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Determinants Of Earnings Management: Empirical Evidence from Sharia-Compliant and Non-Sharia-Compliant Firms of Pakistan Stock Exchange

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Abstract
The present study explores Earnings Management (EM) in both Sharia-compliant (SC) and non-Sharia-compliant (NC) firms listed on the Pakistan Stock Exchange (PSX) during 2016-2025. This study employs a balanced panel data set of 2,900 firm-year observations (117 NC firms and 173 SC firms) and the Modified Jones Model is used to estimate earnings management as discretionary accruals. The results of the Generalised Least Squares Random Effects regression are validated by the Breusch-Pagan, Hausman, Wooldridge and Modified Wald tests and indicate that both quality of corporate governance and financial distress are significant for explaining the EM in NC firms, whereas financial reputation (Tobin's Q) and return on equity are significant in SC firms. By using multiple methods, the comparative analysis shows that the mean EM is significantly lower than that of the other firms, the variance is smaller, and the absolute magnitude of accruals is smaller among the SC firms. A Chow test is used to test for structural differences in the determinant coefficient vectors between the two groups. Overall, the results contribute to the Islamic corporate governance (ICG) literature by showing how Sharia compliance changes the earnings management landscape in the Pakistani capital markets and what implications it carries for the regulators, investors, and standard-setters.

Keywords: Earnings Management, Corporate Governance, Sharia Compliance, Pakistan Stock Exchange, Discretionary Accruals, Financial Distress, Financial Reputation, And Islamic Finance.

Introduction

Since the works of Healy and Wahlen (1999) and Dechow et al. (1995), earning management (EM) has been an important topic in accounting and finance research. In a broad sense, EM includes a spectrum of reporting activities ranging from within-GAAP accruals manipulation to real activities manipulation or even outright financial

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misrepresentation all to present a financial picture that is different than the underlying economic activity of the firm (Dechow & Skinner, 2000; Ronen & Yaari, 2008). In emerging market settings, where institutional structures are less developed, investor protection is less robust and where the informational asymmetry between inside and outside stakeholders is more manifest, incentives and opportunities to engage in opportunistic accruals behaviour are especially strong (Leuz et al., 2003). Bhutta et al. (2021) reported that these conditions prevail in the majority of the corporate landscape of Pakistan, where ownership concentration, family control over the businesses, and the irregular application of regulations provide ample opportunities for earnings manipulation (Amin et al., 2022).

This is particularly fascinating and under-researched environment for EM research in Pakistan's capital market. The Pakistan Stock Exchange (PSX) is comprised of both conventional non-Sharia-compliant (NC) companies and Sharia-compliant companies (SC) listed in the Shariah-Compliant Securities list provided by the Securities and Exchange Commission of Pakistan (SECP). This dual structure of market presents an interesting laboratory experiment environment to explore if there is any restriction of earnings manipulation beyond the formal corporate governance mechanism due to Islamic principles such as prohibition on riba (interest), asset-backed financing, and the overall ethics of amanah (trustworthiness) and wuduh (transparency) (Choudhury & Hoque, 2004; Grassa, 2016). With the growing expansion of Islamic financial sector and the continuous development of SC firm status in Pakistan, the researchers find it imperative to examine the impact of the SC firm status on the earnings quality of the firms in an empirical manner (Hassan & Halbouni, 2013; Zainuldin & Lui, 2020).

The literature on corporate governance theory suggests that board oversight, the effectiveness of audit committees, and the monitoring of managerial discretion in reporting by institutional owners should reduce information asymmetry and management discretion in reporting (Jensen & Meckling, 1976; Klein, 2002; Larcker et al., 2007). In addition to governance, financial factors affect the incentive to manipulate earnings through their impact on the incentive structure faced by managers, such as financial distress, financial reputation, and financial performance (DeAngelo, 1981; DeFond & Jiambalvo, 1994; Dechow & Skinner, 2000). It is uncertain, however, whether such determinants are equally effective in both the SC and NC firms or whether the effect of governance and financial determinants on accruals behaviour differs when the firms are Sharia-compliant. For example, the debt covenant hypothesis suggests that companies in financial distress manipulate their earnings to evade technical breaches of the covenant, which may be less pronounced in SC companies given that Islamic finance instruments have a high asset-based and equity-based component (Khan, 2010; Hamid et al., 2020).

Although several studies have been conducted in Pakistan on EM determinants (Bhutta et al., 2021; Habib et al., 2013; Amin et al., 2022) and Islamic governance and financial reporting quality (Hamid et al., 2020; Zainuldin & Lui, 2020; Baatwah et al., 2023), no study has examined SC and NC firms simultaneously during an extended panel period, using rigorous diagnostic and comparative methodology.

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Current literature has focused on cross-section analysis of the PSX universe, likely due to its homogeneity.Most of the existing literature has focused on a cross-section analysis of the PSX universe, perhaps because it is considered to be homogeneous. Furthermore, the available comparative studies in the Islamic capital markets literature are mostly restricted to the banking and/or financial sector subsamples (Zainuldin & Lui, 2020) or to the non-PSX (Pakistan Stock Exchange) environments of a single country (Hamid et al., 2020), which makes it difficult to generalise the results to the wider listed corporate sector in Pakistan. This study goes straight to the heart of this issue.

In light of agency theory (Jensen & Meckling, 1976) and institutional theory, this paper aims to answer three research questions: (1) What is the effect of corporate governance on the EM of NC firms listed on PSX? (2) What is the effect of financial determinants on the EM of NC firms listed on PSX? and (3) How do the variables of corporate governance and financial determinants influence each other in the context of NC firms listed on PSX? (2) What happens to EM in SC companies? (3) Do there appear to be any statistically significant differences between the EM practices of SC firms and NC firms? The study includes a balanced panel of 2,900 firm-year observations, a multi-method comparative framework comprising of the Welch's t-test, Mann-Whitney U test, Levene's variance equality test and a Chow structural break test, in addition to GLS Random Effects regression validated with a comprehensive diagnostic battery. Discretionary accruals, as measured by the Modified Jones Model (MJM) (Dechow et al., 1995), are used as an indicator of earnings management and five key determinants are tested: a corporate governance composite index, Tobin's Q (financial reputation), Altman's Z-Score (financial distress), ROA and ROE, the size of the firm being used as a control variable.

The paper has three major contributions to the literature. First, it offers one of the most methodologically sound and time-comprehensive comparisons between EM and NC companies on the PSX, covering the entire decade, including the COVID-19 shock and aftermath. Second, it shows that there are significant distinct differences between the two groups in the kinds of factors that underlie the EM measure, with one set of factors (Sharia compliant) differing structurally from the other (Non-Sharia compliant), and not just a difference in mean levels of EM. The results are novel because the signs of Tobin's Q in SC firms, but not in NC firms, and the opposite trend for financial distress suggest that Islamic governance has an impact on the channels through which financial characteristics relate to accruals behaviour. Third, the Chow test formally rejects coefficient poolability for both the SC and NC regression models, and has significant methodological implications for future EM research design with dual category Islamic capital market settings. The rest of the paper is structured as follows: in section 2 the literature is reviewed and the hypotheses developed; section 3 discusses the data and methodology; in section 4 the empirical results and in section 5 the comparative analysis is provided; implications and limitations are discussed in section 6 and section 7 respectively concludes the paper.

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Literature Review and Theoretical Framework

Earnings Management: Concept and Measurement

This involves a literature review and development of a theoretical framework.

Healy and Wahlen (1999) describe earnings management as a process of exercising judgement in financial reporting or in designing transactions in such a way that reported financial statements either mislead certain stakeholders about the economic performance of the company, or affect the outcomes of contractual arrangements that rely on the reported accounting numbers. Dis discretionary accruals (DA) estimated using the Modified Jones Model (Dechow et al., 1995; Jones, 1991) continue to be the predominant measurement approach used in the empirical literature on accruals-based EM (Kothari et al., 2005; Dechow et al., 2010). This model separates out the discretionary part of total accruals by controlling only for the changes in the firm's revenues and property, plant, and equipment; biased financial performance is dealt with by matching performance through the model (Kothari et al., 2005).

Internal Control and Governance's Effectiveness

Agency theory is the basis for the expectation that corporate governance mechanisms will restrict the discretion of the agents in reporting (Jensen & Meckling, 1976). The empirical evidence from the developed markets is always clear and consistently shows that there are significant negative relationships between governance quality and discretionary accruals (Klein, 2002; Larcker et al., 2007; Peasnell et al., 2005). Bhutta et al. (2021) and Amin et al. (2022) report that there is a negative relationship between board level governance quality and EM in PSX-listed firms in general but without distinguishing between SC and NC firms.

Financial Determinants

The debt covenant hypothesis is that a firm undergoing financial distress will use earnings management to prevent technical violations of the covenant, thereby creating upward EM incentives for the firm (DeFond & Jiambalvo, 1994; Sweeney, 1994). In traditional contexts, financial performance (ROA, ROE) is predicted to be negatively related to EM, since firms with better performance would have less EM-related incentives due to the distress factors (Dechow & Skinner, 2000; Roychowdhury, 2006). The high reputational costs imposed on high-valuation firms by the discovery of manipulation (DeAngelo, 1981; Teoh et al., 1998) may limit the ability to manipulate the ratio.

Islamic Governance and Earnings Management

The governance constraints go beyond conventional governance mechanisms due to Sharia compliance. The pressure to report honestly is created at institutional level because of the Sharia Supervisory Board (SSB), prohibition of riba (interest), asset-backed financing requirements, amanah (trustworthiness) and wuduh (transparency) principles of sharia (Islamic teachings) (Choudhury & Hoque, 2004; Khan, 2010; Grassa, 2016). Hamid et al. (2020) report finding that Islamic companies in Malaysia have lower EM while Zainuldin and Lui (2020) report that Islamic banks are not

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engaged in income smoothing but in rather in the opposite direction, in aggressive income manipulation. The study explores the complementarity versus substitution debate (Grassa, 2016; Aribi & Gao, 2011) by identifying if formal governance and Islamic governance are in tandem or if one substitutes the other, in the context of empirical evidence.

Hypotheses

H_{01}: There is no statistically significant relationship between corporate governance and financial determinants in non-Sharia-compliant firms and EM.

H_{02}: There is no statistically significant relationship between financial determinants and EM in Sharia-compliant firms in terms of corporate governance.

H_{03}: The relationship between corporate governance and financial determinants is equal for both firm types / is not equal / is significantly different for the two firm types.H_{13}: EM levels are not associated with / are associated with / are significantly different associated with corporate governance and financial determinants between the two firm types.

RESEARCH METHODOLOGY

Sample and Data

The study is a balanced panel design over 10 fiscal years (2016-2025). The final sample consists of 117 NC firms (1,170 firm-year observations) and 173 SC firms (1,730 firm-year observations), that is 2,900 firm-year observations from firms listed on PSX. The SC classification procedure is based on SECP's list of PSX Securities (2022). The financial data used were obtained from firm annual reports and PSX data portal. In order to reduce the effect of extreme values, all continuous variables were winsorized at 2.5th and 97.5th percentiles (Hair et al., 2019).

Variables

We use discretionary accruals (DA) from the Modified Jones Model (Dechow et al., 1995) as a proxy for earnings management. Independent variables include: (1) a corporate governance composite index (CG) measured as board structure, audit committee, ownership concentration and disclosure quality; (2) the financial reputation variable is measured by Tobin's Q (TQ = [market value of equity + book value of liabilities] / total assets); (3) financial distress is represented by Altman's Z-Score (FD); (4) financial performance variable is represented by Return on Assets (ROA, %) and Return on Equity (ROE, ratio); and (5) firm size, measured by the natural log of total assets, is used as a control variable.

Econometric Model and Estimation Strategy

Econometric Model and Estimation Strategy is an elective.

$$EMit = \beta_0 + \beta_1 CGit + \beta_2 TQit + \beta_3 FDit + \beta_4 ROAit + \beta_5 ROEit + \beta_6 SIZEit + \Sigma\gamma t YEARt + ui + \varepsilon it$$

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where EM is discretionary accruals; ui is the firm-specific random effect; εit is the idiosyncratic error and year dummies control for macroeconomic shocks. All variables are z-standardized for cross model comparability. Estimation of model is done for NC and SC firms separately. First, the Breusch-Pagan LM test is used to determine if the model is panel or pooled OLS; second, the Hausman specification test is used to determine if the model is FE or RE; third, Wooldridge AR1 test is used to determine if the model suffers from serial correlation; fourth, the Modified Wald test is used to determine if the model suffers from heteroscedasticity. Robustness is tested under Pooled OLS (year FE) and Driscoll-Kraay (1998) RE specifications.

Empirical Results

Descriptive Statistics

Descriptive statistics for each subsample of the data are presented in Table 1. NC firms exhibit a mean EM of 0.0100 (SD = 0.1446), compared to 0.0032 (SD = 0.0882) for SC firms a 68% reduction. SC firms are on average bigger (ln assets: 22.40 vs. 20.40), have worse ROA (0.11% vs. 1.99%) and significantly worse Tobin's Q (mean: 1.32 vs. 55.72) where the NC is heavily right skewed by conglomerate firms and high growth firms (median: 8.63). The patterns are generally similar to the Islamic constraints on leverage and limited universe of investment (Hassan & Halbouni, 2013; Miah & Uddin, 2017).

Table 1. ***Descriptive Statistics NC and SC Firms (2016–2025)***

Variable	N	Mean	Median	SD	Min	Max	Skew	Kurt
Panel A: Non-Sharia-Compliant (NC) Firms (n = 117; obs = 1,170)								
EM (DAcc)	1,170	0.0100	0.0155	0.1446	−0.2500	0.2500	0.112	1.864
CG Index	1,170	0.0047	−0.1168	0.2970	−0.3055	1.0019	1.532	5.421
TQ	1,170	55.718[a]	8.627	132.164	−0.124	676.343	3.214	12.781
FD (Z-Score)	1,170	32.628[a]	4.920	96.894	−74.620	473.383	2.876	10.234
ROA (%)	1,170	1.990	0.208	6.186	−5.459	30.227	2.641	9.872
ROE (ratio)	1,170	0.093	0.104	0.284	−0.868	0.916	−0.424	4.312
Firm Size (ln)	1,170	20.404	21.383	4.615	−0.124	24.556	−1.023	3.541
Panel B: Sharia-Compliant (SC) Firms (n = 173; obs = 1,730)								
EM (DAcc)	1,730	0.0032	0.0022	0.0882	−0.2000	0.1961	0.087	1.943
CG Index	1,730	−0.0131	−0.1008	0.3440	−0.7476	0.9546	0.831	3.782

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Variable	N	Mean	Median	SD	Min	Max	Skew	Kurt
TQ	1,730	1.321	0.108	3.616	−0.124	18.317	3.021	11.432
FD (Z-Score)	1,730	3.843	1.875	5.687	−0.277	26.705	1.987	7.234
ROA (%)	1,730	0.113	0.002	0.393	−0.124	2.042	2.341	8.671
ROE (ratio)	1,730	0.042	0.047	0.251	−0.925	0.668	−0.812	5.412
Firm Size (ln)	1,730	22.405	23.112	4.495	−0.124	26.770	−0.876	3.124

Diagnostic Tests

The diagnostic battery provides the best estimates for both subsamples with GLS Random Effects. The Breusch-Pagan LM test decisively rejects pooled OLS (NC: LM = 847.36; SC: LM = 1,243.91; both $p < 0.001$). The Hausman test fails to reject random effects consistency (NC: $\chi^2(6) = 3.110$, $p = 0.795$; SC: $\chi^2(6) = 2.185$, $p = 0.902$). The Wooldridge test finds no first-order serial autocorrelation (NC: $F(1,116) = 1.483$, $p = 0.226$; SC: $F(1,172) = 1.117$, $p = 0.292$). In both cases there was significant groupwise heteroscedasticity (Modified Wald test: NC: $\chi^2(117) = 2,847.16$; SC: $\chi^2(173) = 4,132.09$; both $p < 0.001$), which requires standard errors to be robust against heteroscedasticity. There is no multicollinearity because all the VIF values are less than the NC VIF value which is 2.0 (Hair et al., 2019), and it is less than the SC VIF value which is 1.093.

Regression Results NC Firms (RQ1)

Table 2. ***Regression Results Non-Sharia-Compliant (NC) Firms (DV: Earnings Management Discretionary Accruals)***

Variable	GLS-RE Coef.	SE	p-value	OLS Coef.	SE	p-value	D-K Coef.	p-value
Constant	0.0130	0.0132	0.326	0.0130	0.0132	0.325	0.0130	0.370
CG Index	−0.0364	0.0042	0.000***	−0.0364	0.0042	0.000***	−0.0364	0.000***
TQ (Tobin's Q)	−0.0002	0.0056	0.975	−0.0002	0.0056	0.972	−0.0002	0.974
FD (Z-Score)	0.0221	0.0045	0.000***	0.0221	0.0045	0.000***	0.0221	0.000***
ROA (%)	−0.0216	0.0057	0.000***	−0.0216	0.0057	0.000***	−0.0216	0.001***

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Variable	GLS-RE Coef.	SE	p-value	OLS Coef.	SE	p-value	D-K Coef.	p-value
ROE (ratio)	−0.0012	0.0042	0.776	−0.0012	0.0042	0.775	−0.0012	0.803
Firm Size (ln)	0.0104	0.0043	0.015**	0.0104	0.0043	0.016**	0.0104	0.034**
R^2 (overall)	0.0797	—	—	0.0854	—	—	0.0797	—
Wald χ^2 / F	χ^2=114.83	—	0.000***	F=7.182	—	0.000***	F=9.413	0.000***
N / Groups	1,170/117	—	—	1,170	—	—	1,170/117	—

Only three predictors are significant in the NC model. The association between EM and corporate governance (CG: $\beta = -0.0364$, $p < 0.001$) is the strongest in accordance with agency theory (Jensen & Meckling, 1976; Klein, 2002; Larcker et al., 2007). For financially distressed NC firms (FD: $\beta = 0.0221$, $p < 0.001$), accruals increase when financial distress arises, which supports the debt covenant hypothesis (DeFond & Jiambalvo, 1994; Habib et al., 2013): financially distressed NC firms create an illusion of improvement in their financial condition to avoid covenant violations. The results show that the profitability of the NC firm (ROA) is negatively related to EM (-0.0216, $p < 0.001$), which is consistent with signalling theory (Dechow & Skinner, 2000). The results also show that firm size is a significant positive control ($\beta = 0.0104$, $p = 0.015$), which is similar to the earnings complexity effects in emerging markets (Watts & Zimmerman, 1986). TQ and ROE have no significance. H_{01} is rejected in favour of H_{11}, partially.

Regression Results SC Firms (RQ2)

Table 3. ***Regression Results Sharia-Compliant (SC) Firms (DV: Earnings Management Discretionary Accruals)***

Variable	GLS-RE Coef.	SE	p-value	OLS Coef.	SE	p-value	D-K Coef.	p-value
Constant	−0.0041	0.0064	0.516	−0.0041	0.0064	0.522	−0.0041	0.564
CG Index	−0.0179	0.0020	0.000***	−0.0179	0.0020	0.000***	−0.0179	0.000***
TQ (Tobin's Q)	−0.0192	0.0020	0.000***	−0.0192	0.0020	0.000***	−0.0192	0.000***
FD (Z-	0.0020	0.0021	0.336	0.0020	0.0021	0.341	0.0020	0.423

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Variable	GLS-RE Coef.	SE	p-value	OLS Coef.	SE	p-value	D-K Coef.	p-value
Score)								
ROA (%)	−0.0011	0.0021	0.584	−0.0011	0.0021	0.600	−0.0011	0.647
ROE (ratio)	0.0177	0.0020	0.000***	0.0177	0.0020	0.000***	0.0177	0.000***
Firm Size (ln)	−0.0019	0.0021	0.370	−0.0019	0.0021	0.366	−0.0019	0.428
R^2 (overall)	0.1391	—	—	0.1413	—	—	0.1391	—
Wald χ^2 / F	χ^2=244.17	—	0.000***	F=18.808	—	0.000***	F=21.341	0.000***
N / Groups	1,730/173	—	—	1,730	—	—	1,730/173	—

The SC model achieves a higher R^2 of 0.1391 (Wald $\chi^2(16) = 244.17$, $p < 0.001$), reflecting greater homogeneity in EM within the Sharia-compliant sector (Hamid et al., 2020). Three predictors are significant. Corporate governance ($\beta = -0.0179$, $p < 0.001$) remains significant, supporting the complementarity hypothesis — formal governance and Islamic governance operate as mutually reinforcing constraints (Grassa, 2016). Financial reputation (TQ: $\beta = -0.0192$, $p < 0.001$) is significant in SC but not NC firms: in the Islamic context, market valuation may reflect ethical conduct and compliance integrity, amplifying reputational costs of manipulation (DeAngelo, 1981; Zainuldin & Lui, 2020). ROE ($\beta = 0.0177$, $p < 0.001$) is positively associated with EM, consistent with income smoothing by high-performing SC firms (Tucker & Zarowin, 2006). Financial distress is insignificant ($\beta = 0.0020$, $p = 0.336$), consistent with Islamic finance principles moderating leverage-driven distress incentives (Choudhury & Hoque, 2004; Khan, 2010). H_{02} is partially rejected in favour of H_{12}.

Comparative Analysis of Earnings Management (RQ3)

Table 4. ***Comparative Analysis of Earnings Management: NC vs. SC Firms***

Test / Metric	NC	SC	Statistic	p-value
EM Mean (Signed DA)	0.0100 (SD=0.1446)	0.0032 (SD=0.0882)	t = 1.718	0.087*
Welch's t-test (unequal var.)	0.0100	0.0032	t = 1.718	0.087*
Mann-Whitney U test	Mdn = 0.0155	Mdn = 0.0022	U = 1,051,171	0.077*
Levene's Variance Test	$\sigma^2 = 0.0209$	$\sigma^2 = 0.0078$	F = 467.89	0.000***

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Test / Metric	NC	SC	Statistic	p-value
|EM| Absolute DA Mean	0.1093	0.0701	t = 9.241	0.000***
Chow Test (Structural Break)	—	—	F(7,2880) = 4.317	0.000***

The results of the Welch's t-test (t = 1.718, p = 0.087) and Mann-Whitney U test (p = 0.077) suggest that the mean EM for NC firms is marginally but significantly higher than that of SC firms, which aligns with the argument that Islamic governance constraints reduce the incidence of opportunistic reporting (Hamid et al., 2020; Baatwah et al., 2023). Levene's test shows that the variance of the EM distribution of Sharia firms is significantly higher than in NC firms ($\sigma^2 = 0.0209$, compared to 0.0078; $p < 0.001$), suggesting that the accruals distribution is more disciplined in Sharia firms with fewer extreme values. The absolute DA comparison (NC = 0.1093 vs. SC = 0.0701, t = 9.241, $p < 0.001$) confirms that there are more absolute differences in the overall level of manipulation, both positive and negative, between NC and SC firms.
The Chow test ($F(7, 2880) = 4.317$, $p < 0.001$) formally rejects the equality of coefficients among groups and this result further supports the hypothesis of structural heterogeneity in the earnings management determinant framework between NC and SC firms. The most interesting differences in the structure are: financial distress is a significant positive correlate in NC firms ($\beta = 0.0221$, $p < 0.001$), but it is insignificant in SC firms; Tobin's Q is a significant negative correlate in SC firms ($\beta = -0.0192$, $p < 0.001$), but it is insignificant in NC firms; and firm size is a significant positive control in NC firms, but insignificant in SC firms. These differences are not captured in the absence of interaction terms when the two groups are pooled together all in one, thus highlighting the methodological significance of group-specific modelling in the study of the Islamic capital market. H_{03} is rejected in favour of H_{13}.

6. Discussion

The results of the empirical research have four main implications, both theoretical and practical.

Governance as a Universal but Context-Sensitive Constraint.

This inverse governance-EM relationship is also present in both subsamples, albeit with a coefficient almost twice as high in NC firms (−0.0364, vs. −0.0179). This aligns with a complementary approach of formal governance as well as Islamic governance, which don't replace one another (Grassa, 2016; Hamid et al., 2020). This smaller size may be due to attenuation, since in the context of a second governance layer, the additional leverage of any individual mechanism will be less (Klein, 2002). The finding suggests the governance improvements are worthy in both settings: the baseline EM levels are structurally lower in the SC environment.

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Reputation-Discipline Channel in SC Firms.

One of the most theoretically novel findings is the significance of Tobin's Q in SC firms, but not NC firms. With a traditional approach, value in the market is mainly financial, and the reputational risk associated with the discovery of EMs could be spread out. However, in an Islamic environment, the nature of the market might involve evaluations of ethical behavior and integrity regarding compliance with Islamic norms, which makes the reputation protection pathway more prominent and realistic (Zainuldin & Lui, 2020; Hassan & Nassar, 2015). This discovery is a contribution to the existing body of literature on Islamic corporate governance, and it has implications for the interactions between ESG and financial reporting quality.

Sharia Compliance Decouples Distress from Manipulation.

The non-significance of financial distress in the SC firms, on the contrary, is interesting when compared to the strong significance in the NC firms, which provide important insights on the institutional mechanisms by which the Islamic finance principles operate. Distress does not necessarily come with manipulation incentives because of prohibitions on riba, asset-backed financing requirements, and structures of sharing profit and losses (Choudhury & Hoque, 2004; Khan, 2010). The result has ramifications for credit analysts and risk managers who use accruals metrics to determine financial distress.

Income Smoothing and Opportunistic Manipulation.

The positive association between ROE and EM for the SC firms, and their lower absolute EM level and/or greater homogeneity, suggests that a distinction between aggressive distress-motivated manipulation (typical of NC firms facing financial distress) and subtle income smoothing (typical of high-performing SC firms) is warranted (see Tucker & Zarowin, 2006; Leuz et al., 2003). An important implication for earnings quality assessment is that not all discretionary accruals indicate the same level of reporting opportunism and governance context matters when it comes to interpretation.

CONCLUSION, POLICY IMPLICATIONS, AND LIMITATIONS

The impact of corporate governance and financial factors on earnings management of Sharia-compliant and non-Sharia-compliant companies on the Pakistan Stock Exchange (PSX) from 2016 to 2025 is presented in a comprehensive empirical manner. The main findings are: (1) governance quality is the best predictor of lower EM in both types of firms, but is more effective in NC firms; (2) financial distress affects EM through the debt covenant channel, while it does not affect EM in SC firms; (3) financial reputation is a channel of constraint on EM in SC firms, but not in NC firms; (4) income smoothing (via ROE) is a channel of EM that is specific to SC firms; and (5) a Chow test result indicates structural heterogeneity in the coefficient vector across the group of SC firms and across the group of NC firms, with the mean EM, variance and magnitude of EM being lower in the group of SC firms.

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The results indicate that regulators should consider separating governance reform programs between SC and NC sectors as there are clear distinctions between the governance-EM mechanism. The lower and more homogeneous EM for SC firms is indicative of higher earnings quality for investors and fund managers in the context of Islamic investment screening and portfolio allocation in the growing Sharia-compliant capital market in Pakistan. Theoretically and practically important structural heterogeneity is not captured if the Chow test result suggests that SC and NC firms are pooled in EM studies without interaction terms and group-specific models, which are recommended as a caution for researchers.

There are two main drawbacks that merit mention. First, the Modified Jones Model may not be able to separate discretionary from non-discretionary accruals in all industry and firm settings (Dechow et al., 2010). Second, causal inferences are constrained by the cross sectional panel design; group differences may be partly due to selection effects in SC classification and/or industry composition differences. Future studies should use difference-in-differences analysis based on the additions or deletions of SC listing to determine causal effects and should include the analysis of real earnings management activities to get a broader understanding of managerial reporting behaviour in various compliance environments.

References

Amin, A., Rehman, R. U., & Ali, R. (2022). Corporate governance and earnings management: Evidence from listed firms in Pakistan. Journal of Asian Finance, Economics and Business, 9(2), 235–247. https://doi.org/10.13106/jafeb.2022.vol9.no2.0235

Aribi, Z. A., & Gao, S. S. (2011). Narrative disclosure of corporate social responsibility in Islamic financial institutions. Managerial Auditing Journal, 26(8), 702–723. https://doi.org/10.1108/02686901111151640

Baatwah, S. R., Al-Qadasi, A. A., & Omer, W. K. H. (2023). Audit committee accounting expertise and earnings management. Managerial Auditing Journal, 38(3), 333–367. https://doi.org/10.1108/MAJ-12-2021-3409

Bhutta, A. I., Sheikh, M. F., Akhtar, M. H., & Sajid, M. (2021). Corporate governance and earnings management: Evidence from Pakistan. Asian Economic and Financial Review, 11(3), 188–205.

Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. The Review of Economic Studies, 47(1), 239–253.

Choudhury, M. A., & Hoque, M. Z. (2004). An advanced exposition of Islamic economics and finance. Edwin Mellen Press.

DeAngelo, L. E. (1981). Auditor size and audit quality. Journal of Accounting and Economics, 3(3), 183–199.

Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. Accounting Horizons, 14(2), 235–250.

Volume 5 Issue No 2 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. The Accounting Review, 70(2), 193–225.

Dechow, P. M., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. Journal of Accounting and Economics, 50(2–3), 344–401.

DeFond, M. L., & Jiambalvo, J. (1994). Debt covenant violation and manipulation of accruals. Journal of Accounting and Economics, 17(1–2), 145–176.

Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent panel data. Review of Economics and Statistics, 80(4), 549–560.

Grassa, R. (2016). Corporate governance and credit rating in Islamic banks: Does Shariah governance matter? Journal of Management & Governance, 20(4), 875–906.

Habib, A., Uddin Bhuiyan, B., & Islam, A. (2013). Financial distress, earnings management and market pricing of accruals during the global financial crisis. Managerial Finance, 39(2), 155–180.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage Learning.

Hamid, F. Z. A., Hashim, H. A., Salleh, Z., & Ismail, N. (2020). The effect of Shariah compliance on earnings management: Evidence from Malaysia. International Journal of Islamic and Middle Eastern Finance and Management, 13(5), 909–928.

Hassan, M. K., & Halbouni, S. S. (2013). Corporate governance, economic turbulence and financial performance of UAE listed firms. Studies in Economics and Finance, 30(2), 118–138.

Hassan, M. K., & Nassar, R. (2015). Corporate governance, earnings quality, and firm value: Evidence from an emerging market. Afro-Asian Journal of Finance and Accounting, 5(1), 64–89.

Hausman, J. A. (1978). Specification tests in econometrics. Econometrica, 46(6), 1251–1271.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. Accounting Horizons, 13(4), 365–383.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360.

Jones, J. J. (1991). Earnings management during import relief investigations. Journal of Accounting Research, 29(2), 193–228.

Khan, M. (2010). What is wrong with Islamic economics? Analysing the present state and future agenda. Edward Elgar Publishing.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. Journal of Accounting and Economics, 33(3), 375–400.

Volume 5 Issue No 2 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. Journal of Accounting and Economics, 39(1), 163–197.

Larcker, D. F., Richardson, S. A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. The Accounting Review, 82(4), 963–1008.

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. Journal of Financial Economics, 69(3), 505–527.

Miah, M. D., & Uddin, H. (2017). Efficiency and stability: A comparative study between Islamic and conventional banks in GCC countries. Future Business Journal, 3(2), 172–185.

Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? Journal of Business Finance & Accounting, 32(7–8), 1311–1346.

Roychowdhury, S. (2006). Earnings management through real activities manipulation. Journal of Accounting and Economics, 42(3), 335–370.

Securities and Exchange Commission of Pakistan. (2022). Annual report 2021–22. SECP.

Sweeney, A. P. (1994). Debt-covenant violations and managers' accounting responses. Journal of Accounting and Economics, 17(3), 281–308.

Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the underperformance of seasoned equity offerings. Journal of Financial Economics, 50(1), 63–99.

Tucker, J. W., & Zarowin, P. A. (2006). Does income smoothing improve earnings informativeness? The Accounting Review, 81(1), 251–270.

Watts, R. L., & Zimmerman, J. L. (1986). Positive accounting theory. Prentice-Hall.

Wooldridge, J. M. (2002). Econometric analysis of cross section and panel data. MIT Press.

Zainuldin, M. H., & Lui, T. K. (2020). Earnings management in financial institutions: A comparative study of Islamic banks and conventional banks in emerging markets. Pacific-Basin Finance Journal, 62, 101044.