



[GRIEB] Editor Decision

1 message

Abdul Qoyum <journal.febi@uin-suka.ac.id>
To: Saipul Arni Muhsyaf <saipulam@unram.ac.id>

Tue, May 16, 2023 at 9:56 AM

Saipul Arni Muhsyaf:

We have reached a decision regarding your submission to Global Review of Islamic Economics and Business, "Unravelling the Complex Dynamics of Islamic Social Reporting and Financial Performance: A Study of Mediating and Moderating Factors in Islamic Banks".

Our decision is: **Minor Revision**

Due date of Revision is: May 22, 2023.

Please revise according the reviewer's comments below and attached comment in the manuscript that attached by reviewers.

Reviewer A:
Recommendation: Revisions Required

1. Originality:

Does the paper contain new and significant information adequate to justify publication?

Good

Written comment:

This manuscript has novelty and can fill the gaps in the literature. But, author need to clarify what gap he mean.

2. Relationship to Literature:

Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?

Weak

Written comment:

The recent literature published in 2023 need to be added.

3. Methodology:

Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?

Good

Written comment:

Yes, it is sufficient.

4. Results:

Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?

Good

Written comment:

Yes, it is appropriate. But, author need to elaborate it to give higher research impact (implication) on the field.

5. Implications for research, practice and/or society:

Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?

Good

Written comment:

Yes, author has addressed it in separate section.

6. Quality of Communication:

Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership?

Weak

Written comment:

It need to be grammatically checked.

Reviewer B:

Recommendation: Revisions Required

1. Originality:

Does the paper contain new and significant information adequate to justify publication?

Weak

Written comment:

Author try to contribute to the literature by investigating the relationship between ISR and the financial performance of Indonesian sharia banks. Unfortunately, the author did not discus the its gap by comparing the debate in the recent literature.

2. Relationship to Literature:

Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?

Good

Written comment:

Yes it is sufficient.

3. Methodology:

Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?

Good

Written comment:

Yes, it is appropriate.

4. Results:

Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?

Weak

Written comment:

Author should consider the component in this section like: How do your results relate to the original question or hypothesis outlined in the Introduction/review of literature section (what)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?

5. Implications for research, practice and/or society:

Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?

Good

Written comment:

Yes, it is sufficient.

6. Quality of Communication:

Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership?

Weak

Written comment:

It need to be proofread.

Global Review of Islamic Economics and Business

Unraveling the Complex Dynamics of Islamic Social Reporting and Financial Performance: A Study of Mediating and Moderating Factors in Islamic Banks

Abstract : Islamic Social Reporting (ISR) plays a critical role in the financial performance of Islamic banks. Grounded in stakeholder theory, this study acknowledges the importance of addressing the interests and expectations of various stakeholders, including investors, employees, customers, and communities. By examining the intricate dynamics between ISR and financial performance while considering the mediating and moderating effects of ownership concentration, bank size, board independence composition, and leverage, this research contributes to the stakeholder-centric understanding of financial performance in Islamic banks.

Using a sample of 10 Indonesian Islamic commercial banks from 2017 to 2020, regression models and Path SEM analysis were employed. The findings reveals ISR positively impacts financial performance, with board independence composition and leverage significantly moderating this relationship. However, ownership concentration and bank size do not mediate these effects. This research aligns with prior studies highlighting the moderating roles of board independence composition and leverage but contrasts with those identifying mediating roles of ownership concentration and bank size.

This study contributes to the existing literature on ISR's impact on Islamic banks' financial performance, specifically in Indonesia, and enriches stakeholder theory applications within the Islamic banking sector. These insights can inform policy decisions and management practices, promoting improved performance and sustainable growth. Future research should continue investigating these relationships, considering additional factors and contexts to refine our understanding of ISR's role in shaping financial performance while addressing stakeholder concerns.

Keywords: *Islamic Social Reporting, Financial Performance, Ownership Concentration, Bank Size, Board Independence Composition, Leverage, Mediating, and Moderating Effects.*

JEL Classification:?

Introduction

As society becomes more aware of the environmental, social, and economic challenges facing the world, expectations for corporate responsibility have risen. Organizations must continuously adapt to navigate through a range of shocks and crises to ensure their survival and development. In the context of Islamic banking, Islamic Social Reporting (ISR) serves as a crucial factor in demonstrating a bank's adherence to Islamic principles and commitment to sustainable development (Kamla & G. Rammal, 2013; Maali et al. (2006). The increasing attention on ISR from researchers, policymakers, and investors has led to a growing interest in its financial impact. This study aims to explore the effect of ISR on the financial performance of Indonesian sharia banks, focusing on the Return on Assets (ROA) as the key indicator.

Islamic banks, unlike conventional banks, must operate under the principles of Islamic law, which emphasizes the importance of social responsibility, justice, and ethical behavior (Hanić & Efendic, 2020; Hanić & Smolo, 2023; Mansour et al., 2015). This unique operating framework has driven the development of ISR as a means for Islamic banks to communicate their social and environmental commitments to stakeholders (Farook et al., 2011; Haniffa & Hudaib, 2007). As the Islamic banking sector continues to grow and gain global prominence, understanding the relationship between ISR and financial performance becomes increasingly vital for regulators, investors, and bank managers.

The relationship between ISR and financial performance has been studied by several researchers (Farook et al., 2011; Haniffa & Hudaib, 2007; Maali et al., 2006); however, no consensus has been reached regarding the nature of this relationship, motivating the current study. Theoretically, the relationship between ISR and ROA can be observed from two opposing perspectives: the stakeholder theory, which

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posits a positive relationship between ISR and ROA (Freeman, 2010; Jensen, 1986; Jensen & Meckling, 1976), and the shareholder value theory, which suggests that ISR could negatively impact ROA as it may divert resources from profit maximization (Friedman, 1970, 2007; Jensen & Meckling, 1976). This study aims to provide a comprehensive understanding of the relationship between ISR and ROA by considering the interactions of ownership concentration (OC), bank size, board independence composition (BIC), and leverage (LEV).

This research contributes to the literature by examining the direct and indirect effects of ISR on ROA in the context of the Indonesian sharia banking sector, using a structural equation Modelling (SEM) approach (Hair et al., 2014). The study analyzes data from 2017 to 2020, comparing the financial performance of high ISR banks (treatment group) and low ISR banks (control group) to determine the impact of ISR on ROA. Additionally, this study investigates the mediating roles of OC and bank size in the relationship between ISR and ROA, as well as the indirect effects of BIC and LEV on this relationship (Baron & Kenny, 1986).

Indonesia, as the largest Muslim-majority country globally, provides a suitable context for this study. The Indonesian banking sector has experienced rapid growth and transformation, with sharia banks playing an increasingly important role (Ascarya & Yumanita, 2008; Sukmana & Ibrahim, 2017). The unique characteristics of the Indonesian market, such as its diverse population, varying levels of financial literacy, and the presence of both large and small sharia banks, create a rich environment for exploring the impact of ISR on financial performance.

Furthermore, the recent regulatory changes in Indonesia have led to increased scrutiny of corporate governance practices in the banking sector, with specific emphasis on transparency, accountability, and ethical behavior (Indonesia, 2009, 2012, 2013; Indonesia, 2022). These changes have heightened the importance of ISR as a mechanism for demonstrating compliance with the new regulatory requirements and communicating the bank's commitment to sustainable development (Cahya et al., 2019; Cahya & Rohmah, 2019; Schaltegger et al., 2017). This evolving regulatory landscape underscores the need for a comprehensive understanding of the relationship between ISR and the financial performance of Indonesian sharia banks.

The findings of this study have significant implications for bank managers, regulators, and policymakers. By examining the direct and indirect effects of ISR on ROA and exploring the mediating roles of ownership concentration and bank size, this research provides valuable insights into the mechanisms through which ISR influences financial performance. These insights can help bank managers develop strategies to enhance their ISR practices and improve financial performance while adhering to the principles of Islamic banking. For regulators and policymakers, the study's findings can inform the development of effective governance and regulatory frameworks that support the sustainable growth of the Islamic banking sector.

In light of the existing literature and the gaps identified, this study aims to contribute to the understanding of the relationship between ISR and the financial performance of Indonesian sharia banks. By examining the direct and indirect effects of ISR on ROA and exploring the mediating roles of ownership concentration and bank size, this research seeks to offer valuable insights for bank managers, regulators, and policymakers in enhancing governance practices and understanding the impact of Islamic social reporting on the financial performance of banks.

The remainder of this paper is organized as follows: Section 2 presents a literature review and develops the research hypotheses. Section 3 describes the data and empirical strategy, including the structural equation Modelling (SEM) approach used in this study. Section 4 reports the results of the analysis and robustness tests, which reveal the direct and indirect effects of ISR, OC, bank size, BIC, and LEV on ROA. Additionally, the mediating roles of OC and bank size in the relationship between ISR and ROA are discussed. Section 5 concludes the paper, providing a summary of the findings, their implications for bank managers, regulators, and policymakers, and recommendations for future research.

Literature Review and Hypotheses Development

Islamic social responsibility and financial performance in Islamic banks

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The adoption of Islamic social responsibility (ISR) strategies has become increasingly important for the future of Islamic banks. The financial implications of ISR have become a key area of research, focusing on the competitive advantages that can be gained from considering the broader responsibilities of the bank (Zafar & Sulaiman, 2019). The competitive advantage is derived from an organization's ability to outperform competitors in terms of profitability (Hosseini et al., 2018). In an environment where competition is increasingly fierce, the interactions between stakeholders and organizations intensify, and competitive advantage now encompasses ISR and financial performance.

Islamic banks need to adopt strategies that allow them to thrive in turbulent environments, requiring them to be responsive to stakeholders without neglecting financial performance (Barney & Wright, 1998; Buzzavo, 2012). Moreover, the reputation and legitimacy of Islamic banks depend on fulfilling the expectations of stakeholders, such as depositors, borrowers, and the broader society (Kamla & G. Rammal, 2013). Ensuring that Islamic banks are both financially viable and ethically responsible is critical for their success (Elhoussein, 2018; Franzoni & Asma Ait, 2018).

The relationship between ISR and financial performance can be supported by the Stakeholder Theory and the Resource-Based View. The stakeholder theory suggests that organizations should consider the interests of diverse stakeholders (Freeman, 1984, 2010; Freeman et al., 2010), as neglecting their expectations may negatively impact corporate performance by increasing perceived risk and cost of capital. On the other hand, meeting stakeholder expectations contributes to improved performance (Perrini et al., 2010). The resource-based view highlights the importance of organizational resources and capabilities, such as ISR activities, in achieving a competitive advantage that leads to enhanced financial performance (Barney & Wright, 1998; Buzzavo, 2012).

Empirical evidence on the relationship between ISR and financial performance in Islamic banks has been mixed. Some studies have reported a positive relationship (Elgattani & Hussainey, 2021; Orlitzky et al., 2003; Probohudono et al., 2021; Sarea & Salami, 2021; Waddock & Graves, 1997), while others have found no significant relationship (Bangun, 2019; Ben Abdallah & Bahloul, 2022; Griffin & Mahon, 1997; Putri et al., 2019; Susbiyani et al., 2022; Yuliana & Sartika, 2020). The mixed findings may be attributed to the different measures of ISR and financial performance used in the studies, the varying contexts, and the potential moderating or mediating effects of other factors, such as corporate governance.

Considering the above discussion, the following hypothesis is proposed:

H1: ISR has a positive effect on Islamic banks' financial performance.

Governance factors and financial performance in Islamic banks

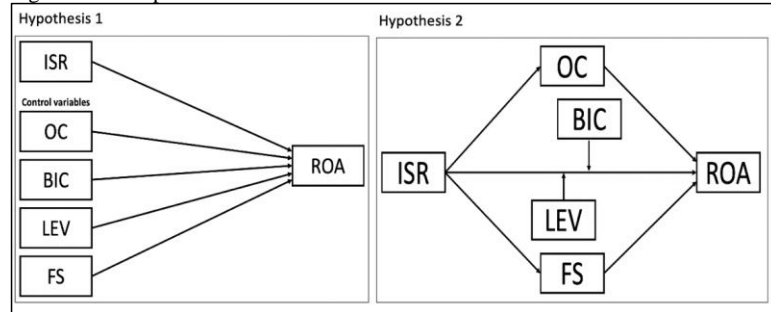
Corporate governance factors, such as ownership concentration (OC), bank size, board independence composition (BIC), and leverage (LEV), may influence the relationship between ISR and financial performance in Islamic banks. The stakeholder theory suggests that different governance factors can mediate or moderate the relationship between ISR and financial performance by affecting the accountability, monitoring, and decision-making processes in organizations (Freeman, 1984; Freeman et al., 2010).

Ownership concentration refers to the extent to which a company's shares are held by a small number of large shareholders, which may result in greater monitoring and control (Jensen, 1986; Jensen & Meckling, 1976). Higher ownership concentration may lead to more efficient allocation of resources, increased accountability, and better decision-making (Zhang, 2022). Conversely, it could result in the entrenchment of controlling shareholders and potential conflicts of interest (Guluma, 2021; Pandey et al., 2021). In this context, ownership concentration could mediate the relationship between ISR and financial performance (Godos-Diez et al., 2014).

Bank size is another important corporate governance factor that may affect the relationship between ISR and financial performance. Larger banks tend to have more resources and capabilities to effectively implement and disclose ISR activities, which could enhance their financial performance (Andhari et al., 2022; Bangun, 2019; Udayasankar, 2008). Moreover, larger banks may benefit from economies of scale and scope, risk diversification, and better access to capital markets (Laeven & Levine, 2009; Laeven et al., 2014). However, larger banks may also face challenges related to organizational complexity, bureaucracy,

and inefficiencies, which could negatively impact financial performance (Altunbas et al., 2011). Therefore, bank size could serve as a mediator in the relationship between ISR and financial performance.

Figure 1. Conceptual framework



Board independence composition refers to the proportion of independent non-executive directors on the board, which is expected to enhance monitoring, control, and decision-making processes in organizations (Fama & Jensen, 1983). Independent directors may contribute to improved ISR implementation and disclosure, leading to better financial performance (Mahrani & Soewarno, 2018; Susbiyani et al., 2022). However, some studies have reported mixed results regarding the impact of independence commissioners on financial performance, suggesting that the effectiveness of independent commissioners may depend on other factors, such as their skills, experience, and the quality of the board's processes (Chaganti & Damanpour, 1991; Lanouar & Elmarzougui, 2011; Utama & Utama, 2019; Zulfikar et al., 2017). In light of these observations, board independence composition could act as a moderator in the relationship between ISR and financial performance.

Leverage, or the proportion of debt in a company's capital structure, may also influence the relationship between ISR and financial performance. Higher leverage may increase the risk and cost of capital, negatively impacting financial performance (Chen, 2020; The & Duc, 2020). However, leverage could also act as a disciplinary mechanism, promoting better productivity, resource allocation and monitoring, leading to improved financial performance (Berger & DeYoung, 1997; Koke & Renneboog, 2005; Sami et al., 2011; Vicente-Lorente, 2001). As such, leverage could serve as a moderator in the relationship between ISR and financial performance.

Considering the potential mediating and moderating effects of corporate governance factors, the following hypotheses are proposed:

H2a: Ownership concentration mediates the relationship between ISR and Islamic banks' financial performance.

H2b: Bank size mediates the relationship between ISR and Islamic banks' financial performance.

H2c: Board independence composition moderates the relationship between ISR and Islamic banks' financial performance.

H2d: Leverage moderates the relationship between ISR and Islamic banks' financial performance.

Research Design

The population of this study comprises all Indonesian Islamic commercial banks officially registered on the Indonesian Financial Services Authority (OJK) website between 2017 and 2020. The sample was selected using a purposive sampling method based on specific criteria, including Islamic commercial banks and Sharia business units registered on the official OJK website from 2017 to 2020, as well as Islamic commercial banks that present their social responsibility reports in their respective annual reports. As a result, the final sample included 10 Islamic commercial banks in Indonesia, with a total of 40 observations spanning from 2017 to 2020.

The dependent variable of this study is Return on Assets (ROA), representing the company's ability to generate profit. It is measured as earnings after tax divided by total assets, multiplied by 100. The independent variables include Islamic Social Reporting (ISR) index disclosures, Firm Size, Board Independence Composition (BIC), Ownership Concentration (OC), and Leverage.

Islamic Social Reporting (ISR) index disclosures are calculated using six themes, consisting of 43 disclosure items presented in the appendix (Susbiyani et al., 2022). The total ISR score is measured by evaluating each bank's ISR through content analysis, assigning a value of 1 if the component is disclosed and 0 if not disclosed. Firm Size is represented by the natural logarithm of total assets, while Board Independence Composition (BIC) is measured as the proportion of independent commissioners to the total number of board members. Ownership Concentration (OC) is determined by the percentage of shares owned by the largest shareholder, and Leverage is measured by the debt-to-equity ratio.

This study aims to investigate the role of governance factors as a channel in the relationship between ISR and firm performance, going beyond examining the direct and indirect relationship. To test the first hypothesis, several panel data approaches were considered, including pooled least squares, fixed effects, and random effects, depending on the data's nature and the research question addressed (Wooldridge, 2010). The panel data regression estimates the relationship between return on assets (ROA), Islamic social reporting (ISR), and control variables (FirmSize, BIC, OC, and Leverage).

$ROA_{it} = \beta_0 + \beta_1 * ISR_{it} + \sum(\beta_j * ControlVariables_{ji,t}) + \varepsilon_{it}$ (Model 1)
 where ROA_{it} is the return on assets for bank i at time t , ISR_{it} is the Islamic social reporting index disclosures, $ControlVariables_{ji,t}$ are the control variables including FirmSize, BIC, OC, and Leverage, and ε_{it} is the error term.

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Fixed effects or random effects models were used to account for unobserved heterogeneity across banks (Baltagi, 2021). The fixed effects model includes bank-specific intercepts, and the random effects model includes both time-invariant and time-varying unobserved heterogeneity. The fixed effects model can be expressed as:

$$ROA_{it} = \beta_0 + \beta_1 * ISR_{it} + \sum(\beta_j * ControlVariables_{ji,t}) + \alpha_i + \varepsilon_{it}$$
 (Model 2)

where α_i is the bank fixed effect.

The random effects model can be expressed as:

$$ROA_{it} = \beta_0 + \beta_1 * ISR_{it} + \sum(\beta_j * ControlVariables_{ji,t}) + \alpha_i + u_{it}$$
 (Model 3)
 where α_i is the time-invariant bank specific random effect and u_{it} is the time-varying bank specific random effect.

The study employed a panel data regression approach to estimate three models and evaluate the validity of the results. Various statistical tests were conducted, including t-tests to assess variable significance (Gujarati et al., 2011), VIF tests to check for multicollinearity (Belsley et al., 1980), Breusch-Pagan tests to detect heteroscedasticity (Breusch & Pagan, 1979), and Durbin-Watson tests to examine autocorrelation (Wooldridge, 2010). The choice of panel data approach was determined by the data's nature and research question. The use of panel data regression analysis and consideration of different panel data approaches provided a thorough and transparent method for estimating the impact of Islamic social reporting on bank performance.

Figure 2. Model formulation for examining the mediation and moderation effects

<p>Model 4 (M4)</p> <ol style="list-style-type: none"> 1. $ROA = \beta_1 * ISR + \beta_6 * OC + \beta_7 * LogFS + \beta_8 * LEV + \beta_9 * BIC + e_ROA$ 2. $OC = \beta_2 * ISR + e_OC$ 3. $LogFS = \beta_3 * ISR + e_LogFS$ 4. $LEV = \beta_4 * ISR + e_LEV$ 5. $BIC = \beta_5 * ISR + e_BIC$ <p>Covariances:</p> <ul style="list-style-type: none"> • $Cov(e_OC, e_LEV) = \psi_1$ • $Cov(e_LogFS, e_OC) = \psi_2$ • $Cov(e_LogFS, e_LEV) = \psi_3$ • $Cov(e_BIC, e_OC) = \psi_4$ • $Cov(e_BIC, e_LogFS) = \psi_5$ • $Cov(e_BIC, e_LEV) = \psi_6$
<p>Model 5 (M5)</p> <ol style="list-style-type: none"> 1. $ROA = \beta_1 * ISR + \beta_4 * OC + \beta_5 * LogFS + \beta_6 * LEV + \beta_7 * BIC + e_ROA$ 2. $OC = \beta_2 * ISR + e_OC$ 3. $LogFS = \beta_3 * ISR + e_LogFS$ <p>Covariance:</p> <ul style="list-style-type: none"> • $Cov(e_LogFS, e_OC) = \psi_1$
<p>Model 6 (M6)</p> <ol style="list-style-type: none"> 1. $ROA = \beta_1 * ISR + \beta_4 * OC + \beta_5 * LogFS + \beta_6 * LEV_ISR + \beta_7 * BIC_ISR + \beta_8 * LEV + \beta_9 * BIC + e_ROA$ 2. $OC = \beta_2 * ISR + e_OC$ 3. $LogFS = \beta_3 * ISR + e_LogFS$ <p>Covariance:</p> <ul style="list-style-type: none"> ▪ $Cov(e_LogFS, e_OC) = \psi_1$
<p>Notes: ROA: Return on Assets, ISR: Islamic Social Reporting, OC: Ownership Concentration, LEV: Leverage, LogFS: Logarithm of Firm Size, BIC: Board Independence Composition LEV_ISR: Interaction between Leverage and ISR, BIC_ISR: Interaction between BIC and ISR, e_ik: Error terms, β_ik: Path coefficients, and ψ_ik: Covariances</p>

Structural Equation Modelling with Mediation and Moderation Effects

The study utilized a Structural Equation Modelling (SEM) approach with a Maximum Likelihood estimator to investigate the mediation and moderation effects (Gunzler et al., 2013; Hayes, 2013; Little et al., 2007; Sardeshmukh & Vandenberg, 2016). This method accounted for the correlations between the error terms of different equations, as demonstrated in Figure 2.

In Model 4 (Figure 2), the path SEM model examines the relationships between Islamic Social Reporting (ISR) and various factors on Return on Assets (ROA), such as Ownership Concentration (OC), Logarithm of Firm Size (LogFS), Leverage, and Board Independence Composition (BIC). The model also explores the relationships between ISR and OC, LogFS, LEV, and BIC. The model includes six covariance terms between the error terms of the variables (Hair et al., 2021).

In Model 5 (Figure 2), the relationships between ISR, OC, LogFS, LEV, and BIC on ROA were investigated. This model examines the direct relationships between ISR and OC, as well as LogFS. Model 5 includes only one covariance term between the error terms of LogFS and OC (Kline & St, 2022). In Model 6 (Figure 2), the path SEM model investigates the relationships between ISR, OC, LogFS, LEV_ISR (interaction between Leverage and ISR), BIC_ISR (interaction between BIC and ISR), LEV, and BIC on ROA (Fama & Jensen, 1983; Jensen, 1986). This model also explores the direct relationships between ISR and OC, as well as LogFS (Haniffa, 2002). Model 6 includes only one covariance term between the error terms of LogFS and OC. For all three models, the goodness of fit statistics (e.g., CFI, TLI, RMSEA, SRMR) were calculated to assess the models' adequacy (Hu & Bentler, 1999).

Mediation Analysis

In this study, we employ mediation analysis to examine the underlying mechanisms through which ISR influences ROA via mediating variables, such as Ownership Concentration, Firm Size (LogFS), Leverage, and Board Independence Composition. Mediation analysis allows us to uncover more nuanced relationships between variables by examining the indirect effects of the independent variable on the dependent variable through mediators (Hayes, 2013).

To conduct the mediation analysis, we use Stata's "medsem" command, which estimates the full structural equation model (SEM) comprising both direct and indirect paths. This command computes the indirect effects of the independent variable on the dependent variable through the mediating variables and tests the statistical significance of these indirect effects (Preacher & Hayes, 2008).

The estimation process involves specifying the hypothesized relationships among the variables based on relevant literature. We then estimate the mediation model and examine the indirect effects and their statistical significance. The output of the "medsem" command provides standardized and unstandardized indirect effects along with their standard errors, z-values, and p-values (Preacher & Hayes, 2008).

In addition to the indirect effects, we report the goodness of fit statistics (e.g., CFI, TLI, RMSEA, SRMR) to assess the adequacy of the mediation model. A well-fitting model indicates that the hypothesized relationships among the variables are supported by the data (Hu & Bentler, 1999).

By employing mediation analysis using the "medsem" command in Stata, we aim to gain a deeper understanding of the complex relationships between Islamic Social Reporting, Return on Assets, and the proposed mediating variables. This analysis allows us to uncover the underlying mechanisms that drive the effects of Islamic Social Reporting on firms' financial performance.

Moderation Analysis

To test the third hypothesis, the moderation effects of BIC and Leverage on the relationship between ISR and ROA were examined. In Equation 3 of the path model, interaction terms (ISR_it * BIC_it) and (ISR_it * Leverage_it) were included to assess the moderating effect of BIC and Leverage, respectively. The significance of path coefficients δ_4 and δ_5 was then examined to determine the presence of moderation effects. If the interaction terms were significant, it indicated that BIC and Leverage acted as moderators in the relationship between ISR and ROA. The moderation effects were visualized by plotting the interaction effects at different levels of BIC and Leverage. Incorporating moderation analysis in the study allowed exploration of how the relationship between Islamic Social Reporting and Return on Assets varied based on the levels of BIC and Leverage. This analysis provided a more comprehensive understanding of the factors influencing the impact of Islamic Social Reporting on firms' financial performance.

Descriptive statistics

Table 1 provides descriptive statistics and Pearson correlation analysis for a sample of 40 Indonesian Islamic banks. The table is divided into two panels. Panel A shows the descriptive statistics for the variables, which include return on assets (ROA), Islamic social reporting (ISR), firm (bank) size (FS), leverage (LEV), ownership concentration (OC), and board independence composition (BIC). The descriptive statistics reveal that the average ROA for the banks is 2.62%, with a large standard deviation of 0.0948135, indicating a considerable variation in the banks' performance. The mean ISR is 0.65845, indicating that the banks have high levels of Islamic social reporting. The mean FS is 17.7007 billion IDR, with a moderate level of variation. The average leverage ratio is 1.98%, and the ownership concentration is high, with an average of 58.536%. The average BIC is 0.56, indicating a moderately independent board composition.

Table 1. Descriptive statistics and Pearson correlation

Panel A: Descriptive Statistics					
Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	40	0.0262	0.0948135	0.001	0.582
ISR	40	0.65845	0.0545066	0.542	0.75
FS	40	17.7007	1.730895	15.601	23.148
LEV	40	1.98025	1.700584	0.03	7.34
OC	40	58.536	24.46026	17.25	99.99

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BIC	40	0.56	0.1155367	0.33	0.75
Panel B: Pearson Correlation					
Variable	ROA	ISR	LogFS	LEV	OC
ROA					
ISR	0.2300				
LogFS	0.0571	0.3439			
LEV	-0.2053	0.2780	0.1852		
OC	0.0668	-0.5964	0.0280	-0.2334	
BIC	-0.4001	-0.1220	-0.2835	-0.2942	0.0495

Note: ROA = return on assets (in %), ISR = Islamic social reporting (index score), FS = firm (bank) size (in billions IDR), LogFS = natural logarithm of total assets, LEV = leverage (in %), OC = ownership concentration (in %), and BIC = board independence composition (in %).

Panel B shows the Pearson correlation coefficients between the variables. The correlation analysis reveals that ISR has a positive correlation with ROA (0.2300), indicating that higher levels of Islamic social reporting tend to be associated with better financial performance. LEV has a negative correlation with ROA (-0.2053), which suggests that higher leverage tends to be associated with lower financial performance. FS has a weak positive correlation with ISR (0.3439) and ROA (0.0571). OC has a negative correlation with ISR (-0.5964), indicating that higher ownership concentration tends to be associated with lower levels of Islamic social reporting. Finally, BIC has a negative correlation with ROA (-0.4001), suggesting that higher levels of board independence tend to be associated with lower financial performance.

Overall, Table 1 provides useful insights into the characteristics and relationships between the variables for Indonesian Islamic banks. The high level of Islamic social reporting and ownership concentration suggests that these factors may be important in understanding the performance of Islamic banks in Indonesia. The negative correlation between ROA and leverage and board independence composition suggests that these factors may have a negative impact on financial performance. These findings have implications for policymakers and regulators in the banking sector, as well as for investors and researchers interested in Islamic finance.

Results and Discussion

This study aimed to investigate the impact of Islamic Social Reporting (ISR) on the financial performance of Islamic banks, considering the mediating and moderating effects of various factors such as ownership concentration, bank size, board independence composition, and leverage. To achieve this goal, we employed multiple models to assess the relationships between these variables and to identify the most suitable model based on goodness-of-fit measures. In this section, we present the results of the analyses and discuss their implications for the existing literature on the topic, as well as their relevance for policymakers and practitioners in the Islamic banking sector.

Panel Data Regression

This study employed various panel data regression models, such as pooled (Model 1), fixed effect (Model 2), and random effect (Model 3) approaches, to examine the first hypothesis (H1), which posited a positive effect of Islamic Social Reporting (ISR) on Islamic banks' financial performance, specifically in terms of Return on Assets (ROA). The model incorporated firm size (FS), leverage (LEV), ownership concentration (OC), and Board Independence composition (BIC) as control variables. Based on classical assumption tests, the xtGLS model was chosen to examine the first hypothesis (Table 2) and was represented as follows:

$$ROA(it) = \beta_0 + \beta_1 ISR(it) + \beta_2 LogFS(it) + \beta_3 BIC(it) + \beta_4 OC(it) + \beta_5 LEV(it) + u(it) \quad (H1)$$

Here, ROA is the dependent variable measured at time t for each individual i, ISR, LogFS, BIC, OC, and LEV are the independent variables measured at time t for each individual i, and β_0 , β_1 , β_2 , β_3 , β_4 , and

Commented [A7]: The results section consists of a description of the results of the data analysis to answer the research question(s). The results should summarize (scientific) findings. It usually contains data presented in the form of tables, interview responses, and figures. **Put all tables within the text.**

While DISCUSSION present the interpretation of your results. In general, the discussion should explore the significance of the results of the work, not repeating them. In the discussion, it is the most important section of your article. Here you get the chance to sell your data. Make the discussion corresponding to the results, but do not reiterate the results. Often should begin with a brief summary of the main scientific findings. The meanings of the findings should be shown from current theories and references of the area addressed. The following components should be covered in discussion: How do your results relate to the original question or hypothesis outlined in the Introduction/review of literature section (what)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?

β_5 are the coefficients of the independent variables ISR, LogFS, BIC, OC, and LEV, respectively. The error term for each individual i at time t is represented by $u(it)$.

Table 2: Panel Regression Results

Model	Model 1 (Pooled OLS)	Model 2 (Fixed Effects)	Model 3 (Random Effects)	H1 (xtGLS Model)
ISR	1.3465*** (0.5861)	1.3465*** (0.5861)	1.0132*** (0.3539)	0.9543*** (0.2943)
LogFS	-0.0056 (0.3742)	-0.0056 (0.3742)	-0.1972 (0.1772)	-0.2127 (0.1425)
BIC	-0.4820** (0.2121)	-0.4820** (0.2121)	-0.4312*** (0.1282)	-0.4312*** (0.1062)
OC	-0.0024 (0.0097)	Omitted	0.0014* (0.0008)	0.0013** (0.0006)
LEV	-0.0069 (0.0240)	-0.0069 (0.0240)	-0.0217** (0.0092)	-0.0221*** (0.0073)
Constant	-0.3899 (0.5907)	-0.5607 (0.9438)	0,8944 (0.4759)	1,5097 (0.3863)
R ²	3,9542	2,2882	-	-
Adj R ²	2,4597	-	-	-
F	2.65**	3.19**	-	-
Prob > F	0,1167	0,2028	-	-
Wald chi2	-	-	21.54***	29.62***
Prob > chi2	-	-	0.0006	0.0000
Hausman test: Chi ² (Prob)			2.14 (0.7098)	
F restricted (Chow test)		0.2424		
LM test: Chi ² (Prob)			0.33 (0.2840)	
Mean VIF	58.07			
B-P/C-W test: Chi ² (Prob)	87.53 (0.000)			
Wooldridge test: F (Prob)	3.552 (0.0921)			
Notes:	<ul style="list-style-type: none"> - Standard errors in parentheses. - Significance levels: * p<0.1; ** p<0.05; *** p<0.01 - M1 is an OLS regression, M2 is a fixed effects (FE) regression, M3 is a random effects (RE) regression, and M5 is a xtGLS (Generalized Least Squares) regression. - In M1, the PT PANIN DUBAI Syariah variable is omitted due to collinearity. - In M2, the OC variable is omitted due to collinearity. - Model 5 (xtGLS Model) is selected based on classical assumption tests results. - B-P/C-W test: Breusch-Pagan / Cook-Weisberg test 			

The xtGLS model results support H1 (Table 2), indicating that ISR positively affects Islamic banks' financial performance, as measured by ROA. The ISR coefficient is 0.95, signifying that banks engaged in Islamic social reporting exhibit higher returns on assets than those that do not. This coefficient is statistically significant at the 0.001 level with a standard error of 0.29. The results imply that, after accounting for the impact of FS, LEV, OC, and BIC, ISR remains a significant determinant of ROA.

The control variables' coefficients were also estimated. The BIC coefficient is -0.43, suggesting that greater board independence corresponds to lower returns on assets. However, this coefficient is not statistically significant at the 0.05 level, with a standard error of 0.11. The LEV coefficient is -0.022, indicating that higher leverage relates to lower returns on assets. This coefficient is statistically significant at the 0.002 level, with a standard error of 0.007.

In contrast, the coefficients for FS and OC are not statistically significant at conventional levels. The FS coefficient is -0.21, implying that larger banks have lower returns on assets compared to smaller ones. However, this coefficient is not statistically significant at the 0.05 level, with a standard error of 0.14. The

OC coefficient is 0.001, indicating that banks with higher ownership concentration have higher returns on assets. This coefficient is statistically significant at the 0.036 level, with a standard error of 0.0006.

In summary, the xtGLS model results support H1, demonstrating that ISR positively impacts Islamic banks' financial performance, as measured by ROA, which is consistent with the findings of researchers such as Eksandy and Hakim (2017); (Eksandy & Hakim, 2018; Fachrurrozie et al., 2021; Omar & Simon, 2011; Sutapa & Laksito, 2018). The results also indicate that, after controlling for the effects of FS, LEV, OC, and BIC, ISR remains a significant determinant of ROA. Furthermore, the findings reveal that higher leverage is associated with lower returns on assets, while the relationships between larger banks and lower returns on assets, and higher board independence and lower returns on assets are not statistically significant at conventional levels. Additionally, the effect of ownership concentration on ROA is statistically significant, with higher ownership concentration correlating to higher returns on as(Eksandy & Hakim, 2017)sets.

Structural Analysis - Multiple Models Approach

To examine the relationships between ISR and the financial performance of Islamic banks, we employed a multiple models approach, which considered four different models: the initial model, the model without interaction, and the model with interaction (Figure 3). The use of multiple models allowed for a more robust examination of the relationships between the variables and facilitated a comparison of model fit. This approach enabled us to identify the most suitable model for the study, considering the goodness-of-fit measures and the hypotheses under investigation.

Tabel 3 displays the results of four different models: the initial model, the model without interaction, the model with interaction, and the modified model (Figure 4). Employing multiple models allows for a more robust examination of the relationships between the variables by accounting for various mediating and moderating factors. This approach also enables a comparison of model fit and helps identify the most suitable model for the study, considering the goodness-of-fit measures and the hypotheses under investigation.

The coefficients, z-statistics, and p-values for each model are provided. The initial model reveals a positive and significant relationship between Ownership Concentration (OC) and Return on Assets (ROA) with a coefficient of 0.0013 at the 10% level, and a positive and significant relationship between Islamic Social Reporting (ISR) and ROA with a coefficient of 0.9543 at the 5% level. However, the relationship between Logarithm of Firm Size (LogFS) and ROA is negative with a coefficient of -0.2127 and not significant, while the relationships between Leverage (LEV) with a coefficient of -0.0221 and Board Independence Composition (BIC) with a coefficient of -0.4312 and ROA are negative and significant at the 5% and 1% levels, respectively. The relationships between ISR and OC with a coefficient of -267.6437, and ISR and LogFS with a coefficient of 0.6037, are also significant at the 1% and 10% levels, respectively (Tabel 3 Panel A).

The model without interaction retains the same results as the initial model since no interaction terms are included. The model with interaction introduces the interaction terms between LEV and ISR with a coefficient of -0.3088, and BIC and ISR with a coefficient of -6.6854. These interactions are negative and significant at the 10% and 1% levels, respectively, indicating that these factors have a moderating effect on the relationship between ISR and ROA (Table 3 Panel A). In this model, the relationships between OC, LogFS, and LEV and ROA become insignificant. The modified model, which is run based on modification indices, is chosen based on the goodness-of-fit tests, retains the results from the model with interaction.

The modified model provides a more comprehensive understanding of the relationships between ISR and ROA, taking into account both the mediating and moderating effects of various factors ((Figure 3). This model demonstrates a better overall fit compared to the initial model and the model without interaction, as evident from the lower Akaike Information Criterion (AIC) of -238.394, Bayesian Information Criterion (BIC) of -211.372, and Root Mean Square Error of Approximation (RMSEA) of 0.054. Additionally, the relatively high Comparative Fit Index (CFI) of 0.984 and Tucker-Lewis Index (TLI) of 0.963, as well as the standardized Root Mean Square Residual (SRMR) of 0.423, support the superiority of the final modified model (Table 3. Panel B).

Table 3. SEM Path relationships' results

		Initial Model ¹	Model Without Interaction ¹	Model With Interaction ¹	Final model (modified) ²
		Coef. (z, P>z)			
Panel A					
ROA	<- OC	0.0013 (2.10, *)	0.0013 (2.10, *)	0.0007 (1.25, n.s.)	0.0007 (1.25, n.s.)
	<- LogFS	-0.2127 (-1.49, n.s.)	-0.2127 (-1.49, n.s.)	-0.1443 (-1.22, n.s.)	-0.1443 (-1.22, n.s.)
	<- LEV	-0.0221 (-3.03, **)	-0.0221 (-3.03, **)	-0.01196 (-1.57, n.s.)	-0.01196 (-1.57, n.s.)
	<- BIC	-0.4312 (-4.06, ***)	-0.4312 (-4.06, ***)	-0.3876 (-4.33, ***)	-0.3876 (-4.33, ***)
	<- ISR	0.9543 (3.24, **)	0.9543 (3.24, **)	0.8246 (3.32, **)	0.8246 (3.32, **)
	<- LEV_ISR	-	-	-0.3088 (-2.41, *)	-0.3088 (-2.41, *)
	<- BIC_ISR	-	-	-6.6854 (-4.23, ***)	-6.6854 (-4.23, ***)
OC	<- ISR	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)
	<- BIC_ISR	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)	-267.6437 (-4.70, ***)
LogFS	<- ISR	0.6037 (2.38, *)	0.6037 (2.38, *)	0.6037 (2.38, *)	0.6037 (2.38, *)
Panel B					
- LR	mod vs sat	0.000	3.470	8.925	8.925
	p > chi2	(0.000)	0.482	0.349	0.349
	base vs sat	59.688	52.773	74.329	74.329
	p > chi2	0.000	0.000	0.000	0.000
AIC		179.970	161.440	-238.394	-238.394
BIC		222.192	185.085	-211.372	-211.372
CFI		1.000	1.000	0.984	0.984
TLI		1.000	1.039	0.963	0.963
RMSEA (pclose)		0.000 (1.000)	0.000 (0.533)	0.054 (1.000)	0.054 (1.000)
- SRMR		0.000	0.056	0.423	0.423

Notes: Significance levels: *** p<0.001, ** p<0.01, * p<0.05, n.s. (not significant)

The final (modified) model illustrates that the relationships between OC, LogFS, and LEV with ROA become insignificant when the interaction terms are introduced. Specifically, the coefficients for OC and ROA (0.0007), LogFS and ROA (-0.1443), and LEV and ROA (-0.01196) are all not significant (Table 3 Panel A). This indicates that the direct effects of OC, LogFS, and LEV on ROA are not supported when considering the moderating effects of LEV and BIC on the relationship between ISR and ROA.

Ownership Concentration (OC) has a positive, but statistically insignificant effect on ROA (Coef: 0.0006744, P>|z|: 0.210). This finding does not support the hypothesis that ownership concentration plays a significant role in influencing the relationship between ISR and ROA. The result is inconsistent with prior studies that found a significant effect of ownership concentration on financial performance (Andhari et al., 2022; Bangun, 2019; Godos-Díez et al., 2014; Udayasankar, 2008).

Bank Size (LogFS) has a negative, but statistically insignificant effect on ROA (Coef: -0.1442732, P>|z|: 0.221). This result indicates that the hypothesis suggesting bank size as a significant mediator in the relationship between ISR and ROA is not supported. The finding contrasts with previous research that reported a significant impact of bank size on financial performance (Bangun, 2019; Godos-Díez et al., 2014; Udayasankar, 2008).

¹ see figure 2.

¹ see figure 2.

¹ see figure 2.

² ROA = β1 * ISR + β4 * OC + β5 * LEV_ISR + β6 * LogFS + β8 * BIC_ISR + β9 * LEV + β10 * BIC + e_ROA

OC = β2 * ISR + β7 * BIC_ISR + e_OC

LogFS = β3 * ISR + e_LogFS

Cov(e.LogFS, e.OC) = ψ

The indirect effect of ISR on ROA through ownership concentration (OC) was positive but statistically insignificant (Coef: 0.0000558, $P > |z|$: 0.210), indicating that ownership concentration does not mediate the relationship between ISR and ROA, contrary to the expectation in hypothesis H1b. The indirect effect of ISR on ROA through bank size (LogFS) was also negative but statistically insignificant (Coef: -0.1189164, $P > |z|$: 0.221). This finding does not support hypothesis H1c, which expected a significant mediation effect of bank size in the relationship between ISR and ROA (Tabel 4).

In contrast, the relationship between BIC and ROA remains negative and significant at the 1% level, with a coefficient of -0.3876. The interaction terms between LEV and ISR (-0.3088) and between BIC and ISR (-6.6854) are both negative and significant at the 10% and 1% levels, respectively (Table 3 Panel A).

This demonstrates that LEV and BIC have moderating effects on the relationship between ISR and ROA, which supports hypotheses H2c and H2d. Furthermore, the relationships between ISR and OC (-0.2676437), as well as between ISR and LogFS (0.6037), are significant at the 1% and 10% levels, respectively (Table 3 Panel A). However, these findings do not support the mediating roles of ownership concentration and bank size, as posited in hypotheses H2a and H2b.

Table 4. summary of effects between endogenous and exogenous, and the goodness of fits

Panel A: Effects										
Endogenous		Direct:			Indirect:			Total:		
< Exogenous	Coef.	z-score	P-value	Coef.	z-score	P-value	Coef.	z-score	P-value	
Panel A: Direct										
ROA										
< OC	0.0007	1.2500	0.2100	0.0000	(no path)	(no path)	0.0007	1.2500	0.2100	
< LogFS	-0.1443	-1.2200	0.2210	0.0000	(no path)	(no path)	-0.1443	-1.2200	0.2210	
< ISR	0.8246	3.3200	0.0010	-0.2658	-1.4400	0.1510	0.5588	3.0400	0.0020	
< LEV*ISR	-0.3088	-2.4100	0.0160	0.0000	(no path)	(no path)	-0.3088	-2.4100	0.0160	
< BIC*ISR	-6.6854	-4.2300	0.0000	-0.6710	-1.1000	0.2700	-7.3564	-4.8200	0.0000	
< LEV	-0.0120	-1.5700	0.1170	0.0000	(no path)	(no path)	-0.0120	-1.5700	0.1170	
< BIC	-0.3876	-4.3300	0.0000	0.0000	(no path)	(no path)	-0.3876	-4.3300	0.0000	
OC										
< ISR	-264.9689	-4.9000	0.0000	0.0000	(no path)	(no path)	-264.9689	-4.9000	0.0000	
< BIC*ISR	-995.0154	-2.3300	0.0200	0.0000	(no path)	(no path)	-995.0154	-2.3300	0.0200	
LogFS										
< ISR	0.6037	2.3800	0.0170	0.0000	(no path)	(no path)	0.6037	2.3800	0.0170	
Panel B: Goodness of fit										
Dependents	fitted	Variance		R-squared	mc	mc2				
		predicted	residual							
ROA	0.0088	0.0055	0.0034	0.6195	0.7871	0.6195				
OC	586.4170	248.0747	338.3423	0.4230	0.6504	0.4230				
LogFS	0.0085	0.0011	0.0074	0.1243	0.3525	0.1243				
overall				0.8305						

Leverage (LEV) interacting with ISR (LEV_ISR) has a negative and statistically significant effect on ROA (Coef: -0.3088444, $P > |z|$: 0.016). This result supports the hypothesis that leverage plays a moderating role in the relationship between ISR and ROA (H2c), consistent with previous research (Berger & DeYoung, 1997; Chen, 2020; Koke & Renneboog, 2005; Mahrani & Soewarno, 2018; Sami et al., 2011; Susbiyani et al., 2022; The & Duc, 2020).

Board Independence Composition (BIC) interacting with ISR (BIC_ISR) has a negative and statistically significant effect on ROA (Coef: -6.685395, $P > |z|$: 0.000). This result supports the hypothesis that board independence composition moderates the relationship between ISR and ROA (H2d), aligning with findings from prior studies (Berger & DeYoung, 1997; Chen, 2020; Koke & Renneboog, 2005; Mahrani & Soewarno, 2018; Sami et al., 2011; Susbiyani et al., 2022; The & Duc, 2020).

The direct effects analysis in the final modified model revealed that ISR has a positive and statistically significant effect on the financial performance of Islamic banks, measured by Return on Assets (ROA). This finding indicates that ISR plays an essential role in enhancing the financial performance of Islamic banks, which is in line with the literature suggesting that ISR can contribute to improved financial performance

through increased transparency, accountability, and stakeholder engagement (e.g., (Maali et al., 2006; Othman et al., 2009).

Islamic Social Reporting (ISR) has a positive and statistically significant effect on ROA (Coef: 0.8245762, $P > |z|$: 0.001), confirming the xtGLS result (Tabel 2.). This result confirms the hypothesis that ISR has a significant direct impact on the financial performance of Islamic banks. The finding is consistent with prior studies that found a positive relationship between ISR and financial performance (Berger & DeYoung, 1997; Chen, 2020; Koke & Renneboog, 2005; Mahrani & Soewarno, 2018; Sami et al., 2011; Susbiyani et al., 2022; The & Duc, 2020).

In summary, the results indicate that ISR has a direct, positive, and significant impact on the financial performance of Islamic banks, while the mediating effects of ownership concentration and bank size were not statistically significant. However, the moderating effects of leverage and board independence composition were found to be significant and negative, implying that higher leverage and a more independent board composition could weaken the positive relationship between ISR and ROA.

Conclusion

In conclusion, this study contributes to the existing literature on the role of ISR in shaping the financial performance of Islamic banks by providing a more nuanced understanding of the complex dynamics at play. The final modified model supports the moderating roles of board independence composition and leverage in the relationship between ISR and Islamic banks' financial performance, while rejecting the mediating roles of ownership concentration and bank size. This study highlights the importance of considering both mediating and moderating factors when examining the relationship between ISR and Islamic banks' financial performance and underscores the value of employing a multiple models approach to assess the relationships between these variables.

The findings of this study have implications for policymakers and practitioners in the Islamic banking sector, as they suggest that promoting ISR practices, enhancing board independence composition, and maintaining an optimal level of leverage could contribute to improving the financial performance of Islamic banks. Future research should continue to explore the relationships between ISR, ownership concentration, bank size, board independence composition, leverage, and Islamic banks' financial performance, considering additional factors and contexts to further enhance our understanding of the role of ISR in shaping Islamic banks' financial performance.

By examining the mediating and moderating effects of various factors, this study offers a more comprehensive understanding of the complex relationships between ISR, ownership concentration, bank size, board independence composition, leverage, and Islamic banks' financial performance. The use of multiple models enabled a robust examination of the proposed hypotheses and facilitated the identification of the most suitable model based on goodness-of-fit measures. The final modified model ultimately provides the most accurate representation of the relationships between these variables, contributing valuable insights to the existing literature and informing policy decisions and management practices within the Islamic banking sector.

Implications for Theory and Practice

The findings of this study have several implications for theory and practice. First, the study contributes to the existing literature on the role of ISR in shaping the financial performance of Islamic banks by providing a more nuanced understanding of the complex dynamics at play. The final modified model highlights the importance of considering both mediating and moderating factors when examining the relationship between ISR and Islamic banks' financial performance. This approach can help researchers better understand the impact of ISR on the financial performance of Islamic banks and inform future research in this area.

Second, the findings of this study can inform policy decisions and management practices within the Islamic banking sector. For policymakers and regulators, the results suggest that promoting ISR practices and enhancing board independence composition could contribute to improving the financial performance of Islamic banks. Additionally, given the moderating effect of leverage on the relationship between ISR and

financial performance, regulators might consider implementing policies that encourage Islamic banks to maintain an optimal level of leverage.

For practitioners in the Islamic banking sector, the study's results underscore the importance of integrating ISR into their business strategies and operations. This integration can help enhance transparency, accountability, and stakeholder engagement, which can ultimately improve the financial performance of Islamic banks. Furthermore, the findings suggest that Islamic banks should pay attention to their leverage and board independence composition, as these factors can influence the relationship between ISR and financial performance.

Future Research Directions

Although this study provides valuable insights into the relationship between ISR and the financial performance of Islamic banks, there is still room for further research in this area. Future studies could explore the relationships between these variables in different contexts, such as other regions or countries, to determine whether the findings are generalizable. Additionally, researchers might consider examining the impact of other potential mediating or moderating factors on the relationship between ISR and financial performance, such as corporate governance mechanisms or organizational culture.

Moreover, future research could investigate the role of ISR in shaping other dimensions of Islamic banks' performance, such as social or environmental performance. This approach could provide a more comprehensive understanding of the role of ISR in promoting sustainable development within the Islamic banking sector. Finally, longitudinal studies could be conducted to examine the dynamic relationships between ISR, mediating and moderating factors, and Islamic banks' financial performance over time. Such studies could help to identify potential causal relationships and provide insights into how these relationships evolve in response to changes in the business environment or regulatory landscape.

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Appendix.

Islamic disclosure themes and items (adopted from [Susbiyani et al. \(2022\)](#))

Disclosure themes	Point Ref.	Source
A Financing and investment themes		
1 Activities containing usury, such as interest and interest income.	1	Haniffa (2002); Othman et al. (2009)
2 Gharar related activities, hedging, future non-delivery trading, margin trading, arbitrage, short selling, pure swap, warrant and the like	1	Haniffa (2002); Othman et al. (2009)
3 Zakat includes disclosure of methods used, sources, amount and recipients of zakat	1	Haniffa (2002); Othman et al. (2009)
4 Policies for dealing with late payment of insolvent clients	1	Othman et al. (2009)
5 Value-added statement of the company	1	Othman et al. (2009)
B Products and services themes		
6 Environment-friendly products and operating activities	1	Othman et al. (2009)
7 Halal or syariah status in products	1	
8 Product safety and quality	1	Othman et al. (2009)

Disclosure themes	Point Ref.	Source
9 Customer's complaints or events occurring from company's disobedience to the applicable rules	1	Othman et al. (2009)
C Employees themes		
10 Job characteristics including working hours, holidays and other benefits	1	Haniffa (2002); Othman et al. (2009)
11 Remuneration	1	Haniffa (2002); Othman et al. (2009)
12 Education and job training in relation to human resources development	1	Haniffa (2002); Othman et al. (2009)
13 Equality of rights between men and women	1	Haniffa (2002); Othman et al. (2009)
14 Employee's involvement at management discussions in the process of decision-making	1	Haniffa (2002); Othman et al. (2009)
15 Occupational safety and health	1	Haniffa (2002); Othman et al. (2009)
16 Work environment	1	Maali et al. (2006); Othman et al. (2009)
17 Employees of specific groups, such as physically disabled, ex-convict, former drug addict and the like	1	Othman et al. (2009)
18 The high-level employees performing religious worship with the mid- and lower-level employees	1	Othman et al. (2009)
19 Muslim employees allowed to perform their religious worship at times for prayers and to fast during the month of Ramadan	1	Othman et al. (2009)
20 Representative prayer's room	1	Othman et al. (2009)
D Society themes		
21 Alms, donation or charity	1	Haniffa (2002); Othman et al. (2009)
22 Wakaf	1	Haniffa (2002); Othman et al. (2009)
23 Qard Hassan	1	Haniffa (2002); Othman et al. (2009)
24 Volunteers from employees	1	Othman et al. (2009)
25 Providing scholarships	1	Othman et al. (2009)
26 Empowering graduates from high schools or colleges, such as in the form of internships or field work	1	Othman et al. (2009)
27 Youth development	1	Othman et al. (2009)
28 Improving life quality of the poor	1	Othman et al. (2009)
29 Children caring	1	Othman et al. (2009)
30 Charity or social programs intended for different occasions, such as charity for natural disasters, providing blood donors, circumcisions, building public infrastructures and the like	1	Othman et al. (2009)
31 Giving charity to programs related to healthcare, entertainment, sports, education and religion.	1	Othman et al. (2009)
E Environment themes		
32 Environment conservation	1	Haniffa (2002); Othman et al. (2009)
33 Acts for reducing global warming effects, such as activities which support minimizing	1	Othman et al. (2009)

Disclosure themes	Point Ref.	Source
pollutions, waste management, clean water management and the like		
34 Environment education	1	Othman et al. (2009)
35 Stating independent verification or environmental audits	1	Othman et al. (2009)
36 Environment management system	1	Othman et al. (2009)
F Corporation management themes		Othman et al. (2009)
37 Compliance to syariah	1	Othman et al. (2009)
38 Share ownership structure	1	Othman et al. (2009)
39 Disclosure about whether the company has undergone monopoly practices	1	Othman et al. (2009)
40 Disclosure about whether the company carries out the practice of hoarding basic necessities	1	Othman et al. (2009)
41 Disclosure about whether the company practices price manipulation	1	Othman et al. (2009)
42 Disclosure about any legal case is raised	1	Othman et al. (2009)
43 Anti-corruption policy, such as code of conduct, whistleblowing system and the like	1	Othman et al. (2009)
Total	43	