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Effect of Green Finance, Profitability, Leverage and Company Size on Financial Sustainability Ratio at Sharia Commercial Banks in Indonesia for the Period 2019-2023

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ABSTRACT

Islamic banking plays an important role in the Indonesian economy by promoting the principles of sustainability and ethics of Islamic finance. However, in the face of global challenges such as climate change and economic uncertainty, Islamic commercial banks need to adopt more effective sustainability strategies to maintain their financial stability. The purpose of this study was to determine the effect of green finance, profitability, leverage and company size on financial sustainability ratio in Sharia commercial banks in Indonesia for the period 2019-2023. Sampling in this study using the method of purpose sampling. The sample included in the criteria are 8 Islamic banking companies. Data analysis technique using multiple linear regression with panel data approach using Eviews 10.0 tool. The results of the partial significance test of the t test in this study is the green finance variable does not significantly affect the financial sustainability ratio. Meanwhile, profitability variables, leverage and company size significantly affect the financial sustainability ratio. The results of the simultaneous significance test F test showed that the variables green finance, profitability, leverage and company size simultaneously significantly affect the financial sustainability ratio. This research contributes to the Islamic banking industry in improving financial sustainability strategies as well as for investors in assessing the financial performance of Islamic commercial banks from a sustainability perspective.

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1. INTRODUCTION

The development of Islamic banking is now recognized globally as an alternative banking system. Islamic banking began to emerge and compete with conventional banks that were previously known to the public. The change in management paradigm from traditional to New Views is a demand from the intense competition in the banking world today [1]. The high demand or needs of the community for sharia-based financial services can be identified through the development of a sharia-based financial services network [2].

Islamic banking, which has always been consistent in carrying out the ethical principles on which it operates, has now experienced rapid development as an

attractive alternative compared to the conventional financial system. Islamic banking institutions are considered to be able to answer the needs of people who want financial services that are in line with Sharia principles. This primarily includes a ban on the practice of usury, unproductive speculative activity, as well as a violation of the principle of fairness in the transaction process. In addition, Islamic banks are required to channel financing and investment into the business sector in accordance with ethical and halal principles according to Islamic Sharia [3].

Islamic commercial banks play an important role in supporting an inclusive and sustainable economy, as well as being one of the key elements in the Islamic financial system. However, facing global challenges such as climate change and the environmental crisis, there is an urgent need for financial institutions, including Islamic commercial banks, to adopt the concept of sustainability in every aspect of their operations. Sustainability (Sustainability) is a program that has the strength or ability to carry out activities or services to achieve its goals and functions to become a healthy financial institution and has the ability to continue operating to become a financial institution that has a role in development progress [4].

Sustainability is now an important factor in every financing and investment decision in the financial sector. Nevertheless, a coordinated and integrated collaborative effort between market participants and broader stakeholders is needed. One of the main objectives of sustainable finance policy is to ensure that the entire financial services sector and its stakeholders use uniform and transparent terms related to sustainable finance [5]. This makes a real contribution to supporting other sustainable initiatives, while helping to develop key terminology and definitions in the field of sustainable finance.

Financial sustainability ratio (FSR) or financial sustainability ratio is one of the main indicators in the sustainability ratio. This ratio serves as a tool to measure the bank's financial growth as well as assess the bank's ability to maintain operational continuity in the future. By using the FSR, it can be seen to what extent the bank is able to generate and increase the rate of Return (return) required to maintain the sustainability of its long-term performance [6]. This ratio is not only an indicator of growth but also a benchmark for the bank's success in facing challenges and ensuring the sustainability of its business amid market dynamics.

According to [7], the Financial sustainability ratio (FSR) is one of the key elements in assessing the sustainability of a bank's performance in the future. FSR is not only used to determine the level of operational viability of the bank, but also to identify potential bankruptcy or decline in performance early. This ratio measures sustainability based on aspects of bank performance, as well as being the basis for more effective management of own capital. In addition, FSR helps planning strategic actions that must be taken immediately, both for short-term and long-term needs. By evaluating the level of financial growth in each period, the FSR provides a clear picture of the efficiency and ability of the bank to maintain its operations in a sustainable manner [8].

The Sustainable Finance Program is designed not only to increase the share of financing, but also to strengthen the resilience and competitiveness of financial institutions. Paa Research [9] emphasized that the priority of developing sustainable finance programs is based on the view that this program is both a challenge and an opportunity. Financial services institutions can take advantage of sustainable finance programs to support more stable growth and development. With this approach, financial institutions are able to face market dynamics more adaptively and maintain long-term sustainability through better risk management and optimization of their resources.

Stakeholder expectations of the financial sustainability ratio at Sharia commercial banks can be accommodated by financial performance and social performance and environmental performance assessment systems [10]. To determine the environmental

and social performance can be seen by looking at the responsibility of banks, especially in supporting environmental sustainability, one of which is by implementing green financing or commonly called green finance. Meanwhile, to measure its financial performance, it can be represented in several variables in measuring the financial health of Sharia commercial banks including profitability, leverage, and company size [11].

The implementation of environmental and social performance of a bank can be seen by supporting environmental sustainability, one of which is by applying the concept of green finance. The concept of green finance acts as a financial service that supports environmental sustainability, climate change mitigation, and efficient use of energy. Green finance serves as a container that helps businesses that have concern for the environment by providing financing or credit. Through this concept, the financial sector can play an active role in encouraging more environmentally friendly and sustainable business practices [12]. Green finance regulates the flow of capital towards projects that care for the environment, and will ultimately result in an increase in the production of a company based on environmentally friendly activities, such as renewable energy, energy efficiency, waste management, and projects that contribute to climate change mitigation and sustainable development.

The implementation of green finance can encourage companies to be responsible for the impacts caused by their corporate activities. In addition to reducing the negative impact on the environment, green finance disclosures also provide significant information on environmental costs that affect equity owners. Therefore, the participation of companies by adopting green finance can increase the interest of interested parties so as to provide added value and increase the company's overall valuation [13].

The performance of Islamic commercial banks in maintaining the sustainability of their operations does not only depend on increasing social and environmental responsibility, but also requires strengthening financial performance. One of the main indicators used to measure a company's financial performance is profitability. Profitability reflects the company's ability to generate profits from various business activities carried out [14]. This indicator is a benchmark for the company's efficiency in utilizing the resources it has, such as capital, labor, and assets. The ability to generate optimal profits can be evaluated through profitability ratios, one of which is Return on Assets (ROA). The ROA ratio is used by management to assess the extent to which the effectiveness and efficiency of the company in managing all assets owned. In this case, profitability is not only an assessment of the company's success in making a profit, but also reflects the company's ability to maximize the potential of resources for long-term sustainability.

Another financial performance that affects the Financial sustainability ratio (FSR) is leverage. Leverage is the utilization of assets and sources of funds that have fixed expenses (costs) with the aim of increasing profits for shareholders [15]. To finance its operations, the company's funds can come from its own capital (equity) or come from external parties in the form of short-term debt and long-term debt obtained from creditors and shareholders. The company must contribute to increasing the company's revenue, the use of these funds has implications for the company's ability to fulfill its obligations to the owners of the funds. One of the ways used to finance the company's operations can use borrowed capital in addition to using its own capital [16].

Leverage to Financial sustainability ratio (FSR) is complex and depends on various factors, including industry, economic cycles, and company management strategies [17]. While leverage can increase investment capacity and operational efficiency, it also carries risks that can threaten long-term sustainability. Effective management of leverage, taking into account the trade-off between risk and return, is essential in maintaining and improving a company's financial sustainability ratio.

The last factor is the size of the company. One measure that shows how Islamic commercial banks have developed and how much the sector contributes to national banking is the total amount of assets. In addition, total assets are also a benchmark for a bank's performance each year, the greater the total assets owned by a bank, the better the performance of the bank [18].

Islamic commercial bank companies effectively continue to experience growth and development, as evidenced by the increase in their assets. In addition to showing the wealth of the company, the total amount of assets owned also shows how large the size of a company. Larger companies usually have more resources and wider access to funding and diversification of business activities. This allows them to achieve a higher level of financial stability. Large companies tend to have more stable cash flows, the capacity to survive difficult economic situations, and the ability to better manage financial risks in order to achieve sustainability.

Based on the background description above, the author is interested in conducting research related to factors that affect the financial sustainability ratio in Islamic commercial banks. So the title of the study was " the effect of Green Finance, profitability, Leverage and Company Size on Financial Sustainability Ratio in Sharia commercial banks in Indonesia for the period 2019-2023'.

2. LITERATURE REVIEW

2.1 Sustainability theory

Sustainability theory was first introduced by [19] through the report "the Limits to Growth" which became one of the important foundations in understanding sustainability from the perspective of the global system. The report emphasizes that the Earth has limits in providing resources and absorbing waste. If population growth, industrialization and resource consumption continue without wise management, the world will face the risk of system collapse due to ecological, social and economic imbalances. In this theory, the world is seen as an interconnected system, where activities in one sector such as the economy or population can affect other sectors, such as the environment and resources. [19] states that there are five main variables that determine sustainability, namely population, natural resources, industrial production, pollution and food production. To achieve sustainability, a dynamic balance between resource consumption and nature's ability to restore itself must be maintained.

2.2 Financial Sustainability Ratio (FSR)

Financial sustainability ratio (FSR) is an important indicator used to assess the level of efficiency of a financial institution [20]. This ratio is used to evaluate the growth of financial performance in each period, thus providing a clear picture of the bank's ability to carry out its operations on an ongoing basis. FSR is the main benchmark for assessing the sustainability of a bank based on aspects of its financial performance. On the other hand, as one of the main financial authorities in Indonesia, The Financial Services Authority (OJK) has a strategic role in supporting the successful implementation of sustainable finance programs, which aim to promote stability, competitiveness, and social responsibility in the financial sector [21].

2.3 Green finance

Green finance is the process of allocating capital resources or investment activities that prioritize environmental protection, climate change mitigation, environmentally friendly energy development, and responsible management in various sectors [22]. The concept aims to integrate environmental awareness into financial decision-making in order to create a sustainable positive impact.

2.4 Profitability

Profitability is the ability of a company to generate profits from various business activities, such as sales, income from investments, asset management, and share capital. According [23],

profitability reflects the extent to which management effectiveness in managing the company to achieve maximum profit. The level of profitability is usually measured by comparing the profit generated in a given period with the total assets or capital of the enterprise. This measurement is generally expressed as a percentage, which gives a clear idea of the efficiency of the company in utilizing the resources it has.

2.5 Leverage

According to [24], debt can have both positive and negative effects on a company, depending on how the company manages it. On the one hand, the company must ensure that the profits generated are sufficient to meet its debt obligations. However, on the other hand, many companies are taking advantage of debt as a tool to increase profitability. This is in line with the view pandangan [25], which defines leverage as a measure of how much of a company's funding comes from debt. If the leverage of a company is zero, it means that the company fully relies on its own capital without using debt. A low level of leverage reflects less risk for the company, especially when economic conditions are declining.

2.6 Firm Size

Company size is an indicator that describes the size of a company based on various parameters, such as total assets, logarithmic size, stock market value, and others [26]. [27] explained that the size of the company reflects a value that indicates the scale of the company's operations, while [28] added that the size of the company can be seen from the total assets, the number of sales, as well as the average revenue generated.

2.7 Hipotesis

The hypothesis is a temporary solution to the formulation of the research problem, where the formulation of the problem is given in the form of a statement sentence [29]. The hypothesis in a study is obtained from the theory on which the conceptual Model of the study is based. Hypotheses are tentative that need to be tested for truth to prove the hypothesis is true or not. Based on the description and findings of previous research, the hypotheses proposed in this study are as follows:

1) H_{01}: Green finance has no significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
   H_{a1}: Green finance has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
2) H_{02}: Profitability does not significantly affect the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
   H_{a2}: Profitability has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
3) H_{03}: Leverage does not significantly affect the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
   H_{a3}: Leverage has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
4) H_{04}: The size of the company has no significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
   H_{a4}: The size of the company has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
5) H_{05}: Green finance, profitability, leverage, and company size simultaneously have no significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
   H_{a5}: Green finance, profitability, leverage, and company size

simultaneously have a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.

3. METHODS

This study uses a quantitative approach with the type of associative research, which aims to identify the relationship or influence between the variables studied. Associative research is designed to answer questions about the relationship between variables systematically and measurably. The quantitative method itself is based on the paradigm of positivism, which prioritizes the use of the scientific method to meet empirical, objective, measurable, rational, and systematic rules. This approach is used in research involving number-based data and statistical analysis, allowing researchers to conduct comprehensive hypothesis testing. In this study, the population and sample were predetermined, and quantitative methods were used to ensure the validity of the results of the study through testing hypotheses that had been formulated earlier [30].

[30] said that the population is a generalization area consisting of objects and subjects that have certain qualities and characteristics set by the researcher to be studied and then drawn conclusions. The population in this study is Sharia Commercial Bank companies (BUS) in Indonesia registered with the OJK, namely as many as 14 banking companies with a period of 2019 to 2023.

Determination of the sample used in this study is Purposive Sampling. According to [30] Purposive Sampling is a sampling technique with certain considerations. Then obtained a sample of 8 Sharia Commercial Bank companies (BUS) with a span of 5 years of observation, so that there are units of analysis as much as 8 x 5 = 40 analytical data.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistical Analysis

Descriptive statistical analysis is used to provide an overview (description) of a data [30]. The Data obtained from the descriptive analysis shows the average (mean), the middle value (median), the highest value (maximum), the lowest value (minimum) and the standard deviation of each variable studied, both independent variables, namely green finance, profitability, leverage and company size, and the dependent variable, namely financial sustainability ratio.

Table 1. Descriptive Statistical Analysis

	X1	X2	X3	X4	Y
Mean	0,631000	1,832000	1,733750	2552,475	1,243750
Median	0,630000	1,220000	1,145000	2664,000	1,170000
Maximum	0,940000	9,090000	8,660000	3107,000	2,100000
Minimum	0,310000	0,040000	0,310000	1654,000	0,990000
Std. Dev.	0,137837	2,215109	1,986685	543,7392	0,272036
Skewness	-0,270875	2,204676	2,552585	-0,387449	2,148648
Kurtosis	2,717759	6,889308	8,742309	1,586278	7,062758

Source: Output Eviews 10 (processed data)

4.2 Selection Of Regression Models

The Data panel regression Model was proved by using Eviews 10.0 program. data processing with regression model panel data using 3 estimation models, namely the least squares Model (Common Effect), fixed effect Model and random effect Model (Random Effect). What is done after doing the estimation of the three methods is to test which Model is right to use.

There are three tests that can be used to choose the right Model,

namely the Chow-test, Hausman test and Lagrange Multiplier test.

1) Chow-test

The CHOW-test or likelihood ratio test is an F-statistic test to determine whether a model uses a Common Effect or a Fixed Effect. Based on the Chow-test that has been done, the following results were obtained:

Table 2. Chow-test

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	2,360787	(7,28)	0,0499
Cross-section Chi-Square	18,554309	7	0,0097

Source: Output Eviews 10 (processed data)

Based on Table 2, the test results above show that the value of the F-test and Chi-square Cross-section < significance value (0.0499 and 0.0097 < 0.05), it can be interpreted that H0 is rejected and Ha is accepted. So that the best Model between Common Effect Model and Fixed Effect Model selected in the Chow Test is Fixed Effect Model and the next test needs to be done is the Hausman test.

2) Hausman Test

The Hausman test is used to choose between a Fixed Effect and a Random Effect. Based on the Hausman test that has been done, the following results were obtained:

Table 3. Hausman Test

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects			
Test Summary	**Chi-Sq Statistic**	**Chi-Sq d.f.**	**Prob.**
Cross-section random	10,130512	4	0,0383

Source: Output Eviews 10 (processed data)

Based on the results of table 3. of the test above, it shows that the value of Random Cross-section with (p value) of 0.0383, where the value is smaller than the significance value of 0.05. Thus, it can be concluded that H0 was rejected and Ha was accepted with the Fixed Effect Model as the best Model, so the test stopped at the Hausman test.

4.3 Classical Assumption Test

The classical assumption test is used to determine whether a regression model has met the requirements of being free from multicollinearity, heteroscedasticity, and normality problems.

1) Normality Test

[31] states that the normality test aims to test whether in regression models, disruptive or residual variables have a normal distribution. A regression Model that is considered good is to have a normal or close to normal distribution. Statistical test used to assess normality in this study is Jarque Bera (JB) with histogram-normality test. With a significance level of 5%, the indicators used for decision -

making that the data is normally distributed or not are as follows:

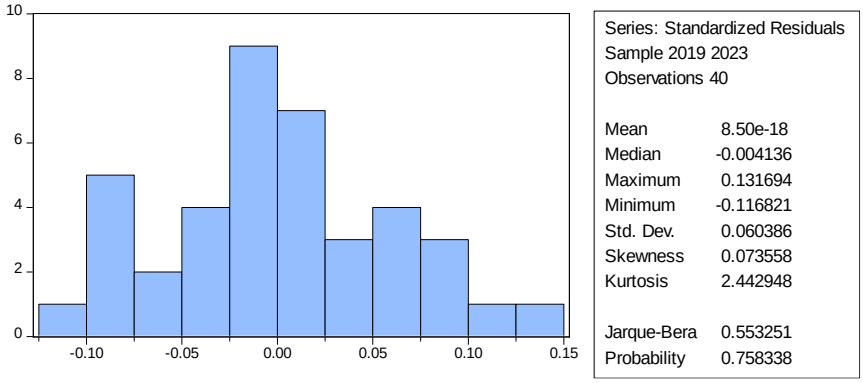

Figure 1. Normality Test
Source: Output Eviews 10 (processed data)

Based on figure 1. above, it can be seen that the Jarque-bera value is 0.553251 with a probability value of 0.758338. The probability value is greater than 0.05, it can be concluded that the data in this study are normally distributed.

2) Multicollinearity Test

The purpose of multicollinearity test is to determine whether there is a correlation between independent variables. If the value of R2 < 0.85 then multicollinearity is not detected if the value of R2 > 0.85 then multicollinearity is detected. Based on the multicollinearity test that has been done, the following results were obtained:

Table 4. Multicollinearity Test

	X1	**X2**	**X3**	**X4**
X1	1,000000	-0,133669	0,284882	0,095264
X2	-0,133669	1,000000	-0,225618	-0,540273
X3	0,284882	-0,225618	1,000000	0,201754
X4	0,095264	-0,540273	0,201754	1,000000

Source: Output Eviews 10 (processed data)

Based on Table 4. above, obtained correlation coefficients X1 and X2 amounted to -0.133669 < 0.85, correlation coefficients X1 and X3 were 0.284882 < 0.85, correlation coefficients X1 and X4 were 0.095264 < 0.85, correlation coefficients X2 and X3 were -0.225618 < 0.85, correlation coefficients X2 and X4 were -0.540273 < 0.85 and correlation coefficients X3 and X4 0.201754 < 0.85. It can be concluded that free from multicollinearity or pass the multicollinearity test.

3) Heteroscedasticity Test

[31] states that the heteroscedasticity test aims to test whether in the regression Model there is a variance inequality from the residual of one observation to another. If the variance of the residuals of one observation to another is constant then it is called homoscedasticity and if it is different then it is called heteroscedasticity. [31] states that the Breusch Pagan test can be done by regressing the absolute residual value against other independent variables.

Based on the heteroscedasticity test that has been done, the following results were obtained:

Table 5. Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	0,521104	0,523314	0,995775	0,3279
X1	0,043050	0,054732	0,786546	0,4382
X2	0,000225	0,007193	0,031324	0,9752
X3	-0,001799	0,004213	-0,427058	0,6726
X4	-0,000195	0,000213	-0,915746	0,3676

Source: Output Eviews 10 (processed data)

Based on Table 5 above, X1 probability value is 0.4382 > 0.05, X2 probability value is 0.9752 > 0.05, X3 probability value is 0.6726 > 0.05 and X4 probability value is 0.3676 > 0.05. It can be concluded that heteroscedasticity does not occur.

4.4 Hypothesis Testing Results

1) Partial significance Test (t test)

Partial significance test t is a way to test how far the influence of one explanatory or independent variable individually in explaining the variation of the dependent variable [32]. The following is the result of T test calculation:

Tabel 6. Partial Significance Test (t test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Hasil
C	3,974229	1,055299	3,765974	0,0008	
X1	0,056981	0,110371	0,516267	0,6097	Not Significant
X2	0,132273	0,014505	9,119076	0,0000	Significant
X3	-0,017516	0,008496	-2,061686	0,0486	Significant
X4	-0,001167	0,000430	-2,714716	0,0112	Significant

Source: Output Eviews 10 (processed data)

Based on the test results using the program eviews 10.0 obtained t test results as in Table 4.8 above, shows that the regression model coefficient has a value of 3.974229 with t-count of 3.765974 and the probability level of 0.0008. Then, the magnitude of the value df = (n-k-1) = (40-4-1) = 35, then based on T-table in Appendix 12. which lies at df = 35 and 0.05 degrees of freedom is obtained by 1.68957. Here are the t test results:

a. Green finance variables showed t-count < t-Table is 0.516267 < 1.68957, and the probability value of green finance 0.6097 > 0.05. Hereby H01 is accepted and Ha1 is rejected, namely green finance does not significantly affect the financial sustainability ratio at Sharia commercial banks in Indonesia for the period 2019-2023.
b. Profitability variables showed t-count > t-table that is 9.119076 > 1.68957, and the probability value of profitability 0.0000 < 0.05. Hereby h02 is rejected and Ha2 is accepted, namely profitability has a significant effect on the financial sustainability ratio of Sharia commercial banks in

Indonesia for the period 2019-2023.

c. Leverage variable Shows t-calculate < t-table i.e. (2.061686) > 1.68957 and leverage probability value 0.0486 < 0.05. Hereby h03 is rejected and Ha3 is accepted, namely leverage has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
d. The company size variable showed t-count < t-table i.e. (2.714716) > 1.68957, and the probability value of company size 0.0112 < 0.05. Hereby h04 is rejected and Ha4 is accepted, namely the size of the company has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.

2) Simultaneous Significance Test (F-Test)

The F statistical test is used to show whether all independent variables included in the Model have an effect together on the dependent variable [32]. The following is the result of F test calculation:

Tabel 7. Simultaneous Significance Test (F-Test)

		Results
F-*statistic*	49,11354	Significant
Prob(S-*statistic*)	0,000000	

Source: Output Eviews 10 (processed data)

Based on Table 4.9 F test results obtained a probability value of 0.000000 and Fhitung of 49.11354, with df = (k-1) = (5-1) = 4 and df2 = (n-k) = (40-5) = 35, obtained Ftable value of 2.64. The probability value of 0.000000 is much smaller than 0.05 while the value of F-calculate is greater than F-table which is equal to 49.11354 > 2.64. So Ha5 is accepted, namely green finance, profitability, leverage and company size simultaneously have a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.

3) Coefficient of determination Test (R^2)

Coefficient of determination (R^2) test was conducted to determine and analyze how much green finance, profitability, leverage and company size as independent variables explain the financial sustainability ratio as a dependent variable. The following is the result of R2 test calculation:

Tabel 8. Coefficient of determination Test (R^2)

R-squared	0,950726
Adjusted R-squared	0,931368

Source: Output Eviews 10 (processed data)

Based on the results of the R2 test in Table 8 above, the R-Squared obtained a figure of 0.950726. Based on the interpretation guidelines of the correlation coefficient that has been presented, this figure shows that the correlation or relationship between green finance, profitability, leverage

and company size to financial sustainability ratio is very strong.

4.5 Discussion

a. Effect of Green Finance on financial sustainability ratio

Green finance is financing that is directed to support sustainable, environmentally friendly projects, and provide a positive impact on society and ecosystems. The implementation of green finance not only reflects social and environmental responsibility, but also becomes part of a long-term financial strategy. The results of statistical analysis of green finance variables obtained t-count of 0.516267 which shows a positive relationship between green finance and financial sustainability ratio. The significance level obtained from regression testing is 0.6097, the significance value is greater than 0.05 indicates that the green finance variable does not significantly affect the financial sustainability ratio (FSR), so the first hypothesis was rejected.

These results reveal that Sharia commercial banks in Indonesia are beginning to strengthen their position in supporting environmental sustainability through the implementation of green finance. Major banks such as Bank Syariah, Bank BCA Syariah and Bank Riau Kepri Syariah appear to be the leaders in this initiative, followed by other banks that are still in the adaptation stage. However, uneven implementation across banks indicates a need to increase commitment and capacity to adopt green finance.

The results of this study indicate that the application of environmentally sound policies to Islamic commercial banks in the 2019-2022 time range is still optional. However, in 2023, the Financial Services Authority (OJK) re-designed the green finance policy to improve the previous regulation. This step is carried out to complete the Sustainable Finance Roadmap Phase II 2021-2025 which is focused on strengthening supply and demand aspects in the green finance ecosystem [33]. From the bidding perspective, OJK presents various initiatives, including the provision of incentives, the development of sustainable financial products, as well as improving the quality of human resources. Meanwhile, in terms of demand, efforts include national campaigns related to green finance, providing support for sustainable economic programs, and green certification for corporations. The form of incentives offered includes a reduction in credit risk weight (RWA) for banks, a 50 percent discount on the annual green bond listing fee by the Indonesia Stock Exchange, and a 50 percent relaxation of risk weight for financing providers.

The results of this study are supported by the results of the study [34] which states that the green finance variable shows that the results do not have a significant effect on the value of the company. This study explains that investors continue to provide the same value or even provide a reduction in value to companies that implement green finance as a result of the risks and costs borne by companies from the implementation of green finance. The results of the study [35] also supports the results of this study furthermore, companies that implement green finance do not have an influence on company value because many investors do not prioritize sustainability issues and choose to protect themselves from certain or short-term risks so that

their assessment of companies that implement green finance or not will remain the same.

b. Effect of profitability on financial sustainability ratio (FSR)

Profitability is a ratio used to measure a company's ability to generate profits. The results of statistical analysis of profitability variables obtained t-count of 9.119076 which shows a positive relationship between profitability and financial sustainability ratio. The significance level obtained from regression testing is 0.0000, the significance value is less than 0.05 indicates that the profitability variable has a positive and significant effect on the financial sustainability ratio (FSR), so the second hypothesis is accepted.

This study shows that increasing and decreasing profitability can lead to increasing and decreasing financial sustainability ratio as well, it shows the high dependence of the company on operating income to maintain its financial stability. As profitability increases, the financial sustainability ratio increases as the company's ability to meet long-term and operational obligations increases. On the contrary, a decrease in profitability instantly weakens this ratio, reflecting the lack of diversification of sources of income, limited cash reserves and high risks to external factors such as market fluctuations or costs.

In line with the theory of sustainability by [19], profitability reflects an organization's internal capacity to survive and thrive amid external pressures. High profitability allows banks to efficiently utilize resources to create sustainable economic value without damaging the long-term capacity of their systems. The results of this study support research from [36] which says profitability has a positive effect on the company's financial sustainability, where the higher the company's profitability level, the greater the financial sustainability. The higher the profit generated, the resulting profit or profit is directly proportional to the performance of the bank's financial sustainability. If ROA increases, financial sustainability will also experience a significant increase in the value of bank ROA.

Islamic commercial banks can leverage profitability as strategic capital to support sustainability initiatives aligned with Sharia principles, such as financing environmentally friendly sectors. Thus, profitability not only favors financial stability, but also contributes to environmental and social balance, in accordance with the concept of sustainability expressed by [19].

c. Effect of Leverage on financial sustainability ratio (FSR)

Leverage is the level of a company's ability to use assets or capital that have fixed costs (debt or shares) in order to realize the company's goal of maximizing the value of the company in question. The results of statistical analysis of leverage variables obtained t-count of -2.061686 which indicates a negative relationship between leverage and financial sustainability ratio. The significance level obtained from regression testing is 0.0486, the significance value is smaller than 0.05 indicates that the leverage variable has a significant effect on the financial sustainability ratio (FSR), so the third hypothesis is accepted.

These results suggest that leverage has the potential to affect a company's financial sustainability, depending on how it is managed. When leverage is used wisely and measuredly, companies can leverage it to expand operations, increase

revenue, or invest in strategic projects that support long-term sustainability. However, the use of too high leverage can be an obstacle to financial sustainability. This is due to the increased debt burden that companies have to bear, such as interest and principal payments, which can reduce financial flexibility. In addition, high leverage also increases the risk of bankruptcy and dependence on external financing, so companies become more vulnerable to changing market conditions.

In accordance with the theory of sustainability proposed by [19] in the context of corporate finance, high leverage reflects a significant degree of external pressure, in which the company must allocate a significant part of its resources to meet debt obligations. This can reduce the company's internal capacity to support long-term sustainability. According To [19], the sustainability of an economic system is determined not only by the resource capacity that firms have, but also by how the system manages external risks and pressures. In the case of leverage, the high proportion of debt to equity indicates that the company faces greater liquidity risk. These risks can hinder a company's ability to invest in sustainability initiatives. The results of this study support the research of [37] which states that financial leverage can increase corporate influence and shareholder wealth as debt and external funding increase.

This study provides a signal to the management of Islamic commercial banks in Indonesia to manage leverage very carefully. Islamic commercial banks need to ensure that leverage levels are at healthy limits to minimize liquidity risk and maintain operational stability. In addition, reduced leverage can open up opportunities for companies to focus more on long-term investments that support financial and environmental sustainability.

d. Effect of company performance on financial sustainability ratio (FSR)

Company size is one of the important variables used to describe the scale or magnitude of a business entity in an operational and financial context. The size of a company is often measured by a number of factors, such as total assets, annual revenue, number of employees, or market capitalization. The results of statistical analysis of company size variables obtained t-count of -2.714716 which shows a negative relationship between the size of the company with the financial sustainability ratio. The significance level obtained from regression testing is 0.0112, the significance value is smaller than 0.05 indicates that the variable size of the company has a negative relationship direction and a significant effect on the financial sustainability ratio (FSR), so the fourth hypothesis is accepted.

This study has similarities with research conducted by Rahman and Maslan (2005) which states that the size of the company affects the sustainability of microfinance institutions. According to [38] company size is an indicator that can be used by investors as one of the variables in determining investment decisions. This will affect the proportion channeled by the bank is greater as well, because the bank maintains liquidity and increases bank profits. However, banks that are classified as large in size will easily obtain third-party funds from customers through savings, deposits, customer investments and other bank businesses. With the large number of third party funds, banks must increase the distribution of

funds in the form of credit so that banks are able to maintain their liquidity.

High disbursement of funds makes the bank face credit risk if the customer is unable to pay the loan, the greater the funds disbursed, the greater the possible risks faced by the bank. One of the possible risks is indicated by the NPL value of the bank. So it can be concluded that the increase in total assets will be accompanied by an increase in NPLs, and the risk of bad debts also increases. This will make the bank's sustainability potential decrease due to the addition of bank risk. So that size has a negative and significant effect on FSR.

In line with the theory of sustainability proposed by [19], the sustainability of a system depends on the balance between the internal capacity of the system and the external pressures it faces. In this context, the size of the company reflects the internal capacity that is supposed to give it an edge in the face of external challenges. Larger companies usually have more extensive resources, both in terms of assets, capital, and operational networks, so they are expected to be able to support financial sustainability. However, the results of this study show that the existence of abundant resources alone is not enough to ensure financial sustainability.

e. Effect of Green Finance, profitability, Leverage and Company Size on Financial Sustainability ratio (FSR)

Financial sustainability ratio (FSR) is a very important indicator in assessing the level of financial sustainability of an institution, including Islamic commercial banks in Indonesia. FSR is used to measure the bank's ability to maintain long-term financial stability while ensuring that its operations remain in line with Sharia principles. In Islamic commercial banks, financial sustainability includes not only aspects of profitability, but also the integration of ethical values, social responsibility, and sustainable environmental management. This is in line with bank syariah's commitment to make a positive contribution to society and support more inclusive development.

Green finance, profitability, leverage, and company size are factors that affect the financial sustainability of the company. This proves that simultaneously geen finance supports the principle of sustainability as explained by [19] who mentioned that sustainable management of resources is necessary to reduce negative impacts on the environment. The implementation of green finance by Islamic commercial banks reflects a commitment to environmental sustainability through financing environmentally friendly projects. On the other hand, high profitability, as achieved by General Islamic banks in this study, supports the economic dimension of sustainability. [19] stressed that sustainable systems require efficiency in resource management to ensure economic viability.

Profitable banks have a greater ability to invest in sustainability initiatives, both in environmental and social aspects. Then, well-managed leverage reflects the bank's ability to leverage debt efficiently without jeopardizing financial stability. In the view [19] system stability is a key component of sustainability. Reliance on sound debt supports long-term financial sustainability by reducing the risk of default that can damage the economic system as a whole. Furthermore, the large size of the

company gives Islamic commercial banks an edge in terms of financial and operational resources. This allows Islamic commercial banks to more easily integrate sustainability principles into their operations, as disclosed [19] that systems with greater capacity are better able to manage uncertainty and changes in the external environment and gain the trust of stakeholders.

These results emphasize the importance of achieving an effective balance between three key aspects, namely, the environment, the economy, and financial system stability, in order to achieve optimal sustainability. In this regard, the implementation of the right strategy is the main key for Sharia commercial banks to play a significant role in supporting sustainability initiatives in Indonesia. These banks can not only contribute at the institutional level, but also play an active role in driving the achievement of sustainability goals on a national scale. This will largely depend on the integration of sharia principles that support environmentally and socially responsible business ethics, thus creating a sustainable positive impact on the country's economy and finances.

5. CONCLUSION

Based on the results of analysis and hypothesis testing in a study entitled on the influence of green finance, profitability, leverage and company size on the financial sustainability ratio in Sharia commercial banks in Indonesia for the period 2019-2023, it can be concluded as follows:

1) Green finance has no significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
2) Profitability has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
3) Leverage has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
4) The size of the company has a significant effect on the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.
5) Green finance, profitability, leverage and company size significantly affect the financial sustainability ratio of Sharia commercial banks in Indonesia for the period 2019-2023.

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