

PRESSURE AND FINANCIAL STATEMENT FRAUD IN THE BANKING INDUSTRY: THE MODERATING ROLE OF PROFIT EQUALIZATION

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Abstract

Fraudulent financial statement remains a critical concern in the banking industry, given its systemic implications for investor confidence and financial stability. Grounded in fraud triangle theory, this study examines the effect of pressure on fraudulent financial statement with income smoothing as a moderating variable in Indonesian listed banks. Using a balanced panel dataset of 48 banks over the period 2022-2024 (144 observations), this study employs Panel Estimated Generalized Least Squares (EGLS) with cross-section weights and Fixed Effect Model. The findings reveal that financial stability positively and significantly influences fraudulent financial statements, while external pressure shows no significant effect. Income smoothing significantly moderates both relationships, attenuating the effect of financial stability and external pressure on fraudulent financial statements. These results extend fraud triangle theory by demonstrating that the relevance of pressure proxies is industry-contingent and that income smoothing functions as a substitutive mechanism rather than a complement to fraudulent reporting. Practically, the findings underscore the importance of asset-growth-based early warning systems for regulators and reinforce the need for stronger governance mechanisms in high-growth banking institutions.

Keywords: Fraudulent Financial Statement, Pressure, Income Smoothing, F-Score, Banking Industry

1. Introduction

The growth of public companies in Indonesia, which reached 956 companies as of December 2025, shows high enthusiasm in seeking funding in the capital market (Indonesia Stock Exchange, 2025). Thus, financial statements have a crucial role as a reflection of the company's performance as well as a basis for consideration for investors in decision-making. However, this condition has not been accompanied by an adequate fraud prevention system, so the risk of fraudulent financial statements remains a serious threat. As the main medium of information delivery, financial reports function as a communication tool that provides an overview of the company's financial condition and operational activities to stakeholders.

Data from the Association of Certified Fraud Examiners (ACFE) through Report to the Nation 2024 shows that although the frequency of financial statement fraud is only 5%, the average loss incurred reaches USD 766,000, a much larger amount than the misuse of assets and corruption. In Indonesia, the practice of fraudulent financial statements is recorded to have a lower frequency, which is 12.2% compared to asset abuse and corruption. However, the financial impact it causes tends to be significant with 23.7% of cases resulting in losses of IDR 1 billion to IDR 50 billion. The banking and financial

services sector has historically been the industry most vulnerable to manipulative practices of financial data due to its business characteristics that rely heavily on public trust and strict regulation. However, ACFE through the 2025 Indonesia Fraud Survey proves that Banking and financial services are the top 3 industries most affected by fraud practices with a percentage of 12%.

In Indonesia, the urgency of monitoring the integrity of banking financial statements is underscored by a series of real scandals that have shaken the stability of the capital market. One of the most prominent cases is the manipulation of financial statements by PT Bank Bukopin Tbk. (2015-2017) by presenting asset positions (credit) and commission-based income excessively. The manipulation carried out by PT Bank Bukopin Tbk. caused the bank to be responsible and revise its financial statements for three consecutive years, so that without the manipulation carried out, the financial statements presented a decrease in equity due to a downward revision of the profit balance and a decrease in the Capital Adequacy Ratio (CAR) to 10.52% (CNBC Indonesia, 2017). In addition, in 2018 the Regional Development Bank of West Java and Banten (BJB) Syariah became one of the companies that suffered losses due to fraud. The case that occurred was in the form of alleged fictitious loans with a loss value of Rp548 billion. Based on the 2018 Good Corporate Governance (GCG) report, the company recorded four cases of internal fraud that had a significant impact on the bank's operational activities and financial condition. This confirms that even though it is a highly regulated industry, banking institutions still have loopholes for management to manipulate financial information to hide true performance risks (Juniarty & Kurniawati, 2025).

The urgency of this research is driven by several critical factors. First, the banking and financial services sector in Indonesia faces significant financial statement fraud risks due to its business characteristics that rely heavily on public trust and strict regulation, yet remains the top 3 industries most affected by fraud practices (ACFE, 2025). Second, the inconsistency of previous research findings regarding the influence of pressure on financial statement fraud indicates a research gap that needs to be addressed. Some studies demonstrate that pressure has a significant positive effect on financial statement fraud (Andalia et al., 2021), while others reveal that pressure does not significantly affect fraud because strict supervision dampens the urge to cheat even when management is under pressure (Hexana et al., 2025). In the banking industry, external pressure proxies measured by leverage show mixed results (Tarmizi et al., 2023; Pamungkas et al., 2025), while other proxies such as financial targets and financial stability often show no significant effect on fraudulent financial statements (Hexana et al., 2022; Juliarta et al., 2024; Tarmizi et al., 2023). Third, the role of profit equalization as a moderating variable in the relationship between pressure and financial statement fraud has not been extensively studied, particularly in the Indonesian banking sector context. Fourth, the high level of vulnerability of banking financial statements to manipulation actions triggered by the pressure to achieve performance targets, where these actions are often disguised through profit equalization practices to create a misleading impression of financial stability. Fifth, the gap between theoretical predictions and empirical findings necessitates renewed investigation with more comprehensive research designs that incorporate moderating variables.

In this study, the researcher will discuss further the high level of vulnerability of banking financial statements to manipulation actions triggered by the pressure to achieve performance targets, where these actions are often disguised through profit equalization practices to create a misleading impression of financial stability. Fierce competition and

high profit targets create an incentive for management to use accounting discretion in estimation accounts, such as the Impairment Loss Reserve (CKPN), to mitigate profit fluctuations. If not thoroughly investigated, this synergy between financial pressures and opportunistic profit management will continue to undermine investor confidence, distort economic decision-making, and threaten the systemic stability of the financial system.

Research on the determinants of financial statement fraud has grown rapidly from the Fraud Triangle theory to the Fraud Hexagon. However, the existing literature still shows very contradictory findings, especially in the element of pressure, where inconsistency of results does not only occur in the banking sector, but also in various other sectors such as manufacturing companies and State-Owned Enterprises (SOEs). Some researchers have found that pressure has a significant positive effect on financial statement fraud because financial conditions threaten to force management to act unethically (Andalia et al., 2021). On the contrary, other studies have shown that pressure has no significant effect on cheating because strict supervision is thought to be able to dampen the urge to cheat even when management is under pressure (Hexana et al., 2025). In the banking industry, external pressure proxies measured by leverage have shown mixed results, with one study finding them to have a significant effect (Tarmizi et al., 2023), but another study states that this factor is not strong enough to drive fraud in the absence of weak governance (Pamungkas et al., 2025). In addition, other proxies such as financial targets (Return on Asset) and financial stability (asset changes) are often shown to have no significant effect on Fraudulent Financial Statements in the banking sector (Hexana et al., 2022; Juliarta et al., 2024; Tarmizi et al., 2023). One of these inconsistencies in the results is based on the argument that strict supervision in banks may be able to dampen the urge to cheat even when management is under pressure (Tarmizi et al., 2023).

These differences in findings are often due to variations in the research time context, such as the period before and after the Covid-19 pandemic, where difficult economic pressures were experienced collectively by the entire industry so that managers did not feel the need to commit fraud individually to justify poor performance. In addition, the use of different detection proxies, ranging from traditional accrual models to score-based models such as Beneish M-Score and Dechow F-Score, also yields mixed results in detecting manipulative behavior. The existence of this result gap shows that the influence of pressure on financial statement fraud is not a simple linear relationship, but may be influenced by other variables that moderate or strengthen managers' motivation in manipulating.

The research gap in this study lies in the limited understanding of how pressure influences financial statement fraud in the banking sector and how profit equalization moderates this relationship. While individual studies have examined the direct effects of pressure on fraud, the moderating role of profit equalization in strengthening or weakening this relationship remains underexplored. Additionally, most previous studies have focused on non-financial sectors or have not distinguished between different types of pressure proxies, limiting understanding of the specific mechanisms through which pressure translates into fraudulent behavior. Furthermore, empirical evidence from the Indonesian banking sector remains limited, particularly in the context of post-pandemic recovery where financial pressures are significant.

The novelty of this research lies in several aspects. First, this study focuses on the Indonesian banking sector during the 2020–2024 period, which represents a unique context characterized by post-pandemic recovery, regulatory intensity, and increasing pressure on financial performance. Second, this study develops an integrative model that

simultaneously examines the influence of pressure on financial statement fraud with profit equalization as a moderating variable, providing a more comprehensive understanding of the determinants of fraud in the banking sector. Third, this study positions profit equalization as a moderating variable, enabling the examination of whether profit management practices amplify or attenuate the relationship between pressure and fraudulent behavior. Fourth, this study contributes to the limited empirical evidence on financial statement fraud in the Indonesian banking sector, providing insights into how financial pressures and profit equalization practices interact to influence fraudulent reporting. Fifth, this study extends the application of Fraud Triangle Theory and Agency Theory to the context of financial statement fraud detection in the banking sector.

The purpose of this study is to examine the effect of pressure on financial statement fraud with profit equalization as a moderating variable in banking sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Specifically, this research aims to: (1) analyze the effect of pressure on financial statement fraud; (2) analyze the moderating role of profit equalization in the relationship between pressure and financial statement fraud; and (3) provide empirical evidence on the application of Fraud Triangle Theory and Agency Theory in the banking sector context.

The contribution of this research is multifaceted. From a theoretical perspective, this research contributes to the enrichment of literature on financial statement fraud by proposing and testing an integrative model that links pressure with fraudulent behavior, incorporating profit equalization as a moderating variable, extending the application of Fraud Triangle Theory and Agency Theory to the context of financial statement fraud in the banking sector. The findings contribute to the understanding of how financial pressures and profit management practices interact to influence fraudulent reporting, providing a more nuanced theoretical framework for analyzing fraud determinants in highly regulated industries. From a practical perspective, this study provides actionable insights for regulators, auditors, and investors in assessing and managing financial statement fraud risks. For regulators, particularly the Financial Services Authority (OJK), the findings provide empirical evidence to support the development of more effective fraud prevention and detection mechanisms in the banking sector. For auditors, this study provides additional insight into the importance of analyzing subjective estimation accounts in banking and profit equalization patterns as early signals of fraud. For investors, these findings can help improve the quality of decision-making by identifying indicators of financial statement manipulation amid economic pressures.

2. Theoretical Background

2.1 Agency Theory

Agency theory, put forward by Jensen and Meckling (1976), describes agency relations as a contract in which the principal delegates decision-making authority to the agent. In the structure of the banking industry, agency conflicts arise due to information asymmetry, where managers have deeper access to operational data than shareholders. This asymmetric mechanism is the root cause of Financial Statement Fraud, because agents have the ability to manipulate information to hide poor performance for personal gain, such as securing incentives or position positions. Agency theory explains that financial statement fraud is not just a random act, but an opportunistic response of agents to significant financial pressure. When principals set performance targets or high profitability ratios, agents are in a pinched situation that triggers motivation to take moral

hazards in order to display a competitive financial image in the eyes of the public (Juniarty & Kurniawati, 2025). In the context of banking, where public trust is a crucial asset, agency conflicts are particularly pronounced as managers face dual pressures from shareholders demanding profitability and regulators requiring compliance, creating a complex environment where the temptation to manipulate financial information may be heightened.

2.2 Fraud Triangle Theory

The Fraud Triangle theory was the initial foundation in the study of fraudulent behavior proposed by Cressey (1953). Cressey identified three main factors that cause a person to cheat, namely pressure, opportunity, and rationalization. The main focus in this study is the element of pressure, which Cressey defines as motivation or impulse that forces a person to behave unethically. In the banking context, pressure often manifests through aggressive performance targets, high leverage, and the need to maintain financial stability to preserve market confidence. The Fraud Triangle framework provides a foundational understanding that fraud does not occur in isolation but is triggered by specific conditions that create incentives for unethical behavior. This theory has been widely applied in financial statement fraud research and remains relevant for understanding the behavioral drivers of manipulation in the banking sector.

2.3 Signaling Theory

Signaling Theory, developed by Spence (1973), explains that companies convey information to investors through disclosure to reduce information asymmetry between management and external parties. In the context of profit equalization, signaling theory provides a perspective that profit equalization can be an effort by management to convey information about long-term profit sustainability to investors. In volatile economic conditions, signals in the form of stable profits can lower capital costs and increase market confidence (Laela & Latif, 2023). However, the effectiveness of this signal is highly dependent on transparency; if profit equalization is carried out with the intention of deception (deceptive income smoothing), then the action actually damages accountability and misleads the economic decision-making of stakeholders. For investors, the ability to distinguish between genuine signals of stability and manipulative smoothing practices is crucial for making informed investment decisions in the banking sector.

2.4 Financial Statement Fraud

The components of financial statements implemented in Indonesia have become increasingly comprehensive and are directly guided by international regulations. However, there are still many gaps in financial statements that can be used to become a space for management and certain individuals to commit fraud in financial statements. Financial statement fraud is a misrepresentation or deliberate omission of an amount or disclosure with the intention of deceiving the users of the financial statement (Arens et al., 2015). This fraud is also in the form of misstatements (both overstatements and understatements) that can occur in financial and non-financial statements (Tuanakotta, 2018). Financial statement fraud is intentional or negligent in financial statements that are presented in accordance with applicable general accounting principles (ACFE, 2024). This negligence or intentionality is material so that it can affect the decision to be taken by the interested party. In the banking sector, financial statement fraud often involves manipulation of loan loss provisions, understatement of non-performing loans, and

overstatement of asset values, which can have systemic implications for financial stability.

2.5 Pressure and Financial Statement Fraud

The Agency Theory Perspective explains that employment contracts between principals and agents are often colored by conflicts of interest triggered by information asymmetry. In the competitive structure of the banking industry, managers face huge demands to meet financial performance targets in order to secure their incentives or positioning. Pressure emerges as the main stimulus that encourages agents to behave opportunistically by hiding poor financial conditions from the principal to avoid the negative consequences of performance that does not reach the target. The main focus of this perspective is on behavioral integrity and managerial professionalism as the foundation for maintaining legitimacy and public trust which is a crucial asset for banks. In this view, commitment to organizational ethical values should be able to reduce deviant behavior, so that financial pressure does not necessarily translate into an act of manipulation of financial statements if managers stick to their moral responsibilities (Juliarta et al., 2024).

An empirical review of the relationship between pressure and financial report fraud still shows intense debate. Research by Andalia et al. (2021), Hermiyetti (2022), and Nurfadillah et al. (2024) provides strong evidence that financial stress has a positive and significant effect on financial statement fraud. However, contradictory results were shown by Hexana et al. (2022), Juliarta et al. (2024), and Pamungkas et al. (2025) who found that the pressure factor had no direct influence on the potential for fraud in the banking industry, which is thought to be related to the characteristics of the banking industry that have very strict risk limits. In the operational context of banks, external pressures proxied through leverage reflect a level of dependence on third-party funds, which increases the risk of default and the burden of fulfilling obligations to creditors. In addition, financial targets in the form of financial stability measured by asset growth create a psychological burden for management to always display stable performance in order to maintain market reputation. Based on the detection model, this stimulus is a crucial determinant of testing the ethical limits of managers when faced with an urgent financial situation (Tarmizi et al., 2023).

The synthesis of the above argument suggests that the information asymmetry inherent in agency relationships provides room for management to respond to financial pressures through manipulative actions. The inability to achieve profitability targets or maintain asset stability under creditor supervision creates a rational motive for agents to misrepresent material in order to maintain the impression of the company's financial health. So that the higher the financial pressure faced by banks, the greater the probability of financial statement fraud detected through parameters. Based on these arguments, the following hypothesis is proposed:

H1: Pressure has a positive effect on financial statement fraud.

2.6 The Moderating Role of Profit Equalization

Based on Agency Theory, profit equalization is seen as an opportunistic instrument that managers use to manipulate shareholder perceptions of company risk. By utilizing accounting discretion on estimation accounts such as Impairment Loss Reserve (CKPN) or Loan Loss Provision, agents can balance profit fluctuations over time (Laela & Latif, 2023). This practice exacerbates information asymmetry because management

deliberately obscures the true volatility of performance to secure personal compensation based on profit stability (Juniarty & Kurniawati, 2025). In the banking sector, profit equalization practices are particularly concerning because they involve subjective estimates of loan loss provisions, which provide significant discretion for management to manipulate reported earnings.

On the other hand, Signaling Theory provides a perspective that profit equalization can be an effort by management to convey information about long-term profit sustainability to investors. In volatile economic conditions, signals in the form of stable profits can lower capital costs and increase market confidence (Laela & Latif, 2023). However, the effectiveness of this signal is highly dependent on transparency, if profit equalization is carried out with the intention of deceptive (deceptive income smoothing), then the action actually damages accountability and misleads the economic decision-making of stakeholders.

The empirical debate about profit equalization in relation to fraud has also recorded mixed findings. Laela and Latif's (2023) research reveals that banks tend to intensify profit-equalizing practices during times of crisis to absorb financial shocks. Furthermore, research by Burca et al. (2022) and Sevala et al. (2022) shows that accrual profit management significantly increases the probability of financial statement fraud because profit manipulation patterns are often the first step before more massive material misrepresentations.

An additional variable in the form of profit equalization is hypothesized to function as a catalyst that strengthens the influence of financial pressure on fraudulent behavior. Bank managers who are under the pressure of ROA targets or high leverage will find it safer to commit fraud if they can disguise it through a pattern of profit-equalization that looks reasonable. This practice creates a gray area that makes it difficult for auditors to detect financial anomalies directly, thus facilitating management to continue to manipulate financial statements systemically under high pressure. Profit equalization acts as a technical mechanism that magnifies the opportunities for pressure-driven behavioral motives. The existence of accounting flexibility in managing estimation accounts in banking provides space for agents to respond to financial pressures unethically without being immediately detected by the surveillance radar (Laela & Latif, 2023). Thus, the stronger the bank's tendency to equalize profits, the effect of the pressure stimulus on the potential for fraudulent financial statements will increase significantly. Based on these arguments, the following hypothesis is proposed:

H2: Profit equalization reinforces the positive influence of pressure on financial statement fraud.

3. Methods

3.1 Research Design

This study employs a quantitative approach using descriptive and verificative methods to examine the effect of pressure on financial statement fraud with profit equalization as a moderating variable in banking sector companies listed on the Indonesia Stock Exchange. The verificative method is used to analyze the causal relationship between financial pressure, profit equalization practices, and fraudulent financial reporting through panel data regression analysis. The quantitative approach is considered appropriate because the study aims to empirically test the proposed hypotheses using statistical analysis of numerical data derived from audited financial statements. The explanatory research design enables the examination of causal relationships between the

independent variable (Pressure), moderating variable (Profit Equalization), and dependent variable (Financial Statement Fraud).

3.2 Population and Sample

The population in this study is all banking companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. The banking sector was selected due to its high vulnerability to financial statement fraud, its business characteristics that rely heavily on public trust and strict regulation, and its position as one of the top 3 industries most affected by fraud practices in Indonesia (ACFE, 2025). Using purposive sampling, the study selected banks that met the following criteria: (1) banking companies consistently listed on the IDX during the 2022–2024 period; (2) banks that published complete audited annual financial statements during the observation period; (3) banks that provided complete data required for calculating all research variables, including financial statement fraud (F-Score), pressure indicators (ACHANGE and LEV), profit equalization (DLLP), and firm size; and (4) banks that had complete financial data for calculating the F-Score components. Based on these criteria, the final sample includes banking companies observed over three years, resulting in a balanced panel dataset. The use of balanced panel data combines the cross-section dimension (bank unit) and the time-series dimension (annual period 2022–2024), allowing the control of heterogeneity between observation units that are not observed and resulting in more efficient estimation than pure cross-sectional and time-series data (Baltagi, 2008).

3.3 Data Collection Techniques

Secondary data were collected from audited annual financial statements of banking companies listed on the Indonesia Stock Exchange during 2022–2024, obtained from the official IDX website (www.idx.co.id) and the official website of each bank. The data collection procedure involved several sequential steps: (1) identification of banking companies listed on the IDX during the 2022–2024 period; (2) selection of banks meeting the predetermined purposive sampling criteria; (3) extraction of financial data from audited annual financial statements, including information required for calculating the F-Score model, pressure indicators, profit equalization proxies, and firm size; (4) calculation of all research variables based on the extracted data; and (5) documentation of all extracted and calculated data systematically organized into a panel dataset suitable for statistical analysis using EViews 14. The secondary data sources employed in this research are considered reliable as they represent official publications from the Indonesia Stock Exchange and audited financial reports.

3.4 Operational Definition of Variables

The operational definitions of the variables examined in this study are presented in Table 1.

Table 1. Operational Definition and Measurement of Variables

Variable	Definition	Measurement	Scale	References
Financial Statement Fraud (Y)	Misrepresentation or deliberate omission of financial information intended to	F-Score Model: $FFS = -7.893 + 0.790(RSST) + 2.518(\Delta REC) + 1.191(\Delta INV) + 1.979(SOFTASSETS) +$	Ratio	Dechow et al. (2011); Dechow et al. (2012)

Variable	Definition	Measurement	Scale	References
	deceive stakeholders	$0.171(\Delta \text{CASHSALES}) - 0.932(\Delta \text{ROA}) + 1.029(\text{ISSUE})$		
Pressure - Financial Stability (X_1)	The financial pressure arising from changes in total assets as an indicator of management's pressure to maintain growth and financial stability	$\text{ACHANGE} = (\text{Total Assets } t - \text{Total Assets } t-1) / \text{Total Assets } t-1$	Ratio	Skousen et al. (2009)
Pressure - External Pressure (X_2)	The pressure from creditors reflecting the company's dependence on debt as a source of funding	$\text{LEV} = \text{Total Liabilities} / \text{Total Equity}$	Ratio	Skousen et al. (2009)
Profit Equalization (Z)	The practice of profit smoothing through discretionary loan loss provisions to manage profit fluctuations	Discretionary LLP: $\text{ISit} = \alpha + \beta_1(\text{EBTPit}) + \beta_2(\text{NPLit}) + \beta_3(\Delta \text{NPLit}) + \beta_4(\Delta \text{LOANit}) + \beta_5(\text{SIZEit}) + \epsilon_{it}$	Ratio	Kanagaretnam et al. (2010); Laela & Latif (2023)
Firm Size (Control)	The scale of the bank representing its resources and operational capacity	$\text{SIZE} = \text{Ln}(\text{Total Assets})$	Ratio	Baltagi (2008)

Source: Developed for this research (2026)

3.5 Data Analysis Techniques

Data analysis in this study is conducted using panel data regression with the assistance of EVIEWS 14 software. The analysis stages include:

- 1) **Descriptive Statistics:** Descriptive statistics are employed to describe the characteristics of the research data, including mean, standard deviation, minimum, and maximum values for all variables examined in the study. This analysis provides an overview of the distribution and tendencies of the data before conducting further statistical testing.
- 2) **Panel Data Model Selection:** The selection of the appropriate panel data regression model is carried out through three main stages: the Chow Test to compare whether the Common Effect Model (CEM) or Fixed Effect Model (FEM) is the better model to use; the Hausman Test to determine whether the best model is FEM or Random

Effect Model (REM); and the Lagrange Multiplier (LM) Test to confirm whether REM is more appropriate than CEM.

- 3) **Classical Assumption Tests:** Prior to hypothesis testing, classical assumption tests are conducted to ensure that the regression model satisfies the required assumptions so that the estimation results are more reliable. The tests include multicollinearity test using Variance Inflation Factor (VIF), heteroscedasticity test, normality test, and autocorrelation test (Durbin-Watson).
- 4) **Panel Data Regression Analysis:** The regression model used in this study is formulated as follows:

$$FFSit = \alpha + \beta_1 ACHANGEit + \beta_2 LEVit + \beta_3 ISit + \beta_4 (ACHANGE \times IS)it + \beta_5 (LEV \times IS)it + \beta_6 SIZEit + \varepsilon it$$

Where:

FFS	= Financial Statement Fraud (F-Score)
ACHANGE	= Financial Stability (Asset Change)
LEV	= External Pressure (Leverage)
IS	= Profit Equalization (Income Smoothing)
ACHANGE×IS	= Interaction between Financial Stability and Profit Equalization
LEV×IS	= Interaction between External Pressure and Profit Equalization
SIZE	= Firm Size (Control)
α	= Constant
β_1 – β_6	= Regression coefficients
ε	= Error term
i	= Bank
t	= Year

- 5) **Hypothesis Testing:** Hypothesis testing is conducted using:
 - a. t-test: Used to determine the partial effect of each independent variable on the dependent variable. The hypothesis is accepted if the probability value (p-value) is less than the significance level of 5% ($p < 0.05$).
 - b. F-test: Used to examine the simultaneous effect of independent variables on the dependent variable.
 - c. Coefficient of Determination (R^2): Used to measure the model's ability to explain variations in the dependent variable.
 - d. Moderated Regression Analysis (MRA): Used to test the moderating effect of profit equalization by examining the significance of the interaction terms between the pressure indicators (ACHANGE and LEV) and profit equalization (IS).
- 6) **Robustness Test:** To ensure the reliability of the findings, robustness tests are conducted to check the sensitivity of the results to alternative model specifications and to verify that the findings are not driven by outliers or model misspecification.

All hypothesis tests are conducted at a significance level of 5% ($p < 0.05$). The study aims to examine how financial pressure influences financial statement fraud and how profit equalization moderates this relationship in the Indonesian banking sector.

4. Results and Discussion

4.1 Results

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Deviation	Min	Max
F-SCORE	148	0.0913	0.0867	0.0061	0.6416
ACHANGE	148	0.1170	0.2234	-0.2969	1.3786

Variable	Obs	Mean	Std. Deviation	Min	Max
LEV	148	4.6604	3.0044	0.0810	15.3080
IS	148	0.0000	0.0135	-0.0323	0.0538
SIZE	148	31.5199	1.6638	28.8291	35.4255

Source: EViews 14 Output (2026)

The dependent variable, namely F-Score, has an average value of 0.0913 with a standard deviation of 0.0867, a minimum value of 0.0061, and a maximum value of 0.6416. The relatively low average value indicates that in general, the banking companies in the sample are not indicated to commit massive financial statement fraud. However, the fairly wide range of values between 0.0061 and 0.6416 reflects significant heterogeneity between banks in the level of risk of financial statement fraud. This dispersion is a prevalent condition in financial statement fraud research in the banking sector, considering the differences in governance characteristics, risk management quality, and financial pressures faced by each bank (Dechow et al., 2011).

The pressure-independent variable with financial stability (ACHANGE) has an average value of 0.1170 with a standard deviation of 0.2234, a minimum value of -0.2969, and a maximum value of 1.3786. The positive average value indicates that the average bank in the sample experienced total asset growth during the 2022–2024 period, consistent with the recovery conditions of the Indonesian banking sector after the COVID-19 pandemic. The considerable variation between negative and high minimum values reflects substantial differences in the rate of asset growth between banks, which can create varying levels of financial stress for management.

The pressure-independent variable with external pressure (LEV) has an average value of 4.6604 with a standard deviation of 3.0044, a minimum value of 0.0810, and a maximum value of 15.3080. The relatively high average leverage reflects the characteristics of the banking industry that inherently relies on third-party funds as the primary source of financing. Large dispersions with a standard deviation of 3.0044 indicate significant heterogeneity in the capital structure between banks in the sample, which may affect the level of external pressure faced by management in presenting financial statements.

The moderation variable, namely profit equalization (IS) proxied with Discretionary Loan Loss Provision, has an average value close to zero (0.0000) with a standard deviation of 0.0135, a minimum value of -0.0323, and a maximum value of 0.0538. A mean value close to zero is the expected condition of the residual variable of the regression result, indicating that in aggregate the formation of discretionary reserves is relatively balanced in the sample. A positive value indicates the bank is forming more reserves than it should be based on credit risk factors, while a negative value indicates the opposite (Kanagaretnam et al., 2010).

The control variable, namely firm size (SIZE), has an average value of 31.5199 with a standard deviation of 1.6638, a minimum value of 28.8291, and a maximum value of 35.4255. The average natural logarithm of total assets of 31.52 reflects a significant diversity of bank sizes in the sample, ranging from small-scale banks to large, national-scale banks listed on the IDX. This variation provides an adequate basis for controlling for the influence of bank size on the probability of financial statement fraud in the regression model.

Overall, descriptive statistics show adequate variation across the study variables, especially in the LEV and ACHANGE variables which reflect a significant heterogeneity of interbank financial conditions. This variation provides a solid foundation for further

analysis of the influence of pressure on financial statement fraud with moderation of profit alignment in the Indonesian banking sector.

Table 3. Correlation Matrix

Variable	F-SCORE	ACHANGE	LEV	IS	SIZE
F-SCORE	1.0000				
ACHANGE	0.5606	1.0000			
LEV	-0.0154	-0.2531	1.0000		
IS	0.0518	0.0251	-0.0795	1.0000	
SIZE	0.0543	-0.2051	0.5117	-0.0000	1.0000

Source: EVIEWS 14 Output (2026)

Table 3 presents the correlation matrix among the research variables. The results of the analysis showed that financial statement fraud was positively correlated and quite strongly with financial stability at 0.5606, indicating that banks with higher asset growth tend to have a higher probability of financial statement fraud. These preliminary findings are consistent with the research hypothesis that financial stability pressures have a positive effect on financial statement fraud. In contrast, the correlation between financial statement fraud and external pressure is negative but very weak at -0.0155 , suggesting that external pressure does not have a meaningful linear relationship with the bivariate probability of financial statement fraud. The correlation of financial statement fraud with profit alignment of 0.0518 and company size 0.0543 all showed very low values, indicating the absence of a strong linear relationship between these variables and individual financial statement fraud.

For independent variables, financial stability was negatively correlated with external pressure at -0.2532 and firm size at -0.2052 , indicating that banks with high asset growth tend to have lower external pressures and relatively smaller sizes. External pressures correlated positively with a firm size of 0.5117, indicating that larger banks tend to have a higher financial stress ratio, consistent with the characteristics of large banks that are more actively managing their capital structures. Overall, the results of the correlation analysis indicate that there is no correlation coefficient between independent variables that exceeds the value of 0.80, so multicollinearity is not expected to refract the regression estimate (Gujarati & Porter, 2009). This ensures that all independent variables can be reliably included in the estimation of the next stage of the regression model.

After the correlation analysis, panel data regression analysis was subsequently conducted to examine the effect of pressure on financial statement fraud with profit equalization as a moderating variable. The regression results are presented in Table 4.

Table 4. Fixed Effect Regression Results for Financial Statement Fraud

Variable	Coefficient	t-stat	Prob.
C	-5.2444	-6.8080	0.0000
ACHANGE	0.1516	6.5423	0.0000
LEV	-0.0036	-1.1532	0.1260
IS	2.4147	3.2363	0.0009
ACHANGE IS	-5.6497	-4.1163	0.0001
LEV IS	-0.5385	-4.3363	0.0000
SIZE	0.1692	6.9705	0.0000
R-squared	0.8243		
Adjusted R-squared	0.7732		
F-statistic	13.6618		

Variable	Coefficient	t-stat	Prob.
Prob (F-statistic)	0.0000		

Source: EVIEWS 14 Output (2026)

Table 4 presents the results of the EGLS Panel estimation with cross-section weights (Cross-Section Weights) to test the effect of pressure on financial statement fraud with profit equalization as a moderation variable. The model shows excellent feasibility with an F-statistical value of 13.6618 and a probability of $0.0000 < 0.05$, indicating that all independent variables simultaneously have a significant effect on financial statement fraud. The Adjusted R-squared (weighted) value of 0.8243 shows that the variables in the model are able to explain the variation in financial statement fraud by 82.43%. The weighted Durbin-Watson value of 2.6439 and the unweighted value of 2.1822 indicate that there is no serious autocorrelation in the model.

Based on the panel data regression results presented in Table 4, the regression equation of this study can be formulated as follows:

$$FFS = -5.2444 + 0.1516(ACHANGE) - 0.0036(LEV) + 2.4147(IS) - 5.6497(ACHANGE \times IS) - 0.5385(LEV \times IS) + 0.1692(SIZE) + \varepsilon$$

Where:

FFS	= Financial Statement Fraud (F-Score)
ACHANGE	= Financial Stability
LEV	= External Pressure
IS	= Profit Equalization (Income Smoothing)
ACHANGE×IS	= Interaction between Financial Stability and Profit Equalization
LEV×IS	= Interaction between External Pressure and Profit Equalization
SIZE	= Firm Size (Control)
ε	= Error term

Based on the regression results presented in Table 4, this study examines the direct effect of pressure (financial stability and external pressure) on financial statement fraud, as well as the moderating role of profit equalization in the relationship between pressure and fraudulent financial reporting. The regression analysis was conducted using the Fixed Effect Model (FEM), which was selected as the most appropriate panel estimation model based on the Chow test, Hausman test, and Lagrange Multiplier test results. The regression results indicate that financial stability has a significant positive effect on financial statement fraud, while external pressure does not have a significant effect. Furthermore, the moderating role of profit equalization produces negative and significant effects on the relationships between both financial stability and financial statement fraud, and external pressure and financial statement fraud. The R-squared value of 0.8243 indicates that the regression model has strong explanatory power in explaining variations in financial statement fraud among banking companies during the observation period. The probability value of the F-statistic is below 0.05, confirming that the regression model is statistically significant and appropriate for hypothesis testing.

4.2 Discussion

4.2.1 The Effect of Pressure (Financial Stability) on Financial Statement Fraud

The hypothesis testing results indicate that the financial stability variable has a positive and significant effect on financial statement fraud, with a coefficient value of 0.1516 and a probability value of 0.0000, indicating that H1 for financial stability is accepted. This finding suggests that the higher the growth of the bank's total assets, the higher the probability of financial statement fraud. The positive coefficient indicates that the

pressure to maintain financial stability is a significant driver of fraudulent reporting behavior in the banking sector.

This finding is in line with the Fraud Triangle Theory (Cressey, 1953) which states that the pressure to maintain financial stability is the main factor that encourages management to manipulate financial statements. In the 2022–2024 period, banks that experienced significant post-COVID asset growth faced higher performance expectations from investors and regulators, increasing incentives to present better-than-real financial conditions. From the Agency Theory perspective, information asymmetry between management and shareholders creates opportunities for agents to manipulate financial information to hide poor performance for personal gain, such as securing incentives or position positions (Jensen & Meckling, 1976). When principals set high performance targets, agents are in a pinched situation that triggers motivation to take moral hazards in order to display a competitive financial image in the eyes of the public (Juniarty & Kurniawati, 2025). These findings are consistent with the research of Skousen et al. (2009) and Nurcahyono et al. (2021).

These results are in line with Hermiyetti's (2022) research which proves that financial stimulus has a significant positive influence on fraud, where manipulation of numbers is carried out to increase public confidence and keep stock values competitive. Similar empirical support was also found in the studies of Andalia et al. (2021), Sari et al. (2024), and Achmad et al. (2022) which stated that the pressure to always display stable performance is a crucial determinant that tests the limits of managerial ethics. Although there is other literature that finds insignificant results due to the factors of strict regulatory supervision in the banking industry, the findings of this study confirm that financial stability pressures remain a rational motivation for management to make material misrepresentations. This statement is reinforced by the argument that when a company is in a precarious financial position, the urge to manipulate information becomes greater in order to avoid the negative consequences of a declining reputation in the eyes of investors and creditors.

4.2.2 The Effect of Pressure (External Pressure) on Financial Statement Fraud

The hypothesis testing results indicate that the external pressure variable does not have a significant effect on financial statement fraud, with a coefficient value of -0.0036 and a probability value of 0.1260, indicating that H1 for external pressure is rejected. This finding suggests that leverage, as a proxy for external pressure, does not significantly influence the likelihood of financial statement fraud in the Indonesian banking sector.

The insignificance of the influence of external pressure on financial statement fraud can be explained through several arguments. The OJK's strict regulation of the capital adequacy ratio (CAR) of Indonesian banks has set standardized leverage limits, so that bank leverage tends to move within a controlled range and does not provide significant pressure for management to manipulate. In the context of intensively supervised banking, creditors and depositors have relatively adequate access to bank health information through OJK publication reports, thereby reducing information asymmetry that triggers fraud. This finding is consistent with Handoko's (2021) research on IDX banking. These results are in line with the findings of Dapit et al. (2025) who stated that leverage does not affect fraud incentives due to strong operational supervision. Similarly, Hexana et al. (2022) and Juliarta et al. (2024) also found that stimulus or pressure factors did not have a significant influence on fraud indications in the Indonesian banking industry, confirming that risk mitigation policies in this sector have been effective.

4.2.3 The Effect of Profit Equalization on Financial Statement Fraud

The estimation results show that the Profit Equalization variable has a coefficient of 2.4147 with a t-statistical value of 3.2363 and a probability of 0.0009. These results indicate that profit equalization has a positive and significant effect on financial statement fraud directly, suggesting that banks that form larger discretionary reserves tend to have a higher probability of financial statement fraud. These findings can be interpreted as that the excessive formation of CKPN is part of a broader management opportunistic behavior, where profit equalization and financial statement fraud are complementary under certain conditions (Beaver & Engel, 1996).

4.2.4 The Moderating Role of Profit Equalization on Financial Stability and Financial Statement Fraud

The variables of financial stability interaction and profit equalization have a coefficient of -5.6497 with a t-statistical value of -4.1164 and a probability of 0.0001. Thus, H2 profit equalization moderates negatively and significantly the effect of financial stability pressures on financial statement fraud. Negative coefficients indicate that profit equalization weakens the relationship between financial stability pressures and financial statement fraud. In banks that equalize profits, the effect of asset growth on the probability of fraud becomes smaller. This suggests that banks that actively manage profits through the CKPN mechanism have released the cumulative pressure of asset growth through finer accounting channels, so there is no need to commit more massive fraud. These findings are in line with the argument that under conditions of growth pressure, profit equalization and fraud can be substitutive (Fonseca & González, 2008). From the perspective of Signaling Theory, profit equalization can be an effort by management to convey information about long-term profit sustainability to investors, reducing the perceived need for more aggressive fraud (Laela & Latif, 2023).

4.2.5 The Moderating Role of Profit Equalization on External Pressure and Financial Statement Fraud

The variables of external pressure interaction and profit equalization have a coefficient of -0.5385 with a t-statistical value of -4.3364 and a probability of 0.0000. Thus, H2 profit equalization moderates negatively and significantly the influence of external pressure on financial statement fraud. The negative coefficient indicates that profit equalization weakens the influence of external pressures on financial statement fraud. These findings suggest that in high-leverage banks, profit equalization practices actually serve as a deterrent mechanism that reduces management's motivation to commit more material fraud. From the perspective of agency theory (Jensen & Meckling, 1976), profit equalization through CKPN provides sufficient accounting flexibility for management to meet creditors' expectations without having to carry out more massive and risky manipulations. The existence of accounting flexibility in managing estimation accounts in banking provides space for agents to respond to financial pressures through legitimate accounting discretion rather than through outright fraud (Laela & Latif, 2023).

4.2.6 The Effect of Control Variables on Financial Statement Fraud

The control variable, firm size, has a coefficient of 0.1692 with a probability of 0.0000, indicating a positive and significant influence on financial statement fraud. Banks with larger sizes tend to have a higher probability of fraud, consistent with the argument that the operational complexity of large banks provides more room for opportunistic

management behavior (Dechow et al., 1995). Larger banks have more complex organizational structures, more extensive branch networks, and more sophisticated financial instruments, which create greater opportunities for manipulation and make detection more difficult for regulators and auditors.

5. Conclusion

This study examines the effect of pressure on financial statement fraud with profit equalization as a moderating variable in banking sector companies listed on the Indonesia Stock Exchange during the 2022–2024 period. Using panel data regression with the Fixed Effect Model (FEM) on 48 banking companies with 144 observations, the results show that financial stability, proxied by asset change (ACHANGE), has a positive and significant effect on financial statement fraud, confirming that asset growth pressures faced by Indonesian banks in the post-COVID recovery period are relevant driving factors for increasing the risk of financial statement fraud, consistent with the pressure element in Fraud Triangle Theory (Cressey, 1953). In contrast, external pressure, proxied by leverage (LEV), does not have a significant effect on financial statement fraud, indicating that OJK's strict capital regulations have succeeded in neutralizing pressure from creditors as a trigger for fraud in IDX banks. Profit equalization, measured through Discretionary Loan Loss Provision (DLLP), has a positive and significant direct effect on financial statement fraud, suggesting that banks forming larger discretionary reserves tend to have a higher probability of fraud. Furthermore, profit equalization negatively and significantly moderates the influence of financial stability on financial statement fraud, indicating that in banks facing asset growth pressures, profit equalization practices serve as a substitute mechanism that dampens the motivation to commit more massive and material fraud. Profit equalization also negatively and significantly moderates the influence of external pressure on financial statement fraud, suggesting that accounting flexibility provided by the DLLP mechanism provides sufficient room for management to meet stakeholder expectations without resorting to riskier manipulations. The coefficient of determination (R^2) value of 0.8243 indicates that the model explains 82.43% of the variation in financial statement fraud, confirming that the regression model has strong explanatory power.

The theoretical implications extend Fraud Triangle Theory, Agency Theory, and Signaling Theory to the context of financial statement fraud detection in the Indonesian banking sector. The significant positive effect of financial stability supports Fraud Triangle Theory by confirming that pressure to maintain financial stability is a primary driver of fraudulent behavior. The non-significant effect of external pressure challenges the assumption that leverage is a universal fraud determinant, suggesting that regulatory intensity in the banking sector may attenuate the influence of creditor pressure. The direct positive effect of profit equalization on financial statement fraud supports Agency Theory by demonstrating that opportunistic profit management practices and fraud are complementary under certain conditions (Beaver & Engel, 1996). The negative moderating effects of profit equalization on both pressure-fraud relationships extend Signaling Theory by showing that profit equalization can serve as a legitimate signal of stability that reduces the need for more aggressive fraud (Laela & Latif, 2023). The asymmetry of the role of profit equalization—positive direct effect but negative moderation—reflects the complex dynamics between profit management and financial statement fraud in the heavily regulated banking industry.

From a practical perspective, regulators, particularly the Financial Services Authority (OJK), should strengthen monitoring of banks experiencing rapid asset growth, as financial stability pressures significantly increase the probability of financial statement fraud. Regulators should pay attention to profit equalization patterns through the Impairment Loss Reserve (CKPN) as an early signal of potential fraud, recognizing that excessive discretionary reserve formation may indicate opportunistic management behavior. Banks should ensure that profit equalization practices through CKPN are conducted transparently and within regulatory limits, as excessive discretionary reserves may increase the probability of fraud. Auditors should pay closer attention to subjective estimation accounts in banking, particularly loan loss provisions, as these accounts provide significant discretion for management to manipulate reported earnings and potentially disguise fraud. Investors should consider financial stability indicators and profit equalization patterns when evaluating the integrity of bank financial statements.

This study has several limitations. First, the analysis is limited to the banking sector, restricting generalizability to other sectors with different regulatory intensity and business characteristics. Second, the three-year observation period (2022–2024) may not capture longer-term trends and patterns in financial statement fraud behavior. Third, the study focuses on two pressure proxies (financial stability and external pressure), excluding other potential pressure determinants such as financial targets, personal financial need, and rationalization. Fourth, the study does not include other Fraud Triangle elements—opportunity and rationalization—which may interact with pressure to influence fraudulent behavior. Fifth, the reliance on the F-Score model may not fully capture all forms of financial statement fraud, particularly more sophisticated manipulation techniques.

Future research should broaden the scope to include multiple sectors to test the generalizability of findings across different regulatory environments and industry characteristics. Researchers should integrate additional variables such as financial targets, personal financial need, rationalization, and opportunity to develop a more comprehensive model of financial statement fraud determinants. Future studies should employ longer observation periods to capture longer-term trends and patterns in fraudulent behavior. Researchers should consider other profit management proxies and compare the effectiveness of different fraud detection models, including the Beneish M-Score and the Dechow F-Score. Comparative studies between different regulatory regimes could provide insights into how regulatory intensity influences the relationships between pressure, profit equalization, and financial statement fraud. Finally, future research could employ qualitative approaches such as case studies or interviews to provide richer insights into the mechanisms through which pressure and profit equalization influence fraudulent behavior in the banking sector.

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