



The Effect of Financial Pressure on Financial Reporting Fraud: Insights from Sharia and Non-Sharia Firms

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ABSTRACT

Purpose : The study examines the impact of financial pressure on financial reporting fraud. It also explores the variation of financial pressure between Sharia-compliant and non-Sharia firms, as Sharia-compliant companies are bound by Sharia principles.

Method : The study uses data from public firms listed on the Indonesia Stock Exchange (IDX) and the Indonesia Sharia Stock Index (ISSI) for the period 2015–2021. All industrial sectors are included, except the financial sector, due to its distinct regulations and policies. The research employs multiple linear regression and independent-samples t-tests.

Findings : The study reveals that pressures related to financial stability and debt are associated with a higher probability of financial reporting fraud. In addition, pressures arising from financial stability and financial targets are more pronounced in Sharia-compliant firms than in non-Sharia firms. In contrast, Sharia-compliant firms exhibit lower debt pressure than non-Sharia firms.

Novelty : The study provides empirical evidence on how financial stability, financial target pressure, and debt pressure differ between Sharia and non-Sharia firms, and how these differences are relevant in explaining the risk of financial reporting fraud. The findings indicate that Sharia-compliant firms exhibit greater financial stability and financial target pressures, but lower debt pressure due to Sharia-based debt restrictions, offering new insights into fraud risk determinants in the context of Sharia compliance.

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INTRODUCTION

Management exploits weaknesses in the financial reporting process through earnings manipulation. While not always illegal, earnings manipulation can damage the credibility of reported financial information and undermine stakeholders' trust in the accounting information presented. High-quality financial reporting is essential for maintaining capital market efficiency and contractual reliability. However, when managerial discretion is exercised opportunistically, it may evolve into financial reporting fraud, thereby threatening transparency and investor confidence. This behavior is often driven by specific goals, such as increasing stock prices, demonstrating compliance with financing contractual agreements, meeting investor preferences and expectations, and obtaining favorable financing terms (Repousis, 2016). This incentive puts pressure on management because it often serves as an indicator of management success.

Many factors explain why management manipulates earnings, including pressure, opportunity, rationalization, and capability. However, this study focuses specifically on pressure as the primary antecedent of financial reporting fraud. Huang et al. (2017) identify pressure as the most influential initial catalyst of fraudulent behavior, while Christian et al. (2019) argue that pressure is the dominant driver among the other fraud triangle components.

Pressure to maintain the appearance of financial stability may motivate management to engage in financial statement manipulation, particularly when actual performance falls short of market expectations. Such actions are often undertaken to avoid adverse consequences, including declining stock prices, debt covenant violations, and reputational damage. The greater the pressure to preserve financial stability, the stronger the managerial incentive to adjust accounting figures in order to portray a more favorable financial condition than actually exists.

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In the context of financial reporting, the pressures most frequently highlighted in the literature include financial stability and financial targets. Financial stability pressure describes a situation in which a firm experiences weakened financial conditions due to declining asset growth, profits, or sales. Under such circumstances, management may feel compelled to maintain a positive financial image before investors, creditors, and regulators. This condition is explicitly recognized in auditing standards such as SAS No. 99, which identifies financial instability as a major fraud risk factor.

SAS 99 states that managers may commit financial reporting fraud when economic, industrial, and operational pressures threaten the organization. Skousen et al. (2009) argue that in companies with asset growth rates below the industry average, management may adjust reported earnings to present stronger future prospects. Conversely, during rapid growth, management may smooth earnings to create the impression of sustainable and stable expansion. These situations illustrate how managerial responsibility for performance can transform into financial pressure that encourages accounting manipulation. Despite the extensive recognition of financial pressure as a fraud determinant, real-world corporate scandals indicate that fraud often emerges during periods of financial instability or aggressive performance expectations. Firms facing declining profitability, tightened liquidity, or unmet earnings benchmarks may be more vulnerable to financial reporting fraud.

In countries operating dual financial systems, where Sharia and non-Sharia firms coexist, the issue becomes increasingly complex. Sharia-compliant firms operate in accordance with Islamic ethical principles that emphasize transparency, accountability (*amanah*), and the prohibition of deception (*gharar*). From a theoretical perspective, these principles are expected to constrain opportunistic managerial behavior and enhance the integrity of financial reporting. However, empirical evidence suggests that Sharia status does not automatically prevent financial reporting irregularities (Alsaadi, 2019). This inconsistency raises an important empirical question: whether financial pressure affects Sharia and non-Sharia firms differently.

In light of these issues, a more nuanced exploration of the practices of both Sharia and non-Sharia firms is necessary to underline the urgency of financial reporting fraud. Although Sharia-compliant firms are governed by ethical principles such as *amanah* (accountability), the prohibition on *gharar* (uncertainty and deception), and the requirement for truthful disclosure, financial pressure may challenge their consistent application in practice. When firms face declining performance, liquidity constraints, or pressure to meet market expectations, managers may engage in earnings management or misreporting, which potentially violates core Sharia governance principles, particularly those related to transparency and honesty in financial reporting. This indicates that financial pressure is a critical factor to examine within Islamic firms, as it may create a tension between religious-ethical obligations and economic incentives. At the same time, non-Sharia firms rely primarily on regulatory and governance mechanisms that may also be insufficient under similar pressures. Therefore, understanding how financial pressure interacts with differing governance foundations is essential to explain the persistence and urgency of financial reporting fraud across both systems.

Prior studies have extensively examined fraud determinants using frameworks such as the Fraud Triangle (Alshurafat et al., 2024; Hasnan et al., 2022; Cheliatsidou et al., 2023; Kagias et al., 2022). These studies generally incorporate the three core elements of the Fraud Triangle, which comprise pressure, opportunity, and rationalization, to explain fraudulent behavior. However, empirical findings remain inconsistent, particularly regarding the role of pressure. For example, Alshurafat et al. (2024) show that pressure correlates positively with fraud. Cheliatsidou et al. (2023) state that pressure is an important factor in fraud. In contrast, Hasnan et al. (2022) found that financial pressure is negatively associated with fraud, which goes against the theoretical expectation that pressure increases fraudulent behavior. Kagias et al. (2022) highlighted key limitations of the Fraud Triangle. They noted that elements such as motivation and rationalization are difficult to observe empirically and may be less suitable for direct measurement.

Against this background, this study positions itself by focusing specifically on the pressure dimension. While pressure is often considered the most influential driver of fraud, its impact remains empirically inconclusive. In contrast to prior studies that treat the fraud triangle elements broadly, this research decomposes pressure into more measurable proxies: pressure to meet financial targets, concerns regarding financial stability, and obligations arising from debt pressure. Through this approach, the study provides a more nuanced understanding of pressure's role in explaining fraudulent behavior.

While many confirm that financial pressure increases fraud risk, several limitations remain. First, most studies treat firms as homogeneous entities, failing to consider institutional or religious governance differences. Second, empirical findings remain inconsistent regarding which type of pressure, between financial instability or financial targets, exerts a stronger influence. Third, limited research integrates religious-based governance into agency-based fraud analysis. This gap persists because prior research tends to focus on conventional corporate governance mechanisms while overlooking the potential moderating role of ethical-religious oversight structures. Therefore, comparative evidence between Sharia and non-Sharia firms remains scarce.

This study is grounded in Agency Theory (Jensen & Meckling, 1976) and the Fraud Triangle Framework. Agency theory explains that fraud arises when there is a divergence between the principal's and the agent's objectives. When management (agents) fails to meet principals' expectations, pressure emerges. The fraud triangle framework further suggests that fraud occurs when pressure, opportunity, and rationalization coexist. Among these

elements, pressure often serves as the initiating trigger (Huang et al., 2017).

The research provides several contributions to existing literature. First, it compares the influence of financial pressure on financial reporting fraud between Sharia and non-Sharia firms. Second, it extends agency theory by incorporating religious-based governance into fraud analysis. Third, it simultaneously examines financial stability and financial target pressures within a comparative framework. Accordingly, this research is intended to analyze the impact of financial stability pressure on financial reporting fraud, analyze the effect of financial target pressure on financial reporting fraud, and investigate whether the impact of financial pressure differs between Sharia and non-Sharia firms.

The formulation of the hypotheses in below in this study is grounded in agency theory, which explains the conflict of interest between principals and agents arising from information asymmetry. Under financial pressure, managers may have incentives to engage in opportunistic behavior, such as financial reporting fraud, to meet performance expectations or contractual obligations. Therefore, financial pressures, such as financial stability pressure, financial target pressure, and debt pressure, are expected to increase the likelihood of fraudulent financial reporting. This theoretical perspective provides the foundation for developing the study's hypotheses. Several empirical studies have documented that financial stability pressure in firms is significantly associated with financial reporting fraud (Budiman et al., 2025; Hidayati et al., 2022; Achmad et al., 2022; Barezki et al., 2023). Accordingly, the following hypothesis is proposed:

H₁: Financial stability pressure positively influences financial reporting fraud

Financial targets require that company managers perform optimally to achieve planned financial goals. Therefore, the extent to which management is considered effective is reflected in the attainment of organizational objectives within a given period. These targets are generally measured in indicators such as return on assets, operating profit, and earnings per share. Return on assets is typically used as a benchmark for evaluating managerial performance and for determining bonuses, salary adjustments, and other incentives (Skousen et al., 2009). This assessment encourages management to take various measures to achieve the desired financial targets.

Achieving these targets is not only a measure of internal performance but also significantly influences investor and creditor perceptions of the company. Pressure to meet financial targets is one trigger for managers to manipulate earnings (Huang et al., 2017). If the target return on assets is not achieved, management often manipulates sales records to meet external targets. Accounts receivable and sales accounts in the calculation of return on assets are often targets of manipulation (Narsa et al., 2023). Empirical evidence indicates that financial target pressure has a positive effect on financial reporting fraud (Sihombing & Panggulu, 2022; Barezki et al., 2023; Hidayati et al., 2022; Budiantoro et al., 2022). Accordingly, the following hypothesis is proposed:

H₂: Financial target pressure positively influences financial reporting fraud

High debt is an indicator of external pressure. It implies that increasing debt levels intensify the pressure exerted by external parties. According to Hanafi et al. (2022), from a debt covenant perspective, debt tends to encourage earnings management practices. In debt covenants, creditors typically stipulate minimum debt ratio requirements or restrictions on dividend payments. Under such conditions, elevated debt intensifies managerial incentives to present financial statements that meet contractual thresholds and preserve investor confidence (Lisa et al., 2025). Firms with substantial leverage are more likely to engage in earnings management (Omukaga, 2021). To avoid these consequences, managers tend to take opportunistic actions through earnings management. Therefore, financial conditions that place a company close to breaching debt covenants will create pressure for managers to manipulate earnings (Chamberlain et al., 2014; Lazzem & Jilani, 2018). Some of these studies show that external pressure or debt is positively correlated with financial reporting fraud. (Achmad et al., 2022; Honesty et al., 2024; Arifin & Prasetyo, 2018). Accordingly, the following hypothesis is proposed:

H₃: Debt pressure has a positively influences financial reporting fraud

The application of religious values within a company will influence the environment and the conduct of individuals within the organization. Empirical research shows that environmental religiosity influences managerial behavior in financial reporting. Companies operating in regions with strong religious principles tend to exhibit fewer financial reporting violations (Dyrenge et al., 2012; McGuire et al., 2012). Religious norms serve as a control mechanism that limits managers' opportunistic actions (Lassoued et al., 2018) and influences financial reporting decision-making (Callen & Fang, 2015). As concrete manifestations of institutional religiosity, Sharia-compliant firms are bound by Islamic principles that prohibit practices contrary to Islamic law, including fraud. Sharia firms are expected to be less likely to engage in financial statement misconduct than non-Sharia firms. On this basis, the following hypothesis is formulated:

H₄: Financial reporting fraud in Sharia firms is lower than in non-Sharia firms

The pressure to maintain financial stability is generally greater for firms operating in accordance with Sharia principles than for non-Sharia firms. It is due to the dual demands of achieving stable growth while simultaneously adhering to Sharia principles. This compliance creates various limitations in the company's financial operations.

In terms of compliance and financial stability, Sharia firms face restrictions on the use of interest-based external financing sources. This situation requires Sharia firms to maintain higher cash reserves to mitigate financial risk (Bugshan et al., 2021). Moreover, the implementation of Sharia principles has been shown to strengthen corporate governance and financial risk management, which are crucial for maintaining stability amidst market volatility (Touti & Taïb, 2024). Consequently, financial stability pressure, as proxied by company growth, will be higher for Sharia-compliant companies than for non-Sharia-compliant companies. On this basis, the following hypothesis is formulated:

H₃: Financial stability pressure is higher in Sharia firms than in non-Sharia firms

In Sharia firms, the pressure to achieve financial targets tends to be greater than in non-Sharia firms. It is because Sharia firms face dual expectations: first, the financial expectation from investors and shareholders to generate competitive profitability, and second, the expectation of Sharia compliance, namely maintaining business practices aligned with Islamic principles, including the prohibition of *riba* (usury), *gharar*, and non-halal (non-permissible) business activities. Shariah firms prohibit investments in companies with significant interest income, thus limiting investment options and potentially reducing profitability (Arslan-Ayaydin et al., 2018). Sharia firms experiencing financial distress often struggle to make capital structure decisions, as liquidity and profitability are crucial for business continuity (Othman et al., 2024). Limitations in the use of interest-based financial instruments leave Sharia firms with less flexibility in achieving financial targets. When profitability falls short of expectations, the pressure they face is greater, as they must not only justify declining performance but also uphold their reputation as ethical and Sharia-compliant entities. On this basis, the following hypothesis is formulated:

H₄: Financial target pressure is greater for Sharia firms than for non-Sharia firms

Companies operating under Sharia principles are subject to stricter restrictions on debt use than non-Sharia companies. This condition arises from the prohibition of interest-bearing (*riba*) transactions and the emphasis on financing structures based on contracts and profit-sharing arrangements. In Indonesia, adherence to Sharia requirements is supervised by the Financial Services Authority (OJK) and the National Sharia Council (DSN-MUI) through the application of specific financial ratio criteria. Based on DSN-MUI Fatwa No. 20/DSN-MUI/IV/2001 and OJK regulations, interest-based debt to total assets may not exceed 45%, while the debt-to-equity ratio (DER) is restricted to a maximum of 82% under Sharia screening provisions. To meet financing needs, Sharia firms commonly rely on *sukuk* (Islamic bonds) as well as *syirkah*, *murabahah*, and *ijarah*-based contracts. Consequently, the following hypothesis is formulated:

H₅: Debt pressure in Sharia firms is lower than in non-Sharia firms

RESEARCH METHODS

This study used data from companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2021 period. All non-financial industries are incorporated in the analysis, while the financial sector is excluded due to its unique regulatory environment and operational characteristics (Zhong et al., 2007; Hanafi et al., 2024). Companies lacking complete information were also removed from the sample, resulting in a balanced dataset. After applying these criteria, the final sample consists of 327 firms observed over 7 years, yielding 2,289 firm-year observations.

Before conducting statistical tests, data screening is an essential preliminary step in any analysis, even though it can be time-consuming (Hair et al., 2019). A fundamental requirement in parametric statistics is multivariate normality, which requires that each variable and the joint distribution of all variables follow a normal distribution. Subsequently, a normality test was performed on the data for each variable. This study does not employ the Kolmogorov-Smirnov or Shapiro-Wilk tests, as both are more appropriate for datasets with relatively small to moderate sample sizes (fewer than 300 cases) and tend to be less dependable when the number of observations is large (Kim, 2013). Following Hair et al. (2019) and West et al. (1995), the criteria applied to determine normality are skewness $\leq |2|$ and kurtosis $\leq |7|$.

Table 1. Skewness and Kurtosis

Variables	Before outlier			After outlier		
	N	Skew.	Kurt.	N	Skew.	Kurt.
FRF	2289	16.642	422.004	2190	1.917	4.487
FS	2289	-44.739	2075.467	2190	-0.487	6.044
FT	2289	-5.54	132.901	2190	-0.266	6.187
DP	2289	8.477	106.354	2190	0.88	3.226
Size	2289	-0.904	2.542	2190	-0.902	2.647
Big4	2289	0.481	-1.77	2190	0.457	-1.792

Source: The processed secondary data (2025)

Table 2. Data Distribution

Industry sector	N (Firms-Years)
Healthcare	84
Basic materials	371
Transportation & Logistic	84
Technology	21
Consumer Non-cyclicals	399
Industrials	168
Energy	287
Consumer Cyclicals	434
Infrastructures	175
Properties & Real Estate	266
Total available sample	2289
Extreme data excluded	-99
Final sample used	2190

Source: IDX data processed (2025)

Table 1 shows that before the outlier, several variables, namely FRF, FS, FT, and DP, were not normally distributed. Based on the box plot analysis, 99 extreme values were identified and subsequently treated as outliers. After the removal of these extreme data points, all variables met the rule of thumb for normal distribution, with skewness $\leq |2|$ and kurtosis $\leq |7|$. Therefore, the final dataset used for analysis consists of 2,190 firm-year observations. The detailed distribution of observations across industrial sectors is presented in Table 2.

Financial reporting fraud refers to deceptive practices by management that result in material misrepresentations in financial reports, potentially causing losses to investors and other stakeholders (Umar et al., 2020). This study refers to Omukaga (2021), who states that financial reporting fraud is proxied by discretionary accruals (DAC). DAC values may appear as positive or negative figures; a positive value suggests upward earnings manipulation, while a negative value indicates downward earnings manipulation. Accordingly, this research employs the absolute value of DAC to represent the overall magnitude of discretionary accruals (Jiang et al., 2020). The operational definitions and measurements of the independent and control variables are summarised in Table 3. The empirical model employed in this study is formulated as Equation 1.

$$\text{FRF} = \alpha + \beta_1 \text{FS} + \beta_2 \text{FT} + \beta_3 \text{DP} + \beta_4 \text{Size} + \beta_5 \text{Big4} + \gamma_{\text{industry}} + \delta_{\text{year}} + \varepsilon \quad \dots\dots\dots 1$$

Table 3. Variable Measurement

Variables	Proxy	Measurement
Financial Reporting Fraud	Financial Reporting Fraud (FRF), measured using discretionary accruals based on the modified Jones (1991) model.	$\text{TAC}_{it} = \text{NI}_{it} - \text{CFO}_{it}$ $\text{DAC}_{it} = (\text{TAC}_{it} / \text{TA}_{it-1}) - \text{NDAC}_{it}$
Pressure	Financial stability (FS)	$\text{FS} = (\text{Total Assets}_t - \text{Total Assets}_{t-1}) / \text{Total Assets}_t$
	Financial target (FT)	$\text{FT} = \text{Earnings after tax}_{t-1} / \text{Total Assets}_t$
	Debt pressure (DP)	$\text{DP} = \text{Total Liability}_t / \text{Total Assets}_t$
Sharia principles	Sharia firms (SF)	SF is coded 1 if indexed in ISSI, and Non-SF is coded 0 if not indexed in ISSI. ISSI (Indonesia Sharia Stock Index) consists of stocks selected by the Financial Services Authority (OJK) in accordance with fatwas released by the National Sharia Council of the Indonesian Ulama Council (DSN-MUI), with the main criterion that the core business activities do not contradict Sharia principles
	Non-Sharia firms (Non-SF)	
Control variables	Size	Logarithmic value of total assets (Ln Assets)
	Big4	The value of 1 for firms audited by a Big 4 audit firm, and 0 otherwise
	Industry type	10 industry classifications
	Year	7 years

Table 4. Descriptive Statistics

Variables	N	Min.	Max.	Mean	St.D	Skew.	Kurt.
FRF	2,190	0	0.496	0.080	0.079	1.917	4.487
FS	2,190	-1.084	0.907	0.044	0.161	-0.487	6.044
FT	2,190	-0.541	0.458	0.028	0.088	-0.266	6.187
DP	2,190	0.003	1.923	0.472	0.231	0.880	3.226
Size	2,190	0	18.922	13.570	2.117	-0.902	2.647
Big4	2,190	0	1	0.039	0.488	0.457	-1.792

Source: The processed secondary data (2025)

The empirical model in this study examines the determinants of Financial Reporting Fraud (FRF). In this regression framework, FRF serves as the dependent variable, with several key independent variables: Financial Stability (FS), Financial Target (FT), Debt Pressure (DP), and Firm Size (Size). Additionally, the model incorporates Big4 as a dummy variable to account for the influence of audit quality by the Big Four accounting firms. The constant term is denoted by α , while the coefficients β_1 through β_5 measure the magnitude and direction of the relationship between each predictor and the likelihood of fraud. To ensure the robustness of the results and account for external variations, the model includes γ_{industry} and δ_{year} as industry and year fixed effects (dummy variables). Finally, ε represents the error term, capturing any unobserved factors that may influence the dependent variable.

RESULTS AND DISCUSSIONS

Table 4 shows descriptive statistics indicating that the mean value of financial reporting fraud (FRF) is 0.080, with a range of 0 to 0.496. FRF in the sampled firms is generally low, although a few companies report relatively higher values. Financial stability (FS) exhibits a mean of 0.044, ranging from -1.084 to 0.907, showing substantial variation in firms' ability to maintain financial soundness. Similarly, financial target (FT) has a small mean of 0.028, with observations ranging from -0.541 to 0.458, indicating that some firms perform below target while others achieve positive results.

Debt pressure (DP) shows a mean of 0.472, ranging from 0.003 to 1.923. It demonstrates that the mean of leverage is moderate; however, several firms face relatively high debt obligations. Firm size (Size) presents a mean of 13.570, spanning from 0 to 18.922, highlighting that large firms largely dominate the sample. Meanwhile, the Big Four dummy variable averages only 0.039, meaning that about 3.9% of firms use a Big Four auditor, whereas the majority rely on non-Big Four auditors. Overall, the results indicate that the majority of firms in the dataset display minimal earnings manipulation, maintain moderate levels of leverage, and operate at a relatively substantial scale. At the same time, only a small proportion engages the services of Big Four audit firms.

Table 5 reports the correlation coefficients for all variables. The strongest association appears between Size and Big4 ($r = 0.344$), which is still far below the 0.80 benchmark, suggesting that multicollinearity is not a concern (Hair et al., 2014). The results show that FRF is positively correlated with FS and DP, while it exhibits a negative correlation with FT. Additionally, FRF demonstrates a negative association with the control variables Size and Big4.

The study uses multiple linear regression analysis to answer H_1 , H_2 , and H_3 with the independent variables financial stability (FS), financial target (FT), and debt pressure (DP) and the dependent variable financial reporting fraud (FRF). Table 6 exhibits that financial stability (FS) and debt pressure (DP) positively affect FRF ($\beta = 0.034$; $p\text{-value} < 1\%$ and $\beta = 0.064$; $p\text{-value} < 1\%$), thereby supporting H_1 and H_3 . In contrast, the financial target (FT) does not significantly affect FRF ($\beta = -0.017$; $p\text{-value} > 10\%$), thus H_2 is rejected.

Furthermore, the variable of control shows that firm size negatively affects financial reporting fraud ($\beta = -0.008$; $p\text{-value} < 1\%$). This finding suggests that larger firms tend to engage in lower levels of financial reporting fraud (Utomo & Mawardi, 2024), as they are subject to greater scrutiny and monitoring from market analysts and investors (Hanafi et al., 2025). Meanwhile, Big4 does not have a significant effect in this study ($\beta = 0.003$; $p\text{-value} > 10\%$), suggesting that audit quality does not differ substantially since all auditors comply with the same auditing

Table 5. Correlation

Variables	FRF	FS	FT	DP	Size	Big4
FRF	1					
FS	0.036	1				
FT	-0.080**	0.215**	1			
DP	0.158**	-0.067**	-0.291**	1		
Size	-0.141**	0.094**	0.099**	0.183**	1	
Big4	-0.039	0.062**	0.226**	-0.007	0.344**	1

Source: The processed secondary data (2025)

Table 6. Regression Results

Variables	β	Std. ε	P-value	Result
Const.	0.139	0.012	0.000	
FS	0.034	0.010	0.001	H ₁ , Accepted
FT	-0.017	0.021	0.401	H ₂ , Rejected
DP	0.064	0.008	0.000	H ₃ , Accepted
Size	-0.008	0.001	0.000	
Big4	0.003	0.004	0.350	
Industry FE		Yes		
Year FE		Yes		
R ²		0.098		
Adj. R ²		0.090		
F_Stat		11.778 (0.000)		
N		2,190		

Source: The processed secondary data (2025)

standards. The choice of Big Four auditors is therefore not solely motivated by the pursuit of higher audit quality but also by global business interests. Meanwhile, industry and year fixed effects are included as additional controls to mitigate unobserved heterogeneity. The industry fixed effects account for structural differences across sectors, while the year fixed effects isolate temporal influences that affect all firms in a given year. Including these fixed effects helps minimize omitted-variable bias and enhances the validity of the coefficient estimates.

To answer H₄, H₅, H₆, and H₇, an independent samples t-test was applied to compare the average levels of FRF, FS, FT, and DP across Sharia (SF) and non-Sharia firms (NSF). Table 7 indicates that Sharia firms tend to have lower financial reporting fraud (FRF) values than non-Sharia firms (Diff = -0.003; p-value > 10%), although the difference is not statistically significant. Accordingly, H₄ is not supported. Furthermore, Sharia firms have significantly higher mean values of financial stability pressure (FS) and financial target pressure (FT) than non-Sharia firms (Diff = 0.027; p-value < 1% and Diff = 0.037; p-value < 1%), thereby supporting H₅ and H₆. In contrast, Sharia firms experience significantly lower debt pressure (DP) than non-Sharia firms (Diff = -0.197; p-value < 1%), thus H₇ is accepted.

Financial Stability Pressure Positively Influences Financial Reporting Fraud

This study provides evidence that higher financial stability pressure increases managerial involvement in financial reporting fraud. Asset growth, as a proxy for financial stability, is one of the key factors determining firm value, which in turn attracts investors (Narsa et al., 2023). Management understands that investors expect firms to achieve stable growth in order to assure their investments. Such investor expectations create pressure on managers and simultaneously serve as a benchmark for assessing managerial success in managing corporate assets. Firms under pressure to maintain financial stability are more prone to committing fraudulent financial reporting to meet financial expectations and avoid negative reactions from stakeholders. Consequently, management tends to exercise discretion and justification in reporting to satisfy investor demands. This result aligns with prior empirical research, which suggests that financial stability pressure is greater among firms engaged in financial fraud (Fitri et al., 2019; Audini & Sinaga, 2025; Putra, 2022).

Financial Target Pressure Positively Influences Financial Reporting Fraud

The results show that financial reporting fraud is not significantly affected by financial target pressure. This finding suggests that pressure to achieve financial targets does not necessarily encourage management to engage in fraudulent financial reporting. It also indicates that management still has alternative ways to achieve targets without

Table 7. Result of The Independent Samples t-Test

Variables	Sharia Firms	Non-Sharia Firms	Difference	P-value	Result
FRF	0.079	0.082	-0.003	0.454	H ₄ , Rejected
FS	0.052	0.025	0.027	0.003	H ₅ , Accepted
FT	0.038	0.001	0.037	0.000	H ₆ , Accepted
DP	0.420	0.617	-0.197	0.000	H ₇ , Accepted
Obs.	1609	581			

Source: The processed secondary data (2025)

resorting to manipulation. Unlike financial stability pressure, which is directly related to the firm's going concern, financial target pressure tends to be more flexible and can still be managed through operational strategies and managerial policies. This condition makes financial stability pressure more influential in driving fraudulent behavior compared to financial target pressure, as also evidenced in the findings of this study. These findings are consistent with several previous studies that report that financial reporting fraud is not significantly affected by financial target pressure (Panggabean & Gunawan, 2025; Soedarman et al., 2025; Suwardi & Riyadi, 2024).

Debt Pressure Has a Positively Influences Financial Reporting Fraud

Debt pressure reflects the firm's responsibility to meet its debt commitments to creditors or financial institutions. As debt levels increase, firms face greater pressure to present a positive financial profile to external parties, such as investors, creditors, and regulators. Under such circumstances, management has strong incentives to commit fraudulent financial reporting to appear capable of meeting its obligations and complying with debt covenants. This result aligns with prior research, which indicates that debt pressure tends to be higher among firms engaged in fraudulent financial practices (Fitri et al., 2019; Achmad et al., 2022; Honesty et al., 2024; Arifin & Prasetyo, 2018). Debt pressure aligns with agency theory, which posits that higher leverage increases managerial pressure, thereby leading to greater earnings manipulation. Theoretically, this is explained by agency theory, which explains conflicts of interest between managers (agents) and owners or creditors (principals). When firms are under financial pressure, managers may act opportunistically by manipulating earnings to make the financial statements appear healthier. In contrast to financial stability and debt pressure, pressure to achieve financial targets does not significantly influence reporting manipulation in this study's sample. This result indicates that the effect of target pressure is not universal but rather depends on the institutional context and the firm's monitoring mechanisms.

In addition, the sample characteristics, which cover various non-financial sectors with diverse performance indicators, mean that ROA is not always the primary reference in setting financial targets and thus may not consistently reflect the actual pressure experienced by management. Regarding the research period (2015–2021), economic conditions were generally stable, although the COVID-19 pandemic occurred toward the end of the period, during which companies focused more on business continuity rather than aggressively achieving financial targets. This finding is consistent with the evidence reported by Mariana & Utami (2023).

Financial Reporting Fraud in Sharia Firms Is Lower Than in Non-Sharia Firms

In the context of Sharia-compliant firms, this study shows that financial reporting fraud in Sharia-compliant firms has a lower mean than in non-Sharia-compliant firms; however, the difference is not statistically significant. This result is inconsistent with the findings of Adiwijaya & Hanafi (2025), who reported that earnings manipulation in Sharia firms is lower than in non-Sharia firms. Furthermore, Hernawati et al. (2024) demonstrate that firms implementing Sharia governance have a better capability to prevent fraud, and this finding is also in line with Karim et al. (2024), who argue that non-compliance with Sharia principles can contribute to financial misconduct, indicating that adherence to Sharia principles plays an important role in reducing the risk of fraudulent financial reporting.

Financial Stability Pressure Is Greater for Sharia Firms Than for Non-Sharia Firms

The results show that financial stability pressure is higher in Sharia firms than in non-Sharia firms. This stems from limited access to interest-based financing, less financial management flexibility, and fewer investment options for diversification. Compliance costs tied to Sharia principles further raise financial pressure. Despite this, ethical business practices may enhance long-term investor trust (Bugshan et al., 2019). Financial stability pressure is also driven by the need to maintain reputation and investor confidence, especially as the Sharia industry grows and aims to compete with conventional firms. This underscores the importance of Sharia-compliant innovation to bolster financial stability and manage market volatility (Abiola-Adams et al., 2023).

Financial Target Pressure Is Greater for Sharia Firms Than for Non-Sharia Firms

The results show that financial target pressure is higher in Sharia firms than in non-Sharia firms. In firms listed under the Indonesia Sharia Stock Index (ISSI), Sharia principles impose certain constraints, but the drive to meet financial targets remains strong. These firms still operate in a competitive market and face investor expectations for high performance. While Sharia principles restrict some forms of opportunistic behavior, they do not fully prevent agency conflicts. According to Agency Theory, conflicts arise from information asymmetry and differing goals between owners (principals) and managers (agents). Managers are thus motivated to reach financial targets to uphold performance, reputation, and compensation.

Therefore, the observed strong pressure to achieve financial targets in Sharia firms reflects ongoing agency dynamics. Management seeks to meet investor expectations while staying within Sharia restrictions. This clarification has been added to the discussion to better explain the study's findings. The literature suggests that firms with a religious orientation or value-based governance often face additional pressure to demonstrate strong financial performance in the eyes of the public (Farook et al., 2011). Sharia firms also encounter greater challenges due to funding restrictions.

Debt Pressure in Sharia Firms Is Lower Than in Non-Sharia Firms

This study also finds that Sharia firms tend to have lower levels of debt pressure than non-Sharia firms. This finding is consistent with the fundamental principles of Sharia, which prohibit *riba* (interest), leading Sharia firms to be more cautious in accessing debt-based financing. The lower level of debt pressure aligns with the regulations set by the Financial Services Authority (OJK) and the National Sharia Council–MUI, which limit debt ratios to a maximum of 45%. This condition has implications for a more conservative capital structure, in which financing through equity or Sharia-compliant instruments such as *sukuk* is preferred over interest-bearing loans. From a financial theory perspective, the relatively lower debt levels of Sharia firms can help reduce financial risk. This result aligns with earlier research that documents lower leverage ratios in Sharia firms relative to non-Sharia firms (Kamal et al., 2023; Bugshan & Bakry, 2025; Gati et al., 2022). Accordingly, the findings of this study strengthen the view that firms adhering to Sharia principles tend to exhibit lower corporate risk (Khaw et al., 2019).

CONCLUSIONS

This study confirms that pressure is a significant driver of financial reporting fraud. Empirical results demonstrate that financial stability pressure and debt pressure are positively associated with the likelihood of fraudulent financial reporting. As financial instability and debt burdens increase, management becomes more inclined to manipulate financial statements to maintain a stable performance image with investors and creditors.

In the context of Sharia-compliant firms, the findings reveal higher financial stability and greater financial target pressures than in non-Sharia firms, likely due to stronger investor expectations for transparency, accountability, and adherence to Sharia principles. However, Sharia firms exhibit lower debt pressure, reflecting the prohibition of *riba*-based financing. Although this lower debt pressure suggests a reduced tendency toward fraud, the difference is not statistically significant. Overall, the results indicate that the Sharia governance framework may function as a mitigating mechanism against fraudulent financial reporting. From a practical standpoint, Sharia financial institutions should reinforce governance and monitoring systems grounded in *amanah* and accountability while ensuring that financial stability does not transform into excessive performance pressure. Theoretically, this study contributes to the literature by providing comparative evidence on pressure and fraud in Sharia and non-Sharia firms, while encouraging future research to expand beyond pressure-related factors for a more comprehensive understanding of fraud dynamics.

This study's limitations stem from using ISSI as a proxy for identifying Sharia-compliant firms, as ISSI is determined by the Sharia Securities List (DES) issued by Otoritas Jasa Keuangan (OJK). The DES allows a certain tolerance for non-Sharia elements, so the proxy does not reflect full Sharia compliance. Consequently, the findings indicate Sharia compliance as defined and regulated by current frameworks, and not absolute or ideal adherence. Future research is therefore encouraged to adopt a more comprehensive framework by integrating non-financial and governance-related variables to explain better the complexity of financial reporting fraud in both Sharia and non-Sharia firms. Expanding the model beyond pressure factors would provide a more holistic understanding of fraud dynamics and improve the explanatory power of future studies.

AI USAGE STATEMENT

The authors used ChatGPT (OpenAI) for language editing and clarity enhancement in preparing this manuscript. The authors take full responsibility for the content, interpretation, and conclusions of this article.

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- 233 Rustam Hanafi, Sutapa, Maya Indriastuti, & Luluk Muhimatul Ifada, *The Effect of Financial Pressure on Financial Reporting...* Indonesia tahun 2020–2024. *Maslahah: Jurnal Manajemen Dan Ekonomi Syariah*, 3(4), 323–328.
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