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Analysis of the Effect of Green Banking and Financial Performance on the Profitability of Member Banks of the Indonesian Sustainable Finance Initiative

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Abstract

This research examines the influence of the variables green banking (Green banking Index), Capital adequacy (CAR), Non-performing loans (NPL), Bank Efficiency (BOPO), Liquidity level (LDR) on the profitability of Member Banks of the Indonesian Sustainable Finance Initiative. This research uses a purposive sampling technique, 8 companies were sampled in the research as Member Banks of the Indonesian Sustainable Finance Initiative, namely: Bank Mandiri, Bank Rakyat Indonesia, Bank Negara Indonesia, Bank Central Asia, Maybank, Bank CIMB Niaga, Bank OCBC NISP and West Java Bank. This research examines economic data based on panel data, based on the calculation results it is found that banking ratios in the form of capital adequacy (CAR) and liquidity level (LDR) partially have a positive and significant effect in increasing Bank Profitability (ROA) of Members of the Indonesian Sustainable Bank Initiative, while the ratio Non-performing loans (NPL), Bank Efficiency (BOPO) and the Green Banking variable (Green Banking Index) have a negative and significant effect on (ROA) Members of the Indonesian Sustainable Bank Initiative.

Keywords	Profitability, Green Banking, Financial Performance, Bank

INTRODUCTION

Implementation of the 2030 Sustainable Development Goals (SDGs) program and the target to reduce Green House Gas (GHG) emissions through Indonesia's Nationally Determined Contribution (NDC) is a foundation for the country to contribute to joint efforts related to encouraging sustainable economic growth and efforts mitigating and adapting to climate change, namely preventing global temperature increases from exceeding 2 degrees Celsius above pre-industrial levels. These Sustainable Development Goals require broader participation than just government efforts alone. Not only from the industrial sector, but also Financial Services Institutions (LJK) which play an important role in achieving this goal by providing financial products and services characterized by 3P (People, Planet & Profit) or known as sustainable finance.

OJK in collaboration with several related institutions, has prepared a Sustainable Finance Roadmap. This roadmap aims to outline the conditions to be achieved regarding sustainable finance in Indonesia in the medium term (2015-2019) and long term (2015-2024) for the financial services industry which is under the supervision of the OJK as well as to determine and develop milestones for improvement related to sustainable finance. This roadmap will be a reference for the OJK and financial services industry players as well as other parties who have an interest in supporting sustainable development, especially the government, industry players and international institutions. OJK ensures that there are eight national banks, both State-Owned Enterprises (BUMN) and private companies, which are ready to implement a sustainable financial system, namely Bank Mandiri, Bank BRI, Bank

BNI, Bank BCA, Bank Muamalat, Bank BJB, Bank Arta Graha and Bank BRI Syariah which later in 2019 five other banks officially joined Indonesia's sustainable finance initiative, namely Bank Syariah Mandiri, HSBC Indonesia, CIMB Niaga, OCBC NISP Indonesia and Maybank Indonesia. (Hayati et al., 2020).

Green banking is a financial institution that prioritizes sustainability in its business practices. In this understanding, Green banking is based on four elements of life, namely nature, well-being, economy and society. A "green" bank will combine these four elements into business principles that care about the ecosystem and the quality of human life. So that in the end what emerges is an output in the form of efficiency in the company's operational costs, competitive advantage, strong corporate identity and brand image as well as achieving balanced business targets (Suryaman, 2016).

According to POJK no. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers and Public Companies, Sustainable Financial Products and/or Services, green financial products are financial products and/or services that integrate economic, social and environmental aspects as well as governance in its features. From this understanding, it can be concluded that green sustainable financial products must have four main aspects in their development, namely economic, social, environmental and governance aspects. (Nurdin, 2019).

The level of health of a bank can be seen from the level of profitability of a bank. There are several factors that influence the level of profitability of a bank that must be considered in order to maintain the health of a bank. Implementation of Green banking can be one of the factors that influences profitability. Banks are required to continue to increase profitability and maintain it at a safe level, this is done as one of the factors that can increase public trust or attract investors to invest in a bank. What is done to determine the level of soundness of a bank's financial performance can also be measured by its profitability performance. Therefore, this research will analyze the influence of the variables Green banking (Green banking Index), Capital adequacy (CAR), Non-performing loans (NPL), Bank Efficiency (BOPO), Liquidity level (LDR) on the profitability of Member Banks of the Indonesian Sustainable Finance Initiative.

METHOD

The type of research used by the author in this research is research with a quantitative approach which emphasizes analysis of numerical data (numbers) and then analyzed using appropriate statistical methods. Based on the type of data, this research uses secondary data, where the data used is obtained from third parties.

This research uses a purposive sampling technique, namely in determining the research sample several special criteria are used. The specific criteria in this research are as follows.

Banks that participate as members of the Indonesian Sustainable Finance Initiative.

1. Banking which displays complete financial reports from 2017-2022.
2. Banks that issue complete Sustainability Reports from 2017-2022.

Table 1. Sampling Criteria

Banks that participate as members of the Indonesian Sustainable Finance Initiative.	13
Banking that displays complete financial reports from 2017-2022.	13
Banks that issue complete Sustainability Reports from 2017-2022.	(5)
Total Sample	8

Based on these criteria, 8 companies were sampled in the research as Member Banks of the Indonesian Sustainable Finance Initiative, namely: Bank Mandiri, Bank Rakyat Indonesia, Bank Negara Indonesia, Bank Central Asia, Maybank, Bank CIMB Niaga, Bank OCBC NISP and Bank Jawa Barat.

This research examines economic data based on panel data, so the model method used is multiple linear regression analysis for panel data. In determining the selection of the regression model that will be used, testing is carried out first to select the most suitable model for managing panel data.

Based on the variables previously mentioned, it can be seen that the model of this research is as follows:

ROAit = f (IGBit, CARit, NPLit, BOPOit, LDRit)

Information:

ROAit = Bank Profitability (ROA),
IGBit = Green banking (Green banking Index),
CARit = Capital adequacy (CAR),
NPL, NPLit = non-performing loans (NPL),
BOPOit = Bank Efficiency (BOPO),
LDR, FDRit = Liquidity level (LDR).

RESULTS AND DISCUSSION

The first hypothesis of this research is that green banking (GB) has a positive effect on bank profitability (ROA) for the 2017-2022 period. Based on the results of the tests that have been carried out, the Green banking coefficient value is -3.027950, which is negative with calculated t (-4.414139) > t table (1.6819) and Prob (0.0001) < α (0.05). These results show that the greater the Green Banking index of a company, the smaller the company's tendency to increase ROA and the smaller the Green Banking index of a company, the greater the company's tendency to increase ROA.

Green banking policy for banks is a policy that requires banks to be firm and selective in distributing credit or adhere to the concept of green loans in providing financial assistance, especially to creditors whose businesses have a major impact on environmental damage (Geo et al., 2023). The influence of green banking which has a negative impact on ROA in the results of this research is because banks that have been included in the Indonesian Sustainable Finance Initiative (IKBI) have implemented green principles. IKBI member banks will provide financing by anticipating the risk of environmental damage arising from a project by conducting due diligence and strict audits (Mustika et al., 2023).

The second hypothesis of this research is that Capital Adequacy (CAR) has a positive effect on Bank Profitability (ROA) for the 2017-2022 period. Based on the results of the tests that have been carried out, the Capital Adequacy coefficient value is 0.063476, which is negative with calculated t (2.495582) > t table (1.6819) and Prob (0.0174) < α (0.05). From these results, the greater the capital adequacy, the greater the company's tendency to increase ROA and the smaller the capital adequacy value, the smaller the company's tendency to increase ROA.

The capital adequacy ratio is a financial ratio related to banking capital where the amount of capital owned by a bank will influence whether or not a bank is able to efficiently carry out its activities. A low CAR ratio reflects the low level of capital of a bank. These conditions can affect the bank's ability to maintain its operational performance. Decreased performance causes a decrease in public trust which ultimately causes a decrease in profitability (Pinasti, 2018). The higher the capital (CAR), the better the bank's ability to bear the risk of any risky productive assets. If the capital value (CAR) is high enough, the bank can finance its operational activities which will make a large contribution to profitability. Large enough capital from a bank can protect depositors and will increase depositors' trust in the bank, so that it will also increase the profitability of the bank concerned (Syakhrun et al., 2019).

The third hypothesis of this research is that non-performing loans (NPL) have a negative effect on bank profitability (ROA) for the 2017-2022 period. Based on the results of the tests that have been carried out, the Capital Adequacy coefficient value is -0.224917, which is negative with calculated t (-1.954173) > t table (1.6819) and Prob (0.05) = α (0.05). From these results, the greater the NPL value, the smaller the company's tendency to increase ROA and the smaller the NPL of a bank, the greater the company's tendency to increase ROA.

Non-Performing Financing (NPL) is a ratio that can provide an idea of whether a bank is able or not to manage problematic financing based on the financing distribution it makes. Non-performing loans in banking will have a negative impact on profitability (Ichsan et al., 2021). The higher the NPL ratio indicates the worse the quality of bank loans is due to the greater number of problem loans. A high NPL will increase costs, resulting in potential losses for the bank and therefore the bank must bear losses in its operational activities, thereby affecting the decline in profit (ROA) obtained by the bank.

The fourth hypothesis of this research is Bank Efficiency (BOPO) which has a negative effect on Bank profitability (ROA) for the 2017-2022 period. Based on the results of the tests that have been carried out, the BOPO coefficient value is -0.077214, which is negative with calculated t (-13.36335) > t table (1.6819) and Prob (0.000) < α (0.05). From these results it shows that the greater the BOPO of a company, the smaller the company's tendency to increase ROA and the smaller the BOPO of a company, the greater the company's tendency to increase ROA.

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Operational Costs to Operating Income (BOPO) is a ratio
that provides information regarding the comparison between operational costs and operational income at a bank. The BOPO ratio provides an indicator of the efficiency of bank activities in carrying out its main business, especially credit or financing (Hendrawan Raharjo et al., 2020). The lower this ratio, the more efficient the operational costs incurred by the bank, so the possibility of the bank experiencing problems is smaller.

The fifth hypothesis of this research is that the level of liquidity (LDR) has a positive effect on bank profitability (ROA) for the 2017-2022 period. Based on the results of the tests that have been carried out, the Capital Adequacy coefficient value is 0.017818, which is positive with calculated t (3.388195) > t table (1.6819) and Prob (0.0018) < α (0.05). From these results, the greater the level of liquidity, the greater the company's tendency to increase ROA and the smaller the level of liquidity, the smaller the company's tendency to increase ROA.

If the LDR percentage increases or is very high, the bank's income will definitely increase, which means that the LDR will have a positive impact, of course as long as credit is given correctly so as not to cause installment problems. Because the more credit given, the more bank interest income will increase. Because bank business credit is still a source of income that determines the size of the profits that will be obtained. The high LDR reflects that the level of credit disbursed is appropriate.

CONCLUSION

Based on the calculation results, it was found that banking ratios in the form of capital adequacy (CAR) and liquidity level (LDR) partially had a positive and significant effect in increasing Bank Profitability (ROA) of Members of the Indonesian Sustainable Bank Initiative, while the ratio of non-performing loans (NPL), Bank Efficiency (BOPO) and the Green Banking variable (Green Banking Index) have a negative and significant effect on (ROA) Members of the Indonesian Sustainable Bank Initiative.

REFERENCES

Agus Salim, M. (2018). Kesiapan Pemerintah Menerapkan Green Banking Melalui Pojk Dalam Mewujudkan Pembangunan Berkelanjutan Berdasarkan Hukum Positif Di Indonesia. Yustitia, 4(2), 119–141. https://doi.org/10.31943/yustitia.v4i2.40

Akbar, D. A. (2016). Inflasi, Gross Domesctic Product (Gdp), Capital Adequacy Ratio (Car), Dan Finance To Deposit Ratio (Fdr) Terhadap Non Performing Financing (Npf) Pada Bank Umum Syariah Di Indonesia. I-Economics: A Research Journal on Islamic Economics, 2(2), 19–37.

Anggraini, D., Aryani, D., & Prasetyo, I. B. (2020). Analisis Implementasi Green Banking Dan Kinerja Keuangan Terhadap Profitabilitas Bank Di Indonesia (2016-2019). Jurnal Bisnis, Manajemen Dan Informatika, 17(2). https://doi.org/https://doi.org/10.26487/jbmi.v17i2.11264

Budisantoso, T., & Nuritomo. (2019). Bank dan Lembaga Keuangan Lainnya (3rd ed.). Salemba Empat.

Dewi, A. S. (2018). Pengaruh CAR, BOPO, NPL, NIM, dan LDR terhadap ROA pada Perusahaan di Sektor Perbankan yang Terdaftar di BEI Periode 2012-2016. JURNAL PUNDI, 1(3). https://doi.org/10.31575/jp.v1i3.55

El Ayyubi, S., Anggraeni, L., & Mahiswari, A. D. (2018). Pengaruh Bank Syariah terhadap Pertumbuhan Ekonomi di Indonesia. Al-Muzara'ah, 5(2), 88–106. https://doi.org/10.29244/jam.5.2.88-106

Hilman, Rodif; S.C, Nangoy; A.L, T. (2014). Kinerja Keuangan Menggunakan Analisis Rasio Likuiditas, Leverage, Aktivitas Dan Profitabilitas Untuk Pengambilan Keputusan Pada Pt. Pln Area Manado. Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 2(1), 283–294.

Hossain, S., & Kalince, T. A. (2014). Green Banking Nexus Banks' Performance. Swiss Journal of Research in Business and Social Science, 1(3), 1–16.

Ichsan, R. N., Suparmin, S., Yusuf, M., Ismal, R., & Sitompul, S. (2021). Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(1), 298–309. https://doi.org/10.33258/birci.v4i1.1594

Khairiyani, Mubyarto, N., Mutia, A., & Zahara, A. E. (2020). Kinerja Lingkungan Terhadap Kinerja Keuangan Serta Implikasinya Terhadap Nilai Perusahaan. Iltizam Journal Of Shariah Economic Research, 4(1), 136–154.

Moorcy, N. H., Sukimin, & Juwari. (2020). Pengaruh FDR, BOPO, NPF, dan CAR terhadap ROA pada PT. Bank Syariah Mandiri Periode 2012-2019. Jurnal Geo Ekonomi, 11(1), 74–89.

Rachman, A. A., & Saudi, M. H. (2021). Green Banking and Profitability (Banks Registered On The Sri-Kehati Index In Indonesia Stock Exchange 2015 - 2019). Turkish Journal of Computer and Mathematics Education, 12(8), 473–486.

Ratnasari, T., & Arni Surwanti, Dr. F. P. (2016). Model Integrasi Untuk Mengukur Dampak Dari Green Banking Dan Kinerja Keuangan Terhadap Profitabilitas Bank (Studi Empiris Di Indonesia). 1–15.

Ratnasari, T., Surwanti, A., & Pribadi, F. (2021). Implementation of green banking and financial performance on commercial banks in indonesia. International Symposia in Economic Theory and Econometrics, 28, 323–336. https://doi.org/10.1108/S1571-038620210000028018

Riskayanti, N. P., Widnyana, I. W., & Gunadi, I. G. (2022). Pengaruh Loan To Deposit Ratio (Ldr), Capital Adequacy Ratio (Car), Non Performing Loan (Npl) Dan Efisiensi Operasional (Bopo) Berpengaruh Terhadap Profitabilitas Pada Bank Umum Yang Terdaftar Di Bursa Efek Indonesia. Jurnal Emas, 3(8), 51–70.

Weber, O. (2017). Equator Principles reporting: factors influencing the quality of reports. International Journal of Corporate Strategy and Social Responsibility, 1(2), 141. https://doi.org/10.1504/ijcssr.2017.10005243

Widarjono, A. (2018). Ekonometrika: Pengantar dan Aplikasinya Disertai Panduan Eviews (Edisi 5). UPP STIM YKPN.

Yusuf, M. (2017). Dampak Indikator Rasio Keuangan terhadap Profitabilitas Bank Umum Syariah di Indonesia. Jurnal Keuangan Dan Perbankan, 13(2), 141–151.