## HOW DO SUSTAINABLE GROWTH RATE AFFECT FINANCIAL PERFORMANCE OF ISLAMIC BANKING? EVIDENCE IN SOUTHEAST ASIA REGION

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#### **Abstract:**

**Background:** The complexity of banking transactions demands increased competitiveness, efficiency, and risk management. The banking industry needs help in minimizing risk and increasing revenue. ASEAN countries usually measure risk through macro risk measurement, while micro performance contributes to business continuity. Sustainable growth is an essential indicator of company and shareholder performance.

**Purpose:** This study aims to examine the elements that determine the extent of sustainable expansion and their impact on the performance of Islamic banking in Southeast Asia.

**Design/methodology/approach:** The research hypotheses are addressed through the utilization of explanatory research. A purposive sampling method was employed to select 13 Sharia commercial banks for the study, including four from Indonesia, seven from Malaysia, one from Thailand, and one from Brunei Darussalam. The collected data were analyzed using panel data regression.

**Findings/Result:** The study's findings demonstrate that both profit margins and retention levels significantly influence the sustainable growth of Islamic banking in Southeast Asia. Higher profit margins enhance the ability of Islamic banks to generate internal funds, leading to higher rates of sustainable development. Furthermore, an increase in the retained earnings ratio contributes to the bank's capital, while asset turnover does not significantly impact sustainable growth.

Conclusion: sustainable growth has a strong positive impact on financial performance, increasing revenue and lowering operating costs, improving financial performance in the region. After increasing revenue, Islamic banking can create Shariah-based products catering to the community's needs. These products must fulfill the principles of ESG (Environmental, Social, Governance) and SDGs (Sustainable Development Goals) to improve sustainability. It will enable future studies to incorporate ESG in assessing sustainable financial performance.

Originality/value (State of the art): While SGR's impact on conventional banking has been studied extensively, research focusing on its effects on Islamic banking, particularly in the Southeast Asian context, remains limited. The study aligns with growing global interest in sustainable finance and its role in long-term financial stability, an area Islamic banking inherently emphasizes through ethical investments and risk-sharing.

**Keywords**: retention rate, assets turnover, sustainable growth rate, financial performance, islamic banking

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### INTRODUCTION

The banking sector faces various risks due to the rapidly changing global financial environment, especially in Southeast Asian/ASEAN countries. The ASEAN Banking Integration Framework (ABIF) was established in 2014 to prepare market access and banking operational freedom in ASEAN member countries, aiming to create Qualified ASEAN Banks (QAB) (Isnurhadi et al. 2023). However, the integration brings new challenges and increases banking risks, such as money market issuance, capital volatility (Ha et al. 2020), and banking systematic risk (Van Anh, 2022). Despite these challenges, emerging ASEAN economies' economic performance is expected to grow at 4.7% yoy with a manageable inflation rate of 5.6%, driven by healthy domestic demand and robust consumption and investment (Asian Development Outlook, 2023). Islamic banking accounts for around 70% of global Islamic finance assets and has been a significant factor driving the industry's growth in the past decade. Countries such as Oman, Turkey, Kazakhstan, Uzbekistan, Nigeria, Uganda, and the Philippines increasingly focus on Islamic banking (State of the Global Islamic Economy, 2023).

According to the Islamic Finance Development Report 2023, Malaysia is the leading country in Southeast Asia's Islamic finance sector. They have experienced a 9% increase in assets and a remarkable 20% growth in Islamic investments. On a global scale, Indonesia ranks seventh, while the Philippines recently enacted a new Islamic banking law in 2019. The international Islamic bank assets have significantly increased, reaching \$3.24 trillion in 2022, compared to \$1.88 trillion in 2018 and \$1.31 trillion in 2012. The number of Islamic banks has also risen to 336, with conventional banks offering Islamic services increasing by an impressive 84% to 274 (Islamic Finance Development Report, 2023). Notably, countries like Indonesia, Malaysia, Saudi Arabia, and Turkey have successfully incorporated Islamic finance metrics into their national economic strategies, resulting in double-digit asset growth rates. Despite challenges, the Islamic banking sector remains resilient, contributing 72% of global Islamic finance assets. This success can be attributed to higher profit income and lower impairment charges (Wardana & Barlian, 2022). The Southeast Asian market achieved positive performance despite global geopolitical instability and inflation (Islamic Finance Development Report, 2023).

The complexity of banking transactions demands increased competitiveness, efficiency, and management. The banking industry needs help in minimizing risk and increasing revenue. ASEAN countries usually measure risk through macro risk measurement, while micro performance contributes to business continuity. Sustainable growth is an essential indicator of company and shareholder performance (Isnurhadi et al. 2023; Sutikno & Aisyah, 2022). Banking performance measures success in business management, financing, credit, and services (Sudaryono, 2017). Sustainable growth is essential for measuring performance (AS & Haryono, 2023; Susanto & Ginau, 2019b; Vasiu & Ilie, 2018). High growth does not guarantee good health, while low growth can lead to financial losses and consequences. Determining sustainable growth rates is essential for companies as a tool to measure performance and control shareholder equity (Isnurhadi et al. 2023).

Growth management is vital in the company's financial planning and performance assessment. Banking performance is a benchmark for success in business management, including funding, loans, and services. The concept of banking growth must be sustainable to become an indicator in measuring banking performance. A sustainable growth rate is an alternative for planning, evaluating, and controlling performance and the banking industry's growth. Banks with high growth do not guarantee a good level of health, and banks with low growth can have an impact on losses and financial consequences. Determining the sustainable growth rate is important for companies for two reasons: first, as a measure of company performance, and second, as a control tool for shareholders to control their equity (Isnurhadi et al. 2023).

In recent years, significant focus has been given to the sustainable growth rate (SGR) in the literature and financial management (Altahtamouni et al. 2022). Managers and executives always maximize their company's growth, considering that growth can lead to increased market share. Thus, this can maximize shareholder wealth as a financial decision-making guideline (Sudaryono, 2017). However, there is increasing concern about the disadvantages of rapid or slow growth, which can lead to bankruptcy. Arora et al. (2018) indicated an urgent need to address the financial consequences caused by rapid or slow growth by emphasizing the importance of growth management that considers the company's financial health or target capital structure.

Previous studies have shown a positive relationship between profit margin and sustainable growth rate (Altahtamouni et al. 2022); Anarfi et al. 2016); Arora et al. 2018); Mukherjee & Sen, 2017; Ramli et al. 2022), while different findings have resulted in a significant negative relationship (Nor et al. 2020). The retention rate component of the PRAT model Higgins (2018) has different research gaps, with some studies showing a positive relationship (Altahtamouni et al. 2022); Nor et al. 2020); Vasiu & Ilie, 2018), while other studies find a negative relationship (Mukherjee & Sen, 2017). The asset turnover component also has different research gaps, with some studies showing a positive relationship (Altahtamouni et al. 2022; El Madbouly, 2022; Junaidi et al. 2019); Ramli et al. 2022), while other studies find a negative relationship (Isnurhadi et al. 2023); Mukherjee & Sen, 2017; Nor et al. 2020). The last component of the PRAT model, financial leverage, has different findings from previous studies; some conclude a positive relationship (Aswad & Haryono, 2023); Isnurhadi et al. 2023); Mukherjee & Sen, 2017; Priyanto & Robiyanto, 2020) and some show negative results (Anarfi et al. 2016); Junaidi et al. 2019); Nor et al. 2020).

The sustainable growth rate (SGR) has received significant attention in the finance and management literature (Altahtamouni et al. 2022). Managers and executives frequently aim to maximize growth in exchange for increased market share and shareholder wealth. However, rapid or slow growth can lead to bankruptcy, highlighting the need for growth management that considers a firm's financial health and capital structure targets (Arora et al. 2018). Robert Higgins developed SGR in 1977, defining it as the maximum rate at which a firm can increase sales without straining its financial resources (Higgins, 2018). Managers use it for long-term financial planning and corporate growth analysis to determine the appropriate sales growth rate that aligns with the company's operational performance and financial policies (Nastiti et al. 2019).

Sustainable growth is an essential aspect of firm performance, influenced by profitability, asset efficiency, and financial leverage (Altahtamouni et al. 2022). It is a multifaceted metric that includes retention policies, net profit margins, asset turnover, and financing strategies (Lockwood & Prombutr, 2010). The PRAT model, developed by oleh Higgins (2018), measures sustainable growth by combining return on

equity and retention rate. The Du Pont model, which derives from the PRAT model, computes a company's net profit from its equity investment. It consists of three components: profit margin, total asset turnover, and equity multiplier (Altahtamouni et al. 2022). Higher profit margins increase the company's ability to generate funds internally, thus leading to sustainable growth (Sudana, 2015). Research shows that financial leverage, dividend policy, profitability, and asset efficiency significantly affect sustainable growth rates (Ramli et al. 2022; Abdul et al. 2021; Nasim & Rizki Irnama, 2015). Islamic banking in Saudi Arabia uses the PRAT model, and all its components significantly influence the sustainable growth rate (Altahtamouni et al. 2022). Sustainable Growth Rate (SGR) is an important indicator in strategic financial analysis related to internal financing and the company's longterm growth. Financial Performance is the main object of financial management and banking science. Focusing on Islamic banking adds novelty and specificity to the topic, considering that the Sharia system has unique characteristics (no interest/riba, profit sharing, etc.).

This study aims to investigate the factors that contribute to sustainable growth rates and their impact on the financial performance of Islamic banking in Southeast Asia. It builds upon the previous research by Altahtamouni et al. (2022). Still, it utilizes a distinct dataset to examine the determinants of sustainable growth rates and their influence on the financial performance of Islamic banking in the region (as depicted in Figure 1). The study aims to comprehensively analyze the data variability among Islamic commercial banks in Southeast Asia. The attractiveness of the Islamic banking market in this region is attributed to the rapid and stable growth of the Islamic finance industry. Additionally, this study will explore the relationship between sustainable growth rates and the financial performance of Islamic banks in Southeast Asia, a topic that has yet to be extensively studied. The study aims to answer the question of how strategic plans are used in the banking sector to ensure sustainability based on existing finances. Descriptive analysis will show the reasons for these factors' variation based on the data processing results and previous research. The sustainable growth level in Southeast Asia's banking sector will determine the determinants and their influence on the company's financial performance. The study is expected to describe how much Islamic banks can grow sustainably without relying on external funding. It is important because Islamic banks have limitations in the use of interest-based instruments. This study is expected to add to the scientific literature that connects the theory of corporate growth (SGR) with the specific characteristics of the Islamic banking industry, which is still relatively limited.

### **METHODS**

We conducted this research by observing and sampling several Islamic commercial banks operating in the Southeast Asian Region, specifically 11 members of the Association of Southeast Asian Nations (ASEAN) countries. We selected the research location by using data from the official websites of each Islamic commercial bank in the Southeast Asian Region, as well as the annual report data of each bank for the period 2019-2023. The total population consists of 47 Islamic commercial banks from 11 countries. The purposive sampling method is the sampling technique employed. The Asian Banker (https://theasianbanker.com) has published the Annual Report 2019-2023, which includes the top 100 Islamic Commercial Banks with the most significant total assets. The sample of 13 Islamic commercial banks includes four from Indonesia (Bank Muamalat, Bank BTPN Syariah, Bank Panin Dubai Syariah, Bank Mega Syariah), seven from Malaysia (Maybank Islamic, CIMB Islamic Bank Berhad, RHB Islamic Bank Berhad, Bank Islam Malaysia Berhad, Public Islamic Bank Berhad, AmBank Islamic Berhad, HongLeong Islamic Bank), one from Thailand (Islamic Bank of Thailand), and one from Brunei Darussalam (Bank Islam Brunei Darussalam Berhad).

Explanatory research examines the determinants of the Sustainable Growth Rate (SGR) and its impact on Islamic banking's financial sustainability in the Southeast Asian Region. Explanatory research is beneficial for testing and explaining causal relationships between variables, testing hypotheses, and strengthening or rejecting existing theories. This technique is widely used in quantitative research, especially those that aim to understand "why" and "how" a phenomenon occurs scientifically and systematically. Data sources were collected through literature studies obtained from the official websites of the World Governance Indicator, The Asian Bank, and International Finance and Service Banking, as well as the financial reports or annual reports of each bank used as samples in the study.

This study uses independent variables and dependent variables. Independent/free variables influence or cause changes or the emergence of dependent variables. Meanwhile, dependent/bound variables are influenced or caused by independent variables. This study's dependent variable is sustainability growth rate (SGR) and financial performance. Moreover, the independent variables are Profit Margin, Retention Rate, Assets Turnover, and Financial Leverage. Furthermore, Table 1 describe the operational definition of variables.

To evaluate the value of the linear regression model, we utilize the panel data model, which combines time series and cross-sectional data (Ghozali, 2021). The panel data estimation involves three equation models: the standard effect model (CEM), the fixed effect model (FEM), and the random effect model (REM). To determine the goodness of fit of the estimation model, we employ Hosmer and Lameshow's test, which examines whether the empirical data aligns well with the model. The model is a good fit when there is no disparity between it and the data. The decision-making process is based on the p-value. If the p-value is less than the significance level  $(\alpha)$ , we reject the null hypothesis, indicating a significant difference between the model and the observed values. It suggests poor goodness of fit, as the model fails to predict the observed values accurately. Conversely, if we fail to reject the null hypothesis during the model fit test, it confirms the test's suitability and indicates that the model fits well (Ghozali, 2021). Multiple linear regression analysis examines the impact and direction of the independent variables on the dependent variable (Aisyah, 2015).

#### Regression equation 1:

Sustainable Grow Rate =  $\beta 0$  +  $\beta 1$ profit margin +  $\beta 2$  retention rate +  $\beta 3$  assets turnover +  $\beta 4$  financial leverage +  $\epsilon$ 

### Regression equation 2:

Financial Performance =  $\beta 0 + \beta 1$  Sustainable Grow Rate +  $\epsilon$ 

### **Profit Margin and Sustainable Growth Rate**

Divide the profit by the total operating income to calculate the profit margin. The net profit margin, extensively researched, is significant. The company should use the profit from revenue to fund additional investments, such as expanding the number of retail outlets, offering a more comprehensive range of

products, and upgrading infrastructure to create more spacious and attractive premises. These measures will attract more customers, increase sales volume, and boost the company's profitability and growth (El Madbouly, 2022). Profitability will drive the company's growth, as a rise in corporate profits will enhance the company's capacity to generate additional funds internally. Therefore, this will increase the sustainable growth rate (Aisyah, 2015). The lower the percentage of net income paid as dividends to shareholders, the higher the retained earnings ratio, so the retention rate also increases. Adding internally generated equity will increase the sustainable growth rate (Patel et al. 2020). It implies that an increase in the company's internal capital will likewise boost the sustainable growth rate (Sudana, 2015), leading to the following hypothesis: Hypothesis 1: Profit margin has a significant positive effect on the sustainable growth rate

## **Retention Rate and Sustainable Growth Rate**

The retention rate, defined as the ratio of retained earnings used to measure a company's financial performance, has direct implications for sustainable growth rates. Some studies use the retention rate as a variable that influences the sustainable growth rate, and they calculate the sustainable growth rate using part of the Higgins ratio. Increasing the retention rate can boost sustainable growth by allocating higher retained earnings to business development, increasing net worth, and providing the company with more resources for operations and investment (Sudana, 2015). The lower the percentage of net income paid as dividends to shareholders, the higher the retained earnings ratio, so the retention rate also increases. Adding internally generated equity will increase the sustainable growth rate (Patel et al. 2020). This means that if the capital originating from within the company is increased, the sustainable growth rate will also increase (Sudana, 2015), leading to the following hypothesis: Hypothesis 2: Retention rate has a significant positive effect on the sustainable growth rate

Table 1. Measurement of Variable

Component	Variable	Description
Dependent v	ariable	
FP	Financial Performance (Sutikno & Aisyah, 2022)	Financial performance will be proxied by Return on Assets (ROA). ROA is a ratio used to measure the ability of a company's assets to generate net income.
		ROA= (Net Profit)/(Total Assets) x 100
SGR	Sustainable Growth Rate (Sudana, 2015)	The sustainable growth rate is the maximum growth the company can achieve without funding its capital from outside the company while maintaining the debt-to-equity ratio.
		$(ROE \times b)/((1-ROE) \times b)$
		ROE = return on equity
		b = retained earnings ratio / debt to equity ratio
Independent	t variable	
P	Profit Margin (Altahtamouni et al., 2022)	Profit margin is the ratio of net profit the company earns on revenue/sales
	,	NPM= (Net Income (EAT) )/Sales
R	Retention Rate (Altahtamouni et al., 2022)	Retention rate is the ratio of profit retained or reinvested into the company
	,	R=1-divident payout ratio
A	Assets Turnover (Altahtamouni et al., 2022)	Assets turnover is a ratio that shows the company's ability to use its resources to generate revenue/sales.
		A= Sales/(Total Assets)
T	Financial Leverage (Anarfi et al., 2016)	Financial leverage is the percentage of total assets financed or owned by shareholders.
		T= (Total Assets)/Equity

### **Assets Turnover and Sustainable Growth Rate**

Asset turnover is a ratio that measures the effectiveness of using all assets to generate sales. The greater this ratio, the more influential the management of all the assets owned by the company will be (Sudana, 2015). The higher the asset turnover, the greater the company can generate sales from every rupiah of its assets. It implies that the company's requirement to add new assets will decrease due to increased sales, promoting sustainable growth. A significant and positive relationship exists between asset efficiency management and sustainable growth rates (Mukherjee & Sen, 2017; Rahim, 2017). The research of Almaqtari et al. (2019) found a significant positive relationship between asset management ratios and sustainable growth rates, leading to the following hypothesis: Hypothesis 3: Assets turnover has a significant positive effect on the sustainable growth rate

#### Financial Leverage and Sustainable Growth Rate

Financial leverage is a ratio that measures the proportion of funds sourced from debt to finance company assets (Sudana, 2015). The higher this ratio, the more it indicates that the portion of debt used to finance asset investment is also increasing. When financial leverage increases, the ratio of debt to capital is higher. Because the company adds funding through debt, the sustainable growth rate can be price-to-earnings ratio, total asset turnover, and financial leverage influence the sustainable growth rate (Bunea et al. 2019; Kharatyan et al. 2017). In contrast to the research of Anarfi et al. (2016), which states a negative relationship between financial leverage and sustainable growth rate, Vintila & Duca (2012), who focus on examining the

relationship between financial leverage and sustainable growth rate, find that increasing the financial leverage ratio means higher company profitability, which will improve company performance, leading to the following hypothesis: Hypothesis 4: Financial leverage has a significant positive effect on the sustainable growth rate

#### Sustainable Growth Rate and Financial Performance

A sustainable growth rate is the company's maximum growth without funding its capital from outside the company but maintaining the debt-to-equity ratio (Sudana, 2015). Return on Assets is a profitability ratio that measures the company's financial performance and how much it can generate profits by utilizing its total assets (Lavidya & Zulkifli, 2023). Effective utilization of company assets will reduce the costs incurred by the company, resulting in savings and enough money for the company to operate (Sudana, 2015). The company's profitability can increase the sustainable growth rate because increasing company profits will increase the company's ability to generate more funds internally (increase the sustainable growth rate). Companies can increase profitability by increasing labor productivity, which in turn can increase their sales (Higgins, 2018; Sudana, 2015), leading to the following hypothesis: Hypothesis 5: Sustainable Growth Rate (SGR) has a significant positive effect on financial performance.

Figure 1 shows the influence of independent variables (X) on dependent variables (Y), namely the influence of financial ratios consisting of profit margin (X1), retention rate (X2), assets turnover (X3), and financial leverage (X4) on sustainable growth rate (Y1) and the impact of variable Y1 on financial performance (Y2).

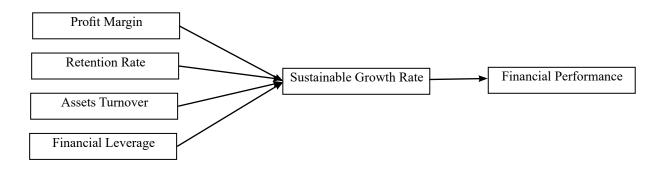


Figure 1. Conceptual framework

#### **RESULTS**

### **Descriptive Statistics**

The research object used in the study is Islamic commercial banks registered and supervised by official institutions regulated by the local government in the Southeast Asia region. Islamic banking in the Southeast Asia region was chosen because it represents 25.5% of the total assets of Islamic banking in the world in 2023 (Asian Development Outlook, 2023). 13 samples were selected and filtered using the purposive sampling method from 47 populations based on the criteria they meet, such as government supervision, total assets, and the annual reports they publish. The results of the descriptive analysis of the research will be displayed in Table 2.

## **Selection of Panel Data Regression Model**

In research using panel data regression, a series of tests can be carried out to determine the regression estimation model, including the Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test. Based on Table 3, the two regression models all show that the cross-section Chi-square probability value is  $0.0000 \le 0.05$ , which means that H0 is rejected and H1 is accepted, so the selected model is the Fixed Effect Model (FEM).

Based on Table 4, the first regression model shows that the cross-section random probability value is  $0.0499 \le 0.05$ , which means that H0 is rejected and H1 is accepted so that the selected model remains a Fixed Effect Model (FEM). Meanwhile, the second regression model shows that the cross-section random probability value is  $0.4338 \ge 0.05$ , which means that H1 is not supported and H0 is accepted so that the selected model is the Random Effect Model (REM) and continued with the Lagrange Multiplier (LM) Test on the second regression model only.

The Lagrange multiplier test aims to determine the best regression model using the Random Effect Model (REM) or Common Effect Model (CEM) approach. Based on Table 5, the second regression model shows that the Breusch-Pagan cross-section value is 0.0000  $\leq$  0.05, which means that H0 is not supported and H1 is accepted so that the selected model is the Random Effect Model (FEM). The Panel data regression model estimation test is known in the first regression model, namely to determine the effect of profit margin (X1), retention rate (X2), assets turnover (X3), and financial leverage (X4) on sustainable growth rate (Y1), the Fixed Effect Model (FEM) is used. The second regression model, namely to determine the effect of sustainable growth rate (Y1) on financial performance using the Random Effect Model (REM) model.

Table 2. Descriptive analysis results

Variable	Financial Performance (Y2)	Sustainable Growth Rate (Y1)	Profit Margin (X1)	Retention Rate (X2)	Assets Turnover (X3)	Financial Leverage (X4)
Mean	2.246769	0.123354	0.408892	0.681262	473.5846	11.57815
Median	1.350000	0.111000	0.420000	0.700000	442.0000	11.84000
Maximum	13.58000	0.755000	0.979000	1.000000	2317.000	26.03000
Minimum	-6.72000	-0.241000	0.016000	0.088000	85.00000	1.570000
Std. Dev.	2.975407	0.138343	0.262082	0.284563	361.8973	5.470438
Skewness	1.5289970	1.916310	0.267184	-0.414792	2.910685	0.176830
Kurtosis	7.805019	10.41999	2.236852	1.997898	14.52159	2.810703

Table 3. Chow Test Results

Model 1:				
Effect Test	Statistic	d.f.	Prob.	
Cross-section F	13.168355	(12,48)	0.0000	
Cross-section Chi-square	94.690279	12	0.0000	
Model 2:				
Effect Test	Statistic	d.f.	Prob.	
Cross-section F	41.281617	(12,51)	0.0000	
Cross-section Chi-square	154.146718	12	0.0000	

### **Panel Data Regression Test**

The regression model selection results that selected the Fixed Effect Model (FEM) for the first regression model, which aims to assess the impact of profit margin (X1), retention rate (X2), asset turnover (X3), and financial leverage (X4) on the sustainable growth rate (Y1). The second regression model, which aims to assess the impact of the sustainable growth rate (Y1) on return on assets (ROA), employs the Random Effect Model (REM). Table 6 displays the selected first-panel data regression model. Table 7 displays the selected regression model for the second equation.

The first regression model in the study is Table 5: SGR = 0.072253 + 0.322702X1 + 0.22528X2 + 7.63486X3-0.023362X4 Table 7, if formulated into the second regression model in the study, is as follows:

Financial Performance= 0.520407+13.99521SGR

The R square value of 0.828580 in Table 8 indicates that factors such as profit margin, retention rate, asset turnover, and financial leverage significantly influence 82.85% of the sustainable growth rate. Meanwhile, factors other than profit margin, retention rate, asset turnover, and financial leverage' determine the remaining 17.15%. The second regression model shows that the sustainable growth rate has an R-squared value of 0.644988 on the financial performance measured by return on assets. It means that the sustainable growth rate can have a significant effect, as shown by the fact that it can change the return on assets by 64.49%.

Table 4. Hausman Test Results

Model 1:					
Correlated Random Effects – F Equation: UJI Test cross-section random effects					
Test Summary	Chi-sq. Statistic	Chi-sq. d.f.	Prob.		
Cross-section random	9.490341	4	0.0499		
Model 2:					
Correlated Random Effects – Hausman Test Equation: UJI Test cross-section random effects					
Test Sunmary	Chi-sq. Statistic	Chi-sq. d.f.	Prob.		
Cross-section random	0.612695	1	0.4338		

Tabel 5. Hasil Uji Langrange Multiplier (LM)

Model 2:					
	Cross-section	Chi-sq. d.f.	Both		
Breusch-Pagan	9.808.293	2.158.202	1.002.411		
	(0.0000)	(0.1418)	(0.000)		

Table 6. First selected regression model: fixed effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.072253	0.147815	0.488808	0.6272
X1	0.322702	0.074350	4.340300	0.0001
X2	0.225286	0.071910	3.132913	0.0029
X3	7.63E-05	4.69E-05	1.626414	0.1104
X4	-0.023362	0.010700	-2.183334	0.0339

This study has five hypotheses tested based on panel data regression analysis. Of the five hypotheses, three are accepted, and two are rejected. Table 9 shows the results of hypothesis testing.

# The Effect of Profit Margins on Sustainable Growth Rates

The findings demonstrate that the profitability of a company has a favorable impact on its sales growth rate (SGR) (Sudana, 2015). Profit margin, which gauges the company's proficiency in converting sales into net income, serves as a metric that encompasses the effectiveness of various departments within the organization, such as production, personnel, marketing, and finance. Higher profit margins indicate better efficiency and increased internal funds, thus leading to sustainable growth. Net profit margin, the portion of operating income that becomes net profit minus operating expenses and other costs, shows the bank's ability to manage costs and increase revenue. Highprofit margins can indicate good operational efficiency and increased profits, while low margins can indicate high costs or low revenues (El Madbouly, 2022). Islamic banking can improve its financial performance by generating more profit from the same revenue,

thus allowing for further investment in the business. In addition, an increase in the net profit margin ratio indicates an effective Islamic banking strategy in managing risk, investing in research and development, and dealing with competitors (Nugroho, 2020)many previous studies had highlighted the variability of SGR calculation. The research's first objective focused on two methods of SGR calculation and figured out the determinant factors (internal and external. A high net profit margin is realized. The company uses revenue to support other investments, like more outlets, a wider range of products, and improved infrastructure to make it more spacious and appealing. This would in turn attract more customers, thus enhancing sales volume and, subsequently, the profitability and growth of the firm (El Madbouly, 2022). Profitability being the driver of the firm's growth, an upsurge in corporate profits will increase the capacity of the company to earn more funds internally. This will, in turn, enhance the sustainable growth rate (Aisyah, 2015). A lower proportion of net income that is paid out as dividends to shareholders will result in a higher retention of earnings ratio and therefore a higher retention ratio. The infusion of internally generated equity will set up the sustainable growth rate (Patel et al. 2020).

Table 7. Second selected regression model: random effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.520407	0.743266	0.700162	0.4864
Y1	13.99521	1.312181	10.66561	0.0000

Table 8. Determination coefficient test results

Regression equation 1	0.828580
Regression equation 2	0.644988

Table 9. Hypothesis testing results

Variable Relationship	Нур	Hypothesis Result		
Profit margin → Sustainable Growth Rate	Accepted	Significant positive effect		
Retention rate → Sustainable Growth Rate	Accepted	Significant positive effect		
Assets turnover → sustainable growth rate	Rejected	No significant effect		
Financial leverage → sustainable growth rate	Rejected	Significant negative effect		
Sustainable growth rate → financial performance	Accepted	Significant positive effect		

# The Effect of Retention Rate on Sustainable Growth Rate

The results prove that the retention rate has a positive effect on SGR. The retention rate is essential in determining a company's sustainable growth. It compares banking management's retained profits to the net profit earned (Sudana, 2015). The decision to distribute net income influences the retained earnings ratio, a portion of a company's net profit not disclosed to shareholders through dividends. The company can use the retained earnings for various purposes like preventive funds, capital reserves, or investment needs (Sahin & Ergun, 2018). Results showed that a higher retained earnings ratio indicates more internal funds for banking management, allowing sustainable growth without depleting all financial resources. In addition, an increase in retained earnings can increase the company's net worth, allowing for greater net asset allocation (Isnurhadi et al. 2023). However, a higher retained earnings ratio may pose risks for Islamic banking, such as interest and bankruptcy. In banking financial analysis, it is essential to consider both retained earnings and the dividend payout ratio and profit ratio distributed to shareholders simultaneously and in the context of the company's economic situation and conditions. Aggressive growth companies retain significant earnings to fund internal expansion, thus having a high SGR. Dividend-focused companies tend to have a low Retention Rate. Therefore, their SGR is also lower unless they have a very high ROE. Retention Rate is a key component in determining how quickly a company can grow internally and sustainably. The retention rate will increase the SGR, provided that the Return on Equity (ROE) remains positive and stable. However, retention policies must also be adjusted to Working Capital Needs, Investment Opportunities, and Shareholder Expectations.

# The Effect of Asset Turnover on Sustainable Growth Rates

The findings demonstrate that the impact of asset turnover on SGR is negligible. Asset turnover, a metric that gauges a company's effectiveness in utilizing its activities to generate sales, has traditionally been associated with improved asset management, leading to reduced reliance on new activities and fostering sustainable growth (Sudana, 2015). However, the results indicate that asset turnover has minimal to no discernible influence on sustainable growth rates,

operational efficiency, or insignificant costs. The banking industry prioritizes capital-intensive ratios to enhance operational efficiency and minimize costs. Islamic banking faces operational risks such as longterm expenses and non-performing loans, which can impact net income even though sales are increasing (Indarti et al. 2021). When asset turnover does not affect the sustainable growth rate, the company cannot improve the efficiency of using its assets to increase sales. It can result in inefficient asset utilization, hindering the expected growth rate without changing its capital structure (Priyanto & Robiyanto, 2020). Islamic banking with a high asset turnover ratio has better financial performance than banks with a low asset turnover ratio. The ratio can also help banks identify potential issues from inefficient asset use, enabling them to implement corrective measures to enhance efficiency. Ratio should not be the priority in measuring financial performance in Islamic banking, as other factors, such as credit risk, operational costs, and regulatory changes, also affect it (Budianto & Dewi, 2023). Islamic banks operate with Sharia principles that emphasize financing by Sharia rules and prudent fund management. Therefore, asset use efficiency (as measured by asset turnover) is not the main factor in determining a bank's ability to grow sustainably. Islamic banks prioritize profitability and profit retention policies to support their internal growth.

# The Effect of Financial Leverage on Sustainable Growth Rates

The results prove that financial leverage has a significant negative effect on SGR. The ratio of financial leverage dictates a company's capital structure policy, dictating the funds required for increased investment in fixed assets (Sudana, 2015). A high debt-to-capital ratio increases financial leverage, which can hurt sustainable growth. Research results show that a high debt-tocapital ratio increases financial leverage but also hurts sustainable growth (Indarti et al. 2021). For example, when Islamic banking adds debt to its capital structure, it increases financial leverage and risks like interest expense. It reduces the company's ability to increase revenue and achieve sustainable growth rates. High financial risk can also hinder the effectiveness of debt and internal resource management, which is critical for sustainable growth. Therefore, increased financial leverage can reduce the company's ability to experience sustainable growth rates (Indarti et al. 2021). Islamic banks prioritize the principle of prudence in managing capital and financing by sharia so that dependence on high leverage does not become the primary strategy for growth. High leverage can increase the risk of default and reduce financial stability, contrary to the principle of desire in Islamic banking.

# The Effect of Sustainable Growth Rates on Financial Performance

The findings demonstrate that the financial performance is greatly influenced by the sustainable growth rate (SGR). The SGR represents the highest level of growth that a company can attain without requiring external funding or altering the debtto-capital ratio (Sudana, 2015). This significantly impacts financial performance, especially in Islamic banking in Southeast Asia. High SGR can increase revenue, reduce operating costs, improve business sustainability, and reduce the risk of losing customers (El Madbouly, 2022). However, a high SGR can also reduce financial performance because companies focusing less on increasing revenue at the expense of profitability may experience financial problems. In banking finance, too much focus on increasing the volume of loans or investments can increase risk and reduce profitability (Budianto & Dewi, 2023). The relationship between SGR and financial performance varies depending on economic and industry conditions. Achieving a sustainable growth rate is a priority for company managers, but achieving it is challenging due to intense competition and a rapidly changing economic and political environment (Amouzesh et al. 2015). Islamic banking can boost its SGR by investing more equity capital or increasing financial leverage. However, failure to sustain this growth may lead to financial problems such as financial losses, high costs, increased debt, bankruptcy, and decreased market value (Fonseka et al. 2012) if the Higgins model is used to compute SGR, it would give higher SGR for more profitable firms than Van Hornes. A firm with higher leverage is given higher SGR in Van Hornes than Higgins. Variations of liquidity, debt maturity and financial distress are trivial in economic sense. Finally, we find that the both Higgins and Van Hornes models result in approximately same (less than 4%. Achieving a sustainable growth rate can help prevent excessive leverage and avoid financial difficulties that may threaten the viability of Islamic banking. A good Sustainable Growth Rate is an essential signal for a company's health and financial performance. When

SGR is maintained at an optimal level and in line with business strategy, Financial performance tends to increase, Capital structure remains healthy, Financial risk is lower, and the company's reputation in the eyes of investors becomes stronger. However, companies must also actively consider whether the actual growth rate is by sustainable capacity (SGR) to avoid financial failure.

## **Managerial Implications**

The results of the study show that the sustainable growth rate (SGR) has a significant influence on the financial performance of Islamic banks. Therefore, Islamic bank management must adjust expansion and growth strategies to align with internal capacity and financing capabilities. To maintain a healthy SGR, banks need to optimize operational efficiency. It can be done through digitalization services, reducing overhead costs, and increasing human resource productivity. The results of this study encourage bank management to conduct financial planning based on data and sustainable growth indicators. It will increase the accuracy of profit projections, financing, and capital needs. Given the research conducted in Southeast Asia, Islamic bank management in each country can compare their positions and growth strategies with those of banks in neighboring countries. This benchmarking can be the basis for adapting best practices.

## CONCLUSION AND RECOMMENDATIONS

#### **Conclusions**

The study revealed that profit margins and retention rates significantly impact the sustainable growth rate of Islamic banking in the Southeast Asian region. Higher profit margins increase Islamic banks' ability to generate internal funds, leading to higher sustainable growth rates. The retained earnings ratio increases the firm's equity capital, while asset turnover does not significantly affect the sustainable growth rate. Financial leverage has a negative impact on sustainable growth rates, increasing risks such as interest expenses and reducing the sustainability of Islamic banking. However, sustainable growth has a strong positive impact on financial performance, increasing revenue and lowering operating costs, improving financial performance in the region.

### Recommendations

After increasing revenue, Islamic banking can create Shariah-based products catering to the community's needs. These products must fulfill the principles of ESG (Environmental, Social, Governance) and SDGs (Sustainable Development Goals) to improve sustainability. It will enable future studies to incorporate ESG in assessing sustainable financial performance. ESG and SDGs are a framework for social or environmental responsibility and a strategy to strengthen the sustainability of Islamic banks' financial performance. The integration of these principles with Islamic values makes Islamic banks strategically positioned to build an inclusive, fair, and sustainable economy.

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