Forensic Accounting and Detection of Occupational Fraud in Nigerian Deposit Money Banks

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ABSTRACT   **Published Online: 13 December 2022**

Banks play a vital role in the intermediation of financial resources in the financial system. However, the recurrent nature of fraud has made deposit money banks less effective. The study aims to examine the effect of forensic accounting on the detection of occupational fraud in Nigerian deposit money banks with a specific focus on data mining techniques, computer-assisted audit techniques, and trend analysis. Data were collected from primary sources using a well-structured questionnaire. Data were analyzed using descriptive statistics and ordinary least square (OLS) regression. The result shows that R^2 and R^2 Adjusted has the value of 0.917484 and 0.901904. The study then conclude that data mining technique has a significant positive effect on occupational fraud detection while the computer-assisted audit technique has a significant positive effect on occupational fraud detection and that trend analysis has a significant positive effect on occupational fraud detection. This finding implies that the detection of occupational fraud will be enhanced when forensic accounting technique is employed. The study therefore recommends, that deposit money banks should enhance the internal control systems with data mining techniques, computer-assisted audit techniques, and trend analysis feature to uncover asset misappropriation fraud in Nigerian deposit money banks by the central bank of Nigeria.

Keywords:
Forensic accounting, occupational fraud, Deposit Money Bank, OLS AND Nigeria.

JEL Codes: C88, K13, M14

1. INTRODUCTION

Banks serve as an indispensable part of the financial system, performing a crucial role in intermediation which results in a flow of financial resources in an economy. However, the recurring nature of fraud has hindered the effective performance of Deposit Money Banks (John et al., 2019). Fraud is a truly global problem, affecting organizations in every region and every industry worldwide. Measuring the true extent of the damage caused by occupational fraud in banks can be challenging due to the inherent nature of concealment and deception involved in most schemes (Association of Certified Fraud Examiners, 2022). It becomes difficult to trace fraud to its origin and originators with banks recording a consistent increase in the number of staff involved in fraud cases annually (John et al., 2019).

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Bingilar et al. (2021) argued that the banking sector is one of the most controlled and regulated sectors in Nigeria. Despite this, there is still evidence of fraud cases in the sector. This growing level of fraudulent activities and the negative image of the banking sector is a cause of concern for necessary mechanisms or controls that will address it in the system (Ewa et al., 2020).

White-collar crime is increasing all over the world. The main share of that is corporate, if it is controlled in the corporate world that will also help to improve the economy (Ram et al., 2019). Fraud and associated vices have wreaked havoc on the banking industry and the Nigerian economy by extension, resulting in an enormous distress rate among businesses with consequential income losses (Awotomilusi et al., 2021). Eze et al. (2019) opined that fraud occurs everywhere in the world, especially with the present cutting-edge technology where many employees who have the opportunity by virtue of the platform they access would simply apply their knowledge and a colossal amount of funds disappears. Nigeria is a country that is heavily engulfed in and characterized by fraud and other forms of corruption which have had a significant detrimental impact on the country's

reputation around the world (Awotomilusi et al., 2021). The costs incurred to deal with the menace of fraud consume a lot of the banks' resources and impose an additional cost on the banks (John et al., 2019); hence, the need for forensic accounting.

As much as this holds, the application of forensic accounting will determine the extent to which the detection of occupational fraud in Nigerian deposit money banks is enhanced. In order to forecast results, data mining tools search databases for anomalies, trends, and correlations. It makes it easier to extract secret predictive data from massive databases and has the ability to greatly help organizations see patterns, abnormalities, and other unexpected actions, empowering them to take proactive, knowledge-driven decisions (Ewa et al., 2020). Computer-assisted audit techniques (CAAT) are computer software programs that facilitate the identification and detection of fraud.

Literature suggests that most research concerning occupational fraud mostly focused on corruption and financial statement fraud (Ananda et al., 2020; Rizqa et al., 2019; Ogr, 2019; Evy et al., 2019; Rani et al., 2019; Oyedokun et al., 2018). Even though most studies have upheld the significance of forensic accounting in detecting occupational fraud, especially corruption and financial statement fraud as proposed by previous studies, there is a need to analyze the effect of forensic accounting methods in detecting asset misappropriation fraud as well. Ewa et al. (2020) assert that "Nigeria has experienced big investment frauds and trading scams that have resulted in the loss of billions of dollars from gullible people as it is alleged that Nigeria's financial sector does not have effective fraud detection mechanism and the prevailing business laws are inadequate to prosecute offenders." Hasni et al. (2020) assert that academic studies on asset misappropriation are rather very limited. The prevalent and consistent occurrence of occupational fraud in the financial system is an indication that much more is expected of forensic accountants to curb this ugly menace.

This study focuses specifically on asset misappropriation in Nigerian deposit money banks because the banking sector contributes immensely to the growth and development of the Nigerian economy and very few researchers studied asset misappropriation. The use of forensic accounting in fraud investigation is highly appropriate given the rising amount of fraud in Microfinance banks and the banking industry as a whole, particularly in Nigeria (Bassey, 2018). The study aims to evaluate the effect of data mining techniques (DMT), computer-assisted audit techniques (CAAT), and trend analysis (TDA) on the detection of occupational fraud in Nigerian deposit money banks.

2.   LITERATURE REVIEW

Forensic accounting has been widely used by many scholars and researchers which has led to the development of many

definitions and concepts. Olukayode (2018) defined forensic accounting as the application of auditing, accounting, statistics, research, and economic concept and techniques in investigation with the sole aim of solving a legal problem or potential problem in form of bribery, fraud, embezzlement, corruption, and forgery that may occur from the economic or financial transaction" while Al-Sharaivi (2018) views forensic accounting as a homogeneous mixture that links accounting, auditing and judiciary through a legal point of view to present a report that contributes in eventually solving arguments and disputes. Forensic accounting is a science that combines investigative, accounting, and auditing skills while applying accounting facts and concepts discovered through auditing methodologies, strategies, and procedures to resolve legal and associated difficulties (Okoye et al., 2020).

Forensic accounting is described in the context of this study as the use of accounting, auditing, and investigation abilities to uncover fraudulent incidents and produce proof usable in a court of law. Forensic accounting methods include data mining techniques, computer-assisted audit techniques, and trend analysis which are the main explanatory variables this study adopts. The need for forensic accounting arose due to the failure of the audit system in organizations to detect fraud and other fraudulent activities. Professionals in the field have observed that intense economic pressures have led so many into fraudulent activities in most organizations (Okoroyibo et al., 2019).

Occupational fraud is the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets (ACFE, 2022). Occupational fraud occurs when one or more individuals in a management position, those charged with governance, employees, or third parties, intentionally act by involving deception to obtain an unjust or illegal advantage (ISA 240). Every organization is faced with one or more forms of occupational fraud. Asset misappropriation, corruption, and financial statement fraud are the three main classifications used to describe occupational fraud. Asset misappropriation schemes are the most common form of occupational fraud around the world (Association of Certified Fraud Examiners (ACFE) (2022). Asset misappropriation will be used to measure occupational fraud in Nigerian deposit money banks.

Ewa et al. (2020) defined data mining as the application of specialized software that looks for anomalies, patterns, and correlations in databases to predict outcomes. It facilitates the extraction of hidden predictive information from large databases and has great potential to assist organizations to identify trends, anomalies, and other unusual activities thus allowing businesses to make proactive knowledge-driven decisions. Firas (2021) argued that in order to find any new hidden or unexpected patterns or information, data mining technique relies on trying to mine a big volume of data, and this technique is implemented through computer programs

designed for this purpose. Data mining software is extremely helpful in detecting fraud as it has scripting capabilities and can search organizations' databases for anomalies and suspicious patterns that are symptoms of fraud (Ewa et al., 2020). Transaction monitoring is an area where forensic accounts can assist to detect fraudulent practices using anti-money laundering (AML) software which uses data mining tools and reports generated by the accounting system which can be queried by the forensic accountant using query type analysis of spreadsheets (Bingilar et al., 2021).

Solomon et al. (2021) defined Computer Assisted Audit Techniques (CAATs) as computer programs and data that are used as part of the audit procedures to process data of audit significance contained in a client computer information system (CIS). Technology is used and employed to accomplish some auditing work that helps the forensic accountant to complete this task at a better, faster, and lower cost (Firas, 2021).

Trend analysis is a forensic accounting technique that is deployed to identify frauds. It involves analyzing transaction patterns to unveil fraud. Ewa (2022) argued that trend analysis involves matching features (revenue, expenditure, assets, and liability heads) of financial statements with a common base item.

Conceptually, Figure 1 depicts the relationship between the independent variable (forensic accounting) and the dependent variable (detection of occupational fraud). This study aims to examine three components of forensic accounting - data mining techniques, computer-assisted audit techniques, and trend analysis enhance the detection of asset misappropriation in Nigerian deposit money banks.

Figure 1: Conceptual Framework of Variables
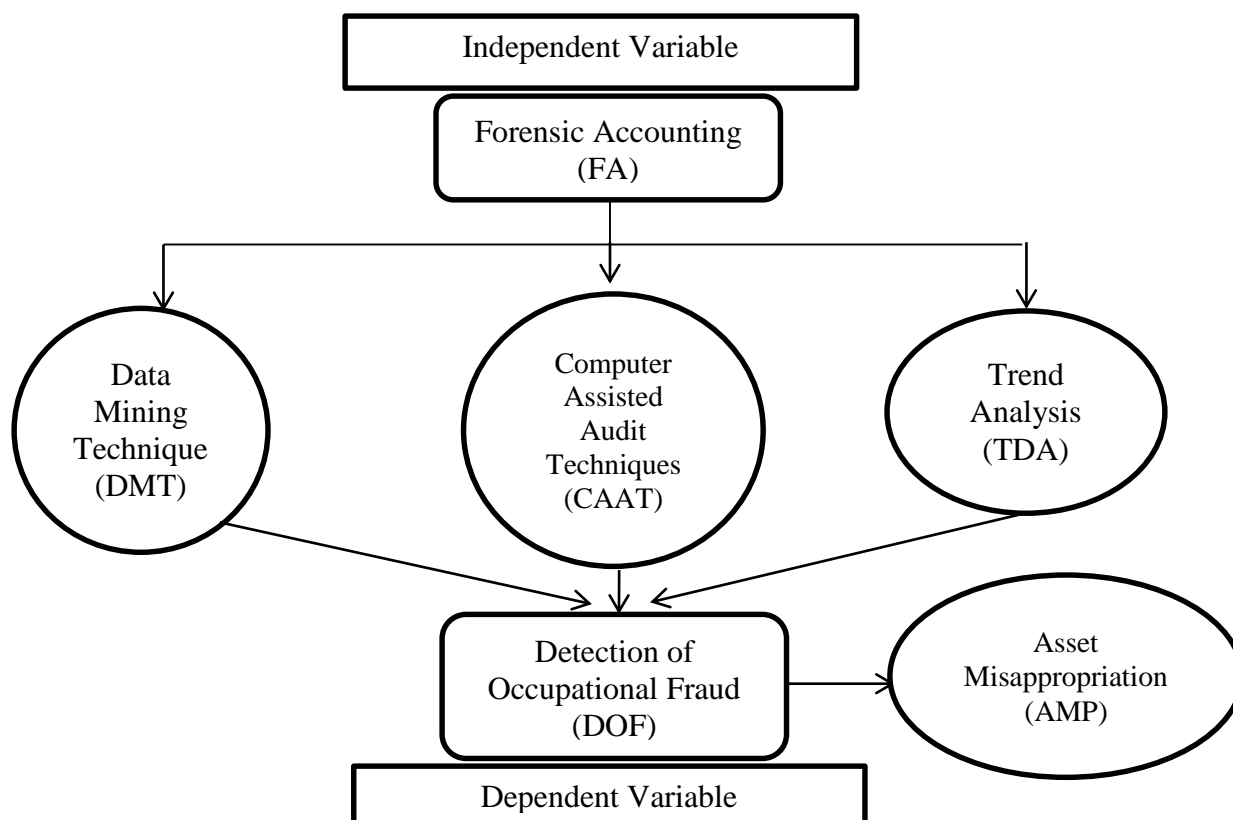
Source: **Researcher's Conceptual Framework (2022)**

Theoretical Literature

Fraud diamond theory is the anchor for this study. Wolfe and Dana propounded the fraud diamond theory in 2004 on the assumption that many frauds would not have occurred without the right person with the right capabilities in place. Wolfe et al. (2004) believe that the fraud triangle theory introduced by Donald Cressey in 1953 which includes pressure, rationalization, and opportunity could be enhanced to improve both fraud prevention and detection by considering a fourth element - capability. Wolfe et al. (2004)

argue that many frauds, especially some of the multi-billion-dollar ones, would not have occurred without the right person with the right capabilities in place.

The fraud diamond theory has been widely used in the study of several forensic accounting contexts. It was used to test if forensic accounting prevents fraud, whether forensic accounting is a tool for fraud prevention/detection, and forensic accounting skills and techniques in fraud investigation (Bingilar et al., 2021; Abdulrahman, 2019; Oladipupo et al., 2019; Eze et al., 2019; Rizqa et al., 2019;

Bashir et al., 2019). Fraud diamond theory is relevant to this study because employees who possess these four elements are prone to engaging in occupational fraud thereby giving rise to the need for the application of forensic accounting. Opportunity opens the doorway to fraud while incentive and rationalization can draw the person toward it, but the person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through, not just once, but time and time again (Wolfe et al., 2004).

Empirical Review

Ewa (2022) evaluated forensic accounting techniques on fraud management in the public sector MDAs in Nigeria to ascertain the operation-ability of forensic accounting techniques in public sector accounting departments. The study investigated data mining, accounting ratios, and trend analysis tools to detect/prevent fraudulent activities in MDAs. Survey research design was adopted for the study and the multiple regression analysis technique (OLS) revealed that the adoption of forensic accounting tools (data mining, accounting ratios, and trend analysis) will significantly enhance the ability to detect and/or prevent fraud in MDAs. The study also revealed a knowledge gap in the application of these preventive control techniques and the usefulness of trend analysis as a technique for detecting fraudulent practices in public service operations. The study concluded that data mining, accounting ratios, and trend analysis are effective tools for detecting fraudulent practices in public service.

Bingilar et al. (2021) examined forensic audit as a tool for fraud detection and prevention in Nigerian banks. The study took a census of the 27 Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange (NSE) as of 31st December 2019. Secondary source was used to collect data from the Nigerian Deposit Insurance Corporations' (NDICs) annual report for 2019. The study covered a period of 10 years spanning 2010- 2019. Data were analyzed using charts, graphs, tables, and regression. The study revealed that forensic audit has a significant and negative effect on several fraud cases, the number of staff involved in bank fraud, and the actual amount of bank losses through fraud in Nigerian DMBs. However, forensic auditing has an insignificant impact on expected losses generated through fraud activities in Nigerian banks.

Firas (2021) investigated the role of forensic accounting techniques in reducing Cloud Based Accounting risks in Jordanian five stars hotels. The population consisted of all accountants in Jordanian five stars hotels. Five stars hotel accountants located in Amman the capital were selected subjects with a total of 170 accountants. A random sample of 118 accountants was selected. The study found that there is a statistically significant role of (CARDR) (Computer-assisted reviews and document reviews) in reducing Cloud Based Accounting risks in Jordanian five stars hotels. As the nature

of computer crime is increasing daily, there is a need for different types of efforts, to be made on all levels of cloud investigations and at the same time, all legislations and codification related to computer crimes must be updated and reviewed from time to time to keep up with emerging technology.

Edheku et al. (2020) explored the impact of forensic accounting on fraud detection in public and private sectors in Abuja metropolis, Nigeria, from the accountants' perspective. The study adopted a descriptive survey design. A sample of 43 accounting officers from 4 selected federal ministries of government and 5 private multinational organizations operating in Abuja metropolis, Nigeria. A validated questionnaire containing 10 items with the overall reliability of 0.73 established by Cronbach alpha was used for data collection. Mean and standard was used to answer the research question while t-test was used to test the hypothesis at a 0.05 level of significance. The study revealed that accounting officers in the private and public sectors strongly agreed that forensic accounting has an impact on fraud detection.

Ewa et al. (2020) evaluated the application of forensic accounting techniques in preventing/detecting fraudulent practices in commercial banks in Nigeria by specifically assessing the impact of commercial data mining, ratio analysis, and trend analysis techniques in fraud detection/prevention. With the aid of descriptive statistics and Ordinary Least Square (OLS) model, the result revealed that forensic accounting significantly enhance the detection of fraud in the banking system. The study further revealed the importance of commercial data mining techniques, ratio analysis as well as trend analysis techniques in fraud detection.

Okoye et al. (2020) examined the effect of Forensic investigation techniques in detecting Occupational fraud in the Public sector. Purposive sampling technique and cross-sectional survey design were employed. The sample size for the study was 250 consisting of investigators, prosecutors, and staff of the Finance, Accounts, and Audit units. The population was drawn from five anti-corruption agencies in Nigeria: Economic and Financial crimes commission (EFCC), Independent Corrupt Practices Commission (ICPC), Code of Conduct Bureau (CCB), Federal Bureau of Investigation (FBI), and Police Special Fraud Unit (PSFU) of the Criminal Investigation Department of the Nigerian Police Force and Ministry of Finance, Anambra State. Data generated for the study was on a five-point Likert scale. The hypotheses of the study were statistically tested with the Kruskal Wallis test (one-way ANOVA for ordinal data). Findings indicate that Data Mining and computer-assisted audit techniques guarantee the detection of payroll and personnel fraud in the public sector.

Adrian et al. (2020) presented various types of analysis that are effective in fraud detection. The research focused on the

exhibit of several statistical and data mining techniques, as nowadays forensic accounting investigation implies the analysis of huge amounts of data. The research adopted a descriptive analysis; the methodology used for elaborating this paper comprised an extensive literature review on the given subject, including a wide range of specialized works such as articles, research, surveys, statistics, books, websites, etc. while adopting the content analysis method. The finding indicates that there is a wide range of technical instruments available for a forensic accounting investigation that goes from financial analyses to business intelligence. It is the forensic accountant's prerogative to choose the appropriate methods and tools according to the nature of the investigation, its complexity, and its purpose, as some of them proved to be more useful than others.

Bana (2019) examined the Impact of Forensic Accounting Investigation on Public Sector Financial Crimes in Nigeria. The study focused on the investigation activities of the Independent Corrupt Practices and Other Related Offences Commission (ICPC). The sources of data for the study were both primary and secondary and the study used Five (5) years of Investigation Reports of the ICPC (from 2015-2019). The statistical tool used to test hypotheses was X2 -square. The findings show that the application of Forensic Accounting skills has a significant impact on financial crimes investigation in the public sector in Nigeria and that there is a significant difference between Forensic Accountants as Investigators and Traditional Investigators of financial crimes.

Oladipipo et al. (2019) investigated forensic accounting as a tool for fraud prevention and detection in deposit money banks in Nigeria. The study looked at the effect of forensic accounting on fraud detection and prevention in deposit money institutions in Ekiti State. The study used a descriptive survey approach, and the respondents' information was collected using a carefully designed questionnaire. The population covered 12 deposit money banks in Ekiti State and the components of the population were 4 key staff (Head of operations, fund transfer officer, resident internal control officials, and cash officials) in each bank. All 44 staff constituted the population of this study and considering the small size of the population, all 44 staff were used for the study and this was achieved through purposive sampling techniques. The data collected were analyzed through simple linear regression. It was discovered that forensic accounting impacted the detection and prevention of fraud in deposit money banks in Ekiti State.

Abdulrahman (2019) examined forensic accounting and fraud prevention in the Nigerian public sector by using some selected studies from within and outside Nigeria. The objectives of the study are to determine how forensic accounting prevents fraud in Nigerian Public Sector and whether forensic accounting prevents fraud in Nigerian Public Sector. To achieve the stated objectives of the study,

data were collected from secondary sources or Content Analysis. Based on the analysis, the study found that a significant and positive influence exists between forensic accounting techniques and fraud prevention.

Literature provides evidence that shows a connection between forensic accounting and occupational fraud. This is evident in studies conducted by Mohammed et al. (2022); Adesola et al. (2020); Ewa (2022); Okoye et al. (2020); Oladipipo et al. (2019); Henry et al. (2017); all found that forensic accounting has positive and significant effects occupational fraud detection in various sectors studied. On the contrary, some studies found that forensic accounting has no significant effect on fraud detection (Bingilar et al., 2021; Bassey et al., 2017). The conclusion inferred by most of these studies is that the application of forensic accounting will enhance the detection of occupational fraud; therefore, it is implied that the more forensic accounting is employed, the more the number of occupational frauds is detected.

3. DATA AND METHODS

The study adopted a survey research design because the information needed to achieve stated objectives was obtained directly from respondents. The population of the study consists of 32 deposit money banks listed on the Central Bank of Nigeria database as of June 30, 2021 (CBN, 2021). Purposive sampling method was employed to select 4 banks based on the disclosure of fraud incidences in the 2021 published annual reports. Data were obtained from primary sources using a well-structured questionnaire administered via Google Forms. Descriptive statistics and Ordinary Least Square (OLS) regression were used to analyze the data gathered.

Model Specification

The model was specified in line with the study conducted by Ewa et al. (2020) on the evaluation of forensic accounting techniques in fraud prevention/detection in the banking sector in Nigeria. This study digresses from the study based on the removal of some variables such as ratio analysis and fraud prevention/detection and inclusion of computer-assisted audit techniques (CAAT) and detection of asset misappropriation. The model is mathematically stated as follows:

$$OF = f(FA) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \ldots\ldots\ldots.. (i)$$

$$FA = f(DMT, CAAT, TDA) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. (ii)$$

$$DAM_t = \beta_o + \beta_1 DMT_t + \beta_2 CAAT_t + \beta_3 TDA_t + \mu_t \ldots\ldots\ldots (iii)$$

OF = Occupational Fraud= Dependent variable
FA = Forensic Accounting = Independent variable
Where:
DAM =Detection of Asset Misappropriation
DMT = Data Mining Techniques
CAAT = Computer Assisted Audit Techniques
TDA = Trend Analysis
$\beta_1, \beta_2,$ *and* β_3 *= Coefficient of the independent variables*

$t = period\,(2021)$

$\mu = error\,term$

4. RESULT INTERPRETATION AND DISCUSSION OF FINDINGS

Descriptive Statistics

Table 1 summarizes the basic statistical features of the series under consideration which includes the observation, mean, median, minimum, maximum, and standard deviation. The average occupational fraud (OF) is 1.766975 and the median OF is 1.777778; the average OF is less than the median. This is an indication that the OF is positively skewed. Also, the standard deviation of 0.288997 indicates a small spread.

The average data mining technique (DMT) is 1.712302 and the median DMT is 1.714286. From the result, the average DMT is less than the median which indicates a positively skewed series. Also, there seems to be a small spread as indicated by the standard deviation value of 0.300897.

Similarly, the computer-assisted audit technique (CAAT) on average is 1.690476 and appears to be positively skewed given the median value of 1.714286 which is greater than the average value. As revealed by the standard deviation value of 0.282680, there seems to be an evidence of small variability from the average value.

Lastly, the average trend analysis (TDA) of 1.654762 and median TDA of 1.571429 indicates that the variable is negatively skewed with a standard deviation of 0.274163 indicating a small spread around the mean value.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Median	Maximum	Minimum	Skewness	Std. Dev.
OF	72	1.766975	1.777778	2.555556	1.111111	0.155699	0.288997
DMT	72	1.712302	1.714286	2.571429	1.000000	0.018403	0.300897
CAAT	72	1.690476	1.714286	2.571429	1.000000	0.189164	0.282680
TDA	72	1.654762	1.571429	2.142857	1.142857	-0.031938	0.274163

Source: **Researcher's Computation Using EVIEWS 9**

Table 2: Correlation Matrix

	OF	CAAT	DMT	TDA
Occupational Fraud	1.000000			
Computer Assisted Audit Techniques	0.161004	1.000000		
Data Mining Techniques	0.238846	0.080541	1.000000	
Trend Analysis	0.254181	0.322672	0.228514	1.000000

Source: **Researcher's Computation Using EVIEWS 9**

From table 3, the R^2 (coefficient of determination) test indicate 0.917484 and this implies that the explanatory variable has a 91.7 percent influence on the dependent variable and the remaining percent is captured by the error term, implying that other significant forensic accounting practices could affect occupational fraud besides identified variables; therefore, 91.7% of the variations in occupational fraud is explained by forensic accounting, which is a good fit. To further confirm the goodness of fit of the model, the adjusted R^2 shows that even if all the unobserved variables are included in the model, 90.2% of the variations in occupational fraud are still explained by the explanatory variables. The overall result shows that forensic accounting techniques positively and significantly affect the detection of occupational fraud in deposit money banks. Also, the Durbin Watson statistics of 1.75 suggests the absence of serial correlation. This indicates that there is no correlation among the error term of each of the variables. Based on the result of the analysis, the null hypothesis is accepted.

The result shows that data mining technique (DMT) with a probability value of .0007 at a 5% level of significance has a positive and significant effect on occupational fraud detection while computer-assisted audit technique (CAAT) with a probability value of .0259 at 5% level of significance has a positive and significant effect on occupational fraud detection. Lastly, trend analysis (TDA) with a probability value of .0054 at a 5% level of significance has a positive and significant effect on occupational fraud detection. Conclusively, data mining technique (DMT), computer-assisted audit technique (CAAT), and trend analysis (TDA) are significant in the detection of occupational fraud (DOF) in Nigerian deposit money banks.

Furthermore, the positive and significant effects of forensic accounting techniques on Nigerian deposit money banks show their effectiveness in detecting occupational fraud. The outcome concurs with the results of Mohammed et al. (2022); Adesola et al. (2020); Ewa (2022); Okoye et al. (2020); Oladipipo et al. (2019); Henry et al. (2017); among other. The result negates the position of Bingilar et al. (2021); Bassey et al. (2017), among others.

Table 3: OLS Estimate of Forensic Accounting and Occupational Fraud

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAAT	0.296607	0.130301	2.276324	0.0259
DMT	0.380120	0.107310	3.542247	0.0007
TDA	-0.363624	0.126708	2.869776	0.0054
R-squared	0.917484	Mean dependent var		1.766975
Adjusted R-squared	0.901904	S.D. dependent var		0.288997
S.E. of regression	0.300321	Akaike info criterion		0.472845
Sum squared resid	6.223303	Schwarz criterion		0.567706
Log likelihood	-14.02242	Hannan-Quinn criter.		0.510609
Durbin-Watson stat	1.752582			

Source: **Researcher's Computation Using EVIEWS 9**

Discussion of Findings

The study found that the occurrence of employee fraud in Nigerian deposit money banks is high, therefore, for Nigerian deposit money banks to detect occupational fraud, job rotation and annual leave should be mandatory for all staff while also ensuring proper segregation of duties, restricted access to office assets and properties, frequently train employees on fraud prevention and ensuring that strict sanctions are in place as preventive measures. It was revealed that cash suppression and cash pilferage are the most common types of asset misappropriation fraud in Nigerian deposit money banks. The study also revealed that forensic accounting techniques aid the easy identification of anomalies in a large volume of data, extraction of duplicate records, testing the accuracy of transactions using dummy transactions, and enhance fraud detection through analysis of transaction patterns.

There are so many policy implications for the statistical relationship that emerged from the result of this study. Data mining technique revealed a positive and significant relationship with the detection of occupational fraud in Nigerian deposit money banks. This result is consistent with the apriori expectation stated in this research and concurred with the findings of Okoye et al. (2020); Ewa et al. (2020) among others. This implies that the application of data mining techniques such as a query on account entries and identification of anomalies/red flags will enhance the detection of occupational fraud.

On the other hand, computer-assisted audit technique is significant and positively related to the detection of occupational fraud in Nigerian deposit money banks. In the same way, the result is consistent with the apriori expectation. This connotes that the application of computer-assisted audit techniques through recalculation to ascertain the accuracy of transactions, testing the accuracy of processes through dummy transactions, and extraction of duplicate records will enhance the detection of occupational fraud. This is supported by Firas (2021), Okoye et al. (2020), among others.

Lastly, trend analysis showed a significant and positive relationship with the detection of occupational fraud in Nigerian deposit money banks. This reveals that close monitoring of employees' financial transactions and analysis of financial transactions to identify unusual occurrences in the spending patterns of employees will enhance the detection of occupational fraud. This is supported by Ewa (2022); Ewa et al. (2020) among others.

5.   CONCLUSION AND RECOMMENDATIONS

The study examined forensic accounting techniques and the detection of occupational fraud in Nigerian deposit money banks using data mining, computer-assisted audit techniques, and trend analysis. Although most existing studies have explored corruption and financial statement fraud and how forensic accounting influences the detection of such fraud in Nigeria; there is a need to investigate the effect of forensic accounting on asset misappropriation fraud as well; hence this study. Trend analysis showed a more significant effect on the detection of occupational fraud; therefore, identification of anomalies in transaction patterns, analysis of a sequence of transaction patterns, use of audit software to extract duplicate transactions, use of dummy transactions to test the accuracy of processes, close monitoring of employee transaction pattern and daily call-over of employee transaction vouchers had the most significant positive effect occupational fraud detection. The study, therefore, recommends that the central bank of Nigeria should ensure;

Deposit money banks be mandated to install commercial data mining software in the internal control system to aid an effective and efficient query and search on transaction entries to identify anomalies in transaction patterns.

Computer-assisted audit software should be adopted by deposit money banks and enhanced with features to identify inconsistencies and duplicate transactions.

Deposit money banks should enhance the internal control systems with trend analysis features that will monitor the financial transaction patterns of employees' thereby uncovering asset misappropriation fraud in the system.

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