

## The Impact of Gender Diversity and Capital Adequacy on ESG Disclosure, Mediated by Financial Performance in KBMI 3 & 4 Banks

Azka Amany\*, Indra Siswanti

Universitas Mercu Buana, Indonesia

Email: 55124110058@student.mercubuana.ac.id\*, indra.siswanti@mercubuana.ac.id

### ABSTRACT

This research aims to analyze the influence of green finance, gender diversity, and capital adequacy on Environmental, Social, and Governance (ESG) disclosure, with financial performance (ROA) as a mediating variable, focusing on banks in the KBMI 3 and 4 categories for the 2021-2024 period. The background of this study is driven by the increasing demand for sustainability transparency in the banking sector and the importance of understanding the mechanisms that encourage comprehensive ESG disclosure. The research methodology employs a quantitative approach using panel data from 10 KBMI 3 and 4 category banks listed on the Indonesia Stock Exchange between 2021 and 2024, utilizing path analysis and the Sobel test. Data were sourced from annual reports and Refinitiv Eikon ESG scores. The results indicate that green finance, gender diversity, and capital adequacy do not have a significant direct effect on ESG disclosure. Conversely, financial performance (ROA) is proven to have a significant positive effect on ESG disclosure and is able to partially mediate the influence of green finance and capital adequacy; however, it does not mediate the effect of gender diversity on ESG disclosure. These findings underscore the importance of improving financial performance to drive sustainability practices in the banking sector, as well as the need for policies that encourage more effective integration between financial and non-financial aspects in sustainability reporting.

**Keywords:** Green Finance; ESG Disclosure; Financial Performance; Capital Adequacy; Gender Diversity.

### INTRODUCTION

Environmental pollution is a crucial issue that has a direct impact on human, animal, and plant life, through changes in ecosystem systems due to the introduction of foreign materials such as waste, garbage, and hazardous substances (Samekto, 2021). Today's company evaluation is no longer limited to profitability, but rather includes responsibility for the environment, society, and governance, known as Environmental, Social, and Governance (ESG).

In recent years, awareness of social and environmental responsibility has increased, companies are faced with demands to disclose relevant information related to environmental, social, and governance (ESG) practices (Dharmawati et al., 2024). Environmental, Social, and Governance (ESG) disclosure is becoming increasingly important not only as a form of commitment to sustainability, but also as a response to the demands of stakeholders who increasingly expect transparency and accountability (Akbar et al, 2022). Data from the Indonesia Stock Exchange (2024) shows that as many as 882 listed companies, or 94% of the number of companies listed on the IDX, have issued Sustainability Reports for the 2023

reporting year. This awareness reveals that, Investors in the capital market are starting to look at the sustainability and ESG aspects of the Company before making its investment decisions.

With ESG Reporting, it is hoped that in the future it can encourage the number, quality of information, and transparency of companies recorded in the delivery of ESG-related data and sustainability. In the end, ESG Reporting can help investors make investment decisions that prioritize sustainability aspects comprehensively.

The banking sector plays a vital role in the economy of a country, especially Indonesia, which is developing, considering the function of banking as an institution that serves as a bridge between those who have excess funds and those who need funds (Linarelli et al., 2021).

Indonesia, through the Financial Services Authority (OJK), classifies the group of banks based on core capital (KBMI), which is divided into 4 KBMIs with KBMI 4 representing the banks with the largest core capital and KBMI 1 with the lowest core capital. Banks included in KBMI 4 and KBMI 3 have a dominance of national assets and credit disbursement, as well as a fundamental pillar for economic stability and growth in Indonesia. The following is a comparison chart of the Bank's core capital in Indonesia.

Banks contribute to the achievement of sustainable development goals. At the same time, issues related to the demands of implementing responsibility for the environment, society and governance in companies, including banks, are increasing (Ng et al., 2020).

ESG Score is an indicator for companies in assessing their commitment to sustainability, transparency and social responsibility. A high score not only improves a business's reputation, but also has a direct impact on productivity by attracting many investors. The ESG Score has succeeded in becoming one of the most frequently used measurements in measuring company performance. To improve economic sustainability, more transparent disclosure of ESG data is needed (Tomtum et al., 2022). The following is the average ESG score of 10 banks in Indonesia.

At the beginning of 2019, the level of ESG disclosure was still relatively low, with only 6 banks such as Bank Rakyat Indonesia (BBRI), Bank Negara Indonesia (BBNI), Bank Mandiri (BMRI), Bank Tabungan Negara (BBTN), Bank Central Asia (BBCA) and Bank Danamon Indonesia (BDMN) achieving values above 70%, only 4 banks out of 6 banks disclosed. In the following years, more banks began to disclose ESG, especially in 2021, where banks such as Bank OCBC NISP (NISP), Bank CIMB Niaga (BNGA), Bank Permata (BNLI) and Bank Maybank Indonesia (BNII) have disclosed ESG, indicating growth in ESG disclosure. By 2023, more and more companies are listed as having marked disclosures above 60%, indicating that there have been improvements in transparency and ESG implementation that are not sufficiently adequate.

The implementation of ESG by the Indonesian government has been regulated through the Financial Services Authority by issuing a regulation with number 51/POJK.03/2017 on the implementation of good corporate governance principles, which encourages companies, including banks to increase ESG disclosure to support the Sustainable Development Goals (SDGs).

One of the main instruments in supporting sustainability is green finance, which specifically allocates funds for environmentally friendly initiatives. This instrument includes projects such as the development of renewable energy, efforts to reduce carbon emissions, and the development of ecologically sustainable infrastructure. This phenomenon emerged as a

direct response to the challenges of the climate crisis, where banks and other financial institutions are acting as agents of change in directing investments towards greener practices. In Indonesia, the development of green finance is strongly encouraged by government regulations, in regulations issued by the OJK on the implementation of good corporate governance principles. This rule requires banks to integrate sustainability considerations into their business operations. According to Lestari (2025), the higher the proportion of green finance disbursed, the greater the incentive for banks to disclose sustainability performance in environmental, social and governance aspects. This is in accordance with research conducted by Liang et al., 2024; Zhao, 2024; and Wu et al., 2023, these findings suggest that green finance can improve ESG performance. However, other findings show that green finance has no effect on sustainability performance (Meliyanti et al., 2025)

Meanwhile, gender diversity in management has become a topic that has increasingly attracted the attention of researchers. Some studies support the hypothesis that companies with higher levels of gender diversity tend to be more active in disclosing Environmental, Social, and Governance (ESG) information. This is due to the diverse ability of management to bring a wide range of perspectives and experience required in adopting sustainable practices. This is in accordance with research (Liu et al., 2025; Omenihu et al., 2025) which shows that gender diversity has a positive effect on sustainability disclosure. Nonetheless, these findings have not been consistent across studies (Septiana et al., 2022).

Measurements on capital adequacy indicators need to be made, to ensure that banks have sufficient capital to absorb unforeseen losses and maintain financial system stability, and banks with adequate capital, are better able to invest in supporting sustainable initiatives. In accordance with the research conducted by these findings, it also shows that capital adequacy and ESG disclosure have a positive relationship, banks with adequate capital are more proactive in sustainability reporting (Lamanda et al., 2024). This is in accordance with research (Retnoningrum et al., 2025; Li et al., 2023). However, other findings show that the capital adequacy ratio (CAR) has no effect on sustainability performance (Nurhikmah et al., 2021).

Financial performance can act as a mediating variable that bridges the relationship between green finance, gender diversity and capital adequacy to improve the Company's financial performance. The success of a company can basically be measured by its ability to provide welfare to shareholders. Companies that are able to manage sustainability strategies while maintaining operational efficiency will reflect healthy financial performance. Financial performance as a mediating variable adds complexity, as ESG disclosures are often associated with increased long-term profitability. The IMF or International Monetary Fund report (2024) shows that banks with good ESG disclosures experience reduced credit risk and increased customer loyalty.

Good financial performance gives investors more confidence, strengthens public trust, and increases company value. Thus, financial performance proxied by profitability in Return On Asset (ROA) is placed as a mediating variable because it is able to bridge the influence of independent variables on the company's value through the profitability it produces. ROA in the last 6 periods has fluctuated, so that increasing profitability has great potential to involve itself in environmental, social, and corporate governance (ESG) activities, as a small portion of the profits earned can be allocated to Environmental, Social, and Governance (ESG). This is in

accordance with research (Putri et al., 2025; Shalhoob, 2025). Despite this, these findings have not been consistent across studies (Aulia et al., 2025; Ramadhan et al., 2025).

The Financial Services Authority Regulation No. 51/POJK.03/2017 on Sustainable Finance has indeed encouraged banks to further integrate Environmental, Social, and Governance (ESG) aspects into their operations, but unfortunately, its application in the field is often inconsistent, so the study of ESG disclosures remains very relevant today, considering that stakeholders such as customers and investors need a way to evaluate the company's performance as a whole. This disclosure is important as a key tool to understand the extent to which the bank's operational sustainability can be sustained. Shareholders, in particular, are looking for credible data about banks in order to forecast their future prospects more accurately. Although there has been a lot of research that discusses the factors that influence ESG disclosures, it is still rare to actually combine these variables with the mediating role of financial performance. Therefore, this study aims to close the gap in the literature by examining how green financing, gender diversity, and capital adequacy affect ESG disclosure, while considering the mediation of financial performance in banks. The main gap in previous studies is the lack of a comprehensive approach that brings together all these variables, namely: green finance, gender diversity, capital adequacy, and ESG disclosure with financial performance mediation, especially in the context of Indonesian banking. Most previous research tends to be general or focused on the manufacturing sector or on an international scale, so their findings may not fully fit local dynamics, such as OJK rules or cultural barriers that exist here.

Based on these phenomena and background, the researcher is interested in conducting a research entitled "The influence of green finance, gender diversity and capital adequacy on ESG disclosure with financial performance as a mediating variable in Bank KMBI 3 and KBMI 4".

Based on the background that has been described, this study formulates several main questions, namely whether green finance, gender diversity, and capital adequacy affect Environmental, Social and Governance (ESG) disclosure, and whether these three variables also affect financial performance. In addition, this study also examines whether financial performance affects ESG disclosure, as well as whether financial performance is able to mediate the influence of green finance, gender diversity, and capital adequacy on ESG disclosure.

In line with the formulation of this problem, the purpose of this study is to test and analyze the influence of green finance, gender diversity, and capital adequacy on ESG disclosure and financial performance. This study also aims to test and analyze the influence of financial performance on ESG disclosure, as well as examine the role of financial performance mediation in the relationship between green finance, gender diversity, and capital adequacy on ESG disclosure. Thus, this study is expected to provide a comprehensive understanding of the relationship between sustainability factors, governance structure, capital conditions, and financial performance in encouraging transparency of ESG disclosure.

## **METHOD**

In this study, we adopted a quantitative approach, which is an approach that uses statistically managed numerical data. This design selection was driven by the need to explain, analyze, and test the cause-and-effect relationship or influence among the variables involved.

Specifically, the independent variables we use include Green Finance, Gender Diversity, and Capital Adequacy, while ESG Disclosure serves as a dependent variable. In addition, Financial Performance acts as a mediator variable. The data collected is secondary and in the form of a panel, covering the period 2022 to 2024. The main data source comes from the Indonesia Stock Exchange (IDX) and the official websites of banking companies.

### Population and Research Sample

Sujarweni (2020) states that population includes all the elements studied with similar characteristics, be it individuals, events, or objects. The population of this study consists of commercial banks listed on the Indonesia Stock Exchange (IDX) throughout the period 2021 – 2024. This population grouping follows the Commercial Bank category system classified by the Financial Services Authority based on the Commercial Bank Category Based on Core Capital (KBMI) in accordance with POJK Number 12/POJK.03/2021. This classification divides banks into four groups:

1. KBMI 1: core capital below Rp 6 trillion,
2. KBMI 2: core capital of IDR 6 – 14 trillion,
3. KBMI 3: core capital of IDR 14 – 70 trillion, and
4. KBMI 4: core capital above IDR 70 trillion.

Overall, the initial population of this study consisted of 14 KBMI 3 & 4 Commercial Banks listed on the Indonesia Stock Exchange (IDX) throughout the study period.

Samples were determined using *the purposive sampling* method, which is selection based on certain criteria that are in accordance with the research objectives (Sugiyono, 2019). The selection of the sample is based on the assumption that a group of banks with a large core capital has a proven and mature financial capacity, governance, and sustainability practices compared to banks with a smaller capital scale. This makes the group of banks relevant, to measure ESG disclosures and other variables that are the main focus of the study.

The *purposive sampling* technique in this study was applied by setting strict selection criteria, consisting of inclusion criteria (mandatory requirements) and exclusion criteria (disqualification requirements), based on the researchers' considerations:

a) Inclusion Criteria

It is a commercial bank listed on the Indonesia Stock Exchange (IDX) during the research period. Included in the core capital classification of KBMI 3 or KBMI 4.

b) Exclusion Criteria

It is set to eliminate samples that may interfere with data validation, namely:

Banks that do not publish *Sustainability Reports* consistently during the study period.

Banks that are not listed on the Refinitiv Eikon or LSEG platforms

### Data Collection Methods

Data collection is carried out through the documentation method, namely by collecting, recording, and analyzing official documents. This data is secondary, taken from published financial statements, not through direct surveys. The data type includes the annual reports of banks listed on the IDX for the period 2020–2024. This data has a *time series* nature because it covers several years, as well as *cross-section* because it involves more than one company per

period. The scale of the data is ratio, considering that all variables such as ESG disclosure, financial performance, *green finance*, *gender diversity*, and capital adequacy are measured in the form of mathematically calculable numbers. This method was chosen because it provides objective, measurable, and accountable data for further analysis.

## Data Analysis Methods

The data analysis involves quantitative data sourced from the Indonesia Stock Exchange (IDX) and the official website of banking companies for the 2022–2024 period. The analysis method we used was panel data regression. The management of this research data was carried out by statistical method through the assistance of the Eviews program. Regression analysis will prove the relationship between dependent and independent variables. Therefore, the analysis method used in this research is to test data with descriptive statistics, test classical assumptions and then perform hypothesis tests.

## Descriptive Statistics

This analysis converts the data into concise information through measures such as *mean*, standard deviation, maximum value, and minimum, to provide a comprehensive picture (Ghozali, 2021) of the variables in this study.

## Panel Data Regression Model

This study uses panel data regression. Panel data is a combination of time *series* data and cross *section*. Ghozali & Ratmono (2017) explain that data panels, or pooled data, combine *time series* and *cross-section* to describe the behavior of specific units. The regression equation models that can be formulated are as follows:

### Model 1

$$ESG_{it} = a_1 + \beta_1 GF_{it} + \beta_2 GD_{it} + \beta_3 CAR_{it} + \beta_4 ROA_{it} + e_{it}$$

### Model 2

$$ROA_{it} = a_2 + \beta_5 GF_{it} + \beta_6 GD_{it} + \beta_7 CAR_{it} + e_{it}$$

### Description:

ESG	= ESG (Dependent Variable) disclosures
LONG	= Financial Performance ( <i>Return On Asset</i> ) (Variable Mediation)
$a$	= Constant
$\beta$	= Regression Coefficient
GF	= <i>Green Finance</i> (Independent Variable)
GD	= <i>Gender Diversity</i> (Independent Variable)
CAR	= Capital Adequacy ( <i>Capital Adequacy Ratio</i> ) (Independent Variable)
$e$	= <i>Error Term</i>

According to (Basuki, 2021) to estimate model parameters with panel data, there are three main approaches in panel data modeling:

### 1. Common Effect Model

This model combines *cross-section* and *time series* data without considering time differences or entities, using *the Ordinary Least Square* (OLS) approach.

## 2. Fixed Effect Model

This model takes into account variation between individuals, with estimates using *the Least Square Dummy Variable (LSDV)* to capture differences in intercepts between companies.

## 3. Random Effect Model

This model assumes that interference variables can be interrelated between time and individuals, using *the Generalized Least Square (GLS)* approach to adjust for interception errors.

### Panel Data Regression Model Selection

To select the best model, we conducted tests based on sample size and variables (Ghozali, 2021). There are three main tests:

#### 1. Chow Test

This test determines between *the Common Effect Model (CEM)* or *the Fixed Effect Model (FEM)*. With a significance of 5% ( $\alpha = 0.05$ ), if *the p-value of Cross Section and Chi-Square*  $< 0.05$ , subtract H0 and select FEM; if  $> 0.05$ , accept H0 and select CEM.

#### 2. Hausman Test

This test compares FEM and *Random Effect Model (REM)*. If the *p-value of Cross Section and Chi-Square*  $< 0.05$ , subtract H0 and select FEM; if  $> 0.05$ , accept H0 and select REM.

#### 3. Lagrange Multiplier Test

This test determines between CEM or REM. If the *p-value of Cross Section and Chi-Square*  $< 0.05$ , subtract H0 and select REM; if  $> 0.05$ , accept H0 and select CEM.

### Classic Assumption Test

In this study, classical assumption testing was not carried out because the type of data used was panel data. According to Risman (2021), the classical assumption test can not be performed on panel data models for the following reasons:

- a. In the panel data model, there are certain assumptions about interception and slope. Therefore, panel data regression is a special linear regression that does not have to meet the Best, Linear, Unbiased, and Estimator (BLUE) criteria, so testing classical assumptions can not be performed.
- b. In the panel data model, the existence of certain assumptions used for the possibility of multicollinearity is small. In addition, if the model used is path analysis with mediation and moderator variables, then the existence of multicollinearity is needed. Therefore, multicollinearity does not need to be tested or avoided.
- c. Autocorrelation testing is considered irrelevant in panel data analysis, because autocorrelation generally only occurs in time series data.
- d. In the Random Effect (REM) model, the heteroscedasticity test is not required because the estimation method used, namely the Generalized Least Square (GLS) which automatically overcomes the heteroscedasticity problem in the model.

### Coefficient of Determination (R<sup>2</sup>)

Ghozali and Ratmono (2017) argue that the determination coefficient (R<sup>2</sup>) is a model used to measure how well a model is able to explain the variation of dependent variables. The value of the determination coefficient is between zero and one. The measurement of the determination coefficient is used to determine the percentage of the influence of independent variables on the change of dependent variables. The smaller the R-Square value, the less influence the independent variable has on the dependent variable. If R-Square is close to 1, then the influence of the independent variable on the dependent variable is stronger. *Cross-section* data usually have relatively low coefficient of determination values because there is a large variation between each observation. Meanwhile, *time series* data usually has a high value of determination coefficient.

If in the empirical test it is found that *the adjusted R-Square* value is negative, then the value is considered equivalent to zero. Mathematically, if the value of R-Square = 1, then *adjusted R-Square* = R-Square = 1, but if the value of R-Square = 0, then *adjusted R-Square* will be calculated using the formula  $(1-k)/(n-k)$ , and if the value of  $k > 1$ , then *adjusted R Square* will be negative.

### Predictive Relevance Test (Q<sup>2</sup>)

Panel data regression analysis can explain the relationship or correlation of data that is *cross section* and *time series*. In this study, the panel data studied is expected to explain the direct and indirect influence of the relationship between variables. The way to find out the relationship between variables is by using *the path analysis* method. Path analysis is a regression extension model used to test the alignment of a correlation matrix with two or more causal relationship models compared by researchers.

In relation to regression analysis using path analysis, to prove the feasibility of the model, a *predictive relevance test* is required. *Predictive relevance* is a test that is carried out to show how good the observation value is produced using *the blindfolding* procedure by looking at the Q<sup>2</sup> value. The Q<sup>2</sup> quantity has a value with a range of  $0 < Q^2 < 1$ , where the closer it is to 1 the better the model. This Q<sup>2</sup> quantity is equivalent to the total determination coefficient in *the path analysis*. A Q<sup>2</sup> value  $> 0$  indicates that the model has *predictive relevance*, on the other hand, if the Q<sup>2</sup> value  $\leq 0$  indicates that the model lacks *predictive relevance* (Chin, 1998). The calculation of the Q<sup>2</sup> value can be obtained by using the formula below:

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)(1 - R_3^2) \dots (1 - R_p^2)$$

Where:

$Q^2$  = Value *predictive relevance*

$R_p^2$  = R-Square value of the dependent variable

As a relative measure of predictive relevance, values of 0.02, 0.15 and 0.35 respectively indicate that independent (exogenous) variables have small, medium or large predictive relevance to construct a particular dependent (endogenous) variable (Hair et al., 2017). So, by looking at the Q<sup>2</sup> value, the following conclusions are obtained:

- 1) If the value is  $0.02 \leq Q^2 < 0.15$ . So the relevance of the prediction is relatively small.
- 2) If the value is  $0.15 \leq Q^2 < 0.35$ . So the relevance of the prediction is moderate.
- 3) If  $Q^2$  the value  $\geq 0.35$ . So the relevance of the prediction is relatively large.

## Statistical Hypothesis Test

### Direct Influence Test (t-Test)

The t-test, which is often referred to as a partial test, serves to verify the truth of a hypothesis. This test measures how much independent variables contribute to explaining variations in dependent variables (Ghozali, 2021). In this study, the test was carried out with a significant level of 0.05 or  $\alpha = 5\%$ . The criteria for accepting or rejecting a hypothesis are:

- a. If the calculated probability of  $\alpha$  is greater than 0.05, then the hypothesis is rejected, which indicates that the independent variable has no significant effect on the dependent variable.
- b. Conversely, if the calculated probability of  $\alpha$  is less than 0.05, the hypothesis is accepted, meaning that the independent variable does indeed have an influence on the dependent variable.

### Indirect Influence Test (Sobel Test)

The mediation test uses the Sobel Test to determine the indirect influence of independent variables (X) to dependent (Y) through mediators (M). This influence is calculated as  $a \times b$ , where a is the coefficient X to M, and b is M to Y. This value can also be obtained from the difference between the total coefficient (c) and the coefficient after mediation (c'), so that  $ab = c - c'$ .

## RESULTS AND DISCUSSION

### The Influence of Green Finance on ESG Disclosure

The first hypothesis states that green finance has a positive effect on ESG disclosure. The results of the study show that green finance has no effect on ESG disclosure. This means that investments or financing that focus on environmental aspects (such as green bonds or sustainable lending) do not directly encourage companies to increase transparency in the banking sector's ESG reporting, based on the empirical data analyzed.

Conditions on the ground show that there is a separation of functions between the business unit that manages the financing portfolio and the unit responsible for corporate reporting. As a result, green financing is often perceived as the fulfillment of mere technical credit targets, while disclosure policies remain conservative without deep data integration on the environmental and social impacts of such financing.

These findings suggest that, although stakeholder theory emphasizes the importance of considering the interests of stakeholders such as green investors and society, in practice, green finance may not be fully integrated into a company's strategy. Companies may still prioritize short-term gains over comprehensive ESG disclosures, so green financing doesn't significantly encourage transparency. From a legitimacy theory perspective, companies may already feel their legitimacy is strong enough through minimal regulation or conventional practices, so green finance is not a major trigger for increasing ESG disclosure. External factors such as a lack of strict regulation, low stakeholder awareness, or green finance's focus on technical aspects (e.g., emissions reduction) rather than disclosure, may explain this lack of significant influence.

The results of this study are contrary to several studies that have found a positive relationship between green finance and ESG disclosure. For example, research by Zhidong et al. (2024) in the journal *Finance Research Letters* shows that green finance drives ESG disclosure in Asian countries, as green finance forces companies to meet stakeholder expectations and maintain legitimacy through transparency. On the contrary, this study supports the findings of studies such as those conducted by Meliyanti et al. (2025) in the *Journal of Economic Studies*, which found no significant relationship in emerging markets, because green finance is often symbolic and in the absence of a binding legal obligation between the use of green funds and certain reporting standards, the correlation between the two will remain low. This difference may be due to the regional context, where developed markets have stricter regulations, while markets such as Indonesia are still developing in the integration of green finance to ESG.

### **The Influence of Gender Diversity on ESG Disclosure**

The second hypothesis states that gender diversity has a positive effect on ESG disclosure. The results of the study show that gender diversity (gender diversity, such as the proportion of women on the board of directors) has no effect on ESG (Environmental, Social, and Governance) disclosure. These findings indicate that women's representation in corporate governance structures is not automatically a driver for better environmental, social, and governance information transparency.

These findings suggest that, although stakeholder theory emphasizes the importance of women's perspectives in considering the interests of stakeholders such as employees and society, in practice, gender diversity may not be strong enough to significantly influence ESG disclosure. Companies may still be dominated by patriarchal culture or short-term financial priorities, so the presence of women does not automatically encourage transparency. From a legitimacy theory perspective, companies may already feel their legitimacy is strong enough through conventional practices or minimal regulation, so gender diversity is not a major trigger for increasing ESG disclosure.

The results of this study are contrary to several studies that have found a positive relationship between gender diversity and ESG disclosure. For example, research by Gavana et al. (2011) in *Meditari Accountancy Research* shows that more female boards of directors encourage better ESG disclosure, as women tend to prioritize stakeholder issues and social legitimacy. Instead, the study supports findings from studies such as those conducted by Septiana et al., 2022 and Putri et al., 2025, which found no correlation, as gender diversity is often symbolic and not followed by substantial changes in ESG disclosure. This difference may be due to cultural or regional contexts, where developed markets have stronger gender equality norms, while markets like Indonesia are still thriving in integrating gender diversity into ESG practices.

### **The Effect of Capital Adequacy on ESG Disclosure**

The third hypothesis states that capital adequacy has a positive effect on ESG disclosure. The results of the study show that capital adequacy proxied with capital adequacy ratio has no effect on ESG (Environmental, Social, and Governance) disclosure. These findings indicate that a strong capital position is not a key determinant that encourages bank management to be

more transparent in reporting environmental, social, and governance issues. As well as affirming that financial health and sustainable transparency are on different paths.

In this condition, banks tend to prioritize capital adequacy as an instrument for mitigating financial risks and fulfilling banking prudential regulations rather than linking it to the sustainability agenda.

In stakeholder theory, emphasizing that sufficient capital allows companies to prioritize stakeholder interests through ESG disclosures, in practice, companies may still focus capital on short-term operational or financial aspects rather than investing in ESG transparency. From a legitimacy theory perspective, companies may already feel their legitimacy is strong enough through basic regulatory compliance or market reputation, so capital adequacy is not a major trigger for increased ESG disclosure. External factors such as a lack of regulatory incentives, dominant shareholder priorities, or the view that ESG is an additional cost (not an investment), may explain this lack of significant influence.

The results of this study are contrary to several studies that have found a positive relationship between capital adequacy and ESG disclosure. For example, research by Retnoningrum et al., (2025) in the *Journal of Accounting Research* and Li et al., (2023) in the *International Journal of Finance & Economics* shows that companies with stronger capital tend to increase ESG disclosure, as capital allows the allocation of resources to meet stakeholder expectations and maintain legitimacy. Instead, the study supports findings from studies such as those conducted by Nurhikmah et al., (2021) in the *Journal of Management and Business Review*, which found no significant relationship, as capital adequacy is often used for conventional financial purposes rather than sustainability. This difference may be due to industrial or regional contexts, where the advanced financial sector has stronger stakeholder pressures, while markets such as Indonesia are still thriving in the integration of capital into ESG practices.

### **The Influence of Financial Performance on ESG Disclosure**

The fourth hypothesis states that financial performance has a positive effect on ESG disclosure. The results of the study show that in accordance with the hypothesis, which states that financial performance proxied with Return on Assets (ROA) has a significant positive effect on Environmental, Social, and Governance (ESG) disclosure. This means that companies with high profitability tend to be more active in disclosing ESG-related information, such as environmental practices, social responsibility, and corporate governance.

In reality, solid financial performance gives management the flexibility to allocate financial resources in order to absorb the high costs that arise from the process of data collection, external audits, and the publication of sustainability reports. Profitable companies are seen as having a better managerial capacity to integrate non-financial issues into their core business strategy without disrupting key operational stability

The positive relationship between ROA and ESG disclosure occurs because the company is profitable, providing flexibility for management to integrate non-financial issues into core business strategies, without disrupting key operational stability.

Viewed from stakeholder theory, this company can meet stakeholder demands more effectively, such as by allocating funds for environmental or social programs, which are then disclosed to build trust. Meanwhile, legitimacy theory explains that these ESG disclosures are

used to maintain or enhance social legitimacy; For-profit companies are better able to "buy" legitimacy through ESG transparency, avoiding reputational risks that could harm businesses. In other words, high ROA provides the capacity to not only survive, but also be proactive in demonstrating social and environmental responsibility, ultimately supporting long-term sustainability.

The results of this study are in line with several previous studies that support the positive relationship between financial performance and ESG disclosures. For example, the research of Mulyantini et al., 2025, in the *International Journal of Management Finance*, found that companies with high profitability are more likely to disclose Corporate Social Responsibility (CSR), which is part of ESG, because they have the resources to do so without sacrificing profits. Aulia et al.'s research, 2025, in an analysis of the Indonesian and Malaysian banking sectors shows that good financial performance encourages ESG disclosure to meet stakeholder expectations and maintain legitimacy. Similarly, the research of Triyani et al., 2024, states that ESG ratings have a positive and significant influence on ROA. ESG ratings are the results of an evaluation of a company's management commitment and concrete actions by the company in addressing ESG issues through various policies and work programs of the company.

However, there are studies to the contrary, such as the study of Masyitoh et al., (2024) and Retnoningrum et al., (2025) that found that companies with poor financial performance are actually more aggressive in ESG disclosures to distract from financial issues.

Positive and significant financial performance is a key driver for ESG transparency, where financial stability serves as the foundation for social and environmental accountability. This study confirms that to improve disclosure standards in an industry, the financial health aspect of a company cannot be ignored.

### **The Influence of Green Finance on Financial Performance**

The fifth hypothesis states that green finance has a positive effect on financial performance. The results of the study show that green finance has a significant positive effect on financial performance proxied with Return on Assets (ROA). This means that companies that implement sustainable financial practices such as green bonds and green loans are able to increase the company's profitability and market value.

The positive relationship between green finance and profitability occurs because green finance not only reduces environmental risks, but also opens up new opportunities.

Based on stakeholder theory, by adopting green finance, the company has successfully aligned economic goals with the expectations of interest groups such as environmentally conscious consumers, local communities, and regulators. thus increasing operational efficiency and profitability. Meanwhile, legitimacy theory explains that green finance strengthens social legitimacy, allows companies to avoid legal fees or boycotts, as well as increases customer and employee loyalty, which ultimately contributes to better financial performance. In other words, investing in green finance creates long-term value by integrating sustainability into business models, reducing energy costs, and increasing innovation.

The results of this study are in line with several studies that support the positive relationship between green finance and financial performance. For example, Wu et al.'s 2023 study on Chinese companies found that the adoption of green finance increases ROA through reduced operational costs and increased access to green capital, supporting stakeholder theory

by demonstrating the benefits of meeting sustainable investor expectations. Similarly, the Pramesti et al. study, 2025, and Nainggolan et al., 2025, which show that companies with green finance practices have better financial performance, as they gain social legitimacy that reduces regulatory risks.

However, there are contrary studies, such as the analysis of Kurniawan et al., (2025), which found that green finance initially increases costs (like early investments in green technologies), so that ROAs can fall in the short term before benefits are seen. These differences may be due to the industry context or stage of adoption; in emerging markets such as Indonesia, where green regulation is developing, long-term benefits are more dominant, whereas in mature markets, transition costs can be higher. Overall, the results of this study are more supportive of the pattern in which green finance provides a competitive advantage, rather than a financial burden.

### **The Influence of Gender Diversity on Financial Performance**

The sixth hypothesis states that gender diversity has a positive effect on financial performance. The results of the study show that gender diversity has no effect on financial performance. These findings indicate that gender diversity in the board of commissioners and directors has not been able to make a direct contribution to increasing the bank's profitability.

From the perspective of stakeholder theory, gender diversity is expected to improve the quality of decision-making through a diversity of perspectives. However, the results of this study show that this role is not optimal in the Indonesian banking sector, possibly due to the limited proportion of women or the unstrategic role in decision-making structures. Meanwhile, the presence of women on the board based on the theory of legitimacy, can improve the image and reputation of the bank. However, this legitimacy is not strong enough to drive direct improvement in financial performance, especially in the highly regulated and stability-oriented banking industry.

These results are in line with the research of Yohanes et al., (2024) who found that gender diversity does not have a significant effect on financial performance. However, these findings differ from Miharja et al., (2023) and Majumder et al., (2024) who often associate gender with positive performance.

Thus, the results of this study show that gender diversity in Indonesian banking is still not a determining factor that can directly improve financial performance, so it is necessary to strengthen the substantive role of women in the governance structure so that its impact on profitability can be more optimal.

### **The Effect of Capital Adequacy on Financial Performance**

The seventh hypothesis states that capital adequacy has a positive effect on financial performance. The results of the study show that capital adequacy has a significant positive effect on financial performance proxied by Return on Assets (ROA). This means that the banking sector company has a higher capital adequacy ratio, the higher the company's ability to generate profits from the assets it manages.

The positive relationship between capital adequacy and profitability occurs because sufficient capital reduces the risk of bankruptcy and improves the company's ability to absorb losses, thus allowing for more stable operations. Based on stakeholder theory, capital adequacy

meets the demands of stakeholders such as regulators and depositors, which increases access to cheap financing and market support, ultimately driving more efficient investments and higher ROAs. Meanwhile, legitimacy theory explains that capital adequacy strengthens social legitimacy by demonstrating a commitment to systemic stability, avoiding regulatory sanctions or losing public trust, which can be detrimental to reputation and performance. In other words, adequate capital provides the basis for sustainable growth without excessive risk, allowing companies to optimize returns on assets.

The results of this study are in line with several studies that support a positive relationship between capital adequacy and financial performance. For example, Nurdin et al.'s research, 2025, found that higher capital adequacy improves financial performance by reducing risk and improving operational efficiency, supporting stakeholder theory by demonstrating the benefits of meeting regulator and investor expectations. However, this study is contrary to the research of Hulu et al., 2024 and Widyatmoko et al., 2024, which states that banks with larger core capital and more complex trading activities are fundamentally not more productive than banks with lower and more productive core capital. The findings of this study support capital adequacy as a competitive advantage, not as an obstacle to the Bank.

### **The Influence of Green Finance on ESG Disclosure through Financial Performance**

The eighth hypothesis in this study states that financial performance can mediate the influence of green finance on ESG. The results of this study support that financial performance is able to mediate the influence of green finance on ESG disclosure.

These findings indicate that green funding allocations do not directly drive sustainability reporting transparency, but rather must first be converted into asset profitability for companies to have the capacity to fund complex ESG reporting.

In business realities, investing in green projects often provides energy and operational cost efficiencies that ultimately increase profits. This increase in net profit then provides flexibility for management to allocate budget in the preparation of sustainability reports in accordance with global standards, as a responsive strategy.

Judging from stakeholder theory, the role of ROA mediation proves that the fulfillment of environmental and social interests is highly dependent on the company's economic sustainability. Stakeholders, such as investors and the green community, demand tangible evidence of the use of the green funds channeled. However, companies are only able to provide high-quality disclosures if they have a healthy financial performance.

ROA acts as a bridge that aligns economic interests (profits) with non-economic interests (environmental transparency), so that companies can satisfy a wider spectrum of stakeholders without sacrificing financial stability.

In the perspective of Legitimacy Theory, these findings imply that good financial performance is a prerequisite for companies to gain legitimacy through ESG disclosures. Companies that benefit from the implementation of green finance tend to feel more financially "secure" to expose their operational practices to the public. In contrast, in the absence of an improvement in financial performance (ROA), companies may be reluctant to disclose due to limited resources or fear of public spotlight on their inefficiencies.

The results of this study are in line with several previous studies that support the mediating role of financial performance. For example, Widoretno et al.'s (2025) research in the

Indonesian Journal of Accounting and Finance found that green innovation can mediate the relationship between ESG performance and financial performance in European companies. Similarly, findings by Malik et al, (2025), show that both green financing and increased ESG lead to better financial outcomes.

### **The Influence of Gender Diversity on ESG Disclosure through Financial Performance**

The ninth hypothesis in this study states that financial performance can mediate the influence of gender diversity on ESG. The results of the study support that financial performance is not able to mediate the influence of gender diversity on Environmental, Social, and Governance (ESG) disclosure. These findings indicate that the presence of women on corporate boards does not have an impact on ESG disclosures through the path of increasing asset profitability.

In corporate reality, this often happens because the role of women on boards is often still complementary or has not reached a critical mass that is able to change strategic decisions regarding the allocation of financial resources for ESG investments. As a result, despite gender representation, internal mechanisms linking financial performance to non-financial transparency remain significantly inactivated.

The inability of financial performance proxied with ROA as a mediator shows a disconnect between the board structure and the fulfillment of stakeholder expectations. This stakeholder theory assumes that gender-diverse boards will be more sensitive to the interests of stakeholders and use financial success to increase disclosure.

However, the results of the study prove that the relationship is not linear, the profitability generated by the company does not automatically become a tool for female boards to encourage ESG transparency. This suggests that the decision to disclose ESG issues is more influenced by external or regulatory factors than the availability of financial resources generated by the diversity of the board.

Whereas based on Legitimacy Theory, these findings imply that gender diversity and ESG disclosure are often managed as two separate legitimacy strategies. Companies may place women on boards to gain social legitimacy related to gender equality, while ESG disclosures are done to legitimize the company's environmental and social impact. However, because financial performance does not play a mediator, the acquisition of legitimacy through gender diversity is not based on economic efficiency which is then conveyed through ESG reports.

The legitimacy built is compartmental, where the presence of women does not automatically increase accountability through the path of financial prosperity of the company.

The results of this study are in line with several studies that reveal that economic performance cannot mediate the relationship between gender diversity and the sustainability of the Company. For example, the research of Prasetyo et al. (2025), found that gender diversity in boards cannot directly increase CSR disclosure (part of ESG), this is contrary to stakeholder theory by showing that women encourage more responsible practices without relying on profitability. The insignificance of this mediation proves that gender diversity at the leadership level does not automatically translate financial success into social accountability.

## **The Effect of Capital Adequacy on ESG Disclosure through Financial Performance**

The tenth hypothesis in this study states that financial performance can mediate the influence of capital adequacy on ESG disclosure. The results of this study support that financial performance is able to mediate the influence of capital adequacy on ESG disclosure.

These findings indicate that a strong capital position does not automatically increase transparency of environmental and social issues, but must first be converted into asset profitability in order for banks to have the freedom of financial resources to fund sustainability reporting.

In the banking world, a high capital ratio allows banks to safely expand into profitable projects. The profits generated from the efficiency of asset management then provide financial space for management to invest in a comprehensive ESG data collection and report publishing system.

When analyzed through stakeholder theory, primary stakeholders, such as supervisory authorities, demand sufficient capital for system stability, while secondary stakeholders demand transparency of social and environmental impacts.

The results of the study prove that the management of the new bank can satisfy the transparency demands of secondary stakeholders after they have successfully used their capital to generate optimal financial performance. In other words, profitability (ROA) is a requirement for banks to carry out broader corporate actions in the field of sustainability to satisfy a more diverse spectrum of stakeholders.

Judging from the Legitimacy Theory, these findings imply that good financial performance is the basis for banks to gain legitimacy through ESG disclosure. Banks often face pressure to demonstrate their role in sustainable development.

When a bank has enough capital that is successfully converted in generating high profits, it has the financial resources to communicate its social responsibility to the public. In contrast, in the absence of adequate financial performance, ESG disclosures may be perceived as a waste of assets or simply a distraction from the bank's profitability issues.

## **CONCLUSION**

Based on the empirical analysis of 10 KBMI 3 and KBMI 4 banks listed on the Indonesia Stock Exchange during the 2021–2024 period, this study concludes that green finance, gender diversity, and capital adequacy do not exert a significant direct effect on ESG disclosure. These findings indicate that sustainability-oriented financing, board gender composition, and strong capital structures alone are insufficient to automatically enhance transparency in environmental, social, and governance reporting within the Indonesian banking sector.

Conversely, financial performance proxied by Return on Assets (ROA) demonstrates a significant positive influence on ESG disclosure. This result confirms that profitability plays a crucial role in enabling banks to allocate adequate resources for sustainability reporting, thereby strengthening transparency and accountability. Furthermore, green finance and capital adequacy significantly improve financial performance, while gender diversity does not significantly affect profitability. Importantly, financial performance partially mediates the relationship between green finance and ESG disclosure as well as between capital adequacy and ESG disclosure. This suggests that both green finance initiatives and strong capital positions must first translate into improved profitability before contributing to enhanced ESG

transparency. However, financial performance does not mediate the relationship between gender diversity and ESG disclosure, indicating that board gender representation alone has not yet functioned as an effective driver of sustainability reporting within KBMI 3 and 4 banks. Overall, this study highlights financial performance as the key mechanism linking financial sustainability to non-financial transparency in Indonesian banking institutions.

## **Recommendations**

### **1. For Banking Management**

Banks should integrate green finance, capital management, and ESG strategies more systematically. Sustainability initiatives must not only focus on regulatory compliance but also be aligned with profitability objectives, ensuring that green investments contribute directly to long-term financial performance and, subsequently, stronger ESG disclosure.

### **2. For Regulators (OJK and IDX)**

Regulators should strengthen the linkage between sustainable finance policies and ESG reporting standards. More explicit disclosure requirements connecting green financing allocation with measurable ESG outcomes would reduce symbolic implementation and promote substantive transparency.

### **3. For Corporate Governance Reform**

Gender diversity policies should move beyond symbolic representation. Strengthening the strategic involvement of women in key decision-making committees—such as risk, sustainability, and audit committees—may enhance their potential impact on both financial performance and ESG disclosure.

### **4. For Future Research**

Future studies are encouraged to incorporate longer observation periods, additional mediating or moderating variables (such as corporate governance quality or institutional ownership), and comparative sectoral analysis to further explore the dynamics between financial and sustainability performance in emerging markets.

## **REFERENCES**

- Akbar, K. F., & Dewayanto, T. (2022). Analysis of the Influence of Corporate Social Responsibility on Corporate Financial Performance with the Moderation Effect of Profit Management (Empirical Study of Non-Financial Companies Listed on the IDX in 2018-2020). *Diponegoro Journal of Accounting*, 11(1), 1-13.
- Aulia, A., Lastari, A. W., & Dillak, V. (2025). Enhancing ESG Disclosure: The Role of Profitability, Financial Slack, and Board Gender Diversity in Indonesian and Malaysian Banks Sector. *GREENOMIKA*, 7(1), 67-77.
- Basuki, A. T. (2021). Panel Data Analysis in Economic and Business Research. *Deep Catalog*.
- Dharmawati, T., Gultom, J., Indrianti, M. A., Gobel, Y. A., & Suhairin, S. (2024). The Influence of ESG (Environmental, Social, and Governance) and Financial Decisions on the Company's Financial Performance. *Journal of Scientific Edunomics*, 8(2), 1-8.

- Ghozali, I. (2021). *Application of Multivariate Analysis with IBM SPSS 26 Program Edition 10*. Publishing Agency of Diponegoro University.
- Ghozali, I., & Ratmono, D. (2017). *Multivariate and econometric analysis: Theory, concepts, and applications with EViews 10*. Publishing Agency of Diponegoro University.
- Kurniawan, I., Malini, H., & Syahputri, A. (2025). The Role of Credit Risk in the Relationship Between Green Finance and Bank Profitability in Indonesia. *eCo-Fin*, 7(2), 1154-1168.
- Lamanda, G., & Vóneki, Z. T. (2024). Is ESG disclosure associated with bank performance? Evidence from the Visegrad Four countries. *Management of Environmental Quality*, 35(1); 201-219.
- Lestari, L. P. (2025). *The Effect of Board Size, Gender Diversity, Green Financing, and Financial Performance on Sustainability Reporting Disclosure: With Company Size as a Moderation Variable*. Thesis of Master of Management Program, Faculty of Economics and Business, Mercu Buana University.
- Liang, Z., & Yang, X. (2024). The impact of green finance on the peer effect of corporate ESG information disclosure. *Finance Research Letters*.
- Linarelli, J., Schwarcz, S. L., & Tirado, I. (2021). Financial Inclusion, Access to Credit and Sustainable Finance. *Law & Contemp. Probs.*, 84, I, 1-20.
- Liu, W., & Ren, T. (2025). Board gender diversity and ESG disclosure: The spillover effect of governance. *Asian Review of Accounting*, 1-23.
- Majumder, M. T. H., Abdul Hamid, M. A., Amin Noordin, B. A., & Al-Duais, S. (2024). Unveiling the link between board gender diversity and energy firm's performance in South Asia: the mediating role of earnings management. *Cogent Business & Management*, 11(1), 2381088.
- Malik, H., & Malik, I. R. (2025). Mediating Role of ESG Ratings in the Relationship Between Green Finance and Financial Performance: Evidence from G20 Countries. *TPM*, 32 (S6), 1-16.
- Meliyanti, & Regina J. Arsjah. (2025). The Influence of Green Finance, Green Accounting and Social Responsibility Activities on Sustainability Performance in Indonesia. *El-Mal: Journal of Islamic Economic and Business Studies*, 6(3), 1127–1143.
- Miharja, I. S., Sormin, S. H., & Graduation, W. (2023). Gender Diversity Analysis on Financial Performance and Company Values with Environmental, Social, Governance (ESG) as Moderating Variables. *Sebatik*, 27(2), 499-508.
- Nainggolan, P. A., & Siswanti, I. (2025). The Influence of ESG, Green Finance, and Efficiency on Company Value Through Financial Performance at KBMI 3 and KBMI 4 Banks.
- Nurhikmah, S., & Rahim, R. (2021). The Influence of Financial and Non-Financial Factors on the Financial Sustainability Ratio of Banking. *Journal of Management and Business Review*, 18(1), 25-47.
- Omenihu, C. M., Abdrakhmanova, M., & Koufopoulos, D. N. (2025). Board Gender Diversity and Environmental, Social, and Governance (ESG) Disclosure in Developed Countries. *Administrative Sciences*, 15(4), 141.
- Prasetyo, M. F., Susilawati, S., & Supriatiningsih, S. (2025). Analyzing the Impact of Gender Diversity and Green Accounting on Corporate Social Responsibility and Financial Performance: An Intervening Role Approach. *International Journal of Business, Law, and Education*, 6(2), 1197-1219.

- Putri, A. S., & Restuti, M. D. (2025). The Influence of Board Gender Diversity and Financial Performance on Environmental, Social and Governance (ESG) Performance. *E-Journal of Accounting TSM*, 5 (3): 1-16.
- Putri, H. S., & Sri Mulyantini. (2025). The Effect of Profitability, Leverage, and Digital Transformation on Environmental, Social, and Governance (ESG) Performance in Manufacturing Companies. *Finance: International Journal of Management Finance*, 2(3), 24-35.
- Retnoningrum & Sutopo, B. (2025). Does ESG disclosure impact banking performance?. *Journal of Accounting Research*, 14(1).
- Samekto, A. (2021). Environmental Damage in Developed Countries and in Developing Countries. *Environmental Law*, 1–331.
- Septiana, W. R., & Puspawati, D. (2022). Analysis of good corporate governance on ESG disclosure in Indonesia in 2016-2020. *Fair Value: Scientific Journal of Accounting and Finance*, 4(10), 4274-4283.
- Shalhoob, H. (2025). ESG Disclosure and Financial Performance: Survey Evidence from Accounting and Islamic Finance. *Sustainability*, 17(4), 1-15.
- Sugiyono. (2019). *Research methods for thesis and thesis*. Alfabet.
- Tomtum, H., & Dahl, M. M. (2022). *The Implications of ESG Rating and ESG Uncertainty*, Master's Program Thesis in Business Administration, National Taiwan Normal University.