehabilitation*.
- Marimon, F., Alonso-Almeida, M.M., Rodríguez, M.P. and Cortez Alejandro, K.A. (2012), “The worldwide diffusion of the global reporting initiative: what is the point?”, *Journal of Clean Production*, Vol. 33, pp. 132-144.
- Mulazid, A. S., Habbe, A. H., Idris, I., Syofyan, E., Prabowo, M. A., & Iswaningtyas, A. (2017). Board of directors and CSR disclosure in Indonesian banking industry: does education matter? *International Journal of Trade and Global Markets*, 10(4), 322. <https://doi.org/10.1504/ijtgm.2017.10011377>
- Mulazid, A. S., Habbe, A. H., Idris, I., Syofyan, E., Prabowo, M. A., & Iswaningtyas, A. (2017). Board of directors and CSR disclosure in Indonesian banking industry: does education matter? *International Journal of Trade and Global Markets*, 10(4), 322. <https://doi.org/10.1504/ijtgm.2017.10011377>
- O’Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. In *Accounting, Auditing & Accountability Journal*. <https://doi.org/10.1108/09513570210435870>
- Papadakis, V., Thanos, I., & Barwise, P. (2010). Research on strategic decisions. In *Handbook of decision making* (Issue January).
- Porter, M.E. and Kramer, M.R. (2006), “Strategy and society: the link between competitive advantage and corporate social responsibility”, *Harvard Business Review*, Vol. 84 No. 12, pp. 78-92.
- Prabowo, M.A., Iswaningtyas, A., Syofyan, E., Idris, I., Mulazid, A.S. and Habbe, A.H. (2017) ‘Board of directors and CSR disclosure in Indonesian banking industry: does education matter?’, *Int. J. Trade and Global Markets*, Vol. 10, No. 4, pp.322–338.
- Rhoads, R. A., Li, S., & Ilano, L. (2014). The Global Quest to Build World-Class Universities: Toward a Social Justice Agenda. *New Directions for Higher Education*. <https://doi.org/10.1002/he.20111>
- Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*. <https://doi.org/10.1002/smj.274>
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Accounting, Organizations and Society*. [https://doi.org/10.1016/0361-3682\(92\)90015-K](https://doi.org/10.1016/0361-3682(92)90015-K)
- Rudyanto, A., & Siregar, S. V. (2018). The effect of stakeholder pressure and corporate governance on the sustainability report quality. *International Journal of Ethics and Systems*, 34(2), 233–249. <https://doi.org/10.1108/IJOES-05-2017-0071>
- Saidu, S. (2019). CEO characteristics and firm performance: focus on origin, education and ownership.

- Journal of Global Entrepreneurship Research, 9(1). <https://doi.org/10.1186/s40497-019-0153-7>
- Saleh, M., Zulkifli, N. and Muhamad, R. (2011), "Looking for evidence of the relationship between corporate social responsibility and corporate financial performance in an emerging market", *Asia-Pacific Journal of Business Administration*, Vol. 3 No. 2, pp. 165-190.
- Shamsie, J., Phelps, C., & Kuperman, J. (2004). Better late than never: A study of late entrants in household electrical equipment. In *Strategic Management Journal*. <https://doi.org/10.1002/smj.364>
- Simnett, R., Vanstraelen, A. and Chua, W.F. (2009), "Assurance on sustainability reports: an international comparison", *The Accounting Review*, Vol. 84 No. 3, pp. 937-967.
- Singh, J.V., Tucker, D.J., House, R.J., 1986. Organizational legitimacy and the liability of newness. *Admin. Sco.Quart.* 31, 171e193
- SWARDANI, N., SUPRASTO, H., RATNADI, N. and SUARYANA, I., 2021. The Role of Board of Commissioners and Institutional Ownership in CSR Disclosure: An Empirical Study in Indonesia. [online] [Koreascience.or.kr](https://www.koreascience.or.kr). Available at: <<https://www.koreascience.or.kr/article/JAKO202115563415844.page>> [Accessed 9 February 2022].
- Uniamikogbo, E., & Amos O., A. (2016). Sustainability and Triple Bottom Line : an Overview of Two Interrelated Concepts. *Igbinedion University Journal of Accounting*, 2(August), 88–126.
- Utama, A. A. G. S., & Mirhard, R. R. (2016). The influence of sustainability report disclosure as moderating variable towards the impact of intellectual capital on company's performance. *International Journal of Economics and Financial Issues*.