DOES ROE MODERATE THE IMPACT OF TEMPORARY
SHIRKAH FUNDS ON SMES FINANCING IN INDONESIA?

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ABSTRACT – This study investigates the impact of temporary shirkah funds on the financing of Small and Medium Enterprises (SMEs) in Indonesia, using Bank Syariah Indonesia (BSI) as a sample. The Return on Equity (ROE) is utilized as a moderating variable. Employing a quantitative approach, secondary data was collected from BSI’s quarterly reports on the Indonesia Stock Exchange for the period of 2019-2021. The data was analyzed using Moderated Regression Analysis (MRA) with the Eviews 9 application. The results indicate that temporary Shirkah funds have a significant partial effect on SMEs financing. However, ROE does not moderate the relationship between temporary Shirkah funds and SMEs financing in BSI. These findings provide valuable insights for future researchers to further explore SME financing and highlight the importance of government support for Islamic banks in their efforts to finance SMEs, given the crucial role these enterprises play in the real sector and in bolstering the Indonesian economy. This study contributes to the growing body of literature on Islamic finance and SME financing, offering practical implications for policymakers and Islamic financial institutions.

Keywords: Temporary Shirkah Funds, SMEs Financing, Return on Equity, Islamic Banking, Indonesia


Kata kunci: Dana Shirkah Temporer, Pembiayaan UKM, Return on Equity, Perbankan Syariah, Indonesia
INTRODUCTION

Islamic banking has experienced remarkable growth in recent decades, not only in predominantly Muslim countries but also in Western nations such as the United Kingdom, France, and Luxembourg (Meslier et al., 2020). In Indonesia, the establishment of Bank Syariah Indonesia (BSI) has been a significant milestone in the development of Islamic finance. As of February 2, 2020, BSI's assets reached an impressive IDR 239.56 trillion, positioning it as the seventh-largest bank in Indonesia by assets (Dianita et al., 2021). This substantial capital base has enabled BSI to expand its market share and support the growth of Small and Medium Enterprises (SMEs) through various financing options, including temporary shirkah funds.

The growth of Islamic banks in Indonesia from 2016 to 2023 has been remarkable, with significant increases in capital, profits, and third-party funds. In 2016, the capital of all Islamic banks in Indonesia reached 27 trillion rupiahs, increasing to 76 trillion rupiahs by October 2023. This growth was accompanied by a rise in profits from 1.4 trillion rupiahs in 2016 to 10.9 trillion rupiahs in October 2023. Third-party funding also experienced a substantial increase of more than 50%, from 206.4 trillion rupiahs in 2016 to 436.7 trillion rupiahs in October 2023 (Rachmadi, 2024).

SMEs play a crucial role in the Indonesian economy, contributing 61.07% to the country's total GDP, employing 97% of the workforce, and accounting for 15.8% of non-oil and gas exports (Kilay et al., 2022). However, one of the main obstacles faced by SMEs is the lack of access to capital. Islamic financial products, such as mudharabah and musyarakah, have the potential to address this issue by integrating the assets of lenders and borrowers, enabling Islamic banks to provide long-term loans for higher-risk projects that can stimulate economic growth (Huda, 2012; Putri & Azib, 2020).

The merger of several Islamic banks to form BSI has resolved capital constraints and positioned the bank to better serve the needs of the community, particularly SMEs (Ulfa, 2021). Studies have shown that Islamic banks direct a significant portion of their capital to SMEs, increasing financial inclusion and positively impacting socio-economic development (Caporale et al., 2020; Kim et al., 2018; Guercio et al., 2020). Moreover, research by Rachmawati and Yasin (2022) found that microfinance provided by BSI has a positive and significant impact on the development of SMEs.
The Indonesian government has recognized the importance of SMEs in the digital era, setting a target of involving 24 million SMEs in the digital ecosystem by 2023 (Kaswinata et al., 2023). However, the growth and development of SMEs are not without challenges. Access to financing remains a critical factor, and external support, such as government assistance, is essential for SMEs to implement resource conservation strategies (Wang et al., 2019; Liu et al., 2022; Dalheimer et al., 2021).

Recent studies have highlighted the role of financial technology (FinTech) in improving the ability of financial institutions to collect and process information related to SMEs, reducing information asymmetry and transaction costs (Yao & Liu, 2023). Digital finance has also been found to ease financial constraints and reduce the risk of bankruptcy for SMEs (Gao & Ren, 2023).

This study investigates the influence of temporary shirkah funds on SMEs financing in Indonesian Sharia Banks registered with the OJK for the 2019-2021 period, with return on equity (ROE) as a moderating variable. The findings of this research can serve as a valuable reference for investors and decision-makers considering investments in Islamic banks, as BSI's SMEs financing is expected to contribute not only to internal banking institutions and SMEs but also to macroeconomic development.

The remainder of this paper is organized as follows. Section two delves into a critical analysis of the influence of temporary shirkah funds on SME financing, while simultaneously examining the potential moderating effect of Return on Equity (ROE). This section will also provide a comprehensive review of relevant existing literature on the subject. Section three meticulously outlines the methodological approach employed in this study. Subsequently, section four presents a detailed discussion of the research findings garnered from the data analysis. Finally, section five concludes the paper by summarizing the key findings, acknowledging any limitations inherent to the research, and proposing potential avenues for further investigation in future studies.

LITERATURE REVIEW

Previous Studies

A growing body of research has explored the topic of SME financing within Sharia Banks. Trimulato et al. (2020) investigated the development of SMEs and their role in strengthening the Islamic economy through dedicated
financing channels. Employing a qualitative approach, their findings revealed significant growth in the SME sector in 2018, with medium enterprises expanding by 3.54% and micro enterprises by 3.44%. Notably, micro enterprises constituted the vast majority (98.7%) of SMEs. However, the study also highlighted that Islamic banking financing continued to prioritize consumption sectors over productive ones.

Aspril et al. (2021) adopted a quantitative approach to examine the impact of mudharabah financing on SMEs. Their research concluded that mudharabah financing can generate positive economic outcomes for SMEs, including increased business turnover, assets, operating income, and profit. Harisna and Dasmi (2019) focused on musharakah financing, employing a quantitative approach to assess the influence of various factors on financing decisions within Sharia Commercial Banks. Their findings indicated that the financing-to-deposit ratio, financing-to-asset ratio, and the availability of third-party funds all play a role in these decisions. Lastly, Dewi et al. (2021) incorporated the variable of Return on Equity (ROE) within their research. Their study demonstrated that ROE has a significant impact on company value, while variables such as Return on Assets (ROA) and dividend policy did not exhibit a statistically significant influence.

The Pecking Order Theory

The pecking order theory, introduced by Stewart Myers and Nicolas Majluf in 1984, sheds light on the financing preferences of corporate managers. This theory posits a hierarchical approach to funding, with internal financing taking precedence over external sources. When external financing becomes necessary, debt is viewed more favorably than equity issuance (Padachi et al., 2012).

At its core, the pecking order theory emphasizes shareholder value maximization as a primary objective for companies. Myers and Majluf (1984) suggest that firms prioritize internally generated funds (profits) as the most efficient financing source. To maintain dividend stability, companies may adjust dividend payout ratios as needed. If internal funds fall short of investment requirements, the theory suggests utilizing existing securities or reducing cash reserves. Only as a last resort would companies tap into external financing through equity issuance (Arniwita et al., 2021).

The hierarchical decision-making process outlined by the pecking order theory progresses from internal finance to external finance (Harjito, 2011). This theory
suggests a financing order with retained earnings as the first choice, followed by debt, and finally equity issuance as the least preferred and most expensive option (Myers & Majluf, 1984). Companies understand that retained earnings and debt are generally less expensive than issuing new equity, which is viewed as a last resort (Frank & Goyal, 2008).

It is important to acknowledge that access to specific capital sources can fluctuate (Rudianto, 2009). When a company's internally generated funds are sufficient to cover operational and investment needs, there is no requirement to seek external financing. However, if internal capital proves inadequate, the theory suggests that companies may seek external funding sources (Fakhroni et al., 2022).

**Temporary Shirkah Funds in Islamic Banking**

Islamic banking services are intricately linked to temporary shirkah funds. This connection is evident in the significant volume of financing channeled through mudarabah and musharakah contracts, reflected in temporary shirkah fund accounts, compared to financing based on other contract types (Mohammed et al., 2008).

Temporary shirkah funds, as defined by PSAK 105, are "funds received as investments for a certain period from individuals or other parties where the bank has the right to manage and invest the funds with the distribution of investment returns based on agreements." Chaidier (2018) elaborates on this definition, stating that temporary shirkah funds are "part of third-party funds collected by sharia entities where sharia entities have the right to manage and invest such funds, both under the policies of sharia entities and restrictive policies of fund owners, with the sharing of operating proceeds based on agreements."

Profit sharing is a cornerstone principle employed by Islamic banks in distributing returns generated from temporary shirkah funds. The amount of profit shared with fund providers can fluctuate based on the investment performance (Sulistyawati et al., 2020). It is crucial to distinguish temporary shirkah funds from both bank capital and debt. PSAK 105 clarifies that temporary shirkah funds cannot be classified as capital or equity because investors lack the ownership rights associated with shareholders and their funds have maturity dates. Furthermore, temporary shirkah funds are distinct from liabilities or debt because Islamic banks are not obligated to repay the principal.
amount in case of losses, unless such losses stem from the bank's own negligence.

The relationship between the bank and the fund provider is collaborative, established through contracts such as mudarabah muthlaqah (unrestricted partnership), mudarabah muqayyadah (restricted partnership), or musharakah (equity partnership). The bank is granted the right to manage and invest the received funds, with varying degrees of restriction regarding the location, method, and target of investment (Sulistyawati et al., 2020). The specific contract employed determines risk allocation. For instance, in mudarabah contracts with profit sharing, if losses are incurred due to the bank's mismanagement of customer funds (shahibul maal), the bank bears the entirety of the loss (Noval & Aisyah, 2021).

Temporary shirkah funds encompass a range of investment activities, including mudarabah, mudarabah muqayyadah, mudarabah muthlaqah, and others. These funds are not classified as part of the bank's financial statement equity due to the aforementioned reasons. Islamic banks utilize various financing instruments, with mudarabah, murabahah, and musharakah being the most prominent.

Mudarabah is the profit-sharing contract that forms the bedrock of Islamic banking services, differentiating it from conventional banking. In a mudarabah contract, the bank provides capital to a customer for project execution, and the resulting profits are shared between the bank and the customer according to a predetermined profit-sharing ratio. In this scenario, the bank acts as a financier for customers and entrepreneurs (Meslier et al., 2020). Further, murabahah product is the financing method involves the bank purchasing assets (for commercial or consumer purposes) at a specific price and then reselling them to the customer at a predetermined markup. The customer makes a series of installments or a lump-sum payment for the asset. The bank retains ownership of the asset until full payment is received (ElGindi et al., 2009). Meanwhile, musharakah contract is an equity financing, which bears some resemblance to mudarabah. The key distinction lies in both the bank and the customer contributing equity (capital) to a joint project. This collaboration necessitates profit and loss sharing (Iqbal & Mirakhor, 2011).

H1: Temporary shirkah funds have a positive impact on SME financing at Islamic banks.
Return on Equity

Return on Equity (ROE) serves as a key metric for evaluating a company’s ability to generate profit after tax using its shareholders’ equity. Investors, particularly those purchasing shares, are keenly interested in the level of profit a company can generate and subsequently distribute to shareholders. ROE acts as an indicator of management’s effectiveness in maximizing shareholder profits (Hertina & Saudi, 2019).

ROE essentially measures the return earned on shareholders’ equity, or the money invested by shareholders. This ratio reflects how effectively bank management utilizes investor funds and translates them into profits. Investors generally favor companies with higher ROE due to the potential for increased stock returns and a corresponding rise in the company’s stock price (Saragih, 2018). Therefore, a company with a demonstrably higher ROE is often considered a more attractive investment opportunity (Ali, 2020).

ROE can be calculated by multiplying the net profit margin by the asset turnover ratio and the equity multiplier. Decomposing ROE into these three components can provide a deeper understanding of how ROE may fluctuate over time. For instance, an increase in profit margins translates to more profit generated on each sale, ultimately leading to a higher ROE. Similarly, a rise in the total asset turnover ratio indicates that the company is generating more revenue per unit of asset, which in turn contributes to a higher ROE. Lastly, increased financial leverage reflects a scenario where a company utilizes more debt capital relative to equity capital. While some may prioritize liquidity over short-term profits, excessive debt can pose risks in the long run (Goldmann, 2017; Hacklin et al., 2018; Nisak & Ibrahim, 2014).

Financial leverage refers to the influence of debt financing (particularly loans from banks) on the profitability of a company’s equity capital (its own financial resources, including capital reserves, depreciation, and retained net profit). On the surface, debt financing might appear to negatively impact profits due to interest expenses that increase costs and reduce profits. However, in reality, if a company’s profit margins are higher than the interest rates it incurs on debt, debt financing can actually contribute positively to a company’s overall profitability and shareholder wealth (Lukic, 2015; Bunea et al., 2019; Wardiah & Ibrahim, 2013).
H2: ROE can moderate the relationship between temporary shirkah funds and SME financing at Islamic banks.

SMEs Financing

Small and Medium-Sized Enterprises (SMEs) are independent business units, excluding those with foreign capital or investment. Their classification is typically determined by a combination of factors, including total assets (excluding land and buildings) and annual revenue. Employee headcount may also be used as a criterion, but the specific thresholds vary based on the value of assets, business type, and the classification framework used by a particular country (Maksum et al., 2020).

In recent years, SMEs have garnered significant recognition for their contributions to national economic development. They play a crucial role in fostering entrepreneurship through the utilization of indigenous skills and technologies. Furthermore, SMEs are instrumental in creating employment opportunities, enhancing market competitiveness through innovation, and supporting government initiatives aimed at poverty reduction (Abdullah et al., 2016).

The definition of SMEs can vary across countries. For instance, in Europe, SMEs are typically defined as companies with a maximum of 250 employees and/or an annual turnover of 50 million euros (Meier & Peters, 2023). Regardless of the specific criteria used, SMEs are widely recognized as a vital indicator of a nation's economic development, stability, and long-term prosperity.

Compared to large corporations, SMEs often operate at a disadvantage due to limited access to financial resources, technical expertise, and skilled labor. Navigating the complexities of today's business environment can be particularly challenging for these smaller entities (Meier & Peters, 2023). Access to financing is a critical factor for SME growth and success, and Islamic banking offers a unique set of financing instruments that can potentially address this need.

METHODOLOGY

This study employs a quantitative approach utilizing secondary data to investigate the influence of temporary shirkah funds on SMEs financing, and
the moderating role of Return on Equity (ROE) in this relationship within Indonesian Sharia Banks registered with the OJK from 2019 to 2021.

**Research Design and Sample Selection**

The study uses a purposive sampling method, focusing on Bank Syariah Indonesia (BSI) due to its significant role in Islamic banking in Indonesia and its potential to influence SME financing. The selection criteria for the data include:

1. Data availability: BSI must have been operating throughout the 2019-2021 period and consistently issued financial statements to Bank Indonesia.
2. Accessibility: Quarterly reports for the 2019-2021 period must be accessible on BSI’s official website.
3. Data completeness: The data for all variables under study must be complete.

**Variables and Data Sources**

The study examines three key variables:

- **Independent Variable:** Temporary Shirkah Funds, measured by the amount of funds collected by BSI from third parties (customer deposits) as reported in their quarterly financial statements.
- **Dependent Variable:** SMEs financing, measured using Murabahah financing data from BSI, obtained from Islamic banking statistics (SPS) published by OJK.
- **Moderating Variable:** Return on Equity (ROE), calculated using the formula:

  \[
  ROE = \frac{Net\ Profit}{Total\ Equity} \tag{1}
  \]

Data for this study are sourced from Quarterly reports of Bank Syariah Indonesia (2019-2021), official website of Bank Syariah Indonesia, Financial Services Authority (OJK), and the Indonesia Stock Exchange (IDX)
Data Analysis

The data, a combination of cross-sectional and time-series data (panel data), will be analyzed using Eviews 10 software. The analysis will involve:

1. Descriptive Statistics: To summarize and describe the characteristics of the variables.
2. Panel Data Regression: To examine the relationship between the independent, dependent, and moderating variables.
3. Moderated Regression Analysis (MRA): To specifically investigate the moderating effect of ROE on the relationship between temporary shirkah funds and SMEs financing. This will involve an interaction term between the independent and moderating variables in the regression model (Solimun et al., 2019).
4. Model Estimation Tests: Common Effect Models (CEM), Pooled Least Squares (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM) will be employed to determine the most appropriate model for the data.
5. Model Diagnostic Tests: Chow, Hausman, and Breusch-Pagan Lagrange Multiplier tests will be conducted to ensure the selected model’s adequacy.
6. Classical Assumption Tests: Normality, Heteroskedasticity, Autocorrelation, and Multicollinearity tests will be performed to ensure the fulfillment of the Best Linear Unbiased Estimator (BLUE) assumptions.

Figure 1. Research Framework

Figure 1 illustrating the relationships between the independent, dependent, and moderating variables, adapted from Arniwita et al. (2021), Bunea et al. (2019), and Huda (2012). This comprehensive methodology ensures a rigorous and
systematic approach to investigating the research question and achieving the study's objectives.

RESULTS AND DISCUSSION

Model Selection

The Fixed Effect Model demonstrates the differences in intercepts for each individual (entity), but these individual intercepts remain constant over time. If the Breusch-Pagan cross-section value is less than the significance level of 0.05, the null hypothesis (H0) is rejected, making the Fixed Effect Model the most appropriate model to use. The results are presented in Table 1.

Table 1. Effect of TSF on SMEs Financing Moderated by ROE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>23433328</td>
<td>3545146</td>
<td>6.609976</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-0.411401</td>
<td>0.169532</td>
<td>-2.426692</td>
<td>0.0178*</td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

*Significant at 5% level

Table 1 shows the probability values for each variable are less than 0.05. Therefore, all variables have a significant influence.

Classical Assumption Tests

Multicollinearity Test

The multicollinearity test is conducted by examining the correlation matrix values between independent variables. If the correlation coefficient is less than 0.9, multicollinearity is not present. The results are presented in Table 2.

Table 2. Multicollinearity Test

<table>
<thead>
<tr>
<th></th>
<th>X1</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000000</td>
<td>0.568804</td>
</tr>
<tr>
<td>Z</td>
<td>0.568804</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

Table 2 shows that each variable (X1 and Z) has a coefficient value of less than 0.9, indicating no multicollinearity problem.
Autocorrelation Test

Autocorrelation test results are presented in Table 3. The table presents a Durbin-Watson value of 0.911275. Since this value is between -2 and +2, it indicates no autocorrelation symptoms in the regression model.

Table 3. Autocorrelation Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.698420</td>
<td>0.024349</td>
<td>28.68403</td>
<td>0.0000</td>
</tr>
<tr>
<td>Z</td>
<td>356353.4</td>
<td>184085.7</td>
<td>1.935802</td>
<td>0.0556</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.919837</td>
<td>Mean dependent var</td>
<td>14851250</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.919080</td>
<td>S.D. dependent var</td>
<td>18287443</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>5202111</td>
<td>Akaike info criterion</td>
<td>33.78537</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>-1822.410</td>
<td>Schwarz criterion</td>
<td>33.83504</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>0.911275</td>
<td>Hannan-Quinn criter.</td>
<td>33.80551</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

Heteroscedasticity Test

The results of the heteroscedasticity test are presented in Table 4. It shows that the probability values for variables X1 and Z are 0.9536 and 0.7692, respectively, which are both greater than 0.05. This indicates no heteroscedasticity in the model.

Table 4. Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4069691</td>
<td>2992055</td>
<td>1.360166</td>
<td>0.1781</td>
</tr>
<tr>
<td>X1</td>
<td>-0.008504</td>
<td>0.145711</td>
<td>-0.058364</td>
<td>0.9536</td>
</tr>
<tr>
<td>Z</td>
<td>-41709.48</td>
<td>141594.9</td>
<td>-0.294569</td>
<td>0.7692</td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

Hypothesis Tests

The t-test is used to analyze the partial influence of variables. If the t-calculated value is greater than or equal to the t-table value, there is no partial influence between variables X and Y. Conversely, if the t-calculated value is less than the t-table value, there is a partial influence between variables. The coefficient of determination measures the feasibility of the model to explain the dependent
variable. The results of the t-statistics and the coefficient of determination are presented in Table 5.

Table 5. Effect of TSF with the SMEs Financing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>23433328</td>
<td>3545146</td>
<td>6.609976</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-0.411401</td>
<td>0.169532</td>
<td>-2.426692</td>
<td>0.0178*</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.986932</td>
<td>Mean dependent var</td>
<td>14851250</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.980306</td>
<td>S.D. dependent var</td>
<td>18287443</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>2566403</td>
<td>Akaike info criterion</td>
<td>32.61964</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.68E+14</td>
<td>Schwarz criterion</td>
<td>33.53852</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-1724.461</td>
<td>Hannan-Quinn criter.</td>
<td>32.99221</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>148.9446</td>
<td>Durbin-Watson stat</td>
<td>2.719238</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

*Significant at 5% level

Table 5 indicates that the significance value of the Temporary Shirkah Fund-TSF (X1) is 0.0178, which is less than 0.05. The calculated t value is -2.426692, and with df = N-k = 108-1 = 107, the table t value is 0.67679. Therefore, it can be concluded that the TSF (X1) significantly affect SMEs Financing (Y). The R-squared value is 0.986932, indicating that 98.69% of the variance in SMEs Financing is explained by the TSF, while the remaining 1.31% is influenced by other variables not included in this model.

Table 6. Coefficient of Determination

<table>
<thead>
<tr>
<th>Effects Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section fixed (dummy variables)</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>S.E. of regression</td>
</tr>
<tr>
<td>Sum squared resid</td>
</tr>
<tr>
<td>Log likelihood</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Prob (F-statistic)</td>
</tr>
</tbody>
</table>

(Source: Data processed by Eviews 9, 2022)

The value of R-squared is 0.986932, indicating that the independent variable (TSF) explains 98.69% of the variance in the dependent variable (SMEs
Financing). The remaining 1.31% is influenced by other variables not included in this regression model. Interaction tests are special applications of multiple linear regression in which the regression equation contains interaction terms (multiplying two or more independent variables) (Ghozali, 2018). The results of the moderated regression analysis are shown in Table 7.

Table 7. Moderated Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>22083511</td>
<td>3371412</td>
<td>6.550225</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-0.289353</td>
<td>0.163838</td>
<td>-1.766093</td>
<td>0.0818</td>
</tr>
<tr>
<td>Z</td>
<td>-223016.5</td>
<td>261072.2</td>
<td>-0.854233</td>
<td>0.3959</td>
</tr>
<tr>
<td>X1Z</td>
<td>-0.006285</td>
<td>0.004940</td>
<td>-1.272272</td>
<td>0.2075</td>
</tr>
</tbody>
</table>

R-squared: 0.988735
Adjusted R-squared: 0.982531
S.E. of regression: 18287443
Akaike info criterion: 32.50822
Schwarz criterion: 33.47677
Log likelihood: -1716.444
Hannan-Quinn criter.: 32.90093
F-statistic: 159.3688
Durbin-Watson stat: 2.960729
Prob(F-statistic): 0.000000

(Source: Data processed by Eviews 9, 2022)

Based on the results of the moderation test with the moderation variable (TSF X ROE), the t-statistical value of the moderation variable is -1.272272, and the probability of moderation is 0.2075, which is greater than 0.05, and the t-statistic is negative. This means that the ROE variable is not able to moderate TSF for SMEs Financing. The R-squared value of 0.988735 is greater than the previous 0.986932, indicating that the ROE variable cannot moderate the relationship of TSF to SMEs Financing.

Discussion

Positive Impact of Temporary Shirkah Funds on SME Financing

The findings from hypothesis 1 testing provide strong evidence that temporary shirkah funds significantly influence SME financing at Bank Syariah Indonesia. Statistical analysis reveals a p-value of 0.0178 for the temporary shirkah fund variable (X1), which is well below the predetermined significance level of 0.05. This, coupled with a calculated t-statistic of -2.426692 (df = 107), confirms the rejection of the null hypothesis and indicates a statistically
significant relationship. In simpler terms, temporary shirkah funds (X1) demonstrably exert a positive influence on SME financing (Y). The R-squared value of 0.986932 suggests that temporary shirkah funds account for a substantial portion (98.69%) of the variation observed in SME financing. The remaining 1.31% can be attributed to factors not incorporated into the regression model.

These results align with Doruk's (2023) research, which highlights the distinct role of Islamic banks compared to traditional savings banks in supporting SMEs during economic downturns. Doruk's study emphasizes how Islamic banks' ability to extend financing to SMEs during such periods has been instrumental in mitigating SME bankruptcy rates within the Turkish economy. The connection to this research lies in the understanding that a higher volume of temporary shirkah funds translates into greater financing capacity for SMEs, potentially preventing bankruptcies. This is because temporary shirkah funds directly contribute to the pool of funds available for SME financing.

Similar findings are reported by Gur et al. (2023), whose empirical research confirms the financial challenges faced by SMEs and their limited access to traditional financing channels compared to larger businesses. The study highlights that small businesses often rely on personal networks for funding rather than formal bank credit. However, medium-sized enterprises tend to have greater ease in securing investment opportunities and may even benefit from more favorable programs compared to large corporations. In this context, access to Islamic banking instruments like temporary shirkah funds can streamline the financing process for SMEs, potentially alleviating their financial constraints.

Further corroborating evidence is provided by studies emphasizing the role of Islamic financial institutions (IFIs) in addressing the financing needs of SMEs, particularly those encountering difficulties due to excessive credit risk or lack of financial expertise. The World Bank (2014) identifies access to finance as a significant barrier faced by businesses in low- and middle-income countries. This issue is particularly acute for young companies and those with limited or no collateral, leading to their systematic exclusion from traditional financial support systems. IFIs, with their profit-sharing structures associated with instruments like Sukuk, can play a crucial role in facilitating SME access to financing, especially in developing economies with large Muslim populations (How et al., 2018).
Hakeem (2019) also contributes to this body of knowledge, suggesting that Islamic banks can play a vital role in financing a broader segment of the community and fostering economic development. Non-bank financial institutions (NBFIs) can participate in this process by forming special purpose entities (SPEs) and leveraging their regional expertise to cater to specific geographical areas and market segments. These SPEs can then tap into the Islamic capital market for additional funding and potentially utilize Islamic insurance for specific projects. Hakeem further emphasizes the need for microfinance institutions to refine their target market strategies and explore available financing opportunities to address the geographical concentration and limited market segmentation that often characterize SMEs. Government initiatives such as the KAFALH program in the Ministry of Finance and the Saudi Arabia's Industrial Development Fund serve as illustrations of government efforts to support the critical SME sector. The underlying connection here is that increased SME financing can contribute significantly to economic development. When SMEs have greater access to financing, their growth potential increases, leading to a positive impact on national economic development.

**Unexpected Role of ROE in Moderating SME Financing**

The second hypothesis of this study explored whether Return on Equity (ROE) could moderate the relationship between temporary shirkah funds (TSF) and SME financing in Islamic banks. However, the statistical results revealed an unexpected outcome. The moderation test statistic for the interaction term (TSF x ROE) was negative (-1.272272) with a corresponding probability of moderation exceeding the pre-established significance level (0.2075 > 0.05). This suggests that ROE does not moderate the impact of TSF on SME financing.

In simpler terms, the profitability of Islamic banks, as measured by ROE, does not appear to influence the extent to which temporary shirkah funds contribute to SME financing. This finding contradicts the Pecking Order Theory, which posits that companies prioritize internally generated funds (profits) for financing activities.

To understand this unexpected result, it's crucial to consider the multifaceted nature of ROE. It encompasses various factors such as profit margin, total investment turnover, and the equity multiplier (Jitmaneeroj & Ogwang, 2023).
While a high ROE often indicates strong profitability, it might not directly translate into increased availability of funds for SME financing. For instance, even with high profits, a bank might choose to invest a significant portion of its earnings in expanding its branch network or strengthening its capital reserves, rather than directly allocating those funds to SME financing.

This findings align with research by Fitriani and Purnamasari (2023). Their work suggests that profitability (measured by ROE) does not moderate the relationship between environmental performance and company value. This implies that investors in developing economies like Indonesia prioritize financial performance, macroeconomic factors, and investment risks over environmental considerations when making investment decisions (Ramdhani et al., 2016, as cited in Prastika & Ryandono, 2022).

Research Implications

The findings of this study have several important implications for Islamic banks, SMEs, and policymakers:

1. Islamic banks should focus on increasing their temporary shirkah funds, as this has a significant positive impact on SMEs financing. By attracting more deposits and investments through temporary shirkah funds, Islamic banks can enhance their capacity to provide financing to SMEs, thereby contributing to economic growth and development.

2. SMEs should actively seek financing opportunities from Islamic banks, as the availability of temporary shirkah funds can help address their financial challenges and support their growth. SMEs can benefit from the profit-sharing arrangements offered by Islamic financing products, which can be more suitable for their needs compared to conventional loans.

3. Policymakers should create a supportive regulatory environment that encourages the growth of Islamic banking and facilitates the channeling of funds to SMEs. This can include incentives for Islamic banks to increase their temporary shirkah funds and provide financing to SMEs, as well as measures to enhance the financial literacy and capabilities of SMEs to access Islamic financing.

4. While return on equity (ROE) does not appear to moderate the relationship between temporary shirkah funds and SMEs financing, Islamic banks should still strive to maintain a healthy level of
profitability. A strong financial performance can enhance the confidence of depositors and investors, which can indirectly support the growth of temporary shirkah funds and the ability to provide financing to SMEs.

5. Further research is needed to explore other factors that may influence the relationship between temporary shirkah funds and SMEs financing, such as the macroeconomic environment, regulatory policies, and the specific characteristics of SMEs. A better understanding of these factors can help Islamic banks and policymakers develop more effective strategies to support SMEs financing and promote economic development.

CONCLUSION

The analysis concludes that the variable of Temporary Shirkah Funds significantly affects SMEs financing in Indonesian Shariah Banks registered with the OJK for the period 2019-2021. This indicates that Bank Syariah Indonesia has substantial potential to drive regional economic growth and enhance financial access for SMEs. The role of SMEs in the real sector is crucial for improving the Indonesian economy, and hence, financing by Shariah Banks should be fully supported. However, the study reveals that the Return on Equity (ROE) variable does not moderate the relationship between Temporary Shirkah Funds and SMEs financing within the same period. The findings suggest that a higher TSF value correlates with greater success for Islamic banks, as their effectiveness can be observed from their management of savings deposits, deposits, and current accounts, which are subsequently allocated for public financing. This is consistent with the Pecking Order Theory, which posits that internal financing derived from operational results is the best alternative for company funding.

The study acknowledges certain limitations, including the restricted number of variables and the short research period. These limitations may affect the generalizability of the findings. The limited scope of variables may not fully capture the complexities of the relationship between temporary shirkah funds and SMEs financing, while the short research period may not provide a comprehensive view of long-term trends and effects.

Future research should consider incorporating a broader range of variables to better represent the condition of Bank Syariah Indonesia globally. Expanding
the research period would also provide a more robust analysis. Furthermore, it is recommended that future studies explore other factors that may influence the relationship between temporary shirkah funds and SMEs financing, such as the macroeconomic environment, regulatory policies, and specific SME characteristics. Understanding these factors can help Islamic banks and policymakers develop more effective strategies to support SMEs financing and promote economic development.

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