

Chapter 2 LITERATURE REVIEW

1.1 Theoretical Background

Environmental Degradation

Environmental degradation is defined as a decrease in the quality of the environment caused by development activities without paying attention to the risks that will occur to the surrounding nature, causing the quality of the environment to change from what it was before the development took place. Destructive event that can be included as environmental degradation was either; deforestation that can lead to soil erosion, disruption of water cycle and can end in desertification of the land, climate change that can increase the intensity and frequency of natural disasters such as floods and landslides.

Environmental degradation can usually be caused by an intervention from human hands, examples such as factories that needed to take natural material like wood or ores, taking excessive amount of resources and causing damage to the surrounding, in some cases those organizations intentionally left the surrounding barren without doing mitigation to fix it, with the excuse of not having enough funds to cover the reforestation.

The banking and finance sector can help mitigate this problem by funding in this clean up project, most business decide not to restore the damage they created to the surrounding environment either because they do not have the funds, tool or manpower to do so. Green finance purpose was to help mitigate this environmental risk by helping finance it, green finance should help facilitate equipment cost in green project, example bank helps finance in green friendly motorcycle by giving them subsidization or bank helps in facilitating equipment and tools necessary for reforestation.

Green Banking

There are many risks of climate damage that may occur naturally or due to the impact of human actions, some damage caused by human intervention for example can be excavation of oil or minerals, illegal logging, air pollution from factories, et cetera. With green banking, the banking sector is trying to help prevent the risk that these activities can cause by either supporting financially or making awareness to the customers

According to a study by Fatimah (2023) on green banking operations and policies, green banking is an effort to strengthen a bank's risk management, especially those related to the environment, by encouraging the banking industry to extend credit or loans to customers who pay attention to environmental sustainability, such as the organic agriculture sector and renewable energy.

Another study by Grace (2019) that study green banking practice, green banking is a financial concept that plans to provide banking services appropriately by prioritizing the needs of the environment and society, green banking focus on facilitating products that are environmentally friendly while still beneficial for banks and investors.

Green banking is a program where a bank carries out their daily operational and business related activities by prioritizing environmental issues, it is a way for the bank and other financial institution to be able to contribute in making businesses that care for the development and protecting the environment.

There were many green banking programs that has been implemented into a bank's working system; reducing and support paperless transaction and documentation, launching mobile banking product(online banking transaction), encouraging loans on a go-green company or projects, et cetera.

Green banking includes of financial banking activities that prioritize sustainable economy in every business and financial activity, persuading and

encouraging costumers in buying green related products such as green loan or green financing. By contributing in managing environmental risk, banks and other financial institution are expected to be able to continue survive in running financial businesses

In Indonesia, many banks has started shifting to green banking practices, most common product released was mobile banking, which has helped customers making online transactions via smartphones without the need to go to the bank. With the convenience of mobile banking that no longer requires any paperwork and reduce the volume of costumers coming directly to the bank, has helped in reducing printed paper and tree logging, as well as reducing gas emission from customers private vehicle.

More green banking practice in Indonesia, banks has started to decorate their work station with live potted plant, some banks have also encouraged their staff to bring their own lunch and water bottle to decrease fast-food consumption(which may led to lower use of plastic for food packaging). Banks has also started to prioritize funding for companies or projects involving the environment, BCA bank has started to focus funding in renewable energy industry sector such as solar power and biogas energy generator companies

Green finance

The term 'going green' is no longer a foreign concept in the corporate industry, rather it was an obligation for many companies to promote and implement the green movement and bring contribution to save the environment. Unfortunately there are still those who still thinks that green movement is nonsense, many cases in Indonesia where mining industry has damage the local landscape and ruin the structure of a once majestic mountain into hills of rocks, and plantation industry that has taken many land plots endangering the local ecosystem and destroying the home of the local wildlife.

Green finance policy refers to a set of policies and institutional arrangements to attract private capital investment in green industries such as environmental protection, energy conservation, and clean energy through financial services such as loans, private equity funds, bonds, stocks, and insurance (People's Bank of China,

United Nations Environment Programme, 2015). Green finance is a program where banks raise funds to invest in activities that support green movements, this project tries to produce economic benefits that will be able to promote sustainable environment.

Many companies and industries that still do not care about the environmental crisis, with excuses such as maintaining high costs and lack of labor and resources, many companies are trying to cut corners and ignore the importance of environmental care for future needs. The purpose of green finance was to help mitigate the risk that environmental damage might bring, starting by financially funding products and services that can address environmental concerns, for example investing in energy efficient mortgages or funding energy renewal business/organization.

In Singapore, banks are obliged to foster green investment and banking with the goal to develop sustainable and green economy within the industry and finance sectors. Singapore aims to be the hub for green finance in South East Asia and has develop platforms to support that movement, the Singapore Green Plan 2030 and the Green Finance Action Plan was established to achieve sustainable economy and to manage some environmental risk via the finance department. Singapore is massively supporting green finance by advising banks to prioritize investment in environmentally friendly companies.

An insight from the Green Finance Platform website, there is currently no systematic methodology for assessing progress on the success greening the financial system. The Task Force on Climate-related Financial Disclosures (TCFD) has suggested that companies should develop scenario analysis to assess the resilience of their business model to a number of possible climate scenarios, while the EU is developing a taxonomy to standardize definitions of green.

Green Investment

Green Investment was an investment program provided by banks for customers with the intention to help promote green movements, examples of green investment products provided by banks was green bonds and green loans which is provided for

companies, industries, and start up companies that is align with environmental friendly principle.

As the central bank of Singapore, the Monetary Authority of Singapore (MAS) has established a massive Green Bond scheme to promote green bonds in Singapore. MAS plan to provide funds and help facilitates green movement in finance and industrial sectors, Singapore aims to be the pioneer of green finance in East Asia and green investment was also one of the project Singapore prioritize to develop.

There might be confusions of the difference between green finance and green investment, with both program has the same reason to sustain green economy by helping providing the necessary capital cost. Green finance in bank was a help provided by bank for companies or business that wants to go-green by providing credit loans, bank will often reduce the return interest in hopes of encouraging people to open business that's environmentally friendly. While Green investment was a product provided by banks for customers or investors who wished to invest in a company who upholds green movements, bank will provide information and help in managing the invested funds to both help support green movement while also maintaining a save and long term profit to investors, with more investment in green projects a stable green economy can be expected

There are many ways of how banks can or have implemented either green banking, green finance, or even green investment in their daily operational work, here are some of green banking implementation that will be used as this research objects in determining the progress of green banking in each bank;

Mobile Banking

Mobile banking is one of services a banks provides that help customers carry out banking transactions via cellphone or smartphone online, the advantages of mobile banking is the ability to carry out transactions such as; money transfer between accounts/banks, and paying bills online.

Mobile banking is very convenient in today's digital era with many banks offering many facilities and services . The ability to deposit checks, transfer money to friends or find an ATM instantly are the main reasons why people especially millennial choose to use mobile banking. Now, with the new generations of youth being more familiar with digital world, mobile banking has become a popular payment method.

In Indonesia mobile banking was introduced in 2011, first released by the BCA bank, BCA Mobile aims to provide remote payment system and services transaction via smartphone. BCA Mobile start to gain popularity in around 2020, when the government has issued the 'stay-at-home' policy, online shopping has gain popularity with the majority of Indonesia citizen not being able to go out leisurely at that time, mobile banking was considered as one of banks facility often used.

Green Bonds

Green bond is one of investment fixed income type with the goal to fund environment positive projects, green bonds offer investors to invest in environmentally friendly project and can be issued either by private or public institution, the goal of this binds is to raise capital value of environment friendly programs and contribute to a more sustainable economy and generate identifiable climate, and other benefits

General public still views green bond to be more expensive and non-profitable than traditional bond which can return profit faster and low expenses, however both bonds mutually beneficial and has the same return value. Green bonds focus in funding only green projects, moreover green bonds can help in realizing the importance of environmental damage awareness. Some examples on what green bond have financed are solar energy projects and waste management, et cetera.

Green Economy Project

Green economy itself is a movement in the economy industry to gain awareness of environmental changes that is happening either local or global or even internationally. This movement aims to encourage environmental care in customers

and business owners, while also maintaining a safe sustainable economy, examples of those projects would be; Projects to increase of organic vegetable cultivation and increase demands for organic food supply in the market, creating more job opportunities and decrease the use of chemical fertilizer.

Many restaurant and cafe has also going eco-green, one of the movements that has been popular lately was 'bring your own cup' where restaurant and cafe encourage their customer to bring their own tumbler when purchasing a certain drinks by giving discount or free refills.

Supermarkets has also contributed to environment friendly movements, popular example supermarket has encourage their customers to also bring their own shopping bag, they also charge more for plastic bag to decrease the demand in using plastic.

2.2. Previous Research:

1. Previous research by Wrespatiningsih and Mahyun(2022), with a research title "Praktik Green Banking dalam Memediasi Pengaruh Corporate Social Responsibility terhadap Kinerja Perusahaan Perbankan"

This study aims to provide evidence of the role of green banking in mediating the effect of corporate social responsibility (CSR) to a banks performance value, research was conducted on banks listed in IDX from the period 2018 to 2020, a total of 44 companies. This study provides empirical evidence that CSR has a significant and positive effect on green banking, but failed to find the effect of CSR on banks performance value.

2.Masukujjaman, Siwar, Mahmud, and Alam(2014), with a research title "Banker's Perception on Green Banking-an Emperical Study on Islamic Banks in Bangladesh"

This paper aims to identify the perception of bankers about the concept of green banking including its benefits, complexities, and in execution. It is an empirical study based on survey conducted on the Islamic banks divisions in Bangladesh with 31 sample chosen. Many banks perceived green banking as an environmental banking practice that helps to protect the environment, although it has high adoption, A lot of bankers are opting for reduction of paper printing works and some have been

sponsoring tree plantation. Regarding the understanding of the benefits of green banking are that it protects the environment, helps to reduce resource wastage and covers the area of corporate social responsibility.

2. Nurmalia, Zuliansyah, and Kurniawan(2021) with a research title “Green Banking dan Rasio Kecukupan Modal Mempengaruhi Pertumbuhan Laba Bank Umum Syariah di Indonesia”

The purpose of this research is to determine the effect of green banking and CAR on the profit growth of Islamic commercial banks in Indonesia. This study use quantitative study using secondary data, and takes 9 Islamic banks as sample. The results of the research shows that there is no effect between green banking and CAR and profit growth, this happens because banks have only begun to implement green banking in 2019, and are too stable to maintain CAR above 8%. This research also found that Green banking does not have a significant effect on Profit Growth, because a lot of banks are still not able to completely eliminate the use of paper, electricity and water 100% which results in unable to optimally reducing operational costs so that it does not affect financial performance of the bank

3. Windasari Rachmawati, Abdul Karim, and Abdul Manan(2023) with a research title “Analisis Green Banking Disclosure: Sebuah Perspektif pada Perbankan di Indonesia”

This study aims to research the effect of banks performance value on its green banking, the subjects of this research was 29 banks listed in Indonesia Stock Effect market for 2028-2021 period, financial performance is assessed based on profitability measured by two proxies, return on assets (ROA) and return on equity (ROE). GBD is measured using the Green Banking Disclosure Index through content analysis. Results of this research shows that profitability with ROA influences green banking disclosure while profitability with ROE does not affect green banking disclosure. The research results show that profitability, using the firm's ROA as a proxy, has an impact on the extent to which banking firms disclose information related to green banking practices, meanwhile board commissioners moderates profitability with the ROE proxy on green banking disclosure, the intensity of board commissioners meetings influences the extent to which profitability with the ROE proxy influences green banking disclosure.

4. Research by Pimonenko, Us, Myroshnychenko, Dubyna, and Vasylyna(2021) compile their research together with a title “Green Financing for Carbon-Free Growth: Role of Banks Marketing Strategy”. The purpose of this paper is to examine the background of bank marketing to determine the role of green finance in the zero-carbon economy and to identify potential future research directions. This study operates with the scientific articles published in the journals indexed in the Scopus database with the research period is 2000-2020. The research theoretically proved that green finance is one of the main triggers of carbon-free development, the obtained results of the co-occurrence analysis showed four main research directions concerning the investigated topic such as financial marketing in sustainable development, financial management in environmental protection, carbon markets, international regulation in emissions trading.

5. Putu Arya Diva Mahardika and Bahtiar Fitanto(2023) with the title “Pengaruh Green Banking Terhadap Kinerja Keuangan Perbankan di Indonesia (periode tahun 2018-2022)”. This research aims to analyze the effect of green banking on banks profitability, subject of this research will be banks from Indonesia stock market from 2018-2022, M-banking transactions, CSR funds, and banks efficiency will be use as independent variable. This research found that CSR funds has a positive impact on ROA, while M-banking transactions and bank efficiency has a negative effect on ROA. But, conclusion of this research was all independent variable has a positive impact and significance on profitability

6. Dewa Ayu Ruth Pramyswari and A. Dewantoro Marsono(2023) With research title “The Effect of Green Banking Activities on Firm Value with Profitability as an Intervening Variable on Digital Service-Based Banks Listed in Asia” Aims to investigate the impact of green banking activities on value of the firms, object of the research focuses on 14 listed digital service-based banks in Asia, comprising 9 Indonesian banks, 1 Vietnamese bank, 1 Philippines bank, 1 Korean bank, and 1 Japanese bank. The results indicate that green banking practices influence the profitability of digital service-oriented banks in Asia, but have no impact on the firm's value, even when intervened by profitability.