

The Effect of Green Accounting and Firm Size on Bank Performance with Firm Growth as a Moderation Variable



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ABSTRACT: Banking plays a very important and strategic role in supporting national economic development so that banks need to maintain their performance in order to operate optimally. This study aims to obtain empirical evidence regarding the effect of Green Accounting and Firm Size on Bank Performance with Firm Growth as a moderating variable. The population in this study are banking companies listed on the Indonesia Stock Exchange (IDX) for 2019-2021 and consistently publishing their annual reports and sustainability reports on the Indonesian Stock Exchange website. The samples used in this study were 37 out of 40 companies that met the criteria. The sampling technique used is purposive sampling method. Data analysis used in this study using multiple linear regression analysis with the EViews software. The results of this study indicate that the green accounting variable as measured by the green banking index has a negative effect on bank performance. Meanwhile, the firm size variable as measured by the natural logarithm of total assets has a positive effect on bank performance. The moderating variable, namely firm growth as measured by asset growth, weakens the relationship between green accounting and firm size on bank Performance.

KEYWORDS: Green Accounting, Firm Size, Bank Performance, Firm Growth

I. INTRODUCTION

One of the many financial institutions that have long influenced Indonesia's economy is banking. Where Banking Supports National Economic Development Banking Plays A Very Important And Strategic Role. Banks must maintain their performance in order to continue operating at their best. The Loan to Deposit Ratio (LDR) is one indicator used to evaluate a bank's financial performance. The composition of the quantity of credit given in relation to the amount of public money and own capital used can be measured by this ratio (Kasmir, 2014: 225). By calculating the level of Loan to Deposit Ratio at a bank, it will be known the quality and performance of the bank in serving and caring for customers.

However, economic activities that grow rapidly and are not controlled often affect the performance of banks, especially on social and environmental issues. Even though the use of energy, water and other natural resources in banking activities is not as bad as that used by other sectors, such as mining and processing industries, banking cannot be separated from the problem of increasing environmental degradation. This is because banks can trigger the implementation of activities that have a negative impact on the environment by providing loans or financing to their customers if environmental aspects are not considered.

The International Forests & Finance Coalition has published a report which reveals that banks have provided loans of USD 37.7 billion to 23 small to large mining companies that are at risk of causing forest destruction, water pollution and violations of human rights in three tropics regions, including Indonesia. Of all the loans granted since 2016 after the Paris Agreement was signed, 43% of the loans were given to companies in Southeast Asia, that is USD 16.1 billion, while Central & West Africa and Latin America both received USD 10.8 billion (kompas.id). This condition was also exacerbated by the phenomenon of forest and land fires (karhutla) which occurred in almost parts of Sumatra and Kalimantan in 2019 and were indirectly caused by banking institutions. Banks have contributed to causing environmental pollution where almost all projects worth billions and even trillions receive credit/financing from banks. Starting from clearing plantation land, mining exploration and exploitation, to the construction of power plants (Almaududi, 2019). However, banking institutions seem not to care about the impact of environmental damage caused by the project.

In this regard, the Government has attempted to prevent pollution by issuing Financial Services Authority Regulation (POJK) Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers and

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Public Companies. . In November 2018, OJK then released the Technical Guidelines for Implementing Sustainable Finance for the Banking Sector. This POJK was released in order to actualize a financial system that employs sustainable principles to create and Put into practice environmental economic instruments, such as social and environmental care policies. As one of the Financial Services Industries, banks are obliged to disclose their green banking implementation in sustainability reports to be announced to the public, including the impact of operations and policies on the economic, social and environmental viability of a bank in running a sustainable business.

However, since the issuance of POJK Number 51/POJK.03/2017 a significant increase in the implementation of sustainable finance was only seen in 2019 with a total disclosure of 55.81% of 45 banks, with Banks in the category BUKU 3, BUKU 4, and Foreign Banks dominating (Khamilia & Nor, 2022). This indicates that the implementation and disclosure of sustainability reports in the banking industry has not been maximized, even though this has been accompanied by developments in regulations and procedures for implementing and reporting them. This will certainly have an impact on public assessment, especially stakeholders who influence the bank's financial performance. Thus, the company needs to think about improvement strategies so that the company's performance can be assessed as good

The overall performance of a bank serves as an example of its operational successes in terms of finances, marketing, collecting and distributing funds, technology, and human resources (Azwa and Afriani, 2016). As a tool for assessing bank operations, formulating management strategies, and conducting strategic analysis, bank performance is crucial. In addition, banks also play an important role in economic growth. When the bank's performance is good, the overall economy will also improve. All related parties, including owners, bank management, government banks, and customers who employ bank services, have an interest in the health or financial and non-financial state of a bank. By knowing the condition of a bank, these parties can use it to evaluate the bank's performance in applying the precautionary principle, complying with applicable regulations and risk management.

One of the factors that affect bank performance is green accounting. Green accounting means the application of accounting by including environmental costs in the company's expenses in order to improve welfare and preserve the surrounding environment. Green accounting is a new discovery in the field of accounting which shows that the center of attention of the accounting process is not focused only on financial objects, transactions and events, but has a concern for the environment and social events (Lako & Sumaryati, 2018). By evaluating environmental operations from the perspectives of benefits (economic benefits) and costs (environmental costs), as well as creating environmental protection impacts, the use of green accounting itself seeks to improve effective environmental management. With the implementation of green accounting, the negative environmental effects of economic systems and activities will be reduced.

Another factor that affects bank performance is firm size. Firm size or company size is a large scale company that can be measured by the total assets or large assets of the company using the calculation of the total asset logarithm value (Nurlis, 2019). Sources of funding from outside parties will be easily obtained by large companies. Companies can easily get more access because of their large size, the opportunities they get are also getting bigger, win the competition and survive in an industry (Anandamaya & Hermanto, 2021). In addition, increasing bank size can also improve bank performance by enabling banks to realize economies of scale (Regehr & Sengupta, 2016).

Firm growth is how far the company places itself in the economy as a whole or the economic system for the same sector. Companies with high growth indicate that the company is growing. Where the company has experienced an increase in its business development from year to year (Sulistiawati & Dirgantari, 2016). According to Brigham and Houston (2009), firm growth is a change in a company's total assets, whether it be an increase or decrease. Growth reflected in total assets shows that banking is an ideal institution to help drive the development of the nation's economy. Therefore, growth in banking companies is quite important because it shows the success of the bank and public acceptance.

Deb et al., (2020) found that green accounting practices have a significant positive impact on bank performance. This is in line with the opinion of Aniela (2012) that the application of green accounting has a positive impact on the company's financial performance in the form of increasing positive consumer perceptions. However, research conducted by Riyadh (2020) states that there is a negative relationship between autonomous green accounting costs and financial performance. Research by Meiyana & Aisyah (2019) reveals that the size of a company tends to attract investors to fund capital. In line with the results of research conducted by Muhindi & Ngaba (2018) that there is a significant relationship between company size and commercial bank financial performance. Different results are found in research conducted by Mabruroh & Anwar (2022) which states that bank size has a negative effect on financial performance. Research conducted by Muttakin & Ullah (2012) showed that growth has a positive and significant relationship to bank performance. The results of this study are in contrast to research conducted by (Barus and Leliani, 2013; Ting et. al., 2014; Meidiyustiani, 2016; Mappanyuki & Sari, 2017) which state that growth has no effect on firm performance.

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Previous studies that have been described above have different results. For this reason, literature is needed to see whether the same findings occur in the variation of the selected variables and in different samples. So researchers are interested in conducting research on financial performance in banking companies whose activities are inseparable from issues of environmental pollution and the studies conducted are still relatively rare. So, based on the background description above, the researcher is interested in conducting research with the title "The Influence of Green Accounting and Firm Size on Bank Performance with Firm Growth as a Moderating Variable (Empirical Study of Banking Companies Listed on the Indonesia Stock Exchange for the 2019-2021 Period)"

II. LITERATURE REVIEW AND HYPOTHESES

Theoretical Background

Legitimation Theory

Legitimacy theory states that businesses or organizations must continuously assess whether they have carried out their operations in accordance with the standards set by society and make sure that their actions may be considered legitimate. The postulate of legitimacy theory is that organizations must not only appear to be concerned about the rights of investors but in general must also pay attention to the rights of the public (Deegan & Rankin, 1996). Legitimacy is a system of corporate management that is focused on siding with the community (society), the government, individuals, and community groups (Grey et. al., 1997). According to Chariri and Ghazali (2007), legitimacy theory is based on a "social contract" between the corporation and the society in which it operates and uses economic resources.

Legitimacy theory explicitly justifies that a business is limited by a social contract, in which companies agree to disclose various social activities so that they are accepted by society in order to ensure the company's survival. Thus, it is important for a company to maintain its image and credibility in society through social and environmental responsibility, including the application of green accounting (Choiriah & Lysandra, 2023). Legitimacy theory also assumes that society is an important factor in the development of companies in the long run. Where the public's perception of the size of the company and its growth can show the success of the bank and public acceptance.

Stakeholder Theory

Stakeholder theory is a theory that describes which parties a company is responsible for (Freeman, 1984). Stakeholders are parties who have relationships and interests in the company, including employees, suppliers, the public, capital markets, competitors, countries, industrial bodies, foreign governments and others. The idea that businesses are accountable to stakeholders as well as shareholders has been further strengthened by the rise of stakeholder theory as the dominant paradigm (Maulida & Adam, 2012). According to the stakeholder theory, each stakeholder has a legal right to learn information about business operations that they can use to inform their decisions. It's possible for stakeholders to decide not to use this information and even to have no direct involvement in the business (Deegan, 2004).

Green Accounting adopts stakeholder theory to meet the various needs of stakeholders who really expect transparency, sustainability and accountability within the company. Environmental practices and disclosures must be highly considered by stakeholders because of the impact of organizational actions on the environment (Choiriah, 2020). Thus, the application of green accounting is based on the relationship between companies and stakeholders in the concept of usefulness that builds cooperation for the creation of sustainable business growth. Stakeholder theory suggests that stakeholder intervention will affect cost savings, environmental impact, reduce environmental uncertainty, and improve bank performance (Deb et al., 2020).

Green Accounting and Bank Performance

Green Accounting is an accounting role that is used to see the relationship between the company's environmental budget and the funds that the company uses to carry out operational activities (Ningsih & Rachmawati, 2017). The application of green accounting can make a bank's image better in the eyes of the public so that they want to consume its products. The bank will gain legitimacy/trust from the community where this will encourage positive progress of the bank so that it can improve environmental performance and in the end there will be an increase in financial performance. This is in line with research conducted by Aniela (2012), that the application of green accounting has a positive impact on a company's financial performance, in the form of increasing positive consumer perceptions. Apart from having an impact on financial performance, the application of green accounting also has an impact on improving environmental performance, both in terms of environmental vitality and environmental health. Further research conducted by Deb et al. (2020), shows that green accounting practices have a significant positive impact on bank performance. Where higher investment in green projects can create more opportunities to optimize bank performance

H1: Green Accounting has a positive effect on Bank Performance

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Firm Size and Bank Performance

Size is an illustration of the scale of a business entity (Adnan et al., 2016). Large companies have various competitive advantages, one of which is considered to have more assets that can be used to ensure the survival of the company. The size of a large company also shows that a bank with large assets has resources that can be used optimally and efficiently to manage third party funds. This is because banks have sufficient funding to finance their operational activities, one of which is selective lending. The size of the company is also one of the determining factors for investor confidence because it is better known to the public so that the information needed by investors will be easier. Research by Azzahra & Wibowo (2019) explains that company size has a positive and significant influence on financial performance. The greater the assets owned, the more capital invested, a lot of money turnover in the company and the large market capitalization will improve the company's financial performance. In line with research conducted by Iskandar & Zulhilmi (2021), which explains that company size affects bank financial performance.

H2: Company size has a positive effect on Bank Performance

The effect of Firm Growth on the relationship between Green Accounting and Bank Performance

Green accounting is how to include the consequences of an event related to the environment in the financial statements. Implementation of good environmental accounting, one of which is in granting credit/financing for environmental projects, can have a major impact in increasing consumer and investor confidence in banks so that bank performance will also increase. Where the trust gained will be even greater if the bank has a good growth rate. Thus, good company growth will encourage an increase in financial performance, especially in banks that apply green accounting. This is in line with research conducted by Muttakin & Ullah (2012) that growth has a positive and significant relationship to bank performance. Further research conducted by Fauzi & Puspitasari (2021) states that asset growth has a significant positive effect on financial performance. Companies with good asset growth means experiencing an increase in total assets for the current period from the previous period, which means the company has good internal funding sources.

H3: Firm Growth strengthens the effect of Green Accounting on Bank Performance

The effect of Firm Growth on the relationship between Firm Size and Bank Performance

Company size is usually indicated by the natural logarithm of total assets (Sari, 2017). The total amount of assets owned by a company increases with its size. Management can use the total value of the bank's assets as collateral when providing credit or loans. On the other hand, larger banks tend to grow at a higher rate. Positive growth in assets can support the ability of banks to channel credit to the real sector so that financial performance also increases. Thus it can be concluded that firm growth plays a role in strengthening the effect of firm size on bank performance. This is in line with the results of research conducted by Regehr & Sengupta (2016), that the greater the assets owned by a bank, the more benefits are obtained from economies of scale through access to credit facilities to lend and invest in capital projects to realize the company's financial performance. While the results of research conducted by Shafiquea et al. (2021) shows that company growth has a significant positive effect on company performance.

H4: Firm Growth strengthens the influence of Company Size on Bank Performance

III. METHOD

Sample and Source of Variables

This study uses a quantitative method with secondary data types, namely data obtained through existing sources and not collected by the researchers themselves. Data processing using the help of Eviews12 software. The population in this study are banking companies listed on the Indonesia Stock Exchange (IDX) for 2019-2021 and publish their annual reports and sustainability reports on the Indonesian Stock Exchange website consistently. While the sample selection was based on purposive sampling method so that a total of 111 samples (37 companies) were obtained. The data collection method uses documentation techniques in the form of annual reports and sustainability reports from sample companies.

The following is the research model:

$$Y = \alpha + \beta_1GA + \beta_2FS + \beta_3GA*FG + \beta_4FS*FG + \epsilon$$

Operational Variables

The research variables are determined based on the theory and confirmed by the hypothesis. The variables used in this study are the dependent variable, independent variable and moderating variable. The dependent variable in this study is Bank Performance. Researchers use the Loan to Deposit Ratio because it can provide an overview of the performance of conventional banks in their ability to manage their funds by optimizing credit distribution so that bank liquidity conditions are maintained

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(Azmy, 2018). LDR reflects the liquidity value of a bank as measured by the ratio between total loans divided by the total receipt of third party funds. The formula is as follows:

$$LDR = \frac{\text{Total Loans}}{\text{Total Receipt of Third Party Funds}} \times 100\%$$

Green Accounting is measured based on the green banking index (Shaumya & Arulrajah (2017) which consists of 16 indicators: 1) environmental awareness training and education; 2) evaluation of environmental performance; 3) environment- based reward system; 4) paperless savings; 5) use of energy-saving equipment; 6) waste management/recycling; 7) environmentally friendly banks; 8) green loans; 9) financial green project; 10) green enterprise facilities; 11) environmental- based credit evaluation; 12) management of green branches; 13) green policy; 14) green partnerships; 15) environmental-based strategic planning, and 16) green procurement. This measurement can indicate that the company has complied with the regulations that must be implemented regarding the obligation to implement green accounting in all bank operational activities. The formula used is as follows:

$$GB = \sum_{i=1}^n di$$

The measurement of firm size variable uses the natural logarithm (Ln) proxy of total assets (Harahap, 2011) because of the manager's assumption that companies with large total assets are relatively stable. The use of total assets is based on the consideration that total assets reflect company size and are thought to affect timeliness. The formula is as follows:

$$\text{Firm Size} = (\text{Ln}) \text{ Total Assets}$$

Firm Growth is measured based on the growth of total assets. Growth or growth is expressed as a percentage of total asset growth where past asset growth will reflect future growth. So the greater the total assets means the greater the growth of a company. According to Ukhriyawati & Dewi (2019), firm growth can be measured by the following formula

$$\text{GROWTH} = \frac{\text{Total Asset}^t - \text{Total Asset}^{t-1}}{\text{Total Asset}^{t-1}}$$

IV. ANALYSIS AND RESULTS

Researchers make outliers on data that has unique characteristics that look very different from other observations and appear in the form of extreme values (Ghozali, 2005:41). So in this study there are 99 data that are worth testing, namely 33 conventional banking companies listed on the Indonesia Stock Exchange (IDX) for three (3) consecutive years. Based on the results of data processing, it can be seen that:

Table 1. Descriptive Statistics

| | Means | Min | Max | St. Dev |
|------------------------|----------|-----------|----------|----------|
| Green Accounting (GA) | 0.770202 | 0.062500 | 1.000000 | 0.217943 |
| Firm Size (FS) | 17.80784 | 15.12960 | 21.26885 | 1.771899 |
| Bank Performance (LDR) | 0.816054 | 0.296700 | 1.467700 | 0.192006 |
| Firm Growth (FG) | 0.127434 | -0.398000 | 1.091000 | 0.209882 |

Based on the results of the descriptive statistical analysis table above, it can be interpreted that the variable Bank Performance (Y) proxied by the LDR (Loan to Deposit Ratio) has the lowest value of 0.296700, namely at PT Bank Ina Perdana Tbk in 2021. While the highest value is 1.467700, namely at PT Bank Pembangunan Daerah Banten Tbk in 2020. The average (mean) LDR value is 0.816054 meaning that overall, the average banking company is able to channel 81.61% of credit obtained from the total third party funds received. Meanwhile, Green Accounting (X1) has a minimum value of 0.062500, namely at PT Bank Neo Commerce Tbk in 2019 and 2020. While the maximum value is 1.000000, namely at PT Bank Central Asia Tbk (2019- 2021), PT Bank Rakyat Indonesia Tbk (2019 -2021), PT Bank Negara Indonesia Tbk (2019-2021), PT Bank Mandiri Tbk (2019 and 2021). The average value of 0.770202 means that the average application of Green Accounting in banking companies in Indonesia has reached 77.02%.

The results of the calculation of the firm size variable (X2) have a minimum value of 15.12960, namely at PT Bank of India Indonesia Tbk in 2020. Meanwhile, the maximum or highest value is 21.26885, namely at PT Bank Mandiri Tbk in 2021. The mean value of 17.80784 indicates an average size level conventional banking companies in Indonesia during 2019-2021 which are described from total assets. The firm growth (Mod) variable has a minimum or lowest value of -0.398000, namely at PT Bank Raya Indonesia Tbk in 2021. Meanwhile, the maximum or highest value is 1.091000, namely at PT Bank Neo Commerce Tbk in

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2021. The mean value is 0.127434 meaning that the average the average growth experienced by conventional banking companies in Indonesia from 2019 to 2021 is 12.74%, a figure that is relatively low

RESULTS

Table 2. Overall Coefficient Test Results

| VARIABLE | +/- | β | t | Sig. |
|----------|-----|-----------|-----------|--------|
| GA | - | -0.044820 | -0.402415 | 0.6887 |
| FS | + | -0.276120 | -2.894417 | 0.0052 |
| GA*FG | - | 0.560786 | 1.196044 | 0.2362 |
| FS*FG | - | 0.114862 | 1.323379 | 0.1905 |

Based on statistical analyses, the significance test results are displayed in the table above. The following explanation is based on the t-statistic test between each independent variable and the dependent variable:

The green accounting variable has a probability value of 0.6887 which is greater than 0.05. This means that there is a regression coefficient which is negative so that it can be said that green accounting has a negative effect on bank performance. Meanwhile, the probability value of the firm size variable is 0.0052, which is smaller than 0.05. This indicates a positive regression coefficient. So it can be concluded that the variable firm size has a positive effect on bank performance.

The green accounting interaction variable (X1_MOD) on bank performance has a probability value of 0.2362 which is greater than 0.05. These results indicate that firm growth weakens the relationship between green accounting and bank performance. The interaction variable (X2_MOD) of firm size on bank performance has a probability value of 0.1905, greater than 0.05. This shows that firm growth weakens the relationship between firm size and bank performance.

DISCUSSION

The Effect of Green Accounting on Bank Performance

Green Accounting has a positive effect on Bank Performance. This means that the more banks carry out green accounting activities, the bank's performance will decrease. When a company considers that the environment is an asset that is used as a corporate strategy, then environmental management is a major concern. One of the focuses of implementing green accounting in banking companies is the policy of lending to sectors that are based on the environment. Karyani & Obrien (2020) contend that in order to engage in green banking, banks must be socially responsible, taking into account both the short- and long-term effects of a project's proposed influence on the environment before providing a loan. For this reason, a corporate governance mechanism is needed so that it can encourage companies to be responsible for the environment, including reporting company actions (Choiriah & Ria, 2021). However, if a bank is unable to manage its green credit properly, it will have a negative impact on the LDR level and in the end the bank's performance will decrease.

According to Karyani & Obrien (2020), banks that use green accounting must produce more thorough reporting, even when the costs to the environment may outweigh the advantages. However, more and more information is disclosed and an increase in environmental investment also does not necessarily increase the company attractiveness. The existence of an inadequate green accounting disclosure mechanism can affect the level of legitimacy from the public which will have an impact on decreasing financial performance in the future (Laksmi & Hanin, 2022). This is because, if public trust in banks decreases, the public funds collected will also decrease (Safitri, 2014). In the end, banks are unable to maintain their liquidity conditions and do not have sufficient funds to meet their credit requests (Setiawan & Pratama, 2019).

In line with research conducted by Damayanti & Mawardi (2022) that understanding and good bank management will have a good influence on the financial system and have a positive influence on banking performance. Likewise, research by Angelina & Nursasi (2021) asserts that the financial performance of a corporation is not significantly impacted by green accounting.

Effect of Firm Size on Bank Performance

Firm size has a positive effect on Bank Performance. According to Irawati et al. (2019), the larger the size of the bank makes the bank increasingly have a competitive advantage in facing competition because banks have relatively high capital to respond to this competition.

Total assets show how much money the company has and how much money the company invests in things that make more money. Larger companies are expected to perform better due to the advantages of economies of scale (Klapper & Love, 2004). According to Setiawan and Pratama (2019), large banks in Indonesia tend to be able to manage their liquidity levels well and have the ability to distribute more credit because banks have large liquid funds so they are better able to meet credit requests

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from customers (debtors). This statement is in accordance with the results of research by Pryobudi et al. (2017) that high credit distribution and large capital are two forces that drive economies of scale from bank competition, allowing larger banks to survive in better competition, have higher asset quality, and the potential scale of invested capital in general develop.

When a company can manage its total assets properly, this can affect the profits it generates for the better. Because big companies have all the options compared to small companies. Large companies also have a special attraction for consumers because large companies tend to have a smaller risk of bankruptcy due to the relatively large number of assets (Pryobudi et al., 2017). This is reinforced by research conducted by Iskandar & Zulhilmi (2021) which shows that company size has a significant effect on financial performance. Where the size of the financial performance received is influenced by the size of the company size of Islamic commercial banks in Indonesia. Similar to the results of research conducted by Chege & Bichanga (2017) and Muhindi & Ngaba (2018), where there is a significant relationship between company size and financial performance. However, different results occurred in research conducted by (Setyawan, 2019) and Fauzi & Puspitasari (2021) that company size has no effect on financial performance.

The Effect of Firm Growth on the Relationship between Green Accounting and Bank Performance

Firm growth does not affect the relationship between green accounting and bank performance. Based on research conducted by Mitid & Rakid (2017), one focus of green accounting relates to environmentally friendly retailers like green loans, green cards, and green mortgages. However, this practice does not necessarily improve bank performance, even though there is influence from firm growth. Because the growth rate of a company cannot be a guarantee that the company will disclose its green accounting better. The development of green loan still has problems with inadequate products and an inadequate management system, namely in terms of green credit product innovation to meet market demand as well as the organizational structure and management level of green credit that is not good (Zhang, 2018). This will certainly affect the decrease in the level of LDR or bank performance where banks cannot optimize their third party funds for lending activities.

On the other hand, reduced total assets also indicate that banks have not been able to increase consumer and investor confidence as indicated by the size of the company's growth and the large amount of third party funds collected by banks (Riauwanto & Sulastiningsih, 2019). This can happen because consumers are not interested in buying environmentally based products. Shaputra (2013) states that most consumers only want products that suit their needs but do not think about the impact on the environment. Consumers are not willing to pay more for environmentally friendly products (Dwi Putranti & Suparmi, 2016). The impact is on the distribution of green credit. Where the large amount of environmental-based credit/lending by banks that are not compensated for by the existence of appropriate and effective credit granting policies will be able to make bank performance as a proxy for the level of liquidity (LDR) decrease.

The Effect of Firm Growth on the Relationship between Firm Size and Bank Performance

Firm growth does not affect the relationship between firm size and bank performance. The size of the company, which is shown by the total assets it owns, cannot guarantee that the company is performing well, especially with the influence of the company's growth. Compared to large companies, smaller companies have higher average growth rates and a wider dispersion of growth (Kang & Eum, 2022). This means, whether or not the growth of the bank will not have any impact on the relationship between firm size and bank performance. This is because small banks will be more daring to extend large amounts of credit in order to be able to compete with their competitors by providing higher interest incentives. Meanwhile, large banks have better capital and liquidity management as well as more incentives to take higher risks in an effort to increase the amount of credit disbursement (Setiawan & Pratama, 2019). Thus, firm growth cannot drive the effect of firm size on financial performance as proxied by LDR.

Meanwhile, because the largest bank asset is credit, banks with large total assets have the potential to extend larger loans (Dewi & Ramantha, 2015). However, positive growth in assets does not necessarily support the ability of banks to channel credit to the real sector. This is because in addition to asset growth, the increased ability to finance credit by banks also needs to be supported by third party funds. If third party funds increase, the interest expense will be higher and if third party funds decrease, the interest expense will also be lower (Rachmawati, 2013). Therefore, the incompetence of banks to channel third party funds can cause banks to experience liquidity problems. So that in the end it will have an impact on the LDR (Loan to Deposit Ratio) which is not optimal.

V. CONCLUSIONS

The research results show that Green Accounting has a negative effect on Bank Performance. This is because banks are unable to manage their green credit properly. Even though banks that implement green accounting are required to always consider environmental aspects when granting credit. In addition, the existence of an inadequate green accounting disclosure mechanism

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can affect the level of legitimacy from the public which will have an impact on decreasing financial performance in the future (Laksmi & Hanin, 2022). Other results show that firm size has a positive effect on bank performance. High credit distribution and large capital are two forces that drive economies of scale from bank competition. This condition allows larger banks to survive in better competition, have higher asset quality, and the potential scale of invested capital is generally growing.

Meanwhile, the test results on the moderating variable show that firm growth does not affect the relationship between green accounting and bank performance. The practice of green accounting at banks does not necessarily improve the performance of the bank itself, even though there is influence from firm growth. Because the growth rate of a company cannot be a guarantee that the company will disclose its green accounting better. Evidenced by the fact that there are still problems with inadequate products and inadequate management systems, in terms of green credit product innovation to meet market demand and organizational structure (Zhang, 2018).

Meanwhile, tests on other moderating variables found that firm growth did not affect the relationship between firm size and bank performance. The size of the company, which is reflected in the total assets owned by a company, cannot guarantee that the company is performing well, especially with the influence of the company's growth. This is because in addition to asset growth, the increased ability to finance credit by banks also needs to be supported by third party funds. Therefore, the inability of banks to channel third party funds can cause banks to experience liquidity problems.

REFERENCES

- 1) Adnan, A., Ridwan, R., & Fildzah, F. (2016). Pengaruh Ukuran Bank, Dana Pihak Ketiga, Capital Adequacy Ratio, dan Loan To Deposit Ratio Terhadap Penyaluran Kredit Pada Perusahaan Perbankan yang Terdaftar Di Bursa Efek Indonesia Tahun 2011- 2015. *Jurnal Dinamika Akuntansi Dan Bisnis*, 3(2), 49–64.
- 2) Almaududi. (2019, September 30). Bank dan Pencemaran Lingkungan.
- 3) Anandamaya, L. P. V., & Hermanto, S. B. (2021). Pengaruh Good Corporate Governance, Ukuran Perusahaan Dan Leverage Terhadap Kinerja Keuangan. *Jurnal Ilmu Dan Riset Akuntansi (Jira)*, 10(5).
- 4) Angelina, M., & Nursasi, E. (2021). Pengaruh Penerapan Green Accounting Dan Kinerja Lingkungan Terhadap Kinerja Keuangan Perusahaan. *Jurnal Manajemen Dirgantara*, 14(2), 211–224.
- 5) Aniela, Y. (2012). Peran Akuntansi Lingkungan Dalam Meningkatkan Kinerja Lingkungan Dan Kinerja Keuangan Perusahaan. *Berkala Ilmiah Mahasiswa Akuntansi*, 1(1).
- 6) Azmy, A. (2018). Analisis Pengaruh Rasio Kinerja Keuangan Terhadap Profitabilitas Bank Pembiayaan Rakyat Syariah Di Indonesia. *Jurnal Akuntansi*, 22(1), 119–137.
- 7) Azzahra, A. S., & Wibowo, N. (2019). Pengaruh Firm Size Dan Leverage Ratio Terhadap Kinerja Keuangan Pada Perusahaan Pertambangan. *Jurnal Wira Ekonomi Mikroskil*, 9(1), 13–20.
- 8) Chege, L. M., & Bichanga, J. (2017). Non-Performing Loans and Financial Performance of Banks: An Empirical Study of Commercial Banks in Kenya. *International Journal of Management and Commerce Innovations*, 4(2), 909–991.
- 9) Choiriah, S. (2020). The Effect of Stakeholder Power, Board Gender Diversity and Human Capital on Environmental Disclosure with Board Independent as Moderation Variable. *Human resources*, 11(12).
- 10) Choiriah, S., & Lysandra, S. (2022). Effect of Green Accounting, Intellectual Capital on Financial Performance, and Competitive Advantage as moderating variables. *Technium Soc. Sci. J.*, 34, 362..
- 11) Choiriah, S., & Lysandra, S. (2023). Effect of Green Accounting, Quality Management on Financial Performance, and Green Innovation as Moderation Variables. *Journal of Economics, Finance and Management Studies*, 6(07), 3534-3542
- 12) Choiriah, S. Ria (2021). The Effect of Carbon Emission Disclosure and Social Performance on Financial Performance, with Firm Growth as Moderation. *Saudi J Econ Fin*, 5(5), 205-212..
- 13) Damayanti, A. C., & Mawardi, W. (2022). Pengaruh Ukuran Bank (SIZE), Loans to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Diversifikasi Pendapatan, Dan BOPO Terhadap Kinerja Bank Di Indonesia (Studi pada Bank Umum Konvensional yang Terdaftar di BEI Tahun 2016-2020). *Diponegoro Journal of Management*, 11(1).
- 14) Deb, B. C., Saha, S., & Rahman, M. M. (2020). Does Green Accounting Practice Affect Bank Performance? A Study On Listed Banks Of Dhaka Stock Exchange In Bangladesh. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(9), 7225–7247.
- 15) Dewi, K. P., & Ramantha, I. W. (2015). Pengaruh Loan Deposit Ratio, Suku Bunga Sbi, Dan Bank Size Terhadap Nonperforming Loan. *E-Jurnal Akuntansi Universitas Udayana*, 11(3), 909-920.
- 16) Dwi Putranti, H. R., & Suparmi, S. (2016). Pengaruh Kemasan Ramah Lingkungan dan Informasi Terhadap Minat Beli Ulang (Studi Konsumen AMDK Kota Semarang). *Prosiding Seminar Nasional INDOCOMPAC*.

The Effect of Green Accounting and Firm Size on Bank Performance with Firm Growth as a Moderation Variable

- 17) Fauzi, A. F., & Puspitasari, E. (2021). Pengaruh Struktur Modal, Ukuran Perusahaan, Likuiditas dan Pertumbuhan Aset terhadap Kinerja Keuangan Perusahaan yang Terdaftar di Jakarta Islamic Index (JII) Periode 2018-2020. *Eduonomika*, 5(2), 1130–1141.
- 18) Ghozali, I. (2005). Analisis Multivariate dengan program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.
- 19) Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of innovation and entrepreneurship*, 2, 1-14.
- 20) Harahap, S. S. (2011). Analisis kritis atas laporan keuangan.
- 21) Irawati, N., Maksum, A., Sadalia, I., & Muda, I. (2019). Financial Performance Of Indonesian's Banking Industry: The Role Of Good Corporate Governance, Capital Adequacy Ratio, Non Performing Loan And Size. *International Journal of Scientific and Technology Research*, 8(4), 22–26.
- 22) Iskandar, M., & Zulhilmi, M. (2021). Pengaruh Likuiditas dan Ukuran Perusahaan Terhadap Kinerja Keuangan Bank Umum Syariah di Indonesia. *Journal of Sharia Economics*, 2(1), 59–78.
- 23) Kang, T., & Eum, W. (2022). Relationship Between Firm Size And Firm Growth: Evidence From Korean Manufacturing Firms. *The Singapore Economic Review*, 1–24.
- 24) Karyani, E., & Obrien, V. V. (2020). Green Banking and Performance: The Role of Foreign and Public Ownership. *Jurnal Dinamika Akuntansi Dan Bisnis*, 7(2), 221–234.
- 25) Kasmir. (2014). Analisis Laporan Keuangan. PT. Rajagrafindo.
- 26) Khamilia, N., & Nor, W. (2022). Faktor-Faktor Dalam Meningkatkan Pengungkapan Green Banking. *Juara: Jurnal Riset Akuntansi*, 12(1), 1–23.
- 27) Klapper, L. F., & Love, I. (2004). Corporate Governance, Investor Protection, And Performance In Emerging Markets. *Journal of Corporate Finance*, 10(5), 703–728.
- 28) Lako, A., & Sumaryati, A. (2018). Kerangka Konseptual dan Aplikasi Akuntansi Hijau. Salemba Empat.
- 29) Mabruroh, M., & Anwar, S. (2022). Pengaruh Green Accounting, Ukuran Perusahaan, Dan Leverage Terhadap Financial Performance Dengan Nilai Perusahaan Sebagai Variabel Moderasi. *COSTING: Journal of Economic, Business and Accounting*, 5(2), 1776–1778.
- 30) Mappanyuki, R., & Sari, M. (2017). The Effect Of Sales Growth Ratio, Inventory Turnover Ratio, Growth Opportunity To Company's Profitability (Survey In Indonesia's Stocks Exchange). *International Journal of Management and Applied Science*, 3(3), 139–147.
- 31) Mawardi, W. (2005). Analisis Faktor-Faktor yang Mempengaruhi Kinerja Keuangan Bank Umum di Indonesia (Studi kasus Pada Bank Umum dengan total Asset Kurang Dari 1 Triliun). *Jurnal Bisnis Strategi*, 14, 1.
- 32) Meiyana, A., & Aisyah, M. N. (2019). Pengaruh Kinerja Lingkungan, Biaya Lingkungan, Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Dengan Corporate Social Responsibility Sebagai Variabel Intervening. *Nominal Barometer Riset Akuntansi Dan Manajemen*, 8(1), 1–18.
- 33) Mitid, P., & Rakid, S. (2017). Social Finance And Social Banking: A Path Towards A More Sustainable Future. *Review of Applied Socio-Economic Research*, 108–119.
- 34) Muhindi, K. A., & Ngaba, D. (2018). Effect Of Firm Size On Financial Performance On Banks: Case Of Commercial Banks In Kenya. *International Academic Journal of Economics and Finance*, 3(1), 175–190.
- 35) Muttakin, M. B., & Ullah, S. (2012). Corporate Governance And Bank Performance: Evidence From Bangladesh. *Corporate Board: Role, Duties & Composition*, 8(1).
- 36) Ningsih, W. F., & Rachmawati, R. (2017). Implementasi Green Accounting dalam Meningkatkan Kinerja Perusahaan. *JABE (Journal of Applied Business and Economic)*, 4(2), 149–158.
- 37) Nurlis, N. (2019). Carbon Emission Disclosure in the Proper Rating Company's Annual Financial Statements in Indonesia Stock Exchange. *Carbon*, 10(12).
- 38) Pryobudi, P., Atim, D., & Risna, W. (2017). The Role Of Efficiency As Mediator For The Influence Of Firm Size On Financial Performance Of Banking That Do Merger And Acquisition In Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 67(7), 195–209.
- 39) Rachmawati, M. F. (2013). Analisis Pengaruh Pertumbuhan Dana Pihak Ketiga, Loan to Deposit Ratio Non Performing Loan, Biaya Operasional, dan Net Interest Margin terhadap Profitabilitas Bank. *Jurnal Akuntansi Dan Keuangan*. Malang: Universitas Brawijaya.
- 40) Regehr, K., & Sengupta, R. (2016). Has The Relationship Between Bank Size And Profitability Changed? *Economic Review* (01612387), 101(2).
- 41) Riyadh, H. A. (2020). The Analysis Of Green Accounting Cost Impact On Corporations Financial Performance.

The Effect of Green Accounting and Firm Size on Bank Performance with Firm Growth as a Moderation Variable

International Journal of Energy Economics and Policy.

- 42) Sari, E. H. (2017). Pengaruh Struktur Modal, Ukuran Perusahaan, Pertumbuhan Aset Perusahaan Terhadap Kinerja Keuangan Perusahaan Yang Terdaftar Dalam Jakarta Islamic Index Tahun 2012-2015. Surakarta: IAIN Surakarta.
- 43) Setiawan, R., & Pratama, A. A. P. (2019). Modal, Tingkat Likuiditas Bank, NPL dan Pertumbuhan Kredit Perbankan Indonesia (Capital, Level of Liquidity, NPL and Lending Growth of Indonesian Banks). Matrik: Jurnal Manajemen, Strategi Bisnis Dan Kewirausahaan, 96-107.
- 44) Setiawan, T. (2016). Penerapan Akuntansi Manajemen Lingkungan pada Dua Puluh Lima Perusahaan yang Terdaftar di Indeks Sri Kehati 2013. Jurnal Akuntansi, 9(2), 110–129.
- 45) Setyawan, B. (2019). Pengaruh Good Corporate Governance, Ukuran Perusahaan Dan Profitabilitas Terhadap Kinerja Keuangan Perusahaan (Studi Empiris Terhadap Perusahaan Sektor Perbankan Di Bursa Efek Indonesia). Jurnal Mitra Manajemen, 3(12), 1195–1212.
- 46) Shafiquea, A., Kashifb, A. R., Haiderc, A., Zaheerd, N., & Khan, S. (2021). Effect of Asset Utilisation and Corporate Growth on Financial Performance. Int. J. Innov. Creat. Chang, 15, 1104–1118.
- 47) Shaputra, R. K. (2013). Penerapan Green Marketing Pada Bisnis Produk Kosmetik. Jurnal Jibeka, 7(3), 47–53.
- 48) Shaumya, S., & Arulrajah, A. (2017). The Impact Of Green Banking Practices On Bank's Environmental Performance: Evidence From Sri Lanka. Journal of Finance and Bank Management, 5(1), 77–90.
- 49) Sulistiawati, E., & Dirgantari, N. (2016). Analisis Pengaruh Penerapan Green Accounting Terhadap Profitabilitas Pada Perusahaan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia. Jurnal Reviu Akuntansi Dan Keuangan, 6(1).
- 50) Ukhriyawati, C. F., & Dewi, R. D. (2019). Pengaruh Struktur Modal, Pertumbuhan Perusahaan Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan LQ-45 Yang Terdaftar Di Bursa Efek Indonesia. Equilibiria, 6(1).
- 51) Ullah, M. H., & Rahman, M. A. (2015). Corporate Social Responsibility Reporting Practices In Banking Companies In Bangladesh: Impact Of Regulatory Change. Journal of Financial Reporting and Accounting.
- 52) Zhang, Y. (2018). Green Credit Rises the Financial Performance of Commercial Bank--A Case Study on Industrial Bank. 2018 International Conference on Management, Economics, Education and Social Sciences (MEESS 2018), 295–300.



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