# FRAUD DIAMOND MODEL AND FRAUDULENT FINANCIAL REPORTING: EVIDENCE FROM DEPOSIT MONEY BANKS IN NIGERIA

<sup>1</sup>Oluwagbade, Oluyinka Isaiah, <sup>2</sup>Oshatimi, Omowumi Olanike, <sup>3</sup>Omomeji, Joseph Olusegun & <sup>4</sup>Fasanmi, Modupe Motunrayo

1,2,3&4 Department of Accounting, Afe Babalola University Ado-Ekiti, Ekiti State Correspondence email: oluwagbadeoi@abuad.edu.ng

#### **Abstract**

This study examines the effect of the fraud diamond model and fraudulent financial reporting of deposit money banks in Nigeria. The study specifically evaluates the effect of pressure, opportunity, rationalization, and capability on fraudulent financial reporting of DMBs. The study adopts the ex post facto research design. The population comprised all listed deposit money banks on the Nigerian Exchange Group (NGX) as of the end of 2022. The final sample was 13 DMBs based on data availability. The study utilises secondary data from the annual financial statements of the DMBs for the years 2012-2022. The data were analyzed using descriptive and inferential statistical analyses. The hypotheses were tested using the multiple linear regression technique. The results showed that CFT has a nonsignificant negative effect on the fraudulent financial reporting of listed Deposit Money Banks: RPT has a non-significant effect on the fraudulent financial reporting of listed Deposit Money Banks; ECD has a significant negative effect on the fraudulent financial reporting of listed Deposit Money Banks; and, PEF has a significant positive effect on the fraudulent financial reporting of listed Deposit Money Banks. Based on this, the study recommends that managers should carefully watch cashflow trend to avoid lowering the financial rating of DMBs as excessive operating cashflow indicates suboptimal managerial decisions; and, shareholders monitor firms for related party transactions which is suggestive of weak corporate governance which lowers the fraudulent financial reporting of Deposit Money Banks; among others.

**Keywords:** Fraud diamond model; fraudulent financial reporting; cashflow; deposit money banks.

#### Introduction

Fraud diamond argues that fraud would not have happened without the capability of the respective individual to perpetrate such. These falsified financial statements that alter numbers by overstating assets, inserting fictitious sales and profit entries, or understating liabilities, debts, expenses, and losses are considered fraudulent financial reporting. The widespread increase in financial statement fraud in the Nigerian setting was mostly caused by dishonest management actions and brazen cover-up by accounting companies. The managers [i.e., agents] who were entrusted by the shareholders [i.e., principals] to protect their investment committed several types of management fraud. According to the ACFE Report to the Nations (2018), the estimated total occupational fraud between January 2016 and October 2017 is

2,690. In the recent ACFE Report (2022), financial statement fraud schemes were the least common but most costly accounting for a \$593,000 median loss; while asset misappropriation schemes are the most common but least costly accounting for a \$100,000 median loss. The fraud triangle model presents three components which must be present for fraud occurrence: opportunity, pressure, and rationalization; while, in contrast, the fraud diamond model identifies four elements for fraud occurrence: opportunity, pressure, rationalization and capability.

Due to increased globalization and competitiveness, the fraud triangle's components are unable to account for the various incentives for fraud in contemporary organizations (ACFE, 2020; Devi, Widanaputra, Budiasih, & Rasmini, 2021). However, the fraud triangle approach to identifying financial statement fraud, has several flaws, according to studies by Sorunke (2016) and Tugas (2012). Firms that are publicly quoted seek to draw the interest of investors and potential investors by displaying financial statements that appear healthy and successful (Kristianti & Meiden, 2021). To achieve these goals managers may falsify their financial figures. Thus, researchers have suggested that auditors should evaluate and take into account the likelihood of fraud from several angles. Specifically, studies by Sorunke (2016) and Tugas (2012) observed some loopholes in the fraud triangle model to detect financial statement fraud. As a result, it is impossible to extend the findings of the prior investigation into each component of the fraud triangle and fraud diamond models to financial statement fraud. Predicated on these issues, the researchers formulated the following hypotheses to guide the study:

- *Ho1:* The effect of cash flow trend on fraudulent financial reporting in deposit money banks
- **Ho2:** The effect of related party transactions on fraudulent financial reporting in deposit money banks.
- *Ho3:* The effect of economic downturn on fraudulent financial reporting in deposit money banks.
- *Ho4:* The effect of pressure from earning forecast on fraudulent financial reporting in deposit money banks.

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

#### **Review of related Literature**

## **Conceptual Reviews**

## **Fraudulent Financial Reporting**

Fraud is a false representation of a fact that deceives and is designed to deceive another person so that the person will act on it to their or their legal detriment, whether by words or conduct, false or misleading allegations, or concealment of what should have been disclosed. Fraud is defined as any act, expression, omission, or concealment calculated to deceive another to his or her detriment, specifically a misrepresentation or concealment with reference to some fact material to a transaction that is made with knowledge of its falsity and or reckless disregard of its truth or falsity and with the intent to deceive another and that is reasonably relied on by the other who is injured thereby (Abdullahi, Mansor, & Nuhu, 2015). In both the public and commercial sectors of the economy, as well as in both emerging and established countries, fraud has been referred to as a pandemic socioeconomic disease. Types of FFR include: 1) Manipulation, forgery, or changes to accounting records or supporting documents relating to the financial statements prepared; 2) Intentional misrepresentations or omissions concerning events, transactions, or other important information in financial statements; 3) Deliberately misusing accounting principles related to the amount, classification, method of presentation, or disclosure in financial statements. Fraud is widespread in Nigeria which is affecting all facets of society, particularly the public sector.

#### The Fraud Diamond Model

In addition to addressing incentive, opportunity, and rationalization deficiency, the four-sided fraud diamond model considers that an individual's capability, namely: personal traits and abilities, play a major role in whether fraud may occur even with the presence of the other three elements. Wolfe and Hermanson (2004) argued that although perceived pressure might coexist with an opportunity and a rationalization, it is unlikely for fraud to take place unless the fourth element (capability) is also present. In other words, the potential perpetrator must have the skills and ability to commit fraud. Many frauds, especially some of the multibillion-dollar ones, would not have occurred without the right person with the right capabilities in place. Wolfe and Hermanson (2004) maintained that opportunity opens the doorway to fraud, and incentive (i.e. pressure) and rationalization lead a person toward the door. However, capability enables the person to recognize the open doorway as an opportunity and to take advantage of it by walking through repeatedly. They also suggest four observable traits for committing fraud; (1) authoritative position (power) or function within the organisation; (2) capacity to understand and exploit accounting systems and internal control weaknesses; (3) confidence that he/she will not be detected or if caught he/she will get out of it easily; and (4) capability to deal with the stress created within an otherwise good person when he/she commits bad acts (Wolfe & Hermanson, 2004).

## **Pressure and Fraudulent Financial Reporting**

According to Cressey (1953), financial statement fraud always involves pressure as a requirement. According to Skousen, Smith, and Wright (2009), there is a direct link between pressure and financial statement fraud. Managers frequently experience external pressure from third parties, such as the need to take on more debt or leverage to maintain their competitiveness. When management is under extreme pressure to fulfil the demands or expectations of outside parties, this is referred to as external pressure. Management may feel under pressure to commit fraud by falsifying financial statements to acquire the necessary debt funding when the firm is facing financial difficulties. Pressure arises if a company's performance falls below the industry average and management may manipulate the company's financial statements by providing the appearance of stable growth (Skousen, Smith, & Wright, 2009). Studies by Achmad and Pamungkas (2018) and Rahman and Nurbaiti (2019), find that external pressure has an impact on fraudulent financial reporting (2019). However, in contrast, Rizani and Respati (2018) and Utami and Pusparini (2019) found no connection between pressure and false financial statements.

## **Opportunity and Fraudulent Financial Reporting**

The second factor that causes financial statement fraud is opportunity (Cressey, 1953). Opportunity in the fraud triangle has always been associated with internal control and is a mandatory element to perpetrate and conceal fraud. The ACFE Report (2022), defines occupational fraud as frauds that are committed by individuals against the organizations that employ them. The two key reasons why this type of crime is so prevalent are as follows, first is that any organization with employees must, to some extent, entrust those employees with access to or control over its assets, whether that means keeping its books, managing its bank accounts, safeguarding its inventory, etc. It is this very trust that can make organizations vulnerable to occupational fraud. Because all frauds, at their heart are based upon breaches of trust. The second reason occupational fraud is so costly and common is simply that there are so many people in a position to commit these crimes.

## **Rationalisation and Fraudulent Financial Reporting**

Rationalization involves the perpetrators seeking to justify their actions in committing fraud. Studies have shown that rationalization can lead to financial statement fraud. Skousen, Smith, and Wright (2009) argue that rationalization can be measured by a change of auditors. Yet others have suggested that accruals are representative of management's decision-making and provide insight into their financial reporting rationalization. Rationalization is a factor often viewed as out of the control of management and internal auditors because an individual who commits fraud justifies their action as being consistent with their code of ethics. This is often

a function of the fact that those who are trusted are placed in positions where fraud may be committed.

## **Capability and Fraudulent Financial Reporting**

Capability can be viewed as a situation of having the necessary traits or skills and abilities for the person to commit fraud. It is where the fraudster recognized the particular fraud opportunity and the ability to turn it into reality. Position, intelligence, ego, coercion, deceit, and stress, are the supporting elements of capability (Wolfe & Hermanson 2004). According to Mackevicius and Giriunas (2013), not every person who possessed motivation, opportunities, and rationalization may commit fraud due to the lack of the capability to carry it out or to conceal it. Wolfe and Hermanson (2004) maintained that opportunity opens the doorway to fraud, and pressure and rationalization lead a person toward the door. However, capability enables the person to recognize the open doorway as an opportunity and to take advantage of it by walking through repeatedly. According to Wolfe and Hermanson (2004) - The theory of White Collar Criminals states that, as fraudsters found themselves successful at a crime, they began to gain some secondary delight in the knowledge that they are fooling the world; that they are showing their superiority to others. The individuals committing fraud must have a strong ego and great confidence that they will not be detected. The common personality types include someone who is driven to succeed at all costs, selfabsorbed, self-confident, and often-narcissistic.

#### Theoretical Framework

#### **Fraud Triangle Theory**

The Fraud Triangle Model was created by Dr Donald R. Cressey (1953), an American sociologist and criminologist. He focused his research on the circumstances that lead individuals to engage in fraudulent and unethical activity. According to Cressey, fraud is the result of a set of circumstances which come together at a particular time and place causing someone to become a fraud perpetrator, particularly a trusted employee. The theory introduces three categories of factors that may be interrelated to represent these circumstances. These are pressure or incentives, opportunities, and rationalizations. Cressey (1953) described these three factors as the fraud triangle which involves:

- 1. **The motive or pressure to commit fraud**: This is perceived in the form of real or perceived financial needs or moral needs such as getting back at the employer. This individual feels that he wants to, or has a need to, commit fraud.
- 2. The perceived opportunity to commit fraud and get away with it: This arises as a result of these enabling factors: deficient internal controls and weak

- corporate governance. When one or two of these factors weigh(s) heavily in the direction of fraud, the probability increases.
- 3. **The rationalization of the perpetrator**: This is achieved through finding a morally acceptable excuse that justifies why their action is not considered a crime.

#### **Empirical Review**

Putri and Fadilah (2023) conducted a study titled 'Analisis Faktor–Faktor Fraud Diamond danUkuran Perusahaan terhadap Kecurangan Laporan Keuanganpada Perusahaan Sub Sektor Transportasi yang Terdaftar di Bursa Efek Indonesia Periode 2019-2021'. The factors tested in the study were pressure, opportunity, rationalization, capability and company size as the independent variables; while financial statement fraud was the dependent variable. The study used the correlational research method. The sample comprised 20 companies in the transportation sub-sector. The study utilized secondary data from the financial reports of the sample companies. The analytical method used was multiple linear regression analysis. The results showed that pressure, opportunity, rationalization, capability and company size have a significant effect on fraudulent financial reporting.

Nadia, Nugraha, and Sartono (2023) conducted a study titled 'Analisis Pengaruh Fraud Diamond Terhadap Kecurangan Laporan KeuanganPada Bank Umum Syariah'. The study analysed the effect of fraud diamond variables, i.e., pressure, opportunity, rationalization, and capability on fraudulent financial statements. The data were collected from the financial reports of Islamic Commercial Banks in Indonesia for 2016-2021. The study employed purposive sampling of 48 firms analysed using multiple linear regression. The results showed that pressure and rationalization have a positive and significant effect on fraudulent financial statements; while opportunity and capability have a positive insignificant effect on fraudulent financial statements.

Agustina and Mariana (2023) undertook a study titled 'Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud'. The opportunity factor is proxied by using financial stability and external pressure. The pressure factor is proxied by using industrial properties and control effectiveness. The rationalization factor is proxied by rationality and auditor turnover. Finally, the ability factor is proxied by ability. The study employed the F-Score indicator to analyse fraudulent financial statements. The study employed a purposive sampling technique and 15 samples of companies. The study used secondary data and multiple linear regression technique employed to analyse the data. The results of financial stability and external pressure had a positive effect on fraudulent financial statements. Meanwhile, the nature of the industry, change in auditor, and capability do not affect the potential for fraudulent financial statements.

Nikmah and Arjoen (2023) conducted a study titled 'Financial statement fraud, audit committee and audit quality: Insight into fraud diamond theory'. The sample was selected using purposive sampling from 214 non-financial companies' listed on Indonesia Stock Exchange from 2016-2019. The study utilized secondary data obtained from www.idx.co.id and each company's website. The data were analysed using logistic regression. The result of this study showed that financial stability, board change, and financial target positively affect the detection of fraudulent financial statements. In contrast, external pressure, ineffective monitoring, and auditor change do not affect the detection of fraudulent financial statements.

Deliana and Oktalia (2022) conducted a study titled 'Fraud detection of financial statements with diamond fraud analysis'. The sample comprised 12 companies which were purposively selected. The study relied on secondary data from 2016 to 2019. The study employed multiple linear regression analysis. The results of this study indicate that the level of leverage affects financial statement fraud. However, changes in total assets, ROA, insider share ownership, special party transactions, independent audit members, change in the public accounting firm, and changes in the board of directors does not affect financial statement fraud.

Setiawan and Trisnawati (2022) conducted a study titled 'Factors that affect fraudulent financial reporting'. The factors in this study are financial targets, financial stability, external pressure, institutional ownership, number of audit committee members, ineffective monitoring, nature of the industry, external auditor quality, the change of auditor, auditor's opinion, change of directors, the proportion of independent commissioner, and numbers of CEO's picture, i.e., variables from the fraud pentagon. The sample comprised 101 firms listed on Indonesia Stock Exchange (IDX). The study relied on secondary data from 2017 to 2020. The data were analysed using the multiple regression technique. The result showed that financial targets, the nature of the industry, and the auditor's opinion have a significant influence on fraudulent financial reporting. In contrast, financial stability, external pressure, institutional ownership, number of audit committee members, ineffective monitoring, external auditor quality, the change of auditor, change of directors, proportion of independent commissioners, and number of CEO's picture have no significant influence on fraudulent financial reporting.

Kristianti and Meiden (2021) conducted a study titled 'Fraud diamond analysis in fraudulent financial statement detection using Beneish M-Score'. The sample size comprised 120 firms usingthe purposive sampling method. The study relied on secondary data which were analysed using descriptive and logistic regression. The results showed that the nature of industry and rationalization variables have a positive and significant effect on the possibility of fraudulent financial statements, but for the variables of financial stability, external pressure, personal financial need,

financial target, ineffective monitoring and capability, it is not proven to have a significant effect on the possibility of fraudulent financial statements.

## Methodology

The study adopted the ex post facto research design. The design is appropriate since the key independent variables are neither controlled nor altered and because their effects have previously been seen. In hindsight, independent variables are investigated to look for potential relationships and the likely consequences that changes in independent variables have on one or more dependent variables. The population comprised of fourteen (14) Deposit Money Banks listed on the Nigerian Exchange Group (NGX) as of the end of 2022. However, the sample was restricted to thirteen (13) Deposit Money Banks (DMBs). The name of banks included in the study is shown in the table below:

**Table 1: List of sample Deposit Money Banks (DMBs)** 

S/N	Names
1	Access Bank PLC
2	Eco Bank Transnational incorporation
3	Fidelity Bank PLC
4	First Bank Nig. PLC
5	First City Monument Bank (FCMB) PLC
6	Guarantee Trust Bank (GTB) PLC
8	Stanbic IBTC Holding PLC
9	Sterling Bank Nig. PLC
10	United Bank for Africa (UBA) PLC
11	Union Bank of Nigeria PLC
12	Unity Bank PLC
13	Wema Bank PLC
14	Zenith Bank PLC

Source: The Nigerian Exchange Group [NGX] (2022)

The study utilizes data drawn from secondary sources. The data were analyzed using descriptive and inferential statistical analyses. The hypotheses were analysed using multiple regression technique.

#### **Model Specification**

A model was formulated for this study based on the objectives of the study to test each of the null hypotheses.

FFR =
$$\beta_0 + \beta_1 CFT_{it} + \beta_2 RPT_{it} + \beta_3 ECD_{it} + \beta_4 PEF_{it} + \mu$$
 .....(1)

Where:

FFR = Fraudulent Financial Reporting

CFT = Cashflow Trend

RPT = Related Party Transactions

Fraud Diamond Model and Fraudulent Financial Reporting ...

ECD = Economic Downturn

PEF = Pressure from Earning Forecast

 $\mu =$ Error term.  $\beta_0 =$ is the constant

 $\beta_1,\beta_2,\beta_3$ , and  $\beta_4$  represent the estimated coefficient for specific bank i at time t

Table 2: Description of input variables

Fraud	Indicator	Measurement	Source
diamond			
Pressure	Cash flow trend	Change in cash flow = average $CF_t - CF_{t-1}$	Lokanan& Sharma (2018); Skousen et al. (2009)
Opportunity	Related party transactions	Non-performing loan Shareholders' fund	Egolum, Okoye, and Eze, (2019); Chen and Elder (2007)
Rationalization	Economic downturn	Dividend coverage ratio = PAT/Dividend paid	Egolum, Okoye, and Eze, (2019); Chen and Elder (2007)
Capability	Pressure from earning forecast	ROE = PAT/Shareholders funds	Egolum, Okoye, and Eze, (2019)

Source: Author's compilation (2023)

## **Data Analysis**

Table 3: Descriptive statistics of input variables

	FFR	CFT	RPT	ECD	PEF
Mean	2.446154	1.808639	0.091900	9.955729	0.086551
Median	2.000000	-0.793042	0.037377	2.700166	0.116475
Maximum	5.000000	276.0980	1.069484	420.1395	0.320797
Minimum	1.000000	-36.37410	0.000000	0.000000	-3.943179
Std. Dev.	1.618984	25.26842	0.177664	42.77209	0.373565
Skewness	0.542613	9.941561	3.772201	8.049207	-9.853912
Kurtosis	1.627140	108.5522	18.02911	71.95192	106.0377
Jarque-Bera	16.58832	62489.97	1531.791	27156.60	59611.30
Probability	0.000250	0.000000	0.000000	0.000000	0.000000
Sum	318.0000	235.1230	11.94695	1294.245	11.25160
Sum Sq. Dev.	338.1231	82365.63	4.071842	235999.3	18.00204
Observations	130	130	130	130	130

Source: E-Views 10

Table 4: Pearson correlation matrix of input variables

	FFR	CFT	RPT	ECD	PEF
FFR	1	-0.19031	-0.004	-0.17501	0.031956
CFT	-0.19031	1	-0.03423	-0.00521	0.038496
RPT	-0.004	-0.03423	1	-0.00341	-0.05001
ECD	-0.17501	-0.00521	-0.00341	1	0.044206
PEF	0.031956	0.038496	-0.05001	0.044206	1

Source: E-Views 10

## **Hausman Test**

The fixed-effects model assumes that the individual-specific effect is correlated to the independent variable. The REM allows making inferences on the population data based on the assumption of normal distribution.

 $H_0$ : The null hypothesis is that the preferred model is REM;

 $H_1$ : The alternate hypothesis is that the model is FEM.

Table 5: Correlated Random Effects - Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.413045	4	0.3530

#### Source: E-Views 10

The results support the use of REM in the case of the study sample, since, the p-value is greater than 0.05, the null hypothesis is accepted and the alternate rejected. The REM was employed in the study.

## **Test of Hypotheses**

Table 6: Random Effects Model for test of Hypotheses

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CFT	-0.011792	0.006364	-1.852996	0.0662
RPT	-0.307808	0.444115	-0.693081	0.4895
ECD	-0.006770	0.002255	-3.002638	0.0032
PEF	0.409380	0.162774	2.515017	0.0132
C	2.527738	0.235087	10.75237	0.0000

Fraud Diamond Model and Fraudulent Financial Reporting ...

Effects Specification

	S.D.		Rho
Cross-section rand Idiosyncratic rand		0.527667 1.499990	
	Weighted	Statistics	
R-squared Adjusted R-	0.075783	Mean dependent var	1.635320
squared S.E. of	0.046208	S.D. dependent var	1.538431
regression	1.502466	Sum squared resid	282.1756
F-statistic	2.562406	Durbin-Watson stat	1.806827
Prob(F-statistic)	0.041640		
	Unweighte	d Statistics	
R-squared Sum squared	0.066359	Mean dependent var	2.446154
resid	315.6855	Durbin-Watson stat	1.615033

Source: E-Views 10

## **Hypothesis One**

**Ho**<sub>1</sub>: The effect of cash flow trend on fraudulent financial reporting in deposit money banks.

CFT as an independent variable to FFR appears to have a negative coefficient (i.e., -0.011792) and is not significant at a 5% level (p=0.0662). This evidence, therefore, leads to a rejection of the alternate hypothesis and acceptance of the null; thus, "CFT has a non-significant effect on the fraudulent financial reporting of listed Deposit Money Banks".

## **Hypothesis Two**

*Ho2:* The effect of related party transactions on fraudulent financial reporting in deposit money banks.

RPT as an independent variable to FFR appears to have a negative coefficient (i.e., -0.307808) and is not significant at a 5% level (p=0.4895). This evidence, therefore, leads to a rejection of the alternate hypothesis and acceptance of the null; thus, "RPT has a non-significant effect on the fraudulent financial reporting of listed Deposit Money Banks".

## **Hypothesis Three**

*Ho<sub>3</sub>:* The effect of economic downturn on fraudulent financial reporting in deposit money banks.

ECD as an independent variable to FFR appears to have a negative coefficient (i.e., -0.006770) and is significant at a 5% level (p=0.0032). This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, "ECD has a significant effect on the fraudulent financial reporting of listed Deposit Money Banks".

#### **Hypothesis Four**

**Ho4:** The effect of pressure from earning forecast on fraudulent financial reporting in deposit money banks.

PEF as an independent variable to FFR appears to have a positive coefficient (i.e., 0.409380) and is significant at a 5% level (p=0.0132). This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, "PEF has a significant effect on the fraudulent financial reporting of listed Deposit Money Banks".

#### **Conclusion and Recommendation**

This study concludes that fraud diamond model has an effect on the fraudulent financial reporting of deposit money banks in Nigeria. This study employed a panel data of DMBs from 2012 to 2021. The empirical data analysis revealed that CFT has a non-significant negative effect on the fraudulent financial reporting of listed Deposit Money Banks; RPT has a non-significant effect on the fraudulent financial reporting of listed Deposit Money Banks; ECD has a significant negative effect on the fraudulent financial reporting of listed Deposit Money Banks; and, PEF has a significant positive effect on the fraudulent financial reporting of listed Deposit Money Banks. Based on this, the study recommends that:

- 1. Managers should carefully watch cashflow trend to avoid lowering the financial rating of DMBs as excessive operating cashflow indicates suboptimal managerial decisions;
- 2. Shareholders should monitor firms for related party transactions which is suggestive of weak corporate governance which lowers the fraudulent financial reporting of Deposit Money Banks;
- 3. Managers should constantly evaluate the dividend coverage ratio as inadequate dividend coverage is suggestive of an economic downturn which negatively affects the fraudulent financial reporting of Deposit Money Banks; and,
- 4. Maintain and sustain the ROE proxy for financial pressure can increase the fraudulent financial reporting of DMBs.

#### **References:**

- Abdullahi, R., Mansor, N., &Nuhu, M.S. (2015). Fraud triangle theory and fraud diamond theory: Understanding the convergent and divergent for future research. *European Journal of Business and Management*, 7(28).
- ACFE (2018). Report to the Nations 2018 Global Study on Occupational Fraud and Abuse. Available [Online] at: https://s3-us-west-2.amazonaws.com/ acfepublic/2018-report-to-the-nations.pdf
- ACFE (2020). Report to the Nations- 2020 Global Study on Occupational Fraud and Abuse. Available [Online] at: https://acfepublic.s3-us-west-2.amazonaws.com/ 2020-Report-to-the-Nations.pdf
- ACFE (2022). Occupational Fraud 2022: A Report to the Nations. Available [Online] at: https://legacy.acfe.com/report-to-the-nations/2022/
- Achmad, T., &Pamungkas, I. D. (2018). Fraudulent financial reporting based of fraud diamond theory: A study of the banking sector in Indonesia. *JurnalIlmiah Akuntansi FakultasEkonomi*, 4(2), 135-150.
- Agustina, R. N., & Mariana, N. (2023). Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud. *JRAK (JurnalRiset AkuntansidanBisnis)*, 9(1), 60-69.
- Chen, K.Y., & Elder, R.J. (2007) Fraud Risk Factors and the Likelihood of Fraudulent Financial Reporting: Evidence from Statement on Auditing Standards No. 43 in Taiwan. Available from: https://www.researchgate.net/publication/228945894
- Cressey, D.R. (1953). Other people's money: A study in the social psychology of embezzlement. *The American Journal of Sociology*.
- Deliana, D., &Oktalia, R. R. (2022). Fraud detection of financial statements with diamond fraud analysis. *Jurnal ASET (AkuntansiRiset)*, 14(1), 033-042.
- Devi, P. N. C., Widanaputra, A. A. G. P., Budiasih, I. G. A. N., &Rasmini, N. K. (2021). The Effect of Fraud Pentagon Theory on Financial Statements: Empirical Evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 1163-1169.
- Egolum, P. U., Okoye, E., &Eze, M. N. (2019). Effect of Fraud Pentagon Model on Fraud Assessment in the Deposit Money Banks in Nigeria. *Journal of Global Accounting Department of Accountancy*, 6(3), 124-142.
- Kristianti, M., & Meiden, C. (2021). Fraud diamond analysis in fraudulent financial statement detection using BeneishM-Score. *JurnalRiset Akuntansi Terpadu*, 14(2), 194-209.
- Lokanan, M., & Sharma, S. (2018). A fraud triangle analysis of the LIBOR fraud. *Journal of Forensic & Investigative Accounting*, 10(2), 187-212.
- Nadia, N., Nugraha, N., &Sartono, S. (2023). Analisis Pengaruh Fraud Diamond Terhadap Kecurangan Lapora nKeuanganPada Bank UmumSyariah. *JurnalAkuntansidan Governance*, 3(2), 125-139.
- Nikmah, N., & Arjoen, M. R. (2023). Financial statement fraud, audit committee and audit quality: Insight into fraud diamond theory. *International Journal of Social Service and Research (IJSSR)*, 3(3), 605-620.
- Putri, F. M., &Fadilah, S. (2023, January). Analisis Faktor–Faktor Fraud Diamond danUkuran Perusahaan terhadap Kecurangan Laporan Keuanganpada Perusahaan Sub

- SektorTransportasi yang Terdaftar di Bursa Efek Indonesia Periode 2019-2021. In *Bandung Conference Series: Accountancy* (Vol. 3, No. 1).
- Rahman, A. A., & Nurbaiti, A. (2019). Analisis Faktor-Faktor Yang Mempengaruhi Kecurangan Laporan Keuangan Dalam Perspektif Fraud Pentagon (StudiPada Perusahaan SektorInfrastruktur, Utilitas, Dan Transportasi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2017). *Journal Accounting and Finance*, 3(2), 1-13.
- Rizani, F., & Respati, N. W. (2018). Factors influencing the presentation of fraudulent financial reporting in Indonesia. *Journal of Advanced Research in Law and Economics*, 9(1 (31)), 254-264.
- Setiawan, K., & Trisnawati, I. (2022). Factors that affect Fraudulent Financial Reporting. *Media Bisnis*, 14(2), 189-208.
- Skousen, C.J., Smith, K.R., & Wright, C.J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Advances in Financial Economics: Corporate Governance and Performance*, 13, 53-81.
- Sorunke, O.A. (2016). Personal ethics and fraudster motivation: The missing link in fraud triangle and fraud diamond theories. *International Journal of Academic Research in Business and Social Science*, 6(2), 159-165.
- Tugas, F.C. (2012). Exploring a new element of fraud: A study on selected financial accounting fraud cases in the world. *American International Journal of Contemporary Research*, 2(6), 112-121.
- Utami, E. R., &Pusparini, N. O. (2019, November). The Analysis of Fraud Pentagon Theory and Financial Distress for Detecting Fraudulent Financial Reporting in Banking Sector in Indonesia (Empirical Study of Listed Banking Companies on Indonesia Stock Exchange in 2012-2017). In 5th International Conference on Accounting and Finance (ICAF 2019) (pp. 60-65). Atlantis Press.
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *CPA Journal*, 38-42.