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The Influence of Green Banking and Financial Performance, Retrieved from Profitability Bank

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Abstract

The purpose of this study was to determine the effect of Green Banking which is proxied as Green Banking Daily Operation, Green Banking Policy, and Financial Performance which is proxied as Capital Adequacy Ratio, Non-Performing Loan, Loan to Deposit Ratio, and Operational efficiency ratio on Profitability which is proxied as Return on Asset. The population in this study is banking listed on the Indonesia Stock Exchange in 2016-2019 which consists of 7 banks as research samples. The research sample was selected using a purposive sampling technique. This research data is secondary data. The analysis technique used is multiple linear regression analysis with the help of the SPSS version 26 program. The results of this study are: (1) Green Banking Daily Operation has a positive and significant effect on Return on Asset, (2) Green Banking Policy has a negative and insignificant effect on Return on Asset, (3) Capital Adequacy Ratio has a positive and significant effect on Return on Asset, (4) Non-Performing Loan has a negative and insignificant effect on Return on Asset, (5) Loan to Deposit Ratio has a positive and significant effect on Return on Asset, (6) Operating Expenses Operating Income has a negative and significant effect on Return on Asset. (7) Green Banking and Financial Performance simultaneously have a significant positive effect on Profitability.

Keywords: *Adequacy Ratio, Financial Performance, Green Banking, Operating Expenses, Profitability.*

INTRODUCTION

Banks are financial institutions that are a place for companies, government, and private bodies, as well as individuals to save funds and channel funds (Syaifuddin DT et al., 2018). Banks with healthy performance can attract investor interest as well as a measure of the bank's performance. One of the assessments of bank performance can be done through profitability indicators.

According to Priyoko D et al., (2019) profitability is a ratio that shows the level of effectiveness achieved through bank operations. The profitability ratio is the ratio of profit (after tax) to capital (core capital) or profit (before tax) to the assets owned by the bank in a certain period. Prasanjaya & Ramantha, (2013) state that measuring the level of profitability is very important to ensure the achievement of profit targets in that period. The book written by Syaifuddin DT, (2009), states that to measure profitability, an indicator is needed that can be used to assess profitability, namely Return on assets (ROA). If Return on Asset (ROA) increases, it means that the company's profitability increases (Indalestari et al., 2018).

Concern for the environment is one of the factors to attract customers/investors which can then increase the profitability of the company. In 2013 in its report, The World Economic Forum placed the environmental and economic sectors as the world's main risks. Where both have a connection to environmental problems caused by economic activities that do not pay attention to environmental aspects, resulting in a negative impact on the global economy (Romli & Saputra, 2021).

Environmental issues are of particular concern to various parties including economic activity actors, especially in the banking sector. The phenomenon that occurs encourages business initiatives that pay attention to environmental sustainability. In some financial institutions, banks have implemented the concept of green initiatives (green banking) by applying green banking principles. According to Wrespatiningsih & Mahyuni, (2022) To achieve sustainable finance at a bank, one of the efforts that can be applied is to implement green banking program practices. In implementing green banking practices, there are various ways, for example by utilizing digital technology as a means of transactions and using digital storage space to avoid using paper.

According to Romli & Saputra (2021), green banking is an effort to strengthen the risk management of a bank, especially those related to the environment by encouraging the banking industry to distribute credit or loans to customers who pay attention to environmental sustainability, for example, the organic agriculture sector and renewable energy. Basically, the

concept of green banking is not just about carrying out "Go Green" activities.

Green banking can be reflected by green banking daily operations as measured by the number of transactions using ATMs in banks. Green banking is also reflected by green banking policy as measured by the implementation of CSR in banking. Green initiatives are also a form of Corporate Social Responsibility (CSR), related to the impact of companies' operations on their environment.

Another factor that can affect banking profitability is financial performance. Financial performance can be used to measure the bank's ability to find sources of funds that can generate the most efficient interest costs, as well as generate profits from the management of assets entrusted to the management of the bank concerned (Syaifuddin DT 2009). Financial performance can be measured by CAR, LDR, NPL, and BOPO (Alfian et al., 2021).

This research is related to research conducted by Ratnasari et al., (2021) on the implementation of green banking and bank financial performance. Research on the effect of green banking and financial performance on profitability in banks has been carried out in developed countries but is still a new topic and has not been widely carried out in Indonesia, so this research needs to be done to be able to provide results in the form of knowledge about how green banking and financial performance affect profitability. So the research conducted by Ratnasari et al., (2021) provides suggestions for further research, namely winnowing the research sample and discussing how green banking and financial performance affect profitability. The difference between previous research and this study is that previous research explains the implementation of green banking and financial performance at banks in Indonesia. Meanwhile, this study measures how green banking and financial performance affect profitability. Then this study adds the number of sample banks registered with the OJK and the Indonesia Stock Exchange that have published sustainability reports.

Based on the description above regarding green banking and financial performance, the researcher raises the title "The Effect of Green Banking and Financial Performance on Bank Profitability".

METHODS

This research was conducted at Banking Companies listed on the Indonesia Stock Exchange from 2016 to 2020 through the site www.idx.co.id and has published sustainability reports through the OJK Sustainability Report site www.ojk.go.id. The object in this study is profitability as the dependent variable (Y), while the independent variables are green banking (X1) which is proxied by green banking daily operations, green banking policy, and financial performance (X2) which is proxied by capital adequacy, non-performing loans, loan to deposit ratio, and BOPO.

The population in this study were banking companies listed on the Indonesia Stock Exchange in 2016-2020, totaling 46 companies. Determining the sample in this study using purposive sampling technique, namely:

1. Banking companies that publish financial reports and annual reports during 2016-2020.
2. Banking companies have the complete data needed related to the measurement of research variables
3. Banking companies that have published *sustainability reports* published through the www.ojk.go.id system.

The following are the results of purposive sampling based on the banking sub-sector criteria listed on the IDX 2016-2020 in Table 1

Table 1. *Purposive Sampling* Results Based on Criteria

No.	Criteria	Total
1.	Banks listed on the Indonesia Stock Exchange 2016-2020	46
2.	Banks that do not publish financial statements 2016- 2020	0
3.	Banks that did not publish the 2016-2020 Annual Report	0
4.	Banks that do not publish *sustainability reports* 2016-2020	39
5.	Number of sample banks	7

Source: Researcher Elaboration, 2023

The data source used in this research is secondary data. The source of data in this study is quoted directly on the Indonesia Stock Exchange website through the www.idx.co.id system, the website of each bank, and sustainability reports on the Financial Services Authority website www.ojk.go.id.

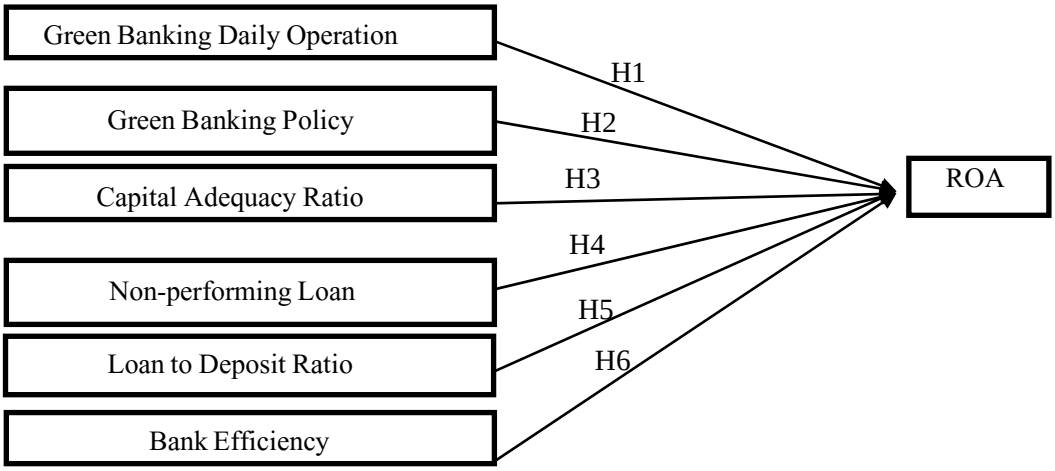

Figure Conceptual Framework

Hypothesis

H1: Green Banking Daily Operation has a significant effect on Return on Assets

H2: Green Banking Daily Policy has a significant effect on Return on Assets

H3: Capital Adequacy Ratio has a significant effect on Return on Assets

H4: Non-Performing Loan has a significant effect on Return on Assets

H5: Loan to Deposit Ratio has a significant effect on Return on Assets

H6: Operating Expenses Operating Income has a significant effect on Return on Assets

Data analysis in this study was carried out by descriptive statistical analysis and multiple regression analysis processed using SPSS 25. Descriptive analysis is a quantitative description that describes or summarizes the features of a collection of information (Mann, 2010). Multiple linear regression analysis is a statistical technique in a general linear model used to analyze the relationship between the dependent variable and several independent variables (Hair, et al., 2019).

The multiple regression model in this study is based on the regression model quoted in Ratnasari et al. (2021), namely:

$$\boldsymbol{Y = \alpha + \beta 1\, X1 + \beta 2\, X2 + \beta 3\, X3 + \beta 4\, X4 + \beta 5\, X5 + \beta 6\, X6 + e}$$

Description:

Y= Return on asset (ROA)

a = Constant

$\beta 1$-$\beta 6$= Regression coefficient

X1 = Green Banking Daily Operation (GBDO)

X2= Green Banking Policy (GBP)

X3= Capital Adequacy Ratio (CAR)

X4= Non-Performing Loan (NPL)

X5= Loan to Deposit Ratio (LDR)

X6= Operating Expenses Operating Income (BOPO)

e = error

Operational Definitions of Variables

1. Profitability is a company's expertise in obtaining profits (profit). The more profit earned, the higher the profitability value. The maximum level of profit can produce a large level of profit, this can be known by comparing the profit earned by the company with several aspects that are used as benchmarks. The company's ability to generate profits can basically be seen from Return on Asset. ROA describes the company's ability to generate profits from available resources (assets) (Alfian et al., 2021). Return on assets (ROA) is a measure of the company's overall ability to generate profits with the total assets available in the company. ROA is used to see the company's overall operational efficiency (Sabrin, Sarita, Takdir, 2016).
2. Green Banking Daily Operation (GBDO). Green banking daily operational is a banking activity that minimizes the CO2 emission footprint in its operational activities. This green banking

operational activity can be seen from the use of online banking, mobile banking, and the application of ATM usage. Khaumya and Arulrajah (2016) used four dimensions to measure green banking practices, namely green banking practices related to employees, green banking daily operations, customer dimensions related to bank practices, and policies related to green banking practices. In this study, green banking initiatives in the daily operational dimension will be measured by calculating the percentage of the number of transactions through the ATM payment system.

GBDO = Number of transactions through ATM

3. Green Banking Policy (GBP). Green Banking Policy (GBP) is the way banks conduct their business by considering environmental issues and Community Social Responsibility (CSR). The implementation of CSR programs requires considerable costs, such as environmental development costs and partnership costs that will reduce bank profits. The higher the costs incurred for CSR implementation, the higher the increase in bank profitability. According to M. & Priantinah, (2012) the level of CSR disclosure in the financial statements expressed in the Corporate Social Responsibility Index (CSR-I) which will be assessed by the amount disclosed in the financial statements and sustainability reports by the company and compared with the amount of disclosure required by GRI which includes 79 disclosure items, namely: economic environment, labor, human rights, society, and product responsibility, which are formulated:

GBP = Number of CSR items used/79

4. Capital Adequacy Ratio (CAR). According to the Bufer Theory of Capital Adequacy, banks may choose to hold back from excess capital to reduce the likelihood of falling below legal capital requirements, especially if their capital adequacy ratio is highly volatile (Chandrasegaran, 2020). Capital Adequacy Ratio (CAR) is the bank's capital adequacy ratio or the bank's ability in existing capital to cover possible losses in lending or trading securities (Wardiah, 2013 in (Siregar, 2021). According to SE BI Number 13/24 / DPNP dated October 25, 2011, the formula for the CAR ratio is:

CAR = (Tier 1 Capital + Supplementary Capital)/(RWA) X 100%

5. Non-Performing Loan (NPL) is a non-performing loan caused by 2 factors, namely errors in analysis by the bank and customers who consciously or unconsciously do not make payments (Kasmir, 2015 in Alfian et al., 2021). Non-Performing Loan (NPL) is a ratio used to measure the ratio between the number of non-performing loans and the total loans disbursed. NPL calculation according to (OJK Regulation No.14/SEOJK.03/2017) as follows:

NPL = Non-performing loans/Total loans X 100%

6. Loan to Deposits Ratio is one of the elements in assessing the liquidity of a company or bank by comparing total loans with total deposits, which means that it is measured between the amount of all credit volumes channeled by banks in receiving funds. The purpose of calculating the Loan to Deposits Ratio is to determine how healthy banks are in carrying out their business activities by measuring indicators of the level of vulnerability in the banking sector (Pratama, 2021). LDR calculation according to SE BI No.13/30/DPNP Date December 16, 201) as follows:

LDR = Total Credit / Third Party Funds X 100%

7. BOPO is a ratio that measures the bank's ability to carry out its operating activities and measures its level of efficiency. BOPO will affect banking performance because all production factors must be used by banks effectively and efficiently so that it can be seen whether their operational activities have been carried out properly or not (Alfian et al., 2021). Matindas, Pangemanan, & Saerang, (2015) in Maulana et al., (2021) suggest that the lower the BOPO value, the more efficiently the bank uses operational costs in running its business. So that the benefits obtained by the bank will be greater, and vice versa, if the BOPO value is higher, the more inefficient the bank uses operational costs in its business. Provisions issued by Bank Indonesia. BOPO is said to be healthy if it is below 85% and is said to be unhealthy if it is above 85% (Indalestari, Takdir & Wahyuniati, 2018). BOPO calculation according to (SE BI No.13/30/DPNP Date December 16, 2011) as follows:

BOPO = Total Operating Expenses/Total Operating Income X 100%

RESULTS AND DISCUSSION

Multiple Linear Regression

Multiple linear analysis is an analysis technique to determine the influence or relationship between the Independent variable (X), namely green banking daily operations, green banking policy, capital adequacy ratio, non-performing loans, loan-to-deposit ratio operating expenses operating income, and dependent variables (Y), namely return on assets. The calculations in this study used the SPSS 26 program.

Table 2. Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		StandardizedCoefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	6.071	1.173		5.174	.000
	GBDO	.018	.003	.236	6.217	.000
	GBP	-.011	.007	-.083	-1.581	.129
	CAR	.157	.025	.356	6.288	.000
	NPL	-.014	.088	-.013	-.163	.872
	LDR	.027	.009	.166	3.100	.005
	BOPO	-.059	.009	-.591	-6.295	.000

Source: Primary Data Processed SPSS, 2023

Based on Table 2, the regression equation can be formulated as follows:

$$Y = 6.071 + 0.018X1 - 0.011X2 + 0.157X3 - 0.014X4 + 0.027X5 - 0.059X6$$

From the results of the regression equation above, it can be seen that the constant value is 6,071. This value indicates that the bank's return on assets variable has a value of 6,071 if other variables are considered constant.

1. The green banking daily operation coefficient of (X1) 0.018 indicates that every increase in the green banking daily operation variable by 1% will increase the bank's ROA (Y) by 1.8%.
2. The green banking policy (X2) regression coefficient of -0.011 indicates that each increase in the green banking policy variable by 1% will reduce the bank's ROA (Y) by 1.1%.
3. The capital adequacy ratio (X3) regression coefficient of 0.157 shows that every increase in the CAR variable by 1% will increase the bank's ROA by 15.7% ROA (Y)
4. The non-performing loan (X4) regression coefficient of -0.014 shows that every increase in the NPL variable by 1% will reduce the bank's ROA (Y) by 1.4%.
5. The loan-to-deposit ratio (X5) regression coefficient of 0.027 shows that every 1% increase in the LDR variable will increase the bank's ROA (Y) by 2.7%
6. The BOPO regression coefficient (X6) of 0.059 shows that every 1% increase in the BOPO variable will increase the bank's ROA by 5.9% of the bank's ROA (Y).

Test Coefficient of Determination (R2)

The coefficient of determination is used to determine how much influence the independent variable has on the dependent variable.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.987 a	.974	.967	.16646	2.217

Source: Primary Data Processed SPSS, 2023

The coefficient of determination or the R square number is 0.967 or 96.7%. According to Nugroho (2005) states that for multiple linear regression, it is better to use an adjusted R square or written Adjusted R square, which has been adjusted to the number of independent variables used, because if the independent variable is 1 (one) then use R square, and if it exceeds 1 (one) use adjusted R square. Adjusted R

square in this study which can be seen in table 4.14 is 0.967, this means that 96.7% of the variation in the dependent variable return on assets can be explained by the independent variables, namely GBDO, GBP, CAR, NPL, LDR and BOPO, while the remaining 3.3% is explained by other variables outside the existing variables.

Partial Hypothesis Results in t-test

1. *The green banking daily operation* variable (X1) has a significance value of 0.000 less than the value of α = 0.05. Thus, the GBDO variable (X1) has a significant positive effect on *return on assets* (Y), this implies that the first hypothesis is accepted.
2. *The green banking daily policy* variable (X2) has a significance value of 0.129 greater than the value of α = 0.05. Thus, the GBP (X2) variable has a negative and insignificant effect on *return on assets* (Y), this implies that the second hypothesis is rejected.
3. *The capital adequacy ratio* variable (X3) has a significance value of 0.000 less than the value of α = 0.05. Thus, the CAR variable (X3) has a significant positive effect on *return on assets* (Y), this implies that the third hypothesis is accepted.
4. *The non-performing loan* variable (X4) has a significance value of 0.872 greater than the value of α = 0.05. Thus, the NPL variable (X4) has a negative and insignificant effect on *return on assets* (Y), this implies that the fourth hypothesis is rejected.
5. *The loan to deposit ratio* variable (X5) has a significance value of 0.005 which is smaller than the value of α = 0.05. Thus, the LDR variable (X5) has a significant positive effect on *return on assets* (Y), this implies that the fifth hypothesis is accepted.
6. The variable operating cost of operating income (X6) has a significance value of 0.000 less than the value of α = 0.05. Thus, the BOPO variable (X1) has a significant negative effect on *return on assets* (Y), this implies that the sixth hypothesis is accepted.

Discussion

The Effect of Green Banking Daily Operation on Return On Assets

Based on the results of the hypothesis, it is known that the green banking daily operation variable has a significant and positive effect on profitability (ROA). This shows that the higher the use of GBDO transactions, the company's ability to generate profits will increase, this can be caused by the more transactions using ATMs, the more efficient the bank will be, and the acceleration of revenue generation will increase, especially at this time to increase revenue from non-cash through digital transaction activities, including digital ATMs in the form of using cardless ATMs. For this reason, the bank regularly educates customers to transact online to be more paperless so that by utilizing technological advances the activities carried out by customers become easier because customers can transact anywhere without having to come to the branch, more effective and efficient, which uses less energy and paperless. It is expected that by reducing operational costs and increasing efficiency, it can increase bank profitability.

The seven samples that GBDO has a minimum value of 24.20% owned by BBCA in 2019. This means that the use of ATM transactions in 2019 has started to decrease because BBCA has created many more sophisticated digital products to make it easier for us to transact and can save energy so that it can be more paperless. Meanwhile, the maximum value is at BBNI bank in 2016 amounting to 65.09%, the high use of ATM transactions at BBNI because in this year BBNI bank's commitment to reducing energy consumption and paperless is very optimal BBNI's success is adapted because this bank is efficient, reducing energy consumption and paperless. Transacting without having to come to the bank will reduce CO2 emissions and will reduce the use of paper so that it is more paperless and environmentally friendly.

The results of this study are in line with the sustainability theory first proposed by (Meadows et al., 1972) which explains that society's efforts to prioritize social responses to environmental and economic problems by utilizing technology. The seven banks in the sample have also published sustainability reports whose contents explain how the bank has achieved, what the bank will develop in the future, and how the bank will improve its performance in doing activities in an environmentally friendly manner.

The results of this study support previous research conducted by (Ratnasari et al., 2021), (Setyoko & Wijayanti, 2022), and (Rachman & Saudi, 2021) which show that GBDO has a significant and positive effect on profitability (ROA), where the greater the Capital

Adequacy Ratio (CAR), the greater the profitability obtained by the bank.

The Effect of Green Banking Policy on Return On Assets

Based on the results of the hypothesis, it is known that the green banking policy variable has a negative and insignificant effect on profitability (ROA). This means that the implementation of CSR program attributes or items is one of the environmental development activities that require large funds and can reduce bank profits.

This is because most banks' CSR activities are not directed towards environmental improvement activities to lead to green banking. In addition, on average, the bank's CSR activities are still small so its contribution to ROA. The results of the description of the research variables show the condition of the insignificant minimum value of 34.62% owned by BMRI, meaning that BMRI in 2017 only implemented 27 CSR items from 78 CSR items. Implemented CSR only on some indicators, namely on indicators of labor practices and decent work, which can be seen from the aspects of labor and aspects of occupational health and safety. While some indicators of aspects that are not implemented such as environmental performance indicators were measured in terms of aspects of emissions, effluents, and waste. This aspect is still not implemented in BMRI in 2017.

The maximum value of 57.69% is owned by BBCA, meaning that it consistently implements 45 CSR items out of 78 CSR items. Almost all indicators in 78 CSR items are implemented by BBCA such as labor indicators, environmental performance indicators, labor indicators, and social community indicators. This means that the implementation of CSR items on BBCA is very good.

Furthermore, when viewed from the average value of 51.64%, it means that from the number of CSR items, namely 78 items, there are 40 items that are used on average by each bank in the sample above. CSR items used are on economic performance indicators. Furthermore, environmental performance indicators on energy aspects, aspects of effluent emissions, and waste. Indicators that are often used are also indicators of labor practices in aspects of employment, health and safety aspects of positions, and aspects of training and education. The last indicator that is often used is the social community indicator.

The results of this study are not in line with existing theories, namely stakeholder theory and legitimacy theory. The term stakeholder was first proposed by the Stanford Research Institute (SRI) in 1963 (Freeman, 1984) which basically states that a company is an entity that does not only operate for its own interests but is obliged to provide benefits to its stakeholders. This would indicate that by disclosing CSR, the company can gain support from the community. This support makes the company's reputation increase. As a result, if the bank implements CSR, the profitability of the bank will decrease. Ghozali and Chariri (2007) state that legitimacy theory is based on the existence of a social contract between the company and the community where the company operates by using economic resources.

The results of this study support previous research conducted by Ratnasari et al. (2021) and Bessong and Tapang (2012) which show that GBP has no significant and negative effect on profitability (ROA).

Effect of Capital Adequacy Ratio on Return On Assets

Based on the results of the CAR hypothesis, it has a significant positive effect. This concludes that the seven banks used as research samples in the 2016-2019 period have a CAR ratio value above the standard set by Bank Indonesia, which is more than 8%. The higher the CAR value, the better the bank can accommodate the risk of loss. So that the seven banks in this sample are eligible and capable of capital adequacy.

A high Capital Adequacy Ratio (CAR) indicates that the bank is healthy. The higher (CAR) the better the bank. A high Capital Adequacy Ratio (CAR) will affect public confidence, and ultimately increase the bank's profits. And if profits increase then Return On Asset (ROA) will also increase.

Capital Adequacy Ratio (CAR) is an indicator of bank capital which is the driving force for a bank's activities, so the size of bank capital greatly affects the bank's ability to carry out its operations. A sufficient Capital Adequacy Ratio (CAR) will allow the bank to have varied business activities and be able to finance the bank's operations properly without worrying about the risks that occur. Because the risks that might occur have provided their funds to deal with them.

The results of this study are in line with existing theory, namely according to the Bufer Theory of Capital Adequacy, banks may choose to withhold from excess capital to reduce the likelihood of falling below

legal capital requirements, especially if their capital adequacy ratio is highly volatile (Chandrasegaran, 2020).

The results of this study support previous research conducted by Ratnasari et al., (2021) and Pratama, (2021) which show that CAR has a significant and positive effect on profitability (ROA), where the greater the Capital Adequacy Ratio (CAR), the greater the profitability obtained by the bank.

The Effect of Non Performing Loan on Return on Assets

Based on the results of the hypothesis, it is known that the Non-performing loan variable has a negative and insignificant effect on return on assets. This means that the rise and fall of NPL has no effect on return on assets. In considering assets, banks are required to manage management in problematic loans to avoid bad debts caused by loans that have been disbursed in maintaining the outstanding value of the loans that have been given by the company so that in regulating the increase in loans given it must be followed by earning asset reserves and in earning asset cost reserves added.

In the research period, the condition of the sample banks was good, which was marked by an increase in CAR with a growth of 2.53%, LDR increased with a growth of 1.18%, BOPO decreased by -1.10%. and ROA 2.2% and NPL decreased by -2.48% so that NPL conditions are not strong enough to affect the bank's ability to generate profits.

The results of this study support previous research conducted by Alfian et al., (2021), Ratnasari et al., (2021), and Indalestari, Shifuddin DT & Wahyuni (2018) which show that NPL has a negative and insignificant effect on profitability (ROA),

The Effect of Loan to Deposit Ratio on Return On Assets

Based on the results of the hypothesis, it is known that the loan-to-deposit ratio variable has a significant positive effect on return on assets. This shows that the higher the level of funds distributed by banks to the public in the form of investment or credit, the return received by the bank will increase so bank profitability will also increase. In addition, if the LDR is still within reasonable limits in accordance with the rules of PBI No. 15/7/PBI/2013 Article 10 LDR limits have a target between 78% - 92%, the profit earned by the bank will increase, assuming that the bank is able to distribute its credit effectively so that it is expected that the number of bad debts is low so that it will have an impact on increasing profitability (ROA).

The results of this study are in line with existing theory, namely according to Koch & Donald (2009) there are several theories for managing liquidity, one of which is the commercial loan theory. This theory argues that bank liquidity will be guaranteed if the bank's productive assets consisting of short-term loans are disbursed in normal business activities. If the bank in question will provide longer credit, the source of funds should be obtained from bank capital and long-term sources of funds. In particular, the theory states that banks should provide short-term credit or self-liquidating loans, such as credit used for working capital to process a seasonal or temporary production.

The results of this study support previous research conducted by Maulana et al., (2021), Ratnasari et al., (2021), and Prasanjaya & Ramantha, (2013) which show that LDR has a negative and significant effect on profitability (ROA).

The Effect of Operating Costs and Operating Income on Return on Assets

Based on the results of the hypothesis, it is known that the variable has a significant negative effect on return on assets. This means that the greater the BOPO, the bank's ROA will decrease. This shows that the more operating costs are not offset by an increase in operating income, the bank is inefficient. The high level of bank operations shows that the bank has not been able to carry out its operational activities efficiently. So that it will have an impact on the decline in bank profitability. In managing the operating income that has been received because operating costs have a direct relationship with the bank's business activities such as interest costs, foreign exchange costs, labor costs, depreciation, and other costs. With a low BOPO ratio the bank can minimize operational risks obtained from the value of operating income.

This result is in line with the existing theory, namely the Managerial efficiency Theory of Profit, this theory recognizes that some companies are more efficient than others in terms of management. productive operations and successfully meet consumer needs. Companies with an average level of efficiency earn an average rate of return (Dominick, 1989).

The results of this study support previous research conducted by Siregar, (2021) and Ratnasari et al., (2021) which shows that LDR has a negative and significant effect on profitability (ROA).

CONCLUSION

1. Based on the simultaneous test*, it is* found that *green banking daily operation, green banking policy,* CAR, NPL, LDR, and BOPO have a significant effect on the ability to generate profits from total assets, this means that the determination is well influenced.
2. *Green banking* variables with *green banking daily operation* (GBDO) proxies have a significant and positive effect on bank profitability. This shows that there is a relationship that occurs between banks implementing green banking in the daily operational dimension with bank profitability. So the higher the number of banking operational activities carried out by utilizing technology and the internet, the more efficient these activities are so that bank profitability will increase.
3. *Green banking* variable with *green banking policy* proxy has no significant and negative effect on bank profitability. This shows that the CSR activity items carried out are not strong enoughto affect the company's profit, because CSR activities are still less than 60% and are directed more to activities that do not support profit generation
4. *The capital adequacy ratio* variable has a significant and positive effect on bank profitability. This can be interpreted that the capital adequacy ratio, which is a ratio that shows the ability of banks to carry out business activities, has a significant and positive effect on bank profitability. Capital adequacy is measured using the CAR ratio. The higher the CAR ratio illustrates the higher the capital owned by the bank, which means that banks will be freer and more optimal in carrying out their business activities, one of which is lending to customers, so that the *returnthat* will be received by banks in the form of interest will increase, so bank profitability will alsoincrease.
5. *Non-performing loan* (NPL) variables have no effect on bank profitability. In the research period the condition of the sample banks was good, which was marked by an increase in CAR with a growth of 2.53%, LDR increased with a growth of 1.18%, BOPO decreased by -1.10% and ROA 2.2% and NPL decreased by -2.48% so that NPL conditions were not strong enough to affect the bank's ability to generate profits.
6. Bank *loan to deposit ratio* (LDR) variable has a significant and positive effect on bank profitability. This can be interpreted that bank liquidity is the ratio of the ratio between the total amount of loans disbursed to the public and the total amount of funds. The higher level of the banking LDR ratio will always be followed by an increase in bank profitability.
7. Operating cost variable operating income has a significant and negative effect on bank profitability. It can be interpreted that BOPO which is a ratio that describes the level of operating expenses to operating income, where the higher the BOPO ratio indicates that banks are efficient in carrying out their operational activities so that it can reduce bank profitability.

In this study, the measurement of *green banking daily operations* only uses ATM transactions. so that it does not include the use of technology and the internet in terms of *green* banking activities, namely reducing the use of paper to reduce deforestation. So that for further research it is hoped that other measurements can be used, such as the number of transactions through *e-channels* which are more encompassing related to the use of technology and the internet in banking activities. This study uses CSR in measuring *green banking* variables*,* with CSR items shown in *annual reports* or *sustainability reports* and divided by 79 items required by GRI, these items consist of: economic performance indicators 9 items, environmental performance indicators 30 items and social performance indicators 40 items. Thus, it is less specialized on the environment. Therefore, future research is expected to measure CSR specifically on environmental indicators. Then banks that publish *green banking* practices in Indonesia are still very few, so for further research it is hoped that it can examine foreign banks *listed* on the foreign capital market as a comparison because many foreign banks have implemented *green banking*.

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