

COMPARISON OF FINANCING GROWTH IN ISLAMIC COMMERCIAL BANKS BASED ON ITS USE

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Abstract

This study aims to analyze differences in financing growth based on its type of use working capital, investment, and consumption at Islamic commercial banks in Indonesia during the 2021-2024 period. This research addresses the limitations of previous studies, which generally focused on aggregate analysis and failed to compare growth dynamics across financing types simultaneously. The study used a quantitative approach with monthly data (n = 48) analyzed using Repeated Measures ANOVA and Bonferroni's follow-up test. The results showed a significant difference in financing growth, where working capital financing differed significantly compared to investment and consumption financing, while both were not significantly different. These findings indicate that working capital financing is more sensitive to economic conditions, while investment and consumption financing tend to be stable. This research contributes by emphasizing the role of financing growth as a strategic signal from a signaling theory perspective and provides implications for strengthening the intermediary function of Islamic banking.

Keywords: Islamic Commercial Banks, Financing Growth, Signaling Theory Perspective, Repeated Measures ANOVA

1. Introduction

Islamic banking plays a strategic role in supporting the transformation of the national economy through increased productivity, value added creation, and the expansion of inclusive and sustainable economic activity. In Indonesia, the development of Islamic banking is reflected not only in the growth of assets and the number of institutions, but also in the strengthening of its financial intermediation function based on Sharia principles. In the context of national economic development, this intermediation function is crucial because it determines the extent to which Islamic banking is able to channel funds to productive sectors and encourage equitable economic growth.

One fundamental characteristic that distinguishes Islamic banking from conventional banking is the application of the profit-sharing principle as a substitute for the interest system. From an Islamic economic perspective, bank interest is categorized as usury, which is strictly prohibited due to its potential to cause injustice, unequal income distribution, and distortion of economic welfare (Anjum, 2022). Therefore, Islamic banks exist not only as an alternative financial system but also as a normative and practical solution for building a fair, partnership based financial system that is oriented toward real sector sustainability (Tok & Yesuf, 2022).

As a financial intermediary institution, Islamic Commercial Banks (BUS) primarily collect public funds and channel them back into financing to support economic activity. The existence of BUS is expected to bridge the funding needs of various levels of society,

especially sectors that are relatively underserved by conventional banking (Amin, 2023). Within the sharia framework, financing is defined as the provision of funds based on an agreement between the bank and the customer that requires repayment within a certain period with a return in accordance with sharia principles (Mohd Noor et al., 2019). This financing scheme is a key instrument in encouraging the growth of the real sector while maintaining the alignment of financial activities with sharia values (Badeeu & Muneeza, 2023).

Financing distribution at Islamic Commercial Banks is classified based on its use, namely working capital financing, investment financing, and consumption financing (Kayani, 2023). Working capital financing plays a crucial role in supporting the sustainability of business operations, particularly Micro, Small, and Medium Enterprises (MSMEs), which are the backbone of the national economy. Investment financing is directed at the acquisition of productive assets, business expansion, and increasing production capacity, while consumption financing is aimed at meeting the needs of individuals and households, indirectly driving aggregate demand. These three types of financing reflect the broad role of Islamic banking in supporting economic activity, both in the productive and consumer sectors (Nastiti & Kasri, 2019).

From a signaling theory perspective, information conveyed by a company to the public reflects signals about the company's internal conditions, prospects, and performance quality (Digdowiseiso et al., 2024). In the context of Islamic banking, financing growth based on its type of use can be viewed as a strategic signal sent by Islamic Commercial Banks to customers, investors, regulators, and the public. Increased working capital and investment financing provides a positive signal regarding the bank's orientation toward strengthening the productive sector (Laghari & Chengang, 2019), while the dominance of consumer financing reflects a response to market demand and economic stability. Thus, the dynamics of financing growth are not only operational but also have strategic significance that influences market perception (Adi, 2023).

Empirically, the development of financing at Islamic Commercial Banks during the 2021-2024 period shows different growth patterns across different types of use. Based on Islamic Banking Statistics data, consumer financing tends to experience relatively stable and consistent growth, while investment financing shows a more accelerated upward trend in line with the improving post-pandemic business climate. Working capital financing, on the other hand, tends to fluctuate, reflecting the dynamics of business liquidity needs and banking responses to financing risks. This development pattern is shown in Figure 1.

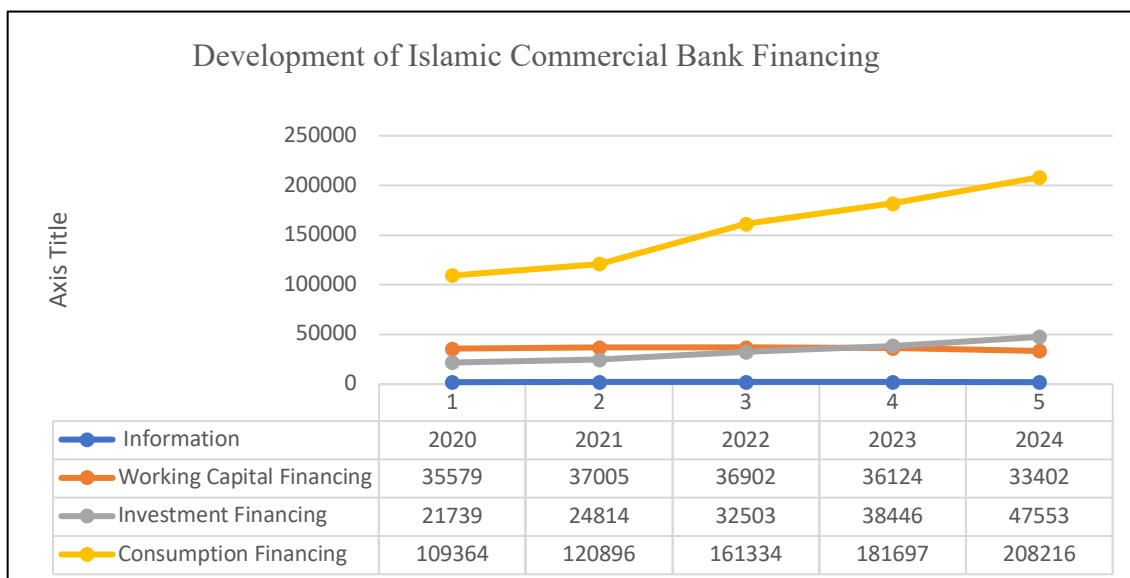


Figure 1. Development of Islamic Commercial Bank Financing 2020–2024
 Source: Islamic Banking Statistics

This pattern indicates that consumer financing remains a dominant component in the financing portfolio of Islamic commercial banks due to its contribution to demand stability and the sustainability of community economic activity. Meanwhile, the increase in investment financing indicates a positive signal for Islamic banking's orientation towards supporting the productive sector and business expansion. However, the relatively rapid financing growth also presents serious challenges, particularly in maintaining financing quality. Financing expansion that is not balanced with adequate risk management and feasibility analysis has the potential to increase the risk of non performing financing (NPF). Therefore, analyzing financing growth patterns based on their use is crucial to ensure that financing expansion is prudent, sustainable, and provides optimal economic impact.

In addition to internal banking factors, the development of Islamic financing is also influenced by the level of public Islamic financial literacy and inclusion, as well as support from government and regulatory policies. During the 2021-2024 period, regulatory policies encouraged strengthening the role of Islamic banking in supporting MSMEs, expanding financial inclusion, and improving financial system stability (Saifurrahman & Kassim, 2024). This period reflects the post pandemic recovery phase, digital transformation, and industry consolidation, which have the potential to influence the direction and structure of financing.

Several previous studies have shown mixed results regarding the role of financing based on its type of use. (Magazzino & Santeramo, 2024) found that productive financing significantly contributes to economic growth, while Al-kayed & Aliani (2020) showed that consumer financing tends to dominate Islamic banking financing portfolios. On the other hand, Arshed et al., (2020) highlighted that differences in financing characteristics have implications for variations in bank risk and financial stability. These differing findings indicate that the relationship between financing type and growth dynamics remains inconsistent, requiring further testing in a more contemporary context.

However, most previous research has focused on aggregate analysis or the relationship between financing and performance and risk, and has not specifically examined differences in financing growth dynamics based on its type of use within a

single, integrated analytical framework (Battisti et al., 2021). Furthermore, the use of a comparative approach based on repeated measures to compare financing growth within the same observation unit is still relatively limited in the Islamic banking literature. This study offers a novel approach by integrating a signaling theory perspective in analyzing financing growth as a strategic signal in Islamic banking, focusing on the post pandemic recovery period of 2021-2024, marked by changes in financing structure and industrial policy. Thus, this study not only provides a more robust comparative analysis across financing types but also enriches the literature on the dynamics of Islamic banking intermediation.

Based on the above description, this study aims to analyze and compare the growth of financing at Islamic commercial banks based on its type of use, namely working capital, investment, and consumption financing, during the period 2021-2024. The results are expected to provide empirical contributions to strengthening financing policies, enhancing the intermediation function, and developing sustainable Islamic banking.

2. Theoretical Background

2.1 Signaling Theory in Islamic Banking

Signaling theory explains that decisions and information a company conveys to the public signal its internal conditions, prospects, and performance quality (Battisti et al., 2021). In the context of Islamic banking, financing disbursement policies can be viewed as a form of strategic signaling that reflects risk preferences, financing sector orientation, and expectations regarding economic conditions. However, most previous research has used signaling theory to a limited extent, primarily as a conceptual foundation without explicitly linking it to measurable operational indicators (Shahid et al., 2024). However, financing growth based on its use working capital, investment, and consumption could serve as a more concrete empirical indicator for capturing strategic signals sent by Islamic banks (Guizani & Ajmi, 2022).

In this case, the increase in productive financing, such as working capital and investment, can be interpreted as a signal of bank confidence in the prospects of the real sector, while the dominance of consumer financing more reflects a strategy of income stabilization and a response to market demand (Arhinful et al., 2025). Therefore, analyzing differences in financing growth is not only operationally relevant but also crucial for understanding how Islamic banks shape market perceptions through their financing policies (Alhammadi et al., 2022).

2.2 Islamic General Bank Financing

Financing is the primary function of Islamic Commercial Banks as intermediary institutions that channel funds to the productive and consumer sectors of the economy based on sharia principles. Unlike conventional credit systems, sharia financing is based on contracts free from usury, gharar, and maisir, and emphasizes the principles of justice and partnership (Shah et al., 2024). However, in practice, the financing orientation of Islamic commercial banks is not always fully aligned with the ideal goal of strengthening the real sector. Several studies show that consumer financing still dominates Islamic banks' portfolios, indicating a trade off between socio economic objectives and profitability and risk considerations. This situation demonstrates that the intermediary function of Islamic banking still faces challenges in optimizing its role as a driver of the productive sector (Susilawati & Iskandar, 2025).

2.3 Types of Islamic Commercial Bank Financing and Their Implications

Financing disbursement by Islamic Commercial Banks is classified into working capital, investment, and consumption financing (Kayani, 2023). Each type of financing has different characteristics in terms of objectives, timeframes, and risk levels, which ultimately influence its growth pattern. Working capital financing is short term and heavily influenced by liquidity dynamics and real sector operational activity, making it more volatile (Reyad et al., 2022). Conversely, investment financing has a long-term horizon and is closely linked to expectations of economic growth, making it more sensitive to macroeconomic uncertainty. Meanwhile, consumer financing is relatively stable due to its influence on consumer consumption patterns, although it has the potential to increase risk if not balanced with prudent financing management (Machireddy, 2023). These differences in characteristics indicate that each type of financing not only has a different economic function, but also produces different growth dynamics, which is important to analyze comparatively.

2.4 Gap Research and Hypothesis Development

Previous research has shown inconsistent results regarding the role of financing based on its type of use. Some studies emphasize that productive financing, particularly working capital and investment, contributes significantly to real sector growth and economic stability. However, other research has found that consumer financing is more dominant in Islamic banking practices, particularly in maintaining bank revenue stability.

These inconsistencies in findings indicate that the dynamics of financing growth are not yet fully understood comprehensively. Furthermore, most previous research has focused on analyzing the relationship between financing and performance or risk in aggregate (Naomi, 2023), thus failing to capture differences in growth across financing types within a single, integrated analytical framework (Oyeyipo, Ifeoluwa, 2023). Furthermore, previous research has been limited by the observation period used, which does not reflect post pandemic conditions, even though the economic recovery period is characterized by changes in financing strategies, increased prudence, and transformation of the Islamic banking industry.

Based on these limitations, this study develops a comparative approach using repeated measures to analyze differences in financing growth within the same observation unit. This approach allows for a more robust analysis in identifying variations in financing dynamics across types of use. Furthermore, the integration of signaling theory into the analysis provides a new perspective on understanding financing growth as a strategic signal in Islamic banking.

Thus, the research hypothesis is formulated as follows:

H1: There is a significant difference in the growth of Islamic Commercial Bank financing based on the type of use (working capital financing, investment, and consumption).

2.5 Conceptual Research Model

Based on the theoretical framework and hypotheses that have been developed, the conceptual model of this research is presented in Figure 2.

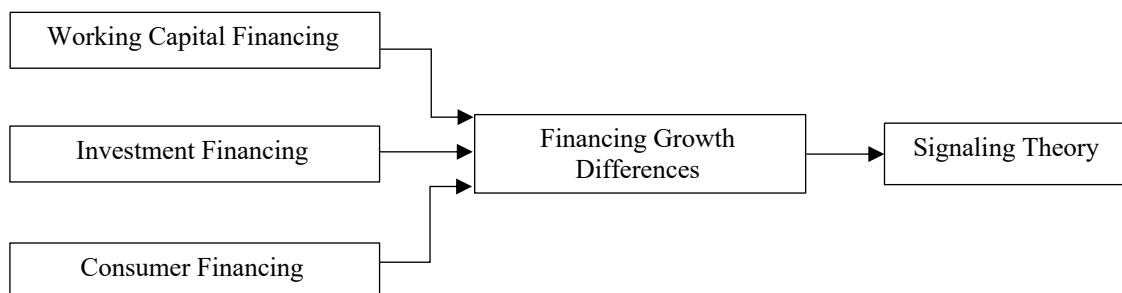


Figure 2. Conceptual Research Model

The conceptual model in this study is based on signaling theory, which explains that financing policies implemented by Islamic commercial banks are strategic signals reflecting the bank's internal conditions and policy direction. In this context, the type of financing consisting of working capital, investment, and consumption is viewed as the primary variable influencing the dynamics of financing growth. Each type of financing has distinct characteristics in terms of intended use, time horizon, and risk level, thus resulting in different growth patterns. These differences in growth are then interpreted as signals reflecting the financing orientation of Islamic Commercial Banks toward both productive and consumer sectors, as well as strategies for maintaining a balance between expansion and risk management. Thus, the conceptual model of this research places the type of financing as a factor that influences financing growth, which is then interpreted as a strategic signal from the perspective of signaling theory.

3. Methods

This study uses a quantitative approach, focusing on analyzing the growth of Islamic Commercial Bank financing based on its type of use: working capital financing, investment financing, and consumption financing. The data used is secondary data in the form of a monthly time series obtained from Islamic Banking Statistics for the period 2021-2024, with a total of 48 observations ($n = 48$) for each type of financing.

The use of monthly data in this study aims to capture financing growth dynamics in greater detail and be more sensitive to changes in short-term economic conditions, compared to quarterly or annual data. Higher data frequency allows for more accurate analysis in identifying fluctuations in financing growth across different types of use.

The variable analyzed in this study is financing growth, calculated based on changes in financing value from the previous period. Financing growth is calculated using the following formula:

$$\text{Growth Rate}_t = \frac{P_t - P_{t-1}}{P_{t-1}} \times 100\%$$

Information:

P_t = financing value in period t

P_{t-1} = financing value in the previous period

This transformation was carried out to eliminate scale effects and allow for a more proportional comparison of growth between types of financing. To examine differences in financing growth based on its type of use, this study employed Repeated Measures Analysis of Variance (ANOVA). This method was used because the study compared more

than two conditions (financing types) measured on the same observation unit over the same time period (Sekaran & Bougie, 2016). Therefore, this approach is considered appropriate for simultaneously identifying differences in average financing growth.

The test begins with assumption tests, namely the normality test using Shapiro–Wilk and the sphericity test using Mauchly's Test. Although there were indications of violations of the normality assumption in some variables, the analysis continued because Repeated Measures ANOVA is relatively robust to violations of normality, especially with a sufficient number of observations and repeated measures designs. If the results of the Repeated Measures ANOVA show a significant difference, the analysis is continued with further tests (post hoc pairwise comparisons) using the Bonferroni method to identify pairs of financing types that have significant differences in growth. All data processing was carried out using statistical software with a significance level of 5% ($\alpha = 0.05$).

This study uses one main group of variables, namely Islamic Commercial Bank financing based on its type of use, which is operationalized as follows:

Table 1. Operationalization of Research Variables

Variables	Operational Definition	Indicator	Scale	Data source
Working Capital Financing	Total BUS financing used to support short-term business operational activities	Nominal value of monthly working capital financing	Ratio (Rp)	Islamic Banking Statistics OJK
Investment Financing	Total BUS financing used for the procurement of productive assets and long-term business expansion	Nominal value of monthly investment financing	Ratio (Rp)	Islamic Banking Statistics OJK
Consumer Financing	Total BUS financing used to meet individual and household consumption needs	Nominal value of monthly consumption financing	Ratio (Rp)	Islamic Banking Statistics OJK

4. Results and Discussion

4.1 Descriptive Statistics

Table 2. Descriptive Statistics of Financing Growth

Financing Type	Mean (%)	Standard Deviation	Minimum	Maximum
Working Capital Financing	-,1164	1,75434	-3.95	4.39
Investment Financing	1,9803	2,59704	-5.22	10.22
Consumer Financing	1,7667	2,69941	-,06	15.12

The results of descriptive statistical analysis show that the average financing growth differs between types of financing. Working capital financing has an average growth of -0.1164% with a standard deviation of 1.75434. Investment financing shows an average growth of 1.9803% with a standard deviation of 2.59704, while consumption financing is 1.7667% with a standard deviation of 2.69941. These findings indicate that, descriptively, investment and consumption financing tend to grow more rapidly than working capital financing. Working capital financing, on the other hand, exhibits more volatile characteristics, reflecting its sensitivity to short term economic activity dynamics.

4.2 Normality Test Results

Table 3. Normality Test Results (Shapiro–Wilk)

Variable	Statistics	Sig.	Conclusion
Working Capital Financing	,990	,952	Normal
Investment Financing	,942	,020	Not Normal
Consumer Financing	,442	,000	Not Normal

The results of the Shapiro–Wilk normality test indicate that the working capital financing variable is normally distributed, while investment and consumption financing are not fully normally distributed. Nevertheless, the analysis continued because Repeated Measures ANOVA is robust to violations of normality, especially with a sufficient number of observations.

4.3 Results of Mauchly's Test of Sphericity

Table 4. Mauchly's Test of Sphericity

Within-Subject Effect	Mauchly's W	Chi-Square	df	Sig.
Financing Type	,959	1,932	2	,381

The results of Mauchly's Test of Sphericity showed a significance value of 0.381 (Sig. > 0.05), thus the sphericity assumption was met. Therefore, the analysis continued using the assumed sphericity assumption.

4.4 Repeated Measures ANOVA Results

Table 5. Repeated Measures ANOVA Results

Source	df	F-value	Sig.	Partial Eta Squared
Financing Type	1	22,663	,000	,325
Error	47			

The results of the multivariate test showed a significant difference in financing growth based on its type of use. This is indicated by a Wilks' Lambda value of 0.628, an F value of 13.602, and a significance level of 0.000 ($p < 0.05$).

The Partial Eta Squared value of 0.372 indicates that the type of financing has a fairly strong influence on variations in financing growth. This finding indicates that the type of financing is a factor that differentiates the dynamics of financing growth in Islamic Commercial Banks.

4.4 Follow up Test (Post Hoc Bonferroni)

Table 6. Results of Bonferroni Post Hoc Follow-up Test

Financing Comparison	Mean Difference	Sig.	Information
Working Capital – Investment	-2,097	0,000	Significant
Working Capital – Consumption	-1,883	0,000	Significant
Investment – Consumption	0.214	1,000	Not Significant

The results of the Bonferroni further test show that there is a significant difference between working capital financing and investment financing (Sig. = 0.000), as well as between working capital financing and consumption financing (Sig. = 0.000). Conversely, no significant difference was found between investment financing and consumption financing (Sig. = 1.000).

These results indicate that the difference in financing growth is mainly influenced by the characteristics of working capital financing, which has different dynamics compared to the other two types of financing.

4.5 Discussion

The research results show that working capital financing has significantly different growth dynamics than investment and consumption financing. This indicates that working capital financing is more sensitive to changes in economic conditions, particularly those related to liquidity and real sector activity. Conceptually, this occurs because working capital financing is short-term and heavily influenced by business operational needs, making it more responsive to economic fluctuations than other types of financing.

This finding aligns with (Mahmood, F., Ahmed, Z., Hussain, N., & Zaied, 2024) research, which showed that productive financing, particularly working capital, plays a more dynamic role in responding to changes in economic activity. Furthermore, research by (Putri, M. I. G., & Imelda, 2023) Emilda et al. (2021) also found that financing directly related to the real sector tends to experience higher fluctuations than consumer financing. However, this dynamic not only reflects growth opportunities but also indicates a higher level of risk, particularly in conditions of economic uncertainty.

From a signaling theory perspective, this growth difference can be interpreted as a strategic signal from Islamic commercial banks regarding their financing priorities for short-term productive sectors. Increased working capital financing sends a positive signal regarding the bank's confidence in real economic activity, as explained in signaling theory, which states that economic decisions reflect strategic information to external parties. Conversely, high fluctuations can also be interpreted as a signal of bank prudence in managing financing risks amidst economic uncertainty.

The lack of significant differences between investment and consumption financing indicates a tendency toward stabilization in financing portfolio management. This phenomenon can be explained by the relatively more stable characteristics of both types of financing compared to working capital financing. Investment financing tends to be long-term and plan-based, while consumption financing is influenced by relatively constant demand patterns.

These results are consistent with (Ozili, P. K., & Outa, 2019) findings, which show that consumer financing is often used as a stabilizing instrument for bank income, while investment financing is managed more selectively to mitigate long-term risks. However, several other studies have shown that the dominance of consumer financing in Islamic banking portfolios may indicate a suboptimal intermediation role in supporting the productive sector. Therefore, the lack of significant differences between investment and consumer financing in this study may reflect a trade-off between profitability goals and the socio-economic functions of Islamic banking.

Furthermore, these findings indicate that Islamic commercial banks' financing strategies are not solely focused on expansion, but also on stability and risk management. In the post-pandemic context, banks tend to adopt a more cautious approach in channeling investment and consumption financing. This aligns with several studies showing that the economic recovery period is characterized by increased banking prudence in maintaining asset quality and reducing the risk of non-performing financing.

Overall, the results of this study strengthen the relevance of signaling theory in explaining the dynamics of Islamic banking financing. Differences in financing growth reflect policy signals conveyed by banks in response to economic conditions, both in the form of expansion in productive sectors and portfolio stabilization to maintain sustainable financial performance.

The theoretical implications of this research indicate that financing growth analysis can be used not only to measure intermediation performance but also to understand the strategies and signals banks send to the market. Practically, the results of this study emphasize the importance of strengthening working capital financing as a key instrument in supporting the real sector, while still considering risk management aspects to ensure sustainable growth.

5. Conclusion

This study aims to analyze differences in financing growth based on its type of use at Islamic Commercial Banks during the 2021-2024 period. The analysis shows significant differences in financing growth between working capital, investment, and consumption financing. Working capital financing has been shown to have significantly different growth dynamics than investment and consumption financing. This finding indicates that working capital financing is more responsive to changing economic conditions and serves as a key indicator reflecting the financing policy direction of Islamic commercial banks.

In contrast, investment and consumption financing did not show significant differences in growth, indicating a tendency toward relatively stable management across both types of financing. This reflects the Islamic banking strategy of maintaining a balance between financing expansion and portfolio stability. Overall, the results of this study confirm that the financing growth structure of Islamic Commercial Banks reflects an adaptive strategy that prioritizes responding to the dynamics of the real sector while maintaining prudence in risk management.

Based on the research results, there are several suggestions that can be put forward.

For Islamic commercial banks, working capital financing needs to be continuously strengthened as a key instrument in supporting the real sector, given its sensitivity to economic dynamics and its role as an indicator of financing policy responses. This strengthening needs to be balanced with improvements in the quality of financing analysis to minimize the risk of non-performing financing.

Regulators need policies that encourage increased productive financing through incentives and strengthening the Islamic financial ecosystem. This is crucial for strengthening the intermediary function of Islamic banking in supporting sustainable economic growth. For future researchers, it is recommended to expand the research by adding macroeconomic variables such as inflation, economic growth, and interest rates, as well as using a panel data approach or other econometric methods to obtain more comprehensive results. Furthermore, analysis at the individual bank level could provide a more in-depth understanding of each bank's financing strategy.

This study is limited by the use of aggregate data, which does not reflect the individual conditions of each Islamic commercial bank. Furthermore, the study does not include macroeconomic variables that could potentially influence financing growth. Therefore, the results should be interpreted with caution.

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