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CASE REPORT

The Impact of Environmental Strategy, Digital Transformation, and Shareholder Pressure on Green Banking Disclosure: A Moderating Effect of Top Management Commitment

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ABSTRACT

This study aims to examine how shareholder pressure, digital transformation, and environmental strategy affect green banking disclosure, and how top management commitment moderates these effects. In this quantitative study, 44 banks that were listed between 2020 and 2023 on the Indonesia Stock Exchange were examined using panel data. The tests were carried out using a random effect model. The findings indicated that green banking disclosure is positively impacted by environmental strategy, while shareholder pressure and digital transformation have a negative effect. The relationship between digital transformation and green banking disclosure can be significantly strengthened with strong senior leadership support, which can also lessen the impact of the business's environmental plan. The addition of new dimensions to the green banking disclosure indicators increases the study model's validity. The research's practical consequences include the necessity of more stringent regulations to promote the adoption of environmental strategies and digital transformation combined with green disclosures, as well as a greater role for senior management in environmental sustainability. This research contributes by expanding the green banking disclosure indicators for the financial sector in Indonesia.

INTRODUCTION

According to Hoque et al. (2019), banks are essential for lending to the economy, boosting investment, and promoting economic growth. Financial institutions and banks are essential in influencing the economy through giving financial support for various endeavors, affecting the overall economic landscape, and aiding in managing environmental risks in the tangible world (Utami & Nugraheni, 2022). By actively supporting initiatives for a cleaner environment, implementing environmentally friendly policies, and promoting clean technologies for businesses, these entities can significantly contribute to sustainability efforts. All financial organizations must establish a thorough plan to track the environmental impacts of their customers or initiatives in the future in order to promote sustainable measures, which have the potential to increase profit margins and support company growth (Siddik & Zheng, 2021; Zhixia et al., 2018).

The banking sector is thought to be a major source of funding for businesses that provide goods and services that greatly increase carbon dioxide emissions from a variety of industries. This puts the banking industry in a position to help close the gap between environmental preservation and economic development by encouraging investments that put social and environmental responsibility first (Siddik & Zheng, 2021; Zhixia et al., 2018).

Global emissions increased by 4.6% in 2020, driving efforts to combat climate change. However, UNEP

research shows that total greenhouse gas emissions will increase by 2021. The effects of global warming encompass climate change, the adjustment to changing climates, and the deterioration of the environment. Therefore, in order to achieve positive results and meet the objectives of the Paris Agreement, which aims to retain the increase in global temperatures to 1.5°C, it is essential that the international community prioritize combating climate change by reducing emissions. Indonesia has committed to reducing its emissions of greenhouse gases by 29% with domestic efforts and 41% with assistance from foreign governments by the year 2030. As a tropical country, Indonesia faces significant challenges due to global sea level rise, disrupting ecosystems, and disrupting stability of the economy.

While the Indonesian government has implemented a number of steps to encourage the implementation of green banking, different conditions are shown by the results of an evaluation conducted by TuK Indonesia and the Trisakti Sustainability Center (2023) claiming that Indonesia's green banking disclosure rate is still low, despite commitments related to the Paris Agreement, after evaluating the sustainable finance of 3 7 banks it was found that, the disclosure of environmental elements in accordance with POJK 51/2017 guidelines the results were the lowest compared to social and economic aspects. This spread of information suggests two things, banks may not be aware of environmental issues and may not actually take environmental action.

WWF's seventh Sustainability Banking (SUSBA) assessment report WWF has published the 7th Sustainability Banking (SUSBA) study. This study looks at how 10 large banks in South Korea and Japan, as well as 39 banks in ASEAN nations, have integrated environmental, social, and governance (ESG) considerations into their business processes. In particular, just four of Indonesia's eleven state-owned and private banks are dedicated to reaching net zero emissions. Therefore, there has been relatively little progress in creating financial products that help banks, particularly small and medium-sized ones, make the shift to net zero emissions. Furthermore, the majority of banks do not currently prioritize how nature and biodiversity affect financial performance.

The absence of uniformity of sustainability reporting in connection with green banking is one of the disadvantages of its implementation (Gunawan et al., 2022; Indriani & Setiany, 2024), As a guideline in carrying out its sustainability practices, banks are monitored by the government with the existence of POJK 51 of 2017. Annex II of SEOJK 16/2021 explains that the preparation of the Sustainability Report can be expanded according to needs including referring to international standards, The Global Reporting Initiative (GRI), provides a widely used framework for reporting on sustainability, for example, that banks and other financial institutions use. Sustainability reports that address social, environmental, and economic factors are prepared by banks that adhere to GRI. An additional metric is the Sustainability Accounting Standards Board, or SASB. SASB standards are designed to help businesses in determining, quantifying, and reporting on the sustainability concerns that are most pertinent to them, as well as how these issues affect their performance and corporate value. To promote openness in the financial sector and ease stakeholder decision-making, SUSBA is one of the publicly available performance measuring tools for the adoption of the Land Surface Temperature (LST) principle. Banks are considering the Task Force on Climate-related Financial Disclosures (TCFD), This provides instructions for revealing clear, consistent, and comparable information about the opportunities and risks related to climate change, when creating the Sustainable Finance Action Plan. By widely implementing these guidelines, businesses and investors will regularly factor in the effects of climate change when making decisions (Hanifah et al., 2022). Embracing these recommendations will also enable companies to highlight their accountability and forward-thinking approach in addressing climate-related matters. As a result, capital will be distributed more strategically and effectively, Facilitating the shift to a more environmentally friendly and sustainable economic system (Task Force on Climate-Related Financial Disclosure 2021).

Considering the evidence, an effort must be made to remedy the lack of openness in green banking. This

study used a number of factors, including Pressure from shareholders (Bukhari et al., 2022), Digital transformation (Saputra et al., 2023), Environmental strategy (Latan et al., 2018) and Top Management Commitment (Bukhari et al., 2022).

Elements that influence green banking According to disclosures based on prior research, among other sources, stakeholder pressure can contribute significantly to the acceptance of green banking, and senior management must act to implement stakeholder demands on environmentally friendly bank practices (Bukhari et al., 2022)., The banking industry's digital revolution can directly explain improvements in the sustainability assessment of banks in Indonesia (Saputra et al., 2023). Companies are prompted to enhance their environmental performance by implementing proactive environmental strategies (Latan et al., 2018). Tan et al. (2022) state that businesses that use environmentally approaches are more inclined to collaborate with their stakeholders in developing sustainable plans for environmental conservation, thereby enhancing their environmental achievements significantly. The situation demonstrates that green banking disclosure in Indonesia is still low, which is brought on by banks' potential ignorance of environmental issues and lack of genuine environmental action. Based on this, action is needed to overcome the low disclosure of green banking in Indonesia. The results of previous studies show inconsistent results, providing an opening to conduct further research, by making new measurements on green banking disclosure variables.

The difference with previous research is not only in the measurement of green banking disclosures but also by adding moderating variables, namely Top Management Commitment (TMC). Senior executives' commitment is essential to making sure that companies are acknowledged for their environmental initiatives, which could boost their competitive advantage (Colwell & Joshi, 2013). Top management must make a concerted effort to translate this pressure into concrete actions inside the banking industry if banks are in order to fulfill the demands of stakeholders who are pushing for environmentally responsible operations (Bukhari et al., 2022). If the executives at the top of a company aren't focused on improving their environmental impact, the company will struggle to reach its goals of being eco-friendly. Achieving top-notch environmental performance involves using corporate resources effectively, including planning that can seamlessly combine business strategy and environmental issues. Environmentally friendly organizations tend to depend on top management commitment, which can ultimately result in achieving better competitive advantage (Porter & Van der Linde, 1995). Top Management Commitment can be moderated because top management is the main control holder in an organization and has the power to influence organizational practices.

This research will explore the impact of stakeholder influence, digital innovation, and environmental planning on the transparency of green banking, considering the moderating influence of senior management commitment.

LITERATURE REVIEW

The Effects of Shareholder Pressure on Green Banking Disclosure

Shareholder pressure is crucial in encouraging companies to enhance their ESG reporting. This dynamic is rooted in the belief that shareholders hold significant sway over corporate governance and strategic choices, particularly in relation to ESG initiatives. Studies indicate that when shareholders actively communicate with management about ESG concerns, it results in increased transparency and better ESG outcomes. Investors are starting to recognize the value of sustainability in fostering a fairer and more secure society. According to Cadez et al. (2019) and Lee et al. (2018), this has caused shareholders to use their ability to exert pressure on companies to enhance their ESG performance. Concerns about the ESG performance and effects of the businesses they invest in across all industries are

growing among shareholders. Prior studies (Crisóstomo et al., 2011; Holderness & Sheehan, 1988; Margaritis & Psillaki, 2010) has shown that stockholders own a large percentage of ownership in companies can influence corporate sustainability through active monitoring. Studies have demonstrated that when shareholders become actively involved, companies tend to improve their ESG reporting and performance. By pushing for resolutions on environmental and social matters, shareholders often prompt companies to enhance their disclosure practices in response to the pressure (Cadez et al., 2019).

H_1 : The disclosure of green banking is positively impacted by shareholder pressure.

The Impact of Environmental Strategy on Green Banking Disclosure

According to Latan et al. (2018), businesses with an environmental plan will outperform those without one in terms of performance of the environment. Based on studies, a company's commitment to environmental conservation and day-to-day operations are greatly influenced by its strategic planning (Kong et al., 2020). The environmental strategy implemented by corporations promotes greater dedication from employees to the company, encourages them to engage in eco-friendly actions voluntarily, and ultimately leads to improved organizational performance in conservation efforts (Kim et al., 2019)

The focus of management on environmental concerns makes the company's proactive environmental plan possible (S. L. Hart & Dowell, 2011). Using environmental performance indicators will demonstrate that companies that take a proactive strategy are more likely to improve their environmental performance (Rodrigue et al., 2013).

A company's decision to reveal its environmental performance shows how committed it is to its environmental strategy. Businesses try to sign voluntary agreements to follow environmental laws. Beyond merely adhering to rules, the organization should embrace proactive methods that improve its environmental performance (Rodrigue et al., 2013). When businesses implement Effective environmental strategies, they achieve strong environmental results. To properly address today's environmental concerns, businesses must continuously update and improve their environmental performance measures (Rodrigue et al., 2013).

Many businesses center their efforts on eco-friendly practices like increasing efficiency, reducing pollution, innovating products, and taking responsibility for their impact on society. These practices present a complex set of challenges. However, many businesses fail to provide comprehensive solutions for tackling social and environmental challenges in spite of their strategic efforts (Hart & Dowell, 2011).

An organization's environmental report will demonstrate how it implements its environmental plan. Consequently, the following theory could be :

H_2 : Environmental Strategy positively impacts on green banking disclosure

The Effects of Digital Transformation on Disclosure in Green Banking

The management and organization of manufacturing production have been greatly transformed by digital innovation, leading to a notable impact on economic performance within the industry. Various in-depth research has revealed that digital transformation yields both advantages and disadvantages for different parties involved, with varying and often conflicting conclusions. Therefore, further investigation is required to understand how digital transformation influences the disclosure practices of green banks. Digital transformation may get resistance from employees because their jobs are being

replaced by AI (Na et al., 2022) and the high costs involved, not all companies are convinced of the business value of DT (Guo & Xu, 2021). Digital transformation should be used by companies to not only increase profits, but also to improve their reputation within the community and minimize harm to the environment, in order to align with sustainability efforts.

According to a number of earlier studies that looked at the interaction between digital transformation and

and corporate sustainability, digital transformation improves environmental sustainability (Feroz et al., 2021) and has a significant effect on an organization's sustainability aspects (El Hilali et al., 2020; Esses et al., 2021). regarding corporate operations, from a "cost-benefit" standpoint. According to Guo & Xu (2021), digital transformation increases the effectiveness of important business operations at the expense of fixed investments in digital skills, technology, and services. The researcher puts up the following theory in light of the previously provided explanation:

H_3 : Digital Transformation has a positive impact on green banking disclosure

Commitment from top management moderates the impact of Shareholder pressure on green banking disclosure

Since Top management is really dedicated, they will respond to stakeholder pressure more proactively, adopt and implement green banking practices seriously, and make sure that disclosures about environmental initiatives are carried out comprehensively and transparently, meeting and even surpassing stakeholder expectations. This will help to moderate the influence of stakeholder pressure on green banking disclosure.

If senior leadership continues to prioritize environmentally friendly practices in their decisions and actions, a company culture that respects and values the natural world will eventually be developed (Aragón-Correa et al., 2008; Bansal & Roth, 2000). According to Bansal & Roth (2000), a company's leadership in environmental management is largely determined by the values set by its senior management (Aragón-Correa et al., 2008).

Senior leadership's commitment is essential to reducing the influence of stakeholder demands on the openness of eco-friendly banking practices. Highly committed management will ensure that the company responds to internal and external pressures with concrete and transparent actions, while less committed management may not provide an adequate response to stakeholder demands, therefore top management commitment determines the extent to which stakeholder pressures can be translated into effective green banking practices and disclosures.

H_4 : Top Management Commitment strengthens the positive impact of stakeholder pressure on green banking Disclosure

Top Management Commitment in moderating the impact of Environmental Strategy on green banking Disclosure

The correlation between creative ability and green innovation strategy weakens as senior management grows more ecologically aware. Similarly, as senior management becomes more environmentally concerned, there is no appreciable shift in the relationship between incentive programs and green innovation strategy. This suggests that senior executives' perceptions of internal and external restrictions are influenced by their level of environmental knowledge. When senior management is more environmentally sensitive, it is simpler to comprehend the significance of environmental

legislation and to see the possible advantages and market opportunities in green innovation. However, it also helps companies to strategically position green innovation within the organization and spend internal resources in a judicious manner (Cao & Chen, 2019).

The environmental consciousness of top management has a detrimental effect on the strategy for green innovation and innovation capability. The two phases of green innovation namely cleaner manufacturing and pollution prevention could be one explanation for this. At the moment, most Chinese businesses are still in the early stages of green innovation, concentrating on pollution avoidance as a means of protecting the environment. When senior management has a stronger environmental awareness, their companies are more likely to prioritize cleaner production methods. The transition from pollution prevention to cleaner production involves strategic timing delays, including the need for technological upgrades to achieve this goal.

When resources are scarce, companies need to prioritize projects based on the return on investment. Green innovation poses challenges such as market risk and research uncertainty, necessitating a greater allocation of resources. It is crucial for senior management to view green innovation as part of corporate responsibility in order for resources to be allocated strategically (He et al., 2018).

Top Management Commitment is critical in driving Environmental Strategy and its relationship with Green Banking Disclosure. Setting the company's priorities and direction is a major responsibility of top management. They can inspire and guide the rest of the organization with their dedication to environmental strategy. This will encourage employees and other business units to support environmental initiatives.

Top management has control over the allocation of company resources. With their commitment to the environmental strategy, they can ensure that funds, time, and other resources are properly allocated to support relevant environmental initiatives. Strategic decisions such as investments in green technology, energy efficiency improvements, and environmental impact reduction often require the approval and support of top management. Their commitment makes these kinds of decisions more likely. Green banking disclosure is about the disclosure of information by banks about their policies, practices and performance in terms of environmental sustainability. Top management's commitment to environmental strategies has a direct impact on these disclosures, as they ensure that the company has sufficient information to share with shareholders, regulators, and other parties. Thus, the following hypothesis can be formulated:

H_5 : The variable of top management commitment strengthens the impact of digital transformation on green banking disclosure.

Top Management Commitment moderates the effect of Digital Transformation on green banking Disclosure

The impact of digital transformation on disclosures related to green banking is moderated in large part by top management commitment. Management that is highly committed to sustainability will ensure that the digital technologies adopted enhance operational effectiveness and promote environmental objectives. They will also ensure that disclosures related to green banking initiatives are transparent and accurate, meeting stakeholder expectations and enhancing the bank's reputation for sustainability.

H_6 : Top Management Commitment as a variable strengthens the positive impact of Digital Transformation on green banking disclosure.

RESEARCH METHOD

Design of Research

Hypothesis testing is employed in this quantitative investigation to assess how the variables relate to one another. With top management commitment acting as a moderator, hypothesis testing is done to assess the impact of environmental strategy, digital transformation, and stakeholder pressure on green banking disclosure. The control variables are profitability, size, and leverage. Secondary data from the firm website, sustainability report, and audited annual report was used.

Population/Sample and Data Collection Methods

The banking subsector listed on the Indonesia Stock Exchange (IDX) serves as the study's population. The sample consists of banks that report on green banking practices (green banking disclosure) in their annual report or Sustainability Report for the years 2020–2023. As a result, businesses that prioritize green banking disclosures and have consistently released Sustainability Reports in recent years make up the sample. Purposive sampling, which involves selecting samples based on specific criteria and factors, was used to get the research sample, namely the banking sector which is listed on the IDX and publishes a sustainability report or annual report during the period 2020-2023.

Table 1. Sample criteria

Company	Number of Companies
The Indonesia Stock Exchange listed the banking subsector between 2020 and 2023.	47
Sample reduction criteria 1 Banking Sub-Sector companies that do not publish sustainable reports or annual reports during the period 2020-2023	(3)
Companies selected as samples	44
Number of years of research	4
Total Sample	176

Source and Type of Data

The study's secondary data came from the sustainability and annual financial reports of businesses that are listed on the Indonesia Stock Exchange. The IDX website provides access to secondary data sources.

DATA ANALYSIS METHOD

Panel data regression

1. Common Effect Model

The Fundamental Effect Model is a straightforward way to analyze panel data. It merges information from multiple time periods and different groups and uses the OLS technique for estimation. With this model, there is no consideration for variations in individual or time-specific characteristics, assuming that company data patterns remain constant over time.

2. Fixed Effect Model

If we consider each person as a variable factor that is not known, we can account for their differences through variations in intercepts. Hence, the approach of using dummy variables is applied to analyze the

fixed effects model in panel data for identifying variations in intercepts among firms. This model uses dummy variables for estimate and is also known as the Least Square Dummy Variable (LSDV) technique.

3. Random Effect Model

Panel data with individual and temporal correlations between the disturbance variables will be estimated by this model. Generalized Least Square (GLS) is a suitable method to account for these random effects models, provided that the error components are homoscedastic and that there are no signs of cross-sectional correlation. Eviews can be used to evaluate panel data, which includes both cross-sectional and time-series data. The Common Effect Model (CEM), Fixed Effect Model (FEM-Covariance Model), and Random Effect Model (REM) are the three models that can be used to estimate the parameters in panel data.

RESULT AND DISCUSSION

Panel Data Regression Model Test

Panel data is a unique type of data that combines information from different groups and time periods in the context of Stata software. In analyzing this type of data, researchers can use three different models to make predictions about model parameters: the Common Effect Model (CEM), the Fixed Effect Model (FEM-Covariance Model), and the Random Effect Model (REM). The Chow test results prove that the prob value of the Cross-section Chi square is 0.000 <0.05, so Ha is accepted. The conclusion is that the selected model is the Fixed Effect Model (FEM-Covariance Model), therefore further testing is carried out using the Hausman Test. The Hausman test results prove that the prob value of the Cross-section Chi square is 0.073 6 > 0.05, so Ha is accepted. The conclusion is that the selected model is the Random Effect Model (REM), therefore further testing is carried out using the Lagrange Multiplier Test. The Lagrange Multiplier test results prove that the prob value of both of 0.0000 <0.05, so Ho is accepted. In conclusion, the best model in this research data processing is to use the final result of the Lagrange Multiplier Test, namely the random effect model (REM) which multicollinearity is not detected or there is no correlation between independent variables.

Research Data Analysis

The examination of research data through hypothesis testing involves evaluating the coefficient of determination, conducting simultaneous effect tests (F test), and assessing partial effect tests (t test). The statistical values of the coefficient of determination, F test, and t test are crucial in this analysis.

Table 2. Hypothesis Testing Results

Hypothesis	Prediction	Coefficient	t stat	p-value	Decision
C		0.3 950	5.9503		
TPS	Positive	-0.2243	-1.6171	0.053 9*	Not supported
SL	Positive	0.4286	3 .7005	0.0002***	Supported
TD	Positive	-0.2720	-2.6040	0.0050***	Not supported
TPS*KMP	Positive	0.2588	1.7292	0.0428**	Supported
SL*KMP	Positive	-0.53 20	-3 .4105	0.0004***	Not supported
TD*KMP	Positive	0.53 05	4.2442	0.0000***	Supported
PROF	Positive	-0.0913	-0.2641	0.3 960	Not supported
UP	Positive	0.0000	2.3 675	0.0096***	Supported
R-square		0.270042	Prob (F Statistic) 0.0000		

Adj. R-square	0.23 5074			

*Sig 10%, **Sig 5%, ***Sig 1%

Source: Data processing output with Eviews 12 software, 2024

Notes: PPH = Green Banking Disclosure, TPS = Shareholder Pressure, SL = Environmental strategy, TD = Digital Transformation, KMP = Top Management Commitment, UP = Banking Size, PROF = Profitability

Analysis of the Determination Coefficient

Table 2 demonstrates that the Adjusted R^2 coefficient of determination is 23.51%. These findings suggest that the independent variables of Shareholder Pressure (TPS), Environmental Strategy (SL), Digital Transformation (TD), Banking Size (UP), and Profitability (PROF) account for 23.51% of the dependent variable, green banking disclosure (PPH), while other variables not covered in this study account for the remaining 76.49%.

Significance Test of Simultaneous influence

The information in Table 2 makes this evident that the Prob (F-statistic) value is less than 0.05., specifically 0.0000. This indicates that the independent variables Shareholder Pressure (TPS), Environmental Strategy (SL), and Digital Transformation (TD) collectively influence Green Banking Disclosure (PPH) in a significant manner.

DISCUSSION

The impact of shareholder pressure on disclosure in green banking

With a coefficient value of -0.2243, Table 2 displays the regression results of the impact of shareholder pressure on green banking disclosure. The P-value is 0.053 9 and the t value is -1.6171. The hypothesis H1 is not supported since the coefficient value is -0.2243, but the t value is -1.6171> t table -1.2866 at the 5% significance level with a P-value of 0.053 9 < 0.10.

Shareholders with significant levels of ownership can put pressure on companies to produce high-quality sustainability reports by participating in oversight schemes, such as voting at General Meetings of Shareholders or through other forms of engagement. Companies with shareholdings that are concentrated in a few parties tend to experience less pressure than companies with widely dispersed shareholdings, according to Rudyanto & Veronica Siregar (2018), if the number of shareholdings is concentrated, information will be more easily communicated and problems that may arise will also be reduced. Nonetheless, the results of this investigation show that shareholder pressure has a detrimental impact on green banking disclosure, which is consistent with Chen et al.'s (2021) and Jiang et al.'s (2024) findings but not with Zhang et al.'s (2023) research.

In order for governments and politicians to create better regulations and standards to lessen negative environmental effects, several developing nations are mapping out their present green banking practices (Miah et al., 2021). But according to a recent study conducted in several underdeveloped countries, IFC identified key obstacles to the adoption of environmentally friendly banking practices as limited understanding, socioeconomic challenges, inconsistent green standards, and inadequate involvement and awareness among stakeholders.

Shareholder pressure significantly and negatively affects green banking disclosure for two reasons. i.e. low environmental awareness and the drive for tunnelling triggered by concentrated ownership deter shareholders from investing more in environmental protection, secondly environmental performance

has no strict limits because there are no laws and rules and there is not enough supervision, shareholders are more likely should pursue financial gain instead of striking a balance between environmental and economic endeavors (Chen et al., 2021). Large shareholders significantly reduce ESG performance due to conflicts of interest and coordination frictions (Jiang et al., 2024).

The findings of this research contradict the stakeholder theory that was originally introduced by Freeman (1984). Stakeholder theory is commonly employed to justify why corporations share sustainability data. The fundamental principle of this theory is that for a company to thrive, it must effectively manage relationships with its key stakeholders. This theory emerged as a result of the recognition that companies have individuals or groups with a vested interest in their operations. Stakeholder theory states that a business should consider not only its own interests but also those of all parties concerned, such as shareholders, creditors, suppliers, customers, the government, society, analysts, and other pertinent parties. Accordingly, a company's ability to succeed is largely dependent on the backing it gets from its stakeholders (Chariri & Ghozali, 2007). According to Deegan (2004), in order for everyone to make educated decisions, they should all have access to pertinent information about the business's activities.

Environmental Strategy's Impact on Green Banking Disclosure

The results of the regression examining the connection between environmental strategy and green banking disclosure are displayed in Table 2, where a coefficient value of 0.4286, t value of 3.7005, and P-value of 0.0002 were achieved. With a P-value of 0.0002 <0.01 and a significance threshold of 1%, the hypothesis H2 is supported since the t value of 3.7005> t table 2.3 488. These findings show that environmental strategy has a positive effect on green banking disclosures, meaning that if banks want to increase green banking disclosures, they must implement an environmental strategy by measuring disclose performance indicators that identify the main categories of air, waste, water and energy, investing in environment-related research and development, obtaining ISO certificates and having an enduring dedication to the environment.

the company's reputation among stakeholders, including investors and customers, who are becoming more sensitive about environmental issues. Green strategies can also reduce operating costs in the long run by reducing environmental risks and complying with strict regulations. In addition, they often encourage innovation in technology and more efficient company operating processes, which, over time, may enhance the business's sustainability and competitiveness. Therefore, putting green methods into practice has long-term benefits for the company as well as the environment.

The investigation's results align with those of Tan et al. (2022), Solovida & Latan (2017), and Arragon-Correa et al. (2008). The environment can greatly benefit from a well-implemented environmental strategy that is both positive and significant in its impact (Tan et al., 2022). An environmental strategy is a tool that organizations can utilize to improve their ability to obtain a competitive edge. Laguir et al. (2021) reported that Businesses that have environmental strategies are more inclined to collaborate with their stakeholders in developing long-term strategies aimed at protecting the environment and promoting sustainable growth.

According to O. Hart (1995), The results of this investigation support the hypothesis of the natural resource-based view. According to the NRBV idea, making money with resources that are difficult for competitors to imitate can help a business keep a competitive edge. This concept encompasses three interconnected approaches: (1) preventing pollution, (2) taking responsibility for products, and (3) promoting sustainable development. Each strategy is influenced by distinct environmental factors, relies on unique essential resources, and offers diverse pathways to gain a competitive edge. For instance, eliminating pollutants from the manufacturing process can enhance efficiency by lowering necessary

inputs, streamlining operations, and cutting expenses related to compliance (S. L. Hart & Dowell, 2011). Hence, it is important for banks to consistently record and enhance their environmental performance indicators in order to tackle current environmental challenges. Since the success of green banking disclosures will depend on how well the banks' environmental plans work, it is imperative that these indicators match those strategies. These insights can be used as a guide to improve environmental strategies and attain long-term environmentally sustainable performance for Indonesian banks who have earned ISO 14001 certification.

The impact of Digital Transformation on Green Banking Disclosure

With a coefficient value of -0.2720, Table 2 displays the regression results of the impact of shareholder pressure on green banking disclosure. P-value of 0.0050 and t value of -2.6040. Although the coefficient value is -0.2720, the hypothesis H3 is not supported since the t value is -0.2720> t table -2.6040 at the 1% significance level with a P-value of 0.0050 < 0.01.

Digitalization serves as a valuable asset for management, while digital transformation involves incorporating digital technology throughout the value chain to enhance customer satisfaction and overall organizational success. Furthermore, digitalization plays a key role in promoting sustainability and continued growth (Mavlutova et al., 2023), this study's findings differ from previous research by showing that digital transformation negatively impacts green banking disclosures, as supported by prior studies of Wu et al (2022), L. Wang & Hou (2024).

Digital transformation has not significantly improved sustainability in the banking industry for a number of reasons. In the banking industry, digital transformation typically prioritizes operational effectiveness, accessibility, and transaction speed over directly enhancing social or environmental sustainability. For example, technologies such as mobile apps, cloud-based services and transaction automation are primarily utilized to improve customer service and reduce operational costs, rather than to directly reduce environmental impacts (Guo & Xu, 2021). Digitalization is often applied in service aspects, but it does not always cover areas that have a direct impact on environmental sustainability. For example, while digitization can reduce paper usage, its impact on the overall carbon footprint is still relatively small compared to an overarching sustainability strategy, such as green investment management or reducing carbon emissions from other operational activities (Peng et al., 2023). While digitization can reduce some forms of physical waste, its effect on reducing carbon emissions is often difficult to measure and depends on many external factors, such as the energy consumption patterns of technological infrastructure. In fact, more intensive use of data and technology can increase energy consumption and environmental impact if not matched with green practices in data center management (Rosário & Dias, 2022)

The integration of digital technology with business operations can lead to improvements in organizational efficiency, enhanced user experience, and overall longevity of the enterprise. The process of implementing digital transformation is progressive and impacted by a number of variables, including industry dynamics, enterprise development, and strategic planning. The uncertain nature of digital transformation can bring about hidden costs that may impact the enterprise. Implementing digital technologies and managing their integration effectively also requires additional resources and oversight. Furthermore, significant investments in innovation and long-term factors are crucial for successful digital transformation. Ultimately, profit-seeking is a key priority for organizations, with interest maximization being the primary objective during business activities. ESG performance integrates considerations for both environmental and social responsibility, breaking away from the conventional approach to performance assessment. Additionally, assessing corporate governance performance involves evaluating the sustainability of stakeholders. Due to self-interest, companies often prioritize the interests of owners over environmental and social responsibilities when adapting to digital

transformation. As a result, the company's non-operational external elements receive little investment, which significantly lowers its ESG performance (L. Wang & Hou, 2024).

The resource-based viewpoint hypothesis, which maintains that companies can obtain a competitive edge, is refuted by the study's findings and high performance by acquiring unique and important resources and capacities and promoting their long-term expansion. Digital transformation is a strategic tool that can improve competitive advantage, notably in accomplishing sustainability objectives and bolstering green banking disclosures, according to RBV theory. In the banking industry digital transformation serves as an important resource that drives innovation, adaptability, and operational efficiency (Oc, 2018). In a market that is evolving quickly, banks' ability to take advantage of these special resources highlights their competitive strength (Traxler et al., 2020).

This mismatch suggests that digital transformation does not automatically support green disclosure objectives. Better strategic management is needed so that digital technology truly becomes a strategic resource in accordance with RBV theory. In addition, digital transformation should be directed to support the collection, reporting and disclosure of green data in a transparent and efficient manner.

Top Management Commitment Moderates the impact of Shareholder Pressure on Green Banking Disclosure

With a value for the coefficient of 0.2588, a t value of 1.7292, and a P-value of 0.0428, Table 2 presents the impact's regression results of shareholder pressure on green banking disclosure tempered by Top Management Commitment. The hypothesis H4 is supported since the t value of 1.7292> t table 1.654 at a significance level of 5% and the P-value of 0.0428 <0.05. These findings suggest that shareholder pressure on green banking disclosure is strengthened by top management commitment.

A strong commitment from senior management fosters a heightened level of accountability, leading to increased proactive measures being taken by senior management (Jazairy & von Haartman, 2020). According to the earlier hypothesis H1, it was suggested that shareholder pressure has a detrimental effect on green banking disclosure. However, when combined with top management commitment, shareholder pressure can actually promote green banking disclosure. The findings of this study support the idea that top management commitment affects the relationship between institutional pressure and firm environmental responsiveness (Jiang et al., 2024). businesses need to address the decrease in effectiveness of decision-making and management oversight due to conflicts among shareholders and promote collaboration and communication among shareholders in order to enhance their performance in social responsibility. By improving collaboration and communication, companies will be able to prioritize their social responsibilities, resulting in advantages for both shareholders and the community and the environment. To benefit the business and society, managers and shareholders alike must take into account the financial implications of environmental investments and avoid having limited viewpoints (R. Zhang & Fu, 2023).

Support and dedication from top management are crucial in encouraging businesses to adopt eco-friendly procedures. Another powerful external driver for businesses to embrace green efforts is stakeholder pressure. The importance of pressure as an environmental motivator is emphasized by Zheng et al. (2020). They also highlight how senior management commitment and stakeholder pressure affect business performance and the effectiveness of green operations (Govindan et al., 2021).

Top Management Commitment (KMP) supports Green Banking Disclosure (PPH) and Shareholder Pressure (TPS). By guaranteeing strategic prioritization, allocating resources, fostering a sustainable culture, and enhancing transparency, top management commitment amplifies the impact of shareholder pressure on green disclosure. These roles are critical to ensure that companies not only respond

reactively to pressure, but also proactively lead green banking practices.

According to legitimacy theory, banks frequently have to improve their standing among stakeholders, such as shareholders. Top management commitment guarantees adequate disclosures, like green banking, to preserve legitimacy and market trust.

According to Qi et al. (2011), a company's conformity to societal norms and expectations is one of the main elements that contribute to its social recognition. Various community groups are putting more and more pressure on banks in the modern world to adopt Green Banking practices and lessen their adverse environmental effects (Bukhari et al., 2022). Banks have the potential to influence a nation's economic framework towards a more environmentally conscious model (Bose et al., 2017). Shareholder demands lead to greater transparency in green banking practices as a result of firm dedication from top executives, ultimately enhancing the company's credibility.

Top Management Commitment Moderates the impact of Environmental Strategy on Green Banking Disclosure

With a value for the coefficient of -0.53 20. a t value of -3,4105, and a P-value of 0.0004, Table 2 displays the regression results of the impact of shareholder pressure on green banking disclosure moderated by Top Management Commitment. The hypothesis H5 is not supported because the coefficient value is -0.53 20 but the t value is -3,4105 > t table -2.3 488 at a significance level of 1% with a P-value of 0.0004 < 0.01. According to these results, the impact of environmental strategy on green banking disclosure is not enhanced by top management commitment.

In line with the earlier assumption H2, which holds that environmental strategy has a positive and considerable impact on green banking disclosure, the inclusion of the top management commitment component lessens the impact of environmental strategy on green banking disclosure.

According to research by Bansal & Roth (2000) and Wehrmeyer et al. (2014), the results of this study reinforce the belief held by many businesses that the costs of putting in place an environmental management system exceed the advantages. Top management's preoccupation with financial matters is the reason for their lack of dedication to CSR implementation (Tandoh et al., 2022). For example, such as EMAS or ISO 14000 ratings. Although still characterized by their focus on environmental issues (Hahn & Scheermesser, 2006). Symbolic top management commitment often results in minimal or meaningless disclosure, undermining sustainability initiatives (Liao et al., 2015), Board oversight is necessary to actively monitor the legality of environmental operations and corporate reputation because management is frequently reluctant to give environmental information (Gregg, 2009).

Environmental strategy's impact on green banking disclosure may be lessened by top management commitment when:

Top management commitment is overly focused on short-term objectives and lacks tangible efforts to implement environmental strategies, making it merely symbolic or inconsistent. The focus is only on short-term interests that are monetary in nature, to the exclusion of more long-term environmental initiatives so that existing environmental strategies are not effectively translated into green disclosure, there are internal conflicts or lack of concrete support for environmental strategies, lack of understanding of environmental strategies are not well designed or relevant to the objectives of green disclosure, top management that dominates the decision-making process can slow down or hinder the implementation of environmental strategies, and environmental strategies are not well designed or irrelevant to green disclosure needs.

The findings of this research do not align with legitimacy theory, which posits that businesses share information in order to appear legitimate to their stakeholders. Green disclosures are limited to meeting minimum stakeholder expectations without actually supporting the environmental strategy, which may cause co-commitment to weaken the relationship of environmental strategy to green banking disclosures. Since legitimacy can be achieved through minimal disclosure, top management may believe that environmental strategy does not need to be communicated thoroughly.

Top Management Commitment Moderates the Effect of Digital Transformation on Green Banking Disclosure

Top Management Commitment moderates the effect of shareholder pressure on green banking disclosure, as shown by the data in Table 2. With a t-value of 4.2442 and a P-value of 0.0000, the obtained coefficient value was 0.5305. The hypothesis H6 is supported since the P-value of 0.0000 is less than 0.01 and the t value of 4.2442 exceeds the t-table of 2.3488 at a 1% significant level. According to these results, the impact of digital transformation on green banking disclosure is strengthened by top management commitment.

It was proposed that digital transformation will negatively affect green banking disclosures, in accordance with the earlier idea H3. On the other hand, digital transformation actually benefits green banking disclosures when top management commitment is included. This bolsters the idea that disclosures about green banking are positively impacted by digital transformation (C. Wang et al., 2024). The involvement of top executives is essential for the successful implementation of environmentally friendly strategies in banking. Research shows that a strong commitment to sustainability from upper management not only boosts the implementation of green initiatives but also enhances the effects of digital advancements in promoting sustainability transparency in the banking industry.

According to C. Wang et al. (2024), digital transformation can encourage more disclosures about green banking, but only if senior management is committed to the cause. This study demonstrates how top management commitment aids in the progress of an organizational culture that encourages the adoption of sustainability initiatives and green technology, which enhances environmental disclosure and performance. It also examines the connection between digitalization and green practices and concludes that top management's support of digital transformation is essential to reaching sustainability objectives. They noted that with a strong commitment from management, banks can leverage Using digital transformation to increase transparency and accountability in environmental disclosure (C. Wang et al., 2024).

The emergence of digital innovations for instance, big data analysis, blockchain, artificial intelligence, and the Internet of Things marks the beginning of the digital era. The significance of adopting digital transformation as a primary focus is growing since it enables the establishment of advantages over competitors and sustained expansion benefits for the national economy. The leadership at the highest levels is essential for enhancing the value of a business and guaranteeing its success. Businesses, being major players in the economy, have a significant impact on advancing digital innovation and taking on the duty of promoting long-term growth. Through digital transformation, top executives may strengthen the organization's commitment to sustainability. By integrating digital transformation into the organization's vision, mission, and sustainability strategy, senior management can show their leadership in the digital space and create long-term goals and development plans for sustainable business success (Li et al., 2023).

To improve firm sustainability, managerial power can moderate digital transformation. A firm's decision-making and strategic orientation are influenced by top management behavior. A management team that is empowered embraces digitalization and strategically navigates to uphold the company's

reputation and image, utilizing robust resources to effectively address any obstacles that may arise in the digital transformation process.

According to T. Zhang et al. (2022), digital transformation presents a chance to improve operational and production efficiency by cutting costs and fostering innovation. According to Tian et al., digital transformation enhances companies' ability to take risks by enhancing operational flexibility and facilitating access to funds. Wang and Han also found that digital transformation is effective in preventing corporate fraud and elevating overall business standards. Moreover, digital transformation motivates firms to adopt greater environmental responsibility, resulting in decreased carbon emissions through the utilization of green technology advancements and improved corporate governance procedures.

Sensitivity Test

This study used Eviews 12 to investigate the effects of different values of independent variables on the dependent variable by performing sensitivity and robustness tests under particular assumptions. The sensitivity test involved comparing the outcomes of testing the dependent variable related to green banking disclosure (PPH) with 20 dimensions, including four new dimensions. Therefore, in this sensitivity test comparing the green banking disclosure variable (PPH) which previously used 16 dimensions with 114 indicators and subsequent testing there were an additional 4 dimensions and 3 indicators. The following are the test results of 2 models with different numbers of dimensions and indicators on the green banking disclosure variable (PPH).

Table 3. Comparison of Hypothesis Results

Model 1 (PPH = 16 dimensions)					**Model 2 (PPH = 20 dimensions)**			
Hypothesis	Coefficient	t stat	p-value	Decision	Coefficient	t stat	p-value	Decision
C	0.4372	5.9360			0.3 950	5.9503		
TPS	-0.3026	-1.9427	0.0269**	Not supported	-0.2243	-1.6171	0.053 9*	Not supported
SL	0.4285	3.2232	0.0008***	Supported	0.4286	3 .7005	0.0002***	Supported
TD	-0.2273	-1.9012	0.0295**	Not supported	-0.2720	-2.6040	0.0050***	Not supported
TPS*KMP	0.3159	1.8415	0.0337**	Supported	0.2588	1.7292	0.0428**	Supported
SL*KMP	-0.5342	-2.9825	0.0017***	Not supported	-0.53 20	-3 .4105	0.0004***	Not supported
TD*KMP	0.4809	3.3505	0.0005***	Supported	0.53 05	4.2442	0.0000***	Supported
PROF	-0.3306	-0.8365	0.2021	Not supported	-0.0913	-0.2641	0.3 960	Not supported
UP	0.0000	0.7968	0.2134	Supported	0.0000	2.3 675	0.0096***	Supported
Adj. R-square			0.16425		Adj. R-square			0.235074

Source: Data processing output with Eviews 12 software, 2024

Notes: PPH = Green Banking Disclosure, TPS = Shareholder Pressure, SL = Environmental Strategy, TD = Digital Transformation, KMP = Top Management Commitment, UP = Banking Size, PROF = Profitability

The following is the regression equation used to evaluate the second model hypothesis shown in the above table:

PPH = 0.43 72 - 0.3 026TPS + 0.4285SL - 0.2273 TD + 0.3 159TPS*KMP - 0.53 42SL*KMP + 0.4809TD*KMP - 0.3 3 06PROF + 2.693 2e-17UP

It is clear from table 3's summary of test results that the findings of the hypothesis test for both models are in agreement.

Adjusted R Square of the second model that uses green banking disclosure with 20 dimensions is 23.51% higher than the first model using green banking disclosure variable 16 dimensions is 16.43%.

The findings of this sensitivity test demonstrate that, in order to support environmental sustainability, transparency, and regulatory compliance particularly in the financial sector, which has a significant influence on financing economic activities, more dimensions must be added to the disclosure of green banking in accordance with the Green Banking Disclosure (PPH). Therefore, the currently developed model can be said to be Robust because it is proven that the R-square value is higher when the model is added to the dimensions than the previous one.

According to the sensitivity test results table, the inclusion of 4 new dimensions of novelty leads to a rise in the P-value from 0.0269 to 0.053 and an increase in the coefficient value from -0.3026 to -0.2243 for the effect of shareholder pressure on disclosure in green banking. The P-value for the connection between environmental strategy and green banking disclosure dropped from 0.0008 to 0.0002, while the coefficient value increased from 0.4285 to 0.4286. Regarding how digital transformation affects disclosure in green banking, there is an increase in P-value from 0.0295 to 0.0050 and an increase in the coefficient value from -0.2272 to -0.2270.

The four dimensions of novelty have been added. The decline in the coefficient value from 0.159 to 0.2588 and the increase in the P-value from 0.03 to 0.0428 show how important senior management commitment is in reducing the impact of shareholder pressure on green banking disclosure. The significance of top management commitment in reducing the impact of environmental strategy on green banking disclosure is demonstrated by the decline in the P-value from 0.0017 to 0.0004 and the coefficient value from -0.53 42 to -0.53 20. The P-value decreased from 0.0005 to 0.0000 and the coefficient value increased from 0.4809 to 0.5305, demonstrating the benefit of senior management's commitment to managing the impact of digital transformation on eco-friendly banking disclosure.

According to the 2021 TCFD recommendations, which aim to harmonize environmental reporting with a focus on climate risk as well as managerial areas like governance and strategy, this study adds the dimensions of governance, strategy, mitigation, and risk as well as metrics and targets to the dimensions of green banking disclosure. The objective is to improve the quality of company disclosures regarding their management of climate-related risks and opportunities across these four areas (Demaria et al., 2019), where banking is one of the high impact sectors not only as a polluting sector, but also affecting environmental change.

Expansion Test

Table 4. Expansion Hypothesis Testing Results

Keterangan	Model 1 PPL			Model 2 EKH			Model 3 SPH			Model 4 PPK			Model 5 PPHE		
	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan
H1 : TPS	-0.1338	0.3167	Tdk didukung	-0.3174	0.0949*	Tdk didukung	-0.3667	0.1473	Tdk didukung	-0.4467	0.0753*	Tdk didukung	-0.7623	0.0098***	Tdk didukung
H2 : SL	0.4463	0.0356**	Didukung	0.4741	0.0084***	Didukung	0.3894	0.1103	Tdk didukung	0.7485	0.0022***	Didukung	0.8900	0.0010***	Didukung
H3 : TD	-0.1495	0.2492	Tdk didukung	-0.3471	0.0261**	Tdk didukung	-0.2858	0.1557	Tdk didukung	-0.5555	0.0093***	Tdk didukung	-0.8181	0.0008***	Tdk didukung
H4 : KMP*TPS	-0.0161	0.4798	Tdk didukung	0.3245	0.1012	Tdk didukung	0.2387	0.2796	Tdk didukung	0.3449	0.1521	Tdk didukung	0.7643	0.0188**	Didukung
H5 : KMP*SL	-0.5738	0.0426**	Tdk didukung	-0.5829	0.0144**	Tdk didukung	-0.4922	0.1249	Tdk didukung	-0.7137	0.0212**	Tdk didukung	-1.2529	0.0006***	Tdk didukung
H6 : KMP*TD	0.4254	0.0558*	Didukung	0.4833	0.0118**	Didukung	0.2836	0.2044	Tdk didukung	0.7025	0.0065***	Didukung	1.0554	0.0004***	Didukung
Adj. R-square			**0.0311**			**0.0244**			**0.0264**			**0.0651**			**0.1109**

Keterangan	Model 6 PLE			Model 7 PRL			Model 8 PH			Model 9 PRH			Model 10 FURL		
	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan
H1 : TPS	0.2423	0.2082	Tdk didukung	-0.230	0.1224	Tdk didukung	-0.3266	0.1167	Tdk didukung	-0.3389	0.1525	Tdk didukung	-0.6599	0.0304**	Tdk didukung
H2 : SL	-0.3015	0.1229	Tdk didukung	0.338	0.0262**	Didukung	0.3964	0.0416**	Didukung	0.2775	0.1560	Tdk didukung	0.8431	0.0025***	Didukung
H3 : TD	0.2890	0.1073	Tdk didukung	-0.210	0.0889*	Tdk didukung	-0.2659	0.0983*	Tdk didukung	0.0977	0.3463	Tdk didukung	-0.3532	0.0930**	Tdk didukung
H4 : KMP*TPS	-0.5879	0.0401**	Tdk didukung	0.213	0.1707	Tdk didukung	0.3044	0.1508	Tdk didukung	0.3193	0.1839	Tdk didukung	0.4821	0.1041	Didukung
H5 : KMP*SL	0.5085	0.0732*	Didukung	-0.432	0.0327**	Tdk didukung	-0.5637	0.0337**	Tdk didukung	-0.4491	0.1123	Tdk didukung	-1.0430	0.0048***	Tdk didukung
H6 : KMP*TD	-0.0247	0.4648	Tdk didukung	0.455	0.0079***	Didukung	0.6306	0.0055***	Didukung	0.3602	0.1121	Tdk didukung	0.9654	0.0015***	Didukung
Adj. R-square			**0.0351**			**0.0814**			**0.1061**			**0.1447**			**0.1751**

Keterangan	Model 11 EKRH			Model 12 KCH			Model 13 KH			Model 14 KMH			Model 15 PSH		
	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan
H1 : TPS	-0.1724	0.2400	Tdk didukung	-0.2908	0.1298	Tdk didukung	-0.1314	0.2128	Tdk didukung	0.0301	0.4648	Tdk didukung	-0.4525	0.0673*	Tdk didukung
H2 : SL	0.4749	0.0172**	Didukung	0.4002	0.0416**	Didukung	0.2346	0.0489**	Didukung	-0.0262	0.4616	Tdk didukung	0.4742	0.0310**	Didukung
H3 : TD	-0.1762	0.1869	Tdk didukung	-0.2591	0.1039	Tdk didukung	-0.0756	0.2758	Tdk didukung	-0.0617	0.4012	Tdk didukung	0.0154	0.4731	Tdk didukung
H4 : KMP*TPS	0.1609	0.2877	Didukung	0.1549	0.3008	Didukung	0.2530	0.0831*	Didukung	-0.0663	0.4252	Tdk didukung	0.4751	0.0735*	Didukung
H5 : KMP*SL	-0.4946	0.0504*	Tdk didukung	-0.4943	0.0559*	Tdk didukung	-0.3039	0.0556*	Tdk didukung	0.0479	0.4479	Tdk didukung	-0.5051	0.0696*	Tdk didukung
H6 : KMP*TD	0.5510	0.0117**	Didukung	0.5641	0.0122**	Didukung	0.2949	0.0272**	Didukung	0.1347	0.32295	Tdk didukung	0.3572	0.0958*	Didukung
Adj. R-square			**0.0915**			**0.0615**			**0.1095**	-		**0.0187**			**0.1186**

Keterangan	Model 16 PH1			Model 17 TK			Model 18 STR			Model 19 MR			Model 20 MT		
	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan	koef	p-value	keputusan
H1 : TPS	-0.9065	0.0097***	Tdk didukung	-0.6137	0.0901*	Tdk didukung	-0.6997	0.0363**	Tdk didukung	-0.4529	0.1343	Tdk didukung	-1.0211	0.0078***	Tdk didukung
H2 : SL	0.8352	0.0063***	Didukung	0.2951	0.2106	Tdk didukung	0.4342	0.0844*	Didukung	0.6822	0.0194**	Didukung	0.7625	0.0142**	Didukung
H3 : TD	-0.4943	0.0490**	Tdk didukung	0.1242	0.3541	Tdk didukung	0.2228	0.2170	Tdk didukung	-0.5193	0.0409**	Tdk didukung	-0.3418	0.1370	Tdk didukung
H4 : KMP*TPS	0.9681	0.0124**	Didukung	0.6766	0.0773*	Didukung	1.0032	0.0073***	Didukung	0.4175	0.1629	Didukung	1.1130	0.0068***	Didukung
H5 : KMP*SL	-1.1730	0.0047***	Tdk didukung	-0.0486	0.4608	Tdk didukung	-0.5175	0.1115	Tdk didukung	-1.0860	0.0075***	Tdk didukung	-1.1940	0.0055***	Tdk didukung
H6 : KMP*TD	0.9256	0.0052***	Didukung	-0.2196	0.2893	Tdk didukung	0.0279	0.4673	Tdk didukung	0.9901	0.0029***	Didukung	0.7018	0.0306**	Didukung
Adj. R-square			**0.1248**			**0.0473**			**0.1286**			**0.1604**			**0.1320**

The results of the model 1 experiment show that, independent of the other factors, the environmental strategy (SL) has a favorable impact on green banking disclosure (PPH). Top management commitment (KMP) reduces the impact of the environmental strategy (SL) but increases the effect of digital transformation (TD) on PPH. The variables under investigation only explain a small fraction of the dependent variable, with the remainder being impacted by external factors, according to the Adjusted R-squared value of 3.11%.

In model 2, SL has a favorable impact on PPH, whereas digital transformation (TD) and shareholder pressure (TPS) have a negative impact. On PPH, KMP increases the impact of TD and decreases the impact of SL. The independent variables can only account for 2.44% of PPH, with the remaining portion being explained by other factors, according to the adjusted R-square of 2.44%. All independent factors have no effect on PPH, according to Model 3, and KMP has no effect on how strongly or weakly the independent variables and PPH are related. Only a small percentage of the variables account for PPH, with the majority being explained by other factors, according to the Adjusted R-square of 2.64%. Model 4 demonstrates that SL has a beneficial impact on PPH, whereas TPS and TD have a negative effect. KMP reduces the impact of SL and increases the impact of TD. Adjusted R-square of 6.51% shows that the independent variables only explain 6.51% of PPH, Other factors explain the remainder.

The fifth model, PPH is positively impacted by SL and negatively impacted by TPS and TD. KMP enhances the impact of TPS and TD on PPH while reducing the impact of SL. An adjusted R-square of 11.09% indicates that a portion of the variation in PPH can be attributed to the independent variables, with the rest being influenced by other factors. Moving on to the sixth model, there are no significant impacts of the independent variables on PPH. However, KMP does amplify the impact of SL and diminish the impact of TPS and TD. The adjusted R-square of 3.51% suggests that the independent variables offer limited explanation for the variation in PPH. Lastly, in the seventh model, SL positively influences PPH while TD has a negative impact. KMP strengthens the impact of TD and weakens the impact of SL on PPH. With an adjusted R-square of 8.14%, it is apparent that the independent variables account for only a fraction of the variance in PPH.

In model 8, PPH is positively impacted by SL and negatively by TD. KMP reduces the impact of SL and

increases the impact of TD. According to the Adjusted R-square, the independent factors can only account for a small percentage of the variation in PPH. The independent variables have no effect on PPH, according to Model 9, and KMP has no effect on how strongly the independent variables and PPH are related. With an Adjusted R-square of 14.47%, PPH may be explained by a relatively small number of variables. Model 10 demonstrates that TPS and TD have a detrimental impact on PPH, whereas SL has a beneficial effect. KMP reduces the impact of SL and increases the effects of TPS and TD on PPH. The independent factors account for 17.51% of the variation in PPH, according to the Adjusted R-square of 17.51%.

Model 11 shows that SL positively impacts PPH, and KMP enhances the impact of TD and TPS on PPH while reducing the effect of SL. The Adjusted R-square of 9.15% suggests that the independent variables only account for a small portion of the variation in PPH. In contrast, in model 12, SL has a positive influence on PPH, and KMP reinforces the impact of TD on PPH but weakens the impact of SL. The 6.15% Adjusted R-square indicates shows the variability in PPH is only partially explained by the independent variables.

In model 13, SL has a beneficial impact on PPH, while KMP reduces the impact of SL and increases the impact of TD and TPS on PPH. The independent variables only partially explain the variation in PPH, as indicated by the Adjusted R-square of 10.95%. KMP has not been shown to increase or decrease the impact of the independent variables on PPH, and Model 14 demonstrates that the independent variables have no effect on PPH. The majority of the variation in PPH is explained by other factors, according to the Adjusted R-square of 1.87%. TPS has a detrimental impact on PPH in model 15, whereas SL has a beneficial effect. KMP reduces the impact of SL and increases the effects of TPS and TD on PPH. The independent factors account for 11.86% of the variation in PPH, according to the Adjusted R-square of 11.86%. In model 16, TPS and TD have a negative impact on PPH, whereas SL has a beneficial effect. KMP has no influence on the effect of SL, but it enhances the effects of TD and TPS on PPH. The independent variables only partially account for the variation in PPH, as indicated by the Adjusted R-square of 10.61%.

CONCLUSION

With top management commitment acting as a moderating variable, this research has shown the effects of environmental strategy, shareholder pressure, regulatory pressure, and digital transformation on green banking disclosure. The interaction between environmental strategy and green banking disclosure has been empirically demonstrated. Research has shown that a strong commitment from top management can both increase the impact of digital transformation on green banking disclosures and decrease the impact of environmental measures on the same. The following findings support the validity of each research hypothesis:

1. The openness of environmentally friendly banking procedures is negatively impacted by shareholder influence. It appears that corporate social responsibility statements are not given top priority by shareholders in the banking industry. This suggests that when choosing which banks to invest in, Indonesian investors can ignore social responsibility reports.

2. A bank's level of disclosure about its green activities can be significantly influenced by the effectiveness of its environmental strategy. This result emphasizes how crucial it is to have the right environmental strategy in place to guarantee that the bank's green banking disclosures accurately reflect its environmental performance.

3. Digital transformation has a negative impact on green banking disclosures. It suggests that operational efficiency, accessibility, and transaction speed are given precedence over actively

promoting environmental or social sustainability when it comes to digitalization in the banking sector.

4. Shareholder pressure on green banking transparency is strengthened by top management commitment. This implies that top management's strong commitment to green banking disclosure is aided by shareholder pressure. This strengthens the company's credibility.

5. The impact of environmental strategy on the disclosure of sustainability practices in the banking industry is not improved by the commitment of senior management. This demonstrates that top management commitment is overly concentrated on short-term objectives and that commitment is merely symbolic or inconsistent, with no actual efforts taken towards the implementation of environmental plans.

6. The impact of digital transformation on green banking disclosures is strengthened by top management commitment. This demonstrates that banks can use digital transformation to boost environmental disclosure accountability and transparency with a strong commitment from management.

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