



Human Capital, Quality of Sharia Supervisory Board and *Maqasid* Shariah Based Performance: Cross Country Evidence

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ABSTRACT

The purpose of this study is to examine the relationship between human capital (HC), quality of the shariah supervisory board (SSB) and performance of *maqasid* shariah-based Islamic banks. This study uses secondary data from the Bankscope database of 2014 to 2018. The research samples comprised 75 banks from a total population of 96 banks. Using the dynamic panel regression two-step generalised method of moments (GMM), this study revealed that HC has a significant and positive influence on sharia *maqasid*-based performance. SSB quality has a significant and negative effect on Islamic banks' performance. These findings support the resources-based theory that assumes more efficient human capital can facilitate the achievement of better organisation performance. The results may serve as a guideline for Islamic bank managers to enhance their bank human capital as it has a positive relationship with *maqasid* sharia-based performance.

Modal sumber daya manusia, kualitas dewan pengawas syariah, dan kinerja berbasis maqasid syariah: Bukti dari lintas negara

ABSTRAK

Tujuan dari penelitian ini adalah untuk menguji hubungan antara modal sumber daya manusia (human capital/HC), kualitas dewan pengawas syariah (DPS) dan kinerja bank syariah berbasis maqasid syariah. Penelitian ini menggunakan data sekunder dari database Bankscope periode 2014 s.d. 2018. Sampel penelitian berjumlah 75 bank dari total populasi 96 bank. Analisis dilakukan dengan pengujian regresi panel dinamis metode generalisasi momen dua langkah (Generalised method of moments/ GMM). Hasil penelitian ini menunjukkan HC positif signifikan terhadap kinerja berbasis maqasid syariah. Kualitas SSB berpengaruh negatif signifikan terhadap kinerja bank syariah. Temuan ini mendukung teori berbasis sumber daya (resources-based theory) bahwa sumber daya manusia yang lebih efisien dapat mendukung pencapaian kinerja yang lebih baik. Hasil ini menjadi pedoman bagi pengelola bank syariah bahwa modal sumber daya manusia memiliki hubungan yang positif dengan kinerja berbasis maqasid syariah sehingga harus meningkatkan pengembangan terkait pengetahuan, keterampilan, dan keahlian.

1. Introduction

Islamic bank (IB) offers banking product solutions that comply with the rules of Islamic law. Beck et al. (2013) believe that sharia principles prohibit business activities using interest instruments because of *usury* (interest), speculative

transactions (*gharar*) and other prohibited financing activities. Sharia principles emphasise fairness and equity, encourage profit-loss sharing and risk-sharing schemes, and require that real economic activities support all transactions. Islamic banks'

primary sources of income come from investment, buying and selling, and banking service fees.

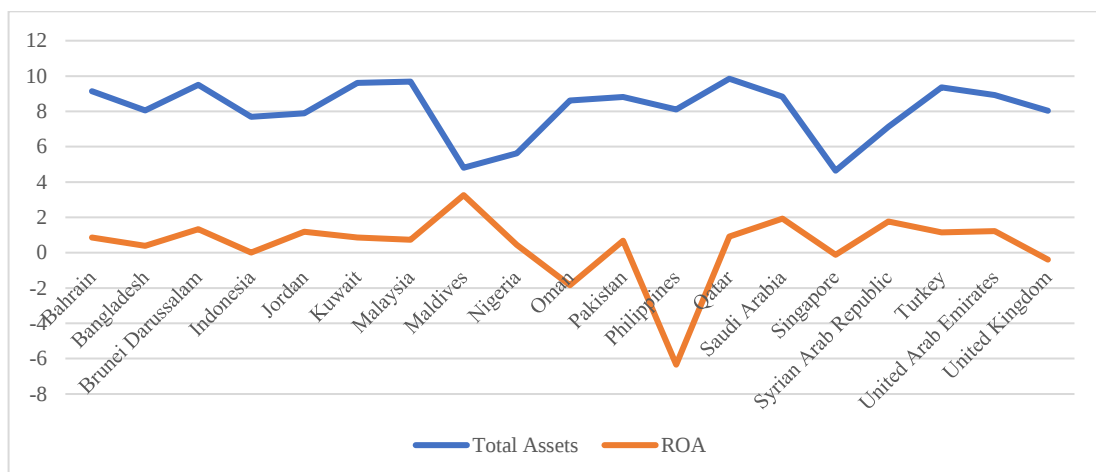
Mohammed et al. (2015) argue that IB is moving away from the concept of Islamic economics and *maqasid al-Syariah*. Abozaid & Dusuki (2007) asserted that IBs have been able to differentiate themselves from conventional banks in form and technicality but not in economic substance. Farooque et al. (2019) also claim that the current Islamic finance industry somewhat reflects the trend of conventional finance. The reason is the use of conventional benchmarks to measure IB performance rather than the *maqasid al-syariah*-based performance measurement system (Mohammed & Taib, 2015). Therefore, to encourage banks to act following Islamic *maqasid*, a performance measurement system based on sharia *maqasid* is needed (Tarique et al., 2021). Agree with Tarique et al. (2021). This study uses a sharia *maqasid* performance measure because accounting-based and market-based performance measures cannot cover sharia aspects.

IB appears to provide financial solutions to the broader community, not to a particular group. Therefore, IBs are expected to be innovative in providing banking solutions by utilising intellectual capital to have a competitive advantage and improve performance. According to (Nawaz & Haniffa 2017), IB requires a higher intellectual level, especially human capital (HC), because the product schemes (contracts) offered are more diverse than

conventional banks. IB requires higher resources to be able to master all product schemes sold. There are only two product schemes in conventional banks: lending and funding with interest instruments. HC in conventional banks is only required to master the product, so the skills required are less than in Islamic banks. Value creation in IB combines human capital, structural capital and capital employed (Nawaz & Haniffa, 2017). The resource-based view (RBV) by Wernerfelt (1984) and Barney (1986) on the role of company resources and capabilities as the basis of strategy. RBV explains differences in profitability between organizations due to differences in resource portfolios and the way resources are reported (Nawaz & Haniffa, 2017). Islamic bank performance depends on internal factors, one of which is HC (Akkas & Asutay, 2022; Aslam & Haron, 2021). More efficient HC and quality SSB support contribute to creating added value for Islamic banks to achieve *maqasid* sharia-based performance (Prasojo et al., 2022b).

Several researchers previously examined HC in the banking sector (Tiwari & Vidyarthi, 2018) and found that human capital efficiency significantly affected bank performance. Nawas and Haniffa (2017) found a significant positive relationship between VAIC and accounting performance (ROA). The results further show a significant positive relationship between accounting performance and HC.

Figure 1. Total assets and ROA of Islamic banks



This study links HC with *maqasid* sharia-based performance because Islamic banks risk non-compliance with sharia principles. *Maqasid* sharia is more suitable as a performance measure for Islamic banks because it includes financial aspects and sharia principles (Tarique et al., 2021). The financial data of Islamic banks in 2014-2018 based on each country's average is shown in Figure 1.

The unique characteristic of Islamic banks, presenting a governance component that is different from existing governance, is the presence of a shariah supervisory board (SSB). According to Hasan (2011), to implement better governance, Islamic financial institutions (IFI) formed a governance committee at the board of directors level and reported sharia governance in the annual report. Noordin & Kassim (2019) say that a better composition of SSB in terms of size, academic background and other related expertise will result in an effective monitoring system. SSB ensure compliance of bank business transactions with sharia principles, thus leading to disclosure practices good about sharia issues.

Several researchers have analyzed the effect of IC on the performance of Islamic banks in GCC countries (Buallay et al., 2019; Nawaz & Haniffa, 2017; Ousama et al., 2019). Previous studies of Islamic governance and the performance of Islamic banks have been carried out by (Baklouti, 2022; Elamer et al., 2019) by taking samples from MENA countries. Following the suggestion of Buallay et al. (2019), which examines the influence of IC on performance in Islamic banks in GCC countries, further researchers can expand their geographical coverage. This research is necessary because it relates human capital, SSB quality, and Islamic bank performance based on *maqasid* sharia. Previous researchers used *maqasid* sharia to rank bank performance and correlate the characteristics of sharia boards with the performance of sharia banks based on *maqasid* sharia. This study covers the suggestions of Buallay et al. (2019) by expanding the coverage from various countries so that the results can be more generalized.

This research is essential to answer the question of whether human capital and SSB quality can improve *maqasid* sharia-based performance of Islamic banks worldwide. This study contributes to filling the gap in the literature review results, namely the relationship between *maqasid* sharia-based performance with human capital and the quality of SSB at IB.

2. Literature review and hypothesis development

Resource theory views the firm as a collection of privileged resources such as human capital and sees these resources as helpful in developing products, services and strategies (Barney, 1991). Nonaka et al. (2017) said that companies must create new knowledge to maintain their existence in the future, so they must have a good strategy and resource management.

Resource-dependence theory assumes that corporate governance has an important function and provides resources and examines the board's role in managing resources for the company (Salancik & Pfeffer, 1978). Hillman & Dalziel (2003) argue that SSB brings various benefits to IB, such as expertise, skills, knowledge, and reputation. Overall, the resource dependence theory views SSB as a resource that will meet the resource needs of Islamic banks and reduce dependence on external resources, thereby improving their performance. SSB is included in the category of human capital. This refers to SSB members' knowledge and skills in Islamic banks (Hillman & Dalziel, 2003). Lai et al. (2012) argue that experienced SSB with relevant expertise can improve monitoring of the executive board. SSB with strong networks with other companies will access more and higher quality information (Tian et al., 2011).

The concept of *maqasid* sharia has been used to observe the performance of sharia banks, as has been done by Julia & Kassim (2019) and Mohammed & Taib (2015). The business aims to bring together various interests; in Islamic economics, fulfilling all

these interests must still refer to *maqasid sharia* to achieve *maslahah* (Johnston, 2007).

Human capital dan Islamic bank performance

Nonaka et al. (2017) argue that IB needs to create new knowledge to maintain its existence in the future, so it needs strategy and resource management. Many studies on the relationship between HC and performance have been carried out; for example (Nawaz & Haniffa, 2017) say that accounting performance and human capital efficiency (HC) has a significant positive relationship. In line with (Tiwari & Vidyarthi, 2018) finding that HC shows a significant positive effect on bank performance. Bontis et al. (2018) said that human resources contribute to explaining economic performance, which is positively influenced by postgraduate employee attendance and added value per employee. HC explains that mission-based performance is positively influenced by annual training, added value per employee and quality of customer relationships.

Meanwhile, McDowell et al. (2018) found a positive relationship between human capital and organisational performance. An efficiently and effectively organised HC can utilise skilled and innovative employees to achieve the best performance through innovation. Therefore, the first hypothesis is formulated as follows:

H₁: Human capital has a significant positive effect on the performance of Islamic Bank (IB)

SSB quality and Islamic bank performance

SSB quality is represented by several indicators, including the presence of SSB, size of SSB, SSB expertise, and SSB doctoral qualification. The literature review results provide ample evidence that SSB positively correlates with firm performance. Empirical evidence from the research of Al-Malkawi & Pillai (2018) and Buallay (2019) found the same

results that SSB has a positive relationship with IB performance. The results of research by Mollah & Zaman (2015) and Syafa & Haron (2019) showed that the larger SSB size positively impacts the performance of Islamic banks. On the other hand, Nawaz (2019) found that the size of the SSB negatively correlates with IB performance. SSB academic qualifications with doctoral degrees positively affect IB performance (Nomran et al., 2016; Safiullah & Shamsuddin, 2017).

According to Safiullah & Shamsuddin (2017), SSB members with high qualifications can improve their ability to review the implementation of *sharia* principles in operations. In addition, according to Almutairi & Quttainah (2017), SSB with an educational background in finance or accounting will improve the operational supervision function and the performance of Islamic banks. (Syafa & Haron, 2019) said that the characteristics of SSB have an essential role in improving the performance of Islamic banks, so the second hypothesis is formulated as follows:

H₂: SSB quality has a positive effect on IB's performance

3. Research method

Data and samples

This study uses secondary data with a bank-level and cross-country unit of analysis. All relevant information about bank-specific characteristics is derived from financial reports and annual reports of IBs worldwide. The primary source for collecting data is the Bankscope database provided by the Berau Van Dijk Company and GDP per capita data obtained from World Bank data. This database contains financial data of all IBs worldwide. Non-financial data will be collected from the annual report of each IB. This study uses company information disclosed in annual reports published from 2014 to 2018.

Table 1. List of samples

No	Bank name	Country
1	ABC Islamic Bank (EC.)	Bahrain
2	Abu Dhabi Islamic Bank PJSC	United Arab Emirates
3	Affin Islamic Bank Berhad	Malaysia
4	Ahli United Bank (Kuwait)	Kuwait
5	Ajman Bank PJSC	United Arab Emirates
6	Al Baraka Banking Group B.S.C.	Bahrain
7	Al Baraka Islamic Bank B.S.C. (c)	Bahrain
8	Al Hilal Bank PJSC	United Arab Emirates
9	Al Rajhi Banking & Investment Corporation (Malaysia)	Malaysia
10	Al Rajhi Banking and Investment Corporation	Saudi Arabia
11	Al Rayan Bank Plc	United Kingdom
12	Al-Amanah Islamic Investment Bank of the Philippines	Philippines
13	Al-Arafah Islami Bank Ltd.	Bangladesh
14	Albaraka Bank (Pakistan) Ltd	Pakistan
15	Alinma Bank	Saudi Arabia
16	Alizz Islamic Bank S.A.O.G.	Oman
17	Alliance Islamic Bank Berhad	Malaysia
18	AmBank Islamic Berhad	Malaysia
19	Bahrain Islamic Bank BSC.	Bahrain
20	Bank Albilad	Saudi Arabia
21	Bank Aljazira	Saudi Arabia
22	Bank Islam Brunei Darussalam Berhad	Brunei Darussalam
23	Bank Islam Malaysia Berhad	Malaysia
24	Bank Islami Pakistan Limited	Pakistan
25	Bank Muamalat Malaysia Berhad	Malaysia
26	Bank Nizwa SAOG	Oman
27	Bank of London and The Middle East plc	United Kingdom

No	Bank name	Country
28	Boubyan Bank KSCP.	Kuwait
29	CIMB Islamic Bank Berhad	Malaysia
30	Citi Islamic Investment Bank	Bahrain
31	Dubai Islamic Bank (Public Joint Stock Company)	United Arab Emirates
32	Dubai Islamic Bank Pakistan Limited	Pakistan
33	Emirates Islamic Bank PJSC	United Arab Emirates
34	First Habib Modaraba	Pakistan
35	First National Bank Modaraba	Pakistan
36	Gatehouse Bank Plc	United Kingdom
37	Global Banking Corporation BSC.	Bahrain
38	Gulf Investment House KSCP.	Kuwait
39	Hong Leong Islamic Bank Berhad	Malaysia
40	Housing Development Finance Corporation PLC	Maldives
41	HSBC Amanah Malaysia Berhad	Malaysia
42	ICB Islamic Bank Limited	Bangladesh
43	Islami Bank Bangladesh	Bangladesh
44	Islamic International Arab Bank	Jordan
45	Jaiz Bank PLC	Nigeria
46	Kuwait Finance House (KSCP.)	Kuwait
47	Kuwait Finance House BSC.	Bahrain
48	Kuwait International Bank KSCP.	Kuwait
49	Liquidity Management Center BSC	Bahrain
50	Maldives Islamic Bank Private Limited	Maldives
51	Maybank Islamic Berhad	Malaysia
52	Meezan Bank Ltd.	Pakistan
53	Noor Bank PJSC	United Arab Emirates
54	OCBC Al-Amin Bank Berhad	Malaysia
55	ORIX Modaraba	Pakistan
56	Pak-Gulf Leasing Company	Pakistan

No	Bank name	Country
57	Public Islamic Bank Berhad	Malaysia
58	Qatar Islamic Bank (QPSC)	Qatar
59	QInvest LLC	Qatar
60	Rasmala UK Ltd.	United Kingdom
61	RHB Islamic Bank Berhad	Malaysia
62	Shahjalal Islami Bank Limited	Bangladesh
63	Sharjah Islamic Bank PJSC	United Arab Emirates
64	Social Islami Bank Ltd	Bangladesh
65	Standard Chartered Saadiq Berhad	Malaysia
66	Syria International Islamic Bank	Syrian Arab Republic
67	The Islamic Bank of Asia Limited	Singapore
68	Turkiye Finans Katilim Bankasi A.S.	Turkey
69	Venture Capital Bank BSC (c)	Bahrain
70	Warba Bank KSCP.	Kuwait
71	PT Bank BCA Syariah	Indonesia
72	PT Bank BNI Syariah	Indonesia
73	PT Bank BRI Syariah Tbk	Indonesia
74	PT Bank Mega Syariah	Indonesia
75	PT Bank Syariah Mandiri	Indonesia

Measurement variable

Dependent variable

The dependent variable in this study is the performance of IB as a proxy for the maqasid sharia

index. Maqasid sharia index (MSI) is calculated using the steps shown in table 2; this concept was adopted from previous research (Syafa & Haron, 2019).

Table 2. *Maqasid* shariah index formula

Dimension	Weight	Average (%)	Element	Average (%)	Ratio	Average (%)
D1: preservation of faith	W1	20	E1: freedom of belief	- 100	R1 : mudharabah and musyarakah investment / total investment	- 50 - 50

						R2 : total income– non-halal funds / total income		
Preservation of life	W2	20	E2: protect human dignity	-	50	R3 : csr expenditure/ total cost	-	50
			E3: protect human rights	-	50		-	50
						R4: distribution of zakat/ net assets		
Preservation of intellect	W3	20	E4: initiation of scientific thinking	-	50	R5: technology investment/ total assets	-	50
			E5: prevent lack of knowledge	-	50		-	50
						R6: employee resignation/number of employees		
Preservation of progeny	W4	20	E6: paying attention to all parties, including stakeholders	-100		R7: net income/shareholder equity	-	16.67
							-	16.67
							-	16.67
						R8: research expenses/total expenses	-	16.67
							-	16.67
						R9: training and development expenses/total expenses		
						R10: net profit/total assets		
						R11: non- performing financing		
						R12: tax paid / profit before tax		
Preservation of wealth	W5	20	E7: public welfare	-	50	R13: investment in the real economic sector / total investment	-	33.33
			E8: minimising economic inequality	-	50		-	33.33
						R14: investment in smes / total investment	-	33.33

R15: investment in
agriculture / total
investment

Independent and control variables

The independent variables in this study are human capital and SSB quality. The control variables are size, leverage, and per capita GDP growth (Safiullah & Shamsuddin, 2017). IC measurement uses VAIC by Pulic (2000) because the VAIC approach is based on the information available in the financial statements. VAIC formula is more straightforward and is generally understood so that it can be validated. HC shows the amount of value-added (VA) generated in monetary units for human capital investment (Palazzi et al., 2019). The first step in calculating HC according to the VAIC method is calculating the value-added (VA) first. VA is obtained from operating profit (OP) and employee expenses. So the formula for calculating VA, according to (Cenciarelli et al., 2018), is net income plus employee expenses. After the VA value is obtained, the formula for calculating the company's HC is to divide VA by employee expenses.

The SSB quality system variable is measured using the SSB index, which is taken from four SSB characteristic indicators: the presence or absence of SSB, SSB size, SSB doctoral qualification, and SSB financial expertise. According to (Ajili & Bouri, 2018), SSB members consist of a minimum of three members, one of which has expertise in Islamic finance according to recommendations from AAOIFI. Farook et al. (2011) reported that SSB members have academic qualifications. Furthermore, Neifar et al. (2020) used the SSB index proxy for the SSB quality variable. This index consists of four attributes: the presence of SSB, number of SSBs, SSB expertise and doctoral qualifications of SSB members.

The index calculation refers to Elamer et al. (2019) by assigning a score of 1 and 0 to each

indicator. The first indicator, if the Islamic bank has SSB, then it is given a score of 1 and 0 if it does not have SSB. The second indicator score is 1 if the Islamic bank has a minimum number of SSB members of three members and 0 if less than three members. The third indicator is a score of 1 if the Islamic bank has an SSB member with a doctoral degree and 0 if it does not have an SSB with a doctorate. The fourth indicator is a score of 1 if the Islamic bank has expertise or experience in finance and 0 if it does not. The next step is to add up the scores and convert them to percentages. Islamic banks with low SSB index scores have low SSB quality, while high scores indicate better SSB quality. This SSB index represents sharia governance; Islamic banks with good SSB quality are considered to have more robust sharia governance qualities, and vice versa; if they have low SSB quality, they are considered weak governance.

In previous research, this study uses the control variable of firm size as measured by the total assets of the natural log (Nawaz & Haniffa, 2017). The second control variable is leverage which is calculated using the formula for total assets divided by total debt (Al-Malkawi & Pillai, 2018). The third control variable is GDP growth per capita as measured by GDP growth per capita using the formula for the level of GDP per capita in year t minus GDP per capita in year $t-1$ (Mollah & Zaman, 2015).

Empirical model

This study examines the relationship between the characteristics of sharia governance, risk taking and Islamic banking performance through the following regression model:

$$Msi_{it} = \beta_0 + \beta_1 hc_{it} + \beta_2 ssb_quality_{it} + \beta_3 size_{it} + \beta_4 lev_{it} + \beta_5 gdp_growthpercap_{it} + \varepsilon_{it}$$

Where:

Msi	= maqasid sharia index
Hc	= human capital
Ssb_quality	= ssb quality
Size	= natural log of total assets
Lev	= ratio of total debt to total assets
Gdp_growthpercap	= percentage growth of gdp per capita

Hypothesis testing of this study uses a dynamic panel regression estimation technique with the generalised moment (GMM) method. This method was chosen to avoid endogeneity problems (Daher et al., 2015).

4. Results and discussion

Table 3 shows that the average HC reaches 5.13875; this result shows that utilising human

resources is compelling. The efficient results of positive HC on IB are consistent with previous studies (Nawaz, 2017; Nawaz & Haniffa, 2017). The minimum value of the SSB quality variable is zero because several countries in the MENA region do not require Islamic banks to raise SSB. MENA countries have a higher level of understanding of sharia principles.

Islamic banks are expected to implement better sharia principles without the role of SSB. The average SSB quality score is 0.54266, and most of the Islamic banks observed in this study already have SSB. According to the AAOIFI governance standards, Islamic banks have at least three SSB members (Ajili & Bouri, 2018); in this study, the majority of Islamic banks have met the standard requirements set by AAOIFI.

Table 3. Results of descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
MSI	375	0.30271	0.20439	0.00009	0.92932
HC	375	5.13875	10.66297	-12.73582	55.74194
SSB_Quality	375	0.54266	0.31991	0	1.00000
SIZE	375	7.71992	2.18164	1.87212	11.48591
LEV	375	0.79514	0.23256	0.00685	0.95553
GDPPCAP	375	1.49047	2.84653	-7.04313	6.73702

The expertise criterion is still a minority in the SSB quality calculation score because most Islamic banks do not yet have SSB with an accounting or financial education background. While the doctoral qualification for SSB, this criterion is fulfilled because most Islamic bank SSBs have doctoral qualifications. SSB is experienced in Islamic bank finance and can utilize this expertise and experience to develop an Islamic bank. Experienced SSB has an

understanding of Islamic bank business and operations so that more decisions related to finance and sharia principles will be better. The results of observations from the annual report. SSB are many academics and international practitioners with a doctoral level of education in the field of sharia. In addition, most SSB members from the MENA Region are AAOIFI members, and they become SSBs of more than one institution at the same time.

Table 4. Test results of model specification

	(1)	(2)
	ms	ms
AR2 stat	-0.458	0.102
AR2 p-stat	0.647	0.919
Sargan stat	42.562	66.773
Sargan p-val	0.490	0.416

Table 4 presents the Arellano-Bond AR (2) test and the Sargan test. First, the AR (2) test for each model shows results that are not statistically significant, so the residuals are not serially correlated in the second order for the first difference equation. Second, the results of the Sargan test show

that the set of instruments used is valid because the probability values are more significant than 0.05. The result means they are not statistically significant, so they fail to reject the null hypothesis, so it can be concluded that the instrument used is valid.

Table 5. Baseline of total sample dependent MS

	(1)	(2)
	ms	ms
l.ms	0.620*** (37.792)	0.620*** (56.906)
hc	0.003*** (22.269)	0.002*** (27.392) (-6.061)
ssb_qty		-0.063*** (-9.889)
size	0.031*** (22.909)	0.023*** (44.043)
lev	-0.147*** (-16.277)	-0.077*** (-15.264)
gdpgrowthpercap	0.004*** (7.726)	0.011*** (50.006)

_cons	-0.015**	-0.023***
	(-2.263)	(-5.877)
Obs.	359.000	355.000
AR2 stat	-0.458	0.102
AR2 p-stat	0.647	0.919
Sargan stat	42.562	66.773
Sargan p-val	0.490	0.416

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Before testing the hypothesis, the feasibility test of the model is carried out first. First, the AR (2) test for each model shows results that are not statistically significant, so the residuals are not serially correlated in the second order for the first difference equation. Second, the results of the Sargan test show that the set of instruments used is valid because the probability values are more significant than 0.05. The result means they are not statistically significant, so they fail to reject the null hypothesis, so it can be concluded that the instrument used is valid.

Statistical testing showed that HC was statistically significant in a positive direction; this result followed the direction of the first hypothesis. The significance level for this hypothesis is 1%, meaning that the researcher has a 99% confidence level. Every increase in human capital efficiency will increase the maqasid sharia index. The results of this study support the resource-based view theory; in this context, it is related to the human capital owned by the IB. This relationship can explain that the ability of employees to manage and utilise optimally can increase profits for IB.

These results are consistent with previous research (Nawaz & Haniffa, 2017; Tiwari & Vidyarthi, 2018) that HC positively affects company performance. HC becomes a source of competitive advantage for companies but must be supported by tangible assets (Palazzi et al., 2019). HC contributes to improving employee capabilities (tacit

knowledge) which are documented so that knowledge sharing can encourage innovation (Hussinki et al., 2018). Contrary to research, Tran & Vo (2018) that HC is negatively related to performance.

The results of this study provide empirical evidence that the efficiency of human capital can significantly support IB performance. IB managers must consider the value of investing in human capital. Banks must pay attention to the competence of their employees. Increasing skills, knowledge and understanding of sharia values are critical in supporting the IB business. This attention is not only focused on recruitment but also requires maintenance and upgrading of human capital skills in order to be able to provide optimal added value. The IB must budget for personal expenses related to upgrading skills through training or other activities that can hone skills. Future technological developments will change the map of work that humans usually do. HC in IB is necessary for developing and creating new products while complying with sharia principles.

Humans in IB are required to have more capabilities and expertise compared to conventional banks considering that Islamic banking products are more complex. The role of HC in the performance of Islamic banks will increase if it is supported by structural capital (SC) and capital employed (CE). Islamic bank SC is related to Islamic bank infrastructure, primarily information technology

(IT), data, and Islamic bank culture (Prasojo et al., 2022a). CE is the financial capital and physical assets such as buildings and bank operational equipment (Nadeem et al., 2018). SC helps humans to innovate more. HC and SC cannot work without physical capital.

IBs need to develop and improve the capabilities of Islamic bank employees. Development of soft skills such as training to increase the ability of new marketing strategies, new product development, and new strategies for customer approach. In addition to the need to perform maintenance on the skills of existing employees, such as continuous product knowledge, they always follow the latest developments. Special education about Islamic character is also critical, considering that the core business of Islamic banks is closely related to the teachings of the Islamic religion. This self-development is an investment for the IB, so the larger the budget spent will positively impact the bank's performance.

The test results show that the SSB quality hypothesis is statistically significant. However, the direction is negative, so this study's results do not follow the second hypothesis. The quality of the SSB is determined by the existence, size, expertise, and doctoral qualifications. This result contradicts previous empirical evidence that the size of SSB (Grassa, 2015; Nomran et al., 2018), expertise by Nomran et al. (2017), holds a doctorate by Syafa & Haron (2019) positive effect on the performance of Islamic banks. This finding rejects the resources-based theory that SSB as a resource for Islamic banks has not impacted the performance of Islamic banks. Consistent with Hakimi et al. (2018) and Almutairi & Quttainah (2017) that the size of the SSB has a negative relationship with the performance of Islamic banks. Hakimi et al. (2018) and Nomran et al. (2018) found that expertise was significantly negatively related to the performance

of Islamic banks. Furthermore, doctoral qualifications harm the performance of Islamic banks in line with the findings (Nomran et al., 2018; Syafa & Haron, 2019).

Quttainah & Almutairi (2017) argue that many SSBs only act as advisors, so SSBs are not directly involved in examining financial contracts. In addition, researchers suspect that the better quality of SSB will increase conservatism in monitoring. Sharia bank performance is proxied by sharia maqasid, so SSB will be more careful in every monitoring activity, ultimately focusing on fulfilling sharia maqasid elements. The size of the SSB that is too large can reduce its effectiveness. In addition, the large number of members will increase the compensation of SSB, thereby reducing profits. AAOIFI recommends that SSB members consist of at least three (Ajili & Bouri, 2018). Studies of governance in the banking sector, in general, say that when the size of the SSB increases, the control and monitoring function will decrease (Mamatzakis & Bermpei, 2015). The business nature of Islamic banks is so complex, so the large size of the SSB can be justified. The results of this study provide insight that larger SSB sizes do not contribute significantly to the performance of Islamic banks, even though they are an integral part of the Islamic bank business model.

Robustness check by region is grouped into two regions: MENA and non-MENA. According to Grassa (2013), there are differences in the sharia governance framework in Islamic Financial Institutions (IFIs) in all MENA countries and outside MENA countries. This difference can impact the effectiveness of implementation in the IFIs. Therefore, the researchers divided the research sample into two regions. Statistical results are presented in Table 5 for samples belonging to the MENA country category and table 6 for non-MENA sample categories.

Table 6. Baseline regional MENA – dependent variable MS

	(1)	(2)
	ms	ms
l.ms	0.733*** (46.737)	0.728*** (9.513)
hc	0.009*** (10.262)	0.011 (1.094)
ssb_qty		-0.101** (-2.392)
size	0.038*** (37.447)	0.022 (1.431)
lev	-0.231*** (-42.885)	-0.018 (-0.147)
gdpgrowthpercap	0.006*** (6.504)	0.005*** (4.238)
_cons	-0.045*** (-8.336)	-0.016 (-0.284)
Obs.	118.000	117.000
AR2 stat	1.041	0.940
AR2 p-stat	0.298	0.347
Sargan stat	34.779	50.310
Sargan p-val	0.839	0.924

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Based on table 6, samples were taken from IBs from MENA countries. The results of the hypothesis test show that HC is proven to be significantly positive in influencing the performance of IB. Meanwhile, the quality of SSB is consistent with the total sample baseline results. While all control

variables, the results are significant and in line with the regression results of all samples. This finding indicates that IBs in MENA countries have efficiently utilised HC to impact performance positively. IB is part of the service-based banking industry, so HC is a strategic asset for the company.

Table 7. Baseline regional non-MENA-dependent variable MS

	(1)	(2)
	ms	ms
l.ms	0.464*** (37.351)	0.530*** (32.369)
hc	0.002*** (43.304)	0.002*** (16.760)
ssb_qty		-0.040*** (-5.413)
size	0.013*** (47.416)	0.013*** (10.321)
lev	-0.038*** (-7.971)	-0.050*** (-3.126)
gdpgrowthpercap	0.014*** (14.284)	0.015*** (8.496)
_cons	0.020*** (3.395)	0.041*** (4.526)
Obs.	141.000	138.000
AR2 stat	-1.589	-1.385
AR2 p-stat	0.112	0.166
Sargan stat	56.285	87.629
Sargan p-val	0.101	0.022

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This empirical evidence can illustrate to policymakers in MENA countries such as central banks, accounting standard policymakers, and legislators related to bank supervision that increasing HC efficiency can improve the performance of Islamic banks. The study's results

were on a sample of Islamic banks outside the MENA country. The results are consistent with the complete sample data that HC significantly positively affects Islamic banks' performance. SSB quality is significant negative on Islamic bank performance. This result is similar to Mollah et al.

(2016) that the governance of Islamic banks in non-MENA countries harms ROA.

Based on the cross-regional analysis, it can be seen that there are not differences in research results between countries in MENA and non-MENA countries. MENA and non-MENA countries tend to have the same efficiency level on the HC and positively impact the performance of Islamic banks. The effect of quality SSB on the performance of Islamic banks in both MENA and non-MENA countries shows a more negligible difference in results.

5. Conclusions

This study analyses the relationship between human capital (HC), SSB quality and sharia-based maqasid performance. This analysis involves 70 Islamic banks from various countries during the 2014-2018 period. The study's results prove that HC has a positive and significant effect on sharia maqasid-based performance. HC is an essential resource for Islamic banks which has been empirically proven to affect the performance of Islamic banks positively. The results of this study support the theory of the resource-based view that human resources controlled and utilised efficiently by Islamic banks can improve performance. SSB quality is proven to have a negative and significant effect on the performance of Islamic banks. This result rejects the resource-based theory because SSB as a resource for Islamic banks has not been able to impact the performance of Islamic banks positively.

These findings are expected to provide new empirical evidence to be used as a reference for additional study material. Measuring Islamic bank performance with Islamic maqasid associated with intellectual capital and SSB quality can complement the sharia maqasid literature as a performance proxy. The contribution to Islamic banking industry practitioners is to guide Islamic bank managers in allocating investments in human capital to be more efficient. The human capital that is more efficient will improve the performance of Islamic banks. Higher quality SSBs tend to be more conservative in

fulfilling sharia aspects so that they can ignore financial aspects that can reduce overall performance. The recommendation from this research is that SSB, which is more qualified in terms of background and experience, must be able to improve monitoring so that Islamic banks can achieve maximum profits while still complying with sharia principles.

The limitation of this research is that some of the annual report data of Islamic banks do not contain the required information, so they are excluded from the sample. This study only focuses on Islamic banks. Subsequent research expands the analysis to include other non-bank Islamic financial institutions, such as Islamic insurance companies. Further studies may include other variables related to the performance of Islamic banks, such as capital structure and corporate social responsibility.

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