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ENVIRONMENTAL QUALITY IN INDONESIA BASED ON ISLAMIC BANK FINANCING AND ECONOMIC GROWTH

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ABSTRACT
Banking activities both conventional and sharia banks in Indonesia are currently growing rapidly. This condition is marked by an increase in the value of an area's assets and an increase in the value of financing every year. These increases support economic activity quickly but can also cause environmental degradation impacts such as increasing the value of CO2 emissions (pollution). This study aims to determine how much influence Islamic financing and economic growth have on environmental quality in Indonesia. A quantitative approach with Multiple linear Regression was applied in this study. The results showed that Islamic bank financing and economic growth have a significant and negative effect on environmental quality in Indonesia.

Keywords: Economic Growth; Environmental Quality; Sharia Financing

INTRODUCTION

One of the goals of establishing Islamic banking is not only for corporate profits but also oriented to creating prosperity in the community and ultimately increasing the country's economic growth. When the growth of a country has increased within a certain period of time, the economy of that country can be said to have increased or has a positive value (Mawaddah, 2011). One indicator of Islamic banking is financing. When the banking sector grows rapidly, more sources of financing can be allocated to productive sectors so that financing contributes positively to economic growth (Okryadi, 2018). Research on the development of Islamic finance and economic growth has been conducted by Mosab I. Tabash and Raj who stated in their research results that there is a strong positive relationship between Islamic bank financing and economic growth (Tabash & Dhakar, 2014).

Indonesia's sectoral economic growth experienced a decline, especially from the goods-producing sectors. Meanwhile, the service sector of the economy, such as the transportation and communications sector, financial sector, rental, and services sector, continued to experience growth (BI, 2013). The slowing of sectoral economic growth was caused by a lack of investment, especially from sharia financing channeled to economic sectors. Investments provided by Islamic banks through financing channeled to economic sectors aim to increase economic growth in the real sector (Susilo & Ratnawati, 2014).

Based on Table 1, the Central Statistics Agency (BPS) released data on Indonesia's economic growth in 2016 - 2020 experiencing fluctuations. Indonesia experienced economic growth of up to 16,043,611 billion in 2019 which is the highest economic growth for the last 5 years. In its development, economic growth has experienced ups and downs for several years, one of which is influenced by aggregate demand. Banking is also very supportive to develop the economic sector because it is undeniable that the circulation of money greatly influences the development of the economic sector.

Table 1. Data on Sharia Financing and Economic Growth in Indonesia in Billion Rupiah

Years	Sharia Financing	Economic growth
2016	32.609.80	12.621.833
2017	30.031.37	13.723.410
2018	20.865.63	14.981.172
2019	17.326.81	16.043.611
2020	12.445.30	15.785.769

Source: OJK (2020), BPS in numbers (2021)

Indonesia is one of the countries experiencing environmental degradation. This is reinforced by the condition of big cities in Indonesia, such as Jakarta, Bandung, and Surabaya, which no longer have healthy air. Banking activities in Indonesia have experienced rapid development, marked by an increase in the value of assets and financing in the economic sector, through continuous economic activities that can lead to environmental degradation (Maulidiyah & Auwalin, 2021). The theory of Environmental Kuznets Curve is the first to discuss the relationship between environmental degradation and economic growth. Indonesia's economic growth is driven by the manufacturing sector, as seen in GDP growth (Maulidiyah & Auwalin, 2021).

Technically, the level of tightness or relaxation of bank policies in financing can be formulated. One of them is to identify the level of balance between the sustainability of the bank and the environment. By heeding these two factors, banks can optimize their role in suppressing the rate of environmental degradation. In fact, furthermore, banks can provide a stimulus that encourages “environmentally friendly” behavior. The banking sector can be a key player in efforts to mainstream sustainable development (BI, 2017).

This study is an evolution of Iskandar's study on the impact of Islamic bank financing on CO2 emissions in Indonesia, which was conducted at the regional and sectoral levels. Banking financing at the provincial level in Indonesia. This study uses a more complete air quality index proxy, pollution parameters use air pollution proxies, and an index with the same parameters (Iskandar, 2019). These parameters are also used to examine the relationship between economic growth and pollution. He explained that Islamic financial institutions have not given sufficient attention to environmental impacts in the existing literature, even though Islamic banking has the potential to develop in the future, therefore this study aims to complement the existing literature. about Islamic banking on the environment (Panayotou, 2019).

LITERATURE REVIEW

Economic growth from the Islamic point of view is not only about increasing the number of goods and services, but also about the moral aspect and moral quality, and the balance between secular and other secular goals. From the perspective of Islamic economics, there are at least three factors that influence economic growth, namely Invisible resources with resources that can be invested) (Huda et al., 2008), Human Resources and Entrepreneurship (Syauqi, 2016), and Technology and innovation (Syauqi, 2016). Therefore, economic growth in Islam will be successful when people understand their obligation to create art through creative and innovative processes.

Banks are not directly involved in the environmental damage that often occurs in Indonesia. However, banking cannot be separated from the problem of increasing environmental degradation. By providing loans or financing to their customers, banks can become a trigger for activities that have an impact on the environment. Therefore, banks are indirectly involved in environmental problems (Harjanti, 2021). The concept of Islamic or sharia banking requires Islamic banks to carry out social services, either through qardh funds, zakat, or social funds in accordance with Islamic teachings. The concept of sharia improvement also requires Islamic banks to play a role in the development of human resources and contribute funds for the maintenance and development of the environment (Huda & Heykal, 2013).

The development of this country is getting faster day by day. Rapid development has resulted in an unavoidable negative impact on the quality of the environment, including a decrease in the quality of water (Effensi, 2003) and air. Air is an environmental medium, a basic human need that needs to be taken seriously, this has also become Indonesia's health development policy where the gas air pollution control program is one of the top ten events (Ikhtiar, 2017).

METHODS

The study uses secondary data in the form of GDP for each province of Indonesia (34 Provinces of Indonesia). These data are obtained from the Central Bureau of Statistics, data on

Environmental Quality is obtained from the Ministry of Environment and Forestry of the Republic of Indonesia, and data for sharia financing is obtained from the OJK. The analysis of modelling is Multiple Linear Regression which is one of the statistical methods that can be used to explain the effect of the explanatory variable on the response variable. In general, the linear regression model that is often used can be divided into two models, namely Multiple Linear Regression and Partial Least Square Regression (PLS) (nengsih et al., 2008). This modelling uses the dependent variable, namely Environmental Quality (Y) and the independent is variable Islamic Financing (X1), Economic Growth (X2).

RESULTS

Table 2 show the descriptive statistics for each variable. Sharia Financing variable has an average value (mean) of 660.18 billion with a minimum value of 6 billion and a maximum value of 6.509 trillion. By looking at the mean (average) value, it can be concluded that statistically the level of Islamic Financing in Indonesia during the 2016-2020 period, the average number of Sharia Financing is smaller than the standard deviation value of 1.127 trillion. where the standard deviation value can be categorized as less good. This shows that the number of Islamic Financing in Indonesia for the 2016-2020 period is relatively low.

The Economic Growth variable has an average value (mean) of 430.425 trillion with a minimum value of 291.51 trillion and a maximum value of 2.816 trillion. By looking at the mean (average) value, it can be concluded that statistically the level of Economic Growth in Indonesia during the 2016-2020 period, the average economic growth rate is smaller than the standard deviation value of 617.318 trillion, where the standard deviation value can be categorized as less good. This shows that the economic growth rate in Indonesia for the 2016-2020 period is relatively low.

Meanwhile, in the Environmental Quality Variable in Indonesia for the 2016-2020 period, in the descriptive test the data obtained a minimum value of 54, and a maximum value of 99 with an average (mean) of 86.83 and a standard deviation of 6.944, which is smaller than the average value. This shows that the environmental quality in Indonesia for the 2016-2020 period is categorized as good.

Table 3 shows that sharia financing has a significant effect on environmental quality in Indonesia (significance level 0.004 < 0.05). The direction of the relationship is negative, meaning that if sharia financing increases, it will reduce the number of air quality, or the quality of the environment in Indonesia will get better. Furthermore, Economic growth has a significant and negative effect on environmental quality in Indonesia (significance level 0.000 < 0.05). With a negative direction of the relationship, it means that if economic growth increases, it will reduce the number of air quality, or the quality of the environment in Indonesia will improve.

Table 2. Descriptive Statistics

Variable	Min	Max	Mean	Std deviation
Sharia Financing	6	6509	660.18	1127.74
Economic Growth	29151	2816760	430425,26	617318.32
Environmental Quality	54	99	86.83	6.99

Source: Author Analysis (2022)

Table 3. T-test

Model	*Beta*	*Std Error*	*t-value*	*p-value*
Constant	90.23	0.479	188.329	0.000
Sharia Financing	-0.002	0.001	-2.897	0.004
Economic Growth	-5.39E-6	0.000	-5.691	0.000

Source: Author Analysis (2021)

Table 4. F-test

Model	*Sum of Square*	*df*	*F-value*	*p-value*
Regression	3769.019	2	73.569	0.000
Residual	4200.972	164		
Total	7969.992	166		

Source: Author Analysis (2021)

The following in Table 4 results from the F tests (ANOVA). The results show Sharia Financing and Economic Growth have a joint effect on Environmental Quality in Indonesia. The value of the coefficient of determination is obtained at 0.466 or 46.6%, which means that the variable Islamic financing and economic growth has an influence of 46.6% on the environmental quality variable in Indonesia. There are 53.4% is influenced by other factors that may affect the quality of the environment.

DISCUSSION

Table 3 shows that Sharia financing has a significant effect on environmental quality in Indonesia with a negative relationship direction. This can be interpreted that if sharia financing increases, it will reduce the air quality or the quality of the environment in Indonesia will get better. The negative influence of sharia financing on environmental quality in Indonesia in 2016-2020 can be seen from the data showing that, in every province in Indonesia with a tendency to increase sharia financing, it will further reduce air quality. Or in other words, increasing sharia financing in every province in Indonesia in 2016-2020 will further improve the quality of the environment for the better.

The results of this study are the same as the results of Dewi Rahmawati Maulidiyah's research which concluded that Islamic banking financing has a negative but insignificant relationship to the Air Quality Index because the market share is still small, the financing carried out is still dominant by the consumptive sector and OJK supervision tends to be loose so that supervision of Islamic banking financing only limited to the pre-financing stage (Maulidiyah, 2021).

Economic growth has a significant and negative effect on the quality of the environment in Indonesia. If economic growth increases, it will reduce the number of air quality, or the quality of the environment in Indonesia will get better. The negative influence of economic growth on environmental quality in Indonesia in 2016-2020 can be seen from the data which shows that, in every province in Indonesia with a tendency to increase economic growth, it will further reduce air quality. Or in other words, increasing economic growth in every province in Indonesia in 2016-2020, will further improve the quality of the environment for the better. The results of this study are different from the research results of Dewi Rahmawati Maulidiyah who concluded that the GRDP of the Manufacturing Industry has a positive but not significant relationship with the Air Quality Index (Maulidiyah, 2021).

CONCLUSION

Based on the study's results, it can be concluded that the Sharia Financing and Economic Growth have a partial and significant negative effect on Environmental Quality in Indonesia in 2016-2020. Furthermore, the variables of Islamic financing and economic growth simultaneously have a significant effect on environmental quality in Indonesia. The coefficient of determination reached 0.466 or 46.6% and the remaining 53.6% was influenced by other factors.

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