**The Eastasouth Management and Business**
Vol. 4, No. 02, January 2026, pp. 485 – 491
ISSN: 2985-7120, DOI: 10.58812/esmb.v4i02

# Navigating Green Banking Disclosure: How Slack Resources Moderate Governance Effects

**Muhammad Gias[1], Suripto Suripto[2], Mediya Destalia[3]**
[1,2,3] Faculty of Social Science and Political Science, Lampung University, Bandar Lampung, Indonesia

**Article Info**

***Article history:***

Received Jan, 2026
Revised Jan, 2026
Accepted Jan, 2026

***Keywords:***

Corporate Governance;
Financial Slack;
Green Banking;
Human Resource Slack;
Moderating Effect

**ABSTRACT**

This study aims to analyze the influence of corporate governance, financial slack, human resource slack, return on assets, and non-performing loan on green banking disclosure among banking companies listed on the Indonesia Stock Exchange during the 2022–2024 period. This research is based on Stakeholder Theory. The study uses secondary data derived from annual and sustainability reports of 16 banking companies and applies panel data regression. Data collection technique used in this research is documentation study. The findings reveal that corporate governance has a significant positive effect on green banking disclosure, while return on assets and non-performing loan demonstrate significant negative effects. Conversely, financial slack and human resource slack show no significant partial influence. The simultaneous test indicates that all independent variables collectively have a significant effect on green banking disclosure, suggesting that sustainability disclosure is shaped by a combination of governance quality, resource availability, profitability, and credit risk management. Moderation testing further shows that neither financial slack nor human resource slack moderates the relationship between corporate governance and green banking disclosure.



***Corresponding Author:***

Name: Muhammad Gias
Institution Address: Faculty of Social Science and Political Science, Lampung University, Bandar Lampung, Indonesia
e-mail: mgias1709@gmail.com

## 1. INTRODUCTION

Global awareness of environmental issues including climate change, pollution, and ecosystem degradation has encouraged countries to commit to environmental mitigation through the Paris Agreement and the Sustainable Development Goals (SDGs). This commitment requires all sectors, including the banking industry, to strengthen their role in sustainable development [1], [2]. In Indonesia, the banking sector holds a strategic position as it functions as the main provider of financing for industries that potentially create environmental impacts [3]. Therefore, transparency in sustainability practices has become a necessity for financial institutions.

Regulations such as Bank Indonesia Regulation No. 14/15/PBI/2012 and the OJK Sustainable Finance Roadmap 2021–2025 direct banks to consider environmental risks prior to credit disbursement. OJK recorded a 22% increase in green financing in 2024, and WWF reports indicate consistent improvement in the sustainability performance of the banking sector. However, findings from TuK Indonesia show that 15 banks continue to provide funding to companies involved in deforestation, while since 2015 Indonesian banks have reportedly financed up to Rp262 trillion to companies linked to forest fires [4]. These conditions reflect misalignment between regulatory expectations and actual sustainability implementation.

Inconsistencies in banking institutions' ability and awareness regarding green disclosures persist, notwithstanding the ongoing evolution of regulatory requirements [5]. In addition to disclosure practices, internal financial indicators also influence banks' capacity to implement green initiatives. The return on assets (ROA) of the banking industry declined in 2020 due to the pandemic but increased steadily from 2021 to 2024. Non-performing loan (NPL) levels rose in 2020 and subsequently decreased through 2024, reflecting banks' ability to manage credit risk. The fluctuations in ROA and NPL highlight financial stability dynamics that may influence the quality of green banking disclosure.

However, previous studies show inconsistent findings regarding the determinants of green banking disclosure, particularly in relation to corporate governance, financial slack, human resource slack, ROA, and NPL [2]. Some studies report significant positive effects, while others find negative or insignificant relationships. These inconsistencies indicate a research gap that needs further investigation within the Indonesian banking context [3], [6].

Based on these empirical conditions, regulatory developments, and the dynamics of banking performance, this study aims to examine the effects of corporate governance, financial slack, human resource slack, alongside ROA, and NPL on green banking disclosure among among Indonesian listed banks. Spanning from 2022 to 2024, the research assesses these variables through both partial and simultaneous testing. The current inquiry intends to contribute empirical data toward understanding the determinants of sustainability disclosure in the Indonesian banking sector.

## 2. LITERATURE REVIEW

### *2.1 Stakeholder Theory*

Stakeholder theory posits that organizational accountability is not limited to equity holders; rather, it requires balancing the interests of various constituent groups affected by business activities, such as staff members, consumers, supply chain partners, the state, and the community at large [7]. Firm effectiveness is therefore quantified through a lens that integrates both financial outcomes and the broader creation of value for all impacted entities.

In the banking sector, stakeholder pressure regarding sustainability practices is increasingly strong. Sun et al. (2020) argue that green banking disclosure represents banks' responses to stakeholder expectations in demonstrating environmental and social commitment. Similarly, Hörisch et al. (2014) emphasize that good governance enhances transparency and stakeholder welfare through more responsible operational practices.

### *2.2 Green Banking Disclosure*

Green banking disclosure denotes reporting of sustainable banking practices that integrate economic, social, and environmental considerations into banking operations [10]. This concept includes financing support for eco-conscious initiatives, such as green credit and renewable energy, as well as developing banking services that account for social, technological, and environmental impacts [11]. Such disclosures reflect a bank's responsibility not only to shareholders but also to environmental stewardship and the welfare of local constituents [8], [12].

Green banking information is typically presented in sustainability reports, which include environmental initiatives, emissions management, green financing, and sustainability training [13]. Based on stakeholder theory, these practices aim to meet stakeholder expectations while strengthening legitimacy and public trust (Wu & Shen, 2013 in Bose et al., 2017).

### 2.3 *Corporate Governance*

Corporate governance is a framework that governs the interactions among the firm, its administrative body, and its impacted parties are managed and directed to ensure effective oversight and the achievement of corporate objectives [15]. It assigns rights and responsibilities proportionately while encouraging transparent, accountable, and sustainable business practices. In the banking sector, strong governance acts as a pivotal driver in integrating sustainability principles and complying with regulatory and societal pressures [5].

Independence and professionalism are key components of good governance. Handajani (2019) finds that a stronger independent board enhances sustainability reporting transparency by reinforcing monitoring functions. The presence of sustainability committees also indicates greater commitment to environmental and social issues [2]. Thus, corporate governance is a significant indicator of a bank's capacity to implement green banking disclosure.

### 2.4 *Financial Slack*

Financial slack represent the extent of redundant financial capacity, comprising liquidity, cash reserves, or unallocated earnings, beyond the firm's operational needs [17], [18]. These reserves provide firms with flexibility to manage uncertainty, absorb risks, and support strategic initiatives without compromising operational stability. In sustainable banking, financial slack plays an essential role in enabling banks to advance sustainability initiatives, including enhancing green banking disclosure [6].

Prior studies indicate that financial slack increases a firm's capacity to withstand internal and external pressures and fosters innovation [19]. Such flexible resources help management allocate funds to corporate social responsibility activities and sustainability reporting in alignment with stakeholder expectations [20]. Thus, financial slack represents a bank's ability to maintain financial resilience while investing in green banking practices and more transparent sustainability disclosures.

### 2.5 *Human Resource Slack*

Human resource slack refers to surplus employee capacity, such as extra working hours, flexible assignments, or an excess number of employees beyond core operational requirements [17]. This surplus serves as a strategic asset that enhances firm's capacity to establish a superior market position while ensuring enduring organizational resilience [21]. Specialized sustainability competencies such as environmental impact analysis or green financial product development are increasingly important, especially under competitive pressures [22].

Human resource slack offers flexibility for innovation, strategy adaptation, and organizational resilience. Kim et al. (2019) highlight that employee equipped with sustainability expertise can drive innovation in green finance. Well-managed HR slack also reduces dependence on external labor and supports corporate stability amid market uncertainties [24]. In reporting contexts, HR slack contributes to enhancing non-financial disclosure quality, including sustainability reports and green banking disclosures. Khan et al. (2022) show that competent human resources strengthen banks' ability to meet stakeholder expectations through improved transparency.

## 3. METHODS

This study utilizes an empirical quantitative method through a causal investigation to determine the extent to which the independent factors drive changes in the dependent variable through statistical analysis. This approach is explanatory in nature, as it aims to test hypotheses using empirical data obtained from comprehensive annual and sustainability disclosures reports of banking companies.

This study implements a purposive sampling strategy, where the selection of participants is guided by predetermined parameters that align with the core investigative goals. This study examines a sample of 16 banking institutions with 48 number of data observation. The data analysis method is used to answer the research problems and test the hypotheses. This study adopts a pooled data methodology, merging time series and cross-section data. Hypothesis testing is conducted using panel regression models utilizing EViews 12 for data estimation.

## 4. RESULTS AND DISCUSSION

Table 1. Multiple Regression Test Result

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.258897 | 0.430155 | 0.601868 | 0.5505 |
| X1 | 1.145300 | 0.365985 | 3.129366 | 0.0032 |
| X2 | -0.019996 | 0.015553 | -1.285640 | 0.2056 |
| X3 | 0.034510 | 0.022042 | 1.565653 | 0.1249 |
| X4 | -0.035176 | 0.016551 | -2.125348 | 0.0395 |
| X5 | -0.042827 | 0.016762 | -2.555095 | 0.0143 |

Source: Processed primary data on Eviews 12 (2025)

Table 1 details the empirical findings derived from the multiple linear regression model using EViews 12. The coefficients, probability values, and statistical significance indicate the partial effect of Corporate Governance, Financial Slack, Human Resource Slack, Return on Assets, and Non-Performing Loan on Green Banking Disclosure.

Corporate Governance shows a t-value of 3.1293, exceeding the critical value of 2.01808, with a p-value of 0.0032. These results indicate a statistically significant effect on GBD, demonstrating that stronger corporate governance practices contribute meaningfully to higher levels of green banking disclosure. Financial Slack, in contrast, records a t-value of 1.2856 and a p-value of 0.2058, showing no significant influence on GBD. Similarly, Human Resource Slack displays a t-value of 1.5656 and a p-value of 0.1249, confirming that this variable also fails to demonstrate a statistically significant impact on the extent of green banking disclosures.

Return on Assets (ROA) yields a t-value of 2.1253 with a p-value of 0.0395, indicating a significant relationship with GBD. This suggests that profitability plays an important role in shaping the extent of sustainability disclosures. Non-Performing Loan (NPL) likewise demonstrates a significant effect, with a t-value of 2.5550 and a p-value of 0.0143, showing that credit risk conditions influence the disclosure of green banking practices.

Table 2. Moderation Regression Analysis Test Result

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 10.39907 | 8.955327 | 1.161216 | 0.2521 |
| X1 | -9.216078 | 9.092018 | -1.013645 | 0.3166 |
| X2 | -0.655723 | 0.547801 | -1.197008 | 0.2380 |
| X3 | 0.453530 | 0.451747 | 1.003947 | 0.3212 |
| X1X2 | 0.639933 | 0.556122 | 1.150705 | 0.2564 |
| X1X3 | -0.432629 | 0.457835 | -0.944945 | 0.3501 |

Source: Processed primary data on Eviews (2025)

According to moderation test result in Table 2 using EViews 12, In terms of moderating effects, the interaction between Corporate Governance and Financial Slack results in a t-value of 1.150705 and a p-value of 0.2564, indicating that Financial Slack does not moderate the relationship between corporate governance and GBD. Likewise, the interaction between Corporate Governance and Human Resource Slack yields a t-value of 0.944945 with a p-value of 0.3501, demonstrating that Human Resource Slack also does not act as a moderator. These findings suggest that the impact of corporate governance on green banking disclosure operates independently of the available financial or human resource slack within the organization.

Table 3. Simultaneous Test Result

| | |
|---|---|
| F-statistic | 9,914323 |
| Prob(F-statistic) | 0,000003 |

Source: Processed primary data on Eviews (2025)

According to F-test result in Table 3, the model estimation using Eviews 12 shows an F-statistic value of 9.914323, which is higher than the F-table value of 2.43769. In addition, the probability value of 0.000003 is below the 0.05 significance level. These results indicate that Corporate Governance, Financial Slack, Human Resource Slack, Return on Assets, and Non-Performing Loan jointly exert a significant influence on Green Banking Disclosure. These results reinforce the conclusion that the extent to which banks report on sustainable initiatives is a measurable by the combined effects of governance structures, financial conditions, resource capacity, profitability, and credit risk management within banking institutions.

Based on result, Corporate Governance has significant positive effect on Green Banking Disclosure. Moreover, well-governed management views sustainability disclosure as a reputational investment, thus showing a stronger commitment to environmental reporting. This finding is consistent with stakeholder theory, where responsive governance leads companies to conform to the pressures of regulators, investors, and society. Overall, both statistical evidence and visual patterns confirm that Corporate Governance has a significant positive effect on Green Banking Disclosure.

Financial Slack does not have a significant effect on Green Banking Disclosure. This points to the fact that size of financial reserves does not directly enhance the quality and transparency of environmental reporting. This happens because financial slack is generally prioritized for liquidity and operational needs rather than sustainability reporting, which is often perceived as a low-cost administrative activity. Moreover, regulatory standards require all banks, regardless of financial capacity, to disclose sustainability information at relatively similar levels.

Human Resource Slack does not have a significant effect on Green Banking Disclosure. This substantiates those excess human resources do not automatically amplify the extent of green banking transparency initiatives, especially when employees lack sustainability-related competencies. This insignificance is caused employee quality being more important than quantity, human resource slack primarily being used for operational stability rather than sustainability initiatives, and capacity-building effects requiring more time than the study period allows.

Return on Assets (ROA) has a significant negative effect on Green Banking Disclosure. This underscores that firms with stronger profit margins is associated with lower levels of environmental disclosure. This opposite movement shows that profit performance does not positively correlate with sustainability reporting. Banks with high ROA tend to withhold environmental information to maintain competitive advantage or minimize additional reporting costs. Non-Performing Loan (NPL) has a significant negative effect on Green Banking Disclosure. This implies an inverse relationship, where elevated credit risk serves as a constraint that diminishes the bank's tendency to provide extensive sustainability reports. When average NPL decreases, Green Banking Disclosure increases, indicating an inverse relationship. Higher NPL causes management to focus on asset recovery and financial stability, thereby reducing attention to sustainability reporting.

Based on the moderation test, indicate that neither Financial Slack nor Human Resource Slack functions as a moderating agent in the nexus between Corporate Governance and Green Banking Disclosure. Governance commitment is more fundamental than financial or human resource flexibility, companies with strong governance fulfil stakeholder expectations directly without requiring additional financial support.

## 5. CONCLUSION

This study concludes that Corporate Governance has a significant positive influence on Green Banking Disclosure among Indonesian banking institutions during 2022–2024. In contrast, Financial Slack and Human Resource Slack do not significantly affect disclosure, indicating that excess financial or human resources alone do not enhance sustainability transparency. Return on Assets (ROA) and Non-Performing Loan (NPL) both show significant negative effects, suggesting that higher profitability and increased credit risk reduce banks' commitment to environmental reporting.
Simultaneously, Corporate Governance, Financial Slack, Human Resource Slack, ROA, and NPL collectively exert a significant influence on Green Banking Disclosure, highlighting the multidimensional nature of sustainability reporting. Furthermore, neither Financial Slack nor Human Resource Slack moderates the relationship between Corporate Governance and Green Banking Disclosure, indicating that governance effectiveness in promoting disclosure is not contingent on resource slack.

## REFERENCES

[1] D. Rahmamita and M. R. Kahar, "Green Banking Disclosure and Financial Performance : Role of Corporate Governance as Moderating Variable," *J. Manag. Adm. Provis.*, pp. 392–401, 2024.

[2] N. Khamilia and W. Nor, "Faktor-Faktor Dalam Meningkatkan Pengungkapan Green Banking," *J. Ris. Akunt.*, vol. 12, no. 1, pp. 1–23, 2022, doi: 10.36733/juara.v12i1.3144.

[3] I. M. Siregar and S. Haryanto, "Green Banking: Operating Costs on Operating Income, Capital Adequacy Ratio, Financial Slack, Sustainability Officer, and Sustainability Committee," *J. Ekon. Syariah Teor. dan Terap.*, vol. 10, no. 5, pp. 427–442, 2023, doi: 10.20473/vol10iss20235pp427-442.

[4] Rainforest Action Network, "Tinjauan atas Reformasi Keuangan Berkelanjutan di Indonesia," *Rainforest Action Network*, 2019.

[5] M. Marfuah, B. A. Sakti, H. Kusuma, and W. R. W. Abdullah, "Green Banking Practices in Indonesia: What is the Role of Corporate Governance?," *Rev. Integr. Bus. Econ. Res.*, vol. 14, no. 1, pp. 408–422, 2025.

[6] N. Ahmar, L. Al Rahmah, and D. P. Darminto, *Green banking disclosure from the perspective of corporate governance, financial slack and human resource slack in Indonesia*, vol. 19, no. 2. 2024. doi: 10.21511/bbs.19(2).2024.08.

[7] R. E. Freeman and D. L. Reed, "Stockholders and Stakeholders: A New Perspective on Corporate Governance," *Calif. Manage. Rev.*, vol. 25, no. 3, pp. 88–106, Apr. 1983, doi: 10.2307/41165018.

[8] H. Sun *et al.*, "Csr, co-creation and green consumer loyalty: Are green banking initiatives important? A moderated mediation approach from an emerging economy," *Sustain.*, vol. 12, no. 24, pp. 1–22, 2020, doi: 10.3390/su122410688.

[9] J. Hörisch, R. E. Freeman, and S. Schaltegger, "Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework," *Organ. Environ.*, vol. 27, no. 4, pp. 328–346, 2014.

[10] R. Romli and A. R. R. Zaputra, "Pengaruh Implementasi Green Banking, Corporate Social Responsibility terhadap Nilai Perusahaan pada Perusahaan Perbankan yang terdaftar di BEI," *Portofolio J. Ekon. Bisnis, Manajemen, dan Akunt.*, vol. 18, no. 2, pp. 36–59, 2022, doi: 10.54783/portofolio.v18i2.214.

[11] N. L. D. E. Trisnawati, D. K. I. Wahyuni, and Sarbaeni, "Analysis of the Impact of Green Banking, Inflation Rates, and Bad Loans on the Profit Growth of Banking Companies Listed on the IDX," *Int. J. Econ. Dev. Res.*, vol. 4, no. 3, pp. 2023–1598, 2023.

[12] Y. Lian, J. Gao, and T. Ye, "How does green credit affect the financial performance of commercial banks? ——Evidence from China," *J. Clean. Prod.*, vol. 344, p. 131069, 2022, doi: https://doi.org/10.1016/j.jclepro.2022.131069.

[13] S. S. Embuningtiyas, O. R. Puspasari, A. A. G. S. Utama, and R. I. Ardianti, "Bank financial soundness and the disclosure of banking sustainability reporting in Indonesia," *Int. J. Innov. Creat. Chang.*, vol. 10, no. 12, pp. 237–247, 2020.

[14] S. Bose, H. Z. Khan, A. Rashid, and S. Islam, "Accepted Manuscript Asia Pacific Journal Of Management ( Abdc Rank : A ) Please cite : Bose , S ., Khan , H . Z ., Rashid , A ., & Islam , S . ( 2017 ). What drives green banking disclosure ? An institutional and corporate governance perspective . Asia Pa," 2017, doi: 10.1007/s10490-017-9528-x.What.

[15] International Finance Corporation, *Indonesia Coprorate Governance Manual, Second edition*. International Finance Corporation, 2018. doi: 10.1596/30122.

[16] L. Handajani, "Corporate Governance dan Green Banking Disclosure: Studi pada Bank di Indonesia," *J. Din. Akunt. dan Bisnis*, vol. 6, no. 2, pp. 121–136, 2019, doi: 10.24815/jdab.v6i2.12243.

[17] T. DeMarco, "Slack Getting Past Burnout, Busywork, and the Myth of Total Efficiency," 2001, doi: 10.24198/jaab.v4i2.33284.

[18] P. Abdillah, S. Regytha, and A. Gunawan, "Does Financial Slack Moderate Effect of Environmental, Social, and Governance (ESG) on Firm Performance?," *Econ. Digit. Bus. Rev.*, vol. 4, no. 2, pp. 379–390, 2023.

[19] A. Solikhin, I. Khalik, and Y. Yuliusman, "Peran Corporate Social Responsibility Dalam Hubungan Financial Slack Terhadap Nilai Perusahaan Bumn Yang Terdaftar Di Bei Periode 2018-2021," *J. Manaj. Terap. dan Keuang.*, vol. 11, no. 04, pp. 1008–1020, 2022, doi: 10.22437/jmk.v11i04.21788.

[20] N. E. Onuoha and N. N. Nkwor, "Slack Resources and Corporate Social Responsibility Link: Evidence from Manufacturing Firms in Nigeria," *J. Account. Audit. Bus.*, vol. 4, no. 2, pp. 1–13, 2021, doi: 10.24198/jaab.v4i2.33284.

[21] H. H. Abdelhamied, A. M. Elbaz, B. S. Al-Romeedy, and T. M. Amer, "Linking Green Human Resource Practices and Sustainable Performance: The Mediating Role of Job Satisfaction and Green Motivation," *Sustain.* , vol. 15, no. 6, 2023, doi: 10.3390/su15064835.

[22] Y. M. Yusoff, M. Nejati, D. M. H. Kee, and A. Amran, "Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry," *Glob. Bus. Rev.*, vol. 21, no. 3, pp. 663–680, 2020.

[23] S. I. Kim, H. Shin, H. Shin, and S. Park, "Organizational slack, corporate social responsibility, sustainability, and integrated reporting: Evidence from Korea," *Sustain.*, vol. 11, no. 16, 2019, doi: 10.3390/su11164445.

[24] M. Ali, C.-H. Puah, A. Ali, S. A. Raza, and N. Ayob, "Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks," *Int. J. Manpow.*, vol. 43, no. 3, pp. 614–638, Jan. 2022, doi: 10.1108/IJM-04-2020-0185.

[25] K. Khan, M. S. Shams, Q. Khan, S. Akbar, and M. M. Niazi, "Relationship Among Green Human Resource Management, Green Knowledge Sharing, Green Commitment, and Green Behavior: A Moderated Mediation Model," *Front. Psychol.*, vol. 13, no. June, 2022, doi: 10.3389/fpsyg.2022.924492.


## BIOGRAPHIES OF AUTHORS

| | |
|---|---|
|  | **Muhammad Gias** Undergraduate University of Lampung majoring Business Administration. Interest in finance and management. Email: mgias1709@gmail.com |
| | **Suripto Suripto**<br>Email: Suriptob.1969@Fisip.unila.ac.id |
|  | **Mediya Destalia** lecturer Department of Business Administration, University of Lampung. Complete bachelor's degree Business Administration in 2008 followed by a Master of Business Administration in 2010 at University of Lampung. Specialized focus on business risk, finance, and administration.<br>Email: Mediya.destalia@fisip.unila.ac.id |