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FRAUD PENTAGON MODEL AND DISCREATIONARY ACCRUALS IN DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT:

This study examined the effect of fraud pentagon model and discretionary accruals in deposit money banks in Nigeria. Notably, in spite of banking regulation and examination by Central Bank of Nigeria Deposit Bank insurance Corporation, and the Chartered Institute of Bankers of Nigeria, there is still a growing concern about fraud and other unethical practices in the commercial practices in the commercial banks. Specifically, the study intends to determine the effect of; pressure on discretionary accruals, opportunity on discretionary accruals, rationalization on discretionary accruals , capability on discretionary accruals, arrogance on discretionary accruals all on deposit money banks. Secondary data was used in this study and OLS multiple regression was used to analysed the data with the aid of E- View 10 output statistical software. The study employed an ex post factor research design. The sample comprised thirteen (13) Deposit Money Banks listed in the Nigerian Exchange Group as at 31st December, 2022. Findings, pressure, opportunity, rationalization and capability positively relate to discretionary accruals of deposit money banks; while, arrogance was positive and non-significant., the study therefore recommended that Shareholders and managers should be effective in mitigating pressure, Managers should mitigate opportunity, Managers should constantly look at rationalisation risk, Managers should constantly monitor firms' accounting systems to mitigate capability and Forensic accountants and anti-graft agencies should look at arrogance potential.

1. INTRODUCTION

Fraud poses massive challenge for many organizations, impacting greatly on bottom – line profits, causing negative publicity and eroding customers, stakeholders and shareholders confidence around the world (Ozondu, Okoye & Adeniyi, 2019). There has been considerable public criticism of the attest function performed by auditors of publicly held corporations when preforming external audits. Auditors are responsible for providing reasonable assurance that company's financial statements are free from material fraud and errors. Respected global audit of financial advisory firm, KPM's has rated Nigeria as the most fraudulent country in Africa, with the half of 2012 estimated at N225 billion (1.5 billion) (Adeyemi, Okpala & Dabor, 2012). Audit quality is all about audit risk assessment and may be improved by enhancing auditor's ability to detect fraud. On the other hand, audit quality enhances corporate governance. Assessing fraud risk is needed as challenging task for auditors. Macroeconomic forces, excessive risk taking and inadequate regulations of economic and professional practices brought about the worst global recession since the great depression of the 1930's. Nigeria has had its own share of financial reporting failure problems. According to Egbunike (2010) the banking scandals involving chief executives of five banks was glaring pointer. The central bank of Nigeria, in a swift move reticent of the Asian Tsunami, on August 14th 2009, accused the chief executives of the banks of irregular financial reporting and corporate governance dysfunction. The banks were also accused of being over loaded with non-performing loans and with their auditors to point out picture of prosperity and buoyancy. The banks include Intercontinental Bank, Union Bank, Oceanic Bank, Afribank and Finbank; by 2012, these banks collapsed and were either merged or acquired by other banks.

The Fraud Pentagon Theory is a framework for understanding the elements that contribute to fraud within an organization. The model identifies five key components that can lead to fraudulent behavior: pressure, opportunity, rationalization, capability, and attitude (Christian, Basri, & Arafah, 2019). This theory has been instrumental in helping organizations identify and address potential vulnerabilities to fraudulent activities, and it is widely used in the field of fraud examination and prevention. Auditor should not assume that all the five conditions must observed or evident before concluding that there are identified risks related to misstatements. Although the risk of material misstatement due to fraud may be greatest when all five conditions observed one or two evident, the auditor cannot assume that, the inability to observe one two conditions means there is less risk of fraud (AICPA, 2003). In a nut shell Crowe's Fraud pentagon model incorporated into triangle theory is an important concept introduced at the level of financial statement audits with the global fraud prevalence. This research seeks insight into ways of improving identification of potential material misstatements due to fraud, at the audit planning state. As outlined above, the emphasis is now shifting toward auditors actively searching for frauds. Auditing standards now make it compulsory for auditors to discuss at where the financial statements may be susceptible to fraud.

Fraud occurs when perpetrators-in-disguise "cook the books" by the intentional misstatement or manipulation of financial data. The users of financial statements are investors, creditors, lenders, shareholders, pensioners, and other market participants' financial fraud is threatening the market increasingly for participants and the gravity of the problem is rising continuously. The effective detection of accounting fraud, however, remains a complex task for accounting professionals, traditional auditors fail to cope with emerging accounting frauds for many reason. Such as the lack of the required data mining knowledge, experience and expertise due to the infrequency of financial frauds, and the efforts made by other concerned people at finance departments, such as Chief Financial Officers (CFOs), financial managers, and accountants, for concealment and deception. Frauds and other financial crimes constitute a very serious threat to the survival of the any nation. Fraud in banks is not new. They are as old as the industry itself. It is very widespread and manifests itself in virtually all aspects of national life. The nation organizations and individuals have lost huge funds to fraudulent practices (Wurim, 2013). Meanwhile, the importance of deposit money banks as engine of growth for development cannot be over emphasized, but the alarming rate at which this criminal act has permeated Nigeria deposit money banks in the recent time has made this study more relevant the banking business has development in field of Information and Communication Technology (ICT) which has change the nature of bank fraud fraudulent practices. Gates and Jacob (2009), assert that the internet provides fraudsters with more opportunities to attack customers who are not physically present on the web to authenticate transactions. In Nigeria, in spite of banking regulation and examination by central Bank of Nigeria Deposit Bank insurance corporation (NDIC), and the chartered institute of Bankers of Nigeria (CIBN), there is still a growing concern about fraud and other unethical practices in the commercial practices in the commercial banks. Evidence from the NDIC (2015) reveals that banks were bedeviled with problems of fraud, weak board and management oversight; fraudulent financial reporting; poor book- keeping practices; non- performing loan with its attendant large provisioning requirements; related party transactions; poor management, declining asset quality; inadequate debt recovery; liquidity problems; leverage problems; non-compliance with banking laws rules and regulations.

However, recent happening in the corporate world with regard to fraud has shown that the aforementioned theories are inadequate to explain the behavior of fraudster. Fraud still persists in the banks. Since fraud is dynamic issue and many of today's largest frauds experienced, creative people, with a solid, grasp of company controls and vulnerabilities, SAS No. 99 urge auditors to continually brainstorm at initial planning stage where they search for flaws in their plans on the fraud risk that might endanger auditors in the detection of fraud in financial statement in No. 99 is the change in strategy for anti – fraud war from reactive to proactive.

The fraud pentagon model in no doubt offered more comprehensive result in fraud risk assessment when compared with other previous models, - The fraud triangle model, the fraud risk in the deposit money banks in Nigeria and equally contributed to the existing literature by bridging the gap in fraud prevention, detection and deterrence in the commercial bank in Nigeria.

1.1 Objectives of the Study

The main objectives of this study is to examine the effect of fraud pentagon model and discretionary accruals in deposit money banks in Nigeria, while the specifics objectives are to:

1. determine the effect of pressure on discretionary accruals in deposit money banks.
2. ascertain the effect of opportunity on discretionary accruals in deposit money banks.
3. examine the effect of rationalization on discretionary accruals in deposit money banks.
4. evaluate the effect of capability on discretionary accruals in deposit money banks.
5. assess the effect of arrogance on discretionary accruals in deposit money banks.

1.2 Hypotheses

The following hypotheses were formulated in null form based on the above stated objectives:

Ho_1: Financial pressure indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

$Ho_{2:}$ Opportunity indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

$Ho_{3:}$ Rationalization indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

$Ho_{4:}$ Capability indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

$Ho_{5:}$ Arrogance indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Fraud

The concept of fraud has no generally acceptable definition; the reason is that fraud implies different things for individuals. Fraud is any illegal act, deceit and breach of confidence. It is a misrepresentation with the intention of deceiving another party (Ojeka, Iyoha, & Asaolu, 2016). This indicates that fraud is distinct from mistake, since the latter is the consequence of human limitations without attempting to mislead. Fraud can be defined as an intentional act of deception aimed at getting an undue advantage at the expense of individual or organization loosing properties or some lawful rights. Fraud is a deliberate deceit planned and executed with the intent to deprive another person of his property or rights directly or indirectly, regardless of whether the perpetrator benefits from his/her actions. It is an intentional misstatement of financial statements (Okoye & Nwoye, 2014) and it can be divided into two main categories which are fraudulent financial reporting and misappropriation of assets.

ISA 240 'The Auditor's Responsibilities to Consider Fraud in an Audit of Financial Statement' refers to fraud as "an intentional act by one or more individuals among management, those charged with governance, employees or third parties, involving the use of deception to obtain an unjust or illegal advantage". The Association of Certified Fraud Examiners (ACFE, 2012) defines accounting fraud as "deception or misrepresentation that an individual or entity makes knowing that the misrepresentation could result in some unauthorized benefit to the individual or to the entity or some other party." Put simply, financial statement fraud occurs when a company alters the figures on its financial statements to make it appear more profitable than it actually is, which is what happened in the case of Enron. Fraud is not peculiar to banking industry alone, it is a general phenomenon. Some multinational organizations such Enron, Worldcom has been affected negatively due to fraud occurrence, therefore many organizations has made so many attempts to restore their goodwill and images by instituting ethical guidelines and code of ethics to prevent unethical behavior. Bank fraud can be committed in so many ways and most of the times it involves both insider (employee) and outsiders coming together to successfully commit an unethical behavior.

Fraudulent financial reporting is an intentional misstatement or omission of amounts or disclosures with the intent to deceive others. Most cases of fraudulent financial reporting involves intentional misstatement of amounts, not disclosures; overstatement of assets and income or omission of liabilities and expenses in an attempt to overstate income. Less frequently is the case of fraudulent financial reporting involving inadequate disclosure. Fraud is the intentional misrepresentation, concealment, or omission of the truth for deception/manipulation to the financial detriment of an individual or an organization which also includes embezzlement, theft or any attempt to steal or unlawfully obtain, misuse or harm the asset of the organization. Financial statement fraud is the deliberate fraud committed by management that injures investor and creditors with materially misleading financial statement (Kahneman, Lovallo & Sibony, 2011). Misstatement or accounting irregularities in financial statement can arise from error or fraud (Kwok, 2005). It is therefore important to differentiate between financial statement error and financial statement fraud. Financial statement error refers to unintentional misstatement in financial statement, including the omission of an amount or a disclosure. In previous researches, efforts have been made to explain financial statement fraud. Ojeka, Iyoha and Asaolu, (2016) define it as a misrepresentation of facts, thus leading to disjointed reports. He further identified financial statement fraud to include activities like improper disclosure, concealed liabilities and expenses, improper revenue recognition and timing differences.

2.1.2 Forms of Fraud

2.1.2.1 Overstating Revenue

Probably the most common financial statement fraud is the manipulation of sales (revenue) figures. It is in the company's best interest to report higher sales, as opposed to lower sales, so virtually every company runs the risk of overstating sales. In some industries, it is very clear when a sale has occurred. If a customer enters a retail store and purchases an item from a cashier, there is little doubt that a sale has occurred. In many businesses and industries, however, it is not so straightforward, and there is some "gray area" when it comes to deciding when a sale has occurred. Consider the insurance industry: You pay your insurance premium in advance of receiving your policy. Money has changed hands, but the insurance company can't record revenue yet because the company hasn't yet done anything to earn that money. Calculations must be done to determine what revenue has actually been earned during the accounting period. The more complex the sales agreements, the more difficult it can be to determine when a sale occurs. Consider a long-term sales contract in which a customer agrees to buy a certain amount of a product or service over several years. Varying contract terms can affect when revenue may be recognized from this type of transaction.

2.1.2.2 Overstating Assets

Asset accounts are manipulated to enhance a company's balance sheet, especially to positively impact important ratios involving assets. At higher risk of overstatement are current assets such as accounts receivable. Companies do not always like to write down or reserve for outstanding balances that customers aren't going to pay. Yet the accounting rules require these write-downs to be done when management is aware that an account is uncollectible. Failing to make these write-offs in a timely fashion is financial statement fraud, plain and simple. But it is often done because it is easy to get away with. There can be a high level of activity in the area of accounts receivable, so auditors are not very likely to detect manipulations in these accounts. And if the manipulations are discovered, it's easy for management to claim that they were not aware that an account should be written off or they were not aware that it was so long overdue. Other ways to commit financial statement fraud related to assets include: failing to write down assets with impaired values (such as goodwill or other intangible assets), filing to write down obsolete inventory, or failing to record expenses for accounts with collection problems.

2.1.2.3 Understating Expenses

One surefire way to increase a company's profits and enhance the financial statements is by not booking expenses as the company incurs them. The manipulation of expenses can be very simple. Management can hold expenses and wait to book them until future periods. Another option is improperly capitalizing the expenses instead of immediately booking them to the profit and loss statement. For example, one automobile dealership had high advertising expenses. During a period of depressed sales, the owner of the dealership was worried about presenting the real financial results to the auto maker. Therefore, several months' worth of advertising expenses was capitalized instead of expensed. Not only did the income statement improve immediately, the balance sheet looked well too, because current assets were increased by this manipulation.

A company with a large construction project may also use this financial statement fraud method rather easily. As buildings and equipment are quickly being added to the balance sheet, it might not be noticed if management moves some expenses into fixed assets. Again, this creates an instant improvement in the company's financial picture because the balance sheet looks stronger and profits are inflated. The risk of detection of the inflated fixed assets is low. Companies can also manipulate expenses by not writing down assets such as accounts receivable, inventory, or buildings and equipment to their correct values under the accounting rules.

2.1.3 Concept of Fraud Pentagon

Fraud poses a massive challenge for many organizations, impacting greatly on bottom-line profits, causing negative publicity and eroding customers, stakeholders and shareholders confidence around the world (Owojori & Asaolu, 2009). The global audit and financial advisory firm, KPMG, has rated Nigeria as the most fraudulent country in Africa, with the cost of fraud during the first half of 2012 estimated at N225 billion ($1.5 billion) (Adeyemi, Okpala & Dabor, 2012). Auditors are responsible for providing reasonable assurance that companies' financial statements are free of material fraud and errors. Audit quality is all about audit risk assessment and may be improved by enhancing auditors' ability to detect fraud. On the other hand, audit quality enhances corporate governance. Assessing fraud risk is indeed a challenging task for auditors. Macroeconomic forces, excessive risk-taking, and inadequate regulations of economic and professional practices brought about the worst global recession since the great depression of the 1930s. Wahyudiono (2014) mentioned that the financial statements are the result of the company leadership's accountability for the management of the company to interested parties who need information. Users of this financial information include investors, creditors, employees, consumers, and the government. The information generated is not only in the form of numbers but also about the performance and financial position on which economic decisions-making is based. Ginting and Hidayat (2019) said that financial statements have characteristics that have benefits, are reliable, relevant, trustworthy, and comparable. Seeing the importance of information contained in financial statements causes companies to compete to improve Performance to maintain the company's existence. However, often the performance results attached in the company's financial statements aim to get a good impression from various parties. The tendency to look good to the public sometimes makes the company manipulate so that the financial statements presented do not display the actual condition, in the end it can cause losses for various parties.

Cheat committed by companies is often called fraud. Singleton and Singleton (2010) defines fraud with acts that include deception, cunning, dishonesty and unnatural ways to manipulate others for personal gain, causing harm to others. Fraud is divided into 3 (three) things, namely: fraudulent financial reporting, misuse of assets (asset misappropriation), and corruption. According to the Association of Certified Fraud Examiners (ACFE) (2020) Report to The Nations the misuse of assets (asset misappropriation) is the most common act of fraud followed by corruption and the lowest is fraudulent financial reporting fraud. Although it has the smallest frequency, financial statement fraud causes the greatest losses compared to other frauds. One of the fraud cases that shocked Indonesia recently was the *Banks* case. Reporting from the CNBC Indonesia page, this case began to evaporate when the company experienced default on customer claims. *Banks* manipulates financial statements by window dressing and recording pseudo-profits for years. This case has very broad implications for the country's finances because it caused losses reaching 18.6 trillion rupiahs. Some of the officials involved were sentenced to life in prison and fines of billions of rupiah for engaging in the fraud of financial reporting.

2.1.4 Fraudulent Financial Reporting

According to Egolum, Celestine and Onyinyechukwu (2021), fraud of financial statements (fraudulent financial reporting) is a misstatement, nominal manipulation, or deliberate neglect to trick those who need information through financial statements. William et al (2001) state financial reporting fraud is divided into the following actions:

i. Misrepresentation or intentional deletion of events, transactions, or other important information in the financial statements;
ii. Deliberate misrepresentation of accounting guidelines such as numbers, groupings, ways of disclosure, and presentation;
iii. Manipulation, falsification, or alteration of accounting information and supporting evidence on which the financial statements are based.

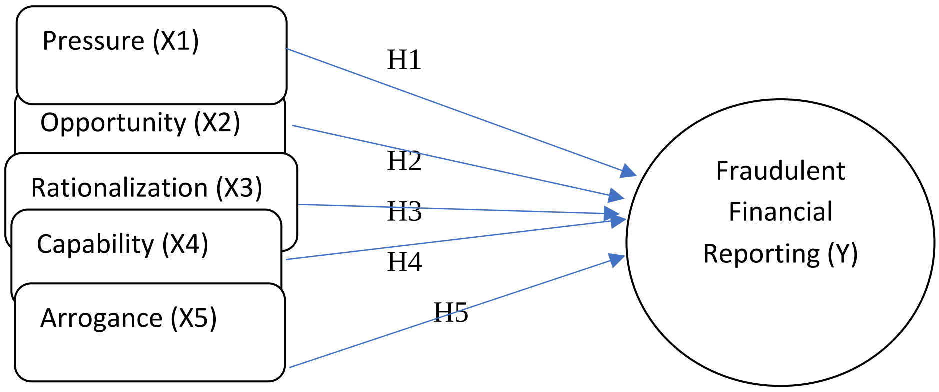

Figure 1: Research Conceptual Framework
Source: Author's Concept (2023)

2.2 Theoretical Review

2.2.1 Pentagon Fraud Theory (Crowe's fraud pentagon theory)

A recent study that discusses details about the elements that cause fraud is the pentagon fraud theory (Crowe's fraud pentagon theory). This theory is the description of the fraud triangle theory. Elements of competence and arrogance are added to this theory. The competency element has the same understanding as the capabilities in fraud diamond theory (Wolfe & Hermanson, 2014). The elements of the Pentagon's fraud theory are as follows:

a. **Pressure-** Rahmanti and Daljono (2013) mentions that pressure is the subject's encouragement to commit acts of cheating. In companies, the most common pressure is the manipulation of financial statements due to a decline in the company's economic performance. Statement on Auditing Standards (SAS) No. 99 states that there are 4(four) common conditions of pressure that can trigger fraud. These conditions include financial stability, financial targets, external pressures, and individual financial needs.

b. Opportunity- Egolum, Okoye and Eze (2019) mentions that opportunities are circumstances that create opportunities for managers / employees to present financial statements. The opportunity arises due to weak internal supervision or through abuse of office. In SAS No. 99, there are three common conditions that can lead to fraud. These conditions are industrial conditions, the ineffectiveness of supervision, and organizational structure**.**

c. **Rationalization-** Rationalization is an act or character that causes managers or employees to commit dishonest acts and justifies such dishonest actions (Egolum, Okoye & Eze, 2019).

d. **Competence-** According to Tjahjani et al. (2022), competence is a condition in which the position of a person in the organization who has authority and competence in manipulating existing systems and utilizing gaps in internal control. Ability or competence can be used as detection tool to trace indications of fraud.

e. **Arrogance (Arrogance)-** According to Fathmaningrum and Anggarani (2021), arrogance is a conceited attitude / superiority owned by individuals and considers that internal control and company policies do not apply to him. Arrogance is the attitude shown by subjects who consider themselves the most superior, powerful, smart and great of the other party. The nature of arrogance is often attached to individuals who are in the top positions, brilliant careers or the rapid development of the business pioneered.

Cheating can occur when the individual is under pressure, then weak control will trigger opportunities for him to cheat and the perpetrator can justify his fraudulent actions. Competence or power that can be utilized to act fraudulently and arrogance or lack of awareness is a factor that indicates cheating. Expanding on Cressey's developed elements, competence, and arrogance provide a clearer projection in describing what the subject needs to act fraudulently. The five elements underlie the subject of cheating. The shrewdness of the subject in acting fraudulently can be detected through the access they have, an understanding of the existing system, and a mindset that can minimize the risks that may occur.

2.3 Empirical Review

Shabnam, Takiah, and Zakiah (2014) research the usefulness of Cressey's fraud risk factor framework adopted from SAS No. 99 to prevent fraud from occurring. By Cressey's theory, pressure, opportunity and rationalization exist when fraud occurs. The study suggested variables as proxy measures for pressure and opportunity, and tested these variables using publicly available information relating to a set of fraud firms and a sample of no-fraud firms. Two pressure proxies and two opportunity proxies are identified and suggested to be significantly related to financial statement fraud. The study found that leverage and sale to accounts receivable are positively related to the likelihood of fraud.

Nwoye, Okoye and Oraka conducted an investigation into the complementary role of SAS No, 99 in the conduct of audit in Nigeria, Surveying 100 respondents comprising Auditors, Accountants in the Industries and the Accounting Academics in Anambra and Enugu State And analyzing the annual reports of the first five most capitalised manufacturing companies in Nigeria for the years 2002-2006 using the Beneish Model, data collated were analysed using the two way ANOVA statistical technique, and the Beneish Model. The analyses result showed that SAS 99 will significantly contributed to the deterrence and detection of fraud by Auditors in Nigeria, especially where complemented with the Beneish model.

Olaoye and Dada (2014) examined the analysis of fraud in Banks: Nigeria Experience. It specifically analyze the environment, reasons, consequences, discovery and preclusion measures for financial scam in the economy. The authors concluded that a sound internal management measure is necessary if financial scam must be prevented in addition to appreciating those who displayed high level of integrity; whereas the constant dismissal of financial workers should be minimized. The study recommended that those that are caught in scam practices should always be punished.

Ulbert, (2023) examined the determinants of fraud measures in selected commercial banks in Nakuru Town of Kenya, using descriptive statistics with the use of a questionnaire to collect data from 89 staff of selected commercial banks in the area of the study. The findings of the study revealed that the effectiveness of the internal control measures was undermined by non-adherence to dual control aspects and lack of sufficient time to undertake the various periodic tests diligently. Therefore, the study recommended the need to establish comprehensive fraud mitigating measures against external frauds at the cashiers' department, more enforcement of compliance with fraud mitigation methods, an increase in staff numbers in key operational areas and lifestyle audits among the bankers to detect fraud occurrences among bankers.
The banking industry in Kenya using Commercial Bank of Africa as a case study by employing descriptive statistics with the use of online questionnaire to access a population of 68 employees representing 33% of the population, the study revealed that fraud in Commercial Bank of Africa was given a very high priority and the employee fraud was the most prominent fraud in the bank, while third party fraud was second. It was recommended that banks should implement systems and structures that will reduce the opportunities for fraud within the banking environment.

Abdullahi and Mansor (2015) examined a study on the effectiveness of fraud techniques in Malaysian Islamic banks was conducted by using primary data through the use of 146 questionnaires distributed to the managers of Islamic banks in Malaysia, the study found that the protection software is the most effective components of fraud protection techniques. Meanwhile, bank reconciliation, password protection and internal control review and improvement were recommended as the most effective techniques when assessing independently.

The importance of Deposit Money Banks (DMBs) as engine of growth for development cannot be over emphasized, but the alarming rate at which fraudulent and criminal act has permeated DMBs in recent times has made this study timely. Fraud risk factors can be defined as events or conditions that indicate *incentives* to perpetrate fraud, *opportunities* to carry out fraud, *rationalizations* to justify a fraudulent action, the *capability* and *behavioral* aspect to use positional authority to pull off a crime proffered the theory of the fraud diamond in place of the fraud triangle by adding the fourth element or variable, the capability. They argued that the fraud diamond offers a better view to factors leading to fraud. Though, auditors are cautioned not to think that these fraud risk factors are all-inclusive before the incidence of fraud. Meanwhile, research has found that auditors who used different ideas techniques that encouraged them to develop their own fraud risk factors outperformed those who relied on a checklist based on looking only for the illustrated fraud risk factors. Moreover, Appah, and Bariweni, (2013), mentioned that, International Standards on Auditing No. 240 provides similar directions to auditors under SAS No.99 with respect to fraud. Both present specific requirements for auditors to follow like; considering a company's internal controls and procedures, and how these are actually implemented when planning the audit, designing and conducting audit procedures to respond to the risk, that management could override internal controls and procedures.

3. MATERIAL AND METHOD

The study adopted the *ex post facto* research design. The population of the study comprised of DMBs listed on the Nigeria Exchange Group from 2012 to 2022. The choice of ex post facto research design is justified for the retrospective nature of the data, and by examining the relationship between an independent variable and a dependent variable after the fact. secondary data was used for the study. Secondary Data covering a period of ten (10) years (2012-2022). The reason for chosen 2012 as the preparatory year was because, the international financial reporting standard (IFRS) was approved and made it mandatory for all companies to implement the new standards in their financial reporting. The sample comprised thirteen (13) Deposit

Money Banks (DMBs) listed in the Nigerian Exchange Group as at 31st December, 2022. The study employs the purposive sampling technique premised on the scope with a complete data set to ensure the homogeneity of the sample. Data collected were analyzed using multiple regressions of ordinary least square (OLS) method of estimation.

The study adapted the model Puspitha and Yasa (2018) study on Indonesian capital market, the model is stated below as follows:

Econometric Specification::

In $\frac{FFR}{1=FFR}$= □ + β_1FS + β_2EP + β_3PFN + β_4FT + β_5NI + β_6IM+ β_7OS + β_8AS + β_9DC + β_{10}FNOP + ε……………………….Eqn 1

Where:

FFR = Fraudulent Financial Reporting

FS = Financial Stability

EP = External Pressure

PFN = Personal Financial Need

FT = Financial Target

NI = Nature of Industry

IM = Ineffective Monitoring

OS =Organizational Structure

AS = Auditor switching

DC = Change of Director

FNOP = Frequent Number of CEO's Picture

ε = Error

The above model is adapted to suit our study objectives as follows in a functional form, we have:

DAC = *f* (PRE, OPP, RAT, CAP, ARR) ……………………… Eqn 2

The model is stated below explicitly as follows:

$DAC_{it} = \beta_0 + \beta_1 PRE_{it} + \beta_2 OPP_{it} + \beta_3 RAT_{it} + \beta_4 CAP_{it} + \beta_5 ARR_{it} + \mu$………………………Eqn 3

Where:

β_0 - Constant
DAC - Discretionary Accruals
PRE - Pressure
OPP - Opportunity
RAT - Rationalisation
CAP - Capability
ARR - Arrogance
μ - Error term

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

In this section, we examine the descriptive statistics for both the independent and dependent variables of interest. Each variable is examined based on the mean, median, maximum and minimum.

4.1.1 Descriptive Statistics

Table 1 below displays the descriptive statistics for the study.

Table 1: Descriptive statistics of the model variables

	PRE	OPP	RAT	CAP	ARR
Mean	2.851219	4.234989	11.46496	0.569468	1.039592
Median	-0.561419	3.779764	4.532496	0.660962	0.141442
Maximum	279.9039	61.30577	422.2682	3.602674	9.287945
Minimum	-44.22827	-0.975440	-0.415090	-4.189441	0.000000
Std. Dev.	25.98409	5.136670	41.33842	0.712686	2.241204
Skewness	8.879458	9.721379	8.155300	-2.935407	2.660550
Kurtosis	93.05263	108.1988	75.28928	22.55829	8.939589
Jarque-Bera	50198.10	68191.95	32721.83	2484.585	378.9073
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	407.7243	605.6035	1639.490	81.43387	148.6617
Sum Sq. Dev.	95874.57	3746.723	242658.9	72.12491	713.2654
Observations	143	143	143	143	143

Source: E-Views 11

Key: PRE-Pressure; OPP-Opportunity; RAT-Rationalization; CAP-Capability; ARR-Arrogance.

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In the case of PRE which is a proxy of Pressure, the mean value of the sampled DMBs was 2.851 while its median value was -0.561. The maximum value was 279.903 while the minimum was -44.228. This, therefore, means that companies with a higher or equal to 2.851 experience higher pressure in the work environment while DMBs with a value below 2.851 are in the low-pressure work environment.

The mean of OPP which is a proxy for Opportunity of the sampled DMBs was 4.235 while its median value was 3.780. The maximum value of OPP was 61.306 while the minimum was -0.975. This, therefore, means that companies with a higher or equal to 4.235 experience higher opportunities in the work environment while DMBs with a value below 4.235 have relatively lower opportunities in the work environment.

The mean of RAT which is a proxy for the Rationalization of the sampled DMBs was 11.465 while its median value was 4.532. The maximum value of RAT was 422.268 while the minimum was -0.415. This, therefore, means that companies with a higher or equal to 11.465 experience higher rationalization in the work environment while DMBs with a value below 11.465 have relatively lower rationalization in the work environment.

The mean of CAP which is a proxy for the Capability of the sampled DMBs was 0.569 while its median value was 0.661. The maximum value of CAP was 3.603 while the minimum was -4.189. This, therefore, means that companies with a higher or equal to 0.569 experience higher capability in the work environment while DMBs with a value below 0.569 have relatively lower capability in the work environment.

The mean of ARR of the sampled DMBs was 1.040 while its median value was 0.141. The maximum value of ARR was 9.288 while the minimum was 0.000 indicating that at the lowest DMB annual reports showed a 0 ARR value in assessing the arrogance in the DMB's financial statements. This, therefore, means that DMBs with higher or equal to the average ARR are considered high financial arrogance firms while DMBs with a value below the average ARR are low arrogance financial reporting. To measure symmetry of the distribution we use *skewness* and *kurtosis*: skewness is used to measure asymmetry in the distribution; kurtosis is used to find the presence of outliers in the data distribution.

The skewness of PRE (8.879) is positive, indicating that the data values are more on the right-hand side, and the left tail is spread out. The mean>median, i.e., 2.85>-0.56 also confirms this. The distribution is positively skewed. The skewness of OPP (9.72) is positive, indicating that the data values are more on the right-hand side, and the left tail is spread out. The mean>median, i.e., 4.23>3.78 also confirms this. The distribution is positively skewed. The

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skewness of RAT (8.16) is positive, indicating that the data values are more on the right-hand side, and the left tail is spread out. The mean>median, i.e., 11.46>4.53 also confirms this. The distribution is positively skewed.The skewness of CAP (-2.94) is negative, indicating that the data values are more concentrated towards the right-hand side of the distribution. The median>mean, i.e., 0.66>0.57 also confirms this. The distribution is negatively skewed.

The skewness of ARR (2.661) is positive, indicating that the data values are more on the right-hand side, and the left tail is spread out. The mean>median, i.e., 1.040>0.141 also confirms this. The distribution is positively skewed. The kurtosis of the distribution showed the following values: PRE (93.05); OPP (108.20); RAT (75.29); CAP (22.56); and, ARR (8.940). All fraud pentagon variables had values greater than 3 we conclude that they had a positive kurtosis. The wider standard deviation, for the fraud pentagon variables PRE, OPP, RAT, CAP and ARR was suggestive of more variability of the data points in the analysis with the DAC having more clustering around the mean. A standard deviation value largely greater than the mean indicates that data points are respectively above or below the mean.

4.1.2 Correlation Matrix

In examining the association among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in the table below.

Table 2: Correlation analysis of the model variables

	DAC	PRE	OPP	RAT	CAP	ARR
DAC	1.0000	0.4165	0.0706	0.4771	0.1475	0.0062
PRE	0.4165	1.0000	-0.0225	-0.0039	0.0498	0.0353
OPP	0.0706	-0.0225	1.0000	-0.0261	-0.5010	-0.0073
RAT	0.4771	-0.0039	-0.0261	1.0000	0.1099	-0.0550
CAP	0.1475	0.0498	-0.5010	0.1099	1.0000	0.0618
ARR	0.0062	0.0353	-0.0073	-0.0550	0.0618	1.0000

Source: E-Views 11

Key: DAC-Discretionary Accruals; PRE-Pressure; OPP-Opportunity; RAT-Rationalisation; CAP-Capability; ARR-Arrogance.

The table above showed that DAC positively correlated with PRE (0.417), OPP (0.071), RAT (0.477), CAP (0.148) and ARR (0.006). As expected, PRE negatively correlated with OPP (-0.023) and RAT (-0.004); however, PRE positively associated with CAP (0.050) and ARR (0.035). OPP negatively correlated with RAT (-0.026), CAP (-0.501) and ARR (-0.007). RAT is positively associated with CAP (0.109) and negatively with ARR (-0.055). CAP is positively associated with ARR (0.062). To check for collinearity among the variables, the results show that there is no *strong* association between any two IVs; since all the correlation coefficients were less than 0.80, according to the correlation matrix in Table 4.2. This indicates that the multicollinearity between them is not problematic. This is further checked using the Variance Inflation Factor (VIF).

4.2 Test of Hypotheses

To test the hypotheses a random effects regression result was estimated since correlation analysis does not imply a cause-effect relationship. This model focuses on estimating the effect of fraud pentagon elements on the Discretionary Accruals of DMBs.

Table 3: Multiple linear regression output for the test of hypotheses

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.019828	0.677368	-1.505574	0.1345
PRE	0.086402	0.013384	6.455369	0.0000
OPP	0.182998	0.078169	2.341044	0.0207
RAT	0.061152	0.008471	7.218822	0.0000
CAP	1.233065	0.568469	2.169097	0.0318
ARR	0.020578	0.155643	0.132213	0.8950
	Effects Specification			
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			4.136887	1.0000
	Weighted Statistics			
R-squared	0.430831	Mean dependent var		1.426202
Adjusted R-squared	0.410059	S.D. dependent var		5.425380
S.E. of regression	4.167107	Sum squared resid		2378.975
F-statistic	20.74037	Durbin-Watson stat		2.091558
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.430831	Mean dependent var		1.426202
Sum squared resid	2378.975	Durbin-Watson stat		2.091558

Source: E-Views 11

The F-statistic value of 20.7430 and its associated p-value of 0.000000 show that the regression model overall is statistically significant at a 1% level, this means that the regression model is valid and can be used for statistical inference. The VIF values for each of the independent variables and the overall are less than 10 which means there is an absence of multicollinearity in the model. In the table above (Weighted Statistics), the regression R-squared value of 0.431 shows that about 43.1% of the variation in DAC was jointly explained by all the independent variables. The Adjusted R-squared is often preferred to account for sample size adjustments had a value of 0.410, i.e., 41.0% of the systematic variation in DAC were accounted for by the explanatory variables. This implies that DAC cannot be 100 per cent explained by all the selected IVs in the model; however, 59% were attributed to the exclusion of other IVs that can impact DAC but outside the scope of this study.

4.2.1 Hypothesis One

Ho_1: Financial pressure indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

PRE as an independent variable to DAC appears to have a positive (i.e., 0.086402) and significant influence on DAC at a 5% level of significance. This, therefore, implies that an increase in PRE will cause an increase in DAC. This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, there is a significant effect of pressure on discretionary accruals in deposit money banks.

This is supported by Egolum, Okoye and Eze (2019) in Indonesia showed that external pressure has no significant influence in predicting fraudulent financial reporting. Using a purposive sample of 15 companies proxied pressure factor proxied by using industrial properties and control effectiveness. The multiple linear regression technique showed that the nature of the industry and capability do not affect the potential for fraudulent financial statements. Purposively sampled 214 non-financial companies' listed on Indonesia Stock Exchange from 2016-2019. 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. Using a sample of 12 companies Egolum, Okoye and Eze (2019) indicate that the level of leverage affects financial statement fraud. 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. However, in Indonesia using a sample of 20 companies in the transportation sub-sector and multiple linear regression analysis showed that pressure has a significant effect on fraudulent financial reporting. Using a sample of 48 Islamic Commercial Banks in Indonesia for 2016-2021, external pressures, financial goals, and type of industry had a significantly positive effect in detecting the potential for fraudulent accounts. Using a sample of 214 non-financial companies' listed on Indonesia Stock Exchange from 2016-2019, utilized secondary data were analysed using logistic regression. The result of this study showed that pressure do not affect the detection of fraudulent financial statements.

4.2.2 Hypothesis Two

Ho_2: Opportunity indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

OPP as an independent variable to DAC appears to have a positive (i.e.,0.182998) and significant influence on DAC at a 5% level of significance. This, therefore, implies that an increase in OPP will cause an increase in DAC. This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, there is a significant effect of opportunity on discretionary accruals in deposit money banks.

In Indonesia using a sample of 20 companies in the transportation sub-sector analysed using multiple linear regression analysis finds that opportunity has a significant effect on fraudulent financial reporting. The results showed that opportunity has a positive insignificant effect on fraudulent financial statements. Using a sample of 214 non-financial companies' listed on Indonesia Stock Exchange from 2016-2019, utilized secondary data were analysed using logistic regression. The result of this study showed that ineffective monitoring do not affect the detection of fraudulent financial statements. Egolum, Okoye and Eze (2019) sampled 12 companies purposively from 2016 to 2019. The study employed multiple linear regression analysis. The results indicate that 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. 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

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of independent commissioners, and number of CEO's picture have no significant influence on fraudulent financial reporting.

4.2.3 Hypothesis Three

Ho_3: Rationalisation indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

RAT as an independent variable to DAC appears to have a positive (i.e., 0.061152) and significant influence on DAC at a 5% level of significance. This, therefore, implies that an increase in RAT will cause an increase in DAC. This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, there is a significant effect of pressure on discretionary accruals in deposit money banks.

In Indonesia on a sample of 20 companies in the transportation sub-sector. The analytical method used was multiple linear regression analysis and showed that rationalisation has a significant effect on fraudulent financial reporting. Using a sample of 214 non-financial companies' listed on Indonesia Stock Exchange from 2016-2019, utilized secondary data were analysed using logistic regression. The result of this study showed that auditor change do not affect the detection of fraudulent financial statements.

4.2.4 Hypothesis Four

Ho_4: Capability indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

CAP as an independent variable to FFR appears to have a positive (i.e., 1.233065) and significant influence on DAC at a 5% level of significance. This, therefore, implies that an increase in CAP will cause an increase in DAC. This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, there is a significant effect of capability on discretionary accruals in deposit money banks.

In Indonesia used a sample of 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 capability has a significant effect on fraudulent financial reporting. Setiawan and Trisnawati (2022) sample 101 firms listed on Indonesia Stock Exchange (IDX) 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. Also, Kristianti and Meiden (2021) from a sample of 120 firms using the purposive sampling method. The logistic regression results showed that the capability was not proven to have a significant effect on the possibility of fraudulent financial statements.

4.2.5 Hypothesis Five

Ho_{45} Arrogance indices do not significantly affect discretionary accruals in the financial statement of Deposit Money Banks.

ARR as an independent variable to DAC appears to have a positive (i.e., 0.020578) and non-significant influence on DAC at a 5% level of significance. This, therefore, implies that an increase in ARR will cause an increase in DAC. This evidence, therefore, leads to a rejection of the alternate hypothesis and acceptance of the null; thus, there is no significant effect of arrogance on discretionary accruals in deposit money banks.

The CEO's political connection can predict fraudulent financial reporting. This can represent the level of arrogance or superiority that the CEO has in a company's annual report. Arrogance can be indicated by the CEO's desire to show everyone the status and position they have in a company (Crowe, 2011). CEOs in companies can describe the main characters in the company. Also of Yusof (2016) states that the number of CEO shares can show the insider dealing and arrogance of a company leader.

CONCLUSION AND RECOMMENDATIONS

This study concludes that there is a nexus between the fraud pentagon model and discretionary accruals of DMBs in Nigeria. Fraud causes losses and cheating in financial statements is done intentionally by presenting and manipulating the value of material can mislead stakeholders in decision making for the company in the business world that reaches trillions of Naira. The study employs data from deposit money banks from 2012 to 2022 to analyse the effect of the fraud diamond model on fraudulent financial reporting of quoted DMBs in Nigeria. The data were analysed using descriptive statistics, such as the mean, median, maximum and minimum; and, the hypotheses were tested using the multiple regression model after checking for REM and FEM. The study specifically finds that pressure, opportunity, rationalisation and capability positively relate to discretionary accruals of deposit money banks; while, arrogance was positive and non-significant. The findings support the agency theory perspective of managers acting for personal gains against that of principals.

The study makes the following recommendations for managers, shareholders and policymakers in the Nigerian context as follows:

1. Shareholders and managers should be effective in mitigating pressure, one of the elements in the fraud pentagon model, can help reduce the likelihood of fraudulent behavior within an organization. The study would be help to forensic accountants, Audit committees and fraud examiner's to understand the financial pressure signal which is embedded in the fraud pentagon model in identifying the remote cause of fraud concealment.
2. Managers should mitigate opportunity, by establishing a system of checks and balances within your organization to deter and detect fraudulent activities. This can include segregating duties, conducting regular audits, implementing authorization processes, and ensuring proper documentation and record-keeping. Develop and enforce a comprehensive code of conduct that outlines expected behaviour, ethical standards, and consequences for violating these standards.
3. Managers should constantly look at rationalisation risk, which is another factor in the Fraud Pentagon model, and is important in preventing fraudulent behaviour. They should foster a strong ethical culture within the organization that emphasizes integrity, honesty, and transparency and encourage reporting and whistleblowing.
4. Managers should constantly monitor firms' accounting systems to mitigate capability, which is the ability to carry out fraudulent acts, which is crucial for preventing fraud. Establish and enforce robust internal control systems that include segregation of duties, regular monitoring, and oversight mechanisms.
5. Forensic accountants and anti-graft agencies should look at arrogance potential, as such can cause individuals to have an inflated sense of self-importance or entitlement, which could lead them to believe that they are above the rules or that their fraudulent actions are justified. Their conceit may cause them to become unaware of the moral and legal

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