

Examining the Nexus of Governance, Firm's Characteristics and CSR Disclosure in Highly Polluted Industries

Arum Tarasya Darwis¹, Islahuddin^{1*}¹Faculty of Economics and Business, Universitas Syiah Kuala & Banda Aceh, Indonesia**Article History**

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Abstract: This study seeks to examine the effect of corporate governance and firm's characteristics on corporate social responsibility disclosure (CSR) of highly polluted industries. The sample of this study consisted of 250 data from 125 companies of basic material, chemicals, and energy sectors listed in the Indonesia Stock Exchange from 2020-2021. The result shows that ownership concentration has a negative effect on CSR disclosure. Audit committee and firm's size positively affect corporate social responsibility disclosure. Meanwhile, the board size and leverage do not affect CSR disclosure. This study provides policy implications to identify governance systems and firm's characteristics at increasing CSR awareness. The paper highlights the research context of the highly polluted industry, indicating a specific sector with unique challenges and implications for CSR. By focusing on these industries, the research aims to provide insights into opportunities associated with CSR disclosure in highly polluting sectors.

Keywords: CSR Disclosure, Corporate Governance, Firm's size, Highly Polluted Industries, Audit Committee, Leverage, Ownership Concentration, Board Size.

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1. INTRODUCTION

There has been a lot of discussion since the middle of the 20th century regarding how business interacts with society and the environment (Bidari, 2020). Corporate Social Responsibility (CSR) has grown in recognition around the world along with increasing public concern for the environment. Accounting concept of CSR is state that an entity has a responsibility to all stakeholders in every aspect of its operations, including issues that affect society and the environment, such as climate change, waste, pollution, product safety, and labour (Firmansyah, 2018). As a result, companies have begun to publicize their corporate social responsibility initiatives. Carroll in 1991 demonstrated CSR in the form of pyramid. It shows the responsibilities that businesses should concern as "good corporate citizens": economic responsibilities, legal responsibilities, ethical responsibilities, and philanthropic responsibilities (Carroll, 2016).

Corporate responsibility must be based on the triple-bottom line, namely economic, social and environmental. The company must consider its value to grow sustainably. The term CSR covers profit, people, and planet (3Ps), where the objective of business isn't only generating profit but also helping people and preserving the sustainability of the planet's life (Farhan, 2021). CSR disclosure is information related to business

strategies, economic performance, environment and society (Nguyen, 2021). To disclose information, companies publish their CSR activities in the annual report or sustainability report.

In developing countries, CSR is in more vulnerable phase due to the gap in social province and governance. To fill such gaps, some institutions, such as the World Bank, Amnesty International and the United Nations, provide voluntary CSR reporting guidelines on social and environmental issues (Bidari, 2020). In Indonesia, several regulations govern the disclosure of social responsibility that companies must carry out. Law number 6 of 2023 concerning limited liability companies, article 109 paragraph 3, states that companies are committed to long-term economic growth to improve the environment and quality of life for corporations and society as a form of social and environmental responsibility. This is the government's effort to create a healthy living environment for communities affected by company activities, primarily if the company is engaged in the natural resource extraction industry.

CSR disclosure has been a concern of society when it is related to the environment and future life (Farhan, 2021). Reflecting the case of Lumpur Lapindo in 2006, this particular incident led to the submersion of

16 villages and industrial zones due to the overflow of scalding mud in Indonesia (Faizal, 2021). Besides that, the case of environmental pollution by PT Newmont Minahasa (PT. NMR) in 2004, which uses the Seabed Tailings Disposal System (SPTDL) to dispose of tailings waste that pollutes Buyat Bay with toxic and hazardous materials (B3) (Nuraida, 2012). This condition has brought Indonesia to the 26th position as the most polluted country globally and ranked first with the highest pollution in Southeast Asia in 2022 (IQair, 2022).

According to Chen *et al.*, (2020), the relationship between CSR and highly pollution sectors is positive because this type of industry is subject to more disclosure requirements concerning its environmental impact than industries that are not highly polluted. The connection arises because companies operating in environmentally sensitive pose a greater risk to human and environmental well-being. Consequently, they face increased pressure to obtain a social license to continue their operations. Environmental issues caused by industries in Indonesia are at high concern, and the firms are accountable to society by disclosing its social responsibility.

CSR disclosure is suspected influenced by the implementation of corporate governance and firm's characteristics. The Organization for Economic Cooperation and Development states that corporate governance involves the connection and interaction of company management, board of directors, shareholders and stakeholders. It encompasses the company's objectives and guides its efforts to accomplish those objectives. Meanwhile, the firm's characteristics are what distinguish one company from another.

CSR content has grown in recognition for long-term sustainable development of countries. High-pollution companies in Indonesia must consider prioritizing CSR, particularly environmental conservation. Corporate social responsibility has been the subject of many studies Farhan (2021), Chen *et al.*, (2020), Susanto *et al.*, (2019), Fallah *et al.*, (2019), however it still lacks focus on highly polluted industry. This paper is aimed at examining corporate governance indicators and firm characteristics of highly polluted industries that influence corporate social responsibility disclosure. The firm's annual reports and websites uses to assess the levels of corporate governance (CG), firm's characteristics (FC), as well as corporate social responsibility disclosure (CSR/D). Additionally, the relationship between CG, FC, and CSR/D was investigated using a multiple regression analysis.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Stakeholder Theory

Stakeholder theory is a framework that suggests the corporation must consider the interests of various stakeholder, including employees, customers, suppliers,

communities, and shareholder in their decision-making processes fairly (Quynh L, *et al.*, 2023). This theory emphasizes the importance of balancing the diverse interests of stakeholders to achieve long-term sustainable success. Maintaining connections with stakeholders is crucial for companies as it involves meeting their desires and requirements. This is particularly important for stakeholders who hold influence over the resources necessary for the company's day-to-day operations, including workers, customers, and owners (Dowling *et al.*, 1975). Sharing information about social responsibility not only enhances the reputation of a socially conscious company but also fulfills stakeholder interests. Some companies anticipate that strong stakeholder relationships will lead to improved financial performance through the development of valuable intangible assets such as resources and capabilities.

Legitimacy Theory

The concept of legitimacy can be described as a corporate management system that aligns itself with the interests of both the community and the government. Legitimacy theory suggests that organizations engage in corporate social responsibility (CSR) activities to maintain their legitimacy in the eyes of society. Company activities often affect the surrounding community. Corporations that practice CSR highly and properly will receive respect from society and get good marks from stakeholders (Quynh L, *et al.*, 2023). Otherwise, its existence can be threatened if the company cannot adjust to the norms prevailing in that society or even harms community members. The company must consider that society is a potential resource for the company concern on sustainability. Legitimacy theory originates from the notion of organizational legitimacy, where the position achieved by an organization exists when the values of an organization are in harmony with the values of a wider social system (Dowling *et al.*, 1975). Legitimacy theory includes the idea of a social contract between the company and society (Deegan, 2002). If the community feels the company has violated the contract's contents, the organization's sustainability will be threatened (Susanto *et al.*, 2019).

Corporate Social Responsibility Disclosure

Corporate social responsibility disclosure is the process through which we can assess an organization's impact on society and identify its responsibilities. CSR can actively convey information about environmental protection and social contribution. According to Hopkins (2005), the concept of CSR involves moral and responsible engagement with stakeholders. Therefore, the primary objective of CSR is to foster concurrently an improved standard of living and profitability. According to Rinawiyanti *et al.*, (2022), managers can also effectively integrate CSR into business functions to achieve superior social and financial performance, particularly in a developing country context.

CSR disclosure in highly polluted industries refers to the practice of companies in such industries openly communicating their social, environmental, and economic impacts to stakeholders (Fallah *et al.*, 2019). These industries typically include sectors such as mining, energy, and chemical sectors, which can have significant environmental footprints and negative effects on surrounding communities (GRI 2013). CSR disclosure in heavy-polluted industries aims to promote transparency, accountability, and sustainable practices. Companies in highly polluted industries need to go beyond mere disclosure and actively work towards reducing their environmental impact. Transparent and comprehensive CSR disclosure catalyzes responsible environmental practices, fosters a positive reputation, and contributes to the overall sustainability and social well-being of the company and its stakeholders.

More businesses today are interested in and know that CSR is an integral part of standard setting. Action CSR is carried out not only when the community is stable, but also in times of social difficulties (Quynh L, *et al.*, 2023). While the application of CSR philosophy in companies for the aim of sustainable development is growing in popularity in developed countries, the topic is considered relatively new in developing countries, especially in the case of Indonesia.

Corporate Governance

According to Al-ahdal *et al.*, (2020), corporate governance is a structure that assures users access to available and adequate resources. Corporate governance is frequently referred to as a tool to enhance the relationship between shareholders, investors, and managers (Harun *et al.*, 2020; Ullah *et al.*, 2019). Board size, ownership concentration, and audit committee are used to describe corporate governance indicators.

Board Size: Board size reflects the number of boards of directors and commissioners involved in the management of a corporation (Wicaksono *et al.*, 2016). They are responsible and have full authority in making decisions regarding directing, controlling, and supervising the management of resources to align with company goals (Sari *et al.*, 2014). Stakeholder theory suggests that board size can influence the effectiveness of corporate governance. A larger board may have a greater diversity of perspectives and expertise, enabling a more comprehensive consideration of stakeholder interests. A larger board can also promote greater checks and balances, reducing the likelihood of dominant control by a few individuals. Therefore, larger boards are often associated with greater CSR disclosure. However, an extensive board may lead to coordination challenges and decision-making inefficiencies.

H1: Board size affects the CSR disclosure in the highly polluted industries.

Ownership concentration: Ownership concentration refers to a situation in which a few individuals or groups

possess the majority of shares, granting them a more influential ownership position compared to other shareholders (Susanto *et al.*, 2019). In stakeholder theory, a higher degree of ownership concentration can affect the power dynamics within a company. When ownership is concentrated in the hands of a few shareholders or a controlling shareholder, their interests may dominate decision-making, potentially neglecting the concerns of other stakeholders. This concentration of power can undermine the principles of stakeholder theory, as the interests of more comprehensive stakeholder groups may be overlooked. In such cases, CSR disclosure may be limited. On the other hand, when ownership is more dispersed, there is a greater likelihood of multiple stakeholder interests being represented, leading to increased CSR disclosure.

H2: Ownership concentration affects CSR disclosure in the highly polluted industries.

Audit Committee: The audit committee's role within the framework of corporate governance is to assist the board of commissioners at ensuring that management operates the business in accordance with established principles (Untoro *et al.*, 2013). In addition, the audit committee focuses on more than just the financial reporting procedure; it also encompasses reporting non-financial data, such as CSR (Harun *et al.*, 2020). In the context of stakeholder theory, an effective audit committee plays a crucial role in ensuring transparency and accountability to stakeholders. It helps safeguard the interests of various stakeholders by overseeing financial reporting practices, internal controls, and the integrity of the company's annual report. By providing independent oversight, an audit committee enhances the reliability of information available to stakeholders building trust and confidence in the organization.

H3: Audit committee affects CSR disclosure in the highly polluted industries.

Firm's Characteristics

Firm's characteristics are features that differentiate one company from another. The characteristics of a company are characteristics inherent in an entity that can be seen from various factors such as company size, leverage and profitability. Previous studies have used those variables to describe the firm's characteristics, such as the research of Susanto *et al.*, (2019) and Gantjowati (2017). This research uses firm's size and leverage to describe firm's characteristics.

Firm's Size: A firm's size shows the size of an entity which can be seen from various aspects such as total assets, total sales, and market value of equity (Susanto *et al.*, 2019). Larger organizations typically have more resources and capabilities to engage in CSR activities and are often subject to greater stakeholder scrutiny. Large businesses receive more public attention, broader media coverage, and higher disclosure demand from important stakeholders (Dias *et al.*, 2019).

H4: Firm's size affects CSR disclosure in the highly polluted industries.

Leverage: Leverage is a mechanism employed to assess the funding of company assets supported by creditors, indicating the degree to which a company depends on debt financing. When a company has large debts, problems arise between shareholders and creditors. Creditors require disclosure of corporate social responsibility as information to evaluate risks properly. High leverage may create financial constraints, limiting a firm's ability to engage in CSR activities and disclose related information. However, firms with high leverage may face increased pressure from stakeholders to demonstrate their commitment to social and environmental issues. Consequently, they might engage in CSR activities and disclosure to enhance their legitimacy.

H5: Leverage affects CSR disclosure in the highly polluted industries

3. RESEARCH METHOD

This study employs a quantitative descriptive method to analyze the impact of factors on CSR disclosure, utilizing purposive sampling to choose its sample set, which consists of companies listed on the Indonesia Stock Exchange (IDX) that satisfy specific criteria of companies that operates in the basic material, and energy sectors and publish their annual reports for the years of 2020-2021. There are 250 companies met the criteria out of 352 companies listed on the IDX during the period of study. This study refers to the Global Reporting Initiative (GRI) G4 index to score the CSR disclosure, while the values of six variables being studied are taken from their annual and sustainability reports. This study measures independent variable with the referring to (Susanto *et al.*, 2019; Fallah *et al.*, 2019;

Harun *et al.*, 2020; Tibiletti *et al.*, 2021). Board size is determined by the total numbers of directors and commissioners in a company. Ownership concentration is determined based on the dominant share held by individuals or groups. The audit committee is determined by the total number of members of audit committee in a firm. Meanwhile, firm size is assessed by taking the natural logarithm of the total assets and leverage is determined by the debt-to-equity ratio.

The coefficients were estimated using a fixed effect regression model, which analyzed the impact of CG and FC on CSR disclosure. Model:

$$CSRSD = \alpha + \beta1BSIZE + \beta2OC + \beta3AC + \beta4SIZE + \beta5LVR + \epsilon$$

The model includes CSRSD to represents the overall score of corporate social responsibility disclosure. It uses G4 as a benchmark score. Corporate governance variables are represented by board size (BSIZE), ownership concentration (OC), and audit committee (AC). Meanwhile, firm's characteristics variables are represented by firm size (SIZE), and leverage (LVR).

4. FINDINGS

Descriptive Statistics

The author conducts statistical analysis to describe the characteristics of the variables in the model. Table 1 presents the descriptive statistics result for each variable used in this study. The level of corporate social responsibility disclosure by total score (CSRSD) has an average value of 0.3185, of which the minimum value is 0.12088 from Sinergi Inti Plastindo Tbk and the maximum value of CSRSD is 0.73626 from Medco Energi Internasional.

Table I: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CSRSD	250	.12088	.73626	.3185	.1216
BSIZE	250	4	28	8	3.282
OC	250	.08	.98	.5086	.21659
AC	250	2	5	3	.407
SIZE	250	24	33	28.70	1.64047
LVR	250	-14.39	11.32	.9966	2.27589
Valid N (listwise)	250				

The mean value of BZISE is 8, ranging from 4 to 28. The minimum BSIZE value was found in Bintang Mitra Semestaraya Tbk., Interdelta Tbk., Indo Komoditi Koporat Tbk., Sinergi Inti Plastindo Tbk., Humpus Intermoda Tbk., Capitaline Investmen Tbk., Golden Eagle Energy Tbk., and Sumber Global Energy Tbk. Meanwhile, the maximum BSIZE score was obtained from Chandra Asri Petrochemical Tbk.

The table I shows ownership concentration (OC) has a mean value of 50.86%, ranging from 8% to 98%. The minimum value of OC is found in MNC Energy Investment Tbk., and a maximum value is found in Solusi Bangun Indonesia. Audit Committee has a minimum value is 2 from Wakita Beton Precast Tbk., Ifischdeco Tbk., MNC Energy Investment Tbk., and the maximum value of AC is 5 from Indika Energy, Petrosea Tbk., and Mitrahahtera Segara Sejati Tbk., with the average score of AC during 2020-2021 is 3.

The mean value of SIZE is 28.70, ranging from the minimum value of 24 from Inter Delta Tbk., and the maximum value of 33 from Barito Pacific. The standard deviation is 1.64047. LVR has a minimum value of -14.39 from Dwi Guna Laksana Tbk., and maximum value of 11.32 from Bumi Resources Tbk. LVR has an

average value of 0.9966 and a standard deviation of 2.27589.

Multiple Regression Analysis

Next, the author performed regression analysis. The impact of each independent variable on CSRD as dependent variable will be discussed in accordance with Table II.

Table II: Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.313	.089		-14.758	.000
	Bsize	.002	.002	.062	1.345	.180
	OC	-.042	.020	-.074	-2.038	.043
	AC	.054	.012	.181	4.592	.000
	SIZE	.051	.004	.688	14.124	.000
	LVR	.002	.002	.043	1.147	.252

a. Dependent Variable: CSRD

Based on Table II, the results of the study can be concluded that the t-value of board size on corporate social responsibility disclosure shows a value of 1.345 with a p-value of 0.180. Comparing the p-value to the significance level of 0.05, it can be stated that the board size has no significant effect on CSR disclosure since the p-value is higher than the significance level. So, H1 is rejected. It might be said that board size has no bearing on CSR disclosure in highly polluted industrial companies. This finding aligns with the research conducted by Fallah *et al.*, (2019) and Tibiletti *et al.*, (2021). A bigger board size leads to less effective monitoring due to coordination issues and can encounter difficulties in making decisions, while smaller board sizes are better at monitoring and directing because they have better coordination and are less prone to free-riding. However, it does not mean that board size has no effect in all cases. Different studies may show different results due to variations in methodologies, sample sizes, industry sectors, or geographical locations. The findings of this research are inconsistent with Chen *et al.*, (2020) & Nomran *et al.*, (2020), which found that board size influences CSR disclosure. Nomran *et al.*, (2020), greater number of boards have the potential to offer a wider range of viewpoints and specialized knowledge, thereby positively impacting a company's CSR efforts and the way they communicate about them. Consequently, this finding does not support the stakeholder theory, which aims to strengthen corporations' relationships with external groups and develop competitive advantages.

According to the results show in Table II, ownership concentration (OC) significantly affects CSR disclosure, as indicated by a t-value of -2.038 and p-value of 0.043, which is less than the α -value 0.05. Therefore, ownership concentration negatively influences CSR disclosure since the direction is negative. Ownership concentration serves as a governance mechanism, implying that specific shareholders hold a

substantial amount of ownership and wield influence to oversee and control management. This implies that when ownership is more concentrated among a few individuals or entities, there is a potential disconnect between the interest of shareholders and the broader social and environmental issues that are the focus of corporate social responsibility. When ownership is concentrated, they hold significant control over company decision-making and resources. In such cases, these concentrated shareholders may prioritize their interests, such as maximizing short-term profits or protecting their control, over the long-term sustainability and social responsibility of the company. This result is in line with Ullah *et al.*, (2019) & Wicaksono *et al.*, (2016), that ownership concentration negatively affects CSR disclosure. When managers have a high level of ownership concentration in companies, it could potentially lead to reduced engagement in social activities. This arises from the notion that the expenses linked to these actions might be perceived as outweighing the advantages they offer. However, this finding is in contrast with the study of Fallah *et al.*, (2019), which found that ownership concentration has a positive effect on CSRD.

Audit committee's (AC) is found to be positive and significant to the CSRD since the value of t is 4.592, indicating statistical significance with a p-value of 0.000, which is less than the α -score of 5%. It indicates that H3 is accepted. Furthermore, a larger audit committee size enhances the committee's effectiveness in overseeing and controlling company operations. The audit committee's responsibility includes ensuring the accuracy and dependability of reports and prompting company management to disclose their social and environmental responsibilities. Fallah *et al.*, (2019), the committee's independence from management allows them to provide unbiased oversight and ensure that CSR disclosure is in line with the interests of stakeholders. Consequently, companies with larger audit committees

are more inclined to disclose information about their CSR initiatives. These results align with previous research by (Susanto *et al.*, 2019), which also revealed a positive correlation between audit committees and CSR disclosure. Fallah *et al.*, (2019) also discovered that a higher composition of the audit committee corresponds to a greater extent of CSR disclosure. These findings align with stakeholder theory, which emphasizes the importance of stakeholder accountability.

The t-value for firm size (SIZE) is 14.124, and it is as evidenced by the significance value of 0.000 and below the α -score of 0.05. The fourth hypothesis (H4) is accepted. Larger companies are considered to have more responsibility to society, so there will also be more disclosure information on annual reports, ultimately increasing corporate social responsibility activities. This result suggests that a large company possessing significant total assets will provide greater details about its CSR initiatives. This discovery aligns with the findings of Nguyen (2021), which similarly revealed a significant and positive correlation between the firm size and its level of CSR disclosure.

This study supported the theory of legitimacy, where the large companies will express higher social responsibility so that the company continues to get a positive response from other parties and the business activities can operate smoothly. As a result, they are more likely to provide more comprehensive disclosure of their CSR activities in their annual reports (D'Amato *et al.*, 2020). Moreover, Indonesian companies of larger size will possess ample financial means and a larger pool of professionals to recruit to share information. These companies maintain dedicated departments responsible for gathering, analyzing, and disseminating social responsibility data. Consequently, their corporate social responsibility disclosure index will surpass smaller enterprises. The result of this study contradicts the result of Hermawan *et al.*, (2019), which failed to demonstrate the impact of a firm's size on its CSR disclosure.

The leverage (LVR), with a value of t 1.147 and a significance value of 0.252 exceeding the α -value 0.05, does not have an impact on the disclosure of CSR. Regardless of whether a company has a high or low level of leverage, it does not affect the extent of CSR disclosure. Even if a company has a significant amount of debt, it can still prioritize its social environment and carry out CSR activities. Consequently, based on the results, the fifth hypothesis (H5) is rejected, indicating that leverage does not influence CSR disclosure. These findings align with the research conducted by Fallah *et al.*, (2019) and Marulitua (2021), which also concluded that leverage does not impact CSR disclosure. The high or low level of corporate leverage does not influence the extent of corporate social responsibility disclosure. However, it is important to consider that companies with high leverage levels may face financial constraints, which can limit their ability to allocate resources towards

CSR activities and disclosure. Meanwhile, Susanto *et al.*, (2019), companies with substantial debt obligations can still engage in corporate social responsibility activities and disclose relevant information if they have a genuine concern and sense of responsibility towards their social and environmental surroundings. However, these findings contradict the findings of Garas *et al.*, (2018), who found that leverage has an effect on CSR disclosure.

5. CONCLUSIONS

This study investigates five variables covering corporate governance and firms' characteristics concerning 91 items of CSRD in highly polluted companies. The significance of the research lies in its contribution to understanding CSR reporting in Indonesia. By creating a CSR disclosure index that integrates data from annual reports and company websites, the research reveals that Indonesian-listed companies generally have limited levels of CSR disclosure. In addition, the analysis shows that only two factors have a positive impact on CSR disclosure, namely the audit committee and firm size. While the Ownership concentration affects CSRD negatively. However, the analysis shows that the boards' size and leverage do not affect CSR disclosure.

The level of ownership concentration plays a crucial role. In other words, when ownership is concentrated, a small number of shareholders hold significant control over the company's decision-making and resources. These concentrated shareholders may prioritize their interests. Furthermore, a larger audit committee size enhances the committee's effectiveness in overseeing and controlling company operations. The firm size also has a significant effect on CSR disclosure. Larger companies are considered to have more responsibility to society, so there will also be more disclosure information on annual reports, ultimately increasing corporate social responsibility activities. This result indicates that a big firm with high total assets will disclose more information about its CSR activities.

The majority of study on CSRD has been carried out in developed countries, and there has been limited exploration in developing countries, specifically in Indonesia. Hence, the outcomes of this research provide valuable information for policymakers and professionals in Indonesia. Additionally, since this research focuses on industries with high pollution levels, the results are relevant for Indonesian companies that contribute to pollution, aiding in the identification of governance characteristics that encourage greater CSR disclosure.

However, it is important to acknowledge the limitations of this research. Firstly, specific variables were employed to measure corporate governance (CG), suggesting that future research should evaluate additional variables like board diversity (such as the board's age and specialized expertise) and the extent of

shareholders' involvement. Secondly, the research sample is limited to companies that produce high pollution therefore these findings are not suitable to be applied to all entities in Indonesia. Nevertheless, a comparison can be made between the results and companies operating in different industries. Thirdly, this research only considered two years for the period of research which is very limited. In future research, a more comprehensive understanding of this phenomenon would be achieved by examining data over a longer duration.

REFERENCES

- Bidari, G. (2020) Factors influencing corporate social responsibility disclosures in Nepalese banks. *Asian Journal of Accounting Research*, 5(2), 209–224. DOI 10.1108/AJAR-03-2020-0013
- Firmansyah, A. and M. B. W. (2018). *Pengantar Manajemen*. Deepublish.
- Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, 1(1). <https://doi.org/10.1186/s40991-016-0004-6>
- Farhan, Z. R. (2021). The Effect of Corporate Governance Attributes and Profitability on Sustainability Reporting Disclosure: Evidence from Leading Companies Listed at FTSE Russel Sharia Compliant Index in Asia Pacific Year 2016-2020. Universitas Syiah Kuala.
- Nguyen, T. H., Vu, Q. T., Nguyen, D. M., & Le, H. L. (2021). Factors influencing corporate social responsibility disclosure and its impact on financial performance: the case of Vietnam. *Sustainability (Switzerland)*, 13(15). <https://doi.org/10.3390/su13158197>
- Faizal, A. (2021). Akibat Bencana Lumpur Lapindo, Pemkab Sidoarjo Ajukan Penggabungan 8 Desa Menjadi 4 Desa. *Kompas.Com*. <https://regional.kompas.com/read/2021/05/31/212657778/akibat-bencana-lumpur-lapindo-pemkab-sidoarjo-ajukan-penggabungan-8-desa?page=all>
- Nuraida, I. (2012). The Practice of Corporate Social Responsibility of Pt Newmont Minahasa, South East Minahasa, North Sulawesi, Indonesia. *Bina Ekonomi*, 16(1), 77–92.
- IQAir. (2022). *World's most polluted countries & regions (historical data 2018-2022)*. <https://www.iqair.com/world-most-polluted-countries>
- Chen, Z., & Hamilton, T. (2020). What is driving corporate social and environmental responsibility in China? An evaluation of legacy effects, organizational characteristics, and transnational pressures. *Geoforum*, 110, 116–124. <https://doi.org/10.1016/j.geoforum.2020.02.004>
- Susanto, Y. K., & Joshua, D. (2019). Pengaruh Tata Kelola Perusahaan Dan Karakteristik Perusahaan Terhadap Pengungkapan Tanggung Jawab Sosial Perusahaan. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 2(4), 572–590. <https://doi.org/10.24034/j25485024.y2018.v2.i4.4036>
- Fallah, M. A., & Mojarrad, F. (2019). Corporate governance effects on corporate social responsibility disclosure: empirical evidence from heavy-pollution industries in Iran. *Social Responsibility Journal*, 15(2), 208–225. <https://doi.org/10.1108/SRJ-04-2017-0072>
- Quynh Lien Le, Lan Huong Nguyen, Viet Hoa Dinh, Thi Thu Huyen Luong, Thi Khanh Linh Pham & Thi Hai Ly Nguyen (2023) Factors affecting corporate social responsibilities disclosure of listed companies in Vietnam, *Cogent Business & Management*, 10:1, DOI: 10.1080/23311975.2022.2160578 <https://www.tandfonline.com/doi/full/10.1080/23311975.2022.2160578>
- Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *The Pacific Sociological Review*, 18(1), 122–136. <https://doi.org/10.2307/1388226>
- Deegan, C. (2002). Introduction: The Legitimising Effect of Social and Environmental Disclosures—A Theoretical Foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>
- Hopkins, M. (2005). The Fortune to be Gained by CSR: Part 1. *MHCi Monthly Feature*. 27(4), 328–346. <https://doi.org/https://doi.org/10.1177/1086026614535786>
- Rinawiyanti, E. D., Xueli, H., & As-Saber, S. N. (2022). Integrating corporate social responsibility into business functions and its impact on company performance: Evidence from the Indonesian manufacturing industry. *Social Responsibility Journal*. <https://doi.org/10.1108/SRJ-05-2021-0193>
- Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, 51, 101083. <https://doi.org/10.1016/j.ribaf.2019.101083>
- Harun, M. S., Hussainey, K., Mohd Kharuddin, K. A., & Farooque, O. Al. (2020). CSR Disclosure, Corporate Governance and Firm Value: a research on GCC Islamic Banks. *International Journal of Accounting and Information Management*, 28(4), 607–638. <https://doi.org/10.1108/IJAIM-08-2019-0103>
- Ullah, M. S., Muttakin, M. B., & Khan, A. (2019). Corporate governance and corporate social responsibility disclosures in insurance companies. *International Journal of Accounting & Information Management*.
- Wicaksono, M., & Paryanto, P. (2016). Pengaruh karakteristik perusahaan terhadap luas pengungkapan corporate sosial responsibility (CSR) perusahaan manufaktur yang terdaftar di bursa efek

- Indonesia tahun 2012-2013. *Jurnal Akuntansi Dan Pajak*, 16(02). <https://doi.org/10.29040/jap.v16i02.134>
- Sari, A. A. Pt. A. M. P., & Ardiana, P. A. (2014). Pengaruh Board Size Terhadap Nilai Perusahaan. *E-Jurnal Akuntansi Udayana*, 7, 177–191.
 - Untoro, Arini, D., & Zulaikha. (2013). Pengaruh Karakteristik Good Corporate Governance (GCG) terhadap Luas Pengungkapan Corporate Social Responsibility (CSR) di Indonesia. *Diponegoro Journal of Accounting*, 2(2), 2337–3086.
 - Gantjowati, E. (2017). Firm's Characteristics and CSR Disclosure, Indonesia and Malaysia Cases. *Review of Integrative Business and Economics Research*, 6(3). <http://buscompress.com/journal-home.html>
 - Dias, A., Rodrigues, L. L., Craig, R., & Neves, M. E. (2019). Corporate social responsibility disclosure in small and medium-sized entities and large companies. *Social Responsibility Journal*, 15(2), 137–154. <https://doi.org/10.1108/SRJ-05-2017-0090>
 - Tibiletti, V., Marchini, P. L., Furlotti, K., & Medioli, A. (2021). Does corporate governance matter in corporate social responsibility disclosure? Evidence from Italy in the “era of sustainability.” *Corporate Social Responsibility and Environmental Management*, 28(2), 896–907. <https://doi.org/10.1002/csr.2097>
 - Nomran, N. M., & Haron, R. (2020). Shari'ah supervisory board's size impact on performance in the Islamic banking industry: An empirical investigation of the optimal board size across jurisdictions. *Journal of Islamic Accounting and Business Research*, 11(1), 110–129. <https://doi.org/10.1108/JIABR-05-2017-0070>
 - D'Amato, A., & Falivena, C. (2020). Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. *Corporate Social Responsibility and Environmental Management*, 27(2), 909–924. <https://doi.org/10.1002/csr.1855>
 - Hermawan, A., & Gunardi, A. (2019). Motivation for disclosure corporate social responsibility: evidence from banking industry in Indonesia. *Entrepreneurship and Sustainability Issues*, 6(3). [https://doi.org/10.9770/jesi.2018.6.3\(17\)](https://doi.org/10.9770/jesi.2018.6.3(17))
 - Marulitua, AK., MBA., CPA., CA., S. (2021). Pengaruh Likuiditas dan Leverage Terhadap Pengungkapan Corporate Social Responsibility Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2015-2019. *Jurnal Akuntansi Dan Bisnis Krisnadwipayana*, 8(2). <https://doi.org/10.35137/jabk.v8i2.544>
 - Garas, S., & ElMassah, S. (2018). Corporate governance and corporate social responsibility disclosures: The case of GCC countries. *Critical Perspectives on International Business*, 14(1), 2–26. <https://doi.org/10.1108/cpoib-10-2016-0042>

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