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President Commissioner Attributes and Climate Change Disclosure: Evidence from Indonesian Banking Companies

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ABSTRACT

Purpose : In recent years, there has been an increased demand for information regarding companies' risk management efforts and opportunities related to climate change. The lack of concrete evidence about companies' efforts to address the impacts of climate change highlights the importance of climate change disclosure. The purpose of this study is to examine the influence of the attributes of the president commissioners (gender, age, and nationality) on climate change disclosure.
Method : The study focuses on listed entities within the banking sector from 2020 to 2022 using a quantitative research methodology. The purposive sampling technique was used to gather a sample size of 129 observations. The data was analyzed using Stata 16.
Findings : The results indicate that companies with female president commissioners tend to disclose less about climate change, while age and foreign nationality positively impact disclosure. These findings align with the upper-echelon theory and have significant practical implications. The findings underscore the need for policymakers to consider the president commissioner's characteristics when developing strategies to promote climate change disclosure, given the growing importance of sustainability concerns. The robustness checks on the regression results consistently support these findings.
Novelty : The president commissioner plays a crucial role in determining the success of climate change disclosure. Previous studies have analyzed commissioners' educational backgrounds, while other crucial traits for supporting climate change disclosure, such as gender, age, and nationality, still lack empirical evidence. Additionally, there is still little attention given to the banking industry.

INTRODUCTION

Sustainability is an important issue that is closely related to climate change. The climate change phenomenon significantly impacts environmental, social, and economic sustainability. Studies have warned that climate change is hampering global growth (Wade & Jennings, 2016), reducing gross domestic product (Burke et al., 2016), and affecting financial stability (Campiglio et al., 2018). Earth's average temperature has risen by 1°C above pre-industrial levels due to greenhouse gas emissions and changes in albedo. Limiting total warming to less than 2 °C will be challenging, let alone achieving the more ambitious goal of 1.5°C to avoid climate risks (Intergovernmental Panel on Climate Change, 2018). Sustainability is a significant challenge that requires collective efforts, including business entities.

The clamor for climate action in the business sector is on the rise, initially targeting industries that significantly contribute to carbon emissions, such as fossil fuels, forestry, and raw mineral extraction. However, the focus is now increasingly shifting towards the financial sector. While the core activities in the financial sector do contribute to carbon emissions through energy, water, and other materials, the current attention is more on the climate change implications associated with financial products and services. Climate change poses substantial risks to banks as it

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can devalue loan collateral assets and borrower income (Bellrose et al., 2021). The indirect impact of carbon emissions caused by the financial sector, whether through borrowers, investment recipients, or funded projects, is considerably more significant than the direct impact of the financial industry itself (Folger-Laronde & Weber, 2018). This is in contrast to other sectors, such as mining, which directly exert great pressure on the climate problem (Sun et al., 2020).

Climate change increases complex risks, including credit, market, and operational risks for banks (England, 2018). Investors demand transparent disclosure of risks related to climate change because it influences judgments and investment decisions (South et al., 2021). Banks play a crucial role in climate-related strategies and disclosures as they have a fiduciary obligation to report on business risks and comply with increasingly stringent regulations. Climate-related disclosures are essential in facilitating corporate action to address climate issues. With comprehensive data on the location of climate-related emissions and risks in their operations, companies can effectively reduce their greenhouse gas emissions and increase their resilience to the impacts of climate change. The global financial industry's initiation and commitment to addressing climate change and sustainable development through reliable disclosure must be encouraged. Sustainable development is central to all development efforts, and sustainable banking practices are a powerful catalyst for achieving it (Mishra & Sant, 2024).

Recent studies have found that the impact of climate change disclosures on stock market valuations of banks is less clear (Bolton & Kacperczyk, 2021). The Greenhouse Gas Protocol defines emissions in 3 scopes, which are also included in the Task Force on Climate-related Disclosures (TCFD). For banking companies, emissions related to the main business should fall under scope 3. However, based on the examination, although scope 3 emissions are often reported, companies usually exclude emissions related to financial assets and if information is provided, it tends to be partial and inconsistent (Giuzio et al., 2019). Thus, climate change disclosures in banks tend to vary, moreover there is no regulation that strictly regulates climate change disclosures in Indonesia.

Several studies have illuminated the concept of sustainable development in the financial industry. For example Caby et al. (2020) explores the determinants that influence the commitment and quality of voluntary carbon disclosure, particularly at the bank level (financial performance, leverage, assets, and age) and country level (developing and developed). Previously Kılıç & Kuzey (2019a) it was found that the determinants that positively influenced climate change disclosure were size, profitability, bank age, and listing status. A recent literature review on climate change (Setiawan et al., 2023), reveals a scarcity of empirical evidence regarding the relationship between top management characteristics such as president commissioner and climate change disclosure. Studies that bring into focus the governance aspects of climate change disclosure include board characteristics, with most research concentrating on the context of developed countries (Cosma et al., 2022; Toukabri & Mohamed Youssef, 2023). Still within the context of developed countries, Alshahrani et al. (2024) tests governance as a moderating factor in audit fees and climate change disclosure. Rodríguez-Jasso et al. (2024) highlight the potential of studying governance and climate change in developing countries like Indonesia. Saha & Khan (2024) and Bedi & Singh (2024) delve into the characteristics of boards in developing countries. Ehlers & Packer (2017) explore the issuance of green bonds as a tool for financing sustainable projects and fostering transparency in the financial sector. Sachs et al. (2019) provide evidence that integrating green finance principles into banking practices can significantly reduce global carbon emissions by encouraging eco-friendly investments. However, these studies have not yet honed in on the characteristics of presidential commissioners, which are considered critical factors in implementing corporate governance.

Governance is a core element that needs to be conveyed in climate change disclosures as recommended (TCFD (Task Force on Climate-related Fiancial Disclosures), 2021). Effective management of climate change's financial risks and opportunities requires direct oversight and executive leadership, starting with the board of commisioners (CDSB (Climate Disclosure Standards Board), 2019). Leadership determined that crucial climate change factors should be identified, assessed, measured, managed, and reported as part of the business drivers (Santoso & Setiawan, 2024). The presidential commissioner plays a vital role in determining the success of climate change disclosure. His duties and responsibilities are coordinating the board of commissioners to ensure that company decisions are made transparently and accountably, communicating the wishes of shareholders in the decision-making process to be forwarded to the board of directors, ensuring that the company runs following its vision and mission, which is very valuable in realizing climate change disclosure. Therefore, recognizing the characteristics of presidential commissioners is important.

Rahayu & Djuminah (2022) examined the educational background of the principal commissioner for sustainable financial development. The study also considered other characteristics of independent commissioners, such as gender, age, and nationality, which were important in supporting climate change disclosure. Hossain et al (2017) stated that the implications of the findings are clear-companies need to address gender equality issues in the boardroom. There was a positive association between the proportion of women on the board and climate change disclosures. Furthermore, the result discovered that the presence of women on board committees increased disclosures about climate change, although, in terms of proportion to the overall board, it had no effect (Ararat & Sayedy, 2019). However, it's important to note that other studies have found no influence of female directors on the disclosure of climate change and corporate sustainability issues (Chakraborty & Dey, 2023); (Kutlu Furtuna & Sönmez, 2024).

Age, a sensitive factor, holds a significant influence on decision-making. Broadly speaking, the older the com-

missioner, the more extensive their experience and the more acute their sensitivity to company resources and the environment. Previous studies have explored the topic of board age diversity and its positive impact on company performance (Ferrero-Ferrero et al., 2015). Katmon et al. (2019) brought to light a potential drawback of age diversity, indicating that it can hinder CSR disclosure; the perspectives of the younger generation might not be readily accepted by their older peers, thereby creating obstacles to decision quality. This suggests that age diversity, while beneficial in many aspects, can also pose challenges in certain situations. However, a more specific study on the age of presidential commissioners and its impact on the disclosure of changes is yet to be undertaken.

Companies with more foreign commissioners tend to disclose information about carbon emissions more often (Kılıç & Kuzey, 2019b). The national factor is essential in determining the presidential commissioner's efforts to encourage reliable climate change disclosure. On the other hand, Jaaffar et al. (2019) and Ummah & Setiawan (2021) found that nationality did not affect climate change disclosure.

Upper Echelon Theory (UET) asserts that the characteristics of top management, including CEOs, can significantly influence strategic decisions and organizational outcomes (Hambrick & Mason, 1984). UET also highlights the pivotal role of leaders in a company, who are not just figureheads but essential actors shaping their subordinates (Kolev & McNamara, 2022; Neffe et al., 2022; Prosvirkina & Wolfs, 2021). This theory underscores that the attributes of top management, particularly those of the CEO, can be potent predictors of the decision-making process and corporate strategy (Khalid et al., 2022). This predictive power of CEO attributes offers a fascinating avenue for research and understanding in the field. UET also underscores the importance of both observable characteristics (e.g., age, gender, experience, educational path, and socioeconomic status) and unobservable characteristics in strategic decision-making (Hambrick & Mason, 1984).

Climate change disclosure reports include narrative and risk disclosure, CSR disclosure, and forward-looking disclosure (Bassyouny et al., 2020). In the context of climate change disclosure reports, Bassyouny et al. (2020) revealed that top management has more flexibility in developing narratives with stakeholders, so the characteristics of top management determine how the narrative is presented in climate change disclosure reports. Companies with capable managers tend to prepare climate change disclosures (Daradkeh et al., 2023). It is in line with UET, where a firm's strategic choices and outcomes are predicted by the characteristics of its top managers (Hambrick & Mason, 1984). The CEO's background in reporting climate change reports helps companies make Voluntary Climate Change Reporting (CVVR) decisions (Khalid et al., 2022). Thus, UET increasingly supports how the characteristics of the president-commissioner influence the extent to which companies disclose climate change. As top management, the president-commissioner has an essential role as the leading actor in determining the effectiveness of the supervision system. The president commissioner plays a role in coordinating all management in a company, following UET (Ermawati & Soewarno, 2024). The characteristics of the president commissioner used in this research are age, gender, and nationality of the president commissioner.

The leader's decision-making, values , and interests are influenced by gender. Leaders' responsibilities, understanding, and risk preferences tend to differ between men and women (Habib & Hossain, 2013; Setiawan et al., 2024; Zalata et al., 2022). Ararat & Sayedy (2019) revealed a positive trend-the presence of women on board committees led to increased disclosures about climate change, a promising sign of the potential for change. However, this effect was not proportional to the overall board. In the field of carbon disclosure research, it is established that the presence of women on the board of commissioners impacts carbon disclosure (Rizti & Utama, 2022). Women are recognized for their heightened sensitivity to the environment and society (Tingbani et al., 2020), but they also tend to be risk-averse (Croson & Gneezy, 2009).

H_1: Gender of president commissioner has a significant influence on climate change disclosure

Physiological research shows that older individuals tend to be more responsible and careful in making decisions than younger individuals; therefore, older individuals are more likely to provide a neutral and fair picture of company performance (Ashton & Lee, 2016). UET explains that older leaders make decisions more conservatively and cautiously (Hambrick & Mason, 1984). On the other hand, Katmon et al. (2019) found that age diversity negatively influences CSR disclosure; parents may not welcome the younger generation's opinions, thereby creating obstacles in making quality decisions. Sanno (2021) who found that older age increases sustainability reporting. Age represents the experience possessed by the presidential commissioner.

H_2: President commisioner age has a significant influence on climate change disclosure

The nationality of the presidential commissioner can influence climate change disclosure through a combination of cultural factors, regulations, social pressure, international experience, and personal values. This statement is not arbitrary, but is supported by the UET, which posits that a leader's effort, knowledge, and experience are key determinants of a company's success (Akram et al., 2020; Neffe et al., 2022; Prosvirkina & Wolfs, 2021). Individual characteristics and national context can impact company policies and practices regarding sustainability and environmental issues, such as climate change disclosure. UET further underscores the leader's role in a team's success (Mahsina & Agustia, 2023). Therefore, the presence of a presidential commissioner with a diverse national background can enhance a company's performance. Nationality diversity encourages independence and transparency, likely increasing information disclosure to critical stakeholders. Relevant research also shows that the board's country

of origin can drive performance improvements (Garcia-Blandon et al., 2019). Companies that have more foreign commissioners tend to disclose information about carbon emissions more frequently (Kılıç & Kuzey, 2019b).

H_3: President commissioner nationality has a significant influence on climate change disclosure

RESEARCH METHODS

This quantitative research emphasizes the analysis of numerical data or numbers obtained by statistical methods. It tested inferential research or hypotheses so that the significance of the relationship between presidential commissioner characteristics, such as age, gender, and nationality on climate change disclosure is obtained.

The population of this research is the banking sector from 2020 to 2022, with 43 banking companies involved. The financial industry, despite its smaller direct environmental impact compared to industries like mining and manufacturing, plays a pivotal role as a research subject due to its indirect influence on sustainability. Financial institutions act as intermediaries that fund various economic activities, including those in environmentally intensive sectors such as energy and manufacturing. By studying banks, researchers can examine how they incorporate environmental, social, and governance (ESG) considerations into their operations, which significantly shape the sustainability practices of other industries. As Weber (2014) highlights, sustainable banking practices create a ripple effect by promoting responsible investments across sectors, underscoring the importance of focusing on financial institutions. Moreover, the financial sector is instrumental in achieving the Sustainable Development Goals (SDGs), particularly by financing renewable energy projects, green technologies, and social development initiatives. Scholtens (2006) emphasizes that banks, as key players in aligning financial flows with sustainability agendas, are uniquely positioned to drive positive environmental change. Additionally, while the financial industry's physical environmental footprint is smaller, its indirect impact through lending and investment portfolios is substantial. Green finance initiatives by banks are crucial for reducing global carbon emissions, making the financial sector an essential area of study for understanding broader sustainability dynamics (Khan et al., 2022; Krastev & Krasteva-Hristova, 2024). These factors collectively establish the logic and urgency of choosing banks as research samples in studies related to environmental and social impact.

This study uses purposive sampling to determine the sample size. The criteria are required data in annual and sustainability reports, such as information on climate change disclosure (CCD), characteristics of presidential commissioners (including age, nationality, and gender), company size, leverage, and foreign ownership. The comprehensive nature of our data sources, including annual and sustainability reports, ensures the thoroughness of our study. Thus, the number of samples obtained is 129 observations. This research uses the following sources to collect the necessary data: climate change disclosure from the annual report and sustainability report, president commissioner gender, age, and nationality, leverage, firm size, and foreign ownership from the annual report of 43 banking-related.

Table 1. TCFD Index on Climate Change Disclosure

Climate Change Disclosure	Description
Governance	1) Explain how the board monitors the opportunities and hazards associated with climate change.
	2) Explain the role that management plays in identifying and controlling the opportunities and hazards associated with climate change.
Strategy	1) Describe the short, medium, and long-term climate-related risks and opportunities that the company has identified.
	2) Describe how the organization's operations, strategy, and financial planning are affected by climate-related risks and opportunities.
	3) Explain the organization's strategy's resilience while accounting for various climate-related scenarios, such as one with temperatures of 2°C or less.
Risk Management	1) Explain the organization's procedures for determining and evaluating hazards associated with climate change.
	2) Explain the organization's procedures for handling hazards associated with climate change.
	3) Explain how the organization's entire risk management incorporates procedures for recognizing, evaluating, and managing climate-related risks.
Matrics and Targets	1) In accordance with its strategy and risk management procedure, reveal the metrics that the firm uses to evaluate climate-related risks and opportunities.
	2) Report greenhouse gas (GHG) emissions from Scope 1, Scope 2, and, if applicable, Scope 3, together with the associated hazards.
	3) Describe the organization's goals for managing climate-related risks, opportunities, and performance in relation to those goals.

Table 2. Variable Measurement

Variable	Measurement	Data Source
Dependent Variable		
Climate Change Disclosure (CCD)	CCD are measured using an index provided by Task Force on Climate-Related Financial Disclosures (TCFD), consist of Governance, Strategy, Risk Management, and Metrics and Targets.	Annual Report and Sustainability Report
Independent Variables		
Gender of President Commissioner (GEN)	Dummy variable, "1" for female commissioner, "0" vice versa.	Annual Report
President Commissioner Age (AGE)	Commissioner's age at the end of the reporting year	Annual Report
President Commissioner Nationality (NAT)	Dummy variable, "1" for foreign commissioner, "0" vice versa.	Annual Report
Control Variables		
Firm Size (FS)	Natural logaritm of total assets.	Annual Report
Leverage (LEV)	Debt of equity ratio (DER)	Annual Report
Foreign Ownership (FOROWN)	Percentage of foreign ownership	Annual Report

Source: The Processed Data (2024)

The dependent variable used in this research is climate change disclosure (CCD). CCD is the index provided by the task force on Climate-Related Financial Disclosures (TCFD), consisting of governance, strategy, risk management, and metrics and targets (Table 1). Based on UET, this research proposed several proxies to measure the characteristics of the president-commissioner. (a) Gender of president commissioner (GEN). For gender measurement, it is a dummy variable, "1" for female commissioners, and "0," and vice versa. (b) President commissioner age (AGE) or the president commissioner's age at the fiscal year's end. (c) President commissioner nationality (NAT). For NAT measurement, it is a dummy variable, "1" for foreign commissioner, "0" and vice versa. The study also identified a few variables as control variables based on previous studies. (a) Firm size (FS): FS is the natural logarithm of total assets at the end of the fiscal year. (b) Leverage (LEV) is a debt-to-equity ratio. (c) Foreign ownership (FOROWN) is the percentage of foreign ownership. The detailed variable measurements are presented in Table 2.

This study employs statistical analysis to answer the research question and hypotheses by analysing and testing empirical models. The first step in this process is a descriptive analysis. This analysis is designed to provide a detailed description of the research variable climate change disclosure and the presidential commissioner characteristics, such as age, gender, and nationality. Following this, ordinary least square (OLS) using Stata 16 is conducted. The regression model equation is as shown by equation 1.

$$CCD_{i,t} = \alpha + \beta_1 GEN_{i,t} + \beta_2 AGE_{i,t} + \beta_3 NAT_{i,t} + \beta_4 FS_{i,t} + \beta_5 LEV_{i,t} + \beta_6 FOROWN_{i,t} + \varepsilon \quad \text{.....1}$$

RESULTS AND DISCUSSIONS

Panels A and B in Table 3 are the results of this study's descriptive statistical analysis. This research examines banking companies in Indonesia in 2020 - 2022 with 129 data units of analysis. Climate change disclosure for banking companies in Indonesia has an average of 4.1085, which shows that banking companies still tend to disclose little information related to climate change, with a minimum value of 0 and a maximum value of 11. Banking com-

Table 3. Decriptive Statistics

Panel A	N	Mean	Maximum	Minimum	Std. Dev.
CCD	129	4.1085	11.0000	0.0000	3.5228
AGE	129	62.0233	86.0000	43.0000	10.5419
FS	129	17.6645	22.1240	14.1810	1.7718
LEV	129	4.4359	11.3285	0.0379	2.4887
FOROWN	129	0.4028	0.9899	0.0000	0.3460

Panel B	N	1		0	
		Frequency	Percentage	Frequency	Percentage
GEN	129	13	0.1008	116	0.8992
NAT	129	39	0.3023	90	0.6977

Table 4. Regression Results

	(1) CCD	(2) CCD	(3) CCD	(4) CCD
GEN	-1.8169**			-1.2856*
	(0.7935)			(0.7728)
AGE		0.0777***		0.0818***
		(0.0228)		(0.0234)
NAT			0.7952	1.2979**
			(0.6161)	(0.5962)
FS	1.1999***	1.3371***	1.2395***	1.3006***
	(0.1390)	(0.1370)	(0.1396)	(0.1362)
LEV	0.1328	0.1602*	0.1620	0.1605*
	(0.0967)	(0.0940)	(0.0979)	(0.0926)
FOROWN	-0.2727	0.3372	-0.7106	-0.6743
	(0.6911)	(0.6862)	(0.8284)	(0.7836)
_cons	-17.3826***	-25.1784***	-18.4593***	-24.6439***
	(2.4027)	(3.0147)	(2.3852)	(3.1033)
N	129	129	129	129.
r2_a	0.4355	0.4621	0.4195	0.4861

Standard errors in parentheses
* p<0.1, ** p<0.05, *** p<0.01

panies in Indonesia only disclose four information items out of 11 items the information they should have. President commissioners of banking companies have an average age of 62 years, with the youngest commissioner being 43 years old and the oldest being 86 years old. President commissioners are dominated by men, with a percentage of 89.92%, and female president commissioners, with a rate of 10.08%. As many as 30.23% of president commissioners are foreign citizens, and 69.77% are Indonesian citizens. The company size in this research sample has an average value of 17.6645. Leverage has an average value of 4.4359. Lastly, foreign ownership of banking companies in Indonesia has an average of 0.4028 or 40.28% owned by foreign investors.

This research examines the relationship between presidential commissioners' attributes (gender, age, and nationality) and climate change disclosure. Regression analysis tests use Stata 16, and the regression results can be seen in Table 4. First, we carried out separate tests regarding the influence of each independent variable on climate change disclosure. The results show that female president commissioners tend to reduce CCD practices, age increases CCD, while nationality in separate tests does not show a contribution to CCD. Second, we test the full model (column 4). Complete model testing shows that GEN has a coefficient of -1.2856 with a probability value below 0.1, so the first hypothesis is accepted. Companies with female president commissioners tend to make fewer climate change disclosures. AGE has a coefficient value of 0.0818 with a probability below 0.01, so the second hypothesis is accepted. Older president commissioners tend to encourage climate change disclosure. NAT has a coefficient of 1.2979 with a probability value below 0.05, so the third hypothesis is accepted. Companies with foreign commissioners tend to make more climate change disclosures. Apart from that, of the three control variables used, only firm size and leverage encourage climate change disclosure practices in banking companies in Indonesia. The results show that the adjusted R^2 has a value of 0.4861, meaning that the model in the study can explain climate change disclosure, while the remaining 51.39% is explained by other variables not tested in this study.

This research also conducted a robustness test to test the robustness of the model. The robustness test is carried out through (1) Tobit regression and (2) OLS regression. The Tobit model was introduced by (Tobin, 1958). The Tobit model is used for cross-sectional data where some data in the sample is 0 for the dependent variable. Second, we excluded samples that did not practice climate change disclosure; in other words, we removed banking companies with a CCD score of "0" from the sample. Testing was only carried out on samples with CCD scores ranging from "1" to "11" and obtained 99 analysis units that met the requirements. Then, we carried out tests with the OLS model. The results of the robustness test can be seen in Table 5. The test results show that GEN has a negative effect on climate change disclosure, while AGE and NAT have a positive impact on climate change disclosure. The robustness test shows consistent results with the primary model, so the result concluded that the results of this study are robust.

The test results show that female presidential commissioners tend to practice climate change disclosure less frequently. Ararat & Sayedy (2019) found that the presence of women on boards can increase climate change disclosure. Other research generally finds that female directors do not influence the disclosure of climate change

Table 5. Robustness test

	Tobit	OLS
	CCD	CCD
GEN	-1.8262**	-1.8725**
	(0.9079)	(0.8842)
AGE	0.0943***	0.1133***
	(0.0274)	(0.0255)
NAT	1.5316**	0.9964*
	(0.7146)	(0.5990)
FS	1.6033***	1.1071***
	(0.1684)	(0.1401)
LEV	0.2118*	0.0876
	(0.1153)	(0.1019)
FOROWN	-0.8786	-0.2532
	(0.9223)	(0.7819)
N	129	99
r2_a	-	0.4675

Standard errors in parentheses: * p<0.1, ** p<0.05, *** p<0.01

and sustainability issues (Caby et al., 2020; Chakraborty & Dey, 2023; Kutlu Furtuna & Sönmez, 2024; Pinheiro et al., 2023). This research provides new insights into the literature regarding climate change disclosure, especially regarding the relationship between presidential commissioners and disclosure. Women are considered to have better sensitivity to the environment and society (Tingbani et al., 2020), but they tend to be risk-averse (Croson & Gneezy, 2009). In the case of climate change disclosure, in the short term, the company incurs high costs, and the company does not directly receive the benefits obtained at that time, but the company will receive benefits from the availability of company resources in the long term and investor trust. During the COVID-19 pandemic, the president commissioner had more significant concerns because the company's financial performance tended to be affected during that period. It may be what drives female presidential commissioners to reduce climate change disclosure practices.

In the context of UET, gender is recognized as one of the key characteristics of top management that significantly influences strategic decision-making, leadership styles, and organizational outcomes (Hambrick & Mason, 1984).. Aligned with the literature review by Bannò et al. (2023), which highlights that 24 studies have engaged UET as a foundational framework, it is emphasized that the presence of women in top-echelon positions has been linked to enhanced sustainability practices, including improved sustainability-related activities, performance, and disclosure. However, this finding does not fully align with the theoretical assumptions of UET. This discrepancy may be attributed to several factors. UET posits that personal characteristics of managers such as gender directly influence organizational outcomes, but in practice, the relationship between gender diversity and sustainability may be moderated or mediated by other variables such as organizational culture, industry context, and regulatory pressures. The presence of women in top management positions does not automatically guarantee substantive changes in sustainability practices, as their influence may be constrained by existing power dynamics (for example, the dominance of men in other senior positions or a collective decision-making system) that limits women's ability to make significant changes. As a result, while the presence of women in leadership is associated with sustainability improvements, the pathway through which this influence occurs is more complex than UET suggests, warranting further investigation.

According to UET, age is one of considered factors that can influence organizational outcomes, suggesting the importance of wisdom and decision-making prowess accumulated through experience (Hambrick & Mason, 1984; Nguyen et al., 2024). Older president commissioners play a crucial role in shaping corporate culture towards sustainability and accountability. This study's findings Sanno (2021) support the notion that older age is associated with increased sustainability reporting. The age of the president commissioner represents a wealth of experience, and their long-term perspective allows them to recognize the importance of sustainable practices and transparent environmental reporting, such as climate change disclosure. Older leaders have typically witnessed various market cycles, regulatory changes, and shifts in societal values. This exposure equips them with the foresight to anticipate future challenges and opportunities, promoting a proactive approach to sustainability. Older commissioners often possess more knowledge and a stronger sense of responsibility for environmental management, leading to improved climate change disclosure. Their advanced age typically fosters a cautious approach, enhancing their credibility (Ya et al., 2019). Their leadership has been instrumental in cultivating a corporate culture that prioritizes sustainability and accountability, thereby enhancing the company's reputation and aligning it with global environmental standards.

The foreign president's commissioner has shown he is better at encouraging climate change disclosure practices. Kılıç & Kuzey (2019b) supports the results of this study. Foreigners tend to bring unique experiences to the company's perspective in making disclosures (Xu & Hou, 2021). They are more familiar with global business culture, which will encourage companies to practice environmental management better according to standards (Shahab et al., 2020), thereby encouraging climate change disclosure. Foreign commissioners often face legitimacy challenges from local stakeholders due to differences in cultural, social, and regulatory contexts. These challenges push them to demonstrate their competence and alignment with local expectations. To gain legitimacy, they adopt higher standards of transparency and accountability, particularly in climate change disclosure. This includes introducing more comprehensive environmental reporting and aligning the company's practices with international sustainability standards. By doing so, they address the information needs of key stakeholders, especially investors, who prioritize corporate responsibility. As a result, foreign commissioners contribute to better climate-related disclosure, enhancing the company's reputation, stakeholder trust, and appeal to socially responsible investors.

According to UET, a leader's personal characteristics, such as nationality, influence the company's strategic direction (Hambrick & Mason, 1984). UET suggests that childhood experiences, cultural upbringing, and social exposure shape a leader's cognitive framework, which persists into adulthood. These psychological traits affect how leaders process and prioritize information, ultimately shaping organizational outcomes. In the case of foreign commissioners, their diverse backgrounds may lead to a stronger emphasis on sustainability issue. A study by Mardini & Elleuch Lahyani (2021) revealed that foreign leaders promote broader carbon emission disclosure, enhance environmental transparency, and reduce information asymmetry to uphold corporate legitimacy. Hewa Heenipellage et al. (2022) also found that leaders with foreign exposure are more likely to engage in sustainability practices. Their exposure to international markets and regulations fosters a broader perspective on the importance of environmental stewardship. This orientation aligns with the principles of sustainable development and enhances the company's alignment with international climate disclosure standards. Consequently, the presence of foreign commissioners not only strengthens a company's ability to meet regulatory requirements but also positions the firm as a leader in sustainability practices. In summary, foreign president commissioners significantly contribute to climate change disclosure by introducing global best practices, addressing legitimacy challenges, and leveraging their unique cultural and psychological characteristics as defined by UET.

At its core, this study provides robust support for Upper Echelons Theory (UET). The decision of a company to disclose or not is intricately tied to the characteristics of its top management (Latan et al., 2018). In the context of investors' growing demand for environmental information to inform their decisions (Gnanaweera & Kunori, 2018), climate change disclosure has become a hot topic. This underscores the necessity of gathering empirical evidence on the influence of presidential commissioner attributes on climate change disclosure practices. As per UET, our study intriguingly reveals a significant relationship between the president commissioner's attributes and climate change disclosure practices.

The study offers valuable insights for the banking industry, emphasizing the critical role of presidential commissioner's attributes (gender, age, nationality) in shaping climate change disclosure. By understanding how leadership diversity drives sustainability reporting, banks can enhance board composition and governance strategies to meet stakeholder expectations. For regulators, the study highlights the need for policies promoting diverse leadership to strengthen corporate accountability. Investors, meanwhile, can leverage these insights to assess bank's ESG commitments, influencing investment decisions and driving demand for higher disclosure standards.

CONCLUSIONS

This research examines the relationship between presidential commissioner attributes, including gender, age, nationality, and climate change disclosure. The results empirically prove this relationship. First, female presidential commissioners tend to practice less climate change disclosure. Second, the age of the president commissioner increases climate change disclosure. Lastly, foreign presidential commissioners tend to make more climate change disclosures. The study results show that recruiting an older presidential commissioner and a foreign citizen is not a wrong decision, especially when the company intends to improve climate change disclosure practices. Overall, the results of this research support the Upper Echelons Theory.

This research has significantly contributed to the climate change disclosure literature, particularly regarding the impact of presidential commissioner attributes. However, several limitations must be acknowledged. First, this study exclusively focuses on the banking sector, which is highly regulated and has an indirect environmental impact. Consequently, the findings may not be generalizable to other sectors, such as energy or manufacturing, which operate under different regulatory pressures and environmental exposures. Future research could address this limitation by examining how sector-specific characteristics might moderate the observed relationships. Second, this study was conducted during the COVID-19 pandemic, a period marked by significant economic and social disruption. This context may have heightened the risk-averse behavior of presidential commissioners, particularly among female commissioners, leading to fewer climate change disclosures during the observation year. Third, the analysis only considers three attributes of presidential commissioners—gender, age, and nationality. Future research could explore additional characteristics such as education, professional experience, and tenure, which may provide a

more comprehensive understanding of leadership influence. Moreover, future studies should consider cultural and regional contexts, as local regulations, societal norms, and governance frameworks may shape leadership styles and disclosure strategies. Expanding the sample to include multiple sectors and diverse geographical areas could improve the generalizability of the findings and offer a broader perspective on the role of presidential commissioners in driving climate change disclosure.

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