

The effect of intellectual capital and shariah supervisory boards on social performance of Islamic banks

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ABSTRACT

This study examined Islamic banks' social performance by considering Intellectual Capital (IC) and Shariah Supervisory Boards (SSB) as antecedents. More specifically, it examined the antecedents that can exert the role of IC and governance mechanism of SSB in enhancing Islamic banks' social performance. Therefore, this study empirically analyzed the effect of IC and SSB on social performance in Indonesian Islamic banks with a sample of 14 Islamic banks throughout the period 2008-2019. To test the research hypotheses, panel data regression model analysis was applied. The results did not establish a positive impact of intellectual capital on the banks' social performance. This result indicated that the size of intellectual capital might not lead to better social performance. This outcome may be due to IC still being the focus of financial performance such that it has not been utilized to optimize the social performance of Islamic banks. The results also showed that SSBs have a positive effect on social performance. It can be concluded that Supervisory Boards could monitor the social activities conducted by Islamic banks, leading to an improvement in the activities. This study helps to bolster the understanding of the role of IC and SSB governance in enhancing the social performance function of Islamic banks.

1. Introduction

The efforts to incorporate the Islamic financial system in the conventional financial system over the last four decades have been very intensive. Despite several challenges, the Islamization of the banking movement is progressing well. The progress made in the previous quarter of the century has shown inspiring results. The main challenge for Islamic banks today is how to build the trust of the stakeholders. It is an open secret that only banks that can gain the trust of their stakeholders would be able to expand, develop, and sustain.

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The banks would then mobilize savings, attract investment, channel financing, invest, increase job opportunities, help the government finance the budget deficit for growth, and adequately accelerate economic development. The stakeholders' trust is needed because all financial institutions must adapt to the reality that the suppliers of funds (shareholders and depositors) and other stakeholders have forewarned that they will not invest or contribute adequately if their expectations are not met. Stakeholder expectations of Islamic banks are different from conventional banks. This difference is based on the knowledge that Islamic banks are founded as financial entities that operate following the fundamental principles of Islamic economics. Islamic economics aims to focus on business objectives that represent maximum profit and give comprehensive welfare to the society. The Islamic economy is also an implementation of the role of Islamic banks in performing social functions.

It is also important to study also important to study the social performance contribution of Islamic Banks, especially in the period of economic recession caused by the Covid-19 pandemic condition. The situation in COVID-19 have long shadowed ASEAN and its members. The number of people affected by this disease continues to increase every day. COVID-19 quickly became health, economic and geopolitical disaster that never happened before (Ridzuan & Rahman, 2021). Thus, the global economy reacts unexpectedly to the epidemic. Governments throughout the globe have adopted several steps, including social distancing measures, campaigns of public awareness, testing and quarantine regulations, and financial aid packages (Mustaffa et al., 2021). Islam has a charitable or philanthropical configuration through its teachings as a faith that encourages people to love, support, and serve each other (Uyun, 2015). These include instructions to invest, to offer charity, to give Zakat and donations that may have different consequences than increasing the trust in Allah. Even to promote a strong sense of humanity, eliminate stingy and covetous materialistic habits, foster a quality of life, clean and developing property owned, also can even solve several problems in life (education, economy, and social) (Kasdi, 2016). This role can also be reflected in the social activities carried out by banks, especially Islamic banking, which has uniqueness in it. It is hoped that these social dimensions will transcend and contribute to the recovery of economic shocks by the whole population, particularly Muslims.

On the other hand, efforts to build stakeholders' trust in this knowledge-based economic era are also experiencing increasingly tough competition. Of course, the competition would enable companies to improve and strengthen their performance through more effective and efficient use of resources so that the businesses can generate added value and compete better. The main driver of business value creation in the era of the knowledge-based economy would be intellectual capital (IC). In other words, welfare can be achieved by the IC's presence (Hall, 2001; Lev & Zambon, 2003). The resource-based theory (RBT) states that IC is the core of value creation and an organization's strategic advantage (Barney, 1991). With the constant competitive advantage of IC, a company would deliver success and boost performance (Chen et al., 2005; Wang, 2008).

Meanwhile, some previous studies also tested the effects of IC on Islamic banking performance in terms of Islamic banking. Previous studies (Nawaz & Haniffa, 2017; Ousama & Fatima, 2015; Setianto & Sukmana, 2016) showed that IC has a positive impact on the performance of Islamic banking. However, most of the previous research undertaken to test the role of intellectual capital in improving performance is restricted to financial performance only. Additionally, the Islamic banking business model relies on the Shariah, which represents religious values and possesses its own ethical identity. Therefore, the Islamic banks' performance indicators should also be distinguished from only financial indicators, and the performance should be tested using social performance indicators. Therefore, it is essential to investigate the effect of intellectual capital on the social performance of Indonesian Islamic commercial banks as IC can be the primary driver of business value creation for the social performance of Islamic banking.

A governance mechanism is required to achieve the expected social and financial performance of banks. The Shariah Supervisory Board (SSB) is one of the key components of corporate governance in Islamic banks (IBs) that should be disclosed as part of social reporting in their annual reports. The role of the SSB is to ensure that IBs' activities conform to Shariah values. The Shariah principles urge the company to

conduct just and fair activities and uphold the ethical standards for all parties involved in the business transactions (Hafeez, 2013). According to Ibrahim et al. (2004), CG fosters the success of the roles and contributions of IBs in economic activities. Setiawan (2009) argued that the SSB is a stakeholder associated with Islamic banks' role, including in the social function of contributing to the economic development, social climate, stakeholders, and public education. Therefore, the SSB's emphasis is related to the way the IB conducts its social functions. Hence, it is also important to investigate the impact of the SSBs' activities on the social performance of Islamic banking. In this study, SSB meeting frequency would be the proxy for the SSB.

Based on the above background, it is vital to research on the social performance of Islamic banks by considering IC and SSB activities as antecedents since the achievement of social performance is expected to increase the confidence and loyalty of depositors, shareholders, and other stakeholders in Islamic banks. Therefore, this study empirically analyzed the effect of IC and SSB on social performance in Indonesian Islamic banks.

2. Literature review and hypotheses development

2.1 Underlying theories

2.1.1 Resources based theory

Resources based theory focuses on resources that exist in the company. They can be used as an advantage in competition and direct the company to have good long-term performance (Wernerfelt, 1984). The theory discusses the resources owned by the company and how the company handles and utilizes the resources it has. Valuable and scarce resources can be directed to create competitive advantage. The owned resources can last a long time and are not easily imitated, transferred or replaced (Ulum, 2015). This implies that if the company can manage its resources effectively, it will have a competitive advantage over its competitors. Concerning explaining how intellectual capital affects the performance of Islamic commercial banks, RBT explains that the performance of Islamic commercial banks will achieve a good predicate if they can use their intellectual capital resources efficiently (Nazra & Suazhari, 2019). Because by efficiently utilizing intellectual capital, it will generate a competitive advantage for Islamic commercial banks. That way, Islamic commercial banks can outperform conventional banks (Wernerfelt, 1984).

2.1.2 Agency theory

In agency theory, it is asserted that the separation of ownership and control in public companies causes managers to do what is in their interests above the interests of shareholders (Jensen & Meckling, 1976). The separation of these roles ensures a balance of power and avoid conflicts of interest (Shukeri et al., 2012). That way, the board of commissioners who are independent from the board of directors can control conflict of interest that can be independent of the board of directors and manage conflict of interest to protect the interests of shareholders (Setyawan & Devie, 2017). This can also be inferred for the sharia supervisory board, which has the same role to monitor, but in terms of the Islamic principle practice of banks. In addition, the implementation of the sharia supervisory board in companies is expected to reduce the incidence of agency costs. The more activities of the sharia supervisory board, the better the supervision so that the level of sharia compliance is better and can reduce agency problems carried out by the management of Islamic banks so that the company's performance is better (Muttakin & Ullah, 2012).

2.2 Hypothesis development

IC plays a vital part in creating value and growing sustainable companies. According to the RBT, IC is the heart of developing value and competitive advantage of a firm (Barney, 1991). In the opinion of the RBT, the development of a sustained competitive benefit relates directly to the company's ability to administer, assign, and deploy valuable, scarce, and irreplaceable resources efficiently (Barney, 1991). With IC, companies should obtain a competitive edge to produce value and achieve optimum performance in the future.

Some previous studies have also found that a company's competitive advantage can be related to corporate social performance (Greening & Turban, 2000; Gregory et al., 2016). From the perspective of Islamic banking, previous studies (Nawaz & Haniffa, 2017; Ousama & Fatima, 2015; Setianto & Sukmana, 2016) had shown that IC positively affects the performance of Islamic banking. Earlier research on IC's business performance link had found a linkage between IC and performance. Chen et al. (2005) discovered that IC's corporate performance has a beneficial influence and may indicate future financial performance. Meanwhile, Clarke et al. (2011) demonstrated that IC has a direct relationship with the performance of companies. Some other studies also showed that IC has a positive relationship with corporate performance (Tan et al., 2007; Ulum et al., 2008). Based on the description above, the hypothesis proposed in this study is as follows:

H1: Intellectual capital has a positive effect on the social performance of Indonesian Islamic banks

Frequent and regular board meetings are seen as one sign that the SSB can oversee Executive Managers and protect shareholders (Ntim et al., 2017). One of the SSB's responsibilities is to organize regular meetings to address all of the community's questions. Prior Shariah governance research had found a link between the frequency of SSB meetings and SSB performance. Furthermore, management experience in dealing with Shariah issues would be enhanced by regular meetings. This assertion is in line with previous research (Garas, 2010). Additionally, improved SSB performance may lead to improved IB performance. According to Vafeas (2003), regular meetings increase loyalty and moral values among board members, shareholders, and company employees, thus improving performance. Regular meetings also aid the SSB's efficient control of all business transactions, allowing it to make reasonable decisions to improve performance (Ntim et al., 2017).

The SSBs are required by Indonesian law to meet at least once a month. The SSBs use the meetings to address and assess the IBs' operations and products' suitability with Islamic values. The number of SSB sessions is made public to ensure that the SSBs are doing their job of monitoring the IBs (Ibrahim et al., 2004). Therefore, from the explanation above, the hypothesis proposed is as follow:

H2: Shariah Supervisory Boards meetings has a positive effect on the social performance of Indonesian Islamic banks

3. Methodology

3.1 Data and sample

This study used secondary data obtained directly from the Financial Services Regulator and the annual reports available from the websites of each Islamic bank. The data collection method used was documentation with a pooled unbalanced panel for all available sample units. However, the number of years was not balanced for all IBs. The years of observation in this study started from 2008 to 2019. The year 2008 was used as the beginning of the study period because it was the year of the enactment of Law No 21 of the Republic of Indonesia on Shariah banking, followed by the Bank Indonesia Regulation, which fosters

Indonesia's Islamic banking industry's growth. The samples in this study were the Shariah banking firms in Indonesia (Appendix 1).

Because this industry relies on IC for its business activities, firms in this field prefer to spend heavily on IC. According to Bontis (2001) and Hermans and Kauranen (2005), IC research should focus on the service sector, such as the banking business.

3.1.1 Independent variables

3.1.2 Intellectual capital

The iB-VAIC (Islamic Banks - Value added intellectual coefficient) was introduced by Ulum (2013) to measure the IC for Syariah banks. The Pulic's Model developed by Pulic measures the efficiency of a firm's value creation efficiency (2000, 2004a, 2004b & 2008). Firer and Williams (2003) mentioned the advantages of this VAIC method. For example, providing VAIC with a consistent standardized measurement base would enable efficient analytical comparisons between companies and countries. The data should be based on audited data contained in the financial statements so that calculations become more objective. However, Pulic's VAIC was developed to measure companies' IC performance with common types of transactions in industrial companies. Meanwhile, Islamic banking has its types of transactions that are relatively different from general/conventional banking. Thus, Ulum (2013) established an Islamic banking VAIC (iB-VAIC) performance assessment methodology utilized to monitor IC in Islamic banking organizations. The accounts in the financial statements of the Islamic banks have been identified using financial reporting data, reporting standards, and relevant rules relating to Islamic banking to create an iB-VAIC model. The iB-VAIC model was also proven for use as the measurement of IC in Islamic banks by previous research (e.g., Nurhidayat & Syarief, 2020; Pratiwi & Kadry, 2015; Rizkyanti et al., 2020; Syah & Fauzan, 2020). The following is an iB-VAIC calculation (Ulum, 2013):

$$iB-VAIC = iB-VACA + iB-VAHU + iB-STVA \quad (1)$$

Where:

iB-VAIC	Value added intellectual coefficient
iB-VACA	VA/CE; human capital efficiency coefficient
iB-VAHU	VA/HC; structural capital efficiency coefficient
iB-STVA	SC/VA; the capital efficiency coefficient is used
VA	VA can also be calculated by the formulation: $OP + EC + D + A$; VA is the calculation of output (OUT), which is calculated from the total income, minus the input (IN), which is calculated from operating expenses and non-operating expenses, except for personnel/employee expenses. While OP is operating profit, EC is employees, D is Depreciation, and A is Amortization.
HC	employee expenses
SC	$iB-VA - HC$; structural capital
CE	Available employed funds (Total equity)

3.1.3 Shariah supervisory board meetings

The SSB uses the meetings of SSB members to discuss and determine the suitability of the activities and products of IBs with Islamic principles. Referring to Nugraheni (2018), the SSB meetings for this research were calculated by the total number of SSB meetings in a year.

$$\text{SSB Meeting} = \sum \text{total number of SSB meeting in a year}$$

3.1.4 Bank size

Following Baklouti (2020), this study will use the control variable to take into account differences within the bank's specific features: bank size. The control variable was chosen because the control variable also affects performance. Bank size can be reflected in the value of assets owned by the bank. A large amount of assets reflects that the bank's activities also increase; along with the increase in bank activity, the bank's performance will also increase. Thus, it can be concluded that company size positively affects bank performance (Khrawish & Al-Sa'di, 2011). Bank size is measured using the bank's total assets at year t , then the natural logarithm is calculated.

3.2 Dependent variable: social performance

According to Nugraheni (2018), social performance is defined as the social responsibility activity of Islamic banks that differentiates it from conventional banks through contributions in managing Zakat, Sadaqah, and Qardul Hassan to improve people's welfare. Social performance is measured using social performance ratios (Ibrahim et al., 2004; Nugraheni, 2018; Samad & Hassan, 1999; Setiawan, 2009), which cover four themes: (i) contribution to economic development, (ii) contribution to society and social environment, (iii) contribution to stakeholders, and (iv) human resource education.

3.2.1 Contribution to economic development

Economic development's contribution reflects the profit-sharing ratio of financing and the intensity of Islamic banking agency functions. For this study, the formula for the relationship between funding profit-sharing and total financial funding (MMR) was:

$$\text{The Ratio of MMR} = \frac{\text{Mudharabah+Musyarakah}}{\text{Total Financing}}$$

The calculation requirements for the MMR ratio were as follows: Score 5 = MMRs > 50%; Score 4 = 40% < MMRs ≤ 50%; Score 3 = 30% < MMRs ≤ 40%; Score 2 = 20% < MMRs ≤ 30%; and Score 1 = MMRs ≤ 20%.

The intensity of the Islamic banking agency roles (IAR) formula was as follows:

$$\text{The intensity of IAR} = \frac{\text{Mudharabah Deposit (URIA)}}{\text{Total Funding}}$$

The calculation conditions for the IAR ratio were as follows: Score 5 = IARs > 90%; Score 4 = 80% < IARs ≤ 90%; Score 3 = 70% < IARs ≤ 80%; Score 2 = 60% < IARs ≤ 70%; and Score 1 = IARs ≤ 60%.

3.2.2 Contribution to society

This contribution is the proportion of Qardh funding to the performance of Zakat. The ratio of Qardh financing (QR) formula was as follows:

$$\text{The ratio of QR} = \frac{\text{Qardh Financing}}{\text{Total Financing}}$$

The following criteria were used to calculate QRs: Score 5 = QRs > 5%; Score 4 = 3% < QRs ≤ 5%; Score 3 = 2% < QRs ≤ 3%; Score 2 = 1% < QRs ≤ 2%; and Score 1 = QRs ≤ 1%.

The Zakat performance ratio (ZR) calculation formula was:

$$\text{The Ratio of ZR} = \frac{\text{Zakah Distribution}}{\text{Profit before Tax}}$$

The calculation criteria for the ZR ratio were: Score 5 = ZRs > 2.5%; Score 4 = 2% < ZRs ≤ 2.5%; Score 3 = 1.5% < ZRs ≤ 2%; Score 2 = 1% < ZRs ≤ 1.5%; and Score 1 = ZRs ≤ 1%.

3.2.3 Contribution to stakeholders

The stakeholders' contribution is reflected by the Mudharib contribution ratio and the contribution of Mudharabah Mutlaqah account holders to the Mudharabah. The formula of the Mudharib contribution ratio (CM) for this study was:

$$\text{The Ratio of CM} = \frac{\text{Wages Expenses and Other Welfares}}{\text{Operational Revenue}}$$

The CM ratio criteria were as follows: Score 5 = CMs > 15%; Score 4 = 12% < CMs ≤ 15%; Score 3 = 9% < CMs ≤ 12%; Score 2 = 6% < CMs ≤ 9%; and Score 1 = CMs ≤ 6%. The contribution ratio formula for the Mudharabah mutlaqah investment account (URIA) holder (CUH ratio) was as follows:

$$\text{The CUH ratio} = \frac{\text{Revenue Sharing Distribution}}{\text{Total Mudharabah Mutlaqah Investment}}$$

The following criteria were used to calculate the ratio of CUH: Score 5 = CUHs > 15%; Score 4 = 12% < CUHs ≤ 15%; Score 3 = 9% < CUHs ≤ 12%; Score 2 = 6% < CUHs ≤ 9%; and Score 1 = CUHs ≤ 6%.

3.2.4 Contribution to increasing human resource capacity

The contribution to human resource growth was indicated by the contribution ratio to the development of human resources. The formula for determining the human resources development (HRD) contribution ratio was as follows:

$$\text{The CHRDRatio} = \frac{\text{Education and Training Expenses}}{\text{Profit after Tax}}$$

The CHRDRatio calculation criteria were: Score 5 = CHRDRs > 15%; Score 4 = 12% < CHRDRs ≤ 15%; Score 3 = 9% < CHRDRs ≤ 12%; Score 2 = 6% < CHRDRs ≤ 9%; and Score 1 = CHRDRs ≤ 6%.

Finally, the formula of social performance (SP) was as follows:

$$\text{Social Performance (SP)} = \frac{\text{Total Score}}{35} \times 100\%$$

Table 1: A summary of social performance variable measurement

No	Contribution	Measurement
1.	Contribution to economic development	$\text{The Ratio of MMR} = \frac{\text{Mudharabah + Musyarakah}}{\text{Total Financing}}$ $\text{The intensity of IAR} = \frac{\text{Mudharabah Deposit (URIA)}}{\text{Total Funding}}$
2.	Contribution to society	$\text{The ratio of QR} = \frac{\text{Qardh Financing}}{\text{Total Financing}}$ $\text{The Ratio of ZR} = \frac{\text{Zakah Distribution}}{\text{Profit before Tax}}$
3.	Contribution to stakeholder	$\text{The Ratio of CM} = \frac{\text{Wages Expenses and Other Welfares}}{\text{Operational Revenue}}$ $\text{The CUH ratio} = \frac{\text{Revenue Sharing Distribution}}{\text{Total Mudharabah Mutlaqah Investment}}$
4.	Contribution to stakeholder	$\text{The CHRDRatio} = \frac{\text{Education and Training Expenses}}{\text{Profit after Tax}}$

This study employed the panel data regression model analysis. According to Gujarati and Porter (2009), research that uses panel data should be tested with panel data regression models. The panel data analysis consists of the pooled regression, fixed-effects model, and random-effects model. Panel data analysis was used to verify the relationship between intellectual capital and sharia supervisory boards monitoring activity on Indonesian Islamic banks' social performance. The panel data analysis consists of time series and intercepts employing the pooled regression, fixed-effects model, and random-effects model (Baltagi, 2011; Gujarati & Porter, 2009; Longhi & Nandi, 2015). The likelihood test was used to test the fixed effects model versus the pooled regression model, and the Hausman test was used to test the fixed effects model versus the random-effects model.

In this study, Model 1 was used to examine the effect of IC and SSBs' activities (represented by SSB meetings) on social performance.

Model 1: Effect of IC and SSB on social performance

$$SP = \alpha + \beta_1 IC + \beta_2 SSBM + \beta_3 BankSize + \varepsilon \quad (2)$$

Where:

- SP : Social performance
 IC : iB-VAIC which represented by Islamic banking value added intellectual coefficient
 SSBM : Sharia Supervisory Boards Meeting as the proxy for sharia supervisory boards monitoring activities
 BankSize : Bank size measured by the natural logarithms of the banks' total assets
 ε : Error term

4. Results and discussion

4.1 Descriptive statistics

Descriptive statistics may be used to obtain an overview of the primary value distribution of the mean. The standard deviation value can be considered as an indicator of data dispersion, and a smaller standard deviation suggests that the data are closer to the mean value. The SP (Social performance) variable has a mean value of 0.4639. It means that the average ability of Islamic Banks in carrying out their social performance is 46.39% of the total social performance indicators. Meanwhile, the IC (Intellectual Capital) variable has a mean value of 3.2085. On the other side, the SSB meeting frequency average value of 14.1954 means that Islamic commercial banks hold an average of 14 SSB meetings which is enough compared to the minimum number of sessions stipulated in Bank Indonesia Regulation No. 11/33/PBI/2009, which states that the sharia supervisory boards must be held at least 1 (one) time in 1 (one) month or 12 times in 1 (one) year. Meanwhile, bank size as the control variable has a mean value of 27.7314. Overall, the descriptive statistics of each variable is presented in Table 2 below.

Table 2: Descriptive statistics results

Variable	Mean	Std. Dev	Min	Max
SP	0.4639	0.15312	0.1429	0.8
IC	3.2085	6.1370	-10.052	69.105
SSB-M	14.1954	5.1763	2	36
BankSize	27.7314	0.97363	25.61	29.855

4.2 Regression results

Table 3 shows the regression results for the dataset of all the selected Islamic banks from 2008 to 2019 to examine the effect of IC and SSBs' activities on social performance.

Table 3: Regression test results

Independent variable	Dependent Variable: Social Performance			
	Coeff.	Robust Std. Err.	z	P> z
Constant	-0.3723	0.6547	-0.57	0.570
IC	0.0001	0.0004	0.36	0.718
SSBM	0.0036	0.0015	1.19	0.018**
BankSize	0.0277	0.0232	-0.57	0.233
R-squared	0.0846			
Adj. R-squared	0.0633			
F-stat	2.05			
p-value	0.0157			
No. of observation (N)	133			
Likelihood Test	21.69 [0.000]			
Hausman Test	0.22 [0.977]			

Note: *** significant at 1%; ** significant at 5%, * significant at 10%

The value of the likelihood test for the chi-square statistics is equal to 21.69 with the probability value of 0.0000. The null hypothesis is rejected at the 5 percent significance level. This result indicates that the fixed effects model is preferred, and it can be used to measure suitable valuations of slope coefficients. Next, the Hausman test was conducted to select the best estimator for the model between the fixed effects and the random effects models. Table 3 shows that the value of the Hausman test is equal to 0.20 and the probability value is 0.9777. The result suggests that the random effects model is a preferred and efficient estimator compare to POLS and Fixed effects models.

Hypothesis 1 testing aimed to test whether intellectual capital has a positive effect on the social performance of Indonesian Islamic banks. Table 6 shows the results of the overall hypothesis testing in this study. The result of hypothesis 1 testing showed that IC does not affect social performance. Therefore, hypothesis 1, which states that intellectual capital has a positive impact on social performance, is not supported. Hypothesis 1 testing result failed to prove that higher IC would lead to higher social performance of the banks. This outcome is possible because the IC in the banks is still mainly used to generate financial performance. As explained in previous literature (e.g., Barney, 1991), the utilization and maximization of IC would lead to value creation in a firm and, subsequently, enhance the firm's financial performance. Furthermore, Nawaz and Haniffa (2017), Ousama and Fatima (2015), and Setianto and Sukmana (2016) also found that intellectual capital has a positive effect on Islamic banks' financial performance.

Hypothesis 2 testing aimed to test whether SSB activities, represented by SSB meeting frequency, positively affect the social performance of Indonesian Islamic banks. The result of hypothesis 2 testing showed a positive effect of SSB meeting frequency on social performance with a coefficient of 0.0036248 at a 5% significance level. This result indicates that the more activities conducted by the SSBs, the better is their monitoring function, which can lead to improvements in social performance. Therefore, hypothesis 2, which stated a positive effect of SSB meeting frequency on the social performance of Indonesian Islamic banks, is supported at $\alpha = 5\%$. The result of hypothesis 2 testing is consistent with the literature. Frequent

meetings lead to the actual control by the SSBs of all transactions carried out by the organization, which allows them to make sound decisions that contribute positively to their performance (Ntim et al., 2017). The SSBs use the meeting to discuss and determine the conformity of the practices and products of the IBs with Islamic values. The disclosure of the number of sessions of the SSBs means that they are performing their job of monitoring the operations of the IBs (Ibrahim et al., 2004). In addition, Vafeas (2003) claimed that frequent meetings enhance loyalty and moral values among the board members, shareholders, and employees of the company, improving performance.

4.3 Diagnostic tests

According to Baltagi (2011) and Gujarati & Porter (2009), the diagnostic tests that needs to be considered in testing the panel data regression model are heteroscedasticity and serial correlation tests. Tests for heteroscedasticity and serial correlation need to be carried out so that in conducting tests using the STATA software, it can adjust the commands on the software so that the appropriate command to overcome the problem of heteroscedasticity or serial correlation, or both, so that the standard error of the model will be robust against interference from these problems and the regression coefficient is not disturbed (Hoechle, 2007). In addition, because collinearity has been detected automatically and the STATA software will immediately omit the variables affected by collinearity, therefore collinearity testing is not necessary.

The study conducted diagnostic tests for heteroscedasticity and serial correlation. The model was corrected using robust standard errors as suggested by Hochle (2007). Table 4 shows the results of the heteroscedasticity and serial correlation tests for the model. Based on the results of the heteroscedasticity and serial correlation tests, this study uses a random effect model with a Clustered Sandwich standard error so that the standard error of the model can be robust against heteroscedasticity and serial correlation when performing regression testing on the model equation (1).

Table 4. Heteroscedasticity and serial correlation

Heteroscedasticity	
X2	60.84
Prob > X2	0.0000
Serial correlation	
F-stat	7.277
Prob > F	0.0183

Note: *** significant at 1%; ** significant at 5%, * significant at 10%

5. Conclusion

This study examined the impact of IC on the social performance of Islamic banks in Indonesia. The empirical results showed that intellectual capital does not affect social performance. This outcome indicates that intellectual capital would make no difference in terms of achieving higher social performance. It may be because the IC itself has more impact on financial performance, as suggested by previous research. It could also possibly be due to the corporate governance mechanism in the Islamic banking system, which is not managing and utilizing the IC for social performance. This study also examined the impact of *Shariah* Supervisory Boards' activities, represented by the Boards' meeting frequency, on the Islamic banks' social performance. The empirical results found that SSB meeting frequency has a positive effect on social performance. The result proved that the role of the SSBs is to ensure that the IBs' activities conform to the *Shariah* values. The *Shariah* principles encourage companies to conduct just and fair activities and promote ethical norms for all parties engaged in business transactions. Therefore, the result is consistent with the

literature, and it proved that the more activities conducted by the SSBs, the more concerned are the banks on their social functions and performance. This study only looked at the direct effect of IC and SSB on the Islamic banks' social performance. It is suggested that future research test the moderating effect of SSB on the relationship between IC and Islamic banks' social performance. It is expected that the presence of the monitoring function of the SSB would raise the impact of IC on the social function of IBs.

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