



A Conceptual Examination of the Effect of Problem Representation on Mindset and Fraud Risk Assessment in the Nigerian Deposit Money Banks.

Olusoji Olumide Odukoya ^a, Rose Shamsiah Samsudin ^a, Oluwatoyin Muse Johnson Popoola
Tunku Puteri Intan Safinaz School of Accountancy, College of Business, University Utara Malaysia.
olusojiodukoya@gmail.com*

Abstract

Banks globally are known for their role of financial intermediation and when these functions are effectively and efficiently performed, the banking sector flourishes, facilitate economic growth and development. However, fraud has been established as a global threat to the viability of companies and organizations including financial institutions. Technological advancements and continuous introduction of new electronic financial products into banking operations and service delivery, has heightened the propensity for banking fraud. Subsequently, persistent incidence of fraud and forgeries in banks, in addition to constituting a threat to the continued survival and stability of the sector, hampers national economic developments and growth. The study's main objective is to evolve a functional and effective mechanism for minimizing the incidence of fraud and forgeries within the Nigerian deposit money banks. Subsequently, this study evolves an abstract structure on the intervening effect of problem representation on the forensic accountant and banking examiner's mindset capability and competence that is, fraud risk assessment which can be applied for prevention and detection of fraud within the deposit money banks. This study aims to disclose the affinity between the three constructs. Findings contribute to existing literature on forensic accounting, banking examination, mindset capability requirement, problem representation and fraud risk assessment of regulators regarding prevention and detection of fraud within deposit money banks.

Keywords: Forensic accountant, banking examiner, mindset, problem representation, fraud risk assessment, deposit money banks.

1. INTRODUCTION

The banking sector remains a critical factor for national economic development and growth. However, studies have shown that only a well-regulated, prudently managed, effectively and efficiently run banking system can stimulate national economic developments. Furthermore, prior studies have established that the ability of the banking system in any jurisdiction to stimulate economic development and growth depends on the stakeholders' implicit confidence and the degree of transparency in handling financial transactions with, confidence and minimal risk. Globally, these attributes constitute the minimum requirements for a safe and sound banking institution.

Regrettably, the Nigerian banking system is plagued by escalating incidence of fraud and forgeries and thus lack the capacity to meaningfully impact national economic growth. Subsequently, Nigeria remain under-developed, afflicted with rising incidence of insecurity, epileptic power supply, bad transportation and communication infrastructures, collapsed educational system and other related social vices. Hence, these adverse consequences of banking fraud and forgeries provide a motivation for this study.

Research findings further showed many factors that are responsible for the upsurge in the incidence of fraud and forgeries within deposit money banks in Nigeria. Among these factors, is the gap in capability and competence of forensic accountants and banking examiners who have primary responsibilities for prevention and detection of fraud. In effect, regulator's inability to stem consistent escalating incidence of fraud and its consequences on national economic developments and growth provide further motivations for this study. Hence, the study examine the effect of problem representation on the forensic accountant and banking examiner's mindset capability and fraud risk assessment in the quest for establishing enduring mechanism for preventing and detecting fraud within the Nigerian deposit money banks.

Fraud constitute a major impediment to business growth globally, and no organisation, institution, or country is immune from its negative effects and that includes the banking sector. In all works of life, whether in the public sector, business conglomerates, agro-industry, manufacturing, insurance, banking and all-over, consistent and concerted efforts are being made to combat the scourge. However, fraud has not and cannot be eradicated (Neo, Hollenbeck, Gerhart & Wright, 2017; Kariuki, 2013).

Furthermore, prior studies affirmed that the rate at which financial crimes, audit failures and accounting fraud occur, had serious negative economic consequences resulting in decline in the auditing profession's confidence rating (Popoola et al., 2015; Hogan et al., 2008; Houck et al., 2006).



In this regards, the failure of the auditor to detect fraud during audit assignment led to a decline in confidence within the profession and subsequent clamour for improvements in the quality of the auditor's work to a level where fraud detection could be easily accomplished during an audit engagement. (Huber, Popoola, Che-Ahmad & Samsudin, 2015; Chui & Pike, 2013; Hogan, Rezaee, Riley & Velury, 2008; Nicolaisen, 2005). This study align with findings of previous studies that most auditors are unable to detect fraud because they are not specialists in fraud matters. Furthermore, that differences exist between fraud examination and financial statements audit (DiGabriele, 2016; Awolowo, 2016; Chui & Pike, 2013).

In Nigeria, regulatory response to auditor's indictment and audit related fraud detection failure necessitate the Institute of Chartered Accountants of Nigeria to issue Nigerian Standards of Audit (NSA) No. 5 and Statements of Auditing Standards (SAS) No 99 (ICAN, 2005). The institute adopted the AICPA (2002) and thus affirmed the need for auditors to react to identified fraud induced risk of substantial misstatement through assignment of forensic accountants and information technology specialists (Popoola et al., 2013b; Chui, 2010; AICPA, 2002). Also, prior study, established disparity between fraud prevention, detection and financial statement audit (Davia, 2000). The study opine that only employment of techniques of forensic accounting aids prevention and detection of fraud.

Furthermore, sequel to persistent global fraud incidences, auditing and investigation scholars and other stakeholders have raised genuine concerns that with forensic accountants being invited for examination and investigation after the occurrence of most frauds and forgeries, the replacement of the auditors with forensic experts would appear imminent (Jenkins, Negangard & Oler, 2018; Popoola et al., 2016; Asare, Wright, & Zimbelman, 2015; Chui & Pike, 2013; Chui, 2010; Boritz, Kotchetova & Robinson, 2008; Hogan et al., 2008).

This study, however, explore the integration of both professionals for fraud prevention and detection. Hence, the study objective encapsulates examination of the effect of problem representation (PR) on mindset capability (MR) as an independent variable and fraud risk assessment (FRA) as a dependent variable of the forensic accountant and banking examiner within the deposit money banks.

The study objectives are to:

- a) Examine the relationship between mindset capability requirement and fraud risk assessment of forensic accountants and banking examiners within the deposit money banks.
- b) Examine the relationship between mindset capability requirement and problem representation of forensic accountants and banking examiners within the Nigerian deposit money banks.
- c) Examine the relationship between problem representation and fraud risk assessment of forensic accountants and banking examiners within the Nigerian deposit money banks.
- d) Explore how problem representation mediates the relationship between mindset capability requirement and fraud risk assessment of forensic accountants and banking examiners within the Nigerian deposit money banks.

Subsequently, this study is organised into three segments, namely; Literature review, Conceptual and theoretical framework, Hypothesis development, and Conclusion.

2. LITERATURE REVIEW

2.1 Review of banking regulation and Nigerian banking sector.

In Nigeria, banking activities are regulated by both the Central Bank of Nigeria (CBN) and the Nigeria Deposit Insurance Corporation (NDIC). The two regulators derived their regulatory powers from their respective enabling legislations namely; the CBN Act 1958 and its subsequent amendments as well as the NDIC Act 2004 as amended. The CBN as primary regulator, is responsible for granting and withdrawing operational banking license, policy formulation and reviews. The CBN also issue periodic circulars and carry out banking examination and supervision in pursuit of its regulatory powers. However, the second regulator, the NDIC is responsible for ensuring the safety of depositors' funds to ensure customers' confidence in the banking institution and ultimately a secured banking industry. They are charged with the responsibility for liquidating failed banks sequel to withdrawal of operating license of such banks by CBN.

In this regards, regulation connotes the rules governing banking operations. Prior researches of Singh (2016), Lucca et al., (2014), and Llewellyn (1986) established that banking regulation consist agreed behaviour based on distinct rules; that are



self, government, or external agency imposed through implicit or explicit agreements of the industry, which restricts business operations within financial institutions. This connotes that regulating the banking system encompasses special rules and laws employed by regulatory authorities to effectively supervise banking business operations.

In this regards, in Nigeria, a number of regulations and activities have been articulated to give effect to extant laws and also meet the growing complexities of running an efficient and effective banking institution. These regulation include, the code of corporate governance, prudential guidelines, risk-based supervision, introduction of universal banking, banking sector consolidation, foreign exchange regulation, credit risk management, revised banking model, money laundering and combating financing of terrorism, cross border consolidated supervision, non-interest banking, regulation of capital-the Basel accord and the establishment of the Assets Management Corporation of Nigeria (CBN, 2016).

Unfortunately, the adoption and implementations of these regulatory frameworks would appear not to have positive impacts on escalating incidence of banking fraud and forgeries within the Nigerian deposit money banks. This thus underscore the need for ascertaining the mindset capability and competence of forensic accountants and banking examiners charged with primary responsibilities for prevention and detection of banking fraud.

In order to complement regulatory authorities, strengthen the corporate governance mechanism on fraud prevention and detection, structures for deterrence of fraud were established in Nigeria. Subsequently, two agencies, namely, Independent Corrupt Practices Commission (ICPC, 2000) and the Economic and Financial Crimes Commission (EFCC, 2002) were assigned roles of prosecuting indicted persons on fraud and forgeries as well as other financial crimes. Thus, these two-fraud deterrent organisations play complementary roles to the supervisory and oversight functions of the two regulators in the quest for consolidating mechanisms for prevention and detection of banking fraud and forgeries within deposit money banks.

Banking system in Nigeria consists of Twenty-two (22) Commercial banks, 942 Micro-finance banks, Five (5) Discount houses, sixty-four (64) Finance companies and six (6) Development banks. It also include, Bureau-de-change (BDCs, Finance companies (FCs) and Primary mortgage institutions (PMIs). However, these financial institutions are broadly classified into three (3) categories, namely,

Deposit money banks, Specialised banks and Other financial institutions (CBN, 2016).

Nigerian deposit money banks currently has 22 licensed banks which operate from 5,450 branch networks. Their total assets as at December 31, 2017 stood at ₦38.53 billion, total deposit liability, ₦19.38 billion, total loans and advances, ₦15.91 billion and total shareholders' fund ₦2.66 billion (CBN, 2017). However, the annual report of the CBN and NDIC over the years provides detailed information on fraud and forgeries within the deposit money banks on yearly basis. Hence it becomes impossible to research into the incidence of fraud and forgeries in the other two categories of the Nigeria banking system due to non- availability of authentic and credible data bases.

The study thus focused on deposit money banks based on the availability of credible information on fraud and forgeries in the sector, its significance within the financial system value chain and tremendous impact on national economic growth and development.

2.2 Fraud Concept

Fraud entails deliberate concealment, misrepresentation, manipulation and exclusion of facts to the disadvantage of people and firms including banks. Fraud also include theft, appropriation, attempt to obtain illegally, misapply and expose organisational assets to harm (Gilbert & Wakefield, 2018; Levi, Burrows, Fleming, Hopkins & Mathew, 2007; Adeduro, 1998; Bostley & Drover, 1972).

Furthermore, Chartered Institute of Public Finance and Accountancy (CIPFA) asserts fraud as the intentional misrepresentation and concealment of material facts, omission of the truth for deception and manipulation to the financial detriments of an individual or organisation. Fraud includes embezzlement, theft, forgeries, misappropriation, and deliberate omission of truth (CIPFA, 2013).

Furthermore, prior studies have also established fraud as a universal problem with adverse impact on economic developments and growth. This is manifested in various corporate scandals and fraud including but not limited to Waste Management Scandal, Freddie Mac, Enron, Lehman Brothers, WorldCom, Parmalat, Ocean Capital Bhd, Transmile Group Bhd, Cadbury Plc and African Petroleum Plc to mention a few. Hence, fraud prevention and detection remains a global phenomenon (Schillermann, 2018); Elsayed, 2017; Wuerges, 2011).



According to Ekpo, Chime and Enor (2016) cited from KPMG global survey (2015), Nigeria accounted for the highest number of fraud cases in Africa. Consequently, due to persistent cases of corruption, banking fraud and forgeries, the Nigerian state remained an under-developed economy, lacking basic infrastructures like, good road networks and stable electricity supply. Furthermore, Nigeria is also plagued by, inadequate water supply and medical facilities; massive unemployment; persistent cases of insecurity to life and properties; decayed educational system; and other related social vices impeding its national development and growth (Lamorde, 2012).

Furthermore, prior studies assert that to prevent fraud, both the regulators and management must strengthen internal control (Huber et al., 2015; Chui & Pike, 2013; Pike, 2013). In relation to banking, this study aligns with prior studies which affirmed that fraud erode customers' confidence (Algamdi, Flechais & Jirotko (2015). It is therefore imminent that corporate governance mechanism within the deposit money banks must be strengthened in order to curtail the current increasing spate of fraud and forgeries.

Subsequently, further studies on prevention and detection of fraud become imperative especially within deposit money banks to stem the tide of persistent incidence of fraud and ultimately save Table 1.

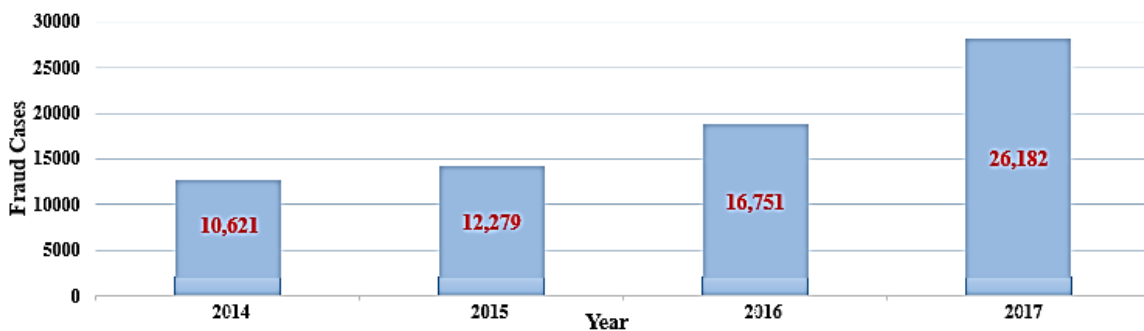
the institution from collapse. This study, therefore, offers a conceptual exploration of ways and means of equipping forensic accountants and banking examiners with the requisite and enhanced mindset capability and competence for banking fraud prevention and detection.

Evidence from annual reports of both Central Bank of Nigeria and the Nigerian Deposit Insurance Corporation confirmed that management, employees, customers or a combination of any of the three perpetrate frauds and forgeries through various means (CBN, 2015). According to the CBN Banking Supervision Report for 2015, the incidence of corporate governance and bank failure due to fraud remained persistent and unabated:

“13,100 cases of attempted fraud and forgeries were reported in 2015 (2014: 11,447 cases), which amounted to N17.8 billion (2014: N25.8 billion) and \$64.6million (2014: \$ 31.2 million out of which N3.5billion (2014:N4.8 billion and \$659,008.1 (2014: \$9.134.935.8)” were lost.

In addition, NDIC annual report for 2017 showed a 246% increase in the incidence of Fraud and forgeries within the Nigerian deposit money banks between 2014 and 2017 as shown in Table 1.

Total Number Of Fraud And Forgeries In Banks (2014 To 2017).



Total Number Of Fraud And Forgeries Cases In Banks

Source: NDIC Annual Report 2017.

In addition, prior studies exist on the origin of banking fraud, highlighted various means applicable towards prevention and detection of fraud as well as nature and dimensions of banking fraud. Ultimately, their findings affirmed fraud as preventable, provided the regulators and managements constantly review and strengthens internal control mechanism (Adetiloye, Olokoyo &

Taiwo, 2016; Chui & Pike, 2013; Adeyemo, 2012; Nwoji, 2011; Godwin 2009). Also, this study, aligns with other literatures on the origin of fraud in the deposit money banks and identify internal control weaknesses and governance ineptitude as contributing factors (Baz, Samsudin & Che-Ahmad, 2017; Agyemang, 2015; Cascarino, 2012; Daniel-Draz, 2011; Zaworski, 2005).





Unfortunately, both CBN and NDIC regulatory reviews, new policy formulations and implementations based on the research findings would appear to have failed to have positive impact on this problem. This may be attributed to lack of capability and competence due to disjointed focus, deficient mindset and poor attitude-to-work by the forensic accountants and banking examiners. Apparently, a need exist for the regulators to initiate new initiatives for harnessing all identified and crucial indices of fraud prevention and detection at the same time.

Subsequently, this study is not just a general fraud review within deposit money banks, rather, it is a deliberate focus on mindset capability and competence of the forensic accountants and banking examiners who constitute the human capital, deployed for the prevention and detection of fraud in the sector. This study opines that forensic accountants and banking examiners through the deployment of the right mindset capability and competence, complemented by a transparent and wholesome implementations of the numerous and extant banking legislations will be better equipped for the task of banking fraud prevention and detection.

2.3 Forensic Accountant mindset and Banking Examiner mindset

Mindset denotes a predictable mental attitude or state of mind which swings individual's behaviour in given situations. Mainly, mindset is the process, perception and distinct attitude which guides individual's recollection and interpretation of information (Gollwitzer & Keller, 2016; Gollwitzer, 2012 ; 1990). Also, mindset impacts an individual's thought process and ways of thinking. Furthermore, Falconer (2012) defines mindset as a qualitative motivation for action, state of mind, an unacknowledged, powerful but subtle feeling and core assumption that motivate participation, a feeling that is distinct from emotion.

Prior studies, Fujita and Carnevale (2012), Torelli and Kaikati (2009) submit that when individuals think abstractly and are focused on interpretation of actions, their behaviour is influenced and values become abstract representations of the ideal. In essence, mindset affects people's behaviour.

In summary, the differences that exist between the mindsets of the forensic accountant and banking examiner are premised on issues such as: education, training, experience, exposure, and skills. Thus, the forensic accountant's mindset embodies distinct ways of thinking whilst a banking examiner's thought is focused on the

examination of bank's transactions to evaluate availability, reliability, and adequacy of documentation, establish audit track (Wuerges, 2011; Chui, 2010).

Basically, forensic accountants are commissioned with the sole aim of making a categorical assertion on the occurrence of fraud (Wuerges, 2011). Furthermore, forensic experts believe that audit track is never a guarantee of financial transactions being fraud free, as fraudsters employ various avenues to conceal fraud by creating apparently legitimate audit trail.

Prior research reveal that in fraud detection assignments, forensic accountants are tactful, more dutiful and accomplished than banking examiners (Eliezer & Emmanuel 2015; Omondi 2013; Boritz et al., 2008). This study thus align with Chui (2010), posit that forensic accountant mindset is strategically superior to the banking examiner's mindset in fraud risk assessment.

2.4 Fraud Risk Assessment (FRA)

Fraud risk assessment (FRA) is a unique procedure for discerning and evaluating risk militating organisational goals' achievements. As noted by Huber, Popoola, Che-Ahmad and Samsudin, (2015), Chui and Pike (2013), Rezaee and Davani (2013), Wuerges (2011) and Chui (2010), fraud risk assessment facilitate an evaluation of an entity in order to establish the state of affairs, develop appropriate audit processes for risk identification and establish procedures for identifying the significance and possibility of fraud occurrence.

Furthermore, Popoola et al., (2016), opine that fraud risk assessment entails a dynamic and repetition of a cycle of processes for identifying and assessing risks to the attainment of organisational objectives. Fraud risk assessment thus demands that considerations be given to external environmental changes and its impact within activity models, which may ultimately make internal control ineffective.

Furthermore, fraud risk assessment is perceived as a strong tool for prevention of fraud and thus was endorsed to enhance auditor's competence in the quest for fraud prevention and detection (Payments, 2015; Subramanian, 2014; Knapp & Knapp, 2001). This study thus align with prior studies, Popoola (2015), Wuerges (2011), Chui (2010) which opine that fraud risk assessment in addition to signposting the focus of an audit also aid auditors in ascertaining the state of the organisation and stretch of audit procedures purposely required to establish the possibility and significance of fraud occurrence within the company.



For this study, fraud risk assessment is defined as the forensic accountant and banking examiner's capacity to access fraud risk to a distinct standard in the quest to prevent and detect fraud within the deposit money banks' operating environments.

2.5 Mindset Capability Requirement

Mindset denotes a predictable mental attitude or state of mind which influences an individual's behaviour in a particular direction under a given situation. Prior studies, Gollwitzer and Keller (2016), Herrmann and Brandstatter, (2015), Gollwitzer (2012; 1990) affirm that mindset is the perception, process and distinct attitude that guide individuals in the collation and interpretation of information. In addition, mindset impacts an individual's thought process and ways of thinking. Prior study, Falconer (2012) defines mindset as a qualitative motivation for action, state of mind, an unacknowledged, powerful but subtle feeling and core assumption that motivate participation, a feeling that is distinct from emotion. To be effective, the banking examiner's mindset must be sound and alert to the identification of red flags associated with significant fraud risk within the banking environment.

According to Ahmad et al., (2018), Feder (2000), efficient professionals working as forensic accountants and banking examiners that is, as intelligent and strategic fraud prevention and detections planners depend on overpowering mindset, when they encounter challenges in bureaucratic settings. Furthermore, Fujita and Carnevale (2012), Torelli and Kaikati (2009) submit that when individuals think abstractly and are focused on interpretation of actions, their behaviour become influenced and values also become abstract representations of the ideal. In essence, mindset affects people's behaviour. Therefore, for this study, the forensic accountant and banking examiner will become more effective when aided in the performance of their assigned duties by a sound and stable state of mind.

2.6 Problem Representation (PR)

Problem representation is recognised by scholars as a structure for internal reasoning that incorporate individuals' interpretation and understanding of problematic situations (Glover, Taylor & Wu, 2016; Mala & Chand, 2015; Bernard & Chi, 1993; Christ, 1993; Chi et al, 1981). Also, prior studies

establish that individuals ultimately cultivate problem representation once a need arises for decision-making (Popoola et al., 2016; Pitz & Sachs, 1984).

Thus, an underlying motive of problem representation is encouragement of an individual's comprehension of a problem and the problem resolution (Ilse, Tomczak & Welling, 2018; Tomasic & Akinbami, 2013; Reed, 2012; Markman & Gentner, 2001). Furthermore, problem representation permits individuals, to establish the significance of the work beyond rudimentary specifics that are provided prior to commencing the task (Mala & Chand, 2015; Lehmann & Norman, 2006; Thibodeau, 2003; Christ, 1993; Pitz & Sachs, 1984).

Furthermore, Larkin (2014), Nendaz et al., (2002), Bernard and Chi (1993), Christ, (1993) and Chi et al., (1981) define problem representation as the internal cognitive framework embodying people's comprehension and interpretation of a problem situation. As a forensic accountant, banking examiner or indeed any professional, the problems encountered are real-world and ill-structured hence highly interdisciplinary and evolving in nature. It is, therefore, necessary to evolve a pre-engagement matrix for addressing challenges that are encountered on the task. Thus, in the context of the deposit money banks, fraud risk assessment denote the forensic accountant and banking examiners' ability for accessing the risk of fraud prevalent within the banks to facilitate fraud prevention and detection within defined standards.

3. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

A conceptual framework refers to the researcher's understanding of the interactions between variables of the study. Thus, it is used to make conceptual distinctions and organise ideas. Conceptual framework identifies the variables required in the research investigation (Baz, Samsudin, Che-Ahmad & Popoola, 2016; Payment, 2015; Yearwood, 2011)

Furthermore, the conceptual framework in this study examine the forensic accountant and banking examiner's mindset capability requirement relative to fraud prevention and detection within Nigerian deposit money banks. Subsequently, the conceptual framework is provided in Figure 1.

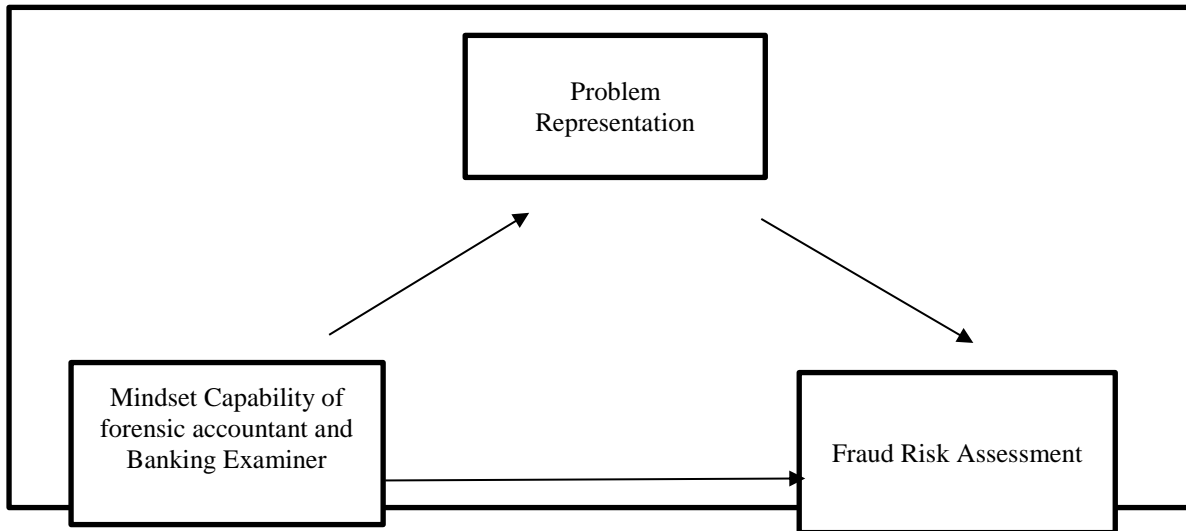


Figure. I:
Conceptual Framework.

Hypothesis Development

3.1 The Influence of Mindset on Fraud Risk Assessment in the Nigerian Deposit Money Banks

The first conceptual linkage in this study is the influence of mindset capability requirement on fraud risk assessment. Previous literature, suggest that a modest change in mindset capability produces considerable changes in performance and an imposing impact on person's resolve; assertiveness; and commitment to achieve set objectives (Popoola, Che-Ahmad & Samsudin, 2015; Chui, 2010; Davis et al., 2010; DiGabriele, 2008; Brandstatter & Frank, 2002).

This research, therefore, postulates thus:

H1: There is a significant relationship between mindset capability and fraud risk assessment of forensic accountants and banking examiner in the Nigerian deposit money banks.

3.2 Influence of Mindset on Problem Representation in the Nigerian Deposit Money banks

The second conceptual linkage of this study is the relationship between mindset and problem representation. Mindset capability requirement was found to have indirect influence on fraud risk assessment through the evolution of problem representation (Popoola, 2014; Basadur, Basadur & Licina, 2013; Lamorde, 2012; Kleinman & Palmon, 2007; Gupta & Govindarajan, 2002; Bargh & Chartrand, 2000). The association between mindset

capability and problem representation have been recognised by literature in accounting. More specifically, this studies produced empirical evidence supporting the assertion that sound mindset influences the development of individual problem representation and in turn inspires accurate assessment of fraud risk (Chiou, Wen-Bin, Wu & Cheng, 2015; Chiou et al., 2013; Torelli & Kaikati, 2009; Kadous & Sedor, 2004; Armour & Taylor, 2003).

This study thus asserts that a significant relationship exist between mindset and problem representation in Nigerian deposit money banks. Specifically, and for this reasoning, the hypothesis is formulated thus:

H2: There is a significant relationship between mindset capability and problem representation of forensic accountant and banking examiner within Nigerian deposit money banks.

3.3 Influence of Problem Representation on Fraud Risk Assessment in the Deposit Money banks

Prior studies have shown that problem representation has a resultant influence on individual's judgement and decision-making process (Mulia, Lasdi & Widjanarko, 2015; Viscusi, Phillips & Kroll, 2011; Denison, 2009; Kadous & Sedor, 2004). Furthermore, the study by Bierstaker et al., (1999) collaborates Kadous and



Sedor (2004). Furthermore, Popoola et al., (2015) found a significant positive relationship between problem representation and fraud risk assessment. This study, align with their findings thus formulate the hypothesis thus:

H3: There is a significant relationship between problem representation and fraud risk assessment of forensic accountant and banking examiner in the Deposit money banks.

3.4 Mediating influence of Problem Representation on Mindset Capability Requirement and Fraud Risk Assessment in the Nigerian Deposit money banks

Prior studies, Widhoyoko (2017), Rayaana, Samsudin, Ayoib, and Popoola (2016) affirmed a significant positive relationship between mindset capability component of fraud and fraud prevention. Also, prior research on empirical investigation of fraud risk assessment and mindset capability requirement on fraud related problem representation in Nigeria, Baz et al., (2016), Popoola et al., (2015) affirmed a significant positive relationships between mindset requirement (MR) and fraud risk assessment (FRA), significant positive relationship between mindset requirement (MR) and problem representation (PR) and significant positive relationship between problem representation (PR) and fraud risk assessment (FRA). Also, the study established that problem representation positively mediates mindset requirement (MR) and fraud risk assessment (FRA).

Based on these studies, the study formulates the hypothesis:

H4: Problem representation significantly mediate the relationship between mindset requirement and fraud risk assessment in the Nigerian deposit money banks.

3.5 Differences between Forensic Accountant and Banking Examiner Mindset and Problem Representation and Fraud Risk Assessment

Previous studies established that banking examiners like auditors appear not to be sensitive to symptomatic signs of fraud as evidence in the celebrated fraud cases like Enron, WorldCom, GT Bank Plc and Cadbury Plc (Popoola et al., 2015; Chui & Pike 2013; AICPA 2002).

Furthermore, the SAS No. 99, recommends that “an auditor respond to an identified risk of material misstatement due to fraud by assigning additional persons with specialised skills and knowledge, such

as forensic accountant and information technology (IT) specialist” (AICPA, 2002).

The standard advocated for auditors to acquire necessary forensic accounting mindset to facilitate fraud prevention and detection through fraud risk assessment with a view to act rationally and decisively on any evidence emanating from financial documents that links to fraud’s prevention and detection.

Subsequently, in the study, forensic accountant’s mindset differ from that of the banking examiner. Forensic accountants’ perspective to fraud investigation is distinctly focused establish existence of fraud, identify perpetrators, and highlight required remedial actions. However, banking examiners as auditor, “expresses opinion on the fairness or otherwise of reported financial instruments and risk assets as at reporting date. Also, banking examiners have been criticised for their inability to innovate that is, “think outside the box” (Popoola, 2014; PCAOB, 2007).

Clearly, based on specifics of differences between forensic accountants and banking examiners, this study intends to evaluate whether the two (2) category of professionals differ significantly in terms of their mindset capability; and competence that is, problem representation; and fraud risk assessment in the Nigerian deposit money banks. Thus, forensic accountants may have significantly higher levels of mindset; problem representation; and fraud risk assessment requirements than banking examiners.

Based on this reasoning, the following hypotheses are formulated:

H 5a: Forensic accountants have significant superior levels of mindset capability requirement than the banking examiners in the Nigerian deposit money banks.

H 5b: Forensic accountants have significant superior levels of problem representation competence requirement than the banking examiners in the Nigerian deposit money banks.

H5c: Forensic accountants have significant superior levels of fraud risk assessment competence requirement than the banking examiners in the Nigerian deposit money banks.

4. CONCLUSION

Fraud in deposit money banks has become an event which requires drastic but calculated efforts to resolve. The study applying the developed



conceptual framework and the four (4) hypotheses formulated found a significant relationship among the three (3) constructs of the study. Also, the study of the mediating influence of problem representation on fraud risk assessment and mindset capability towards fraud prevention and detection in the Nigerian deposit money banks is significant in terms of economic growth and development of a country. This study therefore,

develops a conceptual framework that can be deployed by forensic accountants and banking examiners working within deposit money banks to prevent and detect fraud. The study contributes to literature on banking examination, enhanced mindset capability, problem representation and fraud risk assessment of forensic accountants and banking examiners for fraud prevention and detection in the Nigerian banking sector.

REFERENCES

- Adeduro, A. A. (1998). "An investigation into frauds in banks". An unpublished thesis of University of Lagos. Administrative Sciences (UMAS) (ISSN: 2225-7225), Vol 2, 01-05.
- Adetiloye, K. A., Olokoyo, F. O., & Taiwo, J. N. (2016). Fraud prevention and internal control in the Nigerian banking system. *International Journal of Economics and Financial Issues*, 6(3), 1172-1179.
- Adeyemo, K. A. (2012). "Fraud in Nigerian banks: Deep-seated causes. Alternative and probable remedies". An unpublished thesis of Covenant University, Ogun state, Nigeria.
- Agyemang, J. (2015). Internal Control and Fraud Prevention. *International Journal of Management and Scientific Research*, 1(1), 230-257.
- Ahmad, C. A., Haron, H., Malik, M., Salleh, Z., Hariri, H., Khan, N. I., & Nelson, S. P. (2018). Fundamentals of auditing.
- AICPA, (2002). Statement on Auditing Standards (SAS) No. 99: Consideration of fraud in a financial statement audit. American Institute of Certified Public Accountants, Durham.
- Alghamdi, A., Flechais, I., Jirotko, M., (2015), *Security Practices for Households Bank Customers in the Kingdom of Saudi Arabia*. Retrieved from <https://www.usenix.org/>
- Armor, D. A., & Taylor, S. E. (2003). "The Effects of Mindset on Behaviour: Self-regulation in Deliberative and Implemental Frames of Mind". *Personality and social Psychology Bulletin*, 29 (1), 86-95.
- Asare, S. K., Wright, A., & Zimelman, M. F. (2015). Challenges facing auditors in detecting financial statement fraud: Insights from fraud investigations. *Journal of Forensic & Investigative Accounting*, 7(2), 63-112.
- Awolowo, I. F. (2016). Financial Statement Fraud: The need for a paradigm shift to Forensic accounting. *International Journal of economics and management engineering*, 10(3), 987-991.
- Basadur, M., Basadur, T., & Licina, G. (2013). Simplexity thinking. *Encyclopedia of creativity, invention, innovation and entrepreneurship*, 1617-1634.
- Baz, R., Samsudin, R. S., Che-Ahmad, A., & Popoola, O. (2016). Capability component of fraud and fraud prevention in the Saudi Arabian banking sector. *International Journal of Economics and Financial Issues*, 6, S4.
- Baz, R., Samsudin, R. S., & Che-Ahmad, A. (2017). The role of internal control and information sharing in preventing fraud in the Saudi banks. *Journal of Accounting and Financial Management*, 3(1), 7-13.
- Bedard, J. & Chi, M. T. H. (1993). "Expertise in Auditing" *Auditing: A Journal of Practice and theory* 12 (Supplement): 21- 45.
- Bierstaker, J. L., Bedard, J. C., & Biggs, S. F. (1999). "The Role of Problem Representation Shifts in Auditor Decision Processes in Analytical Procedures". *Auditing: A Journal of Practice and Theory* 18 (1): 18-36.
- Boritz, J. E., Kotchetova, N., & Robinson, L. A. (2008, January). Planning fraud detection procedures: Forensic accountants vs auditors. In *IFA conference, accessed July* (Vol. 22, p. 2009).
- Bostley, R. W. B., and Dover, C. B (1972). Sheldon's practice and the law of banking. 10th ed. English language book society, Macdonald, and Evans, London.
- Bierstaker, J. L., Bedard, J. C., & Biggs, S. F. (1999). "The Role of Problem Representation Shifts in Auditor Decision Processes in Analytical Procedures". *Auditing: A Journal of Practice and Theory* 18 (1): 18-36.



- Cascarino, R. E. (2012). *Corporate Fraud and Internal Control: A Framework for Prevention*. John Wiley & Sons.
- CBN, (2015). Central Bank of Nigeria annual report and accounts, 2015.
- CBN, (2016). Banking system regulation and supervision in Nigeria (1976-2016), Central Bank of Nigeria Bullion, 40(1), 27-36.
- CBN, (2017). Central Bank of Nigeria annual report and accounts, 2017.
- CIPFA, (2013). *The Investigation of Fraud in the Public Sector*, London, CIPFA (2013) 12th edition, p. 3.
- Chiou, W. B., Wu, W. H., & Chang, M. H. (2013). Think abstractly, smoke less: A brief construal-level intervention can promote self-control, leading to reduced cigarette consumption among current smokers. *Addiction*, 108(5), 985-992.
- Chiou, W. B., Wu, W. H., & Cheng, Y. Y. (2015). Beauty against tobacco control: viewing photos of attractive women may induce a mating mindset, leading to reduced self-control over smoking among male smokers. *Evolution and Human Behavior*, 36(3), 218-223.
- Christ, M. Y. (1993). Evidence on the Nature of Audit Planning Problem Representations: An examination of Audit Free Recalls: *The Accounting Review* 66 (2): 304- 322.
- Chui, L. (2010), An experimental examination of the effects of fraud specialist and audit mindsets on fraud risk assessment and on the development of fraud related problem representation, ProQuest LLC UMI 3456520, 789 East Eisenhower Parkway, USA.
- Chui, L., & Pike, B. (2013). Auditors' responsibility for fraud detection: New wine in old bottles? *Journal of Forensic and Investigative Accounting*.
- Daniel-Draz, M.S., (2011), *Fraud Prevention: Improving internal controls*. Retrieved on June 7, 2015, at <http://www.csoonline.com/article/2127917/fraud-prevention/fraud-prevention--improvinginternal-controls.html>.
- Davia, H. R. (2000). *Fraud 101: Techniques and strategies for detection* New York, N, John Wiley & Sons, Inc.
- Davis, C., Farrell, N. & Ogilby, S. (2010), Characteristics and skills of the forensic accountant. AICPA PVS Section.
- Denison, C. A. (2009). Real options and escalation of commitment: A behavioral analysis of capital investment decisions. *The accounting review*, 84(1), 133-155.
- DiGabriele, J. A. (2016). The expectation differences among stakeholders in the financial valuation fitness of auditors. *Journal of Applied Accounting Research*, 17(1), 43-60.
- DiGabriele, J. A. (2008). An empirical investigation of the relevant skill of forensic accountants. *Journal of education for Business* 83(6), 331-338.
- Eliezer, O., & Emmanuel, B. (2015). Relevance of Forensic Accounting in the Detection and Prevention of Fraud in Nigeria. *International Journal of Accounting Research*, 2(7), 17-25.
- Elsayed, A. (2017). Financial Reporting Fraud Schemes. Available at SSRN 3065417.
- Falconer, P. (2012). *What is mindset?* Retrieved from <http://www.paulfalconer.blogspot.com/>
- Ekpo, C. E., Chime, J., & Enor, F. N. (2016). The irony of Nigeria's fight against corruption: An appraisal of President Muhammadu Buhari's first eight months in office. *International Journal of History and Philosophical Research*, 4(1), 61-73.
- Feder, S. A. (2000). Overcoming "mindsets": What corporations can learn from government intelligence failures. *Competitive Intelligence Review* Volume 11, Issue 3, p. 28-36.
- Fujita, K., & Carnevale, J. J. (2012). Transcending temptation through abstraction: The role of construal level in self-control. *Current Directions in Psychological Science*, 21(4), 248-252.
- Godwin, O., (2009). A synthesis of the critical factors affecting performance of the Nigerian banking system. *European Journal of Economics Finance & Admin Sciences*. Vol. 17, issue 17, 34-44.
- Gollwitzer, P. M. (1990). "Action Phases and Mind-Sets." In Higgins, E. T., & Sorrentino, R. M. (Ed.), *Handbook of motivation and Cognition: Foundations of Social Behaviour*. Vol. 2, 53-92, New York, NY: Guilford Press.
- Gollwitzer, P. (2012). *Mindset theory of action phases* (pp. 526-545).
- Gollwitzer, P. M., & Keller, L. (2016). Mindset theory. *Encyclopedia of personality and individual differences*, 1-8.



- Gilbert, M., & Wakefield, A. (2018). Tackling fraud effectively in central government departments: A review of the legal powers, skills and regulatory environment of UK central government counter fraud teams. *Journal of Financial Crime*, 25(2), 384-399.
- Glover, S. M., Taylor, M. H., & Wu, Y. J. (2016). Current practices and challenges in auditing fair value measurements and complex estimates: Implications for auditing standards and the academy. *Auditing: A Journal of Practice & Theory*, 36(1), 63-84.
- Gupta, A. K., & Govindarajan, V. (2002). "Cultivating a Global Mindset." *Academy of Management Executive*.
- Herrmann, M., & Brandstatter, V. (2015). Action crises and goal disengagement: Longitudinal evidence on the predictive validity of a motivational phase in goal striving. *Motivation Science*, 1(2), 121.
- Hogan, C., Rezaee, Z., Riley, R., & Velury, U. (2008). Financial statement fraud: Insights from the academic literature. *Auditing: A Journal of Practice & Theory* 27 (2).
- Houck, M. M., Kranacher, M., Morris, B., Robertson, J., & Wells, J. T. (2006). Forensic accounting as an investigative tool. *The CPA Journal*, August 1.
- Huber, W., & DiGabriele, J. A. (2014). *Research in forensic accounting-what matters?* *Journal of Theoretical Accounting Research*, 10(1), 40-70.
- Huber, W. D., Popoola, O. M. J., Che-Ahmad, A. B., & Samsudin, R. S. (2015). An empirical investigation of fraud risk assessment and knowledge requirement on fraud related problem representation in Nigeria. *Accounting Research Journal*.
- Ilse, M., Tomczak, J. M., & Welling, M. (2018). Attention-based deep multiple instance learning. *arXiv preprint arXiv:1802.04712*.
- Jenkins, J. G., Negangard, E. M., & Oler, M. J. (2018). *Getting comfortable on audits: Understanding firms' usage of forensic specialists.* *Contemporary Accounting Research*, 35(4), 1766-1797.
- Kadous, K., & Sedor, L. (2004). "The Efficacy of Third-Party Consultation in Preventing Managerial Escalation of Commitment: The Role of Mental Representations." *Contemporary Accounting research* 21 (1): 55-82.
- Kariuki, E. N. (2013). Procurement performance measurement in commercial banks in Kenya (Doctoral dissertation, University of Nairobi).
- Kleinman, G., & Palmon, D. (2007). Ability, Cognitive Fallibility, Procedural Instrumentality and Audit Group Judgement: An Exploration: Working Paper: Touro College.
- Knapp, C. A. & Knapp, M. C. (2001). The effect of experience and explicit fraud risk assessment in detecting fraud with analytical procedures. *Accounting Organisation and Society*.
- Lamorde, I. (2012). Nigeria: More boost for corruption. *A paper presentation on the EFCC Budget Defence at the Senate Chamber, Federal Republic of Nigeria. Vanguard Newspaper, November 27.*
- Lamorde, I. (2013). Critical Appraisal of the Roles of Cyber Cafes, ISP, Banks, Courier Companies and Telecommunication Companies in Advance Fee Fraud Schemes.
- Lawrence, C., & Byron, P., (2013). Auditors' Responsibility for Fraud Detection: New Wine in Old Bottles? *Journal of Forensic & Investigative Accounting*. Vol. 5, issue 1, January – June 2013.
- Larkin, J. H. (2014). The role of problem representation in physics. In *Mental models* (pp. 83-106). Psychology Press.
- Lehmann, C. M., & Norman, C. S. (2006). The effects of experience on complex problem representation and judgment in auditing: An experimental investigation. *Behavioral Research in Accounting*, 18(1), 65-83.
- Levi, M., Burrows, J., Fleming, M., Hopkins, M., & Matthews, K. G. P. (2007). The nature, extent and economic impact of fraud in the UK.
- Liewellyn, D., (1986). The regulation and supervision of financial institutions, Institute of bankers, London.
- Lucca, D., Seru, A., & Trebbi, F. (2014). The revolving door and worker flow in banking regulation. *Journal of Monetary Economics*, 65, 17-32.
- Mala, R., & Chand, P. (2015). Judgment and Decision-Making Research in Auditing and Accounting: Future Research Implications of Person, Task, and Environment Perspective. *Accounting Perspectives*, 14(1), 1-50.
- Markman, A. B., & Gentner, D. (2001). Thinking. *Annual review of psychology*, 52(1), 223-247.
- Mulia, T. W., Lasdi, L., & Widjanarko, T. A. (2015). Pengaruh Hurdle Rates dan Framing Terhadap Eskalasi Komitmen dalam Penganggaran Modal. *Simposium Nasional Akuntansi*, 18.
- NDIC, (2017). Nigerian Deposit Insurance Corporation annual report and accounts, 2017.



- Nendaz, M. R., & Bordage, G. (2002). Promoting diagnostic problem representation. *Medical education*, 36(8), 760-766.
- Nicolaisen, D. T. (2005). In the public interest. *Journal of Accountancy*, 199(1), 63-70.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. New York, NY: McGraw-Hill Education.
- Nwoji, D. L., Adebayo, O., & David, A. O. (2011). Corporate governance and bank failure in Nigeria: Issues, challenges and opportunities. *Research Journal of Finance and Accounting*. Vol 2 No. 2.
- Omondi, E. O. (2013). The impact of forensic accounting services on fraud detection and prevention among Commercial Banks in Kenya.
- Owens, D. R. (2012). Fraud risk assessment practices and corporate governance. Payments, U. U. (2015). Preventing Money Laundering and Bank Fraud in the Banking Industry.
- PCAOB, (2007). Audit Evidence. AU Section 326. Public Company Accounting Oversight board.
- Pitz, G. P & Sachs, N. J. (1984) "Judgement and Decision: Theory and Application" *Annual Review of Psychology* 35: 139- 163.
- Payments, U. U. (2015). Preventing Money Laundering and Bank Fraud in the Banking Industry.
- Pike, B. (2013). Auditors' Responsibility for Fraud Detection: New Wine in Old Bottles? Lawrence Chui. *Journal of Forensic & Investigative Accounting*, 5(1).
- Popoola, O. M. J., (2014), Forensic accountants, auditors, and fraud: Capability and competence requirements in the Nigerian public sector. A thesis submitted to Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, in fulfilment of the requirement for the Doctor of Philosophy, Malaysia.
- Popoola, O. M. J., Che-Ahmad, A., & Samsudin, R. (2015). Forensic accounting and fraud: capability and competence requirements in Malaysia. *Journal of Modern Accounting and Auditing*. Vol 10. No 2, pp 825 - 834.
- Popoola, O., Che-Ahmad, A., Samsudin, R. S., Salleh, K., & Babatunde, A. (2016). Accountants' capability requirements for fraud prevention and detection in Nigeria. *International Journal of Economics and Financial Issues*, 6, S4.
- Reed, S. K. (2012). *Cognition: Theories and applications*. Cengage learning.
- Rezaee, Z., & Davani, H. (2013). Does financial reporting fraud recognize borders? Evidence from bank fraud in Iran. *Journal of Forensic & Investigative Accounting*, 5(2).
- Schillermann, M. K. (2018). *Early Detection and Prevention of Corporate Financial Fraud* (Doctoral dissertation, Walden University)
- Sengur, E. D. (2012). Auditors' perception of fraud prevention measures: evidence from Turkey. *Annales Universitatis apulensis: series oeconomica*, 14(1), 128.
- Singh, D. (2016). *Banking regulation of UK and US financial markets*. Routledge.
- Subramanian, R., (2014), *Bank Fraud*. Retrieved from <https://www.sas.com/>
- Thanasak, R. (2013). The fraud factors. *International Journal of Management and Administrative Sciences (UMAS)* (ISSN: 2225-7225), Vol 2, pp 01-05.
- Thibodeau, J. C. (2003). The development and transferability of task knowledge. *Auditing: A Journal of Practice & Theory*, 22(1), 47-67.
- Tomasic, R., & Akinbami, F. (2013). Shareholder Activism and Litigation Against UK Banks-The Limits of Company Law and the Desperate Resort to Human Rights Claims. *Directors' duties And Shareholder Litigation in The Wake of The Financial Crisis*, Joan Loughrey (ed), pp143-172, Cheltenham: Edward Elgar.
- Torelli, C. J., & Kaikati, A. M. (2009). Values as predictors of judgments and behaviours: The role of abstract and concrete mindsets. *Journal of Personality and Social Psychology*, 96, 231 – 247.
- Viscusi, W. K., Phillips, O. R., & Kroll, S. (2011). Risky investment decisions: How are individuals influenced by their groups? *Journal of Risk and Uncertainty*, 43(2), 81.
- Wells, J. T. (2005), *Principles of fraud examination*. Hoboken, N. J.: John Wiley & Sons Inc.
- Widhoyoko, S. A. (2017). Fraud in Rights and Contracts: A Review of Bankruptcy Case of Livent Inc. Based on Governance, Risk, and Compliance (GRC) Framework. *Binus Business Review*, 8(1), 31-39.
- Wuerges, A. (2011). Auditors' responsibilities for fraud detection: New wine in old bottles? Retrieved from <http://www.scribd.com/doc/63671899/Auditor-Responsibility-for-fraud-Detection>.



- Wuerges, A. (2011). Auditors' responsibilities for fraud detection: New wine in old bottles? Retrieved from <http://www.scriid.com/doc/63671899/Auditor-Responsibility-for-fraud-Detection>.
- Yearwood, L. (2011). A Conceptual Framework for the Prevention and Detection of Occupational Fraud in Small Businesses. *Research Paper Concordia University College of Alberta*.
- Zaworski, M. J., (2005), Assessing an Automated, Information Sharing Technology in the Post "9-11" Era -Do Local Law Enforcement Officers Think It Meets Their Needs? A dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Public Administration. Florida International University Miami, Florida, US.