Intellectual Capital and Social Performance of Islamic Banks in Indonesia and Malaysia: The Moderating Role of Sharia Supervisory Boards

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ABSTRACT

The purpose of this study is to investigate the relationship between Intellectual Capital (IC) and Social Performance and to further examine whether Sharia Supervisory Boards (SSB) moderate this relationship. This study employed a longitudinal sample of Islamic banks in two countries leading Islamic banking industries in the south-east Asia region, Malaysia and Indonesia, with a sample of 31 Islamic banks during the period 2008-2020. Panel data regression model analysis was applied to test the study research hypotheses. The findings revealed that IC has a positive impact on the social performance of Islamic banks, demonstrating that greater utilization of IC leads to improved social performance. SSB meeting frequency has a positive impact on the social performance of Islamic banks, indicating that the more active the boards are, the more SSB can perform the social performance. Meanwhile, the gender diversity of SSB members has does not influence Islamic banks' social performance. On the moderating role of SSB aspects, which are SSB meeting frequencies representing SSB activities in monitoring and SSB gender diversity, both proven to strengthen the relationship between IC and Islamic banks' social performance. Overall, this research contributes to a better understanding of the impact of IC and SSB governance in improving Islamic banks' social performance functions. This study implies that Islamic banks should be more aware of their intellectual capital resources and the monitoring role of SSB so that the Islamic banks can perform their social functions more optimally.

Keywords: Intellectual Capital (IC); sharia supervisory boards; ssb meeting frequency; ssb gender diversity; social performance; islamic banks

INTRODUCTION

Islamic banking and finance have expanded and developed rapidly throughout Southeast Asia, and the area is continually growing (Islamic Financial Services Board 2020). According to the IFSB report 2020, the Islamic financial sector in South-east Asia is even larger than the Asian market in 2014. South-east Asia's Islamic banking assets and financial products are significantly greater than those in other parts of the world (now in third place), because of the rapid growth in Malaysia followed by Indonesia. Recent financial institution advancements have allowed them to increase the number of Sharia-compliant banking assets they hold. There is still room for Islamic finance in South-east Asian countries to grow and contribute more to the area, particularly in terms of performance and contribution to South-east Asian society. Furthermore, in this pandemic era caused by the development of the Covid-19 virus, Islamic banks might make a greater contribution to society.

In Islamic banking, social performance refers to the essence of social justice and accountability (Farook et al. 2011). According to Haniffa and Hudaib (2007), Islamic banks must be more socially aware and attentive than regular equivalents, because Islam prioritizes social goals. In Islamic Economics, there is a concept known as maqasid sharia, which is a notion of complete social performance monitoring that is designed to help

(good) people in this world and the next. This concept encompasses financial and social performance in order to maximize advantages while minimizing harm (mudharat) to public well-being (Al-Zuhaily 1997). It is thought that this is appropriate for managing and accessing the performance of Islamic financial institutions, particularly Islamic banks. The social performance of Islamic banks based on maqashid sharia is critical in directing business players and inspiring them to promote public welfare; the purpose of this study is to thoroughly analyze the variables that may contribute to its development.

As the need for knowledge-based resources grows in importance for wealth determination and organizational sustainability, the advent of the knowledge-based economy has resulted in a significant shift in the present market. The economy is transitioning to the fourth industrial revolution (Industry 4.0) once more (Ismoyowati et al. 2020), with goods, supply networks, and business models becoming more digitalized and networked. The digital revolution is predicted to drastically change the sector, necessitating major investment. At the moment, the new economy has huge potentials and abilities in terms of giving strong prospects for strengthening overseas competitiveness and sustaining a rapid pace of economic growth. New economic growth has increased the value of intellectual capital (Mustapha & Abdullah 2004). IC is a broad notion that regards intelligence and learning abilities as key components of economic progress and as

alternatives for physical and other resources (Cohen & Vlismas 2013).

In current economy, intellectual capital is critical for firms' competitiveness, independent of benefit or profit. Ignorance in managing intellectual capital growth may lead to issues such as employee ineptitude, poor service quality, inefficient work procedures, and poor external connections. Because intellectual capital comprises of intangibles such as information that institutions utilize to achieve their goals and increase the effectiveness and efficiency of their organizations, the presence of intellectual capital is critical for Islamic banks and financial institutions.

In the knowledge-based economy, intellectual capital may be described as the primary driving factor for value production. In other words, the presence of an IC can result in wellbeing (Hall 2001; Lev & Zambon 2003). According to RBT (Resource-based theory), IC is an organization's fundamental value development and strategic advantage (Barney 1991). The firm would be able to generate success and improve performance thanks to IC's ongoing competitive advantage (Chen et al. 2005; Wang 2008). The three components of IC are human capital (HC), relational capital (RC), and structural capital (SC). Human capital is a critical component that may improve a company's performance by fostering strategic competitive advantage (Martín-de-Castro et al. 2011). Companies with excellent educational and training standards should encourage Islamic Theory practice in IBs in order to successfully contribute to and eventually improve IBs' social performance. Therefore, the first objective of the study is to examine the relationship of intellectual capital and Islamic banks' social performance.

A governance mechanism is required for banks to accomplish their intended social and financial performance. The SSB's primary goals include assisting Islamic banks in implementing Sharia-compliant policies and procedures. For financial transactions, SSB also has regulatory permission. Then assess facts and documents, such as circulars, financial and operational reports, and policies. The SSB also guarantees that all stakeholders in Islamic banks and society at large have full access to and trust in their information and reports. It entails the creation of banking legislation, as well as ex ante and ex post examinations of transactions and financial instruments to verify Sharia conformity, which is the Sharia Supervisory Board's responsibility. Finally, the bank would include a statement in its annual reports stating whether or not it followed Sharia law. In general, the SSB's mission is to ensure that the operations of IBs adhere to Sharia law standards. As a result, the SSB focuses on how the IB carries out its social functions. One feature of the SSB that may be directly tied to the company's performance is the meeting frequency, which represents the members' monitoring actions (Pratama et al. 2021). The second factor is gender diversity, which would have a favorable influence on performance if women offered extra oversight to the Board (Adams & Ferreira 2009; Gul et al.

2011). Therefore, the second objective is to examine the relationship of SSB and the social performance of Islamic banking.

Because of the results of the previous studies which has not been giving complete picture regarding the relationship between Intellectual Capital and Social Performance of Islamic banks, this study will also examines the role of sharia supervisory boards functions to strengthen IC utilization to optimize the social performance. Grant (1996), stated that the firm's strengths are insufficient to achieve maximum competitive advantage without effective structure and allocation. According to RBT, the capacity of the organization to properly structure and manage its capital is a crucial requirement for the firm to have a competitive edge. The highest management level is a vital structure for monitoring of the organization's management level, and in addition to the board of directors, there is also the Sharia Supervisory Board for sharia banking.

This study contributes to the literatures by examining the relationship between IC and Sharia Supervisory Boards relation to the Islamic bank's social performance, while adding the bigger picture of explaining the role of sharia supervisory boards mechanism to strengthen IC utilization to optimize the social performance.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

RESOURCE-BASED THEORY

Resources Based Theory refers to resources that exist in a company that may be leveraged to gain a competitive advantage and guide the organization to good long-term performance (Wernerfelt 1984). The idea examines the firm's resources and how the organization manages and utilizes those resources. Valuable and limited resources can be directed to generate a competitive advantage, such that the resources possessed persist a long time and are difficult to replicate, transfer, or replace (Ulum 2015). This suggests that if the organization can properly manage its resources, it will have a competitive edge over its competitors. In terms of elucidating how intellectual capital influences the performance of Islamic commercial banks, According to RBT, Islamic commercial banks' performance will be good if they can utilise their intellectual capital resources properly (Nazra & Suazhari 2019). Because it will be able to establish a competitive edge for Islamic commercial banks by efficiently employing intellectual capital. As a result, Islamic commercial banks can outperform traditional banks (Wernerfelt 1984).

INTELLECTUAL CAPITAL AND ISLAMIC BANKS SOCIAL PERFORMANCE

IC is critical in producing value and expanding businesses sustainably. According to Resource-based theory (RBT), information technology (IC) lies at the heart of a

company's value generation and competitive advantage. According to RBT, establishing a lasting competitive edge is intimately tied to the company's ability to efficiently administer, assign, and deploy precious, finite, and irreplaceable resources (Barney 1991). Companies that employ them should get a market edge in order to build value and achieve peak performance in the future (Pratama et al. 2019).

Several prior studies have also discovered a link between a company's competitive advantage and its corporate social performance (Greening & Turban 2000; Gregory et al. 2016). Previous research (Nawaz & Haniffa 2017; Ousama & Fatima 2015; Setianto & Sukmana 2016) have demonstrated that IC has a favorable influence on Islamic banking performance. Several prior research on the relationship between IC and corporate performance revealed a link. Chen et al. (2005) revealed that IC's corporate performance has a positive impact and may be a result of future financial performance. Meanwhile, Clarke et al. (2011) demonstrate that IC is directly related to company performance. According to other studies, IC has a good influence on firm performance (Tan et al. 2007; Ulum et al. 2008). Based on the above description, the following hypothesis is offered in this study:

H_1 Intellectual Capital has a positive relation on Social Performance

SHARIA SUPERVISORY BOARDS AND ISLAMIC BANKS SOCIAL PERFORMANCE

For banks to achieve their desired social and financial performance, a governance structure is essential. The principal objectives of the SSB include aiding Islamic banks in developing Sharia-compliant policies and processes. SSB also has regulatory approval for financial transactions. After that, evaluate facts and documentation such as circulars, financial and operational reports, and policies. The SSB also ensures that all stakeholders in Islamic banks and society in general have complete access to and trust in their information and reports. It requires the development of banking law, as well as ex ante and ex post audits of transactions and financial instruments to ensure Sharia compliance, which is the duty of the Sharia Supervisory Board. Finally, in its yearly reports, the bank would disclose whether or not it followed Sharia law. The SSB's goal is to guarantee that IB activities follow to Sharia law norms. As a result, the SSB is concerned with how the IB performs its social functions. The meeting frequency, which indicates the members' monitoring actions, is one SSB element that may be directly related to the company's performance (Pratama et al. 2021). Based on the above description, the following hypothesis is offered in this study:

H_2 Sharia Supervisory Boards Meeting Frequency has a positive relation on Social Performance

Prior study suggests "diversity value" that female Board members provide the Board with different views, better represent for all the members and encourage active board discussion (Letendre 2004) and transparency (Upadhyay & Zeng 2014). Most research showed that gender diversity has a positive effect on corporate performance (e.g. Campbell & Mínguez-Vera 2008; Carter et al. 2003; Hutchinson et al. 2014). The findings in microfinance institutions have shown that more women are more capable of reducing operational expenses (Chakrabarty & Bass 2014) and improving financial performance (Strøm et al. 2014). Thus, it is hypothesized that

H_3 Sharia Supervisory Boards Gender Diversity has a positive relation on Social Performance

SHARIA SUPERVISORY BOARDS IN STRENGTHENING RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND ISLAMIC BANKS SOCIAL PERFORMANCE

While the capacity of the firm to grow and expand is dependent on the ability of the company to make good use of any resource, whether economic, physical, or intellectual. Though corporate resources might include capital or financial resources, human resources are at the heart of any business. IC is crucial in creating value and ensuring long-term corporate success. This is based on resource-based theory (RBT), and IC is the foundation of value generation and an organization's strategic advantage (Barney 1991). From the perspective of RBTs, the production and utilization of precious, rare, and irreplaceable resources is inextricably tied to the organization's ability to sustain, effectively distribute, and employ these resources. The highest management level is a vital structure for monitoring of the organization's management level, and in addition to the board of directors, there is also the Sharia Supervisory Board for sharia banking. The Sharia Bank's Supervisory Board (SSB) is one of the Sharia Bank's primary bodies, with the goal of ensuring that IBs operate in accordance with Sharia law principles. Sharia values require the corporation to conduct equal and fair ethical standards for all operators (Hafeez 2013). According to Ibrahim et al. (2004), the corporate governance framework supports the involvement and participation of IBs in economic operations. SSB is a partner in the function of Islamic banks, including social roles like as development, community, stakeholders, and public education (Setiawan 2009). As a result, the SSB's focus is on how the IB executes its social performance. Thus,

H_4 Sharia Supervisory Boards Meeting Frequency strengthen the positive relationship between IC and Social Performance

Grant (1996), on the other hand, stated that the firm's strengths are insufficient to achieve maximum competitive

advantage without effective structure and allocation. According to RBT, the capacity of the organization to properly structure and manage its capital is a crucial requirement for the firm to have a competitive edge. Several variables influence the SSB's qualities, including educational background, reputation, cross-membership, and gender diversity (Baklouti 2020; Farook et al. 2011; Rahman & Bukair 2013; Ramly & Nordin 2018). These parameters are used to determine the extent to which the SSB monitors the IB's performance. Therefore, the SSB is expected not only affected the social performance of Islamic banking, but also could have a role in strengthen the optimization and utilization of IC in improving the social performance of Islamic banking. Therefore the following hypothesis is developed.

H_5 Sharia Supervisory Boards Gender diversity strengthen the positive relationship between IC and Social Performance

METHODOLOGY

DATA AND SAMPLE

This research relies on secondary data. The data for this study was taken straight from each Islamic bank's annual report, which was collected from their websites. The data gathering approach employed in this study was documented using a pooled unbalanced panel, which means that all available samples were utilized. The sample of the study was Islamic banks in two countries leading Islamic banking industries in the south-east Asia region, Malaysia and Indonesia, with a sample of 31 full-fledged Islamic banks during the period 2008-2020. The time frame provided because the government initiated the Republic of Indonesia act No 21, 2008 concerning the Islamic banking in 2008 as specific regulation for islamic banking industry. Therefore, the base year that used in this study is 2008.

VARIABLES

INTELLECTUAL CAPITAL

Intellectual capital served as independent variable in this study. Ulum (2013) created iB-VAIC, which is based on Pulic's VAIC (2000, 2004). The advantages of this VAIC method, according to Firer and Williams (2003), include providing VAIC with a consistent and standardized measurement base to enable efficient analytical comparison between companies and countries, based on the audited data contained in the financial statements, making calculations 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 own types of transactions that are relatively different from general/conventional banking. Ulum (2013) established thus an Islamic Banking (iB-VAIC) performance assessment methodology, that is 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. iB-VAIC model is also proven to be able to use as the measurement of IC in Islamic banks as it is have already used in several previous research (e.g. Nurhidayat & Syarief 2020; Pratiwi & Kadry 2015a; Rizkyanti et al. 2020; Syah & Fauzan 2020). The following is an iB-VAIC calculation (Ulum 2013):

$$iB\text{-}VAIC = iB\text{-}VACA + iB\text{-}VAHU + iB\text{-}STVA$$

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	=	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 the cost of employees; D is Depreciation, and A is Amortization.
HC	=	employee expenses
SC	=	iB-VA – HC; structural capital
CE	=	available employed funds (total equity)

SHARIA SUPERVISORY BOARDS MEETING FREQUENCY

Sharia Supervisory Boards Meeting Frequency served as independent as well as moderating variable in this study. Based on the Regulation from Bank Indonesia (2009), SSB should have meeting at least once in a month, while Malaysian sharia board should meet minimum 2 times a year according to regulation from Bank Negara Malaysia (2019). The meeting is used for SSB to discuss and determine the suitability between the activities and products of IBs with Islamic principles. Refers to the research from Nugraheni (2018), Sharia Supervisory Boards Meeting is calculated by the total number of SSB meeting in a year.

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

SHARIA SUPERVISORY BOARDS GENDER DIVERSITY

Sharia Supervisory Boards Gender Diversity served as independent as well as moderating variable in this study. Gender diversity is determined by dividing the number of female members of Sharia Supervisory Boards with the total number of Sharia advisors in SSB of each bank in each year (Ramly et al. 2017). The data that is required to measure SSB gender diversity is available at the annual report of each Islamic banks. The following is the formula to calculate SSB gender diversity:

$$SSB\ Gender\ Diversity = \frac{female\ members\ of\ SSB}{total\ members\ of\ SSB}$$

SOCIAL PERFORMANCE

Social Performance served as dependent variable in this study. Social performance in IBs relates to the essential aspects of responsibility and social justice (Farook et al. 2011). The notion of complete evaluation of social performance in Islamic economics, known as maqasid sharia, seeks to produce good (benefit) for human beings in the world. This idea includes financial and social performance to maximize benefits and minimize harm to create public welfare (Al-Zuhaily 1997).

Social performance is measured using the performance ratio of Maqasid Sharia (Mohammed & Razak 2008; Mohammed & Taib 2015). They were developing the performance ratio of Maqasid Sharia based on al-Maqasid theory of Abu Zahrah (1997) who is a renowned intellectual and expert on Islamic law from Egypt since it is wide-ranging and inclusive of sharia goals. The performance ratio of the Maqassid Sharia is a metric to determine how companies implement all the maqasid targets that make up Abu Zaharah's theory, namely Tahdhib al-Fard (Educating the individual), Iqamah al-'Adl (Establishing justice), and Jalb al-Maslahah (Promotion of public interest).

TABLE 1. Operationalization of Maqasid Sharia Objectives in Islamic Banking

Objectives (Concepts)	Dimensions	Elements	Performance Ratios	Sources of Data
1. Individual Education	D1. Knowledge Advancement	E1. Grant for Education	R1. Scholarship or Grant for Education / Total Expense	Annual Report
		E2. Research	R2. Expense for Research / Total Expenses	Annual Report
	D2. Improving and instilling new skills	E3. Training Given	R3. Expense For Training / Total Expense	Annual Report
	D3. Raising Islamic banking awareness	E4. Publicity Exposure	R4. Expense For Publicity / Total expense	Annual Report
2. Establishing Justice	D4. Equitable or Fair returns	E5. Equitable or Fair Returns	R5. Profit Equalization Reserves (PER) /Net or Investment Incomes	Annual Report
	D5. cheap or low-cost goods and services	E6. Distribution of functions	R6. Mudarabah modes and Musharakah / Total Investments	Annual Report
	D6. Removal of undesirable characteristics that contribute to inequity	E7. Interest-free products	R7. Interest-free incomes /Total income	Annual Report
3. Maslahah	D7. Profitabilities of the bank	E8. Profits ratios	R8. Net income/Total asset	Annual Report
	D8. income and wealth Redistribution	E9. personal income	R9. Zakat paid/Net Assets	Annual Report
	D9. Investments in crucial real sectors	E10. Invest¬ments ratio in real sector	R10. Investments in real economic sector/Total Investments	Annual Report

TABLE 2. Average weights for the three objectives and ten elements of Maqasid Sharia

Objectives	Average Weight (%)	Elements	Average Weight (%)
01. Education (Tahdhib al-Fard')	30	E1. Grant for Education	24
		E2. Research	27
		E3. Training Given	26
		E4. Publicity Exposure	23
		Total	100
02. Justice (AI-'Adl')	41	E5. Equitable or Fair Returns	30
		E6. Distribution of functions	32
		E7. Interest-free products	38
03. Public Interest (Al-Maslaha)	29	Total	100
		E8. Profits ratios	33
		E9. personal income	30
		E10. Invest¬ments ratio in real sector	37
		Total	100
Total	100		

BANK SIZE

Bank Size served as control variable in this study. Following Baklouti (2020), this study will be using control variable to take into account differences within the bank's specific characteristics, which is 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. The 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 has a positive effect on 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.

ANALYSIS TECHNIQUES

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 pool ordinary least square model regression, fixed effects model, and random effects model. In this study, The Breusch and Pagan Lagrangian multiplier test was used to test the pool ordinary least square model regression model versus the random effect regression model. Meanwhile, The likelihood test was used to test the fixed effects model versus the pool ordinary least square model regression model and the Hausman test was used to find the panel data regression model that was the best appropriation between the fixed effect and the random effect regression.

In this study, two equation model was used to evaluate the assumptions. Model (1) is used to examine the IC effect towards social performance, and also examine the effect of Sharia Supervisory Boards consisted of 2 aspects which are Sharia Supervisory Boards Meeting Frequency and Sharia Supervisory Boards Gender Diversity towards social performance. Model (2) is used to examine the moderating effect of SSB on the relationship between IC and social performance. The following is the model used to carry out testing in this study:

Model 1. The Effect of IC, SSB Meeting Frequency, and SSB Gender Diversity on Social Performance

$$SP = \alpha + \beta_1 IC + \beta_2 SSBMeet + \beta_3 SSBGender + \beta_4 BankSize + \varepsilon_t$$

Model 2. The Moderating Effect of SSB Meeting Frequency and SSB Gender Diversity on the Relationship Between IC and Social Performance

$$SP = \alpha + \beta_1 IC + \beta_2 SSBMeet + \beta_3 SSBGender + \beta_4 iBVAIC * SSBMeet + \beta_5 iBVAIC * SSBGender + \beta_6 BankSize + \varepsilon_t$$

Where:

SP	:	Social Performance Variable
IC	:	Intellectual Capital Efficiency in Islamic Banking
SSBMeet	:	Sharia Supervisory Boards Meeting Frequency
SSBGender	:	Sharia Supervisory Boards Gender Diversity
IC*SSBMeet	:	The interaction between variable of SSB Meeting Frequency and IC
IC*SSBGender	:	The interaction between variable of SSB Gender Diversity and IC

| BankSize | : | BankSize is the control variable in this study which measured by the natural logarithms of the banks' total assets |
| ε_it | : | error terms |

RESULTS AND DISCUSSION

DESCRIPTIVE STATISTICS

Descriptive statistics may be used to obtain an overview of the main value distribution of the mean. The standard deviation value can be considered as an indicator of data dispersion. A smaller standard deviation suggests that the data are closer towards the mean value. The descriptive statistics of the variables employed in this research are shown in Table 3.

The SP (Social performance) variable has a mean value of 0.098 It means that the average ability of Islamic Banks in carrying out their social performance is 9.78% of the total social performance indicators. Meanwhile, the IC (Intellectual Capital) variable has a mean value of 10.048. On the other side, the SSB meeting frequency average value of 6.399 means that Islamic banks SSB members are doing meeting 6-7 times a year at average. The meeting frequency most number is from Bank Muamalat Malaysia Berhad in 2006 and the lowest come from several banks in different times. The SSB gender diversity average value of 0.068 means that Islamic banks SSB members who are woman are 6.8% in average of the SSB members. Meanwhile, bank size as the control variable has a mean value of 16.064. Overall, the descriptive statistics of each variable can be seen in Table 3 below.

TABLE 3. Descriptive statistics results

Variable	Mean	Std. Dev.	Min	Max
SP	0.098	0.110	0	1.023
IC	10.048	59.564	-64.060	1014.873
SSBMeet	6.399	8.338	2	54
SSBGender	0.068	0.156	0	1
BankSize	23.539	4.188	13.347	30.935

BREUSCH-PAGAN TEST, LIKELIHOOD TEST, AND HAUSMAN TEST RESULTS

TABLE 4. Breusch-Pagan test, Likelihood Test, and Hausman Test Results

	Model 1	Model 2
Breusch-Pagan test		
chibar^2	346.23	336.28
Prob > chibar^2	0.0000	0.0000
Likelihood Test		
F	8.42	8.37
Prob > F	0.0000	0.0000
Hausman Test Result		
chi2	21.32	7.63
Prob > chi^2	0.0005	0.1632

Panel data analysis was used to verify the relationship between intellectual capital and sharia supervisory boards meeting frequency and gender diversity on social performance in Indonesian and Malaysian Islamic Banks. The panel data analysis consists of time series and intercepts by means of the pool ordinary least square model, fixed effects model, and random effects model (Baltagi 2011; Gujarati & Porter 2009; Longhi & Nandi 2015). The Breusch and Pagan Lagrangian multiplier test was used to test the pool ordinary least square regression

model versus the random effect regression model. Meanwhile, The likelihood test was used to test the fixed effects model versus the pool ordinary least square model and the Hausman test was used to find the panel data regression model that was the best appropriation between the fixed effect and the random effect regression.

Firstly, Breusch and Pagan Lagrangian multiplier test (table 4) was used to test the pool ordinary least square regression model versus the random effect regression model. The assumptions of the hypotheses are as follows:

Null hypothesis: Pool ordinary least square model is preferred

Alternative hypothesis: Random effects model is preferred (p < 0.05)

Based on Table 4, for the model 1, the value of the Breusch and Pagan Lagrangian multiplier test probability value of 0.0000 < 0.05 shows that the pool ordinary least square model is not appropriate to test the model 1, so that the random effects model is preferred. For the model 2, the value of the Breusch and Pagan Lagrangian multiplier test probability value of 0.0000 < 0.05 shows that the pool ordinary least square model is not appropriate to test the model 2, so that the random effects model is preferred.

Secondly, the likelihood test (table 5) was used to test the fixed effects model versus the pool ordinary least square model regression. The assumptions of the hypotheses are as follows:

Null hypothesis: All dummy parameters, except for the one that has been dropped ($\mu = 0$)

Alternative hypothesis: Fixed effects model is preferred (p < 0.05)

Based on Table 4, for the model 1, the p value of the likelihood test is 0.0000 < 0.05. This result shows that the pool ordinary least square model is not appropriate to examine the model 1 and indicates that the fixed effects model is preferred. For the model 1, the p value of the likelihood test is 0.0000 < 0.05. This result shows that the pool ordinary least square model is not appropriate to examine the model 2 and indicates that the fixed effects model is preferred.

Third, the Hausman test was conducted to check the appropriateness of the model selection to choose the best model between the fixed effects and the random effects models. The assumptions of the hypotheses are as follows:

Null hypothesis: Random effects model is appropriate (p > 0.05)

Alternative hypothesis: Fixed effects model is appropriate (p < 0.05)

Table 4 shows that, for model 1, the p value of the Hausman test is equal 0.005 < 0.05, while it showed 0.1632 > 0.05 for model 2. Therefore, the result reports that the model for fixed effects is more appropriate to examine the model 1, while random effects is more appropriate to examine the model 2. Based on the three tests above, therefore, for model 1 this study will used fixed effects model to examine the variables, while random effects model is for model 2.

REGRESSION TEST RESULTS

TABLE 5. Regression results

Independent Variable	Model 1		Model 2	
	Dependent Variable			
	SP			
	Coef.	t	Coef.	z
Cons	0.0064632	0.80	0.0069649	1.07
IC	0.0000462	3.28***	0.00000121	0.07
SSBMeet	0.0024824	2.83**	0.002732	1.93**
SSBGender	-0.020624	-0.79	-0.0569624	-1.23
IC*SSBMeet			0.00000796	2.34**
IC*SSBGender			0.0017125	3.12***
BankSize	0.004723	6.42	0.0047018	5.34***
R^2 Within		0.4532		0.4642
F		493.18		
Prob > F		0.0000		
Wald chi^2				196.43
Prob > chi^2				0.0000

*** significant at 1%, ** significant at 5%, and * significant at 10%

Table 5 summarized the findings of this study's overall regression test. The 1st objective of the study is to examine whether intellectual capital (IC) has a positive relation on the social performance of Islamic banks in Indonesia and Malaysia. The results revealed that intellectual capital had a positive relation on social performance, with a coefficient of 0.0000462 at a 1% significance level, therefore H1 is supported. This indicates that the utilization of intellectual capital will lead to social performance improvement. The result is consistent with the literatures. Based on RBT, in creating value and sustainably growing companies, IC plays a key role. IC is the primary core of the development of value and a competitive advantage of a firm. IC is (Barney 1991). Some previous studies have also found that the 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 research (Nawaz & Haniffa 2017; Ousama & Fatima 2015; Setianto & Sukmana 2016) has found that IC has a positive impact on Islamic banking performance.

The 2nd objective of the study is to examine whether Sharia Supervisory Board's meeting frequency has a positive relation on the social performance of Islamic banks in Indonesia and Malaysia. The results revealed that SSB Meeting frequency had a positive relation on social performance, with a coefficient of 0.0024824 at a 5% significance level, therefore H2 is supported. This indicates that the monitoring activities of SSB members represented by the meeting frequency will lead to social performance improvement. The result is consistent with the literatures. Frequent meetings lead to the actual control by the SSB 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 SSB uses 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 meetings of the SSB means that the SSB already performs their job of monitoring the operations of the IBs (Ibrahim et al. 2004).

The 3rd objective of the study is to examine whether Sharia Supervisory Board's gender diversity has a positive relation on the social performance of Islamic banks in Indonesia and Malaysia. The results failed to find the evidence of positive relation between SSB gender diversity and social performance, so that H3 is not supported. This indicates that the gender diversity presence between the board members will not lead to social performance improvement, regardless of how big the gender diversity is. Gul et al. (2011) support the fact that the insignificant relationship found in the study between social and environmental performance and gender diversity implies that the bank strategy already considers these factors, and the presence of females has no impact on board dynamics.

The 4th and 5th objective of the study is to examine whether Sharia Supervisory Board's meeting frequency and gender diversity could strengthen the positive relation between IC and the social performance of Islamic banks in Indonesia and Malaysia. The results revealed that both SSB Meeting frequency and gender diverisity is able to strengthen the positive relation between IC and Islamic banks' social performance, so that H4 and H5 is supported. This indicates that the monitoring activities of SSB members represented by the meeting frequency will lead to social performance improvement by strengthening the effect of IC on social performance so that the IC could be more utilized to improve the social performance because frequent meetings will lead to better monitoring activites by the SSB of all operations of the IBs (Ntim et al. 2017). In addition, this also indicates that the special traits of woman, which are more diligent (Nielsen & Huse 2010), more involved and committed (Adams & Ferreira 2009), more care, benevolent, and less self-interest oriented (Carter et al. 2003; Cox & Blake 1991; Liao et al. 2015) could strengthening the effect of IC on social performance, by more optimally utilizing the IC to enhance the social performance.

Conclusion

The effect of IC on the social performance of Islamic banks in Indonesia and Malaysia was investigated in this study. The empirical findings demonstrated that IC has a favorable impact on the social performance of Islamic banks. This indicates that intellectual capital will lead to achievement of higher social performance of banks. This imply that Islamic banks should utilize more of its IC in order to achieve more social performance and contribute more to society based on maqashid sharia principles.

This study also examined the positive effect of governance mechanism of Sharia Supervisory Boards (SSB) aspects which are SSB meeting frequencies that represent SSB activities in monitoring and also SSB gender diversity in enhancing the Islamic banks' social performance. The empirical results proved that Sharia Supervisory Boards meeting frequency has a positive relation on social performance, while the SSB gender diversity has no relation with social performance. In addition, this study also done a moderating test approach and proved that both Sharia Supervisory Boards (SSB) aspects which are SSB meeting frequencies that represent SSB activities in monitoring and also SSB gender diversity could strengthen the relation between IC and Islamic banks' social performance.

This study's results are expected to contribute significantly to managers and stakeholders of Islamic banks. For managers of Islamic banks, the results of this study can be used as input to utilize intellectual capital resources and the optimization of SSB functions to monitor the conduct of Islamic banking sharia practices. From the academics perspectives, while previous researches in Islamic banking usually still mostly use financial

performance aspect in measuring the firm performance, this study applies different measurement by adopting a performance ratio of social contribution to reflect social performance of Islamic banks. The measurement of banks performance from social perspective is an effective approach for banks in evaluating their performance. The current study uses different measurement of IC by using iB-VAIC (Ulum 2013) which developed to measure IC specifically in Islamic banking companies. This offers a new model in measuring intangible asset in the organization.

For the improvement of future research, the future research could add more aspect of the sharia supervisory boards. Since the research could not prove the positive effect of gender diversity on the social performance of Islamic banks, maybe other aspect of sharia supervisory board i.e. SSB reputation, SSB educational background, SSB cross-memberships will give better dimension of governance mechanism to help Islamic banks in achieving better social performance.

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