

Governance Mechanisms and Islamic Bank Performance: Insights from South East Asia and the Gulf Cooperation Council

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ABSTRACT

This study explores how corporate governance (CG) disclosure influences the relationship between governance mechanisms and the financial performance of Islamic banks in Southeast Asia (SEA) and the Gulf Cooperation Council (GCC) regions. Using panel data analysis and structural equation modelling (SEM), data from 33 Islamic banks in SEA and 46 in the GCC, covering the period from 2012 to 2021, was analysed to capture both pre- and post-COVID-19 effects. The study examines various governance mechanisms, including corporate governance practices, Shari'ah supervisory boards (SSBs), and legal systems. The findings show that strong governance mechanisms positively affect bank performance, with CG disclosure playing a key role in this relationship. Specifically, CG disclosure has an independent positive impact on bank performance. The research highlights that effective governance structures, such as SSBs and strong legal frameworks, lead to better performance. It also stresses the importance of precise CG disclosure requirements to improve financial stability and trust in Islamic banks. This study offers valuable insights into how Islamic governance mechanisms, especially those aligned with Shari'ah principles, influence the performance of banks, and provides a basis for future research in this field.

Keywords: Governance Mechanisms, Shari'ah Supervisory Board, Corporate Governance Disclosure, Islamic Bank

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INTRODUCTION

Islamic banking refers to a financial institution that performs conventional banking services such as checking accounts, savings accounts, loans, and others but follows Islamic law to fulfil the needs of Muslims to drive their economic activities (Hunt-Ahmed, 2013). Islamic banking, guided by Shari'ah principles, has grown substantially, evolving into a prominent segment within the global financial landscape (Laili et al., 2023). The distinct governance structures of Islamic banks have become a focal point of research, attracting attention due to their unique nature compared to conventional banking institutions. The intricate interplay between governance mechanisms, corporate governance (CG) disclosure, and bank performance has gained significance as Islamic banks expand their presence, especially in regions like South East Asia (SEA) and the Gulf Cooperation Council (GCC). Understanding these relationships becomes imperative to fortify the resilience and stability of Islamic banks in these dynamic markets.

The governance landscape of Islamic banks encompasses various elements, such as corporate governance practices, the role of Shari'ah supervisory boards (SSBs) and the legal frameworks within which these institutions operate (Baklouti, 2022; Jan et al., 2021). These factors collectively shape the performance outcomes of Islamic banks. In the context of SEA and GCC, which represent two distinct regions with unique economic, cultural, and regulatory nuances, the study aimed to unravel the specific dynamics influencing the performance of Islamic banks. Recognising the importance of robust governance mechanisms in these regions is paramount for policymakers, investors, and other stakeholders seeking to foster sustainable growth and financial stability.

While existing literature has delved into the governance structures of Islamic banks, a notable gap persists in comprehensively understanding how these mechanisms influence performance, especially in the context of SEA and GCC. The study addressed this issue by examining the direct and indirect relationships between governance mechanisms, CG disclosure, and bank performance. It sought to unravel the intricacies of these connections, providing insights into the specific attributes and practices that contribute to the enhanced performance of Islamic banks in these regions.

The global financial landscape has been significantly shaped by the Covid-19 pandemic, introducing unprecedented challenges and disruptions.

Amidst the global challenges introduced by the Covid-19 pandemic, both conventional and Islamic banks have encountered unique circumstances. Islamic banks have faced unique circumstances like their conventional counterparts during this period. The dynamic nature of the crisis necessitates a reassessment of governance mechanisms and disclosure practices to ensure adaptability and resilience. Against this backdrop, the study aimed to investigate how Islamic banks in SEA and GCC regions have responded to the challenges posed by the pandemic, adding a temporal dimension to the exploration of governance-performance relationships. This study acknowledged the need for effective governance mechanisms, encompassing CG, SSBs, and CG disclosure, to successfully guide Islamic banks through these unprecedented times (Muhamad et al., 2022). Understanding the role of these governance mechanisms in mitigating the impact of the pandemic on Islamic bank performance is vital for enhancing the resilience of these institutions.

Despite recognising the importance of governance in Islamic banking, there remains a gap in understanding how specific governance mechanisms impact financial performance, particularly in the diverse contexts of SEA and GCC regions (Alhammadi, 2024). This study aimed to fill this gap by providing a comprehensive analysis of governance practices in these regions, examining the direct and indirect effects of CG mechanisms on bank performance. By leveraging panel data analysis and structural equation modelling (SEM), this research offers a nuanced understanding of the governance-performance relationship in Islamic banks.

The core research problem addressed in this study was the ambiguity surrounding the role of CG disclosure as a mediator between governance mechanisms and financial performance in Islamic banks. While previous studies have established the importance of governance in banking, the specific pathways through which CG disclosure influences performance outcomes remain underexplored (Alhammadi, 2024; Amrani & Najab, 2023; Eldaia et al., 2023). This study posited that CG disclosure enhances transparency and accountability and is crucial in strengthening the overall governance framework, thereby improving financial performance. This question addressed was: "How does CG disclosure mediate the relationship between governance mechanisms and financial performance in Islamic banks in the SEA and GCC regions?"

The findings from this research are particularly relevant for regulators, investors, and policymakers involved in the Islamic banking sector. By elucidating the critical role of CG disclosure in enhancing financial performance, this study provides actionable insights for strengthening governance frameworks. Moreover, the focus on the SEA and GCC regions offers valuable comparative perspectives, enhancing the generalizability of the results. The research contributes to the broader understanding of how governance structures, especially SSBs, impact the performance of Islamic banks, thereby advancing the literature on Islamic finance and corporate governance.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Islamic banking refers to a financial system that operates under Islamic law (Shari'ah), which prohibits interest (riba) and promotes risk-sharing, ethical investing, and social justice (BenSaid, 2023; Sallemi & Zouari, 2023). Islamic banking offers financial services similar to conventional banking, including savings accounts, loans, and investment products, but it structures these services in compliance with Shari'ah principles. For instance, instead of charging interest, Islamic banks may earn profit through equity participation, leasing (ijara), or partnership (mudarabah and musharakah) contracts (Laili et al., 2023). The principles of Islamic banking are grounded in key tenets derived from the Qur'an and Hadith, including the prohibition of riba (interest), the requirement for risk-sharing in financial transactions, ethical investments that exclude haram (forbidden) activities such as gambling and alcohol, and a commitment to social justice and welfare through practices like Zakat (charitable giving) (BenSaid, 2023).

While both Islamic and conventional banks offer similar financial products and services, their underlying principles and operational mechanisms differ significantly. Conventional banks primarily generate profit through interest on loans and deposits, whereas Islamic banks use profit-sharing and trade-based models. Conventional banks transfer risk primarily through interest-based lending, while Islamic banks share risk with their clients through equity-based financing and joint ventures (Laili et al., 2023). Furthermore, Islamic banks operate under dual regulatory

frameworks, financial regulations and Shari'ah compliance overseen by SSBs, in contrast to conventional banks, which adhere only to financial regulatory bodies (Alam et al., 2022).

The importance of governance in Islamic banking cannot be overstated, as it encompasses both traditional CG practices and additional layers of Shari'ah governance (SG) to ensure compliance with Islamic principles. Corporate governance structures in Islamic banks include the Board of Directors (BOD), which is responsible for overall governance and strategic direction, and audit committees that oversee financial reporting and internal controls. On the other hand, Shari'ah governance involves SSBs that ensure all operations and products comply with Shari'ah law, reviewing contracts, transactions, and financial statements to confirm compliance (Baklouti, 2022).

Effective corporate governance in Islamic banking enhances financial performance by promoting transparency, accountability, and risk management. Empirical studies have shown that robust governance structures positively impact bank performance, including active and knowledgeable boards, independent audit committees, and effective Shari'ah supervision (Mohd Zain & Wan Abdullah, 2024). Shari'ah governance, in particular, instils confidence among stakeholders, ensuring ethical operations and adherence to Islamic values, which can attract more customers and investors (Ajili & Bouri, 2018b).

This study focused on the SEA and GCC regions, which are prominent markets for Islamic banking, each with unique economic, cultural, and regulatory landscapes. The SEA region, including countries like Malaysia and Indonesia, has seen significant growth in Islamic finance, supported by favourable regulations and a large Muslim population (Abdullah & Asutay, 2021). In contrast, the GCC region, encompassing countries like Saudi Arabia and the United Arab Emirates, has well-established Islamic banking systems backed by oil wealth and strong governmental support (Li et al., 2024).

Studying the governance mechanisms in SEA and GCC regions provides valuable insights into how different regulatory environments and cultural contexts influence the effectiveness of corporate and Shari'ah

governance in Islamic banks. This comparison can help identify best practices and areas for improvement, contributing to the development of more robust governance frameworks that enhance the financial performance and stability of Islamic banks globally (Baklouti, 2022).

The governance structures in Islamic banking are integral to its operation, ensuring compliance with Shari'ah principles and promoting ethical financial practices. Corporate and Shari'ah governance mechanisms differentiate Islamic banks from their conventional counterparts and play a crucial role in enhancing financial performance and stakeholder trust. This study aimed to deepen the understanding of these governance mechanisms by focusing on the SEA and GCC regions, offering insights that can inform policy and practice in the broader Islamic finance industry.

Corporate Governance Mechanisms and Performance

Board size and performance

The BOD is a powerful internal governance mechanism that maximises banks' profitability while protecting shareholders and assisting managers (Ben Abdallah & Bahloul, 2021). One of the essential elements of CG's internal control is board size. Prior studies have argued that banks with larger boards tend to perform well. Many studies, such as Chen (2015) and, Abdul Gafoor et al. (2018), Rashid (2018), argued that a larger board size brings more knowledge, visions, opinions and investment proposals that would eventually benefit shareholders. Large boards help improve and enhance decisions by sharing ideas and contributions, thereby providing management with new ideas and opinions that might help reduce the agency problem and lead to better performance.

Board independence and performance

The presence of outside directors is significant in reducing opinion biases among the board members, thus increasing the reliability and trustworthiness of financial information. Liu et al. (2015), Shaukat et al. (2016), and Fuzi et al. (2016) found that an independent board had a positive influence on performance. Independent board members can work without interfering with the major shareholders, management or other entities. Independent members are more likely to oversee management and mitigate fraud as they are related economically or psychologically to management (Al-Matari, 2019).

Board diligence and performance

The frequency of board meetings is an important way of improving board effectiveness (Alsartawi & Abdalmuttaleb, 2018; Aryani et al., 2017). Similarly, Liang et al. (2013), Lin et al. (2014), and Aryani et al. (2017) found that board meetings had a significant positive influence on performance. The previous study claimed that board meetings and their participation are important channels through which managers access firm-specific knowledge and fulfil their monitoring functions.

Audit committee size and performance

A large audit committee (AC) is argued to contribute to better performance due to the diversity of skills and knowledge that does not exist in a smaller AC. Several studies found a positive association between the size of AC and firm performance (Darko et al., 2016; Reddy et al., 2010). The ACs have many responsibilities, such as overseeing the audit process and managing the company's internal audit process (Buallay & Al-Ajmi, 2020). The AC supports the role of the BOD in controlling the integrity of the companies' financial reporting structures as a sub-committee of the BOD. The larger AC could lead to higher transparency, thus providing stronger monitoring and affecting performance (Ben Barka & Legendre, 2016; Detthamrong et al., 2017).

Audit committee independence and performance

Various empirical results show the association between AC independence and firm performance. Several studies (Aanu et al., 2014; Abdullah et al., 2014; Wang & Huynh, 2013) found that an independent AC positively influenced firm performance. An independent AC might ensure a reliable financial reporting process by checking managers' manipulative, self-centred activities. Mohd Zain et al. (2023) indicated that AC independence promotes greater effectiveness in monitoring the companies' internal controls and financial reporting.

Audit committee financial expertise and performance

According to Salloum et al. (2014), financial literacy is defined by accounting, finance, and audit expertise and skills, including appropriate years of experience in these areas. This expertise on the AC would help the BOD improve the internal control and monitor role and enhance the audit committees' effectiveness in performing their functions. Their expertise

and experience are crucial in assessing different issues, the quality of the company's operations and finances, and engaging in the scheduling and preparation of audit tasks that will allow them to promote and validate external auditors' concerns at board meetings (Kallamu et al., 2015). Their technical knowledge enables them to evaluate and reduce unacceptable risks taking that may jeopardise bank stability (Fajembola et al., 2018).

Audit committee diligence and performance

Previous studies depend predictably on the total number of AC meetings as a metric for AC diligence because other diligence measures are not publicly observable (DeZoort et al., 2002). In general, previous studies found that more frequent AC meetings decreased the probability of financial reporting problems. Many researchers declared that these two variables were positively related (Kang & Kim, 2011; Khanchel, 2007; Wilbanks et al., 2017). The overall CG score was calculated for the Islamic banking sector (the score will be indicated later as CG strength). So, the following hypothesis was posited:

H₁: CG strength and Islamic bank performance have a significant and positive relationship.

Shari'ah Supervisory Board Mechanisms and Performance

SSB Size and Performance

Hamdi and Zarai (2014) found that larger Islamic banks are more likely to employ larger SSB sizes as large Islamic banks' enormous numbers of transactions require more monitoring and certifying works from SSB members (Tashkandi, 2022). The increasing number of SSB members in the Islamic banks that operate under centralised SG makes them more stringent in supervisory and disciplinary power to control Islamic banks' loan risk-taking behaviour than the Islamic banks that operate under the decentralised SG approach (Ben Abdallah & Bahloul, 2021). According to Mollah and Zaman (2015), large SSB size positively influenced Islamic banks' performance when the SSB had a supervisory role. A larger SSB was more efficient in dealing with different monitoring and advisory roles than a small SSB. It instigates better management behaviour and lowers organisational risk (Almutairi & Quttainah, 2017).

SSB Cross-membership and Performance

A cross-membership SSB allows them to establish interaction and broader connections with other Islamic banks and create more efficient resource allocation that, in turn, would enhance Islamic bank performance. Almutairi and Quttainah (2017), Nomran et al. (2017) and Rahman and Haron (2019) found that SSB cross-membership had a positive and significant impact on Islamic banks' performance. Cross-memberships SSB get chances to increase their experience and knowledge and strengthen their reputation, which will eventually also enhance their knowledge as they are exposed to more discussions about the application of Islamic Law in banking.

SSB Financial Expertise and Performance

Regarding SSB members in Islamic banks, scholars with more experience in financial knowledge are more efficient in their performance as SSB members than scholars with no such skills (Abdul Rahman & Bukair, 2013). Indeed, many SSB representatives in Islamic banks are Islamic scholars, with only a few possessing experience in accounting, banking, economic and financial matters (Wan Abdullah et al., 2015). SSB scholars with skills in finance and accounting could have a positive and highly significant impact on the performance of Islamic banks as expertise in Shari'ah law, apart from the market, accounting and finance experience, will help them improve the quality of performance of Islamic banks (Grassa, 2016; Matoussi & Grassa, 2012). The overall SSB score was calculated for the Islamic banking sector (the score will be indicated later as SSB strength). So, the following hypothesis was posited:

H₂: SSB strength and Islamic bank performance have a significant and positive relationship.

Mediating Variable

The association between CG disclosures and company performance has been extensively studied (Orazalin et al., 2016; Rose, 2016; Shamsudin et al., 2018; Srairi, 2015). However, the empirical studies on this topic generated mixed results. Some studies (Elsiddig, 2017; Mollah et al., 2017; Mollah & Zaman, 2015; Srairi, 2015) have shown that good governance practices have significantly increased companies' performance, higher

productivity and low risk of financial failures. However, the empirical evaluation of CG disclosure practices and their impact on the corporate performance of Islamic banks is generally still lacking (Elsiddig, 2017). Ajili and Bouri (2018a) revealed that SBB played an important role in the control of disclosure, and most importantly, SBB had a moderating effect on the relationship between performance and disclosure. Ajili and Bouri (2018a) stated that SSB was a typical CG mechanism for the Islamic banking system. A strong SSB structure was expected to influence the level of disclosure, including the CG disclosure, to mitigate the risk of uncertainty inherent in Islamic banks and reduce the gharar element in the financial reports. This study attempted to verify whether governance mechanisms and practices can predict the level of transparency. Accordingly, it was expected that a more significant amount of CG transparency could influence Islamic banks' performance. This led to the following hypothesis:

H₃: CG disclosures of the Islamic bank mediate the relationship between CG strength as well as SSB strength and Islamic banks' performance.

RESEARCH METHOD

Sample and Data Collection

This study investigated the efficiency of CG and the SSB and their relationship with the performance of Islamic banks from 2012 to 2021. In recent years, the Islamic finance sector has gained attention from policymakers, monetary authorities, investors, and academics as a more acceptable and effective alternative to the Western approach (Ibrahim, 2015). Islamic banking has rapidly developed since its emergence in the mid-1970s as one of the most important segments of the Islamic financial market (Habib, 2023). The choices of Islamic banks in the SEA and GCC region have been driven by three decades of growth in the banking sector. SEA and GCC regions were selected due to their unique economic, regulatory, and cultural characteristics, which significantly impact the governance structures of Islamic banks.

Additionally, these regions represent diverse financial landscapes, providing a rich ground for understanding how governance mechanisms

operate in distinct geopolitical and economic contexts (Mohd Zain et al., 2021). While acknowledging the global growth of Islamic banking, it is imperative to recognise the study's limitations, notably the exclusion of other countries such as Bangladesh, Pakistan, and Egypt. This exclusion was a methodological decision driven by the need for a more focused and in-depth analysis within the available resources and research scope. Including a broader range of countries would have necessitated additional resources and could have diluted the depth of insights gained from SEA and GCC banks. Data collection stopped in the fiscal year 2021, the last year for which data was available when we began collecting data on the net. This study utilised a sample of 79 Islamic banks operating in 12 countries from SEA and the GCC region. The study utilised secondary data from Thompson Router Data Stream, Orbis Bank Focus, Thompson One-banker, and IFIS, which supported the global banking database. Performance data (ROAA, ROAE and Tobin Q) was retrieved from the annual report and financial databases, which provided combined financial information from banks' financial statements. Corporate and SSB data were extracted from each bank's annual and CG reports.

Variable Definition

These studies used accounting and market-based measures to test the CG and SSB against bank performance. Ghalayini and Noble (1996) identified two phases of the development of performance measurement. The first phase started in the late 1880s and went through the 1980s. During this period, performance measurement was based on accounting systems that focused on financial data. This phase is known as the "traditional performance measurement" or accounting-based measures. The second phase began in the late 1980s due to the globalisation of trade and the emergence of the world economy. Due to the changes in the world market, "traditional performance measurement" may not be suitable for measuring performance, and thus, another type of performance measurement was developed. This measurement is known as the "non-traditional performance measure" or market-based measure. Both accounting-based and market-based measures are widely accepted as valid indicators of performance, and each of these measures has its strengths and weaknesses (Agarwal & Taffler, 2008; Mollah & Zaman, 2015). Consistent with prior literature, these studies included accounting-based variables, such as the return on average

assets (ROAA) and return on average equity (ROAE) and the market-based variable of Tobin's Q (Mollah & Zaman, 2015).

The CG strength and SSB strength were measures based on Ajili and Bouri's (2018b) study and Mohd Zain et al. (2023). These studies also tested factor analysis for CG and SSB mechanisms as strengths. Total scores were tested for reliability and validity by using STATA. If Cronbach's Alpha shows more than 70 per cent, it means the measurement is reliable (Aryani et al., 2017; Bonett & Wright, 2015), and the measurement of 0.8 or greater is at a very good level. However, values higher than 0.95 are not necessarily good since they might be an indication of redundancy (Ursachi et al., 2015). The result, as indicated in Table 1, showed that Cronbach's alpha was 0.903 ($\alpha > 0.70$) for CG strength and 0.905 ($\alpha > 0.70$) for SSB strength, which means that the initial checklist and items used in the study had a high-reliability construct and could be replicated in other research. The measurements of items in this study are shown in Appendix 1.

Table 1: Reliability Test of CG and SSB Strength on the Cronbach Alpha Result using STATA

Item	Sign	Item-test correlation	Item-rest correlation	Average interitem correlation	Alpha
CG Strength	+	0.889	0.822	0.700	0.903
SSB Strength	+	0.883	0.813	0.704	0.905
Test scale				0.709	0.924

Corporate Governance Disclosure Index

The selection of items for the CG disclosure index in this study was based on rigorous criteria derived from internationally recognised standards and guidelines. These included the AAOIFI Governance Standards for Islamic Financial Institutions (GSIFI) (AAOIFI, 2015)⁵ auditing standards 2 codes of ethics and 7 governance standards that AAOIFI has issued for the international Islamic finance industry. These standards give guidance on; amongst others presentation of financial statements for Islamic financial institutions (IFIs, the IFSB’s Guiding Principles on Corporate Governance, The OECD’s Principles of Corporate Governance (2015), the BCBS Paper (2015), and other relevant literature on CG disclosures. By incorporating these comprehensive sources, the study ensured that the CG disclosure

index covered all the essential aspects relevant to Islamic banks. The study also sought the opinions of esteemed academics who specialise in CG and Islamic accounting to ensure the accuracy and relevance of the CG disclosure index. Their expertise and insights were instrumental in developing a robust and comprehensive checklist for CG disclosure. The collaborative approach in constructing the index reflected a commitment to incorporating diverse perspectives and the latest advancements in the field. Appendix 2 summarises the CG disclosure checklist used in this study.

Model Specification and Estimation Method

These studies use seemingly unrelated regression to estimate the relationship between CG, SSB and performance. Seemingly unrelated regressions generalise a linear regression model consisting of multiple regression equations, each having its dependent variable and possibly different sets of exogenous explanatory variables (Kim & Cho, 2019; Mbah et al., 2019). The F-statistics for the POLS are not significant at a 1 per cent significance level. The Hausman test determined whether a fixed or random effect method is more appropriate for this study. Based on the Hausman test result, after the rejection of test Breusch-Pagan test, this study employed the random effect (RE) for market-based measurement and the fixed-effects (FE) method for accounting-based measurement (Law, 2018). The choice of FE and RE models over the Generalized Method of Moments (GMM) was informed by the panel data structure of the dataset and the need to address potential endogeneity concerns. Given that the data involved panel observations over time and across entities, such as countries or firms, FE and RE models were deemed appropriate for capturing both time-invariant and time-variant effects within entities.

Moreover, the decision to opt for FE and RE models was motivated by concerns related to endogeneity in the data. These models are well-suited for mitigating potential endogeneity issues by controlling for unobserved heterogeneity that may be correlated with the explanatory variables. In essence, the selected FE and RE models provided a robust framework for analysing the panel structure of the dataset while simultaneously addressing concerns related to potential endogeneity, ensuring the reliability and validity of the findings. We developed the related empirical models in the following sub-sections. The general model examined the direct effect of CG and SSB strength on performance, as shown below:

$$Performance_{it} = \alpha + \beta_1 CGStrength_{it} + \beta_2 SSBStrength_{it} + \beta_3 Size_{it} + \beta_4 Lev_{it} + \beta_5 GDP_{it} + \beta_6 PRCL_{it} + \beta_7 Legal_{it} + \beta_7 MuslimPop_{it} + \varepsilon_{it}$$

Structural Equation Modelling (SEM) is a collection of statistical techniques that allows a set of relationships between independent variables, continuous or discrete, and one or more dependent variables, continuous or discrete, to be examined (Tabachnick & Fidell, 2014). Hair et al. (2017) added that SEM can gauge a model’s mediation effect concurrently instead of measuring individual regression analyses. This study applied MacKinnon et al. (2002) and Preacher and Hayes (Preacher & Hayes, 2008) methods of bootstrapping the indirect effect to determine the presence of mediation effect using the bootstrap approach. Preacher and Hayes (Preacher & Hayes, 2008) suggested that mediation occurs when the lower bound (LB) and upper bound (UB) values of indirect effect do not straddle a zero in between. Furthermore, to determine the type of mediation (partial or full mediation), this study employed recommendations by Mathieu and Taylor (2006) and Baron and Kenny (1986). According to these authors, if indirect and direct effects are significant, this indicates a partial mediation. Meanwhile, if the indirect effect is significant but the direct effect is not significant, this reveals a full mediation. To identify the type of mediation present in the study model, we conducted a mediation analysis:

$$Performance_{it} = \alpha + \beta_1 CGStrength_{it} + \beta_2 SSBStrength_{it} + \beta_3 CGDisclosure_{it} + \beta_6 Size_{it} + \beta_7 Lev_{it} + \beta_8 GDP_{it} + \beta_9 PRCL_{it} + \beta_{10} Legal_{it} + \beta_{11} MuslimPop_{it} + \varepsilon_{it}$$

Where:

- Performance = performance (ROAA, ROAE or Tobin’s Q)
- CGStrength = corporate governance strength
- SSBStrength = Shari’ah Supervisory Board strength
- CGDisclosure = corporate governance disclosure
- Size = size of the Islamic banks
- Lev = leverage of Islamic banks
- GDP = gross domestic product
- PRCL = political right and civil liberties
- Legal = legal system
- MuslimPop = Muslim population
- i = bank

t = time

α = intercept

$\beta_1 \dots \beta_n$ = regression coefficient

ε = error term

The measurements of items in this study are shown in **Appendix 1**.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2 reports the descriptive statistics on all the main variables used in the sample in columns two to five. There were three measurements of performance: ROAA, ROAE and Tobin's Q. The result for the two samples t-test showed a significant difference between Islamic banks in the SEA and GCC regions in terms of performance (ROAA and Tobin's Q). In contrast, ROAA and Tobin's Q were significant at a 1 per cent significance level, and there was no significant level on the ROAE. The result showed that Islamic banks in GCC countries were more profitable regarding ROAA and Tobin's Q than those in the SEA region (Grassa & Matoussi, 2014; Mohd Zain et al., 2023). Meanwhile, the two-sample t-test results showed that CG and SSB strength differed at the 1 per cent significance level in the SEA and GCC regions. The two-sample t-test test showed that the entire variable in the control variable was the difference in the SEA and GCC samples at the 1 per cent significance level except for the Muslim population at the 5 per cent significance level. Only the size of the Islamic banks in the SEA and GCC regions was insignificant.

Table 2: Descriptive Statistics

Variable	Full Sample										Two Sample T-Test
	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis	SEA Sample Mean	GCC Sample Mean		
ROAA	790	0.978	1.795	-3.92	8.92	0.595	0.311	0.582	1.262	4.136***	
ROAE	790	5.495	5.840	-6.92	18.62	-0.167	-0.226	5.398	5.564	0.303	
Tobin's Q	790	0.457	0.262	0.057	1.281	0.633	-0.092	0.391	0.505	4.770***	
CG Disclosure	790	0.844	0.090	0.621	0.966	-0.57	-0.797	0.801	0.874	9.585***	
CG Strength	790	3.966	2.793	0	7	-0.132	-1.768	3.035	4.634	6.401***	
SSB Strength	790	1.736	1.225	0	3	-0.206	-1.59	1.313	2.040	6.654***	
Size	790	7.981	1.514	4.576	10.941	-0.342	-0.502	7.911	8.031	0.848	
PRCL	790	9.960	1.946	5	14	-0.248	-0.443	10.258	9.746	-2.842***	
Leverage	790	0.669	0.470	0.017	2.08	0.547	-0.752	0.561	0.746	4.317***	
GDP	790	4.072	1.723	-0.93	7.24	-1.168	1.044	5.015	3.396	-11.384***	
Muslim Population	790	0.778	0.132	0.43	0.952	-0.306	-1.134	0.794	0.766	-2.253**	

Note:
 ***Significant at 1 %-level; **Significant at 5 %- level; *Significant at 10 %-level

Panel Data Analysis

The statistical analysis in Table 3 shows that CG and SSB strength was positive and significant in accounting-based and market-based measurement performance, supporting hypotheses 1 and 2. The result is consistent with the studies on board size (Chen, 2015; Coles et al., 2008; Mak & Li, 2001), board independence (Liu et al., 2015; Qiu et al., 2016; Syed Fuzi et al., 2016), and board diligence (Alsartawi & Abdalmuttaleb, 2018; Aryani et al., 2017; Lin et al., 2014). These results indicated that companies need a more magnificent pool of knowledge and skills, leading to appointing more board directors. Similar to Mak and Li (2001), Coles et al. (2008), and Chen (2015), this study suggested that a large board could provide more experience, expertise, specialised skills, and communication opportunities, which eventually leads to better performance of Islamic banks. Liang et al. (2013), Lin et al. (2014), and Aryani et al. (2017) argued that directors could fulfil their oversight responsibilities and get firm-specific information through board meetings and meeting participation.

In the same way, the result is consistent with the study on the AC size (Darko et al., 2016; Khanchel, 2007; Reddy et al., 2010), AC independent (Aanu et al., 2014; Abdullah et al., 2014; Chan & Li, 2008; Wang & Huynh, 2013), AC expertise (Al-Matari et al., 2014; Y. A. Al-Matari et al., 2012; Chan & Li, 2008; DeZoort et al., 2003a, 2003b; DeZoort & Salterio, 2001), and AC diligence (DeZoort et al., 2002; Kang & Kim, 2011; Khanchel, 2007). This study used the same argument as the earlier studies: when the company has more representatives on AC, the committee employs more diverse skills and knowledge to improve supervision and eventually positively affect performance.

The agency theory is the primary theoretical approach that explains the link between CG and performance. (Nguyen et al., 2014). In formulating this hypothesis, the opportunistic behaviour of bank managers relies on the governance structure (Hassan & Mollah, 2014; Mollah et al., 2017). Businesses with strong CG can safeguard their customers' interests, reduce difficulties with government authorities, and achieve excellent organisational performance. The agency theory analyses just the stakeholders or founders of the organisations, but the stakeholder theory includes all stakeholders' interests. In the case of Islamic banking, stakeholders' interests are not

limited to maximising revenue or wealth but also involve concern for legal and Islamic financial law issues (Bukair & Abdul Rahman, 2015).

SSB strength in this research was significant in accounting-based and market-based measurements, supporting Hypothesis 2. The SSB system had three prominent roles: advising, monitoring, and maintaining the Shari'ah rule of Islamic banks (AAOIFI, 2015). The first task included certifying the approved financial instruments and describing how the Zakat should be measured (Alnasser & Muhammed, 2012). Besides, the SSB played an important role as an internal control mechanism to evaluate and manage the operations of the Islamic bank (Alam et al., 2022; Boudawara et al., 2023). SSB should be large enough to reduce information asymmetry and improve communication between the board of directors and the SSB (Almutairi & Quttainah, 2017; Bilal Saeed & Kashif Saeed, 2018; Mansoor et al., 2019; Nomran & Haron, 2020). Based on this brief review, it can be concluded that the SSB plays a crucial role in enhancing the stability and profitability of Islamic Financial Institutions (IFIs) through effective CG mechanisms. Large SSB leads to different perspectives and skills from different fiqh schools, leading to a better understanding of products and operations and better results (Alam et al., 2022). Meanwhile, cross-memberships of SSB can enhance scholars' knowledge and experience, and financial expertise exposes scholars to more Islamic banking-related debates and thus enhances Islamic bank efficiency (Nomran et al., 2018). These statements can make the stakeholders confident about the products in which Islamic banks should invest.

AAOIFI (2015) recommends that the SSB be comprised of at least three members. Meanwhile, based on the Bank Negara Malaysia (BNM) of Shari'ah Governance Policy Document (Shari'ah Governance Policy, 2019), the SSB size should not be less than five members. One of their members should have expert knowledge in understanding Islamic economic problems (AAOIFI, 2015). By having a larger SSB, the SSBs' functions and responsibilities could be divided among the members, allowing some members to focus on corporate reporting during their Shari'ah review procedure (Ullah & Khanam, 2018). Besides that, Alam et al. (2022) reported that scholars with a doctorate in accounting, business and economics have better informed Islam's current implications for IFIs. Hence, this study combined the three SSB characteristics (SSB size, Cross-membership

of SSB and expertise of SSB members) into an index to measure its effectiveness. A higher SSB score indicates that SSB is more intellectually honest, knowledgeable, and efficient (Ajili & Bouri, 2018a; Ullah & Khanam, 2018).

The result concerning the legal system provides evidence that Islamic banks in common-law countries tend to provide more disclosures and better performance than those in code-law countries. This result is consistent with La Porta et al. (1998) study. According to La Porta et al. (1998), empirical research is significantly influenced by variations in accounting standards and practices across nations. These studies illustrate that countries with English common law systems tend to have better economic development, healthier capital markets, higher accounting standards and better enforcement than countries with code law systems. Complementary to this, the Size and Muslim population results were significant at the 5 and 10 per cent levels on the market-based measurement performance only. These results showed a significant difference in the variable because market-based performance uses random effect; meanwhile, accounting based performances are based on fixed-effect testing.

Table 3: Result of Regression Analysis between CG Strength, SSB Strength and Performance

Variable	ROAA	ROAE	Tobin's Q
	Fixed Effect Robust	Fixed Effect Robust	Random Effect
Constants	-0.047	0.014	-0.041
CG Strength	0.313*** (0.000)	0.346*** (0.000)	0.322*** (0.000)
SSB Strength	0.387*** (0.000)	0.328*** (0.000)	0.396*** (0.000)
Size	-0.194 (0.285)	0.025 (0.881)	0.080** (0.043)
PRCL	0.117 (0.377)	-0.086 (0.428)	-0.049 (0.320)
Legal	-0.364*** (0.000)	-0.271*** (0.014)	-0.194*** (0.002)
Lev	0.053 (0.190)	0.001 (0.980)	0.020 (0.581)
GDP	0.026 (0.596)	-0.011 (0.815)	0.013 (0.771)

Muslim Pop	0.002 (0.981)	-0.105 (0.132)	0.083* (0.059)
Observation (N)	790	790	790
R-squared	0.454	0.488	0.508
Adjusted R-squared	Na	Na	Na
F-Stat / Wald chi2	14.78***	21.29***	415.18***
Breush Pagan Test	177.31*** (0.000)	167.50*** (0.000)	4.50 (0.017) **
Hausman Test	32.35*** (0.000)	17.14** (0.029)	14.27* (0.075)
Multicollinearity (vif)	1.72	1.72	-
Heteroskedasticity	31366.94*** (0.000)	3411.35*** (0.000)	-
Serial Correlation	0.400 (0.529)	2.028 (0.158)	-

ROAA= Return on average assets; **ROAE**= Return on average equity; **Tobin's Q**= Tobin's Q; **CG Strength**= Index of CG mechanisms (BOD size, BOD independence, BOD diligence, AC size, AC independence, AC financial expert and AC diligence); **SSB Strength**= Index of SSB mechanisms (SSB size, SSB cross-membership and SSB financial expertise); **SIZE**= Log total asset; **PRCL**= Political right and civil liberties; **Legal**= legal systems of countries; **Lev**= Leverage of Islamic bank, **GDP**= Gross domestic product; **Muslim Pop**= Muslim population

Notes:

*** Significant at 1% level; ** Significant at 5% level; and * Significant at 10% level
The sample of Islamic banks panel data runs from 2012 to 2021 (strongly balanced)

Result of Mediating Analysis

Table 4 shows the result of mediating analyses between CG and SSB and the strength and performance of Islamic banks. This study applied the Preacher and Hayes (2008) method of bootstrapping the indirect effect to determine the presence of the mediation effect. The result showed the mediating effect of CG disclosure on the relationship between CG strength, SSB strength, and Islamic bank performance using accounting-based and market-based measurements. The results indicated that CG disclosure partially mediated the relationship between CG strength, SSB strength and performance of Islamic banks, which supported Hypothesis 3 and 4. Previous studies have deduced that proper disclosure and transparency on CG leads to better management and better allocation of a company's resources (Khan & Kamal, 2024).

Moreover, good disclosure of CG improves a company's performance, significantly increasing its share price (Albassam, 2014; Detthamrong et al., 2017; Kabir & Thai, 2017; Mollah et al., 2017). The results for CG disclosure

mediating effect on the relationship between SSB strength and Islamic banks' performance are tabulated in Table 4. The results showed that CG disclosure partially mediated the relationship between SSB strength and Islamic banks' performance in both accounting and market-based measurement.

Similarly, Mollah and Zaman (2015) found that SSB positively impacted the performance of Islamic banks when they performed a supervisory role, but the impact was negligible when they played an advisory role. When SSBs play a supervisory role, they are necessary to ensure that the ethical goals of Islamic banking are realised in practice. Based on AAOIFI's Governance Standard for Islamic Financial Institutions (GSIFI) No 2: Shari'ah Review, AAOIFI (AAOIFI, 2015) Paragraph 3 suggests that SSB should review and examine financial reports, contracts, corporate charters and other reports. The SSB is entrusted with the duty of directing, reviewing and monitoring the transactions of Islamic banks one by one to ensure that those transactions conform to the rules and principles of Shari'ah. SSB must be independent of the BOD but permitted to attend the BOD meetings to argue the religious aspects of their decisions (AAOIFI, 2015). A strong SSB structure is expected to influence the level of disclosure, including the CG disclosure, to mitigate the risk of uncertainty inherent in Islamic banks and reduce the *gharar* element in the financial reports.

Table 4: The Mediation Effect of CG Disclosure on the Relationship between CG and SSB Strength on Performance

Variable		Effect Percentile Bootstrap 95 per cent Confidence Interval					Mediation Effect
Dependence	Independents	Total Effect	Direct Effect	Indirect P-value (Bootstrap)	Lower	Upper	
ROAA	CG Strength	0.361*** (0.000)	0.200*** (0.000)	0.200*** (0.000)	0.089	0.310	Partial Mediation
	SSB Strength	0.338*** (0.000)	0.213*** (0.000)	0.213*** (0.001)	0.093	0.332	Partial Mediation
ROAE	CG Strength	0.405*** (0.000)	0.259*** (0.000)	0.259*** (0.000)	0.141	0.374	Partial Mediation
	SSB Strength	0.330*** (0.000)	0.217*** (0.001)	0.217*** (0.002)	0.079	0.355	Partial Mediation
Tobin's Q	CG Strength	0.335*** (0.000)	0.213*** (0.001)	0.213*** (0.002)	0.080	0.345	Partial Mediation
	SSB Strength	0.374*** (0.000)	0.279*** (0.000)	0.279*** (0.000)	0.131	0.426	Partial Mediation

Note: *** Significant at 1% level; ** Significant at 5% level; and * Significant at 10% level

Robustness Test

Apart from alternative measures, the two-step system generalised method of moments (GMM) approach was tested, as suggested by Mollah and Zaman (2015). According to the law (2018), to test endogeneity, the two-step system GMM approach adopted by Arellano and Bover (1995) and Blundell and Bond (1998) can be used. This study attempted to test the two-step system GMM using the approach by Arellano and Bover (1995) using the command "xtabond" in Stata 14 software, and the result showed that lagged dependent was not significant, justifying the model was not dynamic. This study also used test two-step system GMM using the approach by Blundell and Bond (1998) using the command "xtdpdsys" in Stata 14 software, and the result showed lagged dependent, which was also not significantly similar to the approach by Arellano and Bover (1995). The result of the lagged dependent was insignificant, showing that the data was not dynamic and considered either static (unchanging) or persistent, i.e., data is infrequently accessed and not likely to be modified. The results for GMM estimation are shown in Appendices 3 and 4.

CONCLUSION

This study investigated the mediating effect of CG disclosure on the relationship between governance mechanisms and financial performance in Islamic banks within the SEA and GCC regions. The research used panel data analysis and structural equation modelling (SEM) to analyse data from 33 Islamic banks in SEA and 46 in GCC from 2012 to 2021, capturing pre- and post-COVID-19 scenarios. The findings indicated that robust governance mechanisms significantly enhanced the performance of Islamic banks, with CG disclosure partially mediating this relationship. This underscored the independent positive impact of CG disclosure on bank performance, highlighting the importance of strong governance frameworks, including effective SSBs, legal systems, and CG practices.

The study makes several key contributions. Theoretically, it extends the existing literature on Islamic banking governance by providing empirical evidence of the mediating role of CG disclosure between governance mechanisms and financial performance. The focus on SEA and GCC regions

offers insights into the specific dynamics in these distinct economic and cultural contexts. The findings offer actionable insights for regulators, investors, and policymakers, advocating for specific CG disclosure requirements and guidelines tailored to Islamic banks, which can bolster financial stability and performance.

From a policy perspective, the research emphasises the need for regulatory bodies to implement robust CG disclosure policies to ensure transparency, accountability, and trust within the financial system, particularly in Islamic banking. Strengthened governance structures, coupled with robust CG disclosure practices, not only promote transparency and accountability but also contribute to fraud prevention and financial system stability. This is particularly crucial in navigating the unique challenges posed by the COVID-19 pandemic, underscoring the importance of effective governance mechanisms for the resilience of Islamic banks.

Limitations and Future Research

Despite its contributions, the study has several limitations. It focussed exclusively on Islamic banks in SEA and GCC regions, which may limit the generalizability of the findings to other regions with different regulatory and economic environments. Additionally, the study period covered 2012 to 2021, including the unprecedented impact of the COVID-19 pandemic. While this provides valuable insights, the unique circumstances of this period may not fully represent normal operational conditions. The reliance on secondary data sources, such as annual reports and financial databases, may introduce biases related to data accuracy and reporting standards.

Future research could explore several areas to build on the findings. Comparative analyses across regions such as South Asia and North Africa could evaluate the effectiveness of governance mechanisms and CG disclosure in diverse Islamic banking environments. Investigating the effects of specific global or regional crises, similar to the COVID-19 pandemic, on the relationship between governance mechanisms, CG disclosure, and bank performance can provide deeper insights into the resilience and adaptability of Islamic banks under stress conditions.

Additionally, examining the long-term impacts of strengthened governance standards and disclosure practices on attracting investors, enhancing reputation, and improving the overall credibility of Islamic banks would contribute to a more comprehensive understanding of the field. By addressing these areas, future research can provide a more detailed understanding of the governance-performance relationship in Islamic banks, contributing to the development of more effective governance frameworks and practices. This comprehensive approach can help enhance financial stability and performance in the Islamic banking sector, providing valuable insights for stakeholders.

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REFERENCE

- Aanu, O. S., Odianonsen, I. F., & Foyeke, O. I. (2014). Effectiveness of Audit Committee and Firm Financial Performance in Nigeria: An Empirical Analysis. *Journal of Accounting and Auditing: Research & Practice.*, 2014, 1–12. <https://doi.org/DOI: 10.5171/2014.301176>
- AAOIFI. (2015). *Accounting, Auditing and Governance Standards*. Accounting and Auditing Organisation for Islamic Financial Institutions.
- Abdul Gafoor, C. P., Mariappan, V., & Thyagarajan, S. (2018). Board characteristics and bank performance in India. *IIMB Management Review*, 30(2), 160–167. <https://doi.org/10.1016/j.iimb.2018.01.007>
- Abdul Rahman, A., & Bukair, A. A. (2013). The Influence of the Shariah Supervision Board on Corporate Social Responsibility Disclosure by

Islamic Banks of Gulf Co-Operation Council Countries. *Asian Journal of Business and Accounting*, 6(2), 65–104.

- Abdullah, H., & Asutay, M. (2021). Exploring the Corporate Governance and Risk Management Disclosure Performance Nexus in Islamic Banks: An Empirical Analysis. In *Monetary Policy, Islamic Finance, and Islamic Corporate Governance: An International Overview* (pp. 201–232). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80043-786-920211012>
- Abdullah, S. N., Halim, N. F. C. A., & Nelson, S. P. (2014). The impact of new regulations on earnings quality among Malaysian firms. *International Journal of Economics, Management and Accounting*, 22(2), 21–68.
- Agarwal, V., & Taffler, R. (2008). Comparing the performance of market-based and accounting-based bankruptcy prediction models. *Journal of Banking and Finance*, 32(8), 1541–1551. <https://doi.org/10.1016/j.jbankfin.2007.07.014>
- Ajili, H., & Bouri, A. (2018a). Assessing the moderating effect of Shariah Board on the relationship between financial performance and accounting disclosure. *Managerial Finance*, 44(5), 570–589. <https://doi.org/10.1108/MF-05-2017-0192>
- Ajili, H., & Bouri, A. (2018b). Corporate governance quality of Islamic banks: measurement and effect on financial performance. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(3), 470–487. <https://doi.org/10.1108/IMEFM-05-2017-0131>
- Al-Matari, E. M. (2019). Do characteristics of the board of directors and top executives have an effect on corporate performance among the financial sector? Evidence using stock. *Corporate Governance (Bingley)*, 20(1), 16–43. <https://doi.org/10.1108/CG-11-2018-0358>
- Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. (2014). Audit committee characteristics and executive committee characteristics and firm performance in Oman: Empirical study. *Asian Social Science*, 10(12), 98–113.

- Al-Matari, Y. A., Al-Swidi, A. K., Fadzil, F. H., & Al-Matari, E. M. (2012). Board of Directors, Audit Committee Characteristics and Performance of Saudi Arabia Listed Companies. *International Review of Management and Marketing*, 2(4), 241–251.
- Alam, M. K., Rahman, M. M., Runy, M. K., Adedeji, B. S., & Hassan, M. F. (2022). The influences of Shariah governance mechanisms on Islamic banks performance and Shariah compliance quality. *Asian Journal of Accounting Research*, 7(1), 2–16. <https://doi.org/10.1108/AJAR-11-2020-0112>.
- Albassam, W. M. (2014). Corporate Governance , Voluntary Disclosure and Financial Performance : An Empirical Analysis of Saudi Listed Firms Using A Mixed-Methods Research Design. In *Unpublished Ph.D. Thesis*.
- Alhammadi, S. (2024). Islamic finance as a driver for enhancing economic sustainability and innovation in the GCC. *Journal of Science and Technology Policy Management*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/JSTPM-11-2023-0206>.
- Almutairi, A. R., & Quttainah, M. A. (2017). Corporate governance: Evidence from Islamic banks. *Social Responsibility Journal*, 13(3), 601–624. <https://doi.org/10.1108/SRJ-05-2016-0061>.
- Alnasser, S. A. S., & Muhammed, J. (2012). Introduction to corporate governance from Islamic perspective. *Humanomics*, 28(3), 220–231. <https://doi.org/10.1108/08288661211258110>.
- Alsartawi, M., & Abdalmuttaleb. (2018). Board independence, frequency of meetings and performance. *Journal of Islamic Marketing*, 15. <https://doi.org/10.1108/JIMA-01-2018-0017>.
- Amrani, O., & Najab, A. (2023). The Impact of Multi-Layer Corporate Governance on Banks' Performance under the GFC and the COVID-19: A Cross-Country Panel Analysis Approach. *Journal of Risk and Financial Management*, 16(1), 15. <https://doi.org/10.3390/jrfm16010015>.

- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, 68(1), 29–51. [https://doi.org/10.1016/0304-4076\(94\)01642-D](https://doi.org/10.1016/0304-4076(94)01642-D).
- Aryani, Y. A., Setiawan, D., & Rahmawati, I. P. (2017). Board Meeting and Firm Performance. *Proceedings of International Conference on Economics, 2017(ICE)*, 438–444.
- Baklouti, I. (2022). Is the Sharia supervisory board a friend or an enemy of Islamic banks? *Journal of Islamic Marketing*, 13(2), 526–541. <https://doi.org/10.1108/JIMA-04-2020-0118>.
- Shari'ah Governance Policy, 1 (2019).
- Baron, R. M., & Kenny, D. a. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research. Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>.
- Ben Abdallah, M., & Bahloul, S. (2021). Disclosure, Shariah governance and financial performance in Islamic banks. *Asian Journal of Economics and Banking*, 5(3), 234–254. <https://doi.org/10.1108/ajeb-03-2021-0038>.
- Ben Barka, H., & Legendre, F. (2016). Effect of the board of directors and the audit committee on firm performance: a panel data analysis. *Journal of Management & Governance, Forthcoming*, 21(3), 1–19. <https://doi.org/10.1007/s10997-016-9356-2>.
- BenSaid, Y. R. (2023). Shariah governance and takaful financial performance: the case of listed takaful insurances. *Journal of Islamic Accounting and Business Research, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/JIABR-09-2022-0236>.
- Bilal Saeed, M., & Kashif Saeed, S. (2018). Characteristics of Shariah Supervisory Board, Corporate Governance Mechanisms and Efficiency of Islamic Banks: Evidence from Listed Banks in Asia. *Journal of Islamic Business and Management (JIBM)*, 8(1), 116–138. <https://doi.org/10.26501/jibm/2018.0801-008>.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115–143. [https://doi.org/10.1016/S0304-4076\(98\)00009-8](https://doi.org/10.1016/S0304-4076(98)00009-8).

Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1), 3–15. <https://doi.org/10.1002/job.1960>.

Boudawara, Y., Toumi, K., Wannes, A., & Hussainey, K. (2023). Shari'ah governance quality and environmental, social and governance performance in Islamic banks. A cross-country evidence. *Journal of Applied Accounting Research*. <https://doi.org/10.1108/JAAR-08-2022-0208>.

Buallay, A., & Al-Ajmi, J. (2020). The role of audit committee attributes in corporate sustainability reporting: Evidence from banks in the Gulf Cooperation Council. *Journal of Applied Accounting Research*, 21(2), 249–264. <https://doi.org/10.1108/JAAR-06-2018-0085>.

Bukair, A. A., & Abdul Rahman, A. (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>.

Chan, K. C., & Li, J. (2008). Audit committee and firm value: Evidence on outside top executives as expert-independent directors. *Corporate Governance: An International Review*, 16(1), 16–31. <https://doi.org/10.1111/j.1467-8683.2008.00662.x>.

Chen, T. (2015). Institutions, board structure, and corporate performance: Evidence from Chinese firms. *Journal of Corporate Finance*, 32, 217–237. <https://doi.org/10.1016/j.jcorpfin.2014.10.009>.

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, 87(2), 329–356. <https://doi.org/10.1016/j.jfineco.2006.08.008>.

Darko, J., Aribi, Z. A., & Uzonwanne, G. C. (2016). Corporate governance: The impact of director and board structure, ownership structure and

- corporate control on the performance of listed companies on the Ghana stock exchange. *Corporate Governance (Bingley)*, 16(2), 259–277. <https://doi.org/10.1108/CG-11-2014-0133>.
- Detthamrong, U., Chancharat, N., & Vithessonthi, C. (2017). Corporate governance, capital structure and firm performance: Evidence from Thailand. *Research in International Business and Finance*, 42, 689–709. <https://doi.org/10.1016/j.ribaf.2017.07.011>.
- DeZoort, F. T., Hermanson, D. R., Archambeault, D. S., & Reed, S. A. (2002). Audit Committee Effectiveness: A Synthesis of the Empirical Audit Committee Literature. *Journal of Accounting Literature*, 21, 38–75.
- DeZoort, F. T., Hermanson, D. R., & Houston, R. W. (2003a). Audit committee support for auditors: The effects of materiality justification and accounting precision. In *Journal of Accounting and Public Policy* (Vol. 22, Issue 2, pp. 175–199). Elsevier. [https://doi.org/10.1016/S0278-4254\(03\)00007-3](https://doi.org/10.1016/S0278-4254(03)00007-3).
- DeZoort, F. T., Hermanson, D. R., & Houston, R. W. (2003b). Audit committee member support for proposed audit adjustments: A source credibility perspective. In *Auditing* (Vol. 22, Issue 2, pp. 189–205). <https://doi.org/10.2308/aud.2003.22.2.189>.
- DeZoort, F. T., & Salterio, S. E. (2001). The effects of corporate governance experience and financial-reporting and audit knowledge on audit committee members' judgments. *Auditing*, 20(2), 31–47. <https://doi.org/10.2308/aud.2001.20.2.31>.
- Eldaia, M., Hanefah, M., & Marzuki, A. (2023). Moderating role of Shariah committee quality on relationship between board of directors effectiveness and the performance of Malaysian Takaful. *Competitiveness Review*, 33(1), 62–84. <https://doi.org/10.1108/CR-09-2021-0123>.
- Elsiddig, A. I. (2017). The Impact of Corporate Governance on Islamic Banking Performance: The Case of UAE Islamic Banks. *Journal*

of Banking & Finance, 2017(09), 1–62. <https://doi.org/10.5281/zenodo.889020>.

Fajembola, O. D., Abdul Rahman, N. A., & Md-Rus, R. (2018). Audit committee and banking system stability : A conceptual framework. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 463–474. <https://doi.org/10.6007/IJARBS/v8-i6/4251>.

Ghalayini, A. M., & Noble, J. S. (1996). The changing basis of performance measurement. In *International Journal of Operations and Production Management* (Vol. 16, Issue 8, pp. 63–80). MCB UP Ltd. <https://doi.org/10.1108/01443579610125787>.

Grassa, R. (2016). Corporate governance and credit rating in Islamic banks: Does Shariah governance matters? *Journal of Management and Governance*, 20(4), 875–906. <https://doi.org/10.1007/s10997-015-9322-4>.

Grassa, R., & Matoussi, H. (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), 346–362. <https://doi.org/10.1108/IMEFM-01-2013-0001>.

Habib, F. (2023). *Islamic Finance and Sustainability: The Need to Reframe Notions of Shariah Compliance, Purpose, and Value* (pp. 15–40). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-13302-2_2.

Hamdi, F. M., & Zarai, M. A. (2014). Corporate Governance Practices and Earnings Management in Islamic Banking Institutions. *Research Journal of Finance and Accounting*, 5(9), 81–97.

Hassan, M. K., & Mollah, S. (2014). Corporate Governance, Risk-Taking and Firm Performance of Islamic Banks During Global Financial Crisis. *Finance and Development in Islamic Economies Conference (2014) 1-36*, 1–36. https://www.researchgate.net/publication/280239124_Corporate_Governance_Risk-taking_and_Firm_Performance_of_Islamic_Banks_during_Global_Financial_Crisis.

- Hunt-Ahmed, K. (2013). Contemporary Islamic Finance: Innovations, Applications, and Best Practices. In *Contemporary Islamic Finance: Innovations, Applications, and Best Practices*. John Wiley & Sons. <https://doi.org/10.1002/9781118653814>.
- Ibrahim, M. H. (2015). Issues in Islamic banking and finance: Islamic banks, Shari'ah-compliant investment and sukuk. *Pacific Basin Finance Journal*, 34, 185–191. <https://doi.org/10.1016/j.pacfin.2015.06.002>.
- Jan, A. A., Lai, F. W., & Tahir, M. (2021). Developing an Islamic Corporate Governance framework to examine sustainability performance in Islamic Banks and Financial Institutions. *Journal of Cleaner Production*, 315(March 2020), 128099. <https://doi.org/10.1016/j.jclepro.2021.128099>.
- Kabir, R., & Thai, H. M. (2017). Does corporate governance shape the relationship between corporate social responsibility and financial performance? *Pacific Accounting Review*, 29(2), 227–258. <https://doi.org/10.1108/PAR-10-2016-0091>.
- Kallamu, B. S., Saat, N. A. M., & Mohd Saat, N. A. (2015). Audit committee attributes and firm performance: Evidence from Malaysian finance companies. *Asian Review of Accounting*, 23(3), 206–231. <https://doi.org/10.1108/ARA-11-2013-0076>.
- Kang, S.-A., & Kim, Y.-S. (2011). Does Earnings Management Amplify The Association Between Corporate ... *The International Business & Economics Research Journal*, 10(2), 53–66.
- Khan, S., & Kamal, Y. (2024). Corporate board, audit committee and earnings manipulation: Does the corporate regulation matter? An emerging economy perspective. *Corporate Governance (Bingley)*, 24(4), 831–864. <https://doi.org/10.1108/CG-01-2023-0013>.
- Khanchel, I. (2007). Corporate governance: Measurement and determinant analysis. *Managerial Auditing Journal*, 22(8), 740–760. <https://doi.org/10.1108/02686900710819625>.

- Kim, J., & Cho, H. J. (2019). Seemingly unrelated regression tree. *Journal of Applied Statistics*, 46(7), 1177–1195. <https://doi.org/10.1080/02664763.2018.1538327>.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113–1155. <https://doi.org/10.1086/250042>.
- Laili, N., Ghani, A., Ariffin, N. M., Rahim, A., & Rahman, A. (2023). The extent of mandatory and voluntary Shariah compliance disclosure: evidence from Malaysian Islamic financial institutions. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-10-2021-0282>.
- Law, S. H. (2018). *Applied Panel Data Analysis-Short Panels* (1st ed.). UPM Press.
- Li, T. Y., Ching, L. S., Shanmugaretnam, S., & Gaik, B. T. B. (2024). Panel Data Analysis on the Impact of Corporate Governance on Firm Performance: Evidence from Bursa Malaysia Companies with Good CG Disclosures. *Management and Accounting Review*, 23(1), 357–375. <https://doi.org/10.24191/mar.v23i01-12>.
- Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristics and Chinese bank performance. *Journal of Banking and Finance*, 37(8), 2953–2968. <https://doi.org/10.1016/j.jbankfin.2013.04.018>.
- Lin, Y., Yeh, Y. M. C., & Yang, F. (2014). Supervisory quality of board and firm performance: A perspective of board meeting attendance. *Total Quality Management and Business Excellence*, 25(3–4), 264–279. <https://doi.org/10.1080/14783363.2012.756751>.
- Liu, Y., Miletkov, M. K., Wei, Z., & Yang, T. (2015). Board independence and firm performance in China. *Journal of Corporate Finance*, 30, 223–244. <https://doi.org/10.1016/j.jcorpfin.2014.12.004>.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A Comparison of Methods to Test Mediation and Other

- Intervening Variable Effects. *Psychological Methods*, 7(1), 83–104. <https://doi.org/10.1037/1082-989X.7.1.83>.
- Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure: Evidence from Singapore. *Journal of Corporate Finance*, 7(3), 235–256. [https://doi.org/10.1016/S0929-1199\(01\)00021-9](https://doi.org/10.1016/S0929-1199(01)00021-9).
- Mansoor, M., Ellahi, N., & Malik, A. (2019). Corporate Governance and Credit Rating: Evidence of Shariah Governance from Pakistan Islamic Banks. *Management, & Applied Sciences & Technologies*, 10(18), 10–18. <https://doi.org/10.14456/ITJEMAST.2019.251>.
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in Organisational Behavior. *Journal of Organizational Behavior*, 27(8), 1031–1056. <https://doi.org/10.1002/job.406>.
- Matoussi, H., & Grassa, R. (2012). Is Corporate Governance Different for Islamic Banks? A Comparative Analysis Between the Gulf Cooperation Council Context and The Southeast Asia Context. *The Economic Research Forum (ERF)*, 1–30.
- Mbah, C., Peremans, K., Van Aelst, S., & Benoit, D. F. (2019). Robust Bayesian seemingly unrelated regression model. *Computational Statistics*, 34(3), 1135–1157. <https://doi.org/10.1007/s00180-018-0854-3>.
- Mohd Zain, A. F., & Wan Abdullah, A. W. (2024). Shariah Governance Disclosure : A Key to Financial Success through Governance Mechanisms in Islamic Banks. *Asian Journal of Business and Accounting*, 17(2), 71–111. <https://doi.org/https://doi.org/10.22452/ajba.vol17no2.3>.
- Mohd Zain, F. A., Muda, W. A. W. A., Muhamad, S., Tajuddin, S. A. F. S. A., & Abdullah, H. (2023). Strengthening governance mechanisms and corporate social responsibility disclosure: Drivers of performance in Islamic banks. *Journal of Asian Scientific Research*, 13(4), 149–167. <https://doi.org/10.55493/5003.v13i4.4926>.

- Mohd Zain, F. A., Wan Abdullah, W. A., & Percy, M. (2021). Voluntary adoption of AAOIFI disclosure standards for takaful operators: the role of governance. *Journal of Islamic Accounting and Business Research*, 12(4), 593–622. <https://doi.org/10.1108/JIABR-08-2018-0119>.
- Mollah, S., Hassan, M. K., Al Farooque, O., & Mobarek, A. (2017). The governance, risk-taking, and performance of Islamic banks. *Journal of Financial Services Research*, 51(2), 195–219. <https://doi.org/10.1007/s10693-016-0245-2>.
- Mollah, S., & Zaman, M. (2015). Shari’ah supervision, corporate governance and performance: Conventional vs. Islamic banks. *Journal of Banking and Finance*, 58, 418–435. <https://doi.org/10.1016/j.jbankfin.2015.04.030>.
- Muhamad, S. F., Zain, F. A. M., Samad, N. S. A., Azira, A. H., & Yasoa’, M. R. (2022). Measuring Sustainable Performance of Islamic Banks: Integrating the principles of Environmental, Social and Governance (ESG) and Maqasid Shari’ah. *IOP Conference Series: Earth and Environmental Science*, 1102(1). <https://doi.org/10.1088/1755-1315/1102/1/012080>.
- Nguyen, T., Locke, S., & Reddy, K. (2014). A dynamic estimation of governance structures and financial performance for Singaporean companies. *Economic Modelling*, 40, 1–11. <https://doi.org/10.1016/j.econmod.2014.03.013>.
- Nomran, N. M., & Haron, R. (2020). A systematic literature review on Sharī’ah governance mechanism and firm performance in Islamic banking. *Islamic Economic Studies*, 27(2), 91–123. <https://doi.org/10.1108/ies-06-2019-0013>.
- Nomran, N. M., Haron, R., & Hassan, R. (2017). Bank Performance and Shari’ah Supervisory Board Attributes of Islamic Banks : Does Bank Size Matter ? *Journal of Islamic Finance*, 6(Special Issue), 174–187. <https://doi.org/10.12816/0047348>.
- Nomran, N. M., Haron, R., & Hassan, R. (2018). Shari’ah Supervisory Board Characteristics Effects on Islamic Banks’ Performance: Evidence from

- Malaysia. *International Journal of Bank Marketing*, 36(2), 290–304. <https://doi.org/10.1108/IJBM-12-2016-0197>.
- On Banking Supervision, B. C. (2015). Corporate governance principles for banks. In *Bank for International Settlements* (Issue October).
- Orazalin, N., Mahmood, M., & Jung Lee, K. (2016). Corporate governance, financial crises and bank performance: lessons from top Russian banks. *Corporate Governance: The International Journal of Business in Society*, 16(5), 798–814. <https://doi.org/10.1108/CG-10-2015-0145>.
- Organisation for Economic Cooperation and Development. (2015). *G20/OECD Principles of Corporate Governance*. OECD Publishing. <https://doi.org/10.1787/9789264236882-en>.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>.
- Qiu, Y., Shaukat, A., & Tharyan, R. (2016). Environmental and social disclosures: Link with corporate financial performance. *British Accounting Review*, 48(1), 102–116. <https://doi.org/10.1016/j.bar.2014.10.007>.
- Rahman, A. S., & Haron, R. (2019). The Effect of Corporate Governance on Islamic Banking Performance: A Maqasid Shari'ah Index Approach on Indonesian Islamic Banks. *Journal of Islamic Finance (Special Issue)*, 001–018.
- Rashid, A. (2018). Board independence and firm performance: Evidence from Bangladesh. *Future Business Journal*, 4(1), 34–49. <https://doi.org/10.1016/J.FBJ.2017.11.003>.
- Reddy, K., Locke, S., & Scrimgeour, F. (2010). The efficacy of principle-based corporate governance practices and firm financial performance: An empirical investigation. *International Journal of Managerial Finance*, 6(3), 190–219. <https://doi.org/10.1108/17439131011056224>.

- Rose, C. (2016). Firm performance and comply or explain disclosure in corporate governance. *European Management Journal*, 34(3), 202–222. <https://doi.org/10.1016/j.emj.2016.03.003>.
- Sallemi, N., & Zouari, G. (2023). Shariah board and takaful performance: mediating role of corporate social responsibility. *International Review of Economics*, 71(2), 1–30. <https://doi.org/10.1007/s12232-023-00439-2>.
- Salloum, C., Azzi, G., & Gebrayel, E. (2014). Audit Committee and Financial Distress in the Middle East Context: Evidence of the Lebanese Financial Institutions. *International Strategic Management Review*, 2(1), 39–45. <https://doi.org/10.1016/j.ism.2014.09.001>.
- Shamsudin, S. M., Abdullah, W. R. W., & Osman, A. H. (2018). Corporate Governance Practices and Firm Performance After Revised Code of Corporate Governance: Evidence from Malaysia. In *State-of-the-Art Theories and Empirical Evidence* (pp. 49–63). Springer Singapore. https://doi.org/10.1007/978-981-10-6926-0_4.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *Journal of Business Ethics*, 135(3), 569–585. <https://doi.org/10.1007/s10551-014-2460-9>.
- Srairi, S. (2015). Corporate governance disclosure practices and performance of Islamic banks in GCC countries. *Journal of Islamic Finance*, 4(2), 1–17.
- Syed Fuzi, S. F., Abdul Halim, S. A., & Julizaerma, M. K. (2016). Board Independence and Firm Performance. *Procedia Economics and Finance*, 37, 460–465. [https://doi.org/10.1016/S2212-5671\(16\)30152-6](https://doi.org/10.1016/S2212-5671(16)30152-6).
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using Multivariate Statistics* (Sixth Edit). Pearson.
- Tashkandi, A. A. (2022). Shariah supervision and corporate governance effects on Islamic banks' performance: evidence from the GCC countries. *Journal of Business and Socio-Economic Development*. <https://doi.org/10.1108/jbsed-02-2022-0024>.

- Ullah, M. H., & Khanam, R. (2018). Whether Shari'ah compliance efficiency is a matter for the financial performance. *Journal of Islamic Accounting and Business Research*, 9(2), 183–200. <https://doi.org/10.1108/jiabr-01-2016-0001>.
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How Reliable are Measurement Scales? External Factors with Indirect Influence on Reliability Estimators. *Procedia Economics and Finance*, 20, 679–686. [https://doi.org/10.1016/s2212-5671\(15\)00123-9](https://doi.org/10.1016/s2212-5671(15)00123-9).
- Wan Abdullah, W. A., Percy, M., & Stewart, J. (2015). Determinants of Voluntary Corporate Governance Disclosure: Evidence from Islamic Banks in the Southeast Asian and the Gulf Cooperation Council Regions. *Journal of Contemporary Accounting and Economics*, 11(3), 262–279. <https://doi.org/10.1016/j.jcae.2015.10.001>.
- Wang, D. H.-M., & Huynh, Q. L. (2013). Complicated Relationships among Audit Committee Independence, Nonfinancial and Financial Performance. *Journal of Knowledge Management, Economics and Information Technology*, 3(5), 1–19.
- Wilbanks, R. M., Hermanson, D. R., & Sharma, V. D. (2017). Audit committee oversight of fraud risk: The role of social ties, professional ties, and governance characteristics. *Accounting Horizons*, 31(3), 21–38. <https://doi.org/10.2308/acch-51695>.

APPENDICES

Appendix 1: Measurement of Variables

Variable	Measurement
<i>Performance</i>	<i>ROAA</i> = Net income divided by total average asset
	<i>ROAE</i> = Net income divided by total average equity
	<i>Tobin's Q</i> = The total market value of the Islamic bank divided by the total asset value of the Islamic bank.
<i>CGSTRENGTH</i>	<i>Board size + Board independence + board diligence + AC size + AC independence + AC financial expertise + AC diligence</i>
	<i>Board Size</i> = 1 for the number of directors on the board above the median of 8, 0 otherwise
	<i>Board Independence</i> = 1 for the number of independent directors on the board above the median of 0.667, 0 otherwise
	<i>Board Diligence</i> = 1 for the number of the meeting held above the median of 5, 0 otherwise
	<i>AC Size</i> = 1 for the number of members in the AC above the median of 4, 0 otherwise
	<i>AC Independence</i> = 1 for the number of Independence AC above the median of 0.667, 0 otherwise
	<i>AC Financial Expertise</i> = 1 for the number of AC financial expertise above the median of 0.750, 0 otherwise
	<i>AC Diligence</i> = 1 for the number of the AC meeting held above the median of 4, 0 otherwise
	<i>SSBSTRENGTH</i>
	<i>SSB size</i> = 1 for the number of SSB members above the median of 4, 0 otherwise
	<i>SSB Cross-memberships</i> = 1 for the average number of cross-memberships of the SSB members in institutions offering Islamic financial services above the median of 3.250, 0 otherwise
	<i>SSB Financial Expertise</i> = 1 for the number of SSB financial expertise above the median of 0.333, 0 otherwise
<i>CGDisclosure</i>	Disclosure's index incorporates items from the AAOIFI Governance Standards for Islamic Financial Institutions (GSIFI) (AAOIFI, 2015)5 auditing standards 2 codes of ethics and 7 governance standards that AAOIF1 has issued for the international Islamic finance industry. These standards give guidance on; amongst others presentation of financial statements for Islamic financial institutions (IFIs, the IFSB's Guiding Principles on Corporate Governance, The OECD's Principles of Corporate Governance (Organisation for Economic Cooperation and Development, 2015), the BCBS Paper, and other relevant literature on CG disclosures.

<i>SIZE</i>	Total asset of the Islamic banks (Natural logarithm of total assets)
<i>PRCL</i>	Overall23ombined index scores of political rights and civil liberties based on the work of Gastil (1990) and Freedom House (2014) for the given nation: 1 (freedom) to 14 (repression)
<i>LEGAL</i>	1 if Common law, 0 otherwise
<i>Leverage</i>	Total debt divided by total asset
<i>GDP</i>	The annualised growth rate of GDP per capita
<i>MuslimPop</i>	Percentage of the Muslim population (Number of Muslim populations divided by total number of population)

Appendix 2: Summary of CG Disclosure Checklist

No	Item	Number of Variable
1	General	2
2	Fair treatment of equity-holders, GSIFI No. 6	6
3	Equitable treatment of fund providers and other significant stakeholders	9
4	Fit and proper conditions for board and management	3
5	Effective oversight	16
6	Audit and governance committee	3
7	Risk management	10
8	Avoidance of conflicts of interest	1
9	Appropriate compensation policy oversight	6
10	Code of conduct and ethics	1
11	Appropriate enforcement of governance principles and standards	1
	Total	58

Appendix 3: Robustness Result Using Generalised Method of Moments (GMM) Estimations (Arellano and Bover, 1995)

Variable	ROAA	ROAE	Tobin's Q
Coef	-0.0039	0.0263	-0.0064
CG Strength	0.3121*** (0.000)	0.3454*** (0.000)	0.1411 (0.169)
SSB Strength	0.3792*** (0.000)	0.3779*** (0.000)	0.4780*** (0.000)
Size	-0.1203 (0.542)	-0.0986 (0.621)	-0.2599 (0.365)
PRCL	0.1659 (0.126)	-0.1146 (0.302)	0.0299 (0.850)
Legal	-0.3185*** (0.000)	-0.2478*** (0.003)	-0.1368 (0.251)
Lev	-0.0079 (0.871)	-0.057 (0.756)	0.0555 (0.437)
GDP	0.1164** (0.027)	-0.0125 (0.816)	0.0600 (0.436)
Muslim Pop	0.0683 (0.429)	-0.2107** (0.017)	0.2927** (0.021)
Observation (N)	790	790	790
Wald chi2 (9)	194.30	185.81	101.81
Prob > chi2	0.000	0.000	0.000
GMM-type	L (2/.) . ROAA	L (2/.) . ROAE	L (2/.) . Tobin's Q

ROAA= Return on average assets; **ROAE**= Return on average equity; **Tobin's Q**= Tobin's Q; **CG Strength**= Index of CG mechanisms (BOD size, BOD independence, BOD diligence, AC size, AC independence, AC financial expert and AC diligence); **SSB Strength**= Index of SSB mechanisms (SSB size, SSB cross-membership and SSB financial expertise); **SIZE**= Log total asset; **PRCL**= Political right and civil liberties; **Legal**= legal systems of countries; **Lev**= Leverage of Islamic bank, **GDP**= Gross domestic product; **Muslim Pop**= Muslim population

Notes:

*** Significant at 1% level; ** Significant at 5% level; and * Significant at 10% level

The sample of Islamic banks panel data runs for 2012 to 2021 (strongly balanced)

Appendix 4: Robustness Result Using Generalised Method of Moments (GMM) Estimations (Blundell and Bond, 1998)

Variable	ROAA	ROAE	Tobin's Q
Coef	0.0469	0.0558	-0.0083
CG Strength	0.3111*** (0.000)	0.3688*** (0.000)	0.1443 (0.154)
SSB Strength	0.3736*** (0.000)	0.3920*** (0.000)	0.4851*** (0.000)
Size	-0.1123 (0.478)	-0.0306 (0.828)	-0.2652 (0.225)
PRCL	0.1483 (0.168)	-0.0906 (0.407)	0.0119 (0.939)
Legal	-0.3163*** (0.000)	-0.2374*** (0.005)	-0.1351 (0.249)
Lev	-0.0030 (0.951)	-0.0250 (0.616)	0.0577 (0.414)
GDP	0.1203** (0.024)	-0.0295 (0.578)	0.0446 (0.560)
Muslim Pop	-0.0549 (0.523)	-0.1850** (0.034)	0.3158*** (0.010)
Observation (N)	790	790	790
Wald chi2 (9)	219.63	226.65	101.81
Prob > chi2	0.000	0.000	0.000
GMM-type	L (2/.) . ROAA	L (2/.) . ROAE	L (2/.) . Tobin's Q

ROAA= Return on average assets; **ROAE**= Return on average equity; **Tobin's Q**= Tobin's Q; **CG Strength**= Index of CG mechanisms (BOD size, BOD independence, BOD diligence, AC size, AC independence, AC financial expert and AC diligence); **SSB Strength**= Index of SSB mechanisms (SSB size, SSB cross-membership and SSB financial expertise); **SIZE**= Log total asset; **PRCL**= Political right and civil liberties; **Legal**= legal systems of countries; **Lev**= Leverage of Islamic bank, **GDP**= Gross domestic product; **Muslim Pop**= Muslim population

Notes:

*** Significant at 1% level; ** Significant at 5% level; and * Significant at 10% level
The sample of Islamic banks panel data runs for 2012 to 2021 (strongly balanced)