GREEN GAS EMISSIONS AND CORPORATE GOVERNANCE: FINANCIAL INDUSTRY IN INDONESIA AND MALAYSIA

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ABSTRACT

The accelerating threat of climate change increases the importance of corporate commitment to the climate transition, including the important role of the financial industry in aligning with net zero emissions goals. The International Sustainability Standards Board has issued the latest standards in 2023 related to general requirements and a climate that encourages every organization to report a sustainability report. This research was conducted to determine the relationship between organizational governance and the emissions produced (green gas emissions) which will indirectly affect climate change. This research took samples from the financial industry and public companies contained in the S&P database. This research uses a quantitative approach to find out the relationship of organizational governance and emissions. The research will provide benefits to the literature related to the role of governance in the management of emissions produced by organization.

Keywords: Green Gas Emission, Climate, Corporate Governance, Financial Industry

1. INTRODUCTION

Climate has emerged as a significant global environmental issue and has garnered considerable attention. The gases as known greenhouse gases are compounds which possess the ability to retain heat within the Earth's atmosphere, thereby inducing the greenhouse effect, consequently playing a role in the phenomenon of global warming and alterations in the Earth's climate. The phenomenon of climate change has given rise to a rise in the frequency of extreme weather events across the globe, consequently leading to disruptions in ecological equilibrium, environmental degradation, and interference with regular production and societal order. Malaysia witnessed an annual escalation in its CO2 emissions, culminating in 251.6 million tonnes in the year 2021. The government has set a target of achieving a 45% reduction in carbon intensity by the year 2030 (Azlan, Rahman, & Mohamad, 2023). In the same thing, The Global Carbon Project shows that Indonesia is included in the list of the 10 largest carbon emitting countries in the world.

There is an increasing awareness of environmental change, especially in the area of economics and business. The company began to implement the concept of corporate social responsibility (CSR). This concept originated as a discretionary practice rooted in principles of human rights, and has progressed to become a compulsory procedure wherein organizations integrate objectives related to sustainability. This framework encompasses the well-known ESG dimensions (Environmental, Social, and Governance), extending beyond the conventional boundaries of CSR. To comprehend the process under consideration from this viewpoint, there exist numerous pivotal components: the financial downturn witnessed in 2008–2009 and its subsequent repercussions, primarily on the financial domain, prompting a necessity to fortify corporate governance; the environmental initiatives undertaken by the European Union and its international obligations, particularly stemming from the 2015 Paris Accord, instigating a comprehensive shift in regulations towards sustainability, a transformation that will persist in the foreseeable future; and the ramifications of the Guidelines for Effective Governance.

Furthermore, this concept not only extends to companies that directly produce outputs that affect the environment directly but also affects the financial sector. The term CSR has evolved rapidly and is now used as green banking in the financial sector. Green banking pertains to the practice of operating banking activities in a manner that diminishes external carbon emissions as well as internal carbon footprint. Financial institutions are encouraged to support environmentally friendly technology and initiatives aimed at mitigating pollution to assist in the reduction of external carbon emissions. The incorporation of green finance within the framework of Green Banking plays a pivotal role in facilitating the shift towards resource-efficient and low-carbon sectors, thereby fostering the development of a sustainable green economy (Meena, 2013)

Several previous studies have found that good corporate governance will have an impact on a business's contribution to emissions. Board of directors positively affects carbon emission disclosure in Indonesia (Simamora, Safrida, & Elviani, 2022).Companies that release higher levels of greenhouse gases are at a greater risk of experiencing significantly unfavorable stock returns, particularly after the enactment of the Paris Agreement in 2015, especially within sectors known for their substantial emission rates. Improving their

ecological footprint has the potential to cultivate increased confidence from the market and result in various benefits (Aljughaiman, Cao, & Albarrak, 2021)

Internal green practices, such as pollution prevention and green supply chain management, yield a greater positive influence on financial performance in contrast to external green practices such as green product development (Miroshnychenko, Barontini, & Testa, 2017). Corporate governance mechanisms exert an impact on the environmental performance of firms and play a role in harmonizing the interests of stakeholders and managers in relation to environmental initiatives. (Kock, Santaló, & Diestre, 2010). Environmental performance, as assessed through the quantification of greenhouse gas emissions, holds significant importance in shaping the strategic decisions of businesses at the corporate level as well as influencing environmental policies established by governmental bodies at both domestic and global scales. (Hassan & Romilly, 2018). Companies that possess a more robust environmental governance framework encounter reduced obstacles in obtaining financing. (Li, Zheng, Zhang, & Cui, 2020).

2. LITERATURE REVIEW

2.1 International Financial Reporting Standard

In 2022 the International Sustainability Standards Board (ISSB) will publish special standards related to sustainability. IFRS S1 mandates that an organization must divulge details concerning all sustainability-related risks and opportunities that have the potential to impact the organization's cash flows, as well as its ability to secure financing or the expenses associated with capital, across short, medium, or extended timeframes. IFRS S2 necessitates an organization to divulge data regarding climate-related uncertainties and advantages that have the potential to impact the organization's cash inflows, its ability to obtain funding, or its capital expenses in the near, intermediate, or distant future. IFRS S1 becomes applicable for financial reporting periods starting on or after 1 January 2024, allowing for early adoption if accompanied by the application of IFRS S2 Climate-related Disclosures.

IFRS S1 specifies that the information intended for disclosure should be beneficial to the "primary users" of the financial statement (current and potential investors, creditors, and other lenders) who determine the allocation of resources to the organization. A company is mandated to reveal details on four foundational aspects, drawn from the TCFD and tailored to sustainability disclosures: Governance encompasses the processes, controls, and protocols of corporate governance utilized to supervise and address risks and opportunities impacting the sustainability of the firm. Disclosure should encompass the identification and monitoring responsibilities, technical competencies, ESG-associated remuneration aspects, among others. Strategy pertains to the methodology for handling sustainability-linked risks and opportunities that could influence the business model in the short, medium, and long terms. Risk management involves the entity's procedures, controls, and processes for recognizing, evaluating, and mitigating risks. Metrics and objectives encompass information utilized to appraise, manage, and oversee the institution's performance over time concerning identified risks and objectives. The sustainability regulations are designed to simplify the evaluation of the 'company's value,' defined as the amalgamation of a company's capital (market capitalization) and the net debt value, while also considering the entity's impact and interdependencies on individuals, the environment, and the economy.

Studies have been carried out related to the implementation of the standards carried out. Research carried out in Poland revealed that a mere 34% of businesses in the country incorporate ESG considerations into their operational strategies, while only 18% of these enterprises provide public disclosure of pertinent data concerning their ESG goals and initiatives (Indyk, 2022).

2.2 Corporate governance

Corporate governance (CG) serves as a crucial theoretical and ideological arena within the realms of both management theory and practice. Distinguished scholars in the field of law and economics have articulated the contention that the agency theory perspective on CG, which prioritizes the concerns of shareholders, is ethically preferable when compared to other viewpoints (Stoelhorst, 2024). Governance structures encompass both formal and informal regulations and processes governing the accumulation, development, and allocation of resources within an organization, as well as the distribution of its output, and the resolution of conflicts of interest arising from group dynamics.

Traditional models of Corporate Governance operate under the assumption that the issues of market power and externalities can be adequately addressed through regulatory measures put in place by governmental authorities. However, it is important to note that the effectiveness of such regulations at the national level may be limited when confronted with the challenges posed by global market power and externalities on a worldwide scale. The manuscript formulates a stakeholder theory of corporate governance based on classical property rights theory, challenging the assertion that shareholder primacy represents the sole effective model, and proposing that a stakeholder perspective could better align with contemporary corporations confronting worldwide challenges (Stoelhorst, 2024).

3. RESEARCH METHOD

This research uses descriptive quantitative methods. There are 91 companies in the financial sector but there are 62 companies that are not included in the data processing so that the data provided is incomplete. Therefore, the total sample used amounted to 29 companies engaged in the financial industry consisting of 15 samples from Indonesia and the rest from Malaysia. The data used is taken from the S&P database in Mey 2024. The list of companies used is in the table 3.1

Gas emissions are measured from GHG Scope 1 in tonnes/$mm. This may encompass emissions originating from various sources such as transportation through the burning of fuel in company-owned fleet vehicles, combustion of fuels in stationary equipment like boilers, furnaces, and incinerators, as well as the manufacturing or processing of materials and chemicals like cement production, aluminum smelting, and petrochemical processing. Additionally, it includes fugitive emissions, which involve methane release from coal mines, and the generation of electricity through coal combustion. Further,corporate governance is represented by the number of female directors. Data is taken also from S&P database.

No.	Indonesian Company
1	P.T. Bank Pan Indonesia Tbk
2	PT Allo Bank Indonesia Tbk
3	PT Bank Aladin Syariah Tbk
4	PT Bank KB Bukopin Tbk
5	PT Bank Mandiri (Persero) Tbk
6	PT Bank Negara Indonesia (Persero) Tbk
7	PT Bank OCBC NISP Tbk
8	PT Bank Permata Tbk
9	PT Bank Rakyat Indonesia (Persero) Tbk
10	PT Bank Raya Indonesia Tbk
11	PT Bank Syariah Indonesia Tbk
12	PT Bank Tabungan Negara (Persero) Tbk
13	PT Pacific Strategic Financial Tbk
14	PT Panin Financial Tbk
15	PT Saratoga Investama Sedaya Tbk

No.	Malaysian company
1	AEON Credit Service (M) Berhad
2	AFFIN Bank Berhad
3	Alliance Bank Malaysia Berhad
4	AMMB Holdings Berhad
5	Bank Islam Malaysia Berhad
6	Bursa Malaysia Berhad
7	CIMB Group Holdings Berhad
8	Hong Leong Bank Berhad
9	Hong Leong Financial Group Berhad
10	Malayan Banking Berhad
11	Malaysia Building Society Berhad
12	Public Bank Berhad
13	RHB Bank Berhad
14	Syarikat Takaful Malaysia Keluarga Berhad

Table 3.1 List of sample companies

4.RESULT AND DISCUSSION

Corporate governance is expressed in female directors where Indonesia has the highest frequency of female directors with 3 members owned by PT Bank Rakyat Indonesia (Persero) Tbk. Malaysia has an average of 4 female director members as many as 5 companies, namely: AEON Credit Service (M) Berhad, AFFIN Bank Berhad, CIMB Group Holdings Berhad, Hong Leong Financial Group Berhad, and Malayan Banking Berhad. Malaysia has at least 2 female directors. In other words, in our sample, all financial sector companies in Malaysia have female directors. This can be shown by the line chart in the figure 4.1. While in Indonesia, there are still 7 companies that do not have female directors in the company.

The average carbon emission produced in Indonesia is 10.74 tonnes/$mm. While Malaysia is only 0.63. The sample company in Indonesia that produces the highest carbon emissions is PT Bank Aladin Syariah Tbk with 127.28 tonnes/$mm and the next is PT Bank Rakyat Indonesia (Persero) Tbk with 14.66 tonnes/$mm. In Malaysia, Bursa Malaysia Berhad and Malayan Banking Berhad produced the most carbon emissions at 1.42 tonnes/$mm and 1.79 tonnes/$mm respectively. This can be shown by the line chart in the figure 4.2

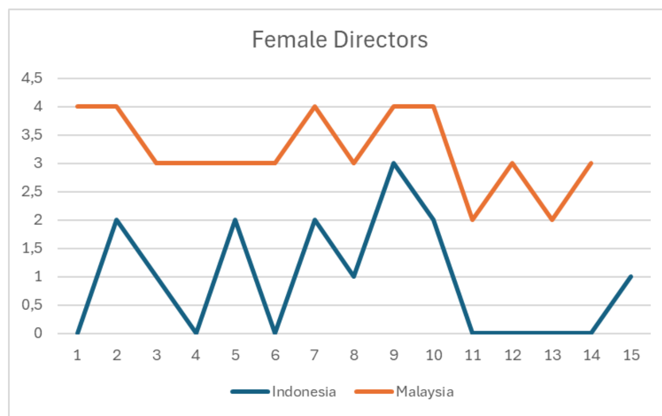

Figure 4.1

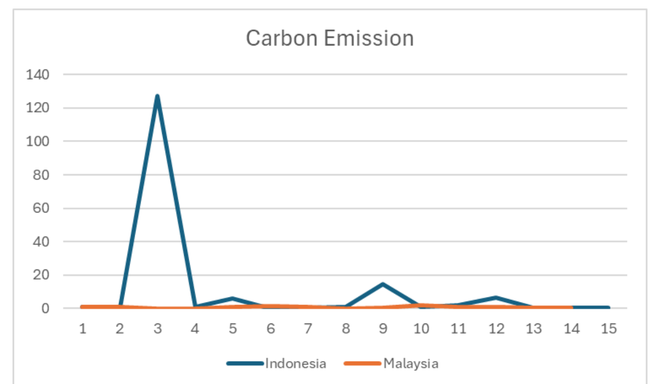

Figure 4.2

The comparison between the two countries shows significant differences, especially in corporate governance expressed in female directors. Malaysia has been very open about the importance of the role of women as decision makers in the company. This is evidenced by the presence of female directors in all companies in Malaysia. This is in contrast to Indonesia where the role of women in this sector has not fully amounted to a significant amount compared to Malaysia. Furthermore, the comparison between governance and

carbon emissions is explained as follows: Malaysia has female directors in all companies with relatively less carbon emissions compared to Indonesia. Indonesia has a larger average production of carbon emissions while some companies do not have female directors.

Previous research has linked the role of female directors as decision makers. International background of female executives, in particular their professional background, has a notable positive influence on the ecological and sustainable outcomes of corporations (Ullah, Jiang, Ntim, Shahab, & Jiang, 2022). Further, previous research has shown that female directors play a favorable role in shaping dividend policy in the Indonesian banking industry. Additionally, the participative leadership approach employed by female directors has a constructive effect on engaging shareholders in the decision-making procedures (Syahfitri & Risfandy, 2023). Than, there is a positive and noteworthy correlation observed between the involvement of female directors and the level of innovative activities within firms (Vafaei, Henry, Ahmed, & Alipour, 2021).

5. CONCLUSION

The conclusion of this study is the need for good governance in decision-making, especially in the company's policy on gas emission management. Furthermore, this study discusses the role of female directors in making important decisions for the business. Future research is expected to develop other factors that can influence company policies in reducing company gas emissions.

The limitations of this research only discuss one context of corporate governance, so that in the future further research can be developed that can expand the perspective of corporate governance.

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