The Relationship Between Capital Structure and Performance in Islamic Rural Bank

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Abstract
The source of Islamic banking capital must avoid interest as the vision and mission that relies on al-Qur'an and hadith. The capital structure is important for financial institutions, including Sharia Rural Bank (BPRS). However, BPRS has a problem that is the limited capital owned so that it affects performance. This paper's main objective is to investigate the relationship between capital structure and performance of the Islamic Rural Banks (BPRS) in Indonesia. The study using panel data regression to measure the capital structure on performance. The research sample used 164 BPRS that operate in 33 provinces from 2010 until 2017. The results show that capital structure affects DER (debt to equity ratio) and DAR (debt to asset ratio) but negatively affects ETA (equity to total Asset ratio). These findings indicate an increase in the capital structure of the performance of the BPRS in Indonesia. Hence, bank managers must reach a trade-off between the advantages and disadvantages of creating liquidity and consider the negative relationship between liquidity creation and bank performance when making decisions.

Keywords
Capital Structure; Islamic Rural Banks (BPRS); Performance; Indonesia

Introduction
One of the recent economic symptoms that appears to be an idea thought, or reality that is currently sticking out is the revival of the Islamic economy. As an idea, Islamic economics emerged as a thought movement towards forming an Islamic economy as modern social science, academic discipline, and an economic system on a local, national, and global scale. Islamic economics, which has recently been more focused on Islamic banking institutions, is extracted from Islam's vision and mission, which is prohibited interest based on the Al-Qur'an and Hadith (Rahardjo, 2015). In reality, Islamic banking has a place in various parts of the world.

Lately, Islamic banking's performance has received significant attention not only in Muslim-majority countries but also in Western and European countries. According to Reuters (2017), Islamic Banking will be the most significant economic growth driver considering it has the largest share of total Islamic financial assets and is expected to grow 1.5 times between 2016 and 2022. This data shows that Islamic banking's performance has the potential to contribute to the growing world economy. Especially in Indonesia, Islamic banking's growth and development are increasing based on the demand for Islamic financial products (Alharbi, 2015). Financial performance has improved as indicated by total assets, third party funds, and financing. Financial Services Authority (OJK, 2019) shows the average growth of Islamic banking in the last ten years of 26.2% (Assets), 27.1% (third party funds), and 24.7% (financing) from December 2012 until December 2018 (Table 1).

Meanwhile, the number of banks and sharia banking office networks also experienced impressive growth. Referring to OJK data, the number of Islamic Commercial Banks (BUS), Sharia Business Unit (UUS), and Sharia Rural Bank (BPRS) office network networks in the last ten years have increased (Table 2). The number of Islamic
banks (Table 2) in July 2019 increased to 14 BUS, 20 Sharia Business Units (UUS), 165 Sharia Rural Banks with a total of 2,805 offices (OJK, 2019).

Besides, the development of Islamic banking financial ratios in Indonesia showed excellent performance over the past ten years (Table 2). In general, sharia banking performance is still relatively good (Table 3), with the leading indicators of capital adequacy ratio (CAR), profitability ratios represented by return on assets (ROA) and return on equity (ROE), Non-Performing Financing (NPF), the Financing to Deposit Ratio, (FDR) and The ratio of Operational Expenses to Operational Revenue (BOPO).

### Table I. The Performance of Islamic Banks in Indonesia 2008-2019 (IDR x Million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Asset Growth</th>
<th>Third Party Funds Growth</th>
<th>Financing Growth</th>
<th>(YoY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-14</td>
<td>272,343</td>
<td>12,41</td>
<td>217,858</td>
<td>18,7</td>
</tr>
<tr>
<td>Dec-15</td>
<td>296,262</td>
<td>8,78</td>
<td>231,175</td>
<td>6,11</td>
</tr>
<tr>
<td>Dec-16</td>
<td>356,504</td>
<td>20,33</td>
<td>279,335</td>
<td>20,83</td>
</tr>
<tr>
<td>Dec-17</td>
<td>424,181</td>
<td>18,98</td>
<td>334,888</td>
<td>19,89</td>
</tr>
<tr>
<td>Dec-18</td>
<td>477,327</td>
<td>12,53</td>
<td>355,919</td>
<td>6,28</td>
</tr>
</tbody>
</table>

Source: OJK (2008-2019)

Islamic banking is committed to conducting activities under Islamic law (Sahyouni & Wang, 2019). Also, Islamic banks and conventional banks have similarities in collecting funds, channeling funds, and providing services like other banks. However, at the level of practice, there are differences between conventional banking and Islamic banking, which apply sharia principles by prohibiting transactions of usury, gharar, maysir and prohibiting financing by Islamic law such as arms sales, sales of narcotics, alcohol, and others (Hardianto & Wulandari, 2016).

In collecting funds, Islamic banking uses the profit and loss distribution as a substitute for interest payments (Al-deehani, Ahmed, & Karim, 1999; Belanès, 2015). Therefore, this main difference causes Islamic banks to have a very different balance sheet from conventional banks, which causes other implications with liquidity creation compared to conventional banks. Furthermore, the traditional capital structure is a bank with a debt scheme, while Islamic banks have a unique capital structure, namely profit-sharing financing obtained from investment accounts. During this time, capital structure theory is used, such as packing order theory (Modigliani & Miller, 1963), pecking order theory (pecking order theory) in the analysis of capital structure developed by (Myers, 1984).

### Table II. Islamic Banking Network in Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Office</th>
<th>Number of Sharia Business Unit (UUS)</th>
<th>Number of Sharia Commercial Bank (BUS)</th>
<th>Number of Sharia Rural Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-2015</td>
<td>313</td>
<td>20</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Dec-2016</td>
<td>349</td>
<td>20</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Dec-2017</td>
<td>446</td>
<td>44</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Dec-2018</td>
<td>464</td>
<td>44</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Jul-19</td>
<td>446</td>
<td>44</td>
<td>13</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: OJK (2020)

The capital structure of the Islamic banks are broadly divided into two types, namely based financing income (profit and musharaka) and financing of non-PLS (murabaha, salam, istishna, and ijarah) (Chowdhury, Akbar, & Shoyeb, 2018; Wahyudi et al. 2019). The principles of non-PLS in Islamic banking allows the expansion of the
capacity of Islamic finance to offer accountability by creating based financing debt. Jurisprudence identifies five types of sales that are deferred, namely Salam, muajjal, Istishna’, Ijarah, and Murabaha (Chowdhury et al. 2018). PLS and non-PLS become the primary function in obtaining profits that reflect the performance of Islamic banking (Hasan, 2020).

According to Karim, Tarazi, & Reille, Indonesia provides insights into Islamic microfinance development because it uses a dual micro bank system that includes conventional BPR (Rural Banks) and Islamic Rural Banks (BPRS). A BPR Syariah is a private bank that is regulated and supervised by the Financial Services Authority (OJK). BPRS can offer banking services, such as loan and savings facilities, based on sharia principles, but cannot provide payment traffic services. Also, BPRS is more socially oriented than BPRs. BPRS has a mission to support the community and especially micro-entrepreneurs. BPRS also has strong links with Indonesian Muslim mass movements, such as Nahdlatul Ulama and Muhammadiyah. Each BPRS has a sharia supervisory board to monitor the suitability of its products with Islamic principles.

TABLE III. FINANCIAL RATIOS OF ISLAMIC BANKS IN INDONESIA

<table>
<thead>
<tr>
<th>Year</th>
<th>CAR</th>
<th>ROA</th>
<th>ROE</th>
<th>NPF</th>
<th>FDR</th>
<th>BOPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>21.73%</td>
<td>2.27%</td>
<td>16.18%</td>
<td>8.63%</td>
<td>114.40%</td>
<td>87.09%</td>
</tr>
<tr>
<td>2017</td>
<td>20.81%</td>
<td>2.55%</td>
<td>19.40%</td>
<td>9.68%</td>
<td>111.12%</td>
<td>85.34%</td>
</tr>
<tr>
<td>2018*</td>
<td>19.33%</td>
<td>1.87%</td>
<td>12.86%</td>
<td>9.30%</td>
<td>111.67%</td>
<td>87.66%</td>
</tr>
<tr>
<td>2019**</td>
<td>19.22%</td>
<td>2.54%</td>
<td>19.50%</td>
<td>8.74%</td>
<td>116.33%</td>
<td>85.95%</td>
</tr>
</tbody>
</table>

Source: OJK

Indonesia is a country with an enormous diversity of conventional microfinance and Islam. The first evolved for more than one hundred years, preceded by an informal financial history of unknown depth, the latter, still on a modest scale, over a period of fifteen years (Dieter & Seibel, 2016). The purpose of this paper is to investigate the effect of capital structure, namely debt and equity-based financing (DEBF), on the performance of the Islamic People’s Financing Bank (BPRS) in Indonesia. It measured using debt to equity ratio (DER), debt ratio, and equity ratio for the first quarter of 2010 to Quarter IV 2017. This study’s purpose is strengthened by previous research, which concluded that DEBF has an impact on the profitability of Islamic banks in Indonesia (Amanda Maulidiyah Firdaus & Ari Prasetyo, 2017; Latifah, 2018; Nanden et al. 2017; Wahyudi et al. 2019).

This study aims to contribute to the literature on Islamic finance and Islamic banks’ practice. Some studies investigated the capital’s performance of Islamic and conventional banks in Spain, and bank ownership, loan relations, and capital structure in the United States (Fernández-Méndez & González, 2019; Ding & Sickles, 2018).

Border efficiency is analyzed by empirical, capital structure, and portfolio risk, in France (Jouida & Hallara, 2015), investigating the relationship of capital structure with regulatory capital in banking (Sheikh & Qureshi, 2017), examining how conventional and Islamic commercial banks in Pakistan choose their capital structure and what factors which most significantly influences the choice of their capital structure. Duasa examined the effect of capital structure on Islamic banking performance in 19 countries (Duasa et.al, 2014). None of them observed the capital structure in BPRS.

As far as we know, this study is the first empirical study to use Islamic banks, especially BPRS, as research objects. From a practical perspective, this research will provide a clear picture of the capital structure and performance of BPRS. This finding will also provide a new picture as a reference for the birth of a new strategic policy from the financial services authority regarding capital structure and Sharia Rural Bank performance.
The next part of this article is a research method that explains the population and sample used, types and data collection techniques, variables and measurements, and data analysis techniques. This section will continue with a discussion of the results of the study and suggestions for further research. The design of this research is quantitative research. This study uses panel data regression. There are 164 samples of BPRS data from 33 provinces in Indonesia in the first quarter of 2010 to Quartile IV 2017. The dependent variable in this study is the performance of the SRB measured using the debt to equity ratio (DER), the debt to asset ratio (DAR), and the ratio of equity to total assets (ETA). This study's independent variable is the capital structure, as measured by debt and equity-based financing (DEBF). DEBF is obtained from the total amount of mudharabah, maysarakah, salam, istishna’, ijarah, and murabahah financing. In addition, this study also uses macroeconomic variables, namely GDP growth rates and provincial inflation, as control variables. The analysis technique used to answer all the objectives of this study is to use panel data regression analysis. Panel data is a combination of time series data and cross-sections (Widiarjono, 2007).

DISCUSSION

Raghib, Zeeshan, & Ahmed describe the effect of capital structure on the performance of Islamic banks in Jordan. They found that some financial ratios of equity ratios, total assets, and financing ratio to total assets affect performance. Besides, the concentration ratio of the Herfindahl Index has a negative impact on performance. It does not affect the ratio of current assets of total assets to Islamic banks’ performance in Jordan. Al-Farissi & Hendrawan examined the impact of capital structure on the performance of conventional banks and Islamic banks using the earnings efficiency approach. They found that Islamic banks in Indonesia succeeded in placing their position in the highest profit efficiency score of 20 percent. In addition, bank capital ratios have a negative effect on the efficiency of their profits. Nikoo investigated the impact of capital structure on banking performance on the Tehran stock exchange. This study sets a model to measure capital structure’s effect on bank performance as measured by return on assets (ROA), return on equity (ROE), and earnings per share. It was found that capital structure has a positive impact on bank performance. Zafar et al. examined the consequences of capital structure on the implementation of Pakistani banks. Findings from the study authenticate the positive relationship between the determinants of capital structure and the performance of the banking industry.

Archer & Karim analyze the capital structure, which shows that an increase in the Investment Sharing Account (PSIA) can increase the value of Islamic banks’ shareholders. Sharing risk between shareholders with PSIA in Islamic banks and Capital Adequacy Ratio (CAR) in Islamic banks shows a formula that is in accordance with AAOIFI. Hafeez et al. examined the impact of capital structure on Islamic banks' performance in Asian countries (Pakistan, Jordan, Egypt, and Bahrain) during the period 2007 to 2016. This study found a positive and significant relationship between equity multipliers (EM) and debt ratios (DR) with ROA, while the equity ratio (ER) has a negative and significant relationship with ROA.

Akhhtar et al. examined the effect of capital structure (debt to equity) on profitability, liquidity, tangibility, interest rates, and growth rates to measure the Pakistani banking sector’s performance. This study uses five annual bank reports from 2005 to 2015. Their results show that there is a significant positive relationship between profitability, tangibility, liquidity, interest rates, and the level of growth and capital structure.

Specifically, in Indonesia, research conducted (Agustina, Sholihin, & Fitria, 2019) aims to measure and analyze BPRS efficiency using balanced panel data from quartiles I 2011 to quartiles IV 2016. The sample includes 58 Sharia Rural Banks with a total of 1,392 observations. The results show that the average technical efficiency of BPRs in Indonesia reaches 86 percent, and there is still 14 percent that can be optimized. Overall, the average efficiency of Indonesian Islamic BPRs increased during the study period. Besides, this study also found that large banks are more efficient than small banks.

Hosen & Syfaat analyzed financial performance and macroeconomic indicators to influence the financing quality in the Islamic People's Credit Bank Industry (IRBI) in Indonesia. Panel data regression is used to predict changes in the quality of financing, as reflected in the value of problem financing (NPF). This research model is grouped based on four work zone areas because IRBI has different competencies depending on the region. The research sample uses 72 IRBI in period II Quarter 2010 to Quarter I 2016. The results showed that simultaneously variables for bank size, financing to deposit ratio (FDR), the operational efficiency ratio (OER), return on equity (ROE), the cost to assets (EA), the percentage of gross domestic product (GDP), and the level of inflation are statistically significant to IRBI financing in Indonesia that is not performing poorly. GDP has a very significant impact on the IRBI NPF in Indonesia. By the work zone area, inflation has a significant effect on IRBI in Zone One, and GDP has a very significant impact on IRBI in Zone Two, Zone Three, and Zone Four. However, there are different effects of GDP on NPF, which have a negative impact on Zone One and Zone Four, while Zone Two and Zone Three have a positive impact. This finding recommends that the government makes different policies in each zone.

Hosen & Fitria examined the effect of the concentration levels of the four largest Sharia Commercial Banks (BUS) on the performance of Sharia Rural Banks (BPRS) using the Ordinary Least Square (OLS) method. The
results show that BUS, UUS, and BPRS always operate in the same financing market for *murabahah* products and compete in the MSME sector. In addition, this insignificant influence shows that BUS, UUS, and BPRS operate in monopolistic markets. This also proves the hypothesis of efficiency in the Islamic banking industry in Indonesia. Besides, this study confirms the theory of fragility of competition where the largest BUS concentration level negatively affects problem financing (NPF) at the BPRS level. Another study conducted (Trinugroho, Risfandy, & Doddy, 2018) examines the determinants of bank margins in Indonesian Islamic banks. This finding shows that bank margins are influenced by competition and diversification. In this less competitive market, Islamic BPR is able to set high margins. BPRs also tend to set high margins when they do not diversify their income, referring to the cross-subsidy strategy. In addition, the impact of competition and diversification of bank margins are more prominent in banks with lower contracts and higher PLS portions. However, when the location of Islamic banks in most Muslims and outside Java, the impact of high margins diminished.

Banks (BPRS) in Indonesia, as measured by Debt to Equity Ratio (DER), indicate that Debt and Equity-Based Financing (DEBF) has a positive and significant effect on Debt to Equity Ratio (DER) of the Islamic People's Financing Bank (BPRS) in Indonesia. This shows that when financing at the Islamic People's Financing Bank (BPRS) has strengthened due to an increase in the types of financing Financing Loss (PLS) based on financing (*mudharabah* and *musyarakah*) and non-PLS financing (*murabahah*, *salam istishna*, and *ijarah*) will provide an increase in the performance of the Islamic People's Financing Bank (BPRS) in the aspect of Debt to Equity Ratio (DER). The rise in funding channeled by the Islamic People's Financing Bank (BPRS) will stimulate the Islamic People's Financing Bank (BPRS) to increase the debt held to the total available capital. The increase in debt is intended so that the Islamic People's Financing Bank (BPRS) has sufficient funds to develop in pursuit of profit. This causes Debt and Equity-Based Financing (DEBF) to have a positive and significant effect on Debt to Equity Ratio (DER).

So far, we have not found the results of research in the BPRS. However, Nandet et al. (2017) findings which conclude that Equity Financing is more dominant in providing benefits compared to Debt Financing in Islamic banks. Wahyudi et al. (2019) also found similar results that DEBF influenced Islamic banks' profitability. Likewise, Firdaus and Prasetyo (2017) found that simultaneously DEBF affected the profitability of Islamic banks. Zafar et al. examined the consequences of capital structure on the implementation of Pakistani banks. Findings from the study authenticate the positive relationship between the determinants of capital structure and the banking industry's performance.

Ratio found that there is a positive and significant effect on Debt Financing and Equity on Debt to Asset Ratio. It means that an increase in financing as measured by Debt and Financing-Based Financing will improve the performance of the Islamic People's Financing Bank (BPRS) in the aspect of Debt to Asset Ratio (DER). This is assumed to occur because an increase in financing that occurred at the Islamic People's Financing Bank (BPRS) can encourage these banks to increase debt proportionately with the level of assets to be expanded to pursue profit. According to Wahyudi Debt to Asset Ratio (DAR) is a debt ratio used to measure the ratio between total debt and total assets. The higher this ratio means, the greater the amount of loan capital used to invest in assets to generate profits for the company (Wahyudi, 2019). Debt and Equity-Based Financing have a positive and significant effect on the Debt to Asset Ratio. This study's results are also supported by research conducted by (Nikoo, 2013; Zafar et al. 2016), who concluded that capital structure has a positive and significant effect on the performance of the banking industry.

Further results found that Debt and Equity-Based Financing had a negative and significant effect on Equity to Total Asset Ratio. These results indicate that an increase in Debt and Equity-Based Financing ratios will reduce the performance of Islamic People's Financing Banks (BPRS) as measured by Equity to Total Asset Ratio. This result provides an assumption that an increase in financing at the Islamic People's Financing Bank (BPRS) encourages the bank to channel more public financing so that the level of bank profit will increase. This condition causes the Islamic People's Financing Bank (BPRS) to use its capital as additional funds in the financing process. This has caused the Debt and Equity-Based Financing ratio to have a negative and significant effect on the Equity to Total Asset Ratio. Equity to Total Assets Ratio is an indicator that shows the existence of capital to maintain liquidity and continuity of operations to protect capital owners from bankruptcy. The owner's role is able to encourage bank management to improve performance efficiency, which will ultimately have an impact on the profits to be received by the bank. In addition, This bank's capital strength can protect customers from losses and maintain public confidence because of the available capital to protect their funds (Pratama, 2019).
CONCLUSION

Islamic banking capital sources have an essential role in supporting the interest-free intermediation function, which is prohibited in Islam. It is expected to be able to support the implementation of national development. BPRS can be more capable of realizing equal distribution of banking services. The results show that the capital structure measured by DEBF (debt to equity-based financing) has a positive and significant effect at the level of 1% of DER (debt to equity ratio) and DAR (debt to asset ratio), but has a negative and significant effect on 1% significance level of ETA (equity to total asset ratio). This shows that there is an increase in the capital structure as measured by debt and equity-based financing (DEBF) on the performance of Islamic Sharia Financing Banks (BPRS) in Indonesia as measured using Debt to Equity Ratio (DER), Debt to Asset Ratio (DAR), and Ratio of Equity to Total Assets (ETA). The results show that capital structure affects DER (debt to equity ratio) and DAR (debt to asset ratio) but negatively affects ETA (equity to total Asset ratio). These findings indicate that there is an increase in the capital structure of the performance of the BPRS in Indonesia.

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