The Impact Of Financing Product Scheme To Islamic Banking Financial Performance

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Abstract

Kata Kunci: Skema Pembiayaan, Bank Syariah, Proporsi Pembiayaan, Return on Assets, Non-Performing Financing

Abstract
The aim of this research is to determine how different financing plans affect a bank's ability to earn income and manage financing risk throughout the course of both the short- and long-term. The study utilizes an associative research design and a quantitative methodology. The Financial Services Authority's monthly aggregate reports on Islamic banking for the years 2012 to 2022 make up the study sample. Total debt-based financing, total profit-sharing financing, total leasing-based financing, return on assets (ROA), and non-performing finance (NPF) are among the variables included in the study model. Vector Error Correction Modeling (VECM), which enables the study of the data, is used to examine the short- and long-term effects of independent factors on the dependent variable. Two investigational models—the ROA model and the NPF model—are included in the study. According to the research's findings, when viewed from the NPF model's point of view, debt- and leasing-based financing are more secure over the long run for Islamic banks. Leasing-based financing, however, turns out to be more beneficial for Islamic banks from the standpoint of the ROA model.

Keywords: financing scheme; Islamic bank; financing proportion; Return on Assets; Non-performing Financing

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1. INTRODUCTION
The banking sector's presence can greatly advance the industry's overall development (Pohl et al., 2023). The banking industry, as an intermediary, offers industry participants the chance to obtain extra capital to meet their needs for business expansion (Kovalenko et al., 2023). The growth of industry and economic development depend on the bank. It offers financial solutions to companies for a range of uses, such as working capital, capital investment,
expansion, and research and development. Without access to banking and financial resources, many industries would struggle to thrive or expand (Koch & MacDonald, 2014).

In Indonesia, the halal industry is one of the most dynamic economic sectors. To increase the growth of this industry, the government has launched a dedicated institution to accommodate its requirements. The organization that this is called is the National Committee for Sharia Economic and Financial Affairs (KNEKS) (Laili & Noviarita, 2022). This committee works with various organizations, including Bank Indonesia, the Financial Services Authority (OJK), and the Ministry of Finance of the Republic of Indonesia, to expedite the growth of the halal industry in Indonesia (Rurkinantia, 2021).

Islamic banks need to be carefully considered because they are the primary financial institutions supporting the halal industry. The effective performance of Islamic banking can significantly enhance its vital role as a pillar of the halal industry (Lyu et al., 2023). Two factors can be used to gauge the success of Islamic banking: profitability (Azad et al., 2023) and the quality of financing (Kyoud et al., 2023)(Zakhariah & Hesniati, 2022).

The halal industry is growing quickly, and Islamic banks should be major players in supporting their entrepreneurs in financing their ventures. According to the Sharia Banking Statistics Report by the Financial Services Authority in February 2023 (OJK, 2023), the majority of Islamic bank financing is directed towards the Wholesale and Retail Trade sector, with a total financing amounting to Rp48,98 trillion. However, financing in the Accommodation and Food Services sector, which is closely related to the halal industry, remains relatively limited, at Rp5.2 trillion. Therefore, there is an opportunity for Islamic banks to bolster the halal industry, facilitating its optimal development.

An important factor to take into account when evaluating Islamic banks' support for financing in the halal sector is how well these banks are performing. Based on the data presented in Figure 1, it can be seen that the Return on Assets (ROA), an indicator of profitability, and the Non-Performing Financing (NPF), an indicator of loan quality, for Islamic banks during the period of 2011-2022 have experienced volatility. When looking at the NPF value, there is a tendency for the NPF ratio to decrease since 2020. Conversely, the ROA ratio has increased since the same period. This condition suggests that the performance of Islamic banking in Indonesia has been improving since 2020. This improvement is supported by the relaxation of social distancing policies by the government, leading to the normalization of economic conditions (Daga et al., 2022).

The improved economic situation should be optimally utilized by Islamic banks. One way to do this is by channeling financing in a manner that takes into account the NPF and ROA ratios. In this study, the examination of the NPF and ROA ratios will be linked to the type of financing contracts used. Each type of financing contract has different risk characteristics and levels of returns (Ibrahim, 2020). Several studies have been conducted regarding the influence of financing types on ROA (Anggarani, 2021; Widanti & Wirman, 2022) and NPF (Fauzukhaq, 2021; Pratiwi et al., 2022; Putra, 2019) with varied results. Therefore, further research is needed to investigate the impact of financing types on the NPF and ROA ratios.

Non-Performing Financing

When Islamic banks provide financing, the quality of that financing needs to be scrutinized. To analyze the quality of financing, the Non-Performing Financing (NPF) ratio can be used (Mahdi, 2021). This ratio represents the comparison between low-quality financing and the total financing provided. Globally, an Islamic bank's NPF ratio is typically given a maximum threshold of 5% (Amuakwa-Mensah et al., 2017). If an Islamic bank's NPF ratio exceeds this indicator, the bank may potentially face the suspension of its financing activities, and in extreme cases, liquidation may be considered (Fakhrunsas et al., 2022). The calculation of this ratio is as follows:

\[ NPF = \frac{\text{Financing Col. 3, 4, 5}}{\text{Total Financing}} \times 100 \]
Return on Assets
To measure the level of profitability of an Islamic bank, various financial ratios can be used, including the Return on Assets (ROA) ratio. The ROA ratio is a comparison between the net income generated by the bank and the total assets held by that bank (Ledhem, 2022). The higher the ROA value, the more effectively the bank manages its assets to generate income (Syathiri et al., 2020). Typically, a bank’s ROA ratio is considered well when it exceeds 1% (Abou Elseoud et al., 2020). The calculation of this ratio is as follows:

\[ ROA = \frac{Net\ Income}{Total\ Assets} \times 100 \]

Islamic Financing Scheme
In the Sharia Banking Statistics report by the Financial Services Authority (OJK) for February 2023, there is a categorization of financing types based on the contractual schemes used. In general, OJK grouped financing types into receivable-based schemes, profit-sharing schemes, and lease-based schemes. Receivable-based financing includes financing with murabah, qardh, and istishna contracts. Furthermore, profit-sharing financing encompasses financing with mudharabah and musyarakah contracts. Lastly, lease-based financing includes financing with ijarah contracts. This research also employs these three financing schemes as its research variables.

Receivable-based financing is the dominant financing scheme within Islamic banks. This scheme is characterized by low risk levels and ease of application. Profit-sharing financing is the next most commonly used financing scheme in Islamic banks in Indonesia. It carries a high level of risk but is accompanied by potentially high returns. Lease-based financing has the smallest proportion. This is because there are fewer financing products that can be applied using this scheme (Rustam, 2013).

The Research Model and Hypothesis
In this research, we will examine the influence of the type of financing scheme employed by Islamic banks on the ROA and NPF ratios. As previously discussed, different financing scheme types have distinct risk and return characteristics, warranting further investigation into their impact on these two ratios in this study. Consequently, there will be two research models to be tested: the NPF model and the ROA model. In brief, the research models and the hypotheses developed are as follows:

Figure 2. NPF Model
Based on NPF model (Figure 2), hypotheses developed are:

H1 : There is a significant impact of the receivable-based financing scheme on the Non-Performing Financing (NPF) ratio.
H2 : There is a significant impact of the profit-sharing-based financing scheme on the Non-Performing Financing (NPF) ratio.
H3 : There is a significant impact of the lease-based financing scheme on the Non-Performing Financing (NPF) ratio.

Figure 3. ROA Model
Based on NPF model (Figure 2), hypotheses developed are:

H4 : There is a significant impact of the receivable-based financing scheme on the Return On Assets (ROA) ratio.
H5 : There is a significant impact of the profit-sharing-based financing scheme on the Return On Assets (ROA) ratio.
H6 : There is a significant impact of the lease-based financing scheme on the Return On Assets (ROA) ratio.

2. RESEARCH METHOD
This study uses an associative research design and a quantitative methodology. The monthly data used was taken from the OJK-published Sharia Banking Statistics reports for the years 2012 to 2022. The dependent variables in this study are the NPF and ROA ratios. Meanwhile, the independent variables used consist of the natural logarithm values of total
financing with receivable-based, profit-sharing, and lease-based schemes (see Table 1.). The data analysis technique employed is Vector Error Correction Modeling (VECM). To conduct this analysis, the research data should be in a stationary state at the 1st difference condition. Subsequently, the determination of the optimal lag is necessary. Finally, the VECM model will be tested for both long-term and short-term effects (Tanjug & Devi, 2018).

### Stationary Test

To meet the requirements for performing the VECM analysis, the data stationarity test is essential. Unit root tests should be used to ensure that the data from the variables is stationary at the first difference level before performing the VECM test. Table 3 shows that all of the data for the variables that were used are in a stationary state at the 1st difference level. Therefore, the research model can be examined using Vector Error Correction Modeling (VECM).

The next stage involves figuring out how many lags are best for each of the two models in this study—the NPF and ROA models. The best lag is chosen in order to evaluate the research models' immediate effects.

### Lag Optimum Test: NPF Model

Three indicators are used to determine the optimal lag in the research: the Schwarz information criterion (SC), the Akaike information criterion (AIC), and the final prediction error (FPE). Among those indications, we must observe the lowest value. These three values can be directly compared in E-Views version 22, as Table 4 illustrates. The asterisk (*) sign in each indicator is used to determine the optimal lag. Based on the FPE and AIC indicators, which are the indicators with the greatest number of asterisks appearing at lag 4, the optimal lag for the NPF model is 4.
According to Table 5, the FPE and AIC indicators show the highest number of asterisks at lag 4. However, only the SC indicator indicates the optimal lag at lag 2. Thus, the ideal lag for the ROA model is 4, which is also the optimal lag for the NPF model. For the NPF and ROA models, the Vector Error Correction Model (VECM) that will be tested in this study will therefore employ a lag value of 4.

Long-Term Effect For NPF Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN_PEMSE(-1)</td>
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<td>-5.25502*</td>
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<tr>
<td>LN_PEMPI(-1)</td>
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</table>

Table 6. VECM Long-Term Effect For NPF Model Result

Source: Compiled by Author

Using a 5% significance level (Lakshmanasamy, 2022), it is possible to see that lease-based financing, receivable-based financing, and profit-sharing-based financing all have substantial effects in the long run. The NPF ratio is impacted negatively by lease and receivable-based financing. This suggests that a 1% increase in lease-based and receivable-based financing can reduce the NPF ratio by 38.68% and 40.55%, respectively, in the long-term effect. Profit-sharing financing, on the other hand, has a favorable effect on the NPF ratio. This means that every 1% increase in profit-sharing-based financing raises the NPF ratio by 15.64% in the long-term effect.

Short-Term Effect For NPF Model

<table>
<thead>
<tr>
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</thead>
<tbody>
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<tr>
<td>D(NPF(-1))</td>
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<tr>
<td>D(NPF(-4))</td>
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<td>-0.55855</td>
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</table>

Table 7. VECM Short-Term Effect For NPF Model Result

Source: Compiled by Author

In Table 7, you can see the short-term effects on the NPF model. The CointEq1 value is significant at a 5% significance level. This indicates a significant correlation between short-term and long-term effects. Regarding short-effects, it can be observed that NPF is significantly influenced by the NPF lag 3, lease-based financing lag 1 and 2, and profit-sharing-based financing lag 2. The positive impact on the NPF ratio is found in NPF lag 3, lease-based financing lag 2, and profit-sharing-based financing lag 2. Meanwhile, lease-based financing at lag 1 has a negative impact on the NPF ratio.

Long-Term Effect For ROA Model

<table>
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<td>-1.35430</td>
</tr>
</tbody>
</table>

Table 8. VECM Long-Term Effect For ROA Model Result

Source: Compiled by Author

The financing scheme that significantly influences the ROA ratio in the long term is observed only in the case of lease-based financing. Its positive direction of influence indicates that an increase in the value of lease-based financing will enhance the ROA ratio. Based on Table 8, it can be ascertained that the coefficient for lease-based financing is 5.38069. This implies that for every 1% increase in lease-based financing, the ROA ratio will increase by 5.38%.
From the other financing scheme, the significant negative influence of receivable-based financing on the NPF ratio aligns with the findings of Putra’s research (Putra, 2019). Receivable-based financing shares characteristics with lease-based financing, both of which are associated with low-risk profiles. Consequently, in the long term, the risk of default associated with receivable-based financing can be minimized (Gündoğdu, 2016).

Finally, the significant positive influence of profit-sharing-based financing on the NPF ratio is in line with the findings of research conducted by Fauzukhaq (2021). Profit-sharing-based financing is characterized by its relatively high-risk nature, primarily due to the concept of risk-sharing inherent in this type of financing. Consequently, if not managed effectively, profit-sharing-based financing can carry a substantial risk of default over the long term (Tahir et al., 2019).

The significant positive influence of lease-based financing on the ROA ratio in the long term is contrary to the findings of Elza et al. (2022), who stated that there was no significant impact of lease-based financing on ROA, and Widanti and Wirman’s research (Widanti & Wirman, 2022), which concluded a significant negative influence. Lease-based financing is characterized by its low-risk profile and a reasonably favorable rate of return. Therefore, effective management of this type of financing can yield maximum returns over the long term (Ajmi et al., 2019).

4. CONCLUSION

In the NPF model, it is observed that in the long run, lease-based and receivable-based financing have a significant negative impact on the NPF ratio, while profit-sharing-based financing has a positive impact. In the short term, NPF lag 3, lease-based financing lag 2, and profit-sharing-based financing lag 2 have a significant positive impact on the NPF ratio. Conversely, lease-based financing at lag 1 has a significant negative impact. While in the ROA model, only lease-based financing has a significant positive impact on the ROA ratio in the long run. In the short term, ROA is positively and significantly influenced by ROA lag 1 and profit-sharing-based financing lag 1 and 3. On the other hand, ROA is negatively and significantly influenced in the short term by ROA lag 2 and 4.

<table>
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<th>Short-Term Effect For ROA Model</th>
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<th>t-statistic</th>
</tr>
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<td>R-squared</td>
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</tr>
</tbody>
</table>

**Table 9. VECM Short-Term Effect For ROA Model Result**

**Source**: Compiled by Author

In the short term, it is only profit-sharing-based financing that exhibits a significant influence on the ROA ratio. In contrast, lease-based and receivable-based financing do not exert a significant influence. Profit-sharing-based financing significantly affects the ROA ratio in the short term at lags 1 and 3. Additionally, ROA lag 1 has a significant positive impact, while at lags 2 and 4, it exerts a significant negative impact on the ROA ratio.

3.2. Discussion

The research results reveal a difference in the direction of influence of financing scheme types on the NPF and ROA ratios. In the context of the NPF ratio, in the long term, lease-based financing exhibits a significant negative influence. This finding aligns with Angraini’s study (2021), but differs from the findings of Pratiwi et al. (2022), who found no significant influence of lease-based financing on the NPF ratio. Lease-based financing typically possesses low-risk characteristics, making its risk management more manageable and potentially providing optimal returns over the long term (Hasanudin & Yaqin, 2019).
The outcomes of this research can serve as a subject of inquiry for participants in the Islamic banking industry in Indonesia with regard to enhancing the quality of the financing. When examined from the perspective of the NPF model, lease-based and receivable-based financing can be optimized to maintain the quality of the financing extended over the long term. Upon scrutiny of the ROA model, it becomes evident that Islamic banks in Indonesia have the possibilities to further optimize the profitability derived from their financing schemes. This is attributed to the fact that, over an extended time horizon, only lease-based financing exerts a significantly positive impact. In the short term, it is only profit-sharing-based financing exhibits a significant positive influence on the ROA ratio. Hence, improvement on the quality of financing in Islamic Banking in Indonesia need to be considered.

The recommendation from the findings of this research is that Islamic banking in Indonesia should strive to maximize the revenue potential from each of its financing schemes. According to the results of this study, it is evident that the financing scheme based on leasing has been notably effective in generating profits. However, the other two schemes, namely profit-sharing based financing and receivable-based financing, have yet to exhibit a significant long-term impact on the Return on Assets (ROA) ratio.

5. REFERENCE


