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ENHANCING ISLAMIC BANK PERFORMANCE: THE ROLE OF SHARIA SUPERVISORY BOARD ATTRIBUTES AND INTELLECTUAL CAPITAL

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ABSTRACT

Islamic banks are required to establish a sharia supervisory board (SSB). In that sense, there is a need to gain insight into whether the characteristics of the sharia supervisory board affect the performance of Islamic banks. This research investigates the effect of SSB size, sharia background, financial background, gender diversity, and the moderating effect of intellectual capital on the performance of Islamic banks in Indonesia, Malaysia, and Brunei Darussalam during 2011-2021. The data used in this study is taken from the annual reports of Islamic banks, as many as 269 observation data, and analyzed through the panel data regression. The results show that the financial background and gender diversity variables among SSBs impact the performance of Islamic banks in the countries. Theoretically, this study strengthens the relevance of resource dependence theory in Islamic banking by highlighting that more extensive and diverse boards attract expertise, networks, and legitimacy that support performance. Practically, this study can serve as a reference for practitioners and policymakers to underline the strategic importance of board composition, gender diversity, and intellectual capital investment as drivers of ethical compliance and financial stability.

Keywords: performance, shariah supervisory board, educational background, gender diversity, intellectual capital.

INTRODUCTION

Islamic finance, grounded in Sharia principles, prohibits interest (riba) and non-halal activities, with governance upheld by Sharia Supervisory Boards (SSB) for transparency and fairness. The 2022 Islamic Finance Development Indicator ranked ASEAN countries like Malaysia, Indonesia, and Brunei Darussalam in the global top 15, underscoring Southeast Asia's growth in Islamic finance (IFDI 2022). Malaysia leads globally through the Malaysia Islamic Financial Centre (MIFC) (Syarif 2019), while Indonesia's growth is driven by government support, rising demand for Sharia-compliant products, and expanding financial institutions (Asriani and Kurniawan 2023; Naja et al. 2023). Brunei's smaller sector remains stable, supported by strategic government initiatives and strong regulation (IMF 2023). The SSB is a critical factor in this success, ensuring compliance, fostering trust, and enhancing the credibility and stability of Islamic banks, allowing them to perform competitively even in challenging environments.

SSB size can significantly impact Islamic bank performance. Studies by Pfeffer and Salancik (1978); Dalton et al. (1998); Khalil and Taktak (2020); Baklouti (2022); Moudud-Ul-Huq (2022); Tashkandi (2022) indicate that larger boards reduce moral hazard and curb aggressive lending, thus lowering risk (Safiullah and Shamsuddin 2018). Conversely, research by Aslam and Haron (2020); Khalil and Taktak (2020); Bayu (2023); Hamid, Hisan, and Anuar (2023) found no effect, suggesting a possible mismatch between SSB size and Islamic bank operational complexity. SSB members' Sharia background also influences performance. Members with such expertise help develop legally sound, innovative, and profitable products, enhancing bank performance (Baklouti 2022). Noordin and Kassim (2019); Moudud-Ul-Huq (2022) suggest these members are better at identifying bank issues, though Khalil and Taktak (2020) found no impact.

The financial expertise of SSB members is another factor, with Kolsi and Grassa (2017); Basiruddin and Ahmed (2019) indicating it reduces Sharia non-compliance risk. However, Khalil and Taktak (2020) observed no effect on performance. Gender diversity within the SSB also affects performance, with studies by Jabari and Muhamad (2021); Moudud-Ul-Huq (2022) showing positive impacts, while Baklouti (2022); Moudud-Ul-Huq (2022) found no impact on risk or performance. Performance is further strengthened when supported by a company's intellectual capital (IC). According to resource-based theory, strategic assets—such as human capital efficiency (HCE), capital employed efficiency (CEE), structural capital efficiency (SCE), and relational capital efficiency (RCE)—provide a competitive advantage. IC enhances SSB effectiveness by bolstering risk management and oversight and promotes innovation through skills, training, and valuable information, leading to superior, sustained performance (Nguyen, Le, and Vu 2021; Mukaro, Deka, and Rukani 2023).

Previous studies have shown inconsistent results, which can open research gaps. Making intellectual capital a moderating variable creates novelty in this study because there are still very few studies related to this. Focusing on Indonesia, Malaysia, and Brunei, the research addresses governance and performance dynamics in Southeast Asia's Islamic banking, a globally leading sector. While Islamic banks in this region demonstrate impressive growth, research gaps remain on how SSB characteristics and intellectual capital affect performance. Therefore, this study aims to investigate the effect of SSB size, sharia background, financial background, gender diversity, and the moderating effect of intellectual capital on the performance of Islamic banks in Indonesia, Malaysia, and Brunei Darussalam during 2011-2021. This study uniquely compares the influence of SSB and IC in these countries, advancing understanding of how governance affects financial performance, innovation, and risk management. This study is expected to guide policymakers, regulators and banks in aligning governance with Shariah principles to enhance financial performance, offering insights into IC-driven innovation and governance for Islamic banks' competitiveness in the evolving financial landscape.

LITERATURE REVIEW

Resource Dependence Theory

Pfeffer and Salancik (1978) posited the resource dependence theory (RDT), which explains how organizations depend on resources outside their borders for survival and efficacy. This argues that no company can do alone, and to reduce their uncertainty, companies need access to essential resources (knowledge and legitimacy information), which means they need to connect with other actors outside the organization, such as board members. Access to these external resources, better decision-making and advisory are essential roles played by Boards of Directors. This theory posits that the composition and structure of a board can have implications for an organization in its external environment, as well as for attracting essential resources or sustaining competitive advantages (Hillman and Dalziel 2003).

Sharia Supervisory Boards

According to resource dependence theory, organizations are not self-contained entities and depend upon these environments to determine how an organization needs its resources in unpredictable environments (Pfeffer and Salancik 1978). Sharia supervisory boards (SSB) is an essential resource to bring and manage these valuable resources, which are knowledge, legitimacy, and networks that play a crucial role for Islamic banks to craft under both regulatory fields and market environment. However, SSB members, with their experience on Fiqh principles, keep the institution in conformity with Sharia, hence ensuring that credibility and image are maintained, which instigates confidence among shareholders (Hillman and Dalziel 2003; Kachkar and Yilmaz 2023). SSB provides the role of being an intermediary that allows Islamic banks to operate within a rapidly changing financial environment and access necessary external sources.

Intellectual Capital

Intellectual capital refers to intangible assets such as knowledge, expertise, customer relationships, and organizational infrastructure that can enhance performance by generating value and providing a competitive edge (Saruchi et al. 2019; Githaiga, Soi, and Buigut 2023; Maji and Saha 2024). Intellectual capital is central to enhancing a company's value and competitive edge (Akkas and Asutay 2023; Githaiga, Soi, and Buigut 2023). Knowledge and innovation from intellectual capital (IC) are vital resources of an Islamic bank ready to develop new products that meet Islamic law (Barney 1991; Innayah, Pratama, and Tubastuvi 2021). Enhancing IC by ensuring that innovations and decisions align with Sharia principles and are market-sound. However, this alignment is not only good in helping correct verification for the bank, but it also helps make the best use of its resources by doing so to lead to competitive advantage (Majumder, Ruma, and Akter 2023).

Performance of Islamic Banks

Performance measures a company's success in achieving its set targets. A company can be said to be a going concern if it has good performance (Prasaja 2018). This means the company can continue to operate because the public believes it can ensure its business continuity. To measure the financial performance and sustainable growth of banking companies, return on assets (ROA), return on equity (ROE), and Z-Score are often used (Grassa and Matoussi 2014; Mollah and Zaman 2015; Nomran, Haron, and Hassan 2017; Isa and Lee 2020). A higher ROA indicates effective asset utilization and operational efficiency, contributing to better financial performance and profitability. A higher ROE indicates that the bank effectively uses its equity to generate profit. A higher Z-score indicates that the bank has a solid financial position and a lower risk of insolvency.

The Size of Sharia Supervisory Board

The size of the board is one of the main characteristics that play a role in the board's effectiveness in monitoring managers and limiting their opportunistic behaviour (AlAbbad, Hassan, and Saba 2019). According to Article 26 of the regulation of Bank Indonesia No. 6/24/PBI/2004 concerning general banks conducting business activities based on Sharia principles (BI 2004), the SSB at Islamic banks in Indonesia must have at least 2 (two) members and a maximum of 5 (five) members. In this study, the size of the SSB is proxied by the number of members on the SSB (Isa and Lee 2020). SSB's effectiveness in monitoring managers and limiting opportunistic behaviour is enhanced by its capacity to leverage diverse expertise and resources through an optimal number of members.

Sharia Background of the Sharia Supervisory Board

Islamic banks operate using Sharia principles, so Islamic banks need to have a supervisory board to oversee banking performance to ensure compliance with Sharia principles. According to Article 27 of the regulation Bank Indonesia No. 6/24/PBI/2004 concerning general banks conducting business activities based on Sharia principles (BI 2004), the SSB has the duties and authority to supervise, assess Sharia aspects, provide opinions on Sharia aspects, review Sharia products and services, and submit Sharia supervision reports. Based on this, Islamic banks must have an SSB with qualifications in the Sharia field (Nomran, Haron, and Hassan 2017). The qualifications of the SSB are measured using the percentage of SSB members who have qualifications in the Sharia field (Isa and Lee 2020). Islamic banks must have an SSB with qualified members, as having expertise in Sharia principles enables the board to effectively oversee compliance and assess the bank's operations, enhancing its ability to access vital resources and maintain regulatory adherence.

Financial Background of the Sharia Supervisory Board

In addition to having a Sharia background, it is advisable for the SSB of Islamic banks also to possess qualifications in finance (Nomran, Haron, and Hassan 2017). An SSB with financial qualifications can work more effectively than those without such capabilities (Bukair and Rahman 2015). Members of the SSB who have qualifications in finance can enhance the quality of the board and better face various challenges that may arise. Therefore, the SSB must include members who possess financial qualifications. The financial qualifications of the SSB are measured by the percentage of board members who have qualifications in the field of finance or banking (Isa and Lee 2020). Including members with financial qualifications on the SSB enhances the board's ability to effectively navigate challenges and optimize decision-making by leveraging diverse financial expertise, ultimately improving the bank's access to essential resources and compliance with regulatory requirements.

Gender Diversity of the Sharia Supervisory Board

Gender is the percentage of women compared to men in a company. Recently, the role of women in companies has become an important focus, especially the presence of women on boards. This interest stems from advocacy development to increase the participation of women on boards (Kabara et al. 2022). The representation of women on boards is expected to benefit companies through innovations and traits that differ from men, such as diligence and attention to detail (Dezsö and Ross 2012). However, in developing countries, women's representation on boards is generally minimal (Brahma, Nwafor, and Boateng 2021). Therefore, regulations need to be made to ensure the representation of women on boards. The gender diversity of the SSB is proxied by the percentage of female board members in the SSB (Isa and Lee 2020). The representation of women on boards, particularly in the SSB, shows that increasing gender diversity can enhance the board's ability to leverage varied perspectives and skills, ultimately improving governance, innovation, and overall organizational performance.

Hypothesis Development

Resource dependence theory suggests that a larger board size encompasses diverse expertise that enhances corporate performance (Pfeffer and Salancik 1978; Dalton et al. 1998). A larger size of the SSB implies various skills that augment the board's capacity to make informed decisions (Mollah and Zaman 2015; Farag, Mallin, and Ow-Yong 2018; Aslam and Haron 2020). Aslam and Haron (2020) found that a larger SSB enhances performance by fostering innovative ideas, diverse policy development skills, and deeper analytical capabilities to improve Islamic bank performance, consistent with the findings of Nomran, Haron, and Hassan (2017) in Malaysia and Hasan, Abdul-Rahman, and Yazid (2020) in Pakistan. Safiullah and Shamsuddin (2018) argue that a larger board size leads to stricter loan screening, policies, and strategies, reducing moral hazard among leaders in implementing monitoring practices. Therefore, a larger SSB will likely restrain aggressive financing and lending practices, reducing bank risk.

H_1: The size of SSB positively affects Islamic bank performance.

Resource dependence theory suggests that external resources are handmaid by organizations and the board on how best these resources can be exploited. SSB members can share their insights, particularly those with finance, Sharia law and governance backgrounds. The diverse expertise helps Islamic banks in better decision-making and enhance compliance with Sharia law, which is pivotal for smooth operations and reputation with stakeholders. Board members are considered the most essential source of wisdom and guidance for decision-making (Hillman and Dalziel 2003). The central bank guideline mandates that a majority of the SSB members must hold Sharia degrees from reputable universities (Isa and Lee 2020). This requirement is because the SSB is expected to advise on Sharia compliance and risk-taking to guide the board of directors in financial contracts to avoid excessive risk-taking (Mollah and Zaman 2015). Therefore, it can be expected that members with qualifications in Sharia will dominate the SSB. This will likely positively impact Islamic banks' performance, with qualified Sharia members from reputable universities (Isa and Lee 2020). The SSB has the primary task of eliminating interest, uncertainty, gambling, and high-risk transactions in

Islamic Banking and consistently monitoring company activities to ensure compliance with Sharia law (Nomran, Haron, and Hassan 2017; AlAbbad, Hassan, and Saba 2019). These qualifications enable the Sharia Supervisory Board to assist Islamic Bank management in enhancing their products and services, thereby minimizing occurring risks (Mollah and Zaman 2015; Almutairi and Quttainah 2017; Nomran, Haron, and Hassan 2017; Farag, Mallin, and Ow-Yong 2018). Research by Isa and Lee (2020) states that SSB members with Sharia qualifications prefer implementing strict supervision activities and less aggressive business transactions, reducing the company's risk portfolio. SSBs with a Sharia background have a deeper understanding of Islamic law when providing consultations and developing new products alongside other board members (Mukhibad and Setiawan 2022).

H_2: The Sharia background of SSB positively affects Islamic bank performance.

Based on the resource dependence theory, SSBs must have qualifications in finance and experience in banking to enhance their ability to improve financial contracts embedded in products and services of Islamic banking (Grassa and Matoussi 2014; Nomran, Haron, and Hassan 2017). Therefore, SSB must be able to manage Islamic banking products and services efficiently. Research by Almutariri and Quttainah (2017); Nomran, Haron, and Hassan (2017) reveals that diverse qualifications among SSB significantly enhance the performance of Islamic banking. SSBs that have strong knowledge of Sharia law but lack expertise in finance and banking may hinder Islamic bank operations (Rahman and Ramli 2016; Nomran, Haron, and Hassan 2017; Lassoued, Attia, and Sassi 2018) as they only understand Sharia principles without comprehending the complex processes in Islamic banking operations (Farook and Farooq 2013; Hakimi et al. 2018). Ghayad (2008); Nomran, Haron, and Hassan (2017) argue that SSB educated in finance and banking can acquire better information for use in Islamic Banking operations, thereby improving Islamic banking performance. SSB should ideally comprise finance, accounting, and economics experts, and it would be advantageous if they possess more than one area of expertise (Rahman and Ramli 2016; Nomran, Haron, and Hassan 2017). Studies conducted by Daly and Frikha (2015); Rahman and Ramli (2016); Haridan, Hassan, and Karbhari (2018); Mansoor, et al. (2019) indicate that knowledge of Sharia regulations and expertise in finance and banking can enhance communication between the board of directors and SSB, thereby improving the performance of Islamic banking and minimizing risks. This is consistent with the findings of Isa and Lee (2020), which state that members with qualifications in finance and banking possess more excellent knowledge and confidence in the products produced and market conditions, enabling them to influence decisions that affect bank performance.

H_3: The financial background of SSB positively affects Islamic bank performance.

In recent years, gender diversity has become an intriguing topic in financial institutions. Garcia-Mecca et al. (2015) suggest that women can swiftly reach top positions due to their ability to enhance workplace environments and consistently improve corporate performance. Research by Arnaboldi et al. (2021) in Europe indicates that banks with solid gender diversity in top management show higher compliance with regulations and incur fewer financial penalties compared to male-dominated banks at the executive level. This aligns with studies suggesting that women are more risk-averse (Barsky et al. 1997; Innayah,

Pratama, and Tubastuvi 2021). Resource dependence theory states that a more gender-diverse board of directors has broader access to resources such as expertise, experience, and networks (Jabari and Muhamad 2021). The presence of women on the SSB can enrich perspectives and enhance the quality of strategic decision-making. Nielsen and Huse (2010); Khaw and Liao (2018) further support this by stating that women are more cautious and diligent in decision-making to prevent risky outcomes for the organization. Increasing the number of women on SSB contributes to more careful decision-making, reduces corporate risks, and enhances company performance (Trikartiko and Dewayanto 2021). In the context of Islamic banking, the presence of women on SSB can effectively check decision-making processes, minimize potential risks, and improve company performance (Dezsö and Ross 2012; Lückerath-Rovers 2013; Isidro and Sobral 2015; Post and Byron 2015; Isa and Lee 2020). Women on these boards bring unique skills, such as avoiding risks compared to their male counterparts (Gallucci, Santulli, and Tipaldi 2020; Galletta et al. 2022). Nguyen, Le, and Vu (2021); Galletta et al. (2022) found a positive relationship between gender diversity and firm performance, suggesting that the presence of women on SSB can enhance financial performance. This correlates with Khan, Haleem, and Khan's (2021) findings that women on SSB can improve overall effectiveness and mitigate potential risks, thus contributing to better company performance.
H_4: Gender diversity positively affects Islamic bank performance.

Intellectual capital plays a crucial role in its relationship with performance and risk-taking. It serves as a critical asset in enhancing the efficiency and competitiveness of Islamic banks by improving decision-making processes, fostering innovation, and managing risks more effectively (Sayed and Nefzi 2024). Resource dependence theory suggests companies can attain a competitive advantage and achieve superior performance by effectively acquiring, managing, and utilizing strategic assets. These strategic assets encompass tangible assets, such as physical infrastructure, and intangible assets, like intellectual property and brand reputation, essential for sustaining competitive and profitable strategies (Wernerfelt 1984). Riahi-Belkaoui (2003) emphasizes that integrating tangible and intangible assets represents a potent strategy for enhancing overall company performance. Intellectual capital plays a critical moderating role in the relationship between the SSB and the performance of Islamic banks by enhancing the board's capacity to govern effectively. The SSB ensures adherence to Sharia principles, and the three components of intellectual capital—human, structural, and relational capital—reinforce its governance role (Feimianti and Anantadjaya 2014). Human capital encompasses SSB members' expertise, skills, and knowledge, enabling them to make more informed and strategic decisions that drive better bank performance. Structural capital includes the bank's internal processes and systems that support the efficient implementation of Sharia-compliant policies, improving the SSB's effectiveness. Relational capital refers to the relationships the SSB maintains with external stakeholders, including customers, regulators, and financial institutions, fostering trust and enhancing the bank's reputation (Abdullah and Sofian 2012). By strengthening the board's oversight capabilities and promoting better risk management, intellectual capital amplifies the positive impact of the SSB on bank performance. Intellectual capital can help firms generate new ideas that enhance their competitive advantages. This is achieved through the skills and expertise of employees, effective business training, and access to valuable information. These new ideas lead to developing better products or services, improving a company's ability to innovate. With a more robust innovation capability, firms can overcome challenges more effectively, ultimately improving overall performance. By leveraging IC, organizations can create sustainable competitive advantages and drive long-term success to perform better (Nguyen, Le, and Vu 2021; Mukaro, Deka, and Rukani 2023). In this way, intellectual capital acts as a moderating variable, ensuring that SSB at Islamic banks can effectively navigate challenges and maintain competitiveness so it could improve the bank's performance.

H_{5a}: Intellectual capital moderates the relationship between the size of the SSB and performance and risk-taking.

H_{5b}: Intellectual capital moderates the relationship between the sharia background of the SSB and performance and risk-taking.

H_{5c}: Intellectual capital moderates the relationship between the financial background of the SSB and performance and risk-taking.

H_{5d}: Intellectual capital moderates the relationship between the gender diversity of the SSB and performance and risk-taking.

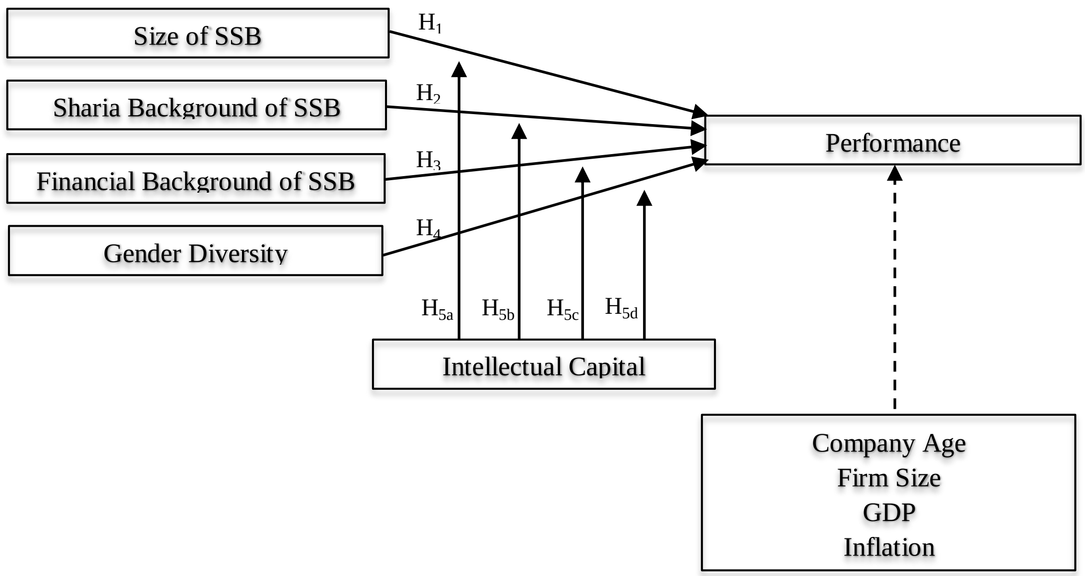

Figure 1 Conceptual Framework

METHOD

This research employs a quantitative research design. The study focuses on Islamic banks in Indonesia, Malaysia, and Brunei Darussalam. Data was collected by accessing the official websites of the relevant companies. The research utilizes multiple linear regression with panel data analysis using the STATA software. The study examines the influence of the dependent variables and company performance, with independent variables including size, Sharia background, financial background, and gender diversity of the Sharia supervisory board. Intellectual capital is also included as a moderating variable in this study. The study covers the entire population of Islamic banks in Indonesia, Malaysia, and

Brunei Darussalam from 2011 to 2021. The study population includes 14 Islamic banks in Indonesia, 18 in Malaysia, and 1 in Brunei.

The study employs a nonprobability sampling technique, specifically purposive sampling, which selects samples based on specific criteria. Unbalanced panel data, including Islamic banks without complete annual reports during the research period, is also utilised. The criteria set for sample selection are as follows: (1) Islamic banking in Indonesia, Malaysia, and Brunei Darussalam from 2011 to 2021. (2) Annual reports of Islamic banks with complete and necessary variable data required by the researcher. Based on the criteria, the sample consists of 26 Islamic banks from the three countries, with 12 in Indonesia, 13 in Malaysia, and 1 in Brunei Darussalam. The study used unbalanced panel data while also attaining a total 269 number of complete variable samples. The names of all Islamic banks used as samples are included in the appendix.

The dependent variable used in this study is the performance of Sharia banks, measured by three proxies: return on asset (ROA), return on equity (ROE), and Z-score. The independent variables used are size, Shariah background, financial background, and gender diversity of SSB. The moderating variable in this study is intellectual capital (IC), which consists of human capital (HCE), structural capital (SCE), capital employed efficiency (CEE), and relational capital (RCE). The control variables used are company age, GDP growth, inflation rate, and company size. Operational variables can be seen in Table 1.

Two models are employed: Model 1 examines ROA and ROE for profitability, while Model 2 assesses the Z-score to measure financial risk and stability. ROA indicates the bank's efficiency in generating income from assets, whereas the Z-score reflects exposure to financial risk, capturing two distinct performance dimensions: returns and risk. Using two models allows for a nuanced evaluation of how governance and intellectual capital separately impact profitability (ROA and ROE) and financial stability (Z-score), thereby providing a comprehensive performance assessment for Islamic banks.

Model for ROA and ROE:

$$Y = \alpha + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \beta_4 X_{it} + \beta_5 X_{it} + \beta_6 X_{it} + \beta_7 X_{it} + \beta_8 X_{it} + \beta_9 (X1Z) + \beta_{10} (X2Z) + \beta_{11}(X3Z) + \beta_{12}(X4Z) + \epsilon$$

Robustness check Model for Z-Score:

$$Y = \alpha + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \beta_4 X_{it} + \beta_5 X_{it} + \beta_6 X_{it} + \beta_7 X_{it} + \beta_8 X_{it} + \beta_9 (X1Z) + \beta_{10} (X2Z) + \beta_{11}(X3Z) + \beta_{12}(X4Z) + \epsilon$$

Explanation:

Y	= ROA and ROE	X_5	= Age of Company
Y	= Z-Score	X_6	= GDP Growth
α	= Constanta	X_7	= Inflation Rate
β	= Regression Coefficient for Each	X_8	= Company Size
X_1	= Size of SSB	Z	= Intellectual Capital (Moderation)
X_2	= Sharia Background of SSB	I	= Company
X_3	= Financial Background of SSB	T	= Time
X_4	= Gender Diversity of SSB	ϵ	= Standard Error

Table 1 Operational Variables

Variables	Formula	Scale
Dependent:		
Performance	$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$ $\text{ROE} = \frac{\text{Net Income}}{\text{Total Equity}}$ $\text{ZScore} = \frac{(\text{Average ROA} + \text{Average CAR})}{\text{Standard Deviation ROA}}$	Ratio
Independent:		
Size of SSB	$\sum \text{SSB Members}$	Ratio
Sharia Background of SSB	$\frac{\text{Members of SSB with a Shariah Background}}{\text{Total Members}} x100\%$	Ratio
Financial Background of SSB	$\frac{\text{Members of SSB with a Financial Background}}{\text{Total Members}} x100\%$	Ratio
Gender Diversity	$\frac{\text{Female SSB Members}}{\text{Total Members}} x100\%$	Ratio
Moderation:		
Intellectual Capital	VA = OUT – IN (OUT represents total revenue, while IN denotes total expenses excluding employee costs). HCE = VA/ HC (is measured as total value added / VA divided by total employee expenditures/ HC). SCE = SC/ VA (is measured as total value added / VA minus human capital / HC). CEE = VA/CE (ratio of value added / VA to capital employed / CE). RCE = RC/ VA (ratio of relational capital/ RC to value added/ VA). IC= HCE + SCE + CEE + RCE	Ratio
Control:		
Company Age	The duration from the establishment of the company until the research period	Ratio
GDP *Growth*	Annual GDP Growth Rate Ratio	Ratio
Inflation Rate	Inflation Rate Ratio	Ratio
Firm Size	Ln (Total Aset)	Ratio

RESULTS AND DISCUSSIONS

Table 2 provides descriptive statistics for 269 observations of Islamic banking data from Indonesia, Malaysia, and Brunei Darussalam.

Table 2 Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
ROA	269	0.775	2.742	-20.13	13.58
ROE	269	6.348	12.579	-94.01	57.98
Z-score	269	3.389	3.086	-3.011	14.305
X1	269	3.981	1.854	1	9
X2	269	0.705	0.255	0	1
X3	269	0.275	0.241	0	1
X4	269	0.112	0.155	0	.5
Z-score	269	3.389	3.086	-3.011	14.305
Ln_asset	269	31.057	1.538	27.218	34.427
Age	269	14.16	11.364	1	64
GDP	269	26.938	.888	23.16	27.805
Inf	269	2.917	1.862	-1.1	6.4

Source: secondary data (processed, 2024)

Table 2 illustrates that the high standard deviations of ROA (2.742%) and ROE (12.579%) reflect substantial variability in Islamic banks' financial performance, averaging 0.68% and 13%, respectively. This aligns with resource dependence theory (RDT), suggesting that board expertise and external connections can positively and negatively influence performance. Banks with strong governance—particularly experienced, well-connected directors—exhibit higher profitability (ROA and ROE). The financial health index averages around 3.389, ranging from -3.011 to 14.305; scores above 1.8 indicate lower bankruptcy risk, suggesting that effective governance, especially a well-qualified SSB, supports resilience. Conversely, banks with weaker SSBs or governance may face greater financial instability.

The mean SSB size is approximately 4 members (range: 1–9), with larger boards generally providing more resources for decision-making, per RDT. Most SSB members have Sharia expertise, which is essential for Islamic banking operations (Isa and Lee 2020), though a board lacking financial acumen may struggle to adapt to market demands. Financial qualifications are less common, with only 27.5% of members having financial backgrounds, potentially limiting financial decision-making efficacy. Hillman and Dalziel (2003) note that diversity in professional backgrounds enhances board decision-making, underscoring the value of financial expertise. Gender diversity is limited, ranging from 11.2% to 50%, reflecting broader global trends of underrepresentation in corporate governance, particularly in Islamic banking. RDT posits that gender diversity enriches board resources, aiding legitimacy, networking, and risk management.

Banks in this study are relatively young, averaging 14 years, with newer institutions still developing governance stability (Majumder, Ruma, and Akter 2023), which may contribute to inconsistent ROA and ROE performance. While GDP growth is relatively uniform, inflation varies (from -1.1% to 6.4%) across observed countries, influencing bank performance. RDT highlights that external economic factors shape firm behavior, with resource connectivity aiding responsiveness to macroeconomic shifts.

Table 3 illustrates the relationships among key financial and governance variables for Sharia banks. ROA and ROE exhibit a strong positive correlation (0.725), indicating that asset returns align closely with shareholder profitability.

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The Z-score, a measure of financial stability, shows a moderate positive correlation with ROE (0.355), suggesting that more profitable banks also tend to be more financially stable. The size of the Sharia Supervisory Board (SSB) has weak to moderate positive correlations with ROE (0.138) and Z-score (0.292), hinting that larger boards may be linked to improved financial performance and stability. A very strong negative correlation (-0.951) exists between the Sharia and financial backgrounds of board members, indicating a trade-off in expertise. Gender diversity on the board correlates moderately with SSB size (0.325), suggesting that more diverse boards tend to be larger, and board size positively correlates with financial stability (0.292). A strong negative correlation between GDP and SSB size (-0.723) suggests that larger economies tend to have smaller SSBs. Inflation negatively correlates with the Z-score (-0.190) and ln_assets (-0.493), indicating that higher inflation may relate to decreased financial stability and smaller asset bases.

Table 3 Matrik Correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) ROA	1.000											
(2) ROE	0.725	1.000										
(3) Z-score	0.245	0.355	1.000									
(4) X1	-0.032	0.138	0.292	1.000								
(5) X2	-0.059	0.001	0.229	0.091	1.000							
(6) X3	0.067	-0.003	-0.196	-0.085	-0.951	1.000						
(7) X4	-0.049	0.001	-0.071	0.325	0.101	-0.099	1.000					
(8) Z-score	0.245	0.355	1.000	0.292	0.229	-0.196	-0.071	1.000				
(9) Ln_asset	0.057	0.309	0.341	0.717	0.009	0.011	0.219	0.341	1.000			
(10) Age	-0.054	-0.033	0.278	0.421	0.047	-0.042	0.011	0.278	0.491	1.000		
(11) GDP	-0.000	-0.021	-0.343	-0.723	-0.094	0.075	-0.388	-0.343	-0.397	-0.175	1.000	
(12) Inf	-0.021	-0.070	-0.190	-0.492	0.015	-0.027	-0.269	-0.190	-0.493	-0.332	0.319	1.000

Source: secondary data (processed, 2024)

Table 4 illustrates regression results reveal the effects of independent variables on three performance indicators—ROA, ROE, and Z-score. In the ROA model, SSB size has a positive association in Model 2 (coefficient = 0.651**), suggesting that larger boards may enhance asset returns through diversified decision-making. Gender diversity also positively impacts Model 2 (coefficient = 4.416**), indicating that more diverse boards may improve asset management. Intellectual capital (z) shows a positive effect on ROA in Models 1 and 3, reflecting its role in optimizing returns. In the ROE model, gender diversity has a strong positive association in Model 4 (coefficient = 24.94***), indicating significant enhancement of equity returns. However, its interaction with intellectual capital shows a negative effect in Models 5 and 6 (coefficients = -2.588*** and -0.181***), suggesting that while gender diversity alone boosts ROE, this effect may be mitigated when combined with intellectual capital under certain conditions.

This study conducted robustness testing using the Z-score to ensure consistency and reliability of findings. The Z-score effectively assesses financial performance by incorporating various indicators of financial health. Table 4 shows a positive and consistent relationship between intellectual capital and the Z-score, underscoring its critical role in financial performance. However, the interaction between gender diversity and intellectual capital consistently has a negative effect on the Z-score, suggesting that the benefits of gender diversity are less pronounced when intellectual capital is considered. These findings support Hypotheses H_1, H_3, H_4, and H_{5d}, with robustness checks further confirming the reliability of the Z-score model and highlighting the importance of intellectual capital and the nuanced impact of gender diversity on financial performance.

Table 4 Regression Results

	(2) ROA	(1) ROA	(4) ROE	(3) ROE	(6) Z-score	(5) Z-score
X1	0.0703	0.651**	0.336	2.165**	0.0629	0.128
	(0.30)	(2.42)	(0.37)	(2.07)	(0.62)	(1.05)
X2	-0.0328	-1.511	-3.419	-8.678	0.903	0.542
	(-0.01)	(-0.56)	(-0.31)	(-0.83)	(0.73)	(0.44)
X3	2.905	0.957	2.206	-5.848	1.672	1.176
	(0.93)	(0.32)	(0.18)	(-0.50)	(1.25)	(0.86)
X4	-0.997	4.416**	5.623	24.94***	1.774*	3.077***
	(-0.47)	(2.04)	(0.69)	(2.96)	(1.95)	(3.13)
Z	0.0691**	0.305	0.309***	0.509	0.0389***	-0.0712
	(2.53)	(0.94)	(2.96)	(0.40)	(3.32)	(-0.48)
X1Z		-0.0362***		-0.110**		-0.00166
		(-2.91)		(-2.28)		(-0.29)
X2Z		0.135		1.041		0.177
		(0.42)		(0.84)		(1.22)
X3Z		0.175		1.322		0.183
		(0.48)		(0.94)		(1.12)
X4Z		-0.705***		-2.588***		-0.181***
		(-5.36)		(-5.05)		(-3.03)
Ln_asset	-1.050**	-0.850*	0.210	0.780	0.539***	0.558***
	(-2.21)	(-1.92)	(0.12)	(0.45)	(2.65)	(2.77)
Age	-0.0871	-0.148	-1.168***	-1.365***	-0.234***	-0.244***
	(-0.90)	(-1.62)	(-3.13)	(-3.86)	(-5.60)	(-5.91)
GDP	3.015	3.643*	7.266	8.770	1.200	1.217
	(1.37)	(1.78)	(0.86)	(1.10)	(1.27)	(1.31)
Inf	-0.170	-0.164	-0.464	-0.491	-0.0850	-0.0911*
	(-1.33)	(-1.37)	(-0.95)	(-1.06)	(-1.55)	(-1.68)
_Cons	-47.38	-71.68	-180.9	-242.4	-44.35*	-45.49*
	(-0.79)	(-1.28)	(-0.79)	(-1.11)	(-1.73)	(-1.78)
r2	0.108	0.250	0.103	0.223	0.170	0.216

The Hausman test result is below 0.05, indicating that all models should use the Fixed Effects Model, *t* statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: secondary data (processed, 2024)

The Size of SSB on Performance and Risk Taking of Islamic Banks

The results indicate that a larger Sharia board size may positively affect ROA and potentially ROE, though it has no significant effect on financial stability (Z-score). This positive link between ROA and ROE aligns with resource dependency theory (Pfeffer and Salancik 1978; Dalton et al. 1998), as a larger board enhances expertise and decision-making. Empirical studies by Aslam and Haron (2020); Nomran, Haron, and Hassan (2017) support that larger boards bring diverse insights, innovative ideas, and stronger policy development skills, improving performance metrics like ROA and ROE. However, the lack of impact on the Z-score suggests that while larger boards may enhance profitability, they may not necessarily influence financial stability. This might stem from different risk strategies within larger boards, which may prioritize returns over risk reduction (Safiullah and Shamsuddin 2018). Comparatively, SSBs in Southeast Asia (SEA) tend to be larger, fostering diversity and policy innovation. In contrast, despite strong Sharia expertise, Saudi Arabia’s smaller SSBs may limit diversity and thus impact financial outcomes like ROA and ROE (Iskandar, Marlina, and Fasihat 2023).

Sharia Background of SSB on Performance and Risk Taking of Islamic Banks

The results indicate that the presence of SSB members with Sharia backgrounds does not necessarily impact Islamic banks performance. Certification by the National Sharia Council qualifies members, even those without formal Sharia education, ensuring a solid understanding of Sharia principles (Meutia, Aryani, and Widyastuti 2019). Resource dependency theory views that the existence of SSB members with a Sharia background does not automatically improve the performance of Islamic banks but depends on the extent to which they can provide resources relevant to the needs of Islamic banks. Islamic banks need to ensure that SSBs provide Sharia legitimacy and have the capacity to support strategic decision-making that affects performance. This explains why Sharia backgrounds do not influence performance, aligning with studies by Meutia, Aryani, and Widyastuti (2019); Baklouti (2022). However, the Sharia background of SSB members positively influences risk-taking, countering the assumption that AAOIFI-certified members would mitigate risk to protect stakeholders. This underscores the importance of financial and banking knowledge for practical risk assessment, supporting Umar, Abduh, and Besar's (2023) findings. In SEA, SSB certification ensures strong Sharia understanding, fostering positive risk-taking but not significantly impacting performance. By contrast, Saudi Arabia's more minor, highly qualified SSBs may lean toward conservative risk management due to limited diversity (Bashir, Edris, and Muslichah 2023).

Financial Background of SSB on Performance and Risk Taking of Islamic Banks

The results indicate that the financial background of SSB positively affects profitability, aligning with resource dependency theory, which emphasizes the value of diverse board expertise in enhancing corporate performance. SSB members with financial backgrounds have insights into banking products, markets, economic conditions, and risks, allowing them to make impactful decisions that enhance bank performance (Isa and Lee 2020). Financial experts on the SSB strengthen financial strategies, thereby supporting stable performance. This positive impact on risk management is echoed in Safiullah and Shamsuddin's (2018) findings, where larger boards improve loan screening and monitoring, reducing moral hazard and limiting aggressive lending. This study reinforces Isa and Lee (2020) view on the importance of financial expertise for SSB effectiveness in Islamic banks. In SEA, SSBs often include financially knowledgeable members, bolstering decision-making and risk management, which supports Sharia-compliant bank performance. Conversely, Saudi Arabia's SSBs, with a stronger Sharia focus, are primarily composed of scholars, potentially limiting their financial perspective for managing complex market dynamics (Minton, Taillard, and Williamson 2014).

Gender Diversity on Performance and Risk-Taking in Islamic Banks

The results indicate that gender diversity on Shariah boards positively affects profitability and financial stability. Studies by García-Meca, García-Sánchez, and Martínez-Ferrero (2015); Arnaboldi et al. (2021) highlight that women in leadership enhance corporate performance and regulatory compliance, suggesting gender diversity not only promotes equality but strengthens bank performance and reduces risks. This research supports these findings, showing that banks with gender-diverse executive teams are more adept at managing regulatory complexities and face fewer penalties. Resource dependence theory offers insight into these outcomes, as women on Shariah boards bring valuable resources—diverse perspectives, expertise, and networks—essential for effective decision-making and risk management (Jabari and Muhamad 2021). Barsky et al. (1997); Innayah, Pratama, and Tubastuvi (2021) note that women's generally risk-averse tendencies contribute to more cautious, meticulous decisions, reducing corporate risk. Nielsen and Huse (2010); Khaw and Liao (2018) similarly find that women's careful decision-making reduces organizational risks, which aligns well with the demands of Shariah compliance. Research by Nguyen, Le, and Vu (2021); Galletta et al. (2022) further supports that gender-diverse boards enhance financial performance and risk management. In SEA, growing emphasis on gender diversity in Shariah boards is linked to greater profitability, stability, and risk management. In contrast, Saudi Arabia's conservative stance on gender limits female board representation, potentially curbing these benefits (Aljughaiman et al. 2023).

Intellectual Capital, Characteristics of the SSB, and Performance and Risk-Taking

The results show that intellectual capital (IC) does not moderate the relationship between SSB characteristics (such as board size, financial background, and Sharia expertise) and Islamic bank performance. However, it does reduce the positive effect of gender diversity on performance in Southeast Asia. This suggests that while IC supports value creation and competitive advantage through skilled human resources and efficient capital, it does not influence the compliance and governance roles directly tied to SSB attributes. SSB characteristics, such as board size and expertise, primarily ensure Sharia compliance and governance rather than impacting broader performance metrics linked to IC. However, the presence of high IC within an organization can diminish the impact of gender diversity on performance, as IC drives competitive advantage, overshadowing other diversity-related benefits. Thus, while SSB governance remains essential, IC becomes the main performance driver, consistent with studies by Goh (2005); Kamath (2006); Ousama, Hammami, and Abdulkarim (2019), which emphasize IC's importance for corporate performance. Resource dependence theory views that intellectual capital (IC) does not moderate the relationship between SSB characteristics and Islamic bank performance because IC has yet to be effectively utilized as a strategic resource. However, when IC reduces the positive effect of gender diversity on Islamic bank performance, this indicates a potential conflict or imbalance in resource utilization, which should be mitigated by a more holistic approach to the board and IC. Additionally, macroeconomic factors like GDP growth and inflation do not significantly affect Islamic bank performance or risk-taking, likely due to regulatory and operational differences across regions, as noted by Rofiqo and Afrianti (2019); Khalil and Slimene (2021). Company age negatively impacts performance, as older banks may struggle with technological adaptation (Khalil and Slimene 2021), while larger companies show reduced risk-taking, aligning with studies by Ajili and Bouri (2018); Abdallah and Bahloul (2021) on company size's effect on performance.

CONCLUSIONS

The results indicate that SSB size and gender diversity positively impact performance measures in Islamic banks, with intellectual capital (IC) adding nuanced interactions. These findings align with resource dependence theory (RDT), which posits that board diversity improves access to various resources, strengthening governance and performance. However, differences in government policies, Sharia interpretations, and macroeconomic factors may limit generalizability. Including control variables like GDP growth and inflation could enhance broader applicability.

This study reinforces the relevance of RDT in Islamic banking, highlighting that larger and more diverse boards attract expertise, networks, and legitimacy that support performance. Incorporating IC in governance suggests that intangible resources synergize with board diversity to enhance financial outcomes. Thus, The study advocates for comprehensive governance frameworks that encompass ethical and performance objectives. For practitioners and policymakers, these findings underscore the strategic importance of board composition, gender diversity, and IC investment as drivers of ethical compliance and financial stability. The study's limitations include focusing on Islamic banks in Indonesia, Malaysia, and Brunei, potentially introducing geographic bias. Results may vary across regions due to differing legal, economic, and Sharia interpretations, and findings may not extend to conventional banks or other industries with distinct governance structures.

Further research should explore whether similar relationships exist across different sectors or regions, particularly in the Middle East and Africa, where Islamic banking is prevalent. Studies using longitudinal or experimental designs could better capture causal mechanisms linking board diversity and IC to performance. Expanding analyses to include market competition, regulatory shifts, and political risk would offer a more comprehensive view of factors influencing Islamic bank performance and facilitate cross-sector and cross-regional comparisons.

REFERENCES

Abdallah, Mariem Ben, and Slah Bahloul. 2021. "Disclosure, Shariah Governance and Financial Performance in Islamic Banks." *Asian Journal of Economics* *and Banking* 5 (3): 234–54. https://doi.org/10.1108/AJEB-03-2021-0038.

Abdullah, Dewi Fariha, and Saudah Sofian. 2012. "The Relationship between Intellectual Capital and Corporate Performance." *Procedia - Social and Behavioral Sciences* 40 (6): 537–41. https://doi.org/10.1016/j.sbspro.2012.03.227.

Ajili, Hana, and Abdelfettah Bouri. 2018. "Corporate Governance Quality of Islamic Banks: Measurement and Effect on Financial Performance." *International Journal of Islamic and Middle Eastern Finance and Management* 11 (3): 470–87. https://doi.org/10.1108/IMEFM-05-2017-0131.

Akkas, Erhan, and Mehmet Asutay. 2023. "The Impact of Intellectual Capital Formation and Knowledge Economy on Banking Performance: A Case Study of GCC's Conventional and Islamic Banks." *Journal of Financial Reporting and Accounting* 21 (5): 1149–70. https://doi.org/10.1108/JFRA-08-2021-0251.

AlAbbad, Amal, M. Kabir Hassan, and Irum Saba. 2019. "Can Shariah Board Characteristics Influence Risk-Taking Behavior of Islamic Banks?" *International Journal of Islamic and Middle Eastern Finance and Management* 12 (4): 469–88. https://doi.org/10.1108/IMEFM-11-2018-0403.

Aljughaiman, Abdullah A., Ngan Duong Cao, Vu Quang Trinh, Mohammed Albarrak, and Xuan Vinh Vo. 2023. "Does Gender Diversity Affect Financial Strength Differently in Conventional and Islamic Banks? Evidence from MENA Countries." *Pacific-Basin Finance Journal* 80 (September): 102095. https://doi.org/10.1016/j.pacfin.2023.102095.

Almutairi, Ali R., and Majdi Anwar Quttainah. 2017. "Corporate Governance: Evidence from Islamic Banks." *Social Responsibility Journal* 13 (3): 601–24. https://doi.org/10.1108/SRJ-05-2016-0061.

Arnaboldi, F., B. Casu, A. Gallo, E. Kalotychou, and A. Sarkisyan. 2021. "Gender Diversity and Bank Misconduct." *Journal of Corporate Finance* 71 (December): 101834. https://doi.org/10.1016/j.jcorpfin.2020.101834.

Aslam, Ejaz, and Razali Haron. 2020. "Does Corporate Governance Affect the Performance of Islamic Banks? New Insight into Islamic Countries." *Corporate Governance: The International Journal of Business in Society* 20 (6): 1073–90. https://doi.org/10.1108/CG-11-2019-0350.

Asriani, Asriani, and Agus Kurniawan. 2023. "The Role of Indonesian Islamic Banks in Improving Economic Growth in Indonesia (Analysis of Opportunities and Obstacles of Islamic Banks Post Merger." *KnE Social Sciences* 2023 (i): 283–98. https://doi.org/10.18502/kss.v8i16.14049.

Baklouti, Ibtissem. 2022. "Is the Sharia Supervisory Board a Friend or an Enemy of Islamic Banks?" *Journal of Islamic Marketing* 13 (2): 526–41. https://doi.org/10.1108/JIMA-04-2020-0118.

Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17 (1): 99–120. https://doi.org/10.1177/014920639101700108.

Barsky, Robert B., F. T. Juster, Miles S. Kimball, and Matthew D. Shapiro. 1997. "Preference Parameters and Behavioral Heterogeneity: An Experimental Approach in the Health and Retirement Study." *The Quarterly Journal of*

Economics 112 (2): 537–79. https://doi.org/10.1162/003355397555280.

Bashir, Mohamed Sharif, Mahmoud Mohamed Ali Mahmoud Edris, and Muslichah Muslichah. 2023. “Does Shari’ah Supervisory Board Characteristics Affect Islamic Banks’ Financial Performance? Evidence from Saudi Arabia.” *Corporate Board Role Duties and Composition* 19 (2): 15–25. https://doi.org/10.22495/cbv19i2art2.

Basiruddin, Rohaida, and Habib Ahmed. 2019. “Corporate Governance and Shariah Non-Compliant Risk in Islamic Banks: Evidence from Southeast Asia.” *Corporate Governance: The International Journal of Business in Society* 20 (2): 240–62. https://doi.org/10.1108/CG-05-2019-0138.

Bayu, Muhamad. 2023. “Role Of The Sharia Supervisory Board And The Size Of Islamic Bank On The Performance Of Sharia Banks In Indonesia.” *Journal of Management and Islamic Finance* 3 (1): 108–20. https://doi.org/10.22515/jmif.v3i1.5300.

BI. 2004. *Peraturan Bank Indonesia Nomor: 6/24/PBI/2004 Tentang Bank Umum Yang Melaksanakan Kegiatan Usaha Berdasarkan Prinsip Syariah*. *Bank Indonesia*. https://www.bi.go.id/id/archive/arsip-peraturan/Documents/f407e1a4a2d04f1e947e1f8787a7be6cpbi62404.pdf.

Brahma, Sanjukta, Chioma Nwafor, and Agyenim Boateng. 2021. “Board Gender Diversity and Firm Performance: The UK Evidence.” *International Journal of Finance & Economics* 26 (4): 5704–19. https://doi.org/10.1002/ijfe.2089.

Bukair, Abdullah Awadh, and Azhar Abdul Rahman. 2015. “Bank Performance and Board of Directors Attributes by Islamic Banks.” *International Journal of Islamic and Middle Eastern Finance and Management* 8 (3): 291–309. https://doi.org/10.1108/IMEFM-10-2013-0111.

Dalton, Dan R., Catherine M. Daily, Alan E. Ellstrand, and Jonathan L. Johnson. 1998. “Meta-Analytic Reviews of Board Composition, Leadership Structure, and Financial Performance.” *Strategic Management Journal* 19 (3): 269–90. https://doi.org/10.1002/(SICI)1097-0266(199803)19:3<269::AID-SMJ950>3.0.CO;2-K.

Daly, Saida, and Mohamed Frikha. 2015. “Corporate Governance: What about Islamic Banks?” *International Journal of Financial Services Management* 8 (1): 18. https://doi.org/10.1504/IJFSM.2015.066567.

Dezsö, Cristian L., and David Gaddis Ross. 2012. “Does Female Representation in Top Management Improve Firm Performance? A Panel Data Investigation.” *Strategic Management Journal* 33 (9): 1072–89. https://doi.org/10.1002/smj.1955.

Farag, Hisham, Chris Mallin, and Kean Ow-Yong. 2018. “Corporate Governance in Islamic Banks: New Insights for Dual Board Structure and Agency Relationships.” *Journal of International Financial Markets, Institutions and Money* 54 (May): 59–77. https://doi.org/10.1016/j.intfin.2017.08.002.

Farook, Sayd, and Mohammad Omar Farooq. 2013. “Sharīʻah Governance , Expertise and Profession : Educational Challenges in Islamic Finance.” *ISRA International Journal of Islamic Finance* 5 (1): 137–60. https://doi.org/10.12816/0002761.

Feimianti, Elisabeth, and Samuel PD Anantadjaya. 2014. “Value Creation of Intellectual Capital: Financial Performance Analyses in Indonesian

Publicly-Listed Consumer Goods Industry." *Review of Integrative Business and Economics Research* 3 (1): 99–113. https://buscompress.com/uploads/3/4/9/8/34980536/riber_k14-029__99-113_.pdf.

Galletta, Simona, Sebastiano Mazzù, Valeria Naciti, and Carlo Vermiglio. 2022. "Gender Diversity and Sustainability Performance in the Banking Industry." *Corporate Social Responsibility and Environmental Management* 29 (1): 161–74. https://doi.org/10.1002/csr.2191.

Gallucci, Carmen, Rosalia Santulli, and Riccardo Tipaldi. 2020. "Women on Bank Boards and Risk-Taking: A Cross-Countries Analysis on the Moderating Role of Masculinity." *Corporate Ownership and Control* 17 (3): 71–83. https://doi.org/10.22495/cocv17i3art5.

García-Meca, Emma, Isabel-María García-Sánchez, and Jennifer Martínez-Ferrero. 2015. "Board Diversity and Its Effects on Bank Performance: An International Analysis." *Journal of Banking & Finance* 53 (April): 202–14. https://doi.org/10.1016/j.jbankfin.2014.12.002.

Ghayad, Racha. 2008. "Corporate Governance and the Global Performance of Islamic Banks." *Humanomics* 24 (3): 207–16. https://doi.org/10.1108/08288660810899368.

Githaiga, Peter Nderitu, Neddy Soi, and Kibet Koskei Buigut. 2023. "Does Intellectual Capital Matter to MFIs' Financial Sustainability?" *Asian Journal of Accounting Research* 8 (1): 41–52. https://doi.org/10.1108/AJAR-06-2021-0080.

Goh, Pek Chen. 2005. "Intellectual Capital Performance of Commercial Banks in Malaysia." *Journal of Intellectual Capital* 6 (3): 385–96. https://doi.org/10.1108/14691930510611120.

Grassa, Rihab, and Hamadi Matoussi. 2014. "Corporate Governance of Islamic Banks: A Comparative Study between GCC and Southeast Asia Countries." *International Journal of Islamic and Middle Eastern Finance and Management* 7 (3): 346–62. https://doi.org/10.1108/IMEFM-01-2013-0001.

Hakimi, Abdelaziz, Houssem Rachdi, Rim Ben Selma Mokni, and Houda Hssini. 2018. "Do Board Characteristics Affect Bank Performance? Evidence from the Bahrain Islamic Banks." *Journal of Islamic Accounting and Business Research* 9 (2): 251–72. https://doi.org/10.1108/JIABR-06-2015-0029.

Hamid, Abdul, Khairatun Hisan, and Khairul Anuar. 2023. "Shariah Supervisory Board and Islamic Banks' Financial Performance: An Evidence from Southeast Asia." *J-EBIS (Jurnal Ekonomi Dan Bisnis Islam)* 8 (April): 167–82. https://doi.org/10.32505/j-ebis.v8i1.6930.

Haridan, Nurfarahin M., Ahmad F. S. Hassan, and Yusuf Karbhari. 2018. "Governance, Religious Assurance and Islamic Banks: Do Shariah Boards Effectively Serve?" *Journal of Management and Governance* 22 (4): 1015–43. https://doi.org/10.1007/s10997-018-9418-8.

Hasan, Amiratul Nadiah, Aisyah Abdul-Rahman, and Zaleha Yazid. 2020. "Shariah Governance Practices at Islamic Fund Management Companies." *Journal of Islamic Accounting and Business Research* 11 (2): 309–25. https://doi.org/10.1108/JIABR-03-2017-0045.

Hillman, Amy J., and Thomas Dalziel. 2003. “Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives.” *Academy of Management Review* 28 (3): 383–96. https://doi.org/10.5465/amr.2003.10196729.

IFDI. 2022. “Refinitiv Islamic Finance Development Report 2022.” *Icd*, 80. https://icd-ps.org/uploads/files/ICD Refinitiv ifdi-report-20221669878247_1582.pdf.

IMF, International Monetary Fund. 2023. “Brunei Financial Sector.” In *Brunei Financial Sector*, 9:55–65. https://www.elibrary.imf.org/view/journals/002/2023/347/article-A004-en.xml.

Innayah, Maulida Nurul, Bima Cinintya Pratama, and Naelati Tubastuvi. 2021. “Board Diversity and Its Effects on Firm Performance and Risk: A Study in Banking Firms.” *Journal of Accounting and Investment* 22 (1): 206–20. https://doi.org/10.18196/jai.v22i1.10005.

Isa, Mansor, and Siew-Peng Lee. 2020. “Does the Shariah Committee Influence Risk-Taking and Performance of Islamic Banks in Malaysia?” *Journal of Islamic Accounting and Business Research* 11 (9): 1739–55. https://doi.org/10.1108/JIABR-12-2018-0207.

Isidro, Helena, and Márcia Sobral. 2015. “The Effects of Women on Corporate Boards on Firm Value, Financial Performance, and Ethical and Social Compliance.” *Journal of Business Ethics* 132 (1): 1–19. https://doi.org/10.1007/s10551-014-2302-9.

Iskandar, Rizkiana, Lilis Marlina, and Dian Urna Fasihat. 2023. “Islamic Social Reporting (ISR), Sharia Supervisory Board (SSB), and Financial Performance: Empirical Evidence on Islamic Banks in the GCC Region.” *International Journal of Science, Technology & Management* 4 (4): 954–62. https://doi.org/10.46729/ijstm.v4i4.865.

Jabari, Huthayfa Nabeel, and Rusnah Muhamad. 2021. “Gender Diversity and Financial Performance of Islamic Banks.” *Journal of Financial Reporting and Accounting* 19 (3): 412–33. https://doi.org/10.1108/JFRA-03-2020-0061.

Kabara, Ali Shariff, Saleh F. A. Khatib, Ayman Hassan Bazhair, and Hamid Ghazi H. Sulimany. 2022. “The Effect of the Board’s Educational and Gender Diversity on the Firms’ Performance: Evidence from Non-Financial Firms in Developing Country.” *Sustainability* 14 (17): 11058. https://doi.org/10.3390/su141711058.

Kachkar, Omar, and Mustafa K. Yilmaz. 2023. “How Diverse Are Shariah Supervisory Boards of Islamic Banks? A Global Empirical Survey.” *International Journal of Ethics and Systems* 39 (2): 312–41. https://doi.org/10.1108/IJOES-10-2021-0195.

Kamath, G. Bharathi. 2006. “Understanding the Intellectual Capital Statements: A Case Study of Infosys Technologies Ltd.” *International Journal of Learning and Intellectual Capital* 3 (3): 268. https://doi.org/10.1504/IJLIC.2006.011314.

Khalil, Afef, and Imen Ben Slimene. 2021. “Financial Soundness of Islamic Banks: Does the Structure of the Board of Directors Matter?” *Corporate Governance: The International Journal of Business in Society* 21 (7):

1393–1415. https://doi.org/10.1108/CG-06-2020-0237.

Khalil, Afef, and Neila Boulila Taktak. 2020. “The Impact of the Shariah Board’s Characteristics on the Financial Soundness of Islamic Banks.” *Journal of Islamic Accounting and Business Research* 11 (10): 1807–25. https://doi.org/10.1108/JIABR-08-2018-0127.

Khan, Shahbaz, Abid Haleem, and Mohd Imran Khan. 2021. “Risk Management in Halal Supply Chain: An Integrated Fuzzy Delphi and DEMATEL Approach.” *Journal of Modelling in Management* 16 (1): 172–214. https://doi.org/10.1108/JM2-09-2019-0228.

Khaw, Karren Lee-Hwei, and Jing Liao. 2018. “Board Gender Diversity and Its Risk Monitoring Role: Is It Significant?” *Asian Academy of Management Journal of Accounting and Finance* 14 (1): 83–106. https://doi.org/10.21315/aamjaf2018.14.1.4.

Kolsi, Mohamed Chakib, and Rihab Grassa. 2017. “Did Corporate Governance Mechanisms Affect Earnings Management? Further Evidence from GCC Islamic Banks.” *International Journal of Islamic and Middle Eastern Finance and Management* 10 (1): 2–23. https://doi.org/10.1108/IMEFM-07-2015-0076.

Lassoued, Naima, Mouna Ben Rejeb Attia, and Houda Sassi. 2018. “Earnings Management in Islamic and Conventional Banks: Does Ownership Structure Matter? Evidence from the MENA Region.” *Journal of International Accounting, Auditing and Taxation* 30 (December 2017): 85–105. https://doi.org/10.1016/j.intaccaudtax.2017.12.003.

Lückerath-Rovers, Mijntje. 2013. “Women on Boards and Firm Performance.” *Journal of Management & Governance* 17 (2): 491–509. https://doi.org/10.1007/s10997-011-9186-1.

Maji, Santi Gopal, and Rupjyoti Saha. 2024. “Does Intellectual Capital Influence Banks’ Efficiency? Evidence from India Using Panel Data Tobit Model.” *Managerial Finance* 50 (4): 697–717. https://doi.org/10.1108/MF-05-2023-0303.

Majumder, Md. Tofael Hossain, Israt Jahan Ruma, and Aklima Akter. 2023. “Does Intellectual Capital Affect Bank Performance? Evidence from Bangladesh.” *LBS Journal of Management & Research* 21 (2): 171–85. https://doi.org/10.1108/LBSJMR-05-2022-0016.

Mansoor, Muhammad, Nazima Ellahi, Qaiser Ali Malik, Board Attributes, and Islamic Bank. 2019. “Corporate Governance And Credit Rating: Evidence Of Shariah Governance From Pakistan.” *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies* 10 (18): 1–11. https://tuengr.com/V10A/10A18GM.pdf.

Masi, Sara De, Agnieszka Słomka-Gołębiowska, and Andrea Paci. 2021. “Women on Boards and Monitoring Tasks: An Empirical Application of Kanter’s Theory.” *Management Decision* 59 (13): 56–72. https://doi.org/10.1108/MD-10-2019-1450.

Meutia, Inten, Desi Aryani, and Sari Mustika Widyastuti. 2019. “Characteristics Of The Sharia Supervisory Board And Its Relevance To Islamic Social Reporting At Islamic Banks In Indonesia.” *EKUITAS (Jurnal Ekonomi Dan Keuangan)* 3 (1): 130–47. https://doi.org/10.24034/j25485024.y2019.v3.i1.4160.

Minton, Bernadette A., Jérôme P. Taillard, and Rohan Williamson. 2014. "Financial Expertise of the Board, Risk Taking, and Performance: Evidence from Bank Holding Companies." *Journal of Financial and Quantitative Analysis* 49 (2): 351–80. https://doi.org/10.1017/S0022109014000283.

Mollah, Sabur, and Mahbub Zaman. 2015. "Shari'ah Supervision, Corporate Governance and Performance: Conventional vs. Islamic Banks." *Journal of Banking & Finance* 58 (September): 418–35. https://doi.org/10.1016/j.jbankfin.2015.04.030.

Moudud-Ul-Huq, Syed. 2022. "Impacts of Sharīʿah Supervision and Corporate Social Responsibility on Banks' Risk-Taking Behavior and Profitability." *International Journal of Islamic and Middle Eastern Finance and Management* 15 (4): 811–28. https://doi.org/10.1108/IMEFM-03-2020-0126.

Mukaro, Charlie Tatenda, Abraham Deka, and Sylvester Rukani. 2023. "The Influence of Intellectual Capital on Organizational Performance." *Future Business Journal* 9 (1): 31. https://doi.org/10.1186/s43093-023-00208-1.

Mukhibad, Hasan, and Doddy Setiawan. 2022. "Shariah Supervisory Board Attributes and Corporate Risk-Taking in Islamic Banks." *Cogent Business & Management* 9 (1). https://doi.org/10.1080/23311975.2022.2158607.

Naja, Abdul Hakam, Rina Indiastuti, Dian Masyita, and Cupian Cupian. 2023. "Is Islamic Banking Performance In Malaysia Truly Better Than Indonesia?" *Journal of Islamic Monetary Economics and Finance* 9 (4): 611–36. https://doi.org/10.21098/jimf.v9i4.1784.

Nguyen, Huu Anh, Quynh Lien Le, and Thi Kim Anh Vu. 2021. "Ownership Structure and Earnings Management: Empirical Evidence from Vietnam." Edited by Collins G. Ntim. *Cogent Business & Management* 8 (1): 57–74. https://doi.org/10.1080/23311975.2021.1908006.

Nielsen, Sabina, and Morten Huse. 2010. "Women Directors' Contribution to Board Decision-making and Strategic Involvement: The Role of Equality Perception." *European Management Review* 7 (1): 16–29. https://doi.org/10.1057/emr.2009.27.

Nomran, Naji Mansour, Razali Haron, and Rusni Hassan. 2017. "Bank Performance and Shari'ah Supervisory Board Attributes of Islamic Banks: Does Bank Size Matter?" *Journal of Islamic Finance* 6 (Special Issue): 174–87. https://doi.org/10.12816/0047348.

Noordin, Nazrul Hazizi, and Salina Kassim. 2019. "Does Shariah Committee Composition Influence Shariah Governance Disclosure?" *Journal of Islamic Accounting and Business Research* 10 (2): 158–84. https://doi.org/10.1108/JIABR-04-2016-0047.

Ousama, A. A., Helmi Hammami, and Mustafa Abdulkarim. 2019. "The Association between Intellectual Capital and Financial Performance in the Islamic Banking Industry." *International Journal of Islamic and Middle Eastern Finance and Management* 13 (1): 75–93. https://doi.org/10.1108/IMEFM-05-2016-0073.

Pfeffer, Jeffrey, and Gerald R. Salancik. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row.

Post, Corinne, and Kris Byron. 2015. "Women on Boards and Firm Financial

Performance: A Meta-Analysis." *Academy of Management Journal* 58 (5): 1546–71. https://doi.org/10.5465/amj.2013.0319.

Prasaja, Mukti. 2018. "Determinan Kinerja Keuangan Perbankan Syariah (Kajian Empiris Pada Perbankan Syariah Di Indonesia)." *Kinerja* 15 (2): 57. https://doi.org/10.29264/jkin.v15i2.4009.

Rahman, Maria Abdul, and Mona Fairuz Ramli. 2016. "The Influence of Relationship Quality on Customer Loyalty in the Dual-Banking System in the Northern States of Peninsular Malaysia." *Procedia - Social and Behavioral Sciences* 219 (May): 606–13. https://doi.org/10.1016/j.sbspro.2016.05.040.

Riahi-Belkaoui, Ahmed. 2003. "Intellectual Capital and Firm Performance of US Multinational Firms." *Journal of Intellectual Capital* 4 (2): 215–26. https://doi.org/10.1108/14691930310472839.

Rofiqo, Azidni, and Noni Afrianti. 2019. "The Influence Of Sharia Banking Characteristics And Macroeconomics Factors On Sharia Banking Profitability: Empirical Studies In Indonesia." *International Journal of Islamic Business Ethics* 4 (1): 540. https://doi.org/10.30659/ijibe.4.1.540-550.

Safiullah, Md, and Abul Shamsuddin. 2018. "Risk in Islamic Banking and Corporate Governance." *Pacific-Basin Finance Journal* 47 (February): 129–49. https://doi.org/10.1016/j.pacfin.2017.12.008.

Saruchi, Sarah Athirah, Nor Aiza Mohd Zamil, Rohaida Basiruddin, and Nor Faezah Ghazi Ahmad. 2019. "Examining the Impact of Corporate Governance on Intellectual Capital: Empirical Evidence of Islamic Banks." *International Journal of Academic Research in Accounting, Finance and Management Sciences* 9 (3): 104–17. https://doi.org/10.6007/IJARAFMS/v9-i3/6345.

Sayed, Omer Ahmed, and Aida Nefzi. 2024. "The Impact of Intellectual Capital on Sustainable Performance: Banking Sector in Saudi Arabia." *Sustainability* 16 (11): 4528. https://doi.org/10.3390/su16114528.

Syarif, Fazlurrahman. 2019. "Regulatory Framework for Islamic Financial Institutions: Lesson Learnt between Malaysia and Indonesia." *Journal of Halal Product and Research* 2 (2): 79. https://doi.org/10.20473/jhpr.vol.2-issue.2.79-85.

Tashkandi, Abdulhadi Abdulrahim. 2022. "Shariah Supervision and Corporate Governance Effects on Islamic Banks' Performance: Evidence from the GCC Countries." *Journal of Business and Socio-Economic Development* 3 (3). https://doi.org/10.1108/JBSED-02-2022-0024.

Trikartiko, Anigo, and Totok Dewayanto. 2021. "Komite Audit Terhadap Penghindaran Pajak (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2019)." *Diponegoro Journal of Accounting* 10 (4): 1–13. https://ejournal3.undip.ac.id/index.php/accounting/article/view/33008.

Umar, Umar Habibu, Muhamad Abduh, and Mohd Hairul Azrin Besar. 2023. "Shari'a Supervisory Board and Islamic Banks' Insolvency Risk." *Journal of Islamic Monetary Economics and Finance* 9 (3): 419–42. https://doi.org/10.21098/jimf.v9i3.1635.

Wernerfelt, Birger. 1984. "A Resource-based View of the Firm." *Strategic*

Management Journal 5 (2): 171–80. https://doi.org/10.1002/smj.4250050207.

APPENDIX

Islamic banks as sample:

Indonesia	**Malaysia**	**Brunei Darussalam**
1. Bank Aceh Syariah	1. Affin Behard	1. BIBD
2. Bank NTB Syariah	2. Muamalat	
3. Bank Muamalat	3. Rakyat	
4. Bank Victoria Syariah	4. CIMB	
5. BRIS	5. Hong Leong	
6. BNIS	6. HSBC	
7. Mandiri Syariah	7. OCBC	
8. BCAS	8. Public	
9. Panin Syariah	9. RHB	
10. Btpn Syariah	10. Standard Chartered	
11. Bukopin Syariah	11. Al Rajhi	
12. Bank Maybank Syariah/ Net/Aladin	12. Bank Islam	
	13. Maybank	