

Internal Audit Proactive Function in Fraud Risk Controls in Banks

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Abstract: *This research was conducted to bridge the gap in the scarcity of academic studies on internal audit proactive function in fraud risk controls. The study applied four internal audit proactive explanatory variables: (Integrated Risk Management Database IRMD; Systematic Error Signal SES; Modern Fraud Detection Networks MFDN; and Continuous Financial Transaction Review CFTR). The Methodology applied primary data on 15 banks with a staff population of 668 that was reduced to 400 sample size that formed the respondents, after applying Taro Yamane's formulae. The valid responses from the returned instrument used were 213 respondents. The study employed Likert Scale rating, Descriptive statistics and ANOVA analyses. The overall P value is 0.733 and this is significant at 5% level that made us to reject the null hypotheses. The adjusted F-Statistic shows that 0.84 (84%) of the four independent variables (IRMD, SES, MFDN and CFTR) combined, actively controls fraud risk in banks. Our study concludes that the four independent variables of internal audit proactive function control fraud risk in the sampled banks in Nigeria. We recommend that firms should apply the four variables in fraud risk control. The implications for entities are to translate the findings into business practice with care, because these are only academic research findings.*

Keywords: Integrated Risk Management, Systematic Error Signal, Continuous Financial Transaction Review, Modern Fraud Detection, Internal Audit Proactive, Fraud Risk Control.

Background of the Study

In general terms, risk is part of any human effort. Both corporate bodies and human beings are exposed to risks of different levels and degrees. The management of any organization, whether working in the public sector, whether working in the private sector, aims to achieve its objectives and as a result they monitor and try to reduce inherent risks. Risk control is achieved by managing them effectively, namely by implementing an adequate risk management system. It is significant that some new risks are completely voluntary, and some are created by peoples' action or through the nature of activities, (Vasile & Croitoru, 2012). Risk management/control is the systematic application of management procedures and practices which provides the necessary information to addressing risk, (World Custom Organization, 2010). The modern risk management started after 1955 and up-to 1970, the concept covered more on insurance market and through that it developed to complement several other risk management activities, (Dionne, 2013). This made companies to diversify portfolios of physical assets and began to develop other areas of risk insurance to cover many areas of risk in the business. Risk management is an important concept related to safety and financial integrity of any organization, and risk assessment is an important part of its strategic development. The strategy of an organization on risk management should be that all the risks it faces must be identified, assessed, monitored and managed also be maintained in a certain limit, and finally be accepted by the entity's management. Therefore, risk management is the process of identifying, analyzing and responding to the risks that the organization faces and is exposed to in daily business decisions. The aim is to optimize the organization's exposure to risk in order to prevent losses, avoid threats and exploit opportunities. The necessity for risk management has come up based on the changes on the strategic corporate/business operating environment and the expansion in transaction volumes that have as well affected the methods corporations approach and handle risk, (WCO, 2010). Every business increase has a corresponding increase of uncertainties that drive corporate management to desire a better structured and systematic way to handle risks. It is through risk management that corporations address the increasing demand of the modern business operating environment and the consequent risks by endeavoring to address these risks whenever they are found, (Ugwu, I. V., 2020). It is the desires for a better structured and systematic way to handle risks that brought the necessity of the word "fraud" risk management that covers numerous types of fraud caused by environment, technology, humans, organizations and politics. Fraud in the other hand is an activity that takes place in a social setting and has severe consequences for the economy, corporations, and individuals (Silverstone & Sheetz, 2007). Fraud is as old as corporations (Onogun, 2009; Adedeji, 2005). There is no doubt that proper fraud risk management or control is seen as one of the guiding principles associated with modern business management, (ISPWG, 2008). The formal financial crisis has its root from the failure of the sub-prime mortgage market as a result of improper fraud risk management and control in the USA. One of the main causes of the global financial crisis was lack of appropriate and effective regulatory framework in developed countries and ethical failings of highly powered bankers and business persons' insensitivity in fraud risk management (Lewis, Joseph & Roach, 2011; Hamilton & Gabriel, 2012; Osisioma, 2012). This problem was complicated by the existence of an integrated and interconnected global community which reflected the vulnerability and openness of world economies to contagious risks and shocks today (Raja, 2008). In Nigeria alone, several legislations were put in place to reduce and to alleviate and if possible to eradicate the occurrence and incidences of fraud risk in

the industry (Owolabi, 2010). In fact, several measures have been taken through the enactment of laws and rules to curb fraud menace. Some of the popular and prominent among them are (CAMD 1990 and BOFID, 1999 etc, (Ugwu I. V. (2020).

Statement of the Problems

But, globally has this been proactively addressed: as regards risk control systems? Well, fraud risk management sagas are the same even in Nigeria and it has become the most intractable problems of modern day business. Improper fraud risks managements have had sever negative consequences on the country and its global image. Lack of proactive fraud risk management and related problems have caused instability in the Nigerian economy resulting to a high mortality rate of business organizations and the consequent losses of revenue, huge financial losses to business organizations and their customers, depletion of shareholders funds and capital base as well as loss of confidence in business investment (Hamilton & Gabriel, 2012). Public concern is growing by the day and management vigilance is not improving even with the aid of computerization, (Ugwu I. V, 2020). Fraud in an audit of a “financial Report” has increased external auditors responsibilities in this area (Coram, Ferguson & Moroney, (2001). As a result, the auditing profession has faced more lawsuits from these years, (Brandon & Mueller, 2006; Lys & Watts, 1999; Palmrose, 1997; Paceni, Hillson & Sinason, 2000; Sonnier, Lassar & Lassar, 2012). Consequently, shareholders attribute their blames to auditors and auditors denounce full responsibilities and declare that management has much to attribute on the audit failure as a result of insensitivity to improper fraud risk management and control, (Porter, 2012; Razeal & Crumbly. 2007).

Literatures have had it that external audit is terribly bad at fraud detection and the scopes of their responsibility do not cover full fraud risk management A survey by (Pricewaterhouse Coopers, 2011), showed that perhaps only about 2 percent of frauds were detected through external auditor (Taylor, 2011). Historically, management had believed that external auditors would uncover fraud but the emergence of Sarbanes–Oxley specifically holds management responsible for fraud risk management and internal audit is an extension of management (Loftus, 2011). Thus, it is expected that internal audit detects weakness in management operations and provides a basis for correcting deficiencies that have eluded the first line of defense before these deficiencies become uncontrollable or are exposed in the external auditors report (Eden & Moriah 1996). The institute of internal Auditors (11A) provides mandatory guidance for internal auditors in its internal professional practices framework (IPPF) through the International Standard for the practice of Internal Audit function in fraud risk management (Standards) (11A, 2009a). Several standards outline the role of the internal audit function in detecting, preventing, and monitoring fraud risks and addressing those risks in audits and investigation (11A, 2009c). 11A standard 1200, proficiency and due professional care, require that internal auditors have sufficient knowledge to evaluate the risk of fraud in their organization (11A Standard 2006). Thus, responding to senior management and the board require that internal audit function report to the board any fraud risks found during their investigations under 11A standard 2120, of fraud Risk Management, (Burnaby, Howe & Muehlmann, 2012). This has actually given a mandate to internal audit to shift greater focus on fraud risk control using proactive systems. Generally in prior literature, there is a dearth of academic studies that have focused on proactive internal audit function in fraud risk specifically and especially in Nigerian context. This study goes further to find out the proactive roles of internal audit in fraud risk using listed Nigeria banks.

Objectives of the Study

The main aim of this study is to determine the internal audit proactive function in fraud risk controls in banks. Other specific objectives of the study are to determine the followings:

- Internal audit integrated risk management controls in fraud risk;
- Internal audit systematic error signal controls in fraud risk;
- Internal audit modern fraud detection networks controls in fraud risk; and,
- Internal audit continuous financial transaction review controls in fraud risk.

Research Questions

- To what extent does internal audit integrated risk management, controls fraud risk?
- To what extent does internal audit systematic error signal, controls fraud risk?
- To what extent does internal audit modern fraud detection network, controls fraud risk?
- To what extent does internal audit continuous financial transaction review, controls fraud risk in Nigeria banks?

Hypotheses of the Study

- Internal audit integrated risk management is not statistically significant in controlling fraud risk in banks;
- Internal audit systematic error signal is not statistically significant in controlling fraud risk in banks;
- Internal audit modern fraud detection is not statistically significant in controlling fraud risk in banks; and,
- Internal audit continuous financial transaction review is not statistically significant in controlling fraud risk in banks;

Significance of the Study

This research work provides literatures as regards internal Audit proactive variables on fraud risk controls in banks. Others: It will benefit companies by the efficiency of internal audit function in fraud risk management procedures, increase projects success; 2) It will “adds values through improving the control and monitoring environment within organizations to detect fraud” (Coran et al, 2011); 3) Corporate taxes paid to the government will increase as the applications of the findings reduce the incidence of fraud and also increase profitability of organizations, (Burnaly, Howe & Muehimnn, 2012); and finally, as a scientifically studied topic in management it serves as a reference.

Review Of Related Literature

Conceptual Framework

Internal Audit

A background opinion was put forward concerning internal audit by (Brink & Cashin, 1958), that internal audit emerged as a special segment of the broad field of accounting, utilizing the basic techniques and method of auditing. They, accepted the fact that the public accountants and internal auditor by using many of the same techniques leads to a mistaken assumption that there is little difference in the work or in ultimate objectives. The internal auditor, like any audit, is concerned with the investigation of the validity of representation, but in his case the representations' with which he is concerned cover a much wider range and have to do with many matters where the relationship to accounts is often somewhat remote. In addition, the internal auditor, being a company man, has a more vital interest in all types of company operations and its quite mutually more deeply interested in helping to make those operations as profitable as possible. Thus to a greater extent, management services come to influence this thinking and general approach (Brink & Cashin, 1958). A wider definition of internal audit came in 1971, 1981 and 1990 after revising the statement of responsibilities by the Institute of Internal Auditors (IIA). The standard contained the following definition and objectives that "Internal auditing is an independent appraisal activity established within an organization as a service to the organization. It is a control which functions by examining and evaluating the adequacy and effectiveness of other controls. The objective of the internal auditing is to assist members of the organization in the effective discharge of their responsibilities'. To this end, internal audit furnishes them with analysis, appraisal, recommendations, counsel and information concerning the activities reviewed. Therefore, the audit objective includes promoting effective control at reasonable cost, (Ugwu I. V, 2020)

Concept of Risk

The word "risk" derives from the Italian word, 'risicare', which means "to dare". From the definition, risk is a choice, it is not fate. This then, follows that the word risk is not an option, but a choice that depicts a kind of permanent nature that exposes one to risk in everyday life, and there can be a control over it by proper management. Existing literatures have not a unanimously accepted definition of risk. Some of the most commonly used definitions stated that: "Risk is the possibility of obtaining favorable or unfavorable results in a future action expressed in terms of probabilities." Or "Risk is a possible future event whose production could cause some losses." Or "Risk is the threat that an event or action to affect in a negative manner the capacity of an organization to achieve its planned goals, (Vasile and Croitoru, 2012). Risk definitions can be mainly based on two words: Probability and Consequences. There are some definitions that states that risk focus only on the probability of the occurrence of an event; while others focus on both the probability of risk manifestation and the consequences of the event. This then includes risks and the threats: threat is an event with a low probability of manifestation, but with high negative consequences, since the probability of manifestation is difficult to assess in these cases; while risk is an event with a higher probability of occurrence, for which there is sufficient information to rate the probability and consequences. If we compare only negative results on the fact that some concepts about risk are focused only on negative events, while others take into account all variables, both threats and opportunities, (Vasile and Croitoru, 2012; Karin M. Smith, .2018). Further, risk is related to profitability and loss. Achieving the expected result of an activity is under the influence of random factors that accompany in all stages of its development regardless of the domain of activity. Vasile and Croitoru, (2012) continued that the probability of risk occurrence is the possibility that the risk materializes and it can be appreciated or determined by measurement, when the nature of risk and available information permit such evaluation. The risk impact is a consequence of the results (objectives) when risk materializes. But some literature has stated that inherent risk is the risk that exists naturally in any activity and is defined as "the risk existing before the implementation of internal control measures to reduce it" or "all risks that threaten the entity/organization and may be internal or external risks, measurable or immeasurable" (Karin M. Smith, .2018). The fact remains that residual risk is the risk remaining after implementation of internal control measures. The residual risk should be monitored in order to maintain it at accepted levels. Risk appetite is the level of exposure that the organization is prepared to accept, namely the risk tolerated by the organization. Some have recommend that organizations' management should bear in mind that risks cannot be avoided and under these conditions to be concerned by their evaluation to keep them "under control" at levels considered acceptable, tolerated by the organization, and not to seek the total elimination of them, as this can lead to other unexpected and uncontrolled risks. Proactive risk control is being viewed as a step further in proper fraud risk management.

Concept of Fraud Risk Control/Management

Fraud risk management is defined as the systematic application of management policies, procedures and practices to the tasks of establishing the context, and to those of identifying, evaluating and treating risks (Hodges, 2000). Again, Anderson and Terp as in (Na Ranong & Phuenngam, 2009), defined fraud risk management as a process that should seek to eliminate, reduce and control risks, enhance benefits and avoid detriments from speculative exposures. The main objective of fraud risk management is to maximize the potential of success and minimize the probability of future losses. Thus the risk that becomes problematic can negatively affect cost, time, quality, quantity and whole system performance. Fraud risk management is an area of paramount importance to any organization. The fact being that every entity is exposed to risks but an effective fraud risk management is necessary for the improvement of any business performance (Williams, 2002). The definition of fraud risk management give by Committee of Sponsoring Organization of Tradeway Commission (Coso, 2004) say that "...fraud risk management is a process,

affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives". Fraud risk management is the process to manage the potential risks by identifying, analyzing and addressing them. The process can help also to reduce the negative impact and the emerging opportunities. This outcome help to mitigate the likely hood of risk occurring and the negative impact when it occurs. From the definition, fraud risk management involves identifying, measuring, monitoring and controlling risks. It is to establish that those involved should have a clear view of fraud risk management and fulfill the business operational strategy and objectives.

Internal Audit Proactive Fraud Risk Control

Proactive has been defined by dictionary as an, anticipation, forward-looking to deal with an expected change or difficulty. It is dealing with a problem as it props up. It is a way to prevent future problems. It is based on auditors focusing on issue detection. While it is helpful to detect problems, we are increasingly coming to the realization that deterring and preventing issues is better than detecting and having to correct them later. This is the essence of being proactive (Graham, 2019). The general functions of internal auditors is seen as that of identifying errors that have already occurred and reviewing procedures that are already in place. This after the fact" audit function does have its place now however "future issues must also be addressed. In this regards, Bullen, (1995) said adopting a proactive approach internal audit function can directly address the causes of weakness that expose corporations to loss by fraud and theft and make impact. In the same views, Murdock, (2019) stated that traditionally, internal auditing was done retroactively. That means that we have historically reviewed decisions, activities and transactions after they occurred to determine whether those were done according to some criteria (e.g. laws, regulations, policies, procedures and contractual terms). The results were then used to provide an opinion on the overall conditions in the program or process reviewed. This methodology has relied on this practice and it has been used widely for a long time, one of the issues with this after-the-event approach is that the actions have already occurred. It is based on auditors focusing on issue of detection. Proactive is on deterring and preventing events which are better than detecting and having to correct them later. Proper fraud risk management demands that internal audit adapt a proactive measure to combat fraud. This could be possible by implementing the set fraud risk framework to prevent and detect fraudulent and suspicious activities from all carders' of management. Internal audit function needs to let the employers and other stakeholders know that fraud is taken very serious in the organization and therefore cannot be tolerated at any level of management, (PWC, 2014).

The essence of being proactive was stated in the Standard 2100 – Nature of Work that "The internal audit activity must evaluate and contribute to the improvement of the organization's governance, risk management, and control processes using a systematic, disciplined, and risk-based approach. Internal audit credibility and value are enhanced when auditors are proactive, and their evaluations offer new insights and consider future impact." Being proactive and considering the future seems to be a departure from the common practice for some internal auditors, but it is one of requirements to proactively combat fraud. As part of this strategy, firms have to implement a mechanism to prioritize audits and support proactive examinations of higher-risk compliance operations. The value of proactive audits is tangible – such audits provide important insights into how a compliance program is functioning, need for improvement and enhancement of company compliance and financial controls. If problems are identified, a root cause analysis can provide insights that apply across the company and ultimately lead to proactive interventions to prevent problems before they occur.

(DataVisor, 2019) said, embracing the Concept of Proactive Fraud Management is a kind of psychological battle waged against fraudsters. It's an attempt to "get into the head" of malicious actors, to try and understand what they're going to do next, and where and how they're going to do it. Proactive fraud prevention is a sort of mash-up of weather forecasting, profiling, and good old-fashioned detective work. Proactive means neutralizing attacks before they can launch and before damage can occur. Karin Smith (2018) said, Proactive Measures to Fight Fraud includes: The Fraud Triangle; Fraud Schemes by Industry – Government and Public Administration; Fraud Prevention Culture which includes to conduct proactive auditing; Proactive auditing is an approach by conducting an analytical procedure Identify area (likely risk area) Identify account balances impacted (cash and revenue) Identify key factors to be used in the analysis (number of participants, price of program) calculate expected revenues and compare to actual Investigate if logical reason for the variance document results and review with management and finally follow up on identified issues

Integrated Risk Management Database

Integrated risk management (IRM) is a set of practices and processes supported by a risk-aware culture and enabling technologies, that improves decision making and performance through an integrated view of how well an organization manages its unique set of risks. Gartner defines integrated risk management (IRM) as "a set of practices and processes supported by a risk-aware culture and enabling technologies that improves decision making and performance through an integrated view of how well an organization manages its unique set of risks." IRM focuses on how firms make risk-based decisions about adding technology to streamline the critical business processes. Graham suggested an Integrated Risk Management Implementation Guide to includes Idea Source in seeing "risk management a must be opportunistic. He said that this means understanding that risk embodies both favorable as well as unfavorable unexpected outcomes. Risk management is a technique for improving risk taking. Felix Kloman, sees risk management as an inherent part of good management which requires an agreement on an approach that is integrated with corporate strategy that outlines exposures, issues and potential problem areas. IRM creates a system, not dissimilar from regular

organizational performance review (and, hopefully, as part of it) where internal auditors look not just at performance and events, but identify, in a systematic way, important gaps, variations and exposures that let management get ahead of their possible impact, i.e. mitigate. Integrated risk management database encourages better up-front planning. It also equips the organization to assess if its policies and capabilities are adequately aligned to the desired strategy.

Graham continued that systematic application of risk management has been adopted differently in organizations. Practically many have applied the term as Integrated Risk Management; while others as Enterprise Risk management. But the choice of integrated is deliberate. Risk management cannot be seen as a new management system, existing independently and separated from the way in which organization manages itself, makes decisions, allocates resources and holds people accountable. Internal audit function can apply IRM in a specific manner to control fraud before it occurs. Managing risk in an integrated way can mean everything from using financial instruments to managing specific financial exposures, from effectively responding to rapid changes in the organizational environment to reacting to natural disasters and political instability or changes in direction.

According to Graham, Integrated risk management includes three specific areas such as: Financial risk management and this means accurately evaluating market, liquidity and credit exposures and proposing courses of action to buffer the risks. In addition, it entails projecting spending patterns against budget to make course corrections that could threaten budgetary discipline. Another one is operational risk management which comes up-to continuously assessing the effectiveness of internal controls, measuring and identifying weak areas to mitigate the risk of failure of those controls. IRM entails the observant use of operational data to identify risks and potential opportunities for system improvement. There is also strategic and business risk management which is regarded as assessing risks related to planning and management processes that support an organization's business plan and model and also evaluating the impact of external and internal variables, such as market dynamics and major events. These are seen as the basis for an overall framework for integrated risk management, enabling organizations to address the unique character of different types of risk while also ensuring that risks are mitigated in an integrated fashion and from a strategic perspective.

Internal Audit systematic error signal

As stated by Ku (1969), "systematic error is a fixed deviation that is inherent in each and every measurement." Hence, the measurements can be corrected for the systematic error if the magnitude and direction of the systematic error are known. Complex devices make it difficult to predict their accuracy. Systematic errors are errors that are not determined by chance but are introduced by an inaccuracy (involving either the observation or measurement process) inherent to the system. Systematic error may also refer to an error with a non-zero mean, the effect of which is not reduced when observations are averaged. Errors are normally classified in three categories: systematic errors, random errors, and blunders. Systematic errors are due to identified causes and can, in principle, be eliminated. Errors of this type result in measured values that are consistently too high or consistently too low. Systematic error signal is a proactive means to control fraud. It could go through data mining to classify, cluster, and segment the data and automatically find associations and rules in the data that may signify interesting patterns, including those related to fraud. It can also go through pattern recognition to detect approximate classes, clusters, or patterns of suspicious behavior either automatically (unsupervised) or to match given inputs. It can also make use of machine learning techniques to automatically identify characteristics of fraud. Neural network can also apply to independently generate classification, clustering, generalization, and forecasting that can then be compared against conclusions raised in internal audits or formal financial documents, (Palshikar 2018; Al-Khatib, Adnan M. 2012). It can necessitate the use of machine learning and artificial intelligence for 'supervised' and 'unsupervised' learning. They can be used to seek for accounts, customers, suppliers, etc. that behave 'unusually' in order to output suspicion scores, rules or visual anomalies, depending on the method. (Michalski., Bratko, & Kubat, 1998; Bolton & Hand 2002).

Modern Fraud Detection Networks

Yufeng Kou, Chang-Tien, Sirwongwattana and Huang (2004) are of the view that several modern techniques in detecting fraud are continually being developed and applied to many business fields. Chaudhary, Yadav and Mallick (2012) also opined that fraud detection includes monitoring of the spending behavior of users/ customers in order to determination, detection, or avoidance of undesirable behavior. There are several modern fraud detection network that internal audit can apply in proactive fraud detection. These modern techniques are based on Data mining, Machine learning, Sequence Alignment, Fuzzy Logic, Genetic Programming, Artificial Intelligence etc., and these techniques can be combined successfully to obtain a high fraud coverage combined with a low or high false alarm rate. Several other modern fraud detection networks include: Credit card fraud and this is divided into two types: Offline fraud and On-line fraud. Telecommunication Fraud detection techniques Hansen, McDonald, Messier, and Bell, 1996 as in (Chaudhary, et al 2012) used a powerful generalized response model to predict management fraud. Their Model includes the "probit and logit" techniques.

Foster & Stine (2004) presented a model to forecast personal bankruptcy among users of credit card and one among the model is called neural network which is defined as a set of interconnected nodes designed to represent functioning of the human brain. Researchers show that neural network have several associated methods from statistics and numerical analysis into their networks and are given cases, nonlinear mapping relations from the input space to output space. Neural networks can learn and summarizes the internal assumptions of data even without knowledge of the potential data principles in advance. Rumelhart, (1986) stated that Neural networks topologies, or architectures, formed by organizing nodes into layers and attach layers of neurons with modified weighted interconnections And it can match its own behavior to the new environment along with the results of formation of evolution capability from present environment to the new possible situation. Dorronsoro et al as in (Chaudhary, et al 2012)

developed accessible online fraud detection system technically which has some base on a neural classifier. On the other hand, (Ezawa & Norton, as in (Chaudhary, et al 2012) said that Bayesian networks are also one technique to detect fraud, and have been applied to detect fraud in the telecommunications industry and also in the credit card industry Maes et al. as in (Chaudhary, et al 2012). Again, Logistic Regression: (Altman, Marco and Flitman, as in (Chaudhary, et al 2012) stated that data mining tasks has more and more statistical model that involves discriminant analysis, regression analysis, multiple- logistic regression, etc. Logistic regression (LR) is useful for situations and can predict the presence or absence of a characteristic or outcome based on values of a set of predictor variables. For predictive purposes, algorithms are often acclaimed as a means of detecting fraud. Chan et al. (1999) has developed an algorithm for prediction of suspect behavior. Wheeler & Aitken as in (Chaudhary, et al 2012) formed the idea of combining different algorithms to maximize the power of prediction; while Wheeler & Aitken, presents different algorithms: diagnostic algorithms, diagnostic resolution strategies, best match algorithms, density selection algorithms, probabilistic curve algorithms and negative selection algorithms. Further, clustering techniques has two parts and have been suggested for behavioral fraud by Bolton & Hand as in (Chaudhary, et al 2012). They are: Peer group analysis which is a system that allows identifying accounts that are behaving differently from others at one moment in time whereas previously, they were behaving the same and Signals of suspicious behavior are a sudden transaction for a high amount, and a high frequency of usage without any knowledge to cardholder. Then, outliers are a basic form of non-standard attention that can be used for fraud detection. It is also an observation that deviates much from other observations that arises suspicion that it was generated by a different mechanism is known as outlier.

Continuous Financial Transaction Review

In a simple term, financial transaction is an agreement, or communication that is carried out between a buyer and a seller to exchange goods and services for payment. It is viewed as a change in the status of the finances of two or more businesses or individuals. This does not necessarily matters whether the goods or services are exchanged at one time, and the money paid at another. Again, financial transaction is any action that exchanges or substitutes financial capital for others with different maturities (Balasubramanyan., Berger., & Koepke 2019). Literatures on financial mathematics analyze financial transactions and the risks associated with them (Tian, & Yan 2018; Deyoung, Gron, Torna, & Winton). Abad-Segura and González-Zamar (2020) said that the elements that make up a financial transaction, considered as any non-simultaneous exchange of financial capital, are the financial capital that is exchanged; the valuation function that governs the financial exchange; the origin or delivery of the first capital; the maturity of the first capital; (the person who gives the first capital acquires a position, creditor) lender or creditor status; (the person who receives the capital takes a debit) borrower or debtor status; the end or delivery of the last capital, maturity of the last capital; the duration of the transaction, the time that elapses between the beginning and the end of the transaction; and the periodic installments, return of capital owed, from the debtor position (Abad Segura, 2017; Conklin, 2016). More so, financial transactions are divided into simple ones, with a single capital at the beginning; and another at the end of the spectrum, which includes the study of interest and discount transactions and is complex, are rents, which involve payment streams, such as what happens in the case of the installments of a loan. The change in the value of capital is due to the fact that capital, the sum of money loaned in a financial transaction, earns interest over time; that is, the remuneration of the capital loaned for its use over time (Gil Peláez, 1993; Gil Luezas & Gil Peláez, 1987).

In another form, Continuous financial transaction embeds automation, control, and period-end tasks within day-to-day activities, allowing the rigid accounting calendar to more closely mirror the broader business. Continuous financial accounting reviews the way business process works, emphasizing real-time processing, emphasizing skilled employees' daily activities, and deep analysis of business transactions. In continuous financial transaction reviews, finance and accounting managers deliver accurate and real time analysis of the organization's financial performance at periods when needed. Continuous financial transaction review is a modern approach that empowers real time financial intelligence and compels finance and accounting managers to provide unprecedented value to the larger business through real time controls and reviews of every transaction. The automation technology behind Continuous Accounting allows data and transactions to be processed and reconciled at any time, and if necessary, flagged for further research. Analysis of the data may be performed continuously, based on business cycles and the decisions that need to be made. Continuous financial accounting review allows automating many processes and embedding close activities throughout the period and makes workloads to be more evenly distributed over time, (Gil Peláez, 1993; Gil Luezas & Gil Peláez, 1987).

Theoretical Review

Fraud Risk Management Theory

Risk management is a formal part of decision-making processes within companies traceable to the late 1940 and early 1950's. There were two earlier strands of risk management practice that have more recently been integrated under the broader concept of corporation risk management. One of these relate to the management of financial risks. Financial risk management began, as a formal system, at the same time as the development of financial derivatives products such as financial futures, option and swaps. Business continuation management extended the practice of contingency planning by requiring more comprehensive internal systems. The corporate responses to the current threats provide a recent example of business continuation management in action. Both contingency planning and business continuation management approaches, however, were limited, since they presupposed that strategic choices had already been made and their role was continued to the effective implementation of their strategies

(Dickinson, 2001; Deleoach, 2000; Doherty, 2000). On the other hand, Classical decision theory presupposes the risk of a decision alternative in terms of variation in possible outcomes, in their likelihoods, and in their subjective values (Benaroch, Lichtenstein & Robinson, 2006). This view considers a decision maker to be passive in management of fraud risk as it assumes that all alternatives are given and their features cannot be changed to affect risk. By contrast, according to the behavioral school's view of fraud risk management, decision makers associate fraud risk management with a probability concept and with the magnitude of a bad outcome (March & Shapira, 1987), but they do not treat uncertainty over positive good outcome as an important aspect of fraud risk management, (Benaroch et al, 2006). Moreover, bringing fraud risk under controls; is seen as entailing the active mastering of the environmental, for example, by negotiating uncertainty involving contracts or by delaying decisions, (Benaroch et al, 2006). The real option view sees fraud risk management to be a proactive process aimed at favorably skewing the variation in expected outcome by means of building the flexibility needed to respond to the occurrence of fraud risk with corrective action (Benaroch et al, 2002). In other words, risk management includes responding to the occurrence of fraud risk proactively, in consideration of external and internal fraud risk within the business environment with corrective action needs.

Empirical Review

S. Ward, (2003) studied the approaches to Integrated Risk Management: A Multi-Dimensional Framework and stated that terms such as 'integrated risk management' and 'enterprise-wide risk management' are increasingly used to capture the notion of risk management embedded into all aspects of an organization's activities. The research argues that integrated risk management can be developed in six separable directions or dimensions: the interpretation of risk as threat, opportunity or uncertainty; the decisions to which risk management is applied; the purpose of the risk management activity; the nature of the process employed; the parties involved; and the resources applied.

Almasi-Hashiani, Hasanzade, Eshrati and Morasae, (2012) studied an introduction to common systematic errors by considering the continuous increase in number of published articles by Iranian researchers in recent years, the matter of quality in design, implementation, analysis and publication of articles is receiving its relevant attention. Of issues in quality of articles and studies are methodological errors and different kinds of errors that a researcher may fall into during various phases of a study. They found that of these errors systematic ones (or biases) can be counted.

Marcos Laffin & Tayse Gomes, (2013) studied the prevention of error and fraud in accounting and aims to present the legal mechanisms for such restraint in the context of Accounting Science and concluded that the main factors that increase the risk of fraud or error in the economic result of the absence of internal audits and external, as well as the pressure imposed by unstable market and competitive businesses.

In the same way, (Ernst & Young, 2012) conducted a global survey about evolving role of internal audit using questionnaire and found out that strong risk management has a positive impact on long –term earnings performance in organization.

A consolidated study was made by (Coetzee et al, 2009) on perceptions of the role of the internal audit function in respect of fraud risk management. They found that communication regarding risk issues is lacking. Although, the internal audit function's role is perceived as positive yet, the views of senior management and those of the chairperson of the audit committees differ substantially, and the two parties expect an increase in internal audit function involvement in the fraud risk management related issues.

At the same time (DeZoort & Harrison 2008) studied on an evaluation of internal auditor responsibility for fraud detection using data collected from six countries of Australia, Belgium, Canada, Mexico and US. On the overall, the internal auditors in the study reported moderate levels of responsibility for fraud detection and account participants reported higher overall detection responsibility than anonymous participants. Perceived, responsibility for detecting fraud was higher in the misappropriation of assets case than in either the fraudulent financial reporting or corruption case.

Another study made by US examined the size of internal audit budgets using percentages and regression analysis and found that they were positively related to company size; financial leverage, service or utility industries, inventory operating flows: and audit committee review of the internal audit budget (Carcellors et al, 2005). Results showed that internal audit budgets were negatively related to the percentage of internal auditing that was outsourced. The overall conclusion was that companies facing higher fraud risk will increase their organizational monitoring through internal audit providing evidence of the importance of the internal audit function.

Two other researchers, (Church & McMillan, 2001) investigated on factors affecting internal auditors consideration of financial reporting during analytical procedures and comparing financial statements and discovered that when considering fraudulent financial reporting, internal auditors think that fraud is the reason for an unexpected difference in income.

Research Methodology

Research Design

In this study, a simple questionnaire survey research design was employed to find the potentials of internal audit proactive function in fraud risk management in banks.

Population and Samples of the study

Out of the population of functional banks in Nigeria, 15 banks were purposefully selected for the study, (Uzoagulu, 1998). The population element of the study consists of the internal auditors, accountants and fraud auditors in each of the banks of interest in this study.

Table 1: Population Elements of the Study: internal auditor, fraud audit and accountant staff in each of the 15 Banks

S/N	Description of Institution	Internal Audit Staff	Fraud Audit Staff	Accountants Staff	Total
1.	Bank A	3	5	16	24
2.	Bank B	3	4	30	37
3.	Bank C	5	9	53	67
4.	Bank D	2	3	40	45
5.	Bank E	4	6	44	54
6.	Bank F	1	2	8	11
7.	Bank G	2	3	21	26
8.	Bank H	3	5	50	58
9.	Bank I	1	1	14	16
10.	Bank J	3	8	77	88
11.	Bank K	8	10	41	59
12.	Bank L	1	2	15	18
13.	Bank M	6	7	58	71
14.	Bank N	2	3	76	81
15.	Bank O	1	2	10	13
		45	70	553	668

Source: Authors Computations of Primary Data sourced from the Banks.

Sample and Sampling Technique

The research employed Taro Yamane's formulae to determine the sample for the study. The formula is given as:

$$n = \frac{N}{1 + N(e)^2} \text{ where; } n = \text{Sample Size; } N = \text{Population Size (668); } E = \text{Level of Significance (0.05); } 1 = \text{Constant.}$$

Using the formula, therefore, we have:

$$\text{Sample Size} = \frac{668}{1 + 668(0.05)^2} = \frac{668}{669(0.0025)} = \frac{668}{1.67} = 400.$$

Therefore, the sample size for this study is 400 respondents (accountants, internal and fraud audit staff). Each of the 15 chosen commercial /deposit money banks represents a sample frame and the 400 determined sample size is distributed among these institutions as follows:

Table 2: Distribution of sample size among the 15 Banks studied.

S/N.	DESCRIPTION OF INSTITUTIONS	SAMPLE SIZE FOR EACH INSTITUTION
1.	Bank A	24/668 x 400 = 14
2.	Bank B	37/668 x 400 = 22
3.	Bank C	67/668 x 400 = 40
4.	Bank D	45/668 x 400 = 28
5.	Bank E	54/668 x 400 = 32
6.	Bank F	11/668 x 400 = 6
7.	Bank G	26/668 x 400 = 16
8.	Bank H	58/668 x 400 = 35
9.	Bank I	16/668 x 400 = 10
10.	Bank J	88/668 x 400 = 52
11.	Bank K	59/668 x 400 = 35
12.	Bank L	18/668 x 400 = 11
13.	Bank M	71/668 x 400 = 42
14.	Bank N	81/668 x 400 = 49
15.	Bank O	13/668 x 400 = 8
		Total Sample Size = 400

Source: Author's Computation of Proportion of the 400 sample size to each of the banks' population

Methods of Data Collection and Analyses

This study used questionnaire based on Likert Scale rating of Strongly Agree (5 points), Agree (4 points), Strongly Disagree (3 points), Disagree (2 points), and Undecided (1 points).

Only questionnaires correctly filled and returned were used for analysis. In order to determine the degree of respondents' position in each of the variables of interest, normal values were assigned to the options in each variable as has been stated above, that is 5, 4, 3, 2, and 1. A cut off was determined by finding the mean of the nominal values assigned to the options in each variable using the formula: $\bar{X} = \frac{\sum X}{n}$, where; \bar{X} = Mean; X = the score; n = number of items.

Thus we have $\bar{X} = \frac{5+4+3+2+1}{5} = \frac{15}{5} = 3$. Our decision rule, therefore, is that any mean within 3.0 and above was considered as significant by the respondents, while a mean that is below 3.0 is taken as not significant.

To further strengthen the empirical analyses and test the posited hypotheses, ANOVA was employed to test the equality or otherwise of the agreement of the three categories of bank staff on the internal audit proactive function as an instrument for fraud risk management in Nigeria Banks. SPSS statistical analyses software was employed to carry out the analyses.

Likert Scale was used to measure the extent of the respondents' agreement on each variable factor. Descriptive statistics of percentage, mean and standard deviation were applied in the study.

Validity and Reliability of the instrument

This research used both face and content validity to check whether the instrument covered what were required and the appropriateness of the measuring instrument on the study. The appropriateness of the face and content was validated by the researcher and other experts (Uzoagulu, 1998), and certified to be used to carry out the study. Reliability of the instrument was established. The Cronback Alpha correlation of items calculated yield, 0.765 which is very high above the minimum stated by Cronback. The table of the reliability of the instrument of the study is found in appendix.

Data Analyses and Presentation

Research Question One Analyses

Question I: To what extent does internal audit integrated risk management controls fraud risk?

Table 3: Internal Audit Integrated Risk Management Controls In Fraud Risk

Job description	To what extent do you agree that internal audit integrated risk management control fraud risk?					Total
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
Internal auditors	0 0%	3 7.3%	2 4.9%	19 46.3%	17 41.7%	41 100.0%
Fraud auditors	0 0%	2 3.8%	4 7.7%	29 56.8%	17 32.7%	52 100.0%
Accountants	2 1.7%	4 3.3%	10 8.3%	54 45.0%	50 41.7%	120 100.0%

Source: Author's Computation, 2019

From table 3 above, both internal and fraud auditors did not respond on strongly disagreed. There were 2 respondents of accountants with 1.7% who strongly disagreed. But disagreed opinion had 3 respondents from internal auditors with a corresponding 7.3%, 2 respondents having 3.8% from fraud auditors and 4 respondents of accountants having 3.3%. Undecided responses were: 2 (4.9%) for internal auditors, 4 (7.7%) for fraud auditors and accountants with (10) 8.3%. There are more respondents who agreed than those who strongly agreed. Internal auditors who agreed were 19(46.5%), while those who strongly agreed were 17(41.5%). Fraud auditors who agreed are 29 (46.3%), while those who strongly agreed had a total of 17 (32.0%). Further, accountants who agreed are 54 (45%) and those who strongly agreed 50 (41.7%). These indicated that more respondents believed that internal audit role focus on integrated risk management combats fraud

Research Question Two Analyses

Question 4: To what extent does internal audit systematic error signal controls fraud risk in banks?

Table 4: Internal Audit Systematic Error Signal Controls Fraud Risk In Banks

Job description	To what extent do you agreed that internal audit systematic error signal control fraud risk in banks?					Total
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
Internal auditors	1 2.4%	3 3.8%	5 12.2%	16 39.0%	16 39.0%	41 100.0%
Fraud auditors	0 0%	2 3.8%	6 11.5%	32 61%	12 23.1%	52 100.0%

Accountants	4 3.3%	6 5.0%	9 7.5%	53 44.2%	48 40.0%	120 100.0%
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Source: Author’s Computation, 2019

In the above table Accountants who agreed were 53 (44.2%) and strongly agreed were 48 (40%). Fraud auditors who agreed had 32 (61.5%), while internal auditors who agreed came up to 16 (39%). Internal auditors who agreed and those who strongly agreed had an equal rating of 16 (39%). Undecided respondents of internal auditors were 5 (12.2%), fraud auditors representing 6 (11.6%), accountants representing 9 (7.5%). Both strongly disagreed and disagreed were 1 (2.4), 3(7.3%) for internal auditors; fraud auditors had nobody who strongly disagreed but had 2 disagreed persons representing 3.8%, while accountants who strongly disagreed had 4 (3.3) and had 6 (5%), who disagreed.

Research Question Three Analyses

Question 3: To what extent does internal audit modern fraud detection network controls fraud risk in banks?

Table 5 Internal Audit Modern Fraud Detection Network Function In Fraud Risk

Job description	To what extent do you agreed that internal audit modern fraud detection network control risk in banks?					Total
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
Internal auditors	2 4.9%	1 4.9%	3 7.3%	22 53.7%	12 29.3%	41 100.0%
Fraud auditors	0 0%	3 5.8%	8 15.4%	24 46.2%	17 32.7%	52 100.0%
Accountants	3 2.5%	9 7.5%	9 7.5%	52 43.3%	47 39.2%	120 100.0%

Source: Author’s Computation, 2019

Result from the above table, Internal auditors who strongly agreed were 12 (29.3%), and fraud auditors had 32 (32.7%), while accountants scored 47 (39.2%). In agreed opinion, Internal auditors had a 22 (53.7%), fraud auditors scored 24 (46.2%) and accountants had 52 (43.3%). The undecided opinion were internal auditors 3 (7.3%) and fraud auditors who had 3 (15.4%), while accountants had 9 (7.5%). Further, internal auditors who strongly disagreed were 2 (4.9%), while those who disagreed were 2 (4.9%). Fraud auditors had zero in strongly disagreed and 3 (5.8) disagreed. Accountants who strongly disagreed were 3 (2.5%) and those who disagreed scored 9 (7.5%).

Research Question Four Analyses

Question 4: To what extent does internal audit continuous financial transaction review controls fraud risk in banks?

Table 3 Continuous Financial Transaction Review Control Fraud Risk

Job description	To what extent do you agreed that internal audit continuous financial transaction review control fraud risk in banks?					Total
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
Internal auditors	3 7.3%	3 7.3%	3 7.3%	16 39.0%	16 39.0%	41 100.0%
Fraud auditors	2 3.8%	2 3.8%	4 7.7%	18 34.6%	26 50.0%	52 100.0%
Accountants	3 2.5%	6 5.0%	8 6.7%	53 44.2%	50 41.7%	120 100.0%

Source: Author’s Computation, 2019

From the table above strongly agreed were: Internal auditors 16 (39%); fraud auditors 26 (50%); while accountants 50 (41.7%). Those who agreed were as follows: Internal auditors 16 (39%); fraud auditors 18 (34.6%); accountants 53 (44.2%). Undecided responses were: Internal auditors 3 (7.3%); fraud auditors 4 (7.7%); while accountants 3 (8.7%). The internal auditors who indicated strongly disagreed and disagreed had an equal response of 3 (7.3%); Fraud auditors also had an equal response of 2 (3.8%) respectively for strongly agreed and disagreed opinions.

Individual and group means and standard deviations scores on internal audit proactive function.

Reinstate Main Objective: To what extent does internal audit proactive function, controls fraud risk in banks?

Individual and group mean and standard deviation scores of respondents on internal audit proactive control

Variables	Internal auditors			Fraud Auditors			Accountants			Total		
	Me a	Std	N	Mea n	Std	N	Me a	Std	N	Me a	Std	N
Focus on Integrated Risk Management Database	4.27	0.81	41	4.20	0.86	52	4.01	0.98	120	4.16	0.88	213
Focus on Systematic Error Signal	4.13	0.95	41	4.40	0.84	52	3.69	1.01	120	3.95	0.93	213
Focus on Modern Fraud Detection Network	4.22	0.83	41	4.00	0.97	52	4.05	0.97	120	4.07	0.92	213
Focus on Continuous Financial Transaction Review	3.88	1.11	41	4.24	0.83	52	4.02	0.99	120	4.05	0.98	213
Average Total	4.12	0.93		4.21	0.88		3.94	0.98				

Source: Author’s Computation, 2019.

The average proactive mean total responses of the fraud auditors showed 4.21 and the standard deviation is 0.88; internal auditors’ proactive average mean response is 4.12 with a proactive average standard deviation of 0.93; while the total proactive mean of Accountants is 3.94 with a proactive standard deviation of 0.98. It was only the mean of the various groups that differed a little, though they fall within the acceptance range of above 3.00. But the standard deviations of the three job groups indicated just a little variability showing that the majority of the scores were tightly clustered around the mean (Bartz, 1963). Therefore, the groups have homogeneity in their various individual and group opinions that internal audit proactive role combats fraud risk in banks.

Hypotheses Testing

Reinstated Hypotheses in the Table Below:

Table 6 ANOVA Hypotheses

		Sum of Squares	D f	Mean Square	F	Sig.
H i: Internal audit integrated risk management role is statistically significant in combating fraud risk in banks;	Between Groups	10.916	4	2.729	0.06	0.95
	Within Groups	133.995	208	.644		
	Total	144.911	212			
H ii: Internal audit systematic error signal role is statistically significant in combating fraud risk in banks;	Between Groups	4.382	4	1.096	0.20	0.82
	Within Groups	178.923	208	.860		
	Total	183.305	212			
H iii: Internal audit modern fraud detection role is statistically significant in combating fraud risk in banks; and,	Between Groups	4.549	4	1.137	0.22	0.80
	Within Groups	191.657	208	.921		
	Total	196.207	212			
H iv: Internal audit continuous financial transaction review role is statistically significant in combating fraud risk in banks;	Between Groups	6.177	4	1.544	0.36	0.36
	Within Groups	212.311	208	1.021		
	Total	218.488	212			
					0.84	

Source: Author’s Computation of ANOVA @ 5% Significant.

The adjusted F-Statistic of the model shows that 0.84 (84%) of the four proactive role variables combined actively impact fraud risk in banks; while the balance of 26% are controlled by other factors not captured in the study variables but are outside the scope

of this study. The output of ANOVA gave the P values of the individual independent variables as 0.95, 0.82, 0.80 and 0.36 with the overall value of 0.733 at a 5% significant level. Then applying the decision rule, P value $0.733 > 0.05$, we therefore conclude with the decision rule and reject the null hypothesis and accept the alternate hypothesis that the application is significant in fraud risk combats and thus declare that there is no significant difference among the agreement of internal auditors, fraud auditors and accountants that internal audit proactive function significantly combats fraud risk in banks.

Findings, Discussions Of the Findings and Summary of Findings

The findings of the study after the analysis and the testing of the hypothesis showed that the null hypotheses of the four independent variables were not upheld, i.e. they were all rejected. This implied that the respondents agreed categorically that the application of internal audit proactive function is significant in combating fraud risk in banks.

Discussions of the Findings

Table of ANOVA depicted that the four null hypotheses of the study were rejected by the respondents. Any observed difference in their opinion was due to chances (Uzoagulu, 1998). The findings in respect of the hypotheses is in consonant with the findings of (Sinason, Hillison & Pacini, 2001; Ernest & Young, 2010; Kuenkaikaew & Rutgers, 2013) who were of the opinion that internal audit proactive role function ensures that fraud risk analysis is dynamic and that transactions are blocked prior to fraudulent executions. Also, this findings support the views of (Bullen, 1995) that internal audit function in fraud risk should not be seen as identifying errors that have already occurred and reviewing the procedures that are already in place but, should be a focus on addressing the future issues that causes weakness that exposes corporations to fraud, theft and profit increase. This finding agrees with the option view theory stated in the study. Moreover, bringing fraud risk under controls; is seen as entailing the active mastering of the environmental, for example, by negotiating uncertainty involving contracts or by delaying decisions, MacCrimmon & Weh Rung as in (Benaroch et al, 2006). The real option view sees fraud risk management to be a proactive process aimed at favorably skewing the variation in expected outcome by means of building the flexibility needed to respond to the occurrence of fraud risk with corrective action (Benaroch et al, 2002). In other words, risk management includes responding to the occurrence of fraud risk proactively, in consideration of external and internal fraud risk within the business environment. The opinion of (Ernest & Young, 2011) also agreed with the finding that internal audit proactive function extends more than the normal audit function.

This finding may be attributed to several factors, some of which are inherent in the operations of proactive function as perceived by the respondents and also stated in (Ernest & Young, 2011). Some of these factors include more on integrated risk management database, Systematic error signal, Modern fraud detection network and continuous financial transaction review.

Internal audit role of integrated risk management in fraud risk agrees with the arguments of Stephen Ward, (2003) that integrated risk management can be developed in six separable directions or dimensions: • the interpretation of risk as threat, opportunity or uncertainty; • the decisions to which risk management is applied; • the purpose of the risk management activity; • the nature of the process employed; • the parties involved; and • the resources applied for fraud risk control.

In further discussion, we found that all the individual and group mean scores were all very high above 3.0 study limits. Also the Likert analyses had high percentages of agreed and strongly agreed responses in the tables to support the subject matter.

Further, the statement of (Ernst and Young, 2009) was that internal audit function should ensure that the risk assessment identifies those risks that are presenting the most significant risk and communicating them appropriately. Part of the advisory management decision role was to facilitate risk management decision across the organization. It was also agreed in (IIA 2011, Global Internal Audit Survey, 2011) that internal audit function understood fraud risk management concepts and the value proposition better than most employees and is the bases for allowing them to function without restriction. Furthermore, Ernst & Young, 2006; IIA, Global Survey, 2009), also agreed that internal audit proactive function should get more involvement proactive fraud management.

Summary of Findings

This research was conducted to bridge the gap in the scarcity of academic studies and knowledge in the area internal audit proactive fraud risk combats. The populations of the study were made up of all the functioning money deposit banks, out of which 15 banks were randomly selected (Uzoagulu, 1998). The population elements were 668 internal audit staff, fraud audit staff and accountant staff in all the 15 banks in Enugu banking Zone. Taro Yamane's formulae were applied to determine the sample size of the study which gave a total number of 400 sample size for the study. The valid responses from the returned instrument used for the analyses to guide this study were 213 respondents. Likert Scale was used to analyze the responses in strongly agreed, agreed, strongly disagreed, disagreed, and undecided. Descriptive statistics of percentages, mean and standard and ANOVA parametric analysis was employed to test the four hypotheses of the respondent's opinions. The study results revealed that all null hypotheses tested were rejected and the alternate hypotheses were accepted. The adjusted F-Statistic of the model shows that 0.84 (84%) of the four proactive role variables combined, actively impact fraud risk in banks; while the balance of 26% are controlled by other factors not captured in the study variables but are outside the scope of this study. The output of ANOVA gave the P values of the individual values of the independent variables as 0.95, 0.82, 0.80 and 0.36 with the overall value of 0.733 that showed significant at 5% level.

Implications of the Findings

The results of this study have a far-reaching implication for banks, business owners, future entrepreneurs, other financial institutions etc. From the findings, we point out that special attention has to be directed towards the four identified internal

proactive variables: Integrated risk management; Systematic error signal; Modern fraud detection; and Continuous financial transaction that have been viewed to be significant in fraud risk combat. These variables are to be considered not only in the operations of the existing business plans but also in getting involved in new ventures and loan applications. Several business entities have collapsed both in Nigeria and elsewhere due to improper fraud risk management (Onogun, 2009; Adedeji, 2005; Osisioma, 2012; Owolabi, 2010; Adeyemi, 2012; Robu, Chesan, Mironiuc & Cap, 2012). Therefore, the implication for entities is to translate the findings into business practice. But, care must be taken in the application of these findings, because these are only academic research findings.

Conclusions of the study

The findings of this study serve as a basis for making the following conclusions.

1. This study found four variables that were perceived to be significant in controlling fraud risk in banks and these are:
2. integrated risk management is significant in controlling fraud risk;
3. systematic error signal is significant in controlling fraud risk;
4. modern fraud detection network is significant in controlling fraud risk; and
5. continuous financial transaction review is also significant in controlling fraud risk in banks.

Recommendations

This study makes the following recommendations based on the findings: Internal audit proactive function in fraud risk management can be brought down to the grassroots of every management with focus on integrated risk management database, systematic error signal, modern fraud detection and continuous financial transaction review in fraud risk management.

Current Research Contributions

This contributes four variables and gave a construction of a new conceptual framework, and systematic empirical review of literatures covering internal audit function variables that will serve as a reference to other researchers.

Lack of methodology in application of fraud risk principles in planning internal audit function was found by (Coetzee & Lubee, 2013). But, the methodological contribution of this research is found on the design, comparative methods, systematic techniques and systematic analysis that were employed in the study.

Suggestions for Further Study

Further study can be on the impact of internal audit proactive function in fraud risk management.

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Appendix

Reliability Statistics

Cronbach's Alpha	N of Items
.765	4

Questionnaire

Dear Respondent,

Topic: "Internal Audit Proactive Function in Fraud Risk Management"

I plead with you to assist me in completing this questionnaire for this study. I will treat the information provided confidentially. Tick your opinion and comment where necessary.

I therefore appreciate your kind urgent response to this.

Thanks.

Instructions:

i) Please tick (✓) in your opinion as provided in each of the questions.

ii) State other comments if need be.

Please, indicate the extent to which you agree or disagree using the key. Key: SA = Strongly Agree; A = Agree; SD = Strongly Disagree; D = Disagree; U = Undecided 1.

To what extent do you agree that the following Internal Audit Proactive function, Controls Fraud Risk In Banks?

		SA	A	UN	D	SD
	Proactive Function					
1	To what extent do you agree that internal audit integrated risk management controls fraud risk?					
2	To what extent do you agreed that internal audit systematic error signal controls fraud risk in banks?					
3	To what extent do you agreed that internal audit modern fraud detection network controls risk in banks?					
4	To what extent do you agreed that internal audit continuous financial transaction review controls fraud risk in banks?					