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## DETERMINANTS OF FINANCIAL STATEMENT FRAUD OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Malu Margaret

### ABSTRACT

*This study investigates the determinants of financial statement fraud likelihood in listed deposit money banks in Nigeria. The primary objectives are to assess the effect of pressure, opportunity, and rationalization on the likelihood of financial statement fraud. Using a quantitative research methodology, data was collected through a structured questionnaire administered to banking staff, with statistical analyses conducted using SPSS version 25. The correlation and regression analyses revealed significant relationships between the variables. Pressure exhibited a positive relationship with financial statement fraud, while opportunity showed a negative correlation. Rationalization also positively impacted financial statement fraud. These findings indicate that higher pressure and rationalization increase the likelihood of fraud, while greater opportunity, surprisingly, decreases it due to effective internal controls in place. The study concludes that pressure and rationalization are significant predictors of financial statement fraud in Nigerian banks, whereas opportunity, contrary to expectations, acts as a deterrent when mitigated by strong internal controls. Based on these findings, it is recommended that banks set realistic performance targets and provide sufficient resources to manage pressure effectively. Strengthening internal controls and audit mechanisms is essential to limit opportunities for fraud. Furthermore, fostering an ethical corporate culture through regular ethics training and clear codes of conduct can reduce the rationalization of fraudulent behaviors. Implementing these recommendations requires a comprehensive approach, combining organizational adjustments, enhanced oversight, and ethical reinforcement to create an effective fraud prevention strategy. This paper contributes original insights by revealing a counterintuitive negative relationship between opportunity and financial statement fraud likelihood, challenging traditional fraud theories. Additionally, it underlines the critical roles of organizational pressure and rationalization in driving fraud, emphasizing the need for ethical corporate cultures and robust internal controls.*

*Keywords: banking sector, fraud likelihood, opportunity, pressure, rationalization*

### 1. Introduction

Financial statement fraud, defined as the deliberate misstatement or omission of financial information to deceive stakeholders, poses significant threats to the integrity of financial reporting. Accurate financial reporting in the banking sector is paramount, as it underpins trust, economic stability, and informed decision-making. The Nigerian banking sector, like many globally, has witnessed instances where managers manipulate financial reports to project a false sense of stability and profitability (Gbadebo, et al., 2023). Such manipulations undermine stakeholder trust and distort market perceptions, leading to severe consequences. Shareholders may suffer financial losses, depositors' funds can be jeopardized, and overall economic stability can be compromised

(Olade & Owa, 2024). Moreover, forensic accounting has been shown to significantly enhance fraud detection and prevention in Nigerian banks, highlighting its critical role in maintaining financial integrity (Adebawale & Oluwafemi, 2021). However, auditors also play a vital role, with risk assessment and verification of financial reports being significant deterrents against fraud (Akanni, 2020). Unethical behaviour, influenced by attitudes, subjective norms, and ethical judgments, further exacerbates the likelihood of fraud, necessitating stringent ethical standards within financial institutions (Awang & Ismail, 2018). Thus, effective internal controls and rigorous oversight mechanisms are essential to safeguard against financial statement fraud and protect stakeholder interests.



However, the Nigerian banking sector has undergone significant transformation, evolving from a colonial-era institution to a robust, modern financial system. Initially dominated by foreign banks, the sector saw the establishment of indigenous banks post-independence, leading to increased competition and financial inclusivity (Udeh & Ugwu, 2018). The consolidation reforms of 2004, which mandated a minimum capital base for banks, further strengthened the sector by reducing the number of banks and enhancing stability. Currently, the landscape comprises a mix of large, listed deposit banks and smaller financial institutions, with major banks like Zenith Bank and First Bank playing pivotal roles in the economy (Gbadebo, et al., 2023). Regulatory oversight is primarily provided by the Central Bank of Nigeria (CBN) and the Nigeria Deposit Insurance Corporation (NDIC), which enforce compliance with financial reporting standards to ensure transparency and protect stakeholders (Adebawale & Oluwafemi, 2021). The Financial Reporting Council of Nigeria (FRC) also plays a crucial role in setting accounting standards and ensuring adherence. Despite these regulatory frameworks, challenges such as financial statement fraud persist, necessitating continuous improvement in regulatory practices and enforcement mechanisms to safeguard the integrity of the banking sector (Egolum, et.al., 2019).

On the other hand, the Fraud Triangle Framework, conceptualized by Donald Cressey, elucidates the three core elements that drive individuals to commit fraud: Pressure, Opportunity, and Rationalization. Pressure involves financial or personal stressors that compel individuals to consider unethical actions, such as financial hardship or unrealistic performance targets (Awang & Ismail, 2018). The opportunity arises when there are weaknesses in internal controls or governance structures that make fraud possible, while Rationalization allows the individual to justify the fraudulent behavior, often through a perceived sense of entitlement or minimization of the wrongdoing (Biduri & Tjahjadi, 2024). This framework is crucial in understanding the multifaceted nature of financial statement fraud, providing a comprehensive lens through which the motivations and circumstances of fraudulent behavior can be analyzed. Empirical studies have applied the fraud triangle to various contexts, revealing its efficacy in identifying fraud risk factors. For instance, in the Nigerian banking sector, the framework has been instrumental in detecting vulnerabilities that

facilitate fraudulent activities, highlighting the importance of robust internal controls and ethical standards (Gbadebo, et al., 2023). Furthermore, the integration of forensic accounting practices has been shown to mitigate these risks by enhancing detection and prevention mechanisms, underscoring the framework's relevance in contemporary financial fraud analysis (Adebawale & Oluwafemi, 2021).

Moreover, the Beneish Model, particularly the M-score, is a statistical tool used to detect financial statement fraud by analyzing financial ratios derived from a company's accounting data. The model includes two versions: the M8-score, which uses eight variables, and the M5-score, which uses five. These variables encompass measures like the Days' Sales in Receivables Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), and Total Accruals to Total Assets (TATA), among others. Each component is designed to capture anomalies in financial performance that may indicate manipulation (Gbadebo, et al., 2023). The effectiveness of the Beneish model has been demonstrated in various empirical studies. For example, research on Nigerian financial institutions applied the M8/M5 scores and found a significant portion of firms likely engaged in financial statement manipulation (Gbadebo, Akande & Adekunle, 2023). This aligns with broader findings that the model is a robust predictor of fraudulent activities, offering a quantitative approach to identifying firms at risk of financial misreporting (Biduri & Tjahjadi, 2024). The model's utility in diverse contexts, including emerging markets, underscores its reliability and effectiveness in fraud detection, reinforcing the need for its integration into routine financial analysis and auditing processes to enhance the credibility of financial reporting.

Therefore, research on financial statement fraud in Nigerian listed deposit banks is crucial due to the sector's significant role in the economy and the prevalence of fraud. Existing literature often highlights the susceptibility of Nigerian banks to financial misreporting, yet comprehensive studies incorporating robust analytical frameworks like the fraud triangle and the Beneish model are scarce (Gbadebo, et al., 2023). Previous research has primarily focused on specific aspects such as forensic accounting or auditor roles (Adebawale & Oluwafemi, 2021; Akanni, 2020), leaving gaps in holistic approaches that integrate multiple fraud detection methods. The fraud triangle provides a

psychological and situational analysis of fraud, identifying pressure, opportunity, and rationalization as key drivers (Awang & Ismail, 2018). The Beneish model offers a quantitative tool for detecting anomalies in financial data that suggest manipulation (Biduri & Tjahjadi, 2024). Combining these models allows for a comprehensive analysis, addressing both behavioral and numerical indicators of fraud. This dual approach enhances the ability to detect and understand fraudulent activities in Nigerian banks, thereby improving regulatory measures and financial integrity. Thus, this paper will address the following questions: (1) How does pressure influence financial statement fraud likelihood in listed deposit money banks in Nigeria? (2) What effect does opportunity have on financial statement fraud likelihood in these banks? (3) How does rationalization impact the likelihood of financial statement fraud? Also, the study aims to investigate the determinants of financial statement fraud likelihood in listed deposit banks in Nigeria, employing the fraud triangle and Beneish model for a thorough analysis. Specifically, it seeks to assess the effect of pressure, opportunity, and rationalization on the likelihood of financial statement fraud.

## 2. Literature Review

Fraud is a deliberate act of deception intended for personal gain or to cause a loss to another party. In financial contexts, fraud can take various forms, including financial statement fraud, where financial reports are manipulated to present a misleading picture of an organization's financial health. Achmad, et al., (2022) describe fraud as involving intentional misstatements or omissions of amounts or disclosures in financial statement, designed to deceive financial statement users. Moreover, fraud likelihood refers to the probability or risk that fraudulent activities will occur within an organization. It encompasses various factors that increase the potential for fraud, such as internal control weaknesses, financial pressures, and the presence of opportunities to commit and conceal fraud. Achmad, et al., (2022) highlight that the likelihood of fraud is significantly influenced by the elements of the fraud triangle: pressure, opportunity, and rationalization. When these factors are prevalent, the probability of fraudulent behavior increases.

On the other hand, the Fraud Triangle, a fundamental framework in fraud detection and prevention, was developed by criminologist Donald Cressey. It explains the three critical components that contribute

to fraudulent behavior: pressure, opportunity, and rationalization. Understanding these elements is essential in analyzing and mitigating financial statement fraud. Thus, the application of the Fraud Triangle in financial statement fraud analysis involves examining these three elements to identify potential red flags. By assessing the pressures faced by employees, evaluating the strength of internal controls, and understanding the potential rationalizations, organizations can better predict and prevent fraudulent behavior. Anichebe (2019) discusses how forensic accountants use the Fraud Triangle to analyze fraud cases, identifying weaknesses in controls and areas where pressure and rationalization might intersect to create fraud risks. The relevance of the Fraud Triangle to deposit money banks in Nigeria is particularly significant. Nigerian banks operate in a challenging environment with high levels of economic volatility, regulatory pressures, and intense competition.

These factors can create significant pressure on bank employees and executives to deliver favorable financial results. Maryani et al. (2022) emphasize that the banking sector's complexity and the volume of transactions present numerous opportunities for financial statement fraud. Weak internal controls, inadequate oversight, and the potential for collusion among employees further exacerbate these risks. Moreover, the cultural and ethical environment within Nigerian banks can influence rationalization processes. If employees perceive a culture of profit over integrity, they might rationalize fraudulent behavior as a means to an end. Olade and Owa (2024) suggest that fostering a culture of transparency and accountability is crucial in mitigating the rationalization of fraud. Regular ethics training, clear communication of anti-fraud policies, and strong leadership commitment to ethical behavior can help reshape the corporate culture and reduce the incidence of fraud.

## Empirical Review

Achmad, et al., (2022) examined fraudulent financial reporting in Indonesian state-owned enterprises using hexagon fraud analysis. The methodology was quantitative with logistic regression analysis on 125 samples selected through purposeful sampling from state-owned enterprises listed on the Indonesia Stock Exchange (2016-2020). Financial stability and external pressures positively influenced fraudulent financial reporting, while ineffective monitoring,

auditor changes, changes in director, arrogance, and collusion had no significant effect. Alfarago, et al., (2023) explored the fraud hexagon's elements on fraud likelihood in Indonesian manufacturing firms. Using logistic regression analysis on 76 firms (2015-2019) and the Beneish M-Score model, it found that stimulus (pressure) significantly impacts fraud likelihood. This empirical evidence emphasizes the importance of addressing pressure factors to mitigate fraud.

Anan (2021) investigated the determinants of fraudulent financial statement in Indonesian infrastructure companies using the SCORE model. The quantitative study sampled firms from the IDX (2015-2018) with logistic regression analysis. It revealed that stimulus significantly impacts fraudulent financial statement, while competence, opportunity, and rationalization had insignificant effects. The study underscores the agency theory in financial goal achievement through fraud. Anichebe (2019) analyzed the relationship between financial statement fraud and corporate governance in Nigerian agricultural firms using binary logit regression on panel data (2013-2017). The findings indicated that corporate governance variables accounted for 52% of the fraud likelihood. Effective audit committees and governance with financial expertise are crucial in mitigating fraud.

Asmaranti, et al., (2023) applied the fraud pentagon theory to detect financial statement fraud in Indonesian public firms (2012-2020). Using logistic regression on 48 firms, it found rationalization and capability significantly influence fraud, while pressure, opportunity, and arrogance do not. The study highlights the need for internal controls to prevent fraud. Budiyo and Arum (2020) examined the fraud triangle's impact on financial statement fraud in Jakarta Islamic Index firms (2012-2018). Multiple linear regression analysis on six companies showed financial stability, personal financial needs, and opportunity negatively impacted fraud, while external pressure, financial targets, and rationalization had positive and significant effects. It suggests enhancing financial performance under Sharia principles.

Chimonaki, et al., (2023) analyzed fraud theories from 2004 to 2022 using a bibliometric approach. It found the fraud diamond theory most effective in explaining human behavior leading to fraud. The study suggests

further research on the fraud pentagon and hexagon models to explore behavioral characteristics in fraud detection. Ebaid (2023). investigated board characteristics' impact on financial statement fraud in Saudi-listed companies (2014-2019). Using the Beneish M-score and panel data techniques, it found board independence negatively, and board size positively, related to fraud likelihood. Gender diversity and meeting frequency had no significant impact, underscoring the importance of board governance.

Elkotby (2022) utilized the fraud hexagon model to identify fraud elements in Egyptian firms (2019-2020) using logistic regression on 10 companies. It revealed that collusion significantly contributes to fraud, demonstrating the model's effectiveness in fraud detection compared to other models. Febriyanto (2023) examined fraudulent financial reporting determinants in Indonesian mining companies using the fraud pentagon theory. Multivariate analysis on 60 firms (2017-2021) showed pressure, opportunity, and competence significantly influenced fraud, while rationalization and arrogance did not. This emphasizes the need for comprehensive fraud prevention strategies in the mining sector.

Thus, across these studies, various models (fraud triangle, diamond, pentagon, and hexagon) were used to detect financial statement fraud, with common determinants being pressure, opportunity, rationalization, and capability. Empirical evidence consistently showed that pressure and opportunity are significant factors. Corporate governance and internal controls are crucial in mitigating fraud risk. The findings highlight the complexity of fraud determinants and the need for multi-faceted approaches in prevention and detection strategies.

### **Fraud Triangle Theory**

The Fraud Triangle Theory, introduced by Donald Cressey in the 1950s, proposes that three factors—pressure, opportunity, and rationalization—are necessary and sufficient to explain why individuals commit fraud. Cressey initially developed this theory to explain embezzlement among trusted individuals in occupational settings. According to the theory, pressure refers to financial or non-financial motivations that drive individuals to commit fraud, such as personal debts or the desire for a lavish



lifestyle (Cressey, 1953). Opportunity exists when internal controls are weak or absent, allowing individuals to exploit vulnerabilities in the organization's systems or processes to perpetrate fraud (Wells, 2020). Rationalization involves the cognitive process through which individuals justify their fraudulent actions as acceptable or necessary under the circumstances, often by distorting ethical standards or minimizing the perceived harm caused by their actions (Chimonaki, et al., 2023).

The Fraud Triangle Theory remains significant in understanding financial statement fraud in deposit money banks, where the theory's framework helps identify and mitigate fraud risks. By examining pressures faced by bank employees, opportunities arising from inadequate controls or oversight, and rationalizations employed to justify fraudulent behaviors, financial institutions can enhance their fraud detection and prevention measures (Hakim et al., 2023). The theory underscores the importance of addressing all three components to effectively reduce the likelihood of fraud in banking operations.

Critics argue that the Fraud Triangle Theory oversimplifies the complexities of fraud by focusing primarily on individual motivations and opportunities while neglecting broader systemic factors that may contribute to fraudulent behaviors (Alfarago, et al., 2023). Moreover, the theory's assumption that all individuals who experience pressure and have an opportunity will rationalize fraud is not universally applicable, as individual responses to ethical dilemmas vary (Sudrajat, et al., 2023). Critics also point out that the theory may not adequately account for situational pressures or external influences that could lead individuals to commit fraud without rationalizing their actions.

Despite its limitations, the Fraud Triangle Theory remains a valuable framework for assessing and addressing fraud risks in deposit money banks and other financial institutions. By integrating insights from behavioral psychology and organizational behavior, the theory provides a foundational understanding of the psychological and environmental factors that contribute to fraudulent behaviors (Ghafoor, et al., 2022). Contemporary applications of the theory include its adaptation to various industries and the development of more sophisticated fraud detection techniques that

incorporate behavioral analytics and data mining (Sukmadilaga et al., 2022).

Therefore, the Fraud Triangle Theory offers a compelling framework for understanding the motivations and opportunities underlying financial statement fraud in deposit money banks, its application requires careful consideration of contextual factors and individual differences. By addressing the theory's criticisms and leveraging its strengths, financial institutions can enhance their ability to detect, prevent, and mitigate fraud effectively, thereby safeguarding their financial integrity and maintaining stakeholder trust (Budiyo & Arum, 2020).

### The Beneish Model

The Beneish Model, developed by Messod Beneish in 1999, is a statistical model designed to detect earnings manipulation or financial statement fraud based on financial ratios. The model uses eight accounting-based variables to score the likelihood of manipulation, with higher scores indicating a greater likelihood of fraudulent financial reporting (Beneish, 1999). Proponents of the model argue that it provides a quantitative framework that complements qualitative assessments of financial statement integrity, thereby enhancing fraud detection capabilities (Nugroho & Diyanty, 2022b).

The Beneish Model's assumptions revolve around the idea that manipulators exhibit specific financial characteristics that differ from non-manipulators. These characteristics include unusual changes in revenue and expense items, abnormal accruals, and other accounting anomalies that deviate from expected patterns (Chimonaki, et al., 2023). By analyzing these variables, the model aims to identify companies where financial statement may be intentionally distorted to mislead stakeholders.

Significantly, the Beneish Model provides a structured approach to detecting financial statement fraud, offering a systematic way to evaluate financial data for irregularities indicative of manipulation. Its application involves calculating a Beneish M-score, where a higher score indicates a higher likelihood of earnings manipulation (Nugroho & Diyanty, 2022b). This scoring system helps auditors and analysts prioritize investigations into companies flagged by the

model, thereby potentially preventing fraud or minimizing its impact on stakeholders (Febriyanto, 2023).

Critics of the Beneish Model argue that its reliance on historical financial data and predefined thresholds may limit its effectiveness in detecting sophisticated or emerging forms of financial statement fraud (Ghafoor, et al., 2022). Moreover, the model's sensitivity to accounting practices and industry-specific norms may lead to false positives or overlook manipulations that do not fit typical patterns (Achmad, et al., 2022).

In practice, the Beneish Model has been widely applied in various industries, including banking, to detect potential financial statement fraud. In the context of deposit money banks in Nigeria, the model's ability to analyze financial ratios and detect anomalies aligns with regulatory efforts to ensure financial transparency and integrity (Elkotby, 2022). By leveraging the Beneish Model, regulators and financial institutions can supplement traditional audit procedures with quantitative analytics, thereby strengthening fraud prevention measures and enhancing market confidence (Sukmadilaga et al., 2022).

Thus, the Beneish Model offers a valuable tool for detecting earnings manipulation and financial statement fraud, its application requires careful consideration of industry-specific factors and the evolving nature of fraudulent practices. By integrating the model's quantitative insights with qualitative assessments, deposit money banks in Nigeria can enhance their ability to identify and mitigate risks associated with fraudulent financial reporting, thereby promoting trust and accountability in the financial sector (Maryani et al., 2022).

### 3. Methodology

This study adopts a quantitative research approach utilizing a survey research design, which is ideal for gathering primary data directly from staff members of listed deposit money banks in Nigeria. The survey design allows the collection of detailed, firsthand insights from individuals involved in the financial operations and management of these banks, specifically regarding financial statement fraud. This approach is particularly useful for obtaining current

data reflective of the respondents' perceptions and experiences, offering valuable insights into the determinants of financial statement fraud. The population for this study consists of staff members from eight selected deposit money banks in Nigeria, chosen for their prominence and critical roles within the Nigerian financial sector. These banks were selected based on their size, relevance in the banking industry, and the availability of staff willing to participate in the survey. A total of 80 respondents will be chosen for the study, with ten respondents from each bank. The participants are selected from various departments, including finance, internal audit, compliance, and risk management, ensuring a diverse range of insights into the determinants of financial statement fraud likelihood.

The data for this study are collected using an online questionnaire, which was distributed to the selected staff members. The use of an online questionnaire is advantageous as it allows for efficient data collection and broad geographic coverage, without the limitations imposed by physical location. The questionnaire was designed to align with the study's key variables and research objectives. It includes sections covering demographic information and specific questions relating to the three components of the fraud triangle: Pressure (PRS), Opportunity (OPP), and Rationalization (RAT). These variables represent the independent variables of the study and are measured using specific indicators designed to capture their effect on the likelihood of financial statement fraud. The dependent variable, fraud likelihood, is also measured through relevant questions in the survey. The questionnaire was carefully pre-tested to ensure clarity, relevance, and reliability. Respondents were assured of confidentiality and anonymity to encourage honest and accurate responses.

To analyze the data, several estimation techniques are employed. First, descriptive statistics is used to provide an initial overview of the data collected, offering insights into the general trends and patterns within the sample. This analysis help in understanding the distribution and basic characteristics of the data, laying the foundation for further analysis. Next, correlation analysis is performed to examine the relationships between the independent and dependent variables. This step is critical in identifying potential multicollinearity issues and ensuring the independence of the explanatory variables. It also provides preliminary insights into the strength and

direction of the relationships between the variables, which is essential for interpreting the subsequent regression analysis. The main estimation technique for this study is Ordinary Least Squares (OLS) regression, which is employed to estimate the coefficients of the model. The regression analysis quantifies the relationships between the independent variables (Pressure, Opportunity, and Rationalization) and the dependent variable (fraud likelihood). The coefficients derived from this analysis provide a clear understanding of the impact each factor has on the

likelihood of financial statement fraud. Additionally, the statistical significance of each variable is tested to determine which factors are most strongly associated with the dependent variable.

#### 4. Results and Discussion

The section presents the data analysis and interpretation of the result of the dependent variable and independent variables. The data collected data are analyzed and presented in the following tables. Tables 1, 2, and 3 (descriptive statistics, correlation matrix,

Table 1: Descriptive Statistics (Demographic Data)

Items	Frequency	Percentage (%)
<b>Current Position:</b>		
Senior Management	7	8.8
Middle Management	33	41.3
Operational Staff	40	50.0
<b>Years of Working in Banking:</b>		
Less than 1	5	6.3
1-5	31	38.8
6-10	19	23.8
Above 10	25	31.3
<b>Highest Level of Education:</b>		
Bachelor Degree	28	35.0
Masters Degree	43	53.8
Doctorate Degree	9	11.3
<b>Department:</b>		
Finance	18	22.5
Risk Management	18	22.5
Compliance	35	43.8
Operation	9	11.3
<b>Training on Ethics and Fraud:</b>		
Yes	70	87.5
No	10	12.5

Source: SPSS V25

The descriptive statistics from the demographic data provide insight into the characteristics of the respondents in the study on the determinants of financial statement fraud likelihood in listed deposit money banks in Nigeria. The majority of respondents hold operational staff positions (50.0%), followed by middle management (41.3%), and senior management (8.8%). This distribution suggests a broad representation across different organizational levels, which could enhance the comprehensiveness of the findings (Achmad, et al., 2022; Alfarago, et al., 2023). In terms of tenure, the data reveal that a significant portion of respondents (38.8%) have worked in the banking sector for 1-5 years, while 31.3% have more than ten years of experience. This indicates a mix of relatively new and

seasoned employees, providing diverse perspectives on the issues under study. Furthermore, 23.8% have 6-10 years of experience, and 6.3% have been in the banking sector for less than a year. This variety in tenure can offer insights into how experience influences perceptions and understanding of fraud risks (Anan, 2021; Asmaranti, et al., 2023).

Educational attainment among the respondents is predominantly high, with 53.8% holding master's degrees, 35.0% possessing bachelor's degrees, and 11.3% having doctorate degrees. This high level of education among respondents suggests that they are well-equipped with the knowledge and skills necessary to identify and understand fraud risks and controls within their institutions (Budiyono & Arum, 2020; Chimonaki, et al., 2023). Department-wise,

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Table 2: Correlation Matrix

	FRL	PRS	OPP	RAT
FRL	1			
Sig. (2-tailed)				
N	80			
PRS	.170	1		
Sig. (2-tailed)	.131			
N	80	80		
OPP	-.310**	.493**	1	
Sig. (2-tailed)	.005	.000		
N	80	80	80	
RAT	.285*	-.636**	-.145	1
Sig. (2-tailed)	.010	.000	.201	
N	80	80	80	80

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS V25

The correlation matrix in Table 2 presents the relationships between financial statement fraud likelihood (FRL) and three variables: pressure (PRS), opportunity (OPP), and rationalization (RAT). The matrix indicates that PRS has a weak positive correlation with FRL ( $r = .170$ ), suggesting that as pressure increases, the likelihood of financial statement fraud also slightly increases. This finding aligns with prior studies that emphasize the role of pressure in motivating fraudulent behavior (Achmad, et al., 2022; Alfarago, et al., 2023). OPP exhibits a significant negative correlation with FRL ( $r = -.310$ ,  $p$

$< 0.01$ ), indicating that greater opportunities for fraud correlate with a decreased likelihood of fraudulent financial reporting. This counterintuitive result may suggest that when opportunities are more prevalent, other controls or factors may mitigate fraud occurrence, requiring further investigation (Anan, 2021; Asmaranti, et al., 2023).

RAT shows a moderate positive correlation with FRL ( $r = .285$ ,  $p < 0.05$ ), implying that higher levels of rationalization are associated with an increased likelihood of financial statement fraud. This is



consistent with the idea that individuals who rationalize unethical behavior are more prone to committing fraud (Budiyono & Arum, 2020; Chimonaki, et al., 2023). PRS and OPP have a significant positive correlation ( $r = .493$ ,  $p < 0.01$ ), indicating that higher pressure correlates with more opportunities for fraud. This relationship highlights the interconnectedness of fraud risk factors, as elevated pressure can create conditions that increase opportunities for fraudulent activities (Ebaid, 2023; Elkotby, 2022). Conversely, PRS and RAT are negatively correlated ( $r = -.636$ ,  $p < 0.01$ ), suggesting that higher pressure correlates with less rationalization, which could indicate that individuals under high pressure might not always justify their fraudulent actions through rationalization (Febriyanto, 2023; Ghafoor, Zainudin, & Mahdzan, 2022).

The negative correlation between OPP and RAT ( $r = -.145$ ) is not statistically significant, implying that there is no strong linear relationship between the

availability of opportunities and the rationalization of fraud. This finding suggests that rationalization and opportunity might operate independently in influencing fraudulent behavior (Hakim et al., 2023; Handayani & Evana, 2022).

Therefore, the correlation matrix highlights the complexity of factors influencing financial statement fraud. The significant relationships between these variables highlight the need for an approach in fraud prevention and detection, considering the relationship between pressure, opportunity, and rationalization. These findings show that addressing these factors individually and in combination could enhance the effectiveness of fraud risk management strategies within organizations. This comprehensive understanding is crucial for developing targeted interventions to mitigate the risk of financial statement fraud in the banking sector.

Table 3: Regression Results

Dependent Variable: FRL

Variable	Coefficient	Std. error	t-statistic	prob.t
(Constant)	1.932	.390	4.955	.001
PRS	.918	.089	10.370	.001
OPP	-.941	.106	-8.857	.001
RAT	.442	.046	9.504	.001
R- squared	0.650			
Adj. R- squared	0.636			
F-statistics	47.071			
Prob. (F)	0.001			

Source: SPSS V25

The regression results in Table 3 offer a comprehensive analysis of the factors influencing the likelihood of financial statement fraud (FRL). The model includes three independent variables: pressure (PRS), opportunity (OPP), and rationalization (RAT). The regression equation is given by the constant and the coefficients of these variables. The constant term is 1.932, which represents the baseline level of FRL when all independent variables are zero. The coefficient for PRS is 0.918 with a standard error of 0.089 and a t-statistic of 10.370, indicating a statistically significant positive relationship between PRS and FRL at the 0.001 significance level. This suggests that for every unit increase in PRS, the likelihood of financial statement fraud increases by

0.918 units, corroborating previous findings that pressure is a significant driver of fraudulent behavior (Achmad, et al., 2022).

Conversely, the coefficient for OPP is -0.941 with a standard error of 0.106 and a t-statistic of -8.857, which is significant at the 0.001 level. This indicates a negative relationship between OPP and FRL, suggesting that as opportunities for fraud increase, the likelihood of fraud decreases by 0.941 units. This counterintuitive finding might imply that as opportunities increase, other mitigating factors or controls could be in place to reduce fraud incidence (Anan, 2021). Further research is needed to explore



this dynamic, as it challenges the traditional understanding of the fraud triangle (Alfarago, et al., 2023).

The coefficient for RAT is 0.442 with a standard error of 0.046 and a t-statistic of 9.504, significant at the 0.001 level. This positive relationship indicates that higher levels of rationalization are associated with an increased likelihood of financial statement fraud by 0.442 units. This finding aligns with theories that rationalization is a crucial psychological mechanism enabling individuals to justify fraudulent acts (Budiyo & Arum, 2020).

The R-squared value of 0.650 indicates that approximately 65% of the variability in FRL is explained by the independent variables (PRS, OPP, and RAT) included in the model. This high R-squared value suggests that the model has a good fit and that these variables are significant predictors of financial statement fraud likelihood (Chimonaki, et al., 2023). The adjusted R-squared value of 0.636 adjusts for the number of predictors in the model and still indicates a strong explanatory power, reinforcing the robustness of the model (Ebaid, 2023). The F-statistic of 47.071 with a corresponding p-value of 0.001 further supports the overall significance of the regression model. The high F-statistic indicates that the combined effect of the independent variables on FRL is statistically significant, providing strong evidence against the null hypothesis that the model with no independent variables fits the data as well as the model with the independent variables (Elkotby, 2022).

Testing the hypotheses using the t-statistics and p-values at the 5% significance level, it is evident that all the independent variables (PRS, OPP, and RAT) significantly affect the likelihood of financial statement fraud. The null hypotheses for PRS, OPP, and RAT, which state that these variables do not significantly influence FRL, are rejected given their respective p-values of 0.001. This confirms the hypotheses that pressure, opportunity, and rationalization significantly impact financial statement fraud likelihood (Febriyanto, 2023).

The implications of these results are multifaceted. The significant positive relationship between PRS and FRL underscores the need for organizations to manage pressures that employees face, such as

unrealistic performance targets and financial pressures, which can lead to fraudulent behavior (Ghafoor, et al., 2022). The negative relationship between OPP and FRL suggests that simply having opportunities for fraud does not necessarily lead to fraud, possibly due to the presence of effective controls and oversight. This finding emphasizes the importance of strong internal controls and governance structures to mitigate fraud risk (Hakim et al., 2023).

## 5. Conclusion and Recommendations

The study's findings illuminate the significant factors influencing financial statement fraud likelihood (FRL) within the banking sector. The first major finding is the positive correlation between pressure (PRS) and FRL, indicating that heightened pressure, such as unrealistic performance targets, significantly increases the propensity for fraud (Achmad, et al., 2022). This underscores the importance of managing organizational pressures to reduce fraudulent behavior. Secondly, the analysis reveals a negative relationship between opportunity (OPP) and FRL, suggesting that increased opportunities for fraud are paradoxically associated with lower fraud likelihood (Anan, 2021). This counterintuitive result implies the presence of robust internal controls and oversight mechanisms that effectively mitigate fraud risks, even when opportunities are present (Alfarago, et al., 2023). The third significant finding is the positive relationship between rationalization (RAT) and FRL, highlighting that individuals who rationalize their unethical actions are more likely to commit fraud (Budiyo & Arum, 2020). This finding stresses the need for organizations to foster an ethical corporate culture and provide continuous ethical training to reduce the rationalizations that enable fraud (Handayani & Evana, 2022).

The regression model, with an R-squared value of 0.650, demonstrates that these factors collectively explain a substantial portion of the variability in FRL, affirming the model's robustness (Chimonaki, et al., 2023). The significant F-statistic further validates the model, indicating that the independent variables together have a meaningful impact on FRL (Ebaid, 2023). Consequently, the study rejects the null hypotheses, confirming that PRS, OPP, and RAT significantly affect FRL. These insights emphasize the critical need for multifaceted anti-fraud strategies addressing these key drivers. Effective management

of organizational pressures, stringent internal controls, and a strong ethical culture are paramount in mitigating financial statement fraud (Ghafoor, et al., 2022; Hakim et al., 2023). Understanding these dynamics is essential for developing comprehensive interventions that enhance the integrity and transparency of financial reporting within the banking sector (Iswantari & Sasongko, 2023). This study contributes to the broader literature by highlighting the intricate interplay of psychological and situational factors in financial fraud, offering actionable insights for practitioners and policymakers aiming to combat fraudulent activities (Febriyanto, 2023).

Based on the findings, three key recommendations can enhance fraud prevention in the banking sector. Firstly, organizations should mitigate pressure by setting realistic performance targets and providing adequate resources, which can reduce the likelihood of fraudulent behavior. As highlighted by Achmad, et al., (2022), managing organizational pressures effectively can decrease the propensity for fraud. Secondly, reinforcing internal controls and oversight mechanisms is crucial to limit opportunities for fraud. This involves implementing robust audit processes, continuous monitoring, and stringent checks and balances, which Alfarago, et al., (2023) identified as effective in mitigating fraud risks despite the presence of opportunities. Thirdly, fostering an ethical corporate culture is essential to reduce rationalizations that lead to fraudulent actions. Organizations should offer ongoing ethics training and develop clear codes of conduct, as suggested by Handayani and Evana (2022), to instill ethical behavior and discourage rationalization of unethical actions. These recommendations necessitate a holistic approach, combining organizational changes, enhanced oversight, and ethical training to create a comprehensive fraud prevention strategy. Effective implementation of these measures can significantly reduce the likelihood of financial statement fraud, thus promoting integrity and transparency within the banking sector (Ghafoor, et al., 2022; Hakim et al., 2023).

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