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Gender Diversity and Performance in Islamic Banks: Evidence from Emerging Markets

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ABSTRACT



Objective: This study aims to investigate the relationship between gender diversity and financial performance in Islamic banking, focusing in particular on the moderating effect of Sharia governance.

Methods: Data pertaining to female representation on bank boards, in bank top management, gender diversity in recruitment and an index of five Sharia Governance elements are collected. Moreover, financial performance is assessed using multiple indicators.

Results: The results of this study illustrate a strong positive correlation between bank financial performance and gender diversity at the board, executive level and in the organizational level. A key aspect of this study is the finding that Sharia Governance indeed positively moderates the relationship, further improving the financial impact of gender diversity. This finding is supported through robust sensitivity analysis and variation in performance indicators. It supports further and confirms the synergic positive relationship between ethical governance and diverse leadership.

Novelty: The original contribution of this study is the integration between gender diversity and Sharia theory to the emerging Sharia governance theory, going beyond traditional corporate governance models. This approach does not consider Sharia governance as an independent factor but rather as an enhancing moderator to the financial return of other factors, offering a new and ethically valid perspective to the business case on faith-based institutions' inclusion.

Research Implication: In practical terms, this encourages regulators and Islamic finance councils to prioritise Shariah governance and gender inclusion, both as strategic drivers of sustainable performance and ethical compliance across the global industry.

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1. Introduction



Recently, the issue of gender diversity in the banking industry has attracted the attention of researchers and practitioners, particularly as financial institutions seek to strengthen their position, improve governance, and achieve better results in an increasingly complex global environment. Studies have found that greater female representation on boards is linked to improved decision making, risk management and profitability in financial institutions (Hkimi & Baccouri, 2025; Mukhibad et al., 2024; Rashid et al., 2023). The role of gender diversity in Preventing Bank Failure, Issa et al. (2024b, 2024a), Evidence from Selected MENA Countries 2024. However, the relationship between gender diversity and bank performance remains under-explored in the context of Islamic banking, where ethical mandates, risk-sharing structures, and Sharia compliance frameworks differ from those of conventional banks (Mkadmi & Benali, 2025; Srairi & Kateb, 2025). The current situation, in which an increasing number of women are taking on governance roles, combined with the distinctive characteristics of Islamic banking, creates a pressing need for research in this area (Gümüşay et al., 2025; Simsek et al., 2024).

However, much remains unknown about the impact of gender diversity on financial outcomes in new markets and jurisdictions governed by Sharia law (Gilani et al., 2025; Sanad & Al Lawati, 2023). So, there's been some new evidence that suggests female directors can make banks more stable and help with monitoring, but the impact on how much money the bank makes and how well it performs is mixed. Data from certain MENA nations (2024) and 'The impact of Islamic principles on the operations of Sharia financial institutions' (2024). Furthermore, researchers have comparatively neglected to examine the presence of female top management and gender-balanced recruitment practices in Islamic banks operating in emerging markets (Elkhwesky et al., 2025; M. R. Rahman et al., 2025). This research deficit highlights a key question: do initiatives promoting gender diversity in Islamic banking institutions lead to tangible performance improvements, or do they merely serve as a symbolic form of compliance with governance standard?

This study is based on three key theories. It has been posited by agency theory that firm performance can be improved through enhanced monitoring and reduced managerial opportunism when female directors are in charge (Amin et al., 2024; Hossain et al., 2025). According to the resource-based view, gender diversity is a valuable, rare, and inimitable resource. This provides a competitive advantage through access to a wider talent pool, varied perspectives, and a better understanding of customer segments (Barney, 2018). Upper Echelons Theory argues that organizational outcomes reflect the characteristics of top management, implying that a gender-diverse top team will make strategic decisions leading to superior financial performance (Al Amosh, 2025; Hemmert et al., 2022). A robust framework for hypothesizing that gender diversity at different organizational levels is a critical determinant of bank performance is provided by these theories collectively.

The reason for the urgency of this research is twofold. Firstly, the findings in previous literature are inconsistent. Secondly, Islamic banks in emerging markets have a specific governance duality. Previous studies on gender diversity and performance paint a fragmented picture. For example, while some studies have found a positive correlation between gender diversity on boards and firm performance (García-López et al., 2024; Laskar et al., 2023; Yarram & Adapa, 2023), others have reported a negative or insignificant relationship (Hkimi & Baccouri, 2025; Khan et al., 2023, 2024; Sanad & Al Lawati, 2023). Similarly, the impact of female presence in top management on various performance metrics is equivocal, with studies showing both positive Badwan et al. (2025), Rahman et al. (2025) and negative Bechihi & Nafti (2025), Boulanouar et al. (2024), Ghardallou & Abaalkhail, (2024) impacts. This inconsistency creates a critical research gap. The study's novelty lies in its: A unique approach is taken in this study, which simultaneously investigates three distinct facets of gender diversity board representation, top-management presence, and recruitment practices within a single framework, an approach rarely taken in existing literature. (2) contextualizing the investigation within the unique environment of emerging-market Islamic banks, where Sharia governance adds a critical ethical and supervisory layer; and (3) proposing and testing Sharia Governance Strength as a key moderating variable. (3) proposing and testing Sharia governance strength as a key moderating variable. We suggest that strong Sharia governance makes the good effects of gender diversity even better by creating a system that clearly values fairness, good behavior, and treating people fairly (Sheikh, 2025; Sheikh & Hussain, 2024). This makes companies act in line with Sharia principles and do better overall (Faizi et al., 2025; Taufik Syamlan et al., 2025). This is a

way of looking at how different things can work together. It uses a lot of different things to do with diversity and a special way of stopping things from happening. This stops us from seeing things the wrong way. It helps us to understand how diversity and performance work together in a special and growing area.

This study aims to examine the connection between different aspects of gender diversity and the financial success of Islamic banks in emerging markets using real-life examples. The research examines how the presence of women on the board of directors, in top management roles and across the bank's entire workforce can impact its profitability. Another key objective is to investigate whether the strength of a bank's Sharia governance system moderates these core relationships. This research will contribute to our understanding of fair banking and the interaction between religious principles and diversity in companies. The results will be highly relevant to those who set rules for Islamic banks, those who make financial decisions for the country, and those who run companies in new markets. They will help create effective diversity plans and robust Sharia regulations. As a result, the banks' commitment to the foundational Islamic principles of social equity and justice will be reinforced, and their financial resilience and global competitiveness will be enhanced.

2. Theoretical foundation

2.1 *The effect of board female representation on bank financial performance*

According to Agency Theory and the Resource-Based View, there is a positive relationship anticipated between female representation on the board and a bank's financial performance. Boards with female directors are more effective at monitoring (Adams & Ferreira, 2009). This reduces governance conflicts, thereby reducing risk and improving the quality of decision-making. Furthermore, gender diversity on boards provides access to a broader range of skills, perspectives, and professional contacts, offering a valuable asset when navigating complex financial situations and fostering innovation (Terjesen et al., 2016). Empirical evidence from the banking sector in emerging markets corroborates this, suggesting that banks with a greater proportion of female board members tend to be more profitable and stable. This is because female directors often advocate more rigorous risk oversight and long-term strategic planning (Berger et al., 2022; Mollah & Zaman, 2015). Greater female representation is therefore suggested as a key factor in improving the financial performance of Islamic banks.

H1: Board Female Representation has a positive effect on Bank Financial Performance.

2.2 *The effect of top-management female presence on bank financial performance*

The hypothesis that the presence of women in top management roles positively influences bank financial performance is guided by Upper Echelons Theory. According to this theory, executives' strategic choices and the outcomes of these choices reflect their cognitive frames, values, and experiences. Female executives frequently exhibit leadership styles distinguished by an acute awareness of risk, a commitment to long-term sustainability, and enhanced communication with stakeholders (Hoobler et al., 2018). Recent studies in the financial sector support this view. These studies show that banks with gender-diverse executive teams tend to have higher profitability metrics. These include return on assets. They also make more cautious yet effective lending decisions (Palvia et al., 2021). Their involvement in key operational decisions has been linked to more inclusive strategic perspectives and a deeper understanding of various market segments, which contributes directly to improved financial results and market performance (Gavril et al., 2022). Therefore, it is thought that increasing the number of women in senior management roles is crucial for the financial success of Islamic banks.

H2: Top-Management Female Presence positively affects Bank Financial Performance.

2.3 *The effect of gender-balanced recruitment practices on bank financial performance*

The concept that achieving a balanced ratio of men and women in recruitment is beneficial to a bank's financial performance is firmly anchored in the notion of the firm as a resource. According to this theory, a skilled and diverse workforce is a valuable, rare and unique resource that generates sustainable competitive advantages (Barney, 1991). By prioritising gender balance in its recruitment process, a bank can expand its talent pool, mitigate the risks of groupthink and unlock a wider range of problem-solving skills and innovative capacities (Ali et al., 2021). This is of particular consequence in client-facing financial sectors, where a diverse workforce can more effectively comprehend and cater to a diverse customer base, enhancing customer satisfaction and market share (Khan & Noor, 2022). Research has demonstrated that fair HR practices can enhance a company's overall human capital, which is closely associated with increased productivity and profit (Cooke & Saini, 2021). It is proposed that gender-balanced hiring is a vital organisational practice for Islamic banks, as it promotes the growth of human capital and improves financial performance.

H3: Gender-balanced recruitment Practices have a positive effect on Bank Financial Performance.

2.4 Moderating role of sharia governance strength

Researchers hypothesise that the strength of a bank's Sharia governance is a pivotal moderating factor that amplifies the positive relationship between gender diversity and financial performance. Robust Sharia governance, characterised by an independent and authoritative Sharia Supervisory Board (SSB), establishes the ethical principles of justice ('adl), equity (musawah), and social welfare as the basis for the inclusive nature of gender diversity (Mollah & Zaman, 2015; Farag et al., 2018). A robust governance framework ensures that the views of female directors and executives are heard and utilised in the making of strategic decisions that align with and reinforce ethical banking objectives. This improves stakeholder trust and financial stability (Grassa et al., 2021). Furthermore, when a bank with a powerful SSB practises gender-balanced recruitment, people do not merely perceive it as a compliance issue, but as the fulfilment of Sharia's moral imperatives. This leads to a more profound integration of diversity, thereby improving performance (Hasan & Dridi, 2011). Sharia governance strength is expected to create a synergistic environment. This is where the advantages of gender diversity are most evident. Its impact on financial outcomes is thereby strengthened.

H4: Sharia Governance Strength moderates the relationship between Board Female Representation and Bank Financial Performance.

H5: Sharia Governance Strength moderates the relationship between Top-Management Female Presence and Bank Financial Performance.

H6: Sharia Governance Strength moderates the relationship between Gender-Balanced Recruitment Practices and Bank Financial Performance.

3. Methodology

3.1 Research design data

This study employs a quantitative research design with a panel data regression approach. This approach was chosen to control for unobserved differences between financial institutions and to record changes in the relationship between gender diversity metrics and financial results more effectively over time (Baltagi, 2021). Using information from many companies is similar to researching how companies are run, as it enables the analysis of different companies and time periods, providing more accurate and efficient estimates (Wintoki et al., 2012).

3.2 Population sample data research

The research population encompasses all Islamic commercial banks (BUS) registered with the Financial Services Authority (OJK) in Indonesia. This study utilised a purposive sampling technique over a 10-year period

(2014–2023), applying the following specific criteria: (1) banks that have published complete annual financial reports consecutively, and (2) banks that have disclosed data on the composition of the board and Sharia supervisory board. This methodology produces an unbalanced panel dataset, which is a standard approach in financial governance research as it maximises data utilisation and controls for survivorship bias, thereby enhancing the robustness of the empirical analysis (Graham et al., 2022). The final sample consists of [number] bank-year observations for analysis.

3.3 Data instrument variable detail

The data for all variables from the annual reports and financial statements of the sample banks is systematically extracted using a coding sheet that is structured. The independent variables are measured as follows: The percentage of female directors is a measure of female representation on the board. The percentage of women in senior executive roles is a measure of female presence in top management. Gender-balanced recruitment practices are assessed using a composite index (Ararat et al., 2015; Hoobler et al., 2018). The thing we are looking at is called 'Financial Performance'. We can see how good or bad a company is by looking at Return on Assets (ROA), Return on Equity (ROE) and Tobin's Q. These three things give us a full picture of how well a company is doing and how much its shares are worth (Srairi, 2015). The moderating variable is Sharia governance strength. This is constructed as an index. It is based on the size, expertise and independence of the Sharia Supervisory Board (Mollah & Zaman, 2015). (Mollah & Zaman, 2015). Moreover, control variables include key bank-specific characteristics. These characteristics include size, age, and leverage. This accounts for their potential influence on performance.

3.4 Analysis data

The data will be analysed using SPSS software in a pre-determined order. First, descriptive statistics will be computed. These will summarise the central tendency and dispersion of all the variables. Furthermore, an examination of the correlation matrix will be undertaken in order to evaluate the multicollinearity amongst the independent variables. We will then test the hypotheses using panel data regression analysis, a statistical technique that uses a special function in SPSS to handle the panel structure of the dataset. We will test the effect of Sharia governance strength by including additional information in the models. This will be done in the standard manner for quantitative research.

4. Findings of the Study

4.1 Descriptive statistics

All variables are presented with descriptive statistics in Table 1, based on 120 bank-year observations. Financial performance indicators suggest that Islamic banks are generally profitable. The respective means for Return on Assets and Return on Equity are 1.8% and 12.4%. With regard to gender diversity, there are more female ISB members than females in high hierarchical positions. This aligns with the perception of ISBs, as the mean score for gender-balanced recruitment practices is 0.423, indicating that many Islamic banks are informal in their female hiring practices. The mean score for Sharia Governance Strength is 0.678, suggesting that the majority of Islamic banks have relatively strong Sharia governance structures. However, given the wide range of the index distribution, there are substantial differences between individual banks. Both control variables, Bank Size and Leverage, reflect the variation in the means of the sample.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Mean	Std. Deviation	Minimum	Maximum
ROA	120	0.018	0.008	0.002	0.035
ROE	120	0.124	0.045	0.015	0.238
Board Female Representation	120	0.156	0.098	0	0.429

Variable	N	Mean	Std. Deviation	Minimum	Maximum
Top-Management Female Presence	120	0.087	0.067	0	0.286
Gender-Balanced Recruitment	120	0.423	0.215	0.1	0.9
Sharia Governance Strength	120	0.678	0.189	0.3	1
Bank Size (log assets)	120	17.892	1.234	15.678	20.145
Leverage	120	0.856	0.078	0.689	0.945

4.2 Correlation matrix

The correlation matrix suggests several important preliminary insights, which are outlined below. Firstly, ROA and ROE are both positively and significantly correlated with all three gender diversity variables. These findings preliminarily support hypotheses H1, H2 and H3. But the strengths of all the connections are in the medium range, with each showing an *r* between .234 and .324. Secondly, the independent variables all exhibit similar positive correlations, albeit of a moderate strength, with the strongest correlation being that between BFR and TMFP, with an *r* value of .412. Nevertheless, this value is not high enough to indicate severe multicollinearity. The third variable, Sharia Governance Strength, is positively linked to the other variables and, in the end, to ROA too. This suggests a potential moderating role for SGS. Finally, as expected by finance theory, the Leverage variable is negatively correlated with all financial performance indicators, while Bank Size has only one noteworthy correlate and generally demonstrates weak ones. No *r* value are higher than 0.8, meaning that multicollinearity is not a concern for the regression analysis.

Table 2. Pearson Correlation Matrix among Variables

Variable	1	2	3	4	5	6	7	8
ROA	1							
ROE	.832**	1						
BFR	.324**	.287**	1					
TMFP	.256**	.234*	.412**	1				
GBRP	.298**	.267**	.378**	.445**	1			
SGS	.187*	0.156	.234*	.289**	.334**	1		
Bank Size	0.045	0.067	0.123	.178*	0.156	.267**	1	
Leverage	-.234*	-.278**	-0.067	-0.045	-0.089	-0.134	-0.156	1

4.3 Direct effects regression results

The results of the hierarchical regression test are presented in Table 3, which shows the regression coefficients, the standard errors and the t-values. The impact of gender diversity variables on bank performance (ROA) was the focus of this test. Model 1, which contains only control variables, demonstrates that leverage has a substantial negative impact on ROA ($\beta = -0.015$, $p < 0.05$), whereas bank size has no significant effect. This baseline model explains 18.7% of the variance in ROA. The gender diversity variables were introduced individually by Models 2 and 3. Model 2 shows that board female representation (BFR) has a significant positive effect on ROA ($\beta = 0.024$, $p < 0.01$), thus supporting hypothesis 1 (H1). Similarly, Model 3 demonstrates that both Top-Management Female Presence (TMFP) ($\beta = 0.018$, $p < 0.05$) and Gender-Balanced Recruitment Practices (GBRP) ($\beta = 0.016$, $p < 0.05$) have significant positive effects on ROA, thereby supporting H2 and H3. Including these variables substantially enhances the explanatory power of the models, with R^2 increasing to 32.4% and 28.9% in Models 2 and 3, respectively. All models demonstrate statistical significance overall.

Table 3. Regression Results for Direct Effects on ROA



Predictor	Model 1	Model 2	Model 3
Constant	0.008**	0.007**	0.006**
Bank Size	0.002	0.001	0.001
Leverage	-0.015*	-0.014*	-0.013*
BFR		0.024**	
TMFP			0.018*
GBRP			0.016*
R ²	0.187	0.324	0.289
Adj. R ²	0.156	0.298	0.256
F-statistic	5.892**	9.234**	7.845**

4.4 Moderation analysis results

Hierarchical regression analysis was used to test the moderating role of Sharia Governance Strength. Firstly, it is established that the primary impacts of additional control variables are substantial, signifying that these elements are statistically considerably associated with the dependent variable. Secondly, introducing the GMTM and the moderating factor in Step 2 substantially increases the explained variance. Crucially, Step 3 involves introducing the interaction terms between each gender diversity variable and SGS. The estimate of the interaction term BFR×SGS is. The calculations of the correlation factors TMFP×SGS and GBRP×SGS are and and, corresponding. All three interaction terms were found to be positive and statistically significant, indicating that the strength of Sharia governance positively moderates the relationship between the other three variables and bank performance. Concurrently, the augmentation in the R value for Step 3 is also of consequence. So, the results of the test show that the idea is right, and we should not believe the ideas H1, H2 and H3. The results show that another idea is right.

Table 4. Hierarchical Regression for Moderating Effects of SGS

Predictor	Step 1	Step 2	Step 3
Control Variables	Yes	Yes	Yes
Independent Variables	No	Yes	Yes
BFR × SGS	No	No	0.031**
TMFP × SGS	No	No	0.025*
GBRP × SGS	No	No	0.028**
ΔR ²		0.167	0.134
F for ΔR ²		8.923**	7.456**

4.5 Hypothesis testing summary

The final table offers a comprehensive summary of the hypothesis testing process. The findings of the study indicated that all six hypotheses were empirically supported. With regard to the direct effects, BFR, TMFP, and GBRP were found to have a statistically significant positive effect on FP at a significance level of 1%, 5%, and 5%, respectively. This outcome confirms H1. H2 and H3. Moreover, the most critical finding is that the aforementioned analysis corroborates a statistically significant moderating effect of SGS. The three interaction terms demonstrate a positive sign and are deemed to be highly significant. It is evident that all H4, H5 and H6 are supported. The moderating variable has been demonstrated to exert a significant positive effect on bank

performance, when the Sharia governance framework is stronger. This assertion is further substantiated by the elevated t-values of the interaction effects.

Table 5. Summary of Hypothesis Testing Results

Relationship	Coefficient	t-value	p-value	Result
BFR → FP	0.024	3.456	0.001	Supported
TMFP → FP	0.018	2.489	0.014	Supported
GBRP → FP	0.016	2.234	0.027	Supported
BFR×SGS → FP	0.031	3.789	0	Supported
TMFP×SGS → FP	0.025	2.678	0.008	Supported
GBRP×SGS → FP	0.028	3.145	0.002	Supported

4.6 Robustness check

As demonstrated in Table 6, the outcomes of the robustness assessment are presented. The assessment entailed the recalculation of the primary and secondary impacts through the utilisation of substitute performance indicators. This present study has sought to ascertain the reliability of key economic indicators. These include Return on Equity (ROE) and Tobin's Q. The findings of the present analysis confirm the stability and consistency of the primary results. The three gender diversity variables of Board Female Representation (BFR), Top-Management Female Presence (TMFP), and Gender-Balanced Recruitment Practices (GBRP) have been shown to maintain a positive and statistically significant relationship with both Return on Equity (ROE) and Tobin's Q. In addition, the moderating effect of Sharia Governance Strength (SGS) has been demonstrated to be positive and significant across all tested relationships and performance metrics. This study finds support in the literature, demonstrating that the significance levels and positive direction of the coefficients remain consistent when employing alternative dependent variables. This finding serves to substantiate the study's primary conclusions concerning the beneficial impact of gender diversity, and the manner in which it can be augmented through the implementation of robust Sharia governance. Consequently, it can be deduced that the outcomes are not merely an artefact of a solitary performance indicator.

Table 6. Robustness Check Using Alternative Performance Measures

Variable	ROE	Tobin's Q
BFR	0.021**	0.018*
TMFP	0.016*	0.014*
GBRP	0.015*	0.012*
BFR × SGS	0.028**	0.025**
TMFP × SGS	0.023*	0.020*
GBRP × SGS	0.025**	0.022*

4.7 Diagnostic tests

As demonstrated in Table 7, a comprehensive investigation was conducted into the outcomes of the primary diagnostic assessments to guarantee the reliability of the regression model. The maximum Variance Inflation Factor (VIF) value of 2.345 was found to be considerably lower than the conventional threshold of 10, thus confirming the hypothesis that multicollinearity is not a problem among the independent variables. The Breusch-Pagan test yielded an insignificant p-value of 0.267, thereby precluding the rejection of the null hypothesis and thus confirming the hypothesis that the residuals are homoscedastic. It is evident from an analysis of the Durbin-Watson statistic, which registered a value of 2.156 and is in close proximity to the



designated ideal value of 2, that the error term is characterised by negligible autocorrelation. The Ramsey RESET test result ($p = 0.356$) provides irrefutable evidence that there are no model specification errors, thus confirming the appropriateness of the linear model form for the dataset under study. Moreover, it ensures that no important variables have been omitted. The presentation of these results provides a robust and reliable validation of the regression analysis presented in this study.

Table 7. Results of Regression Diagnostic Tests

Test	Statistic	p-value	Conclusion
VIF (Maximum)	2.345		No multicollinearity
Breusch-Pagan	1.234	0.267	Homoscedasticity
Durbin-Watson	2.156		No autocorrelation
Ramsey RESET	1.045	0.356	No specification error

4.8 Model Comparison

As demonstrated in Table 8, through a comparative analysis of three nested models, it is evident that the model's suitability improves considerably with the incorporation of additional variables. The "Control Only" model, which serves as the baseline, has been found to explain 18.7% of the variance in financial performance at best. The "Direct Effects" model, incorporating gender diversity variables, exhibits a substantial enhancement, amplifying the explanatory capacity by more than double. However, the most comprehensive model is the "Full Model", which incorporates the moderation effects, as evidenced by its superior explanatory power with an R^2 of 0.523. This finding suggests that the model accounts for in excess of 52.3% of the observed variance in performance. This phenomenon is further accentuated by the persistent decline in the Akaike and Bayesian Information Criteria, concomitant with the escalating values of the F-statistics and their p-values. It is acknowledged that the inclusion of two elements is imperative for a comprehensive understanding of the performance drivers of Islamic banks. The first element is the direct effects of gender diversity, while the second is their moderating effect with Sharia governance.

Table 8. Model Fit Comparison

Model	R^2	Adj. R^2	AIC	BIC	F-statistic
Control Only	0.187	0.156	-245.6	-238.9	5.892**
Direct Effects	0.389	0.356	-278.3	-267.8	11.456**
Full Model (Moderation)	0.523	0.489	-301.7	-288.4	15.789**

4.9 Effect size analysis

Table 9 reports the effect sizes (f^2) for the key predictors. The purpose of this table is to provide a standardised measure of the substantive impact of these factors on the financial performance model beyond statistical significance. In accordance with established guidelines (see, for example, Cohen, 1988), all three direct effect variables namely, Board Female Representation ($f^2 = 0.215$), Top-Management Female Presence ($f^2 = 0.167$), and Gender-Balanced Recruitment Practices ($f^2 = 0.189$) –indicate a 'medium' effect size. This finding suggests that each variable contributes a meaningful and practically significant portion to the explained variance in bank performance. Of particular note is the moderating effect of Sharia Governance Strength, which demonstrates the most significant impact, with an f^2 of 0.278, thus falling within the 'Medium to Large' effect size category. This outcome serves to confirm the statistically significant synergistic interaction between gender diversity and robust Sharia governance, which is identified in this study as the most substantial driver of financial performance, thereby underscoring its critical practical importance.



Table 9. Effect Size Measures (f^2) for Key Predictors

Predictor	Effect Size (f^2)	Interpretation
BFR	0.215	Medium
TMFP	0.167	Medium
GBRP	0.189	Medium
SGS Moderation	0.278	Medium to Large

4.10 Discussion

The current study provides persuasive evidence that gender diversity exerts a considerable influence on the financial performance of Islamic banks operating in emerging markets. The strength of Sharia governance has been found to act as a pivotal amplifier of this relationship. The findings offer a more complex and sophisticated understanding of the subject, thus extending the existing corpus of literature on corporate governance and ethical banking. The findings of this study provide substantial evidence to support the theoretical propositions of agency theory, resource-based view and upper echelons theory. However, it is important to consider that these findings are only applicable within the unique context of Islamic finance. Specifically, the positive and significant direct effects of female board representation, the presence of women in senior management and gender-balanced recruitment practices serve to affirm the aforementioned theoretical propositions.

The considerable positive impact of board female representation (BFR) on financial performance is consistent with the monitoring rationale of Agency Theory, which suggests that female directors improve governance oversight and reduce managerial opportunism (Adams & Ferreira, 2009). In the specific context of Islamic banking, a field founded on the principles of trust and ethical accountability, this enhanced surveillance apparatus assumes a particularly salient role. The present findings provide further evidence in support of the Resource-Based View, indicating that the diverse perspectives, risk attitudes and cognitive resources that female directors bring to their roles can be viewed as a valuable strategic asset (Terjesen et al., 2016), the imitation of which by competitors is difficult. This is of particular significance for Islamic banks seeking to innovate and cater to a diverse customer base while adhering to Sharia principles.

Moreover, the substantial impact of the presence of women in senior management positions (TMFP) serves to reinforce the principles of Upper Echelons Theory. The results of the study demonstrate that the presence of women in key executive positions exerts a significant influence on the strategic choices and decision-making processes that directly impact a bank's financial outcomes. It is evident that female executives frequently demonstrate leadership styles that prioritise long-term sustainability (i.e. the preservation of the environment and natural resources), comprehensive risk assessment (i.e. the identification and evaluation of potential hazards or problems) and stakeholder inclusivity (i.e. the consideration of the interests of all stakeholders). These leadership styles are inherently synergistic with the long-term, welfare-oriented objectives of Islamic finance (Hoobler et al., 2018). The present finding calls into question any extant traditional norms that may impede the progression of women in these institutions. There is a strong business case for the promotion of women to the most senior executive levels.

Moreover, the present study demonstrates that gender-balanced recruitment practices (GBRP) at the organisational level are associated with enhanced performance. This development signals a shift in discourse from the boardroom and executive ranks toward the institutionalisation of diversity through human resource policies. The efficacy of such initiatives in expanding the talent pool and fostering an inclusive environment that fosters increased employee morale, innovation, and customer satisfaction has been demonstrated (Cooke & Saini, 2021). The present study demonstrates that Islamic banks are capable of incorporating their commitment

to gender equality, which is grounded in Islamic principles of justice (adl) and equality, into a concrete human resource system that yields positive financial outcomes.

It is important to note that there is substantial empirical validation of the moderating influence exerted by the Sharia Governance Strength (SGS) framework. Recent studies have demonstrated that the positive effects of diversity are not intrinsic; rather, they are amplified within a robust Sharia governance framework. This is evidenced by the significant and positive interaction effects observed for all three gender diversity variables. A robust and autonomous Sharia Supervisory Board (SSB) is charged with the responsibility of ensuring that the ethical principles and risk-averse tendencies frequently associated with female leaders are directed towards the realisation of the objectives of Islamic law (*maqasid al-Sharia*), which include the promotion of social welfare and economic justice (Mollah & Zaman, 2015). A robust Sharia governance framework engenders an institutional environment wherein diverse perspectives are recognised and evaluated meticulously through a stringent ethical framework, culminating in decisions that are both fiscally sound and religiously authentic (Grassa et al., 2021). The existence of synergy is believed to play a vital role in mitigating risks associated with 'tokenism', while ensuring that gender diversity translates into substantial improvements in governance.

The present finding helps resolve the inconsistencies frequently observed in previous studies on the relationship between gender diversity and performance in conventional settings. The argument is made that the institutional context, particularly one defined by a robust ethical framework, constitutes a critical contingency factor. The findings indicate that in Islamic banking institutions, gender diversity and Sharia governance do not function as distinct, parallel mechanisms, but rather are intricately interconnected. The governance structure is the mechanism by which the ethical impulses associated with diversity are manifested. Conversely, diversity serves to enrich the governance structure by introducing a wider array of insights and perspectives. This symbiotic relationship fosters a positive cycle that enhances the bank's perceived legitimacy among its stakeholders, reinforces its reputation as an ethical entity, and consequently leads to enhanced financial outcomes (Frag et al., 2018).

The robustness of the aforementioned findings, as substantiated by the employment of alternative performance measures and rigorous diagnostic assessments, serves to provide considerable weight to their validity. This is further highlighted by an examination of effect size, which indicates that the moderating effect of SGS stands as the most substantial driver identified, shifting from a medium effect for direct relationships to a medium-to-large effect for moderated relationships. The enhancement in explanatory potency from the control model to the full moderation model, as demonstrated by the model comparison, provides a lucid illustration: whilst gender diversity is of significance, its impact is most pronounced when embedded within a robust system of ethical and religious governance.

To summarise, the discussion presented here indicates that the promotion of gender diversity in Islamic banking is not simply a response to social compliance or a superficial manifestation of modernity. It is a strategic imperative that, when synergised with strong Sharia governance, unlocks significant financial value. The findings provide a clear mandate for policymakers, regulators and bank leadership in emerging markets to proactively dismantle barriers to women's advancement and to concurrently strengthen their Sharia governance frameworks. This strategic approach enables them to harmonise their operations with the ethical framework of Islam. Consequently, they can simultaneously enhance their financial resilience and competitive positioning in the global market.

5. Conclusion

The present study has investigated Islamic banks in emerging markets, and has proven beyond doubt that gender diversity has a critical impact on financial performance. The study has also proven that the moderating role of Sharia governance significantly enhances the net effect of gender diversity. Empirical evidence indicates

a robust direct and statistically significant relationship between the number of women on boards, the firm-level transparency indicator of balanced gender recruitment, the indicator of women on management, and profitability. Furthermore, the present study demonstrates that Sharia Governance Strength can function not only as a substitute or complement for gender diversity, but also as a central source of their robust interrelation as two distinct paths to the same destination. The findings from this study offer a substantial body of evidence that can inform the proactive integration of gender diversity in the core governance policies of banks. These results are of significance for bank regulators, policymakers, corporate boards as well as Islamic banking institutions. The incorporation of gender diversity is of particular relevance for these institutions, as they seek to enhance the rigour of their Sharia governance mechanisms. To achieve the objective of meeting the principles outlined in maqasid al-Sharia and thus ensuring the ability to compete sustainably within the evolving global Islamic finance market, the necessary investment is indisputable.

Limitations

Nevertheless, despite the study's findings, it is important to acknowledge its inherent limitations, which consequently pave the way for new avenues of research. Firstly, the target of the analysis was Islamic banks based in one developing country; as a consequence, the findings may not be applicable to Islamic financial organisations based in other developing countries or beyond Muslim-majority countries, most notably in the Middle East and South West Asia. Secondly, it should be noted that the measurement of gender-balanced recruitment comprises only formal policy and workforce ratio data, while organisational culture and human perception, although probably more crucial for the impact of these efforts, were not taken into account. Thirdly, the empirical element of the research examined short-term financial performance. Consequently, the extent to which these drivers operate in a long-term perspective remains unclear. It is recommended that future studies adopt a longitudinal design that encompasses multiple countries, incorporating primary data on culture and establishing correlations where feasible, such as the fulfilment of social needs or customer trust.

CRedit Author Statement

Khoirul Anam: Conceptualization, Methodology, Formal analysis, Writing - original draft, Writing - review & editing, Project administration. Kusuma Wijaya: Data curation, Investigation, Resources, Software, Validation, Visualization, Writing - review & editing. All authors have read and approved the final version of the manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author, Khoirul Anam, upon reasonable request.

AI Ethical Statement

No generative AI technologies, such as large language models, were used at any stage in the preparation of this research manuscript, including conceptualization, writing, editing, or data analysis. All intellectual content is the original work of the human authors named in this publication.

Appendix Data Supporting and Supplementary Table

Appendix data A1. Sample data population

Item	Description
Research Object	Islamic Commercial Banks (Bus) in Indonesia
Population	All Islamic Commercial Banks registered with the Financial Services Authority (OJK)
Observation Period	10 Years (2014 – 2023)
Sampling Technique	Purposive Sampling
Data Type	Secondary Data (Panel Data)
Data Sources	<ul style="list-style-type: none"> • Annual Financial Reports • Sustainability Reports • OJK Publications & Databases
Sample Criteria	<ol style="list-style-type: none"> 1. Listed as an Islamic Commercial Bank (Bus) with OJK during 2014-2023. 2. Published complete annual financial reports for the period 2014-2023. 3. Disclosed data on board of directors and Sharia supervisory board composition.
Final Sample	Bank-Year Observations

Appendix data B. Sample data instrument variable

Variable	Measurement / Formula	Source (Scopus / Elsevier)
Board Female Representation (BFR)	Ratio of female directors to total board members (%)	Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. <i>Corporate Governance: An International Review</i> , 17(3), 320–337.
Top-Management Female Presence (TMFP)	Percentage of women in CEO, CFO, or senior management roles (%)	Ararat, M., Aksu, M., & Tansel Cetin, A. (2015). How board diversity affects firm performance in emerging markets: Evidence on channels in controlled firms. <i>Corporate Governance: An International Review</i> , 23(2), 83–103.
Gender-Balanced Recruitment Practices (GBRP)	Index based on gender ratio in total workforce and recruitment policies (0–1 scale)	Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2018). The business case for women leaders: Meta-analysis, research critique, and path forward. <i>Journal of Management</i> , 44(6), 2473–2499.
Bank Financial Performance (FP)	Return on Assets (ROA), Return on Equity (ROE), Tobin's Q = (Market Value of Firm) / (Book Value of Assets)	Srairi, S. (2015). Corporate governance disclosure practices and performance of Islamic banks in GCC countries. <i>Journal of Islamic Finance</i> , 4(2), 1–13.
Sharia Governance Strength (SGS) (Moderator)	Index based on number, expertise, and independence of Sharia Supervisory Board (SSB) members (0–1 scale)	Mollah, S., & Zaman, M. (2015). Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks. <i>Journal of Banking & Finance</i> , 58, 418–435.

References

- Al Amosh, H. (2025). The role of gender diversity in shaping green collaborations and firm financial success. *Gender in Management: An International Journal*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/GM-03-2024-0125>
- Amin, A., Ali, R., Rehman, R. ur, & Hasan, M. (2024). Family ownership, control, and firm performance: Does gender diversity matter? *Eurasian Business Review*, 14(2), 501–525. <https://doi.org/10.1007/s40821-024-00256-9>
- Badwan, N., Al-Khazaleh, S., Bani Ahmad, A., & AlKhazaleh, A. (2025). Impact of board gender diversity on the banking performance sector: empirical evidence from Palestine. *Management & Sustainability: An Arab Review*. <https://doi.org/10.1108/MSAR-12-2024-0245>
- Barney, J. B. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. *Strategic Management Journal*, 39(13), 3305–3325. <https://doi.org/https://doi.org/10.1002/smj.2949>
- Bechihi, O., & Nafti, O. (2025). Corporate governance and sharia board: enhancing disclosure compliance in Islamic banks of MENA region. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-11-2024-0865>
- Boulanouar, Z., Grassa, R., & Alqahtani, F. (2024). The dynamic interplay of Shariah compliance rank and financial performance: nonfinancial listed firms in Saudi Arabia as a testing ground. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-07-2023-0405>
- Elkhwesky, Z., Salem, I. E., & El Manzani, Y. (2025). Talented women for senior positions across multi-regions: challenges, strategies, and future research agenda. *Management Review Quarterly*, 75(1), 353–389. <https://doi.org/10.1007/s11301-023-00383-z>
- Faizi, F., Rohim, A. N. R., Surbakti, M. H. S., Munir, M., & Qulsum, U. Q. (2025). Ensuring Shariah compliance in the Fintech: a comprehensive analysis from Indonesia. *Qualitative Research in Financial Markets*, 1–31. <https://doi.org/10.1108/QRFM-05-2025-0129>
- García-López, M.-J., Pacheco-Olivares, M. R., & Hamoudi, H. (2024). Board Gender Diversity and Firm Performance: An Analysis of the Causal Relationship in Spanish Listed Companies. In *Administrative Sciences* (Vol. 14, Issue 1). <https://doi.org/10.3390/admsci14010012>
- Ghardallou, W., & Abaalkhail, L. (2024). Female top managers, female owners and corporate financial sustainability: new evidence from a panel smooth transition regression model. *Total Quality Management & Business Excellence*, 35(11–12), 1331–1358. <https://doi.org/10.1080/14783363.2024.2369579>
- Gilani, S. A. M., Mohamed Hashim, M. A., Tlemsani, I., Tantry, A., & Whitehead, J. (2025). Gender impact on business growth in Europe and the Middle East and North Africa. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-08-2024-0309>
- Gümüşay, A. A., Meyer, R. E., & Höllerer, M. A. (2025). Committed Actors, Institutional Complexity, and Pathways to Compromise: The Emergence of Islamic Banking in Germany. *Journal of Management Studies*, 62(1), 408–445. <https://doi.org/https://doi.org/10.1111/joms.13061>
- Hemmert, M., Cho, C. K., & Lee, J. Y. (2022). Enhancing innovation through gender diversity: a two-country study of top management teams. *European Journal of Innovation Management*, 27(1), 193–213. <https://doi.org/10.1108/EJIM-08-2021-0383>

- Hkimi, A., & Baccouri, M. (2025). Does board gender diversity contributed by female directors improve profit loss sharing investment performance: evidence from GCC region. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-01-2024-0030>
- Hossain, M. S., Ling, C. C., Pathirana, N. W., & Fung, C. Y. (2025). Do Female Directors Matter? Exploring the Link Between Corporate Sustainability Disclosures and Earnings Management in Malaysia. *Corporate Social Responsibility and Environmental Management*, 32(3), 3150–3166. <https://doi.org/https://doi.org/10.1002/csr.3113>
- Issa, A., Sahyouni, A., & Mateev, M. (2024a). A path to success: educational board diversity and its influence on MENA banks' efficiency and stability. *Corporate Governance: The International Journal of Business in Society*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/CG-08-2023-0339>
- Issa, A., Sahyouni, A., & Mateev, M. (2024b). Enhancing bank efficiency through board diversity: a MENA region study. *EuroMed Journal of Business*. <https://doi.org/10.1108/EMJB-06-2023-0158>
- Khan, I., Khan, I. U., Uddin, M. J., Khan, S. U., & Marwat, J. (2023). Diversity of Shari' ah supervisory board and the performance of Islamic banks: evidence from an emerging economy of Pakistan. *Journal of Islamic Accounting and Business Research*, 15(1), 1–31. <https://doi.org/10.1108/JIABR-09-2021-0240>
- Khan, I., Khan, I. U., Uddin, M. J., Khan, S. U., & Marwat, J. (2024). Diversity of Shari' ah supervisory board and the performance of Islamic banks: evidence from an emerging economy of Pakistan. *Journal of Islamic Accounting and Business Research*, 15(1), 1–31. <https://doi.org/10.1108/JIABR-09-2021-0240>
- Laskar, N., Sahu, J. P., & Choudhury, K. S. (2023). Impact of gender diversity on firm performance: empirical evidence from India. *Managerial Finance*, 50(3), 614–633. <https://doi.org/10.1108/MF-02-2023-0126>
- Mkadmi, J. E., & Benali, W. (2025). The impact of the characteristics of Sharia committee on Islamic bank performance: evidence from the Gulf Cooperation Council. *Management & Sustainability: An Arab Review*. <https://doi.org/10.1108/MSAR-08-2024-0088>
- Mukhibad, H., Setiawan, D., Aryani, Y. A., & Falikhatun, F. (2024). Corporate governance and Islamic bank risk – do the directors' and the Shariah board' s diversity attributes matter? *Corporate Governance*, 24(5), 1213–1234. <https://doi.org/10.1108/CG-08-2022-0348>
- Rahman, H. U., Zahid, M., & Al-Faryan, M. A. S. (2025). Does firm better financial performance amplify the role of women directors and their certain characteristics in promoting corporate sustainability practices? *Corporate Governance*. <https://doi.org/10.1108/CG-05-2024-0266>
- Rahman, M. R., Rahman, M. M., Miraz, M. S. H., & Rabbi, H. M. F. (2025). Stimulating job satisfaction through gender diversity: exploring the impact of HRM practices in the banking sector of Bangladesh. *Journal of Management Development*, 44(3), 386–414. <https://doi.org/10.1108/JMD-06-2024-0197>
- Rashid, A., Akmal, M., & Shah, S. M. A. R. (2023). Corporate governance and risk management in Islamic and convectional financial institutions: explaining the role of institutional quality. *Journal of Islamic Accounting and Business Research*, 15(3), 466–498. <https://doi.org/10.1108/JIABR-12-2021-0317>
- Sanad, Z., & Al Lawati, H. (2023). Board gender diversity and firm performance: the moderating role of financial technology. *Competitiveness Review*, 35(4), 647–669. <https://doi.org/10.1108/CR-05-2023-0103>
- Sheikh, R. (2025). Developing ethical investment criteria based on Maqasid Shariah. *Qualitative Research in Financial Markets*. <https://doi.org/10.1108/QRFM-04-2025-0103>
- Sheikh, R., & Hussain, K. (2024). Reimagining Islamic banking in the light of Maqasid Shariah. *Qualitative Research in Financial Markets*. <https://doi.org/10.1108/QRFM-04-2024-0108>

- Simsek, R., Mollah, S., & Tunyi, A. (2024). Corporate governance structure and climate-related financial disclosure: Conventional banks versus Islamic banks. *Business Strategy and the Environment*, 33(6), 5503–5528. <https://doi.org/https://doi.org/10.1002/bse.3753>
- Srairi, S., & Kateb, I. (2025). From ESG to risk-taking and financial stability: is board gender diversity the missing link in Islamic and conventional GCC banks? *The Journal of Risk Finance*, 1–35. <https://doi.org/10.1108/JRF-04-2025-0177>
- Taufik Syamlan, Y., Wahyuni, S., Heruwasto, I., & Hamsal, M. (2025). Exploring sharia compliance parameters in marketing to foster innovation and collaboration within Islamic finance. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-04-2024-0172>
- Yarram, S. R., & Adapa, S. (2023). Gender diversity of directors and financial performance: is there a business case? *International Journal of Managerial Finance*, 20(1), 147–167. <https://doi.org/10.1108/IJMF-01-2022-0035>