Research Article

Does Shariah Supervisory Board Moderate the Effect of Islamicity Performance Index and Intellectual Capital on Financial Performance?

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Abstract.
This research aims to analyze the effect of Islamicity Performance Index and intellectual capital on financial performance in Islamic banks moderated by Shariah supervisory board. The research used 168 sample data from 36 companies consisting of Sharia Bank (BUS) and Sharia enterprise unit (UUS) registered by Otoritas Jasa Keuangan in 2018-2022. The analysis technique used is multiple linear regression analysis with STATA version 17, as a tool. The result concluded profit sharing ratio, zakat performance ratio, Islamic income vs non-Islamic income ratio, and intellectual capital do not affect financial performance. Meanwhile, an equitable distribution ratio has a positive effect on financial performance. The Sharia supervisory board does not strengthen the effects of the profit sharing ratio, zakat performance ratio, and Islamic income vs non-Islamic income ratio. However, the Shariah supervisory board strengthens the effect of equitable distribution ratio and intellectual capital on financial performance. The research contributes to developing new insight into the recent phenomena and the novelty of variables. Research limitations are only using 4 of the 7 Islamicity Performance Index proxies, the object is only in the Indonesian region, and the literature on Sharia supervisory boards is limited.

Keywords: financial performance, intellectual capital, Islamic banking, Islamicity Performace Index, Sharia supervisory board

1. Introduction
The Indonesian Shariah Financial Development Report (LPKS) by Otoritas Jasa Keuangan (OJK) [1] reported that Indonesian sharia bank ranked ninth globally with assets worth US$48 billion, US$9 billion higher than in 2021. However, not all aspect have a stable growth.

The table shows that asset growth has been decreasing in 2019, the financing distribution (PYD) has been constantly decreasing since 2018-2021, but it increased in 2022. Third-Party Funds (DPK) decreased in 2019, then it increased in 2021 and returned to decrease by 2022. Then reviewed by Net Operating Margin (NOM) ratio that measures the ability of the company's productive assets to generate profit.[2]

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>12.57%</td>
<td>9.93%</td>
<td>13.11%</td>
<td>13.94%</td>
<td>15.63%</td>
</tr>
<tr>
<td>PYD</td>
<td>12.17%</td>
<td>11.01%</td>
<td>8.08%</td>
<td>6.90%</td>
<td>20.44%</td>
</tr>
<tr>
<td>DPK</td>
<td>11.93%</td>
<td>11.88%</td>
<td>11.88%</td>
<td>15.30%</td>
<td>12.93%</td>
</tr>
</tbody>
</table>

Source: LPKS Indonesia

NOM BUS decreased in 2020, but it increased in 2021-2022. NOM UUS tends to be more fluctuating. It was decreasing in 2019-2020, then increasing in 2021. But it was decreasing again in 2022. This instability describes the level of operational efficiency of banks that also tend to be unstable in managing productive assets to generate profits. Here is the NOM ratio data table.


<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM BUS</td>
<td>1.42%</td>
<td>1.92%</td>
<td>1.46%</td>
<td>1.66%</td>
<td>2.59%</td>
</tr>
<tr>
<td>NOM UUS</td>
<td>2.38%</td>
<td>2.18%</td>
<td>1.73%</td>
<td>2.13%</td>
<td>1.79%</td>
</tr>
</tbody>
</table>

Source: data processed in 2023

Through the growth rate data and NOM ratio that has remained unstable over the last five years, it shows the financial performance that needs to be further optimized. Moreover, the role of the banking sector is quite important in the national economy, because banking development will affect the entire sector of the economy. So in order to advance the national economy, we need to pay more attention to this sharia banking [3]. Pudyastuti [4] said that performance improvements must always be following by developments in the sharia bank so that customer confidence can be realized and increased. LPKS Indonesia by OJK [1] indicates that the growth of Third-Party Funds (DPK) in conventional banks increased by 5.62%, while Sharia bank decreased by 2.37% in 2022. The data are showing that sharia banks still need to increase public confidence. Stakeholder and customers of sharia bank expect that funds in sharia bank will be managed on the principle of Islamic economy [5]. But the fact is seen through frequent fraud, such as fictitious credit [6] and corruption of labour capital applications as well as investments in Bank Syariah Mandiri [7], and suspicion of bribery in Bank Syariah Indonesia [8]. The non-conformity of this Islamic principle has made an evaluation of the performance of the sharia bank [9].

In the measurement of Shariah purposive, Islamicity Performance Index are used as the measurement. The Islamic Performance Index (IPI) consists of: (t) Profit sharing ratio.
(PSR) as part of its primary objective needs to be assessed to measure its success rate through the existence of profit sharing results [10]. (2) Zakat performance ratio (ZPR). The nominal distribution of Zakat funds will increase its reputation shariah bank so that will increase customers to use the products [11]. (3) Equitable distribution ratio (EDR) as a measure that reviews the distribution of income to various stakeholders [12]. For this reason, EDR is an indicator that measures the level of fairness in income disbursement [13]. (4) Islamic income vs. non-Islamic income (Iln) as a measure that assesses the rate of Islamic incomes over productive assets [13]. The higher Islamic Income ratio will make customers feel more confident in the products and services of the Shariah bank because its operations are believed to have fully implemented the principle of Sharia [14].

The growth of the shariah bank is also influenced by their human resources that understand sharia economy and are able to implement its principle. Intellectual capital (IC) as corporate's human resources has an important role in the growth, development, and welfare of bank. The IC is needed to gain the value added that leads to product innovation and better quality of service which will improve the index of inclusion as well as profit gains [15].

The shariah bank needs a team that focus on review and supervise its operations. The Shariah Supervisory Board (SSB) is the team that has a role to do review and supervision bank operationsal activities and Islamic application in shariah banking [16]. The certainty of conformity of products and services according to the principles of Islamic Shariah is the main role of SSB [17].

The rest of this paper will test the impact of each Islamicity performance index and intellectual capital on financial performance. Besides that, it also tested the role of the Shariah Supervisory Board in moderating Islamicity performance index and intellectual capital on financial performance.

2. Literature Review

2.1. Shariah enterprise theory

Triyuwono [18], the pioneer of Shariah Enterprise Theory (SET) acknowledges the most important axiom of all concepts is Allah swt. as the owner of all resources. Allah swt. is the number one of amanah and every resource in stakeholders is an amanah given in which there is a responsibility to use it in accordance with the purposes and principles of Shariah. Shariah banks must operate their activities based on the concept of SET. Shariah banks are liable not only to the owners of the company but also to stakeholders and
Allah swt. It is in line with the SET principles that emphasize the value of responsible, *amanah*, fair, honest, and reliable action [19]. Through the Islamicity Performance Index, we can indirectly see how SET is applied to banks because this index is an evaluation tool for the performance of banks that not only measure their finances, but also their validity, fairness, and clearance (*tazkiyah* or *zakat*).

### 2.2. Resourced based theory

Resources based theory by Penrose [20] argues that each company has a different resource in which there is a special character. Resource-based theory states that the company has resources that will make the company have a competitive advantage so that it can deliver the company to good long-term performance [21]. Resources that are rare and valuable are able to create competitive advantages so that such resources can be used over long periods of time and are not easy to imitate or replace [22]. In addition to creating a competitive advantage, good management of intellectual capital also creates added value of the company, which will affect financial performance, growth, and market value [23]. Olivia et al. [24] said that the competition between conventional banks and Sharia banks required Sharia banking to re-regulate and enhance strategies to the public in promoting shariah banking services and products.

### 2.3. Hypothesis

Through Profit Sharing Ratio (PSR) can be measure how the application of SET principle in the bank to achieve its primary objective of profit sharing. This transaction has become one of the main objectives of the bank because it is free of interest (*riba*) and is considered to have complied with the provisions of the Shariah so that its development will affect profits [9]. The PSR as part of bank’s main objective will reflect the level of adherence of the bank to the application of the principle of Shariah in achieving its objectives [25]. According to the theory, businessmen are must operate bank’s activities in corridors in accordance with the principles of Islamic Shariah. If profit sharing is managed with a good level of compliance then the value can be higher and strengthen the presence of banks among other sharia banks. The increasing of profit-sharing will increase income, which also indicates increased profit, as does financial performance [11]. This was supported by Siswanti et al. [26] and Jummaini et al. [11] which proved that PSR had a positive influence on financial performance.
H₁: Profit Sharing Ratio (PSR) has positive effect on shariah bank financial performance.

The Proxy Zakat Performance Ratio (ZPR) reflects the existence of the principle of cleansing (tazkiyah or zakat) on the individualist, greedy, or shameless nature that may be present in the property owner. Zakat is the third element of Islam, so it is used as the purpose of accounting of the Shariah [13]. Zakat also aims to reduce poverty through the redistribution of excess to the needy so that the wealth of this zakat will continue to circulate [27]. The availability of information on the management of the Zakat Fund is also a manifestation of the social concern of the bank to the public so that it shows that the bank is not only focused on the operation of its business, but also on the implementation of its sharia activities [28]. Banks that care about and defend stakeholders will gain support and a positive reputation which will have an impact on improved financial performance and bank sustainability [29]. This is in line with Cahya et al. [12], Rahmaniar & Ruhadi [30], and Fatmala & Wirman [19] that ZPR has been shown to have a positive influence on financial performance.

H₂: Zakat Performance Ratio (ZPR) has positive effect on shariah bank financial performance.

Equitable Distribution Ratio (EDR) assesses the application of Sharia principles focusing on fairness through income distribution [4]. According to the SET that there are some principles that prioritize values over fairness, responsibility, and amanah [19]. Therefore, this ratio will describe the principle of fairness. EDR will measure the percentage of income distribution to stakeholders, such as through salary expense, donations whose earnings are derived from the qardh fund, dividends distributed to investors, and so on. Through this measurement will be depicted the distribution of income that is not only to the internal, but also external, i.e. the community or the needy through the qardh funds Meilani et al. [31]. Operations that remain in the corridors of Islamic Shariah will make the implementation of the principle of fairness so that the existence of such observance will be able to increase customer confidence in the services and products of the shariah bank then the financial performance is affected. It is in line with Arafah & Wijayanti [32] who stated that EDR had a positive impact on financial performance.

H₃: Equitable Distribution Ratio (EDR) has positive effect on shariah bank financial performance.

Islamic income vs non-Islamic income (IIn) as a proxy that reflects the principle of validity (halal) [25]. Clearly, Islam has forbidden their ummat to engage in transactions that contain gharrar (unclear), riba*, and mayshir so that the shariah bank must only obtain a halal income. However, in reality, Sharia banks have not been able to get 100%
relief from conventional banks [28]. Generally, non-legal income arises as a result of an unavoidable emergency [33]. The high validity (halal) ratio will describe the success of the sharia bank in applying its sharia principles so that it will more and more remove the doubts of the prospective customer and give a greater sense of security in using its products and services. Then, when it properly managed, it will be able to improve financial performance [14]. This explanation is in line with Cahya et al. [12], Arafah & Wijayanti [32], and Siswanti et al. [26] that proves IIn has a positive influence on financial performance.

**H4**: Islamic income vs non-Islamic income (IIn) has positive effect on shariah bank financial performance.

Good Intellectual Capital (IC) management will create competitive advantage as well as value added which will affect the financial performance, growth, and market value of the company [23]. Olivia et al. [24] said that the competition between conventional banks and sharia banks requires sharia banking to re-regulate and improve strategies to the public in the promotion of sharia services and products. For this, the role of IC is very necessary in realizing value added that leads to the development of innovation of new products as well as better quality services so that it can increase inclusion and profits obtained [15]. This explanation is in line with Cahya et al. [12], Indriani & Ratnawati [34], and Nawaz et al. [35] which stated that IC had a positive impact on financial performance.

**H5**: Intellectual Capital (IC) has positive effect on shariah bank financial performance.

The Shariah Supervisory Board (SSB) as an important resource is also part of the bank’s intellectual capital. According to RBT, when these resources are managed optimally it will create a competitive advantage and improve the performance of banks [21]. With the presence and good characteristics of SSB, the better the level of supervision it does [36]. Strict supervision will increasingly encourage bank management to adhere more closely to the principle of Shariah in conducting its operations, such as the level of compliance in the management of profit-sharing, the rate of clearance (tazkiyah) in the distribution of zakat funds, the fairness in the disbursement of income, and the validity (halal) in the acquisition of income. The strength of the implementation of the principle of Shariah in its operations will minimize the possibility of fraud due to the principles of shariah that prioritize honesty and trust (amanah) [37]. Therefore, the SSB is a vital resource to ensure that the bank’s operations are implemented in accordance with the principle of Shariah so that stakeholder confidence, performance, as well as market developments can be improved [38].
$H_9$: SSB strengthen the effect of PSR on shariah bank financial performance.

$H_{10}$: SSB strengthen the effect of ZPR on shariah bank financial performance.

$H_{11}$: SSB strengthen the effect of EDR on shariah bank financial performance.

$H_{12}$: SSB strengthen the effect of Iln on shariah bank financial performance.

$H_{13}$: SSB strengthen the effect of IC on shariah bank financial performance.

3. Methodology

The research used secondary quantitative data with the source of Financial Statement and Annual Report available in https://ojk.go.id/id/ or the official website of each bank. The population is sharia bank (BUS) and sharia enterprise unit (UUS) in Indonesia registered by OJK in 2018-2022. This period was chosen because it refers to NOM ratio of BUS and UUS which began to be less stable since 2018 and fluctuating until 2022. Research samples are determined using purposive sampling techniques. Purposive sampling criteria are each BUS and UUS registered with OJK period 2018-2022 and each BUS and UUS that publishes audited financial statements or audited annual reports in the period 2018-2022.

![Table 3: The Research Sample Selection.](image)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Total Sampel</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS registered by OJK in 2018-2022;</td>
<td>14 14 14 12 13</td>
</tr>
<tr>
<td>UUS registered by OJK in 2018-2022;</td>
<td>20 20 20 21 20</td>
</tr>
<tr>
<td>BUS and UUS did not publish audited financial statements and annual reports for in 2018-2022.</td>
<td>- - - - -</td>
</tr>
<tr>
<td>Sampel per year</td>
<td>34 34 34 33 33</td>
</tr>
<tr>
<td>Total research data</td>
<td>168</td>
</tr>
</tbody>
</table>

Source: data processed in 2023

The total sample are 168 data obtained on 36 sharia banks, consisting of 16 BUS and 20 UUS. Total samples per year were not same because there were several banks that underwent different form changes, liquidations, as well as years of establishment.

3.1. Operational definition and variable measurement
3.1.1. Financial performance

Measured through NOM to rate the level of operational efficiency of sharia banks in managing their productive assets for gaining profit [2]. Here is the formula of NOM by OJK [39]:

$$NOM = \frac{\text{Revenue from distribution of funds after deducing by profit sharing} - \text{Operational Expense}}{\text{Average of Productive Asset}}$$

3.1.2. Profit sharing ratio (PSR)

Hameed et al. [10], PSR as the ratio of financing of profit sharing is measured by total all the financing of profit sharing and compared to the overall financing in bank. This is the formula of PSR that used by Hameed et al. [10], Aeny et al. [40], and Jummaini et al. [11]:

$$PSR = \frac{\text{Financing of Mudharaba} + \text{Financing of Musyarakah}}{\text{Total Financing}}$$

3.1.3. Zakat performance ratio (ZPR)

ZPR is the ratio that evaluates the allocation of zakat funds with the net asset of the bank as comparison [41]. Based on Hameed et al. [10], Afandi & Haryono [42], and Mayasari [13] measurements of the zakat ratio are as follows:

$$ZPR = \frac{\text{Zakat}}{\text{Net Asset}}$$

3.1.4. Equitable distribution ratio (EDR)

According to Pudyastuti [4], EDR is a measurement that reviews the implementation of the principles of fairness according to Islamic Shariah. Measured by calculating the percentage rate of income distribution, then compared to the net value of income after deducting by the tax and zakat [31]. Meilani et al. [31], Hameed et al. [10], and Arafah & Wijayanti [32] describe the measurement of EDR as follows:

$$EDR = \frac{\text{Qardh Funds} + \text{salary expense} + \text{net profit} + \text{dividen}}{\text{Revenue} - (\text{tax} + \text{zakat})}$$
3.1.5. Islamic income vs non-islamic income (Iln)

Hameed et al. [10] presented Iln as a measure of income from a halal source. Based on Hameed et al. [10], Arafah & Wijayanti [32] and Mayasari [13] measurements of Iln are as follows:

\[ Iln = \frac{Islamic \ Income}{Islamic \ Income + Non \ Islamic \ Income} \]

3.1.6. Intellectual capital

Measured using Islamic Banking-Value Added Intellectual Coefficient (IB-VAIC) as a form of modification Ulum [43] on the VAIC model. According to Olivia et al. [24], Afandi & Haryono [42], and Cahya et al. [12] the calculations are as follows:

\[ VA = OUT - IN \]

Description:

\[ VA = Value \ added \]

\[ OUT = Total \ pendapatan \ dan \ penjualan \]

\[ IN = Total \ beban \ selain \ beban \ tenaga \ kerja \]

Calculate IB-VACA to measure value added from equity

\[ IB - VACA = \frac{VA}{CE} \]

Description:

\[ VA = Value \ added \]

\[ CE = Capital \ employed \ (equitas) \]

Calculate IB-VAHU to measure value added of the funds as labour payments.

\[ IB - VAHU = \frac{VA}{HU} \]

Description:

\[ VA = Value \ added \]

\[ HU = Human \ capital \ (salary \ expense) \]
Calculate IB-STVA to measure the total of structural capital that required to obtain one rupiah of IB-VA.

\[ IB - STVA = \frac{SC}{VA} \]

Description:

\[ VA = Value\ added \]
\[ SC = Structural\ capital\ (VA - HU) \]

Calculate IB-VAIC

\[ IB - VAIC = VACA + VAHU + STVA \]

### 3.1.7. Shariah supervisory board (SSB)

SSB is measured by existence, size, cross membership, reputation of member, and competence of member. The measurement is based on Farook et al. [44] using the IG-Score method. Each characteristic is scored 1 and scored 0 if it does not exist, then summed up as IG-score. If there is a member of the SSB then score 1 for existence, score 1 if there is a member with a position of SSB elsewhere, and score 1 when a member is reputable at other financial institutions. A small modification by replacing the measurement of secular educational qualifications with the competence of qualified SSB members with dual skills in the fields of finance and sharia [45]. The size assessment criteria were modified following Septyan [46] study, which is a score of 1 when there are 3 SSB members. Here’s the form of the equation:

\[ SSB = Existence + Size + CrossMem + Reputation + Competence \]

### 3.2. Data Analysis Techniques

Data analysis techniques are performed through descriptive statistical tests, panel data regression, classical assumption tests, and hypothetical tests with STATA software version 17 as a tool.

**Model 1: Multiple Linear Regression**

\[ NOM = \alpha + \gamma_1PSR_i + \gamma_2ZPR_i + \gamma_3EDR_i + \gamma_4ln_i + \gamma_5IC_i + \gamma_6SSB_i + e_i \]

**Model 2: Multiple Linear Regression with moderated variable**

\[ NOM = \alpha + \beta_1PSR_i + \beta_2ZPR_i + \beta_3EDR_i + \beta_4ln_i + \beta_5IC_i + \beta_6SSB_i + \beta_7PSR_iSSB_i + \beta_8ZPR_iSSB_i + \beta_9EDR_iSSB_i + \beta_10ln_iSSB_i + \beta_11IC_iSSB_i + e_i \]

Description:

- \[ \alpha = \text{Constanta} \]
- \[ \gamma_1-\gamma_6 = \text{Coefficient of Model 1} \]
- \[ \beta_1-\beta_{11} = \text{Coefficient of Model 2} \]
\( \beta_{1} - \beta_{11} \) = Coefficient of Model 2

PSR = Profit Sharing Ratio

ZPR = Zakat Performance Ratio

EDR = Equitable Distribution Ratio

IIn = Islamic Income vs Non-Islamic Income

IC = Intellectual Capital

SSB = Shariah Supervisory Board

e_{it} = Error

4. Result

The sample of this study are sharia bank and sharia enterprise unit. There are 168 samples used in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviasi</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>0.0118519</td>
<td>0.0330894</td>
<td>-0.1224</td>
<td>0.1361</td>
</tr>
<tr>
<td>PSR</td>
<td>0.4598911</td>
<td>0.2882529</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ZPR</td>
<td>0.0037727</td>
<td>0.009665</td>
<td>0</td>
<td>0.0367781</td>
</tr>
<tr>
<td>EDR</td>
<td>0.3367405</td>
<td>0.2198224</td>
<td>-0.3636371</td>
<td>0.7744556</td>
</tr>
<tr>
<td>IIn</td>
<td>0.9977417</td>
<td>0.0006011</td>
<td>0.9977082</td>
<td>1</td>
</tr>
<tr>
<td>IC</td>
<td>4.842396</td>
<td>4.655607</td>
<td>-6.793024</td>
<td>20.53766</td>
</tr>
<tr>
<td>SSB</td>
<td>0.7797619</td>
<td>0.3676036</td>
<td>0.2</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17 (2023)

Result descriptive statistic in table 4 show that NOM (Y) as measurement of financial performance indicates that the average capacity of productive assets in generating operating income is 1.19%. The deviation standard of 0.0330894 > 0.0118519 (mean) indicates the spread over NOM is high. The lowest NOM was obtained by Aladin Shariah Bank in 2018 and 2022. The highest NOM was acquired by BTPN during 2018 and 2019.

The average PSR (X1) is 45%, indicating the rate of profit-sharing financing against the total financing performed by each sharia bank of 45%. The standard deviation 0.2882529 < 0.4598911 (mean), indicates the spread of data over the PSR is low. The lowest PSRs were generated by BTPN in 2018, Aladin Bank Shariah in 2018-2022 and Bank Jago in 2021 and 2022.

The average ZPR (X2) is 0.37727%, indicating that the average sharia bank disbursed zakat only 0.37727% of its net assets. The standard deviation 0.009665 > 0.0037727 (mean), meaning the data
spread is high. The highest ZPRs were obtained by Bank Danamon Indonesia in 2017 and 2018 and BPD Kalimantan South in 2018-2022.

The average EDR (X3) is 33.67405%, indicating the sharia bank’s average share of 33.67405% of its total net income with each stakeholder. Standard deviation 0.2198224 < 0.3367405 (mean), indicating low EDR data spread. The highest EDRs were obtained by Aladin Shariah Bank in 2019 and BPD West Kalimantan in 2019-2021. The lowest EDPs were acquired by Panin Dubai Shariah Bank in 2021, Aladin Sharjah Bank in 2021 and 2022, and several other banks.

Average IIn (X4) is 99.97417%. Standard deviation 0.0006011 < 0.9997417, indicates low IIn data spread. Approximately 60% of sharia banks are rated 1 and the remaining 40% are in the range of 99%, so it can be concluded that almost all of the income that exists in the sharia bank comes from halal income.

The average IC (X5) is 4,842396, indicating that on average the IC of each Sharia bank can generate value added Rp4,842 on every Rp1 the company invested. The resulting deviation standard is lower than the average of 4,655607. It shows the data spread over IC each sharia bank is low. The lowest value was generated by Bank Panin Dubai Shariah in 2021, Bank CIMB Niaga in 2022, and several other banks.

The average SSB (Z) is 77,97619%, indicating the average level of effectiveness of SSB in carrying out its role in the sharia bank based on its characteristic rating is quite high at 77.97619. The standard deviation < average is of 0.1676036, describing the spread of the SSB data is low. The highest valuation was obtained by Aceh Sharia Bank in 2020-2022, BJB Sharia in 2019, and several other banks.

4.1. Panel data regression

<table>
<thead>
<tr>
<th>Table 5: Chow Test.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
</tr>
<tr>
<td>F(35, 126)</td>
</tr>
<tr>
<td>F(35, 121)</td>
</tr>
<tr>
<td>Prob &gt; F</td>
</tr>
<tr>
<td>Source: Output STATA v.17</td>
</tr>
</tbody>
</table>

The result in table 5, Model 1 and 2 have probability 0,0000 < α = 0,05, it shows that Fixed Effect Model (FEM) is a suitable model.

<table>
<thead>
<tr>
<th>Table 6: Lagrange Multiplier Test.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
</tr>
<tr>
<td>chibar2(01)</td>
</tr>
<tr>
<td>Prob &gt; chibar2</td>
</tr>
<tr>
<td>Source: Output STATA v.17</td>
</tr>
</tbody>
</table>
The result in table 6, model 1 dan 2 have probability $0,0000 < \alpha = 0,05$, it show that Random Effect Model (REM) is a suitable model.

**Table 7: Hausman Test**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi2(5)</td>
<td>23.15</td>
<td>-</td>
</tr>
<tr>
<td>chi2(9)</td>
<td>-</td>
<td>23.47</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0,0003</td>
<td>0,0052</td>
</tr>
</tbody>
</table>

Source: *Output STATA v17*

The result in table 7, model 1 has probability $0,0003 < \alpha = 0,05$. Model 2 have probability $0,0052 < \alpha = 0,05$. According to the result, suitable model for both models are Fixed Effect Model (FEM).

### 4.2. Classical assumption test

**Table 8: Normality Test**

<table>
<thead>
<tr>
<th></th>
<th>Before Treatment</th>
<th>After Treatment</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skewness</td>
<td>Kurtosis</td>
<td>Skewness</td>
<td>Kurtosis</td>
</tr>
<tr>
<td>NOM</td>
<td>-3,879331</td>
<td>39,979</td>
<td>0,0906787</td>
<td>9,178567</td>
</tr>
<tr>
<td>PSR</td>
<td>0,197066</td>
<td>2,019058</td>
<td>0,197066</td>
<td>2,019058</td>
</tr>
<tr>
<td>ZPR</td>
<td>5,186169</td>
<td>35,72426</td>
<td>2,891697</td>
<td>9,93454</td>
</tr>
<tr>
<td>EDR</td>
<td>-2,03027</td>
<td>12,02568</td>
<td>-0,4320684</td>
<td>4,212284</td>
</tr>
<tr>
<td>IIn</td>
<td>-9,311837</td>
<td>102,1884</td>
<td>-2,585596</td>
<td>8,414038</td>
</tr>
<tr>
<td>IC</td>
<td>-10,45195</td>
<td>125,3553</td>
<td>1,222653</td>
<td>6,27129</td>
</tr>
<tr>
<td>SSB</td>
<td>-0,6656129</td>
<td>3,681066</td>
<td>-0,6656129</td>
<td>3,681066</td>
</tr>
</tbody>
</table>

Source: *Output STATA v17*

Through the skewness-curtosis normaly test the data distribution rate of each variable is tested. Data is normally distributed if Skewness $\leq 3$ and Kurtosis $\leq 10$. Some variables were found not normally distributed and a winsorized treatment was performed to address them, and all the data are normaly.

The Variance Inflation Factor (VIF) determines whether there is a correlation between the variables. Data is free of multicolinearity if Tolerance $> 0.100$ and VIF $< 10.00$. Some variables are indicated multicolinearity so treatment centering is done.

According to modified wald test, it is determined whether there is an inconsistency between the variants of one observation residue and the other. When P value $> 0.05$ is obtained, heterocedastisity is not indicated. Both models show P value $< 0.05$, so robustness is indicated as a treatment to overcome heteroscedastism.
### Table 9: Multicolinearity test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIF</td>
<td>1/VIF</td>
</tr>
<tr>
<td>IIn</td>
<td>31.70</td>
<td>0.031543</td>
</tr>
<tr>
<td>SSB</td>
<td>23.85</td>
<td>0.041926</td>
</tr>
<tr>
<td>EDR</td>
<td>4.47</td>
<td>0.223938</td>
</tr>
<tr>
<td>PSR</td>
<td>4.15</td>
<td>0.240880</td>
</tr>
<tr>
<td>IC</td>
<td>2.36</td>
<td>0.424156</td>
</tr>
<tr>
<td>ZPR</td>
<td>1.20</td>
<td>0.834219</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

### Table 10: Heterokedasticity Test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi2 (36)</td>
<td>22226,10</td>
<td>1.4e+31</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

### Table 11: Autocorrelation Test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>F(1, 33)</td>
<td>15.490</td>
<td>9.130</td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.0004</td>
<td>0.0048</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

According to the Wooldridge test for autocorrelation in data panels, the data is free of autocorrelation if it produces P value > 0.05. Both models show P value < 0.05, so robustness is used as a treatment to overcome auto-correlation.

### 4.3. Hypothesis test

### Table 12: Determination Coefficient Test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Square:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>0.7587</td>
<td>0.7745</td>
</tr>
<tr>
<td>Prob &gt; chibar2</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

R-Square model 1 is 75.87%, it is mean that PSR, ZPR, EDR, IIn, IC, and SSB can provide an explanation of financial performance (NOM) of 75.87% while 24.13% are influenced by other factors. whereas R-square over
model 2 was 77.45%, it is mean that PSS, ZP, EPR, In, IC, SSB, SSB moderators of PSR, SSB moderators of ZPR, SBS moderates of EDR, SSSB moderators of In, and SBS Moderators of IC can provide explanations for financial performance of 77.45, and 22.55% is affected by other factor.

4.4. Partial test (t test)

<table>
<thead>
<tr>
<th></th>
<th>Regression Model: FEM</th>
<th></th>
<th>Hypotesis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Prob &gt;</td>
<td>t</td>
</tr>
<tr>
<td>PSR</td>
<td>-0.02232</td>
<td>0.000*</td>
<td>H₁: +</td>
</tr>
<tr>
<td>ZPR</td>
<td>-0.0090225</td>
<td>0.954</td>
<td>H₂: +</td>
</tr>
<tr>
<td>EDR</td>
<td>0.1144105</td>
<td>0.000*</td>
<td>H₃: +</td>
</tr>
<tr>
<td>In</td>
<td>0.5336246</td>
<td>0.742</td>
<td>H₄: +</td>
</tr>
<tr>
<td>IC</td>
<td>0.0000986</td>
<td>0.642</td>
<td>H₅: +</td>
</tr>
<tr>
<td>SSB</td>
<td>0.0036368</td>
<td>0.644</td>
<td></td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

<table>
<thead>
<tr>
<th></th>
<th>Moderated Regression Model: FEM</th>
<th></th>
<th>Hypotesis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Prob &gt;</td>
<td>t</td>
</tr>
<tr>
<td>PSR_SSB</td>
<td>0.0118713</td>
<td>0.675</td>
<td>H₆: +</td>
</tr>
<tr>
<td>ZPR_SSB</td>
<td>-0.0556424</td>
<td>0.379</td>
<td>H₇: +</td>
</tr>
<tr>
<td>EDR_SSB</td>
<td>0.0403278</td>
<td>0.036*</td>
<td>H₈: +</td>
</tr>
<tr>
<td>In_SSB</td>
<td>-1.661926</td>
<td>0.000*</td>
<td>H₉: +</td>
</tr>
<tr>
<td>IC_SSB</td>
<td>0.0000595</td>
<td>0.050*</td>
<td>H₁₀: +</td>
</tr>
</tbody>
</table>

Source: Output STATA v.17

5. Discussion

The result test show that the PSR does not significantly affect the financial performance of the sharia bank and hypothesis 1 was rejected. This is because the income generated from the profit-sharing financing has not been able to increase or maximize the bank’s operating income. In its implementation, financing has a variety of risks, such as the risk of uncollectible financing or other problems. The high rate of financing disbursement is not proportionate to the acquisition revenue and it show from data in sharia banking statistics that published by OJK [47]. Statisctis data show that ratio uncollectible financing (mudharaba and musyaraka) is higher than Murabaha. Ratio uncollectible financing mudharaba and musyaraka is 2.89% in...
2018, 3.26% in 2019, 3.34% in 2020, 2.77% in 2021, and 2.39% in 2022. While uncollectible Murabaha ratio tend to decrease in last 5 year, 2.90% in 2018, 2.92% in 2019, 2.77% in 2020, 2.25% in 2021, and 2.19% in 2022. Revenue from Murabaha is higher than profit sharing financing, in fact disbursement of Murabaha is lower than profit sharing financing. It show that revenue form profit sharing financing (mudharaba and musyaraka) can not maximize income increases [32]. It all consistent with Pramono & Widiarti [48], Rahmaniar & Ruhadi [30] and Fatmala & Wirman [19].

The result test show that ZPR does not significantly affect on the financial performance of the sharia bank and hypothesis 2 was rejected. This is because the many banks have exceptionally low distribution of obligatory charity (zakat). The average trend of ZPR over the last 5 years shows fluctuating value with low average. The average is 0.377% which means that the sharia bank distributes zakat only 0.377% of its net assets. According to Wijayanto [49] zakat has to distribute the company is 2.5% so that the average value is very far from the rate. Furthermore, BAZNAS [50] said that the initial purpose of the zakat is fulfilment of the obligation for the Muslims to cleanse their assets by distribute to the needy parties so that there is an improvement in financial performance is not the main focus or reason for doing zakat distribution, but only the positive impact that can be expected when it is distributed. Distribution zakat is not main of banking activities, so that increasing the ratio does not focus to achieve. Therefore, zakat distribution can not have a direct influence on the financial performance of the sharia bank. The result is consistent with Jummaini et al. [11].

The result test show that EDR has significant positive effect on financial performance so that hypothesis 3 was accepted. The test results are in line with the sharia enterprise theory that if a sharia bank performs its operations in accordance with Islamic sharia corridors, one of them through the application of the principle of justice, then it will show that the bank is obedient to Islamic principles. Accordingly, a high EDR will indicate that the rights of all stakeholders are fulfilled because a bank that is able to allocate income to all parties reflects the good performance of the bank on the principle of fairness. Allocated income is not only for internal stakeholders (employee) but also external stakeholder, such as social community and people in need of donation (qardh). It can effect to performance of employee and increase confidence and interest of existing customers and potential customers to save their money in sharia bank or take financing in sharia bank so that the financial performance can increase. This result is consistent with Arafah & Wijayanti [32].

The result test show that Ilm does not significantly effect on financial performance and hypothesis 4 was rejected. According to Rahmaniar & Ruhadi [30], it occurred because of the difference in the recording between halal income and non-halal income. Halal income is recorded in the profit and loss report, while non-halal income are recorded on the charity fund report so that the high or low ratio Ilm cannot fully describe the level of bank validity and also seen through earnings management practices that are still frequently done [51]. Illahi [52] said that some research revealed that there is a practice of earnings management by sharia bank in the financial reporting process. According to Djuwita et al. [51] that income is the part of the account which is highly vulnerable to the practice of manipulation. This causes the financial statements
generated to be false or misleading. But there should be an application of the Sharia principle, which is the priority of honesty and transparency. Although IIn has not yet influenced financial performance, the level of halal income remains critical to be monitored and strengthened so that practices that are not in accordance with the principles of Shariah can be pursued. This results consistent with Rahmaniar & Ruhadi [30] and Jummaini et al. [11].

The result test show IC does not significant effect on financial performance and hypothesis 5 was rejected. Agustina et al. [53] said that the sharia bank has had a wide development due to the variety of products it has. However, the quality and capacity of human resources and Information Technology still needs to be improved. Andespa [54], Handida & Sholeh [55], Nasfi et al. [56] and Arslan [57] said that the level of sharia banking services has not met the expectations of his customer, both in terms of product knowledge and explanations related to his sharia academies. Meilani & Sugiarti [58] also said that bank's employees have not been maximum in providing consulting services, determining the right investment product, responding to complaints or providing solutions to problems. Employees also have not shown compliance with the law of Shariah. It can be seen from employees who have not prioritized prayer in the early hours or closed the counter or the bank for a moment when the Azan runs. Relubun et al. [59] said that the increasing sharia bank has not been offset by a qualified human resources. Daroin & Ningtias [60] said that the composition of the human resources in Shariah banks is not balanced where 90% of those human resources have no sharia economic background nor sharia banking. Similarly, Sari & Widyastuti [61] said that some internal sharia audits do not have a sharia accounting certification. Internal sharia audit should have knowledge in the fields of sharia, audit, and fiqh muamalat so that they are competent in conducting inspections. This results consistent with Rahmaniar & Ruhadi [30].

The result test show that SSB was unable to moderate the influence PSR, ZPR, and IIn against financial performance and hypothesis 6, 7, 9 were rejected. This is because the role of the SSB in supervising compliance with the Sharia principle in terms of profit-sharing management is not optimal. Syahrial [62] stated in line with Prabowo & Jamal [63] that there are number of factors that make the SSB unoptimal, such as: 1) there is no special law as a reference to supervision of sharia banks, 2) SSB as a supplementary object without special criteria based on expertise, 3) SSB is chosen as a charismatic figure and known to the public, not based on his expertise, 4) SSB's salary comes from the sharia bank supervised by him, 5) Low level of SSB presence in surveillance. Almost every member of the SSB has other main professions, so overseeing the sharia bank is his side job, 6) the SSB has no authority to act firmly over the outcome of its oversight. The SSB can only make warnings, 7) the sharia banking is very vulnerable to errors that will be published, 8) there is a legitimate weakness on the assessment of sharia compliance due to the ineffectiveness and inefficiency of such oversight mechanisms, 9) the limited skills of SSB in auditing, accounting, economics, and business law, 10) there is no effective mechanism or work structure for the SSB to carry out internal control functions, 11) there are still cases of sharia principles violations by the sharia banking. Some of the factors above, in fact there are some factors have been regulated in 15/13/PBI/2013.
that the qualification of the election of members of the SSB is integrity, competent in your sharia mu'amalah, banking, or finance and has a good reputation. However, for qualifications over competence in the law of business, auditing, or accounting, are not regulated. The non-optimal SSB, in this case its role against the level of compliance with the Sharia principle in terms of obedience to the management of profit-sharing resulting, ZPR, and IIn in its role has not been able to strengthen the influence of profit sharing, zakat ratio, and islamicity income vs non islamicity income on its financial performance.

The result test show that SSB able to strengthen EDR against financial performance (EDR_SSB) and hypothesis 8 was accepted. This is in line with the theory that the SSB as part of the resources that are also intellectual capital, when managed optimally can create a competitive advantage in its role of surveillance, establishing rules and principles of Sharia, as well as issuing a fatwa against all fair policies and procedures in accordance with the shariah so that its role can strengthen the EDR against the financial performance of Sharia banks.

The result test show that SSB strengthen IC toward financial performance (IC_SSB) and hypothesis 10 was accepted. This is in line with the theory that SSB characteristics in carrying out strict supervision will encourage management to more adhere the principle of Sharia in its banking operations, so that the role of SSB can strengthen the impact of the IC on the financial performance of shariah banking. The optimalization of IC will show employee capacity potential, such as increased product innovation, improved information systems, technology, and other developments that create competitive advantages and increased financial performance.

6. Conclusion

The profit-sharing Ratio (PSR) is unable to influence the financial performance of the sharia bank because the proceeds from profit-sharing financing have proved to be incomparable with the amount distributed by the funds so it cannot maximize the increase in profits. On average, sharia banks still channel zakat funds with a low percentage of their net assets so Zakat Performance Ratio (ZPR) has no impact on financial performance. The Equitable Distribution Ratio (EDR) has been shown to have an impact on the financial performance of Shariah because the higher the ratio will indicate that the rights of all stakeholders are fulfilled because the bank in this case can allocate the income to all parties reflects the good performance of banks in applying the principle of fairness. Islamic Income vs. Non-Islamic Income (IIn) has no impact on the financial performance of Shariah banks because the high IIn which in this case is described through the calculation of halal income and non-halal income does not sufficiently describe the level of validity. Intellectual Capital (IC) has no impact on the financial performance of sharia banks due to its unoptimal management and the availability of appropriate human resources which are also still limited. The role of SSB can strengthen influence EDR and IC on the financial performance. However, the role of the SSB has not been able to moderate the influence of the PSR, ZPR, and IIn on the financial performance of the
shaaria bank because there are some factors that influence the less optimal role of SSB on these variables. Recommendations to next research are to use all of indicators of Islamic performance index and add research sample from another country, especially Islamic country.

References


[8] Sinaga F. KPK Pastikan Bank Syariah Indonesia Takkan Lolos dari Pemeriksaan Kasus Suap Hakim Agung. JPNN.Com [Internet]. 2023 Feb 23 [cited 2023 Sept...


International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP)
Theme: “Sustainability and Socio Economic Growth”; KnE Social Sciences; 2019.
https://doi.org/10.18502/kss.v3i13.4216

https://doi.org/10.21043/malia.v6i1.12600


