
Sharia supervisory board, *maqasid syariah*, and accounting-based performance: evidence from Indonesia

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Abstract: *Maqasid syariah* is essential to evaluate the achievement of the Sharia implementation objectives. This research provides evidence of the influence of the *maqasid syariah* index and Sharia Supervisory Board (SSB) attributes on accounting performance. Data were obtained from the Indonesian Islamic banks and analysed using the panel data regression method. We find that the accounting-based performance was not affected by any of the SSB attributes. *Maqasid syariah* index was proven to have a positive and significant influence on Accounting-Based Performance. From the three indicators that we used in measuring the *maqasid syariah*, justice indicators had a significant positive influence on accounting-based performance. These results provided evidence that the high fulfilment of *maqasid syariah* through fair policies will improve bank accounting-based performance.

Keywords: *maqashid shariah* index; tenure; meeting frequency; attendance; corporate governance; sharia supervisory board; accounting-based performance.

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1 Introduction

The Islamic bank is different from conventional banks because it promotes justice and prosperity for all stakeholders. The Islamic financial institutions operations need to comply the principles of brotherhood, justice, benefit, balance and universalism (IAI, 2017). Therefore, Islamic banks are prohibited from conducting fraudulent transactions, add interest, *gharar*, *maysir*, as well as the production, distribution, and sale of illicit products. This means that there are differences between Islamic and non-Islamic banks, both in terms of philosophy and operations (Syafii et al., 2012; Mohammed et al., 2015b; Mohammed and Taib, 2015).

However, research findings indicate that these functions of Islamic banks have not been properly implemented. Therefore, it was concluded that there are no differences between both banks, which has generated significant debate (see Dar and Presley, 2000; Haniffa and Hudaib, 2010; Kamla, 2009; Khan, 2010; Dusuki and Abozaid, 2007). This conclusion was drawn due to the low equity-based financing using *Mudharabah* and *Musyarakah* contracts (Dusuki and Abozaid, 2007; Dar and Presley, 2000; Hidayah et al., 2019; Chong and Liu, 2009; Farooq, 2015). Equity-based financing is compatible with Islam because it places a great responsibility on social justice, income distribution, and promotes the development and economic growth (Dusuki and Abozaid, 2007). Equity-based financing is also considered a spiritual product (Hidayah et al., 2019).

Similarly, the difference between these banks is due to the shift in the objectives of Islamic banks from *falah* (victory in the world and hereafter) to profit maximisation (Abdul-Baki and Uthman, 2017; Niswatin et al., 2014). According to Niswatin et al. (2014), scholars found that performance is more dominant and leads to profitability (Shawtari et al., 2019; Sakti and Mohamad, 2018; Qian and Velayutham, 2017; Milhem and Istaiteyeh, 2015; Zarrouk et al., 2016; Pradiknas and Faturohman, 2015), and hence the shift. Islamic banking practices which pursue this advantage are considered incompatible with Islam under *falah* (Abdul-Baki and Uthman, 2017; Niswatin et al., 2014), which prioritises the welfare of the community over personal interests. Therefore, the criteria for decision making in Islam are to fulfil obligations to Allah, societal obligations, and personal interest (Abdul-Baki and Uthman, 2017). With these decision-making indicator, humanity is prioritised to actualise societal benefits before pursuing personal interests (Abdul-Baki and Uthman, 2017).

Previous research has provided evidence that Islamic banks lack *maqasid syariah* performance (Asutay and Harningtyas, 2015; Rahmana and Haron, 2019). Asutay and Harningtyas (2015), using Islamic banks from Malaysia, Indonesia, Pakistan, Turkey, Qatar, and the UK as sample found that the achievement of Islamic *maqasid* performance is still low, with the highest achievement being 56.83%. These achievement indicate a lack of performance when compared with the highest score of 282.84%. Rahmana and Haron (2019), using 11 samples of Islamic banks in Indonesia, found that the *maqasid* index was between 11% and 28%, and few banks had a *maqasid* index above 20%. Syafii et al. (2012), using Islamic bank in Jordan and Indonesia as sample found that the largest *maqasid* score was with Bank Muamalat Indonesia, with a score of 17.84%, which is a poor score when compared with the maximum score of 100%.

Niswatin et al. (2014) stated that the shift towards profit orientation might be because profitability is the primary measurement tool in evaluating the Islamic banks

performance. In Indonesia, the CAMEL, which is a bank performance measurement tool, and is the main indicator used for profitability. Therefore, this concept should not be underestimated because it affects bank management models that are capitalistic (Niswatin et al., 2014) and reduces trust in Islamic banks.

Experts have formulated a performance measurement tool based on the *maqashid syariah* (Kasri, 2016), a financial system aimed at promoting human welfare, social justice, sustainable economic development, and investment-oriented principles (Asutay and Harningtyas, 2015). Therefore, scholars have used it as an option in evaluating the performance of Islamic banks (Mukhibad, 2019; Mergaliyev et al., 2019; Hurayra, 2015; Asutay and Harningtyas, 2015; Mohammed et al., 2015b; Mohammad and Shahwan, 2013; Syaffi et al., 2012).

In contrast to previous studies, we consider that aside from being an indicator to be achieved (Islamic law objectives), *maqasid syariah* is also a means to improve bank accounting performance. Many hadiths explain that preserving religion (din) will have an impact on maintaining global needs. Then, a fair return and price as well as meeting the interests of stakeholders are needed to build the trust, and loyalty for customers and other stakeholders to the bank, which in turn will improve bank's performance (Consuegra et al., 2007). Another aspect of *maqasid* is education. Many researchers have provided evidence of the impact of education expenditure, having a positive influence on the an entity performance (Asri, 2017; Nawaz and Haniffa, 2017, Nawaz, 2019). Therefore, we believe that *maqasid syariah* has the potential to improve bank accounting performance.

We present this paper in several sections. The initial part is to present the reasons for the research. We present the concepts of *maqasid syariah*, the development of hypotheses, and the methods used. We present the results of the study by presenting descriptive statistics, model test results, and discussion. Finally, we present the conclusion.

1.1 *Maqasid syariah*

Islamic banks use Islamic law or *syariah* principles in their operations. Experts believe that bank operations that use Islamic law should be consistent the *maqasid syariah*. Asutay and Harningtyas (2015) consider that Islamic law has several goals, such as to promote the welfare of the community by protecting their faith, lust, intellect, descent, and wealth. These five essential elements are popularly called Al Ghozali's theory (Mohammed et al., 2015). Researchers have developed a measurement tool derived from the concept of this *maqasid*. Ibn Ashur (1973) describes the five elements of al Ghazali's theory in the freedom of faith; reservation of human dignity, protection of human-right, propagation of scientific thinking, avoidance of brain drain, family care, the well-being of society and diminishing income and wealth disparity (Mohammed et al., 2015). Meanwhile, Zahrah (1997) focuses more on the objectives of Sharia which include three factors, namely education, justice and promoting social welfare. These are seen as different elements in formulating *maqasid syariah*.

In operationalising this measuring instrument, many alternative measurements are compatible with the concept of *maqasid*. Haniffa and Hudaib (2007) developed a measuring tool called the Ethical Identity Index (EII) that is communicated through the annual report. Meanwhile, Hameed et al. (2004) introduced a measuring tool called the

Islamic Disclosure Index (IDI). IDI has three main indicators, i.e., Syariah compliance, corporate governance, and social or environmental indicators. They developed a measuring tool called the *Maqasid* Based Performance Evaluation Model (MPPEM). Mohammed et al. (2015) identify *maqasid syariah* in three indicators, i.e., education, justice, and *maslahah*. These three indicators are operationalised with financial ratios; the educational grant ratio, research-, training-, and publicity expenses to measure individual educational indicators. The justice indicator is measured by profit ratios, bad debt, and interest-free income. The *maslahah* indicator is measured by net profit ratio, zakat paid, and investment deposit. The following is a measurement of the *maqasid syariah* index developed by Mohammed et al. (2015).

1.2 Hypothesis development

According to AAOIFI and Republic of Indonesia law Number 21, enacted in 2008, SSBs are responsible for ensuring Sharia compliance. Therefore, depositors, shareholders and other stakeholders must be convinced about the banks' compliance with Sharia in all transactions. This is because the director and other parties are unable to determine whether a transaction complies with Islamic law. Therefore, the director enquires with the SSB about the decisions made based on Islamic law with a fatwa (decision), assuming the transaction is classified as new. Therefore, the SSBs can also provide consulting services besides the supervisory function, similar to the internal audit (Alziyadat and Ahmed, 2018; Garas, 2010; Mukhibad and Khafid, 2018; Alsartawi, 2019). This means that its members are vulnerable to similar factors that affect the external auditor and audit committee (Almutairi and Quttainah, 2017; Bukair and Abdul-Rahman, 2013).

Nomran et al. (2018); and Nawaz (2017), reported that the SSB size could affect the quality of services provided. Its large number has a better network and more expertise, with a positive influence on the quality of services provided and the ability to improve performance. Evidence on the number of SSBs with a positive impact on performance has been provided. According to Almutairi and Quttainah (2017), in a research conducted on the 100 largest Islamic banks in 15 countries, the SSB size had a positive impact on financial performance. Nomran et al. (2018) found the same SSB size with a positive impact on performance (ROA, ROE) using 15 Islamic banks in Malaysia. Thus, the first hypothesis as follows:

H1: Number of SSB members has a positive influence on accounting-based performance.

SSB often requires coordination between members, directors, commissioners, and other boards to perform its duties. This activity was held in a meeting which possibly consists of a form of SSB activities. Therefore, the frequent the meetings cause the better the supervision, monitoring, and provision of consulting services. These meetings are to be held at least once every two months by the Financial Services Authority (OJK).

With respect to managing banks, directors need to innovate the types of products, services, and marketing strategies, and require the SSB's advice regarding the suitability of products according to Islamic law. Smooth communication between SSB and the director has an impact on implementation or product launch and a positive impact on bank performance (Vafeas, 1999).

Many studies have provided evidence on the causality between the numbers of meetings with performance, similar to conventional banks (Alsartawi, 2019). Oseit and Ntim (2011), and Vafeas (1999) found that the board meetings frequency improves the decision-making process and company performance. Conversely, infrequent meetings are time consuming and do not improve company performance (Hanh et al., 2018). According to Alsartawi (2019), the frequency of SSB meetings will impact positively on ROA. Thus, this study hypothesis that:

H2: Frequency of SSB meetings has a positive influence on accounting-based performance.

A long-standing debate by scholars is the relationship between the number of boards and company performance, with complex findings on the second. Several boards owned by banks improve the quality of supervision because of their varying expertise and experience. However, the number of boards also causes free rider, communication, and coordination problems (Guest, 2009; Ahmed et al., 2006; Basuony, Mohamed, and Al-Baidhani, 2014; Beasley, 1996; Haniffa and Hudaib, 2006; Nasr and Ntim, 2018; Nawaz, 2017). Sometimes, the outside board's paucity of time leads to low bank usage (Vafeas, 1999).

Many studies have present evidence on the relationship between the number of meetings with performance (Alsartawi, 2019; Vafeas, 1999; Oseit and Ntim, 2011; Al-Daoud et al., 2016; Eluyela et al., 2018) and concluded that there is a positive relation between the frequencies of board meetings and company performance. However, Hanh et al. (2018) reported that the meetings frequency does not improve company performance due to high energy and travel costs, which negatively impact ROA, ROE, and sales. Agreeing with Hanh et al. (2018), we measure the quality of meetings as a factor influencing company performance.

The problem of communication between boards and the quality of meetings were elaborated by new indicators, such as the average attendance at SSB meetings. Alsartawi (2019) stated that SSB meeting is evidence that it conducts supervision and consultation. The presence of its members at meetings affects the quality of supervision and advice provided. It also improves the quality of management policies and company performance (Al-Daoud et al., 2016; Oseit and Ntim, 2011; Vafeas, 1999). Poor product supervision and quality of advice have an impact on the passage of products with the ability to violate Sharia and subsequently reduce bank performance. Therefore, the meeting is considered as a corporate governance tool (Vafeas, 1999).

H3: The average attendance ratio of SSB meetings improves performance based on the maqasid syariah index and profitability.

Reguera-Alvarado and Bravo (2017); Huang and Hilary (2018); Ombaba and Kosgey (2018) agreed that the boards' tenure affects the board's quality in carrying out its duties. Scholars have found that board tenure affects performance, quality of financial reports (Kim and Yang, 2014; Oba, 2014) and fraud (Chen et al., 2006). It enables the board to gain higher expertise and increase knowledge on business environment (Reguera-Alvarado and Bravo, 2017). Therefore, the board of directors with a longer service period contribute positively to the quality of financial reporting (Kim and Yang, 2014; Oba, 2014). Chen et al. (2006) stated that directors with shorter tenure were less able to prevent fraud. This, therefore, strengthens the previous findings by Reguera-Alvarado and Bravo' (2017) which stated that independent directors with short tenure in a company

do not have a significant positive impact on its performance. However, Huang and Hilary (2018) stated a more detailed explanation which showed an inverse U-shaped relationship with firm value and accounting performance.

Research, linking board tenure with company performance, has been conducted with objects outside Islamic banks by applying SSB tenure, which enables a member to possess good knowledge, expertise and understanding in discharging their duties and improves bank performance.

H4: SSB tenure has a positive influence on accounting-based performance.

Educational qualification is another indicator that improves the ability of SSB members in monitoring bank compliance with Islamic law and providing consulting services to directors (Alsartawi, 2019). According to Bukair and Abdul-Rahman (2013), the task of SSB is to monitor the transactions, services, and products of Islamic banks. Therefore, it needs to review and monitor all contracts, products (funding, lending, and services), and financial transactions to ensure that it is according to Islamic rules and principles. SSB members with financial experience and knowledge more responsible (Bukair and Abdul-Rahman, 2013); therefore, these experts in finance and accounting are required to improve the performance of Islamic banks (Grassa, 2016). Rahmana and Haron (2019), Nomran and Haron (2019), and Nomran et al. (2017) stated that the SSB's expertise in finance, and accounting, influenced bank performance. However, Nomran et al. (2018) and Rahmana and Haron (2019) did not find a positive significant influence on SSB's educational background to bank performance.

H5: SSB with expertise in economics, finance, and accounting has a positive influence on accounting-based performance.

Cross-membership is another factor that can increase the expertise, knowledge, and effectiveness of SSB. Bukair and Abdul-Rahman (2013) identified five reasons why this is important, as follows:

- 1 ability to compare knowledge gained from other companies
- 2 decisions made by one SSB act as information for others
- 3 act as an information channel on business practices
- 4 its membership is preferred due to its knowledge, skill and credibility
- 5 SSB members adopt tacit and explicit knowledge into the application of Islamic law.

Therefore, an increase in the number of members leads to a rise in SSB's knowledge of the enforcement of sharia principles (Bukair and Abdul-Rahman, 2013; Farook and Roman, 2007).

SSB cross-membership enhances knowledge and understanding of the practices of Sharia law in the Islamic banking through exposure and discussions (Safiullah and Shamsuddin, 2018; Farook and Roman, 2007). Additionally, those that have occupied several positions usually gain a broader knowledge of the company's strategy, which contributes to the company's performance (Reguera-Alvarado and Bravo, 2017). Nomran et al. (2018) found that cross membership of SSB had a positive effect on ROA, but none on ROE.

H6: SSB cross-membership has a positive influence on accounting-based performance.

Textually, *maqasid syariah* means the objectives of Syariah (Mukhibad, 2019). In a broader context, the purpose of implementing Islamic law is to promote the welfare of society by protecting faith (Din), property (mal), life (Nafs), reason ('aql), and posterity (nasl) (Mukhibad, 2019; Rahman et al., 2014). Thus, Islamic banks that implement Islamic law should be consistent with *maqasid syariah* (Mohammed et al., 2015).

We predict that accounting performance will improve *maqasid syariah*, in addition to evaluating performance. Education, one of the indicators of *maqasid*, has been proven to have a link with accounting performance (see Asri, 2017; Nawaz and Haniffa, 2017, Nawaz, 2019). Companies with high education and training expenses will improve entrepreneurial judgement, job performance, staff accumulate technical information, skills, and know-how (Nawaz and Haniffa, 2017).

Mohammed et al. (2015) have developed a measure of fairness with free returns, fair prices, and interest-free. Additionally, justice can be demonstrated by moderate profits, fulfilling, and protecting the interests of all stakeholders (Azid et al., 2007). We believe that fair return and price and meeting stakeholders' interests are needed to build customers' and other stakeholders' trust in Islamic banks, thus improving bank performance. Banks looking for customer satisfaction will always charge a fair price. Studies have shown that the customer's decision to accept the product and service has a direct and indirect relationship with their loyalty and satisfaction (Consuegra et al., 2007). Thus, Islamic banks must always charge fair prices and choose profit levels that add value to customers, increase their satisfaction, and subsequently increase loyalty (Anouze et al., 2019).

H7: Maqasid syariah index has a positive influence on accounting-based performance.

2 Method

The study obtained data from 12 Islamic banks in Indonesia from 2014 to 2018 by using the purposive sampling method. We exclude banks that do not report education, research, training, and publications expenses. Additionally, the panel data regression method and we use random-effect regression model and balance data were used for its analysis. Data is collected manually from the annual reports that have been published by each bank.

Maqasid syariah performance was calculated on average from three indicators, namely education, justice, and welfare. These three indicators are referenced from Zahrah (1997), who formulated *maqasid syariah*. For each of these indicators, we develop measurements in several elements as done by Mohammed et al. (2008). The education indicator was determined based on three sub-indicators; research, employee training and publication costs. The justice indicator was measured based on the ratio of equity financing (Mudharabah and Musyarakah) and interest-free income ratio. The welfare indicator was measured based on the ratios of profitability, zakat expenditure to net profit and investment in the real sector. Measurement of the *maqasid syariah* variable could be summarised in Table 1.

Table 1 *Maqasid syariah* index

<i>Indicators</i>	<i>Sub-Indicators</i>	<i>Measurement (%)</i>
Education	Education	Education cost or grant toward total income ratio
	Research	Research cost to income ratio
	Training	Training cost to income ratio
	Publication	Publication cost to income ratio
Justice	Equity Financing	<i>Mudharabah</i> and <i>musyarakah</i> financing to financing ratio
	Interest-free income	Interest-free income to income ratio
Welfare	Profitability	Net income to equity ratio
	<i>Zakah</i> Expenditure	<i>Zakah</i> expenditure to income ratio
	Investment Real Sector	Financing to deposit ratio

Source: Modified from Mohammed et al. (2008) and Syafii et al. (2012)

The value of each indicator is measured from the average of the sub-indicators and the *maqasid syariah* score or index measured by the average of the indicator. We use the average of the indicators because Zahrah (1997) does not differentiate between each indicator. Additionally, we believe that the *maqasid syariah* indicator should be considered in the implementation of Islamic law.

Other variables are measured by the following method:

- a The number of SSB members measures the SSB size.
- b The frequency of SSB meetings is measured by the number in one year.
- c SSB meetings are calculated from the attendance percentage of SSB meeting.
- d SSB tenure is measured from the average tenure of members which is calculated at Islamic banks using t number of years.
- e SSB expertise is measured by the percentage of those with educational background, both at the bachelor's, master's or doctoral level in the field of economics, accounting, and finance.
- f SSB cross-membership is the average number of concurrent positions held by its members
- g The control variable is the company size measured by the log asset. Naseri et al. (2020), Eljelly (2013), Hakimi et al. (2018) proved that size has an impact on bank profitability. Banks with large assets have a greater ability to provide services to the customer and positively impact profitability. According to Basuony et al. (2014), Hamid and Ahsan (2014), Rahmana and Haron (2019), Mergaliyev et al. (2019) and Wang and Wu (2011), we use size as control variables.
- h The accounting-based performance was measured based on the ratios of profitability that have been adjusted to the bank's business. We use the return on asset (ROA) and net operating margin (NOM).

The model developed by researchers is as follows:

$$ROA = \beta_0 + \beta_1SSBsize_{it} + \beta_2Freq_{it} + \beta_3Attand_{it} + \beta_4Tenure_{it} + \beta_5Expert_{it} + \beta_6Cross_{it} + \beta_8Size_{it} + \varepsilon$$

$$AdjROA = \beta_0 + \beta_1SSBsize_{it} + \beta_2Freq_{it} + \beta_3Attand_{it} + \beta_4Tenure_{it} + \beta_5Expert_{it} + \beta_6Cross_{it} + \beta_8Size_{it} + \varepsilon$$

Random-Effect approach Model was used in the data analysis. The researchers also conducted a classic assumption test which included tests of normality, heteroskedasticity and multicollinearity: Normality testing uses the Jarque-Bera score. Multicollinearity tests are conducted between variables using correlation matrix and variance inflation vector (VIF).

3 Results

First, we show the descriptive statistics of the *maqasid shariah*, performance, and profitability, as presented in Table 2(a).

Table 2(a) Descriptive analysis

	<i>Education</i>	<i>Justice</i>	<i>Welfare</i>	<i>MS Index</i>	<i>ROA</i>	<i>Adj ROA</i>	<i>NOM</i>	<i>Adj NOM</i>
Mean	0.0033	0.268914	0.049977	0.326364	0.007537	-9.09E-11	0.569164	1.52E-10
Median	0.0013	0.278045	0.054300	0.335000	0.007292	0.000102	0.522212	-0.048980
Maximum	0.0353	0.373600	0.151200	0.490000	0.040800	0.029123	1.433100	0.835806
Minimum	5.00E-05	0.120100	-0.055300	0.130000	-0.025500	-0.031811	-0.003600	-0.523989
Std. Dev	0.0062	0.065549	0.033149	0.087330	0.010485	0.009930	0.275711	0.271057
Skewness	3.5254	-0.367748	-0.215124	-0.494821	-0.269538	-0.358756	0.853481	0.855723
Kurtosis	15.6216	2.556273	4.271627	2.773779	6.324280	5.424571	3.913843	3.711572

Table 2(a) shows that Islamic banks in Indonesia had *maqasid shariah* ratios of 32.63%, with a large average value of 49%. The education indicator shows the smallest achievement with an average value of 0.33%. These results indicate that the achievement of *maqasid shariah* performance was limited with an average of 32.63%.

The profitability ratios measured by ROA had an mean of 0.75%, respectively. However, the ROA and ROE had large standard deviations. That is, with fierce competition from conventional banks and having a small market share, Islamic banks in Indonesia have high business risks. We suspect that this is the cause of the low profitability of Islamic banks in Indonesia.

Islamic banks in Indonesia need regulators such as the Financial Services Authority (OJK), to possess an SSB of at least two people and a maximum of 50% of the number of directors. Table 2(b) shows that Islamic banks have 2–3 people, according to the standards, with an average value of 2.3 indicating a minimum number of two people.

The number of SSB meetings also showed that the activities were routinely carried out. Some Islamic banks conducted meetings 30 times a year. As shown in Table 2(b), the quality of meetings is measured by analysing the percentage of members' attendance,

is high at 88.16%. However, there were Islamic banks where the attendance rate was only 50%.

Table 2(b) Descriptive analysis (SSB attributes)

	<i>SSB Size</i>	<i>SSB Meeting</i>	<i>Attend SSB</i>	<i>Tenure SSB</i>	<i>SSB Expert</i>	<i>Cross SSB</i>	<i>LnSize</i>
Mean	2.3182	14.2576	87.1956	6.3712	0.2542	3.2247	29.8397
Median	2.0000	12.0000	96.0750	5.5000	0.0500	3.0000	29.5910
Maximum	3.0000	30.0000	100.00	17.000	0.6700	5.5000	32.2195
Minimum	2.0000	8.000000	0.96000	1.0000	0.0000	1.5000	27.2184
Std. Dev.	0.4693	3.958673	19.4672	3.4740	0.2833	1.0140	1.2746
Skewness	0.7807	1.588504	-2.0123	1.1504	0.3430	0.2887	0.1211
Kurtosis	1.6095	6.243594	7.5335	3.7694	1.2969	2.2627	2.1357

IDR: Indonesian Rupiah.

The SSB also showed an average tenure of 6.30 years and maximum tenure of 17 years. Bank Mega Syariah had the longest SSB tenure in 2018. The tenure is not categorised by the regulators of Islamic banks in Indonesia (OJK) with limited maximum SSB. However, regarding the level of education, its members, on average, had a master's degree.

Another weakness was the low expertise of SSB members in the field of economics, finance, and accounting, at an average value of 26.36%. According to Nomran and Haron (2019), and Rahmana and Haron (2019), SSB members with consulting and supervision services need expertise in the fields of economics, finance, accounting and Islamic law. This expertise should be considered during the selection of SSB members in Indonesia.

Table 2(b) also shows that SSB cross membership was 3.22 during the observation period, which means a high concurrent position of 4. It also indicates that the number of SSB members in Indonesia was still limited, due to the various requirement as a member of the National Sharia Board in addition to other competencies. This may be the cause of the limited number of SSBs in Indonesia.

Table 3 shows that the correlation metric between the independent variables. The Table 3 show that there is no significant causality between the independent variables. Additionally, the results of the collinearity test show a VIF value below 10. Based on the score, there is no multicollinearity. The normality test used the Jarque-Bera and resulted in a value of 5.72 with a probability of 0.0573. This value exceeds 0.05, which means that the data is normal.

3.1 Panel data regression test

The next step was testing the hypothesis with panel data which included test models, Common Method Model, and the Fixed and Random Effect Model. A Hausman test resulted in a probability score of $0.000 < 0.05$, while the second model had a probability of $0.0259 < 0.05$. The results concluded that the use of REM on both models was feasible.

Table 3 Correlation Matrix and VIF

	<i>SSB Size</i>	<i>SSB Meeting</i>	<i>Attend SSB</i>	<i>Tenure SSB</i>	<i>SSB Expert</i>	<i>Cross Membership SSB</i>	<i>MS Index</i>	<i>Ln. Assets</i>
SSB Size	1.0000							
SSB Meeting	-0.2766	1.0000						
Attend SSB	-0.0726	0.0961	1.0000					
Tenure SSB	0.1435	-0.2168	0.0431	1.0000				
SSB Expert	0.1925	-0.3486	-0.2493	0.1963	1.0000			
Cross Membership SSB	-0.0126	0.2119	0.1654	0.2714	-0.3495	1.0000		
MS Index	-0.2416	0.2217	0.3198	-0.0461	-0.2871	0.0009	1.0000	
LN Assets	0.5082	-0.1921	0.0812	0.1753	0.2763	0.1963	0.0975	1.0000
VIF	1.637	1.305	1.178	1.297	1.801	1.683	1.482	1.936

Table 4 shows that the number of SSB does not influence ROA. Islamic banks in Indonesia have two variations in the number of SSB, i.e., 2 or 3 people. The results of this study indicate that there is no improvement in ROA on bank policy by having an SSB of 3 people. The second indication from the results is that the existence of 3 SSBs may have an impact on increasing customer confidence due to more effective bank supervision. However, this increase in trust does not justify the additional costs due to the increase in the number of SSBs. Therefore, this benefit and cost analysis should be considered by banks in determining the number of SSB. Then, our findings reject the opinions of Nomran et al. (2018); and Nawaz (2017) that a large number of SSBs improve supervision and consultation provided to banks and that these services will have a positive impact on performance improvement.

Table 4 Random effect model

<i>Variables</i>	<i>ROA</i>		<i>AdjROA</i>	
	β	<i>T-statistic</i>	β	<i>T-statistic</i>
SSB Size	-0.010130	-1.555024	-0.007025	-1.146240
SSB Meeting	0.000314	0.841117	0.000266	0.756064
Attendance of SSB	0.000135	1.461648	0.000114	1.316481
SSB Tenure	0.000177	0.236954	0.000363	0.516571
SSB Expert	0.003883	0.283716	0.006918	0.537305
Cross Membership SSB	-0.001104	-0.500739	0.000937	0.451975
<i>Maqasid syariah</i> Index	0.050413*	1.779661	0.048303*	1.812541
Size	-0.091003	-0.580903	-0.134537	-0.912884
Constant	0.308722	0.591782	0.436422	0.889255

*** Significant at 1%; ** 5%; * 10%.

The results also show that the number of meetings did not have an impact on ROA. SSB meetings conducted to provide services to the director did not have a positive impact on bank profitability. There are indications that these SSB meetings were ineffective. Therefore, the impact on increasing profitability is not significant. The meetings were held because regulators in Indonesia mandated monthly SSB meetings. If the implementation is not according to the needs of the bank, then they are only formalities incurring costs, such as consumption-, transportation costs and are time-consuming. Vafeas (1999) observed a complex causality between board meetings and bank performance. Therefore, quality is most important for a meeting, not frequency (Arosa et al., 2013). One indicator to identify the quality of the meeting was the presence of SSB members. Our results indicate that the level of attendance at SSB meetings does not affect profitability. This finding also corroborates previous findings, that SSB meetings are ineffective, resulting in the implementation and attendance of participants not being able to increase profitability.

Our results also show that SSB educational background and level do not influence profitability. These results reject the findings of Nomran and Haron (2019), and Rahman and Haron (2019) that the SSB from the field of economics and finance will improve the quality of supervision and their subsequent advice will improve bank performance. These different findings enable SSB in Indonesia to refrain from using their financial capacity to monitor, supervise and provide advice to the director.

This study also shows that SSB tenure and cross-membership cannot increase bank profitability. An SSB's expertise can be formed through experience, i.e., their tenure as an SSB and the number of Islamic entities they have overseen (cross-membership). The absence of a relationship between the two indicators to measure performance indicates that the SSB have not used their experience to improve the quality of the advice to the director. SSB, addressing several entities, allow inter-SSB discussions, sharing experiences, and an improvement in the ability of SSB (Farook and Roman, 2007; Safiullah and Shamsuddin, 2018).

None of the SSB attributes, factors that improve accounting performance, have been proven to influence performance. This evidence allows

- 1 SSB to improve bank performance
- 2 that SSB's role is not directly related to bank profitability.

Law Number 21 of 2008 concerning Islamic Banks states that SSB has to provide advice, control and suggestion to directors and to ensure bank activities according to the Islamic law Principles. The object of SSB supervision is directed at the suitability of banks' products. Alsartawi (2019), Farag et al. (2018) and Mohammed and Muhammed (2017) stated that SSB verified the Sharia compliance for instruments and products.

Table 4 also provides evidence that bank compliance with *maqasid syariah* has a positive impact on financial performance. These results are conformable with our proposition that Islamic banks with high compliance on *maqasid syariah* will improve accounting performance. *Maqasid syariah* is defined as promoting the welfare of the people, which includes guarding people's faith, self, reason, descent, and wealth (Asutay and Harningtyas, 2015). *Maqasid syariah* is seen as the goal, and several researchers use it as an alternative measure of bank performance (Asutay and Harningtyas, 2015; Soediro and Meutia, 2018). This finding indirectly supports the findings of Asri (2017), Nawaz and Haniffa (2017), and Nawaz (2019) that companies with expenditure on education and

training (some of the indicators of *maqasid*–guarding reason) will improve entrepreneurial judgement, job performance, accumulate technical information, skills, and know-how (Nawaz and Haniffa, 2017). This finding will further improve accounting performance. The contribution of banks in maintaining faith—in other words, maintaining the level of religiosity—will improve employee performance (Bakar et al., 2018; Osman-Gani et al., 2013).

3.2 Robustness check

For robustness check, we used another method in measuring accounting performance. We used the Net Operating Margin (NOM), and the bank adjusted NOM (Adj NOM). We present the results using FEM in Table 5. The results indicate that all SSB attributes were not proven to have a positive impact on NOM and AdjNOM. *Maqasid syariah* index is proven to have a positive influence on NOM. These findings also reinforce the findings of this study.

Table 5 Robustness check

Variables	NOM		AdjNOM	
	β	T-statistic	β	T-statistic
SSB Size	-0.048383	-0.322610	-0.054582	-0.378030
SSB Meeting	-0.004600	-0.534806	-0.002378	-0.287230
Attendance of SSB	-0.002278	-1.072211	-0.001733	-0.847207
SSB Tenure	-0.022515	-1.310740	-0.025888	-1.565431
SSB Expert	-0.355357	-1.127868	-0.334443	-1.102574
Cross Membership SSB	-0.066348	-1.307682	-0.050933	-1.042715
<i>Maqasid syariah</i> Index	1.693344**	2.596668	1.734885***	2.763339
Size	4.786908	1.327344	3.992207	1.149830
Constant	-15.41071	-1.283207	-13.39383	-1.158433

4 Conclusion

This study provides evidence of bank compliance with *maqasid syariah* and SSB, measured using the following attributes: the number of members, the number of meetings, tenure, meetings attendance, cross-membership, expertise and education level, and influence on the bank's accounting performance. We identified that all SSB attributes do not influence accounting performance, measured by ROE and NOM. We also measured accounting performance adjusted to the type of business and show the same evidence, that SSB does not influence accounting performance.

We find that compliance with *maqasid syariah* is proven to have a influence on accounting performance. *Maqasid syariah* is seen as a means to achieve the goal of prospering society through safeguarding faith, reason, self, descent, and property. This means that the concern of banks in complying with *maqasid syariah* will improve bank accounting performance. The rationale is that the bank's policy towards education will

increase employee expertise and will subsequently improve the bank's accounting performance.

This study uses a small sample due to the limited number of Islamic banks in Indonesia. Moreover, this research was limited to measuring the *maqasid syariah* and accounting performance based on financial ratios. Therefore, other measurements could be used by future researchers to perfect the results of this study. Additionally, our sample had only Islamic banks in Indonesia which have the characteristics as described in this study. Therefore, future researchers' use of more Islamic banks from various countries is greatly feasible and may produce better generalisations on research results.

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