Analysis of the Effect of the ESG Score on Bank Profitability in the ASEAN Region (Indonesia, Malaysia, Thailand, Vietnam, and Philippines) Before and During the COVID-19 Pandemic

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Abstract. We examine the relationship between environmental, social, and governance (ESG) score and bank profitability. Our sample includes over the period 2018–2021 from 5 ASEAN countries (Indonesia, Malaysia, Thailand, Vietnam and Philippines). We employ System Generalized Method of Moments (GMM) estimation to control for endogeneity. Environmentally friendly activities have the greatest effect on bank value. We examine the channels through which ESG activity impacts bank profitability and explain why proponents of both stakeholder theory and trade-off theory have found evidence to support their predictions of the relationship between ESG activity and bank value.

Keywords: ESG · Banking Industry · Sustainable Finance · ASEAN

1 Introduction

Environmental, social, and governance, or better known as the abbreviation ESG, have been discussed throughout the last few years. This is also taken into account in every investment decision after the government and various large companies in the world have committed to achieving the common goal of achieving net zero emissions by 2050 (Sandria, 2020). Shareholder maximization is often stated as a company goal, so increasing the use of ESG factors by companies will increase shareholder value (Azmi et al., 2020).

According to Korwatanasakul (2020), shareholders are starting to realize that investing in companies that implement the ESG concept will contribute to increasing efficiency, productivity, operations, and risk management in the long term. One of them is the application of ESG in the banking industry sector, which has tight and highly regulated profit margins.

Most of the countries that are members of the ASEAN (Association of Southeast Asian Nations) region are bank-based countries, or countries where the company's funding sources still rely heavily on banks compared to the capital market or other sources of financial funding, so that the role of banks is very important (crucial). According to

Swamy (2015), the role of profitability is crucial macroeconomically. It is explained that a healthy banking sector with well-maintained profitability will help maintain financial system stability and will help withstand negative effects when economic turmoil occurs in a country. Meanwhile, from a microeconomic standpoint, a bank with good profitability will be more competitive and have more leverage to obtain low-cost funds002E

The end of 2019 was an unexpected event with the spread of Corona Virus Disease (Covid-19), which spread to more than 200 countries around the world. The rapid and widespread spread of the virus made the World Health Organization (WHO) state that since March 2020 it has been a global pandemic, which according to Broadstock, Chan, Chen, and Wang (2021) had major consequences and tended to resemble the Great Depression of 1929–1933 compared to the global financial crisis of 2008–2009.

ESG developments in recent years have attracted researchers and academicians from all over the world to be able to conduct in-depth research, especially during the crisis period during the 2008–2009 global financial crisis (Cornett et al., 2016; Lins et al., 2017); however, not many researchers have conducted research related to ESG and its relation to bank profitability performance by taking data samples during the COVID-19 pandemic crisis period.

The majority of previous studies have conducted research using data samples in developed countries where the concept of ESG has taken longer and is far more developed, such as the United States and continental Europe (Albuquerque et al., 2020; Alda, 2020; Bae et al., 2021; Diaz et al., 2021; Folger-Laronde, 2021; Kanamura, 2021). Meanwhile, for the continents of Asia, Africa, and Latin America, where there are many countries that are classified as emerging market economies, it still tends to be minimal, especially for those that describe conditions in one region, including Azmi et al. (2020), who used a sample of 44 emerging economies. In research by Garcia et al. (2017), it is explained that ESG can have the greatest value in emerging markets where regulation, transparency, and corporate governance are considered weak (Khanna and Palepu, 2000).

Therefore, researchers are motivated to re- examine the ESG Score problem and its relationship with bank performance activities, especially profitability, before and during the COVID-19 pandemic crisis, which had quite a different impact and handling than the previous crisis.

Unlike the research by Azmi et al. (2020), which used the ESG data sample of 44 emerging economies taken from Bloomberg separately with each aspect as an independent variable in the processing process, the authors try to use the ESG Score data that has been presented by Refinitiv Eikon with a comprehensive methodology that has been combined by considering the ESG Controversies Score to form the ESG Combined Score to test the effect on the dependent variable.

2 Literature Review and Hypotesis

1. Stakeholder Theory
Stakeholder theory is one of the main theoretical foundations on the topic of CSR or ESG, and it was stated from the start by Freeman (1984) that all stakeholders have an equally important position; what is meant by stakeholders are customers, suppliers,

employees, investors, and regulators. This theory explains that a company's ability to generate sustainable profits is strongly influenced by the company's ability to relate to various stakeholders (Freeman and McVea, 2001). This theory identifies stakeholders who are considered worthy of getting more attention from management when making decisions (Mitchell et al., 1997). According to Clarkson (1995) and Hockerts (2002), stakeholders can be classified into several groups, including primary and secondary; actual and non-potential; internal and external; as well as direct and indirect.

In the development of this theory, Dylick and Hockerts (2002) define the sustainability of a company as the company's ability to meet the needs of all stakeholders without neglecting its ability to meet these needs in the future. Waddock (2000) revealed that stakeholders and external analysts evaluate companies in various ways. The availability of large-scale electronic information on companies and awareness from shareholders, environmental protection agencies, community organizations, and investors encourage companies to adopt a "triple bottom line" approach, which ultimately has an impact on the development of various indicators for measuring performance from an ESG perspective. Moreover, ESG is often used by companies to control public perception in connection with changes in company policy (Sumunar, 2018).

B. Environmental, Social dan Governance (ESG)

The term "ESG" appeared around 2004 in a report under the Global Compact United Nations (UN), which was attended by more than 50 leaders of financial institutions to participate in a joint initiative to invest ESG in global capital markets (Maher et al., 2020). According to Gillian, Koch, and Starks (2021), there are terminological differences in defining ESG and CSR; basically, ESG is considered more expansive than CSR because ESG explicitly involves corporate governance, while CSR only includes these factors indirectly. ESG is more directed at matters relating to environmental, social, and governance indicators that are integrated into the company's business model, while CSR refers more to company activities that are more responsible towards the social environment so that the company's image becomes better and is maintained.

Companies that incorporate ESG into their business models will get more benefits, such as capital gains and high public trust, which will also affect the level of investor dependence on these companies. On the other hand, investors also pay attention to ESG investments because they are believed to be able to improve the performance of the company's asset portfolio and increase the rate of return due to the minimum risk of these assets and portfolios (Broadstock et al., 2021).

According to Korwatanasakul (2020), comprehensively, there are three main aspects or factors in ESG performance, including:

a) Environment

The company's steps in protecting and minimizing the risks of all its business activities to the environment, as well as the efforts made in conserving its resources, are assessed in this factor because they can have a negative impact on the surrounding environment either by reducing the capacity of the natural resources used or by increasing pollution from the company's business activities.

b) Social

Social factors can apply in general to society in terms of how banks provide benefits to society by exploiting their influence. Social factors include the evaluation of social impacts and policies related to occupational health, safety, and relations with employees.

c) Governance

The willingness of the bank to protect the interests of all stakeholders, both shareholders and company management, This is related to the structure and practices carried out by the company as a commitment and in accordance with applicable business ethics

H1: The ESG Score had a positive effect on bank profitability before and during the COVID-19 pandemic.

H2: Before and during the COVID-19 pandemic, social factors have the greatest impact on bank profitability.

3   Materials and Methods

The data that the author uses in this study is nothing but secondary data obtained from several sources, including Refinitiv Eikon to obtain ESG Score information and bank quarterly reports, the website of the Financial Services Authority, and the Central Bank during the period 2018 to 2021 to obtain data. Additional banking finance.

In accordance with the opinion of Cooper and Schindler (2014), there are two sampling methods and techniques that can be used, namely probability sampling and non-probability sampling (judgment sampling), where researchers can subjectively determine certain criteria in terms of limiting the number of research samples, which is also part of purposive sampling.

We use the System Generalized Method of Moments (GMM) method proposed by Blundell and Bond (1998) to control for endogeneity due to omitted variables and has been used in prior studies of emerging market banks to control for endogeneity (Bilgin et al., 2020). This method combines the first differences in our regression equation with the level form. This method reduces any biases and imprecision associated with the first-difference GMM. We use System GMM instead of two-stage least squares because using an inappropriate instrument could bias our results.

The System GMM method is superior to traditional methods like Fixed and Random Effects models because it can handle dynamic modeling. Fixed Effects and Random Effects models suffer from a lack of exhaustiveness in terms of variables. Hence estimations are prone to omitted variable bias. The dynamic panel specification of System GMM can address this omitted variable bias (Ibrahim and Rizvi, 2017). Moreover, using dynamic GMM also allowed us to control for persistence.

The research model is based on the specifications of the Arellano-Bond dynamic equation:

$$Yi, t = \alpha Yi, t - 1 + \beta' Xi, t + \eta i + \theta t + \varepsilon i, t$$

The estimation method used is the System Generalized Method of Moment (GMM) developed by Arellano and Bover (1995) and Blundell and Bond (1998) for dynamic panel data.

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