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The Effect of Prudential Control Systems on Occurrence of Fraud in Commercial Banks in Kenya

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Abstract: **The study examined the effect of prudential control systems on occurrence of fraud in commercial banks in Kenya. The study assessed five research questions of To what extent does supervisions by the Central Bank of Kenya (CBK) effective in minimizing management fraud in commercial banks? To what extent do the operational risk management guidelines established by the CBK effective in reducing falsification of documents by bank's staff? To what extent do the periodic on-site inspections by the CBK effective in reducing unofficial borrowings by the bank tellers from the teller tills? To what extent does the Banking Fraud Investigations Department (BFID) effective in carrying out their duties? To what extent will the change of reporting structure of Banking Fraud Investigations Department to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigations under National Police Service make them effective? The population of the study were 13,411 top management team of 43 commercial banks in Kenya. A sample size of 169 top management staff were drawn using stratified random sampling. Data was collected using structured questionnaires. Pearson Chi-square was used to measure the relationship between independent variables and dependent variables. The study found that all mechanisms of effective prudential control systems are critical and instrumental in minimizing amount of fraud loss and increase in fraud loss recovery. The study recommended capacity building in the regulations, effective reporting of fraud incidences, change of BFID reporting structure and improvement in prosecution of fraudsters.**

Keywords: **Banking Fraud Investigations Department, Commercial Banks, Occurrence of Fraud, Operational Risk Management, Prudential Control Systems, Supervisions, Regulations**

1. INTRODUCTION

1.1 Background of the Study:

The global financial crises of 2007-2009 and subsequent banks' failures can be associated with defective and inadequate banking regulations and supervisions (Barth, Caprio & Levine, 2013; Tsytsyk, 2014; El-Shazly, 2014). As a result of banks failures, much attention is being paid to enhancement of banking regulations and supervisions (Macey & O'Hara, 2003). Weak supervisory and prudential control systems set by the commercial banks' regulatory bodies provide opportunities for incidences of fraud (Kefela, 2008). Despite the regulatory and supervisory improvements made by Basel Committees in Basel 1, Basel II and Basel III Accords, many countries have continued to experience banking problems which are largely associated with domestic issues of non-compliance (El-Shazly, 2014; Iyade, 2006; Mwega, 2014)

Prudential control systems challenges in Africa are associated to weak laws and regulations which are compounded by regulators which are not free from political interference, inadequately staffed banking and supervisory departments, inefficient enforcement tools and low integrity of central banks staff (Kefela, 2008). Prudential control systems in East

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African central banks are perceived to have been historically ineffectively responded to by a wave of bank consolidations (Opiokello, 2006; Gulde & Pattilo, 2006).

Despite Kenyan banking industry being tightly regulated and supervised by the Central Bank of Kenya (CBK) in accordance with prudential guidelines derived from Basel Accords, Central Bank Act, Banking Act, and other Acts of Parliament, fraud losses and frequency have been on the increase with recovery of the lost amounts dwindling (CBK, 2014; Cap, 484; 486 & 486, Laws of Kenya; BFID Annual Report, 2015). Typically, it is estimated that organizations lose 5% of their annual revenue to fraud (ACFE, 2014). In Kenya, fraud losses in 2015 by commercial banks are estimated to be in excess of Kenya shillings (Kshs) 3.3 Billion. According to BFID Annual Report of 2015, the reported fraud loss of 2015 is a sharp growth from Kshs 1.1 Billion reported in 2014. However, these figures are taken to be more conservative as most of the fraud losses are dealt within in-house structures (Mwithi & Kamau, 2015). In a span of one year, three commercial banks in Kenya have been placed under statutory management therefore creating suspicion on effectiveness of prudential control systems in minimizing internal fraud typologies (CBK Press Releases, 2015)

1.2 Statement of the Problem:

Banks' failures and collapses have mostly been examined from influence of accounting variables (Schaeck, 2008; Cole & White, 2012). Prudential control systems are essential component of corporate governance mechanism which are instrumental in managing incidences of fraud in banks (Berger, Imbierowicz & Rauch, 2016). Weak banking regulations and supervisions have contributed to occurrence of fraud leaving stakeholders extremely devastated (Kefela, 2008). Globally, incidences of fraud have been on the increase despite the structural, regulatory and supervisory efficiencies created by Basel Accords, The International Accounting Standards Board (IASB), The International Organization of Securities Commission (IOSCO), the Financial Action Task Force on Money Laundering (FATF), the World Bank and the International Monetary Fund (IMF) (Olsen, 2005; Iyade, 2006; ACFE, 2014)

Statistics show that African financial sector has the highest prevalence, fastest growing exposure and most prevalence to incidences of fraud due to weak or non-adhered to prudential regulations (PwC, 2011). The Kenyan banking industry is estimated to have lost through fraud Kshs 3.3 Billion in 2015, this conservatively reported fraud loss amount indicates a sharp increase from Kshs 2.2 Billion reported in 2014 (BFID Annual Report, 2015; Kiragu, Gekeria & Kanali 2015). Empirical studies on occurrence of fraud have largely focused on other corporate governance elements other than prudential control systems (Akelola, 2012, Mwithi & Kamau, 2015, Iminza *et al*, 2015). This study examined the effect of prudential control systems set by the CBK on occurrence of fraud in commercial banks in Kenya.

1.3 Research ***Questions and Hypothesis:***

The study was based on five research questions namely; To what extent does supervisions by the CBK effective in minimizing management fraud in commercial banks? To what extent do the operational risk management guidelines established by the CBK effective in reducing falsification of documents by bank's staff? To what extent do the periodic on-site inspections by the CBK effective in reducing unofficial borrowings by the bank tellers from the teller tills? To what extent does the Banking Fraud Investigations Department Effective in carrying out their duties? To what extent will the change of reporting structure of Banking Fraud Investigations Department to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigations under National Police Service make them effective? Null hypothesis were formulated synchronized to the research objectives as detailed below;

H_{01}: Supervisions by the CBK do not significantly minimize management fraud in commercial banks.

H_{02}: Operational Risk Management Guidelines established by CBK do not significantly reduce falsification of documents by bank's staff.

H_{03}: Periodic on-site supervisions by the CBK do not significantly reduce unofficial borrowings by the bank tellers from the teller tills.

H_{04}: Banking Fraud Investigations Department Officers do not effectively carry out their duties.

$H_{05:}$ Change of reporting structure of Banking Fraud Investigation Department to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigations under National Police Service would not make them effective.

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1.4 Conceptual Framework:

The conceptual framework of the study has been derived from the Systems of the CLASS model of corporate governance (Drew, Kelley & Kendrick, 2006). The conceptual framework comprise of five independent variables which include supervisions by the CBK, operational risk management guidelines, periodic onsite inspections, effectiveness of Banking Fraud Investigations Department Officers and change of reporting structure of BFID. The dependent variable of the study was occurrence of fraud. Occurrence of fraud was measured using amount of fraud loss, frequency of fraud and fraud loss recovery rate.

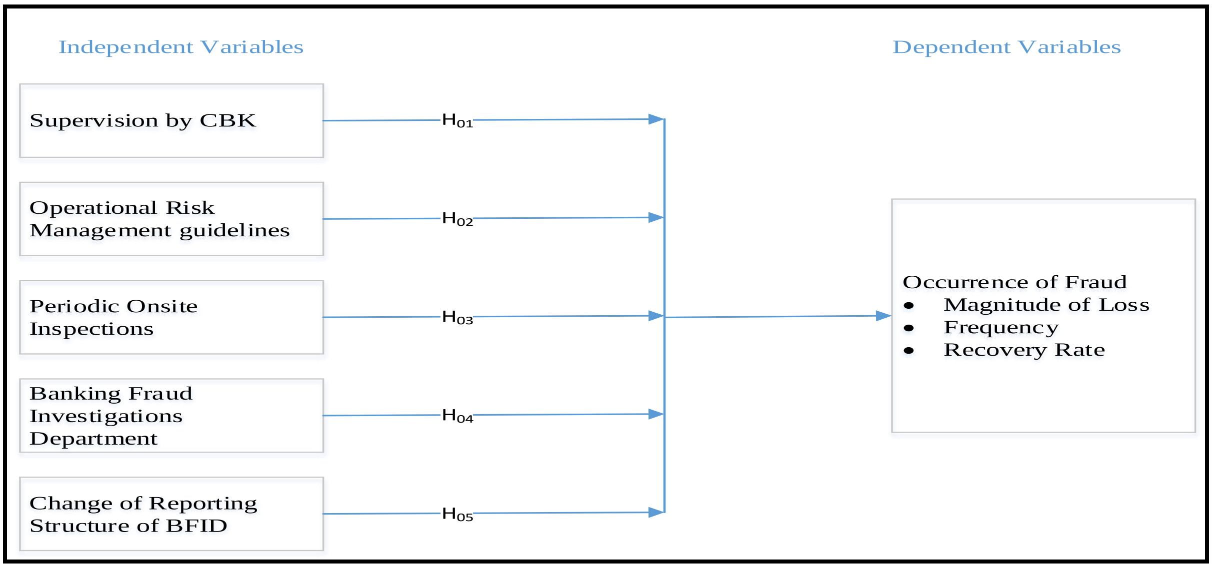

Figure1: Conceptual Framework of Effect of Prudential Control Systems set by the Regulator on Occurrence of Fraud.

2. REVIEW OF LITERATURE

2.1 Effect of Supervision by the CBK on Management Fraud:

Supervisions and regulations are used interchangeably but both must follow certain laws and procedures based on the national regime (Iyade, 2006). According to Tsytsyk (2014) the effective system of prudential supervision of banking is complex but generally aimed to prevent systemic risks in banking sector, and to increase transparency and efficiency of the banking system. Tsytsyk (2014) further states that regulators should focus on effective risk management strategies. In Kenya, supervision of commercial banks must be undertaken in accordance with Central Bank Act and Banking Act and CBK Prudential Guidelines (CBK, 2014). Most suitable supervision is the mixed approach which entails both onsite and off-site inspections (Olsen, 2005). A review of annual inspection reports of the Kenyan commercial banks depict a picture of ineffective and inefficient regulator as the reports fail to show any malpractices by top managers of commercial banks such as incidences of management fraud which subsequently lead to collapse of some of the commercial banks (CBK, 2013; 2014). Evaluations of the Banking Supervision Department (BSD) of the CBK show it is understaffed and also the skill set by the staff cannot satisfactorily deal with the prudential challenges of the banks (CBK, 2014; Ganioglu, 2007). Similarly, El-Shazly (2014) undertook a study of incentive-based regulations and banking restructuring for Egyptian commercial banks, the study concluded that in addition to undercapitalization and management inefficiencies other contributory factors to banks' failures include understaffed and inadequately trained bank examiners and supervisors, subjective assessment of bank asset quality, insufficient sector transparency and limited evidence of private market discipline, the study recommended strengthening institutional standards and accountability in the auditing profession and also homogeneity of forms of prudential controls.

Adeoye and Adeoye (2014) assessed fraud risk management in Nigerian banking industry. The study revealed that there are weak internal control systems which were compounded by NDIC and CBN failure to undertake proper surveillance both onsite and offsite inspections to ascertain and penalize banks which had suffered fraud as a result of weak internal controls and failure to establish compliance unit.

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Lehleiter (2013) examined reasons for trouble in the European banking and sovereign debt crisis. The study found lack of efficient regulations and supervisions as the main causes of the European financial crisis. Ganioglu (2007) assessed the association between weakness in supervision and banks' failures in Turkey. The study inferred that weaknesses in banking supervision acts as an enabler in excessive risk taking by top management of commercial banks. Pasiouras, Tanna and Zopounidis (2007) found that effective prudential controls impact on efficiency of commercial banks which subsequently inhibits opportunities for fraud. Kefela (2008) assessed the regulatory challenges faced by the East African countries central banks in enhancing banking efficiency and stability, the study concluded by appreciating the inherent routine, technical and operational issues which are likely to emerge but recommended that in order to achieve efficient banking system, prudential controls and a friendly non-distorted macroeconomic framework are required.

Iyade (2006) assessed impact of regulations and supervisions by looking at the roles of Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC). The study concluded that both CBN and NDIC have not been effective in managing various distresses in Nigerian Banking system. Peru and Okido (2015) examined effects of CBK's prudential regulations and commercial banks performance in Kisii County, the study found a positive correlations between prudential regulations and commercial banks' performance.

2.2 Effect of Operational Risk Management on Occurrence of Fraud:

Operational risk management is generally viewed as any breakdown in internal controls, personnel and corporate governance which may culminate into error, fraud, performance failure, compromise on the interest of the bank thereby leading to financial loss (Arora & Agarwal, 2009). There is a noted gap or lack of focus on fraud risk as fraud risk is only mentioned twice but only in general terms (CBK Risk Management Guidelines, 2013).

CBK has set of periodic prudential reports but despite the severity of fraud, it is not mandatory for the commercial banks to report any incidences of fraud to the regulator (Akelola, 2015). Mwanyale (2014) examined the effect of regulatory framework of combating fraud of mobile money in Kenya. The study found that non-compliance to procedures are associated to incidences of fraud. Ashby, Clark and Thirlwell (2011) revealed the implications of operational risk failures to organizations. Evaluations of annual bank supervision reports published by the CBK fail to report on effectiveness of operational risk management and also adherence of the provisions of operational risk management by the individual commercial banks (CBK, 2013; 2014). BFID Annual Report (2015) evidenced that all along falsification of documents were not being tracked prior to 2014, however figures of 2014 are alarming as the amount of loss stood at Kshs 324 Million with the figure skyrocketing to Kshs 1.55 Billion in 2015. Kiragu, Gikiri and Iminza (2015) assessed the effect of operational governance on occupational fraud risk in commercial banks in Kenya, the study found insignificant association between operational governance and occupational fraud risk.

2.3 Effect of On-Site Supervision on Occurrence of Fraud:

According to Olsen (2005) on-site supervision is compliance based supervision where the regulator visits the individual bank and confirms that their operations are compliance with specific standards. Olsen (2005) guides that on-site supervision in itself not adequate and can only compliment off-site supervision.

Assessment of annual inspection reports by the CBK give a glaring inefficiencies on on-site banking supervision. The annual inspection reports are too generalized and fail to highlight the inspection approaches adopted (CBK, 2013; 2014). Levine (2012) opined that ineffectiveness of any form of banking supervision could be as a result of uninformed, inadequately staffed and politically dependent supervisor. Studies have shown the inefficient and ineffective on-site supervision as no issues which may bring down a bank are being detected by the on-site examiners, issues only surface through whistle blowers (Gottschalk, 2013)

2.4 Effect of Banking Fraud Investigations Department Officers' on Occurrence of Fraud:

Studies have shown that police are incapable and disinterested in dealing with fraud (Brooks, Button & Frimpong, 2009). Akelola (2015) stated that most institutions would rather deal with fraud in-house than reporting to police. According to Chapter 84, Laws of Kenya, police have no prosecutorial power of fraud but such powers are delegated by the Office of the Attorney General. BFID Annual Report (2015) highlights limited duties to be undertaken by the Banking Fraud Investigation Departments (BFID) who are seconded from the Directorate of Criminal Investigation Department (CID). The report further shows the ill preparation of the BFID to deal with ever-rising fraud menace in terms of number of law enforcement officers, regional presence and skills and experience.

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2.5 Change of Reporting structure of BFID:

In the current organization structure of National Police Service, BFID officers report to and are answerable to Directorate of CID. BFID are only seconded to CBK. Nelson and Quick (2011) argue to structural review enhances efficiency while Martinell (2001) emphasizes that every organization may adopt any structures which deliver results. Ajagbe (2007) found no relationship between organizational structure and performance. An earlier study by Yezhuang (2001) commented that structural cohesion reduces ambiguity and improves performance. Long, Perumal, and Ajagbe (2012) found an association between organizational structure and performance. Frevel (2009) advised that there is no one best structure of how police force can interact with civilian but it is essential that while reviewing the reporting structure of police you must keep in mind their job description, incentives and their respective impact on morale and perception. Ungar (2012) states that it has not been easy to review police reporting lines. Akelola (2015) highlights the immediate need to change the reporting structure of police due to the fact that BFID has been tainted with issues of lack of integrity which has led to low public confidence hence it would be instrumental to have them report to the Governor of the CBK.

3. METHODOLOGY

The study adopted positivism research philosophy and descriptive research design. The population of the study consisted of 13,411 top management staff of 43 commercial banks regulated by CBK. A sample size of 169 top management staff stationed in Nairobi City was drawn using stratified random sampling method. Primary data was collected through structured questionnaires. Data was analyzed using inferential statistical analysis. The relationship between mechanisms of prudential control systems and occurrence were measured using Pearson Chi-Square. A statistical tool of SPSS was used to analyze the data and results presented using figures and tables.

4. FINDINGS

4.1 Effect of Supervision by the CBK on Management Fraud

Table 1: Effect of Supervisions by CBK on Occurrence of Fraud

Variable	**Pearson Chi-Square**	**Pearson Chi-Square**	**Fraud Risk Estimate**
To what extent has effective supervision by CBK:	**p - value** Asymp. Sig. (2-sided)	**cc Value** % Cells with expected count less than 5	**RRR Value** (Relative Risk Ratio)
Minimized the amount of losses due to management fraud?	.000	.0	1.368
Minimized the frequency of management fraud?	.507	.0	.896
Increased the recovery rate of losses due to management fraud?	.014	.0	1.221

The findings of the study show that effective supervision by CBK is likely to minimize amount of losses due to management fraud. Banks subjected to effective CBK supervision are 1.4 times less likely to experience the amount of losses due to management fraud relative to those banks that are not subjected to such supervision ($p < 0.001$, RRR = 1.368). The study also show that effective supervision by CBK is unlikely to minimize frequency of management fraud ($p > 0.05$). The study further show that effective supervision by CBK is likely to increase the recovery rate of losses due to management fraud. Banks subjected to effective CBK supervision are 1.2 times more likely to experience an increase in the recovery rate of losses due to management fraud relative to those banks that are not subjected to such supervision p<0.001, RRR = 1.221). These results indicate that Effective supervision by CBK is likely to minimize amount of losses due to management fraud (p<0.001, cc =0.0). The results also show that effective supervision by CBK is likely to increase the recovery rate of losses due to management fraud (p<0.001, cc = 0.0). The results therefore negate the hypothesis that supervision by the CBK are ineffective in minimizing management fraud in commercial banks.

4.2 Effect of Operational Risk Management on Occurrence of Fraud:

Table 2: Operational Risk Management Guidelines established by CBK

Variable	**Pearson Chi-Square**	**Pearson Chi-Square**	**Fraud Risk Estimate**
To what extent has Operational Risk Management guidelines established by CBK :	**p - value** Asymp. Sig. (2-sided)	**cc Value** **%** Cells with expected count less than 5	**RRR Value** Relative Risk Ratio
Reduced amount of fraud loss due to falsification of documents by staff?	.000	.0	1.524
Reduced frequency of falsification of documents by staff?	.158	.0	.809
Increased recovery rate of losses resulting from falsification of documents by staff?	.000	.0	1.366

The findings of the study depict that Operational Risk Management guidelines established by CBK are likely to reduce the amount of fraud loss due to falsification of documents by staff. Banks adhering to the Operational Risk Management guidelines established by CBK are 1.5 times less likely to experience losses due to management fraud relative to those banks that do not adhere to the Operational Risk Management guidelines established by CBK (p<0.001; RRR = 1.524). The findings of the study shows that Operational Risk Management guidelines established by CBK are less likely to reduce frequency of falsification of documents by staff (p >0.05). Additionally, the findings of the study shows that Operational Risk Management guidelines established by CBK are likely to increase the recovery rate of losses resulting from falsification of documents by staff. Banks adhering to the Operational Risk Management guidelines established by CBK are 1.4 times more likely to increase the recovery rate of losses resulting from falsification of documents by staff relative to those banks that do not adhere to the Operational Risk Management guidelines established by CBK (p<0.001; RRR = 1.366).

These results indicate that Operational Risk Management guidelines established by CBK are likely to reduce the amount of fraud loss due to falsification of documents by staff (p<0.001, cc =0.0). The results also show that Operational Risk Management guidelines established by CBK are likely to increase the recovery rate of losses resulting from falsification of documents by staff (p<0.001, cc = 0.0). The results therefore negate the hypothesis that Operational Risk Management Guidelines established by CBK do not significantly reduce occurrence of fraud. The null hypothesis was therefore rejected hence the alternative hypothesis accepted.

4.3 Effect of On-Site Supervision on Occurrence of Fraud:

Table 3: Periodic on-site supervisions undertaken by CBK

Variable	**Pearson Chi-Square**	**Pearson Chi-Square**	**Fraud Risk Estimate**	**Fisher's Exact Test**
To what extent has periodic on-site supervisions undertaken by CBK:	**p - value** Asymp. Sig. (2-sided)	**cc Value** **%** Cells with expected count less than 5	**RRR Value** Relative Risk Ratio	**p - value** Asymp. Sig. (2-sided)
Minimized the amount of fraud losses due to unofficial borrowings losses by the bank tellers from the teller tills?	.000	.25*	1.435	.000

Minimized the frequency of unofficial borrowings losses by the bank tellers from the teller tills?	.516	.0	.899	-
Increased recovery rate of losses due to unofficial borrowings losses by the bank tellers from the teller tills?	.003	.25*	1.240	.008

The study found that periodic on-site supervisions undertaken by CBK are likely to minimize the amount of fraud losses due to unofficial borrowings losses by the bank tellers from the teller tills. Banks experiencing periodic on-site supervisions undertaken by CBK are 1.4 times less likely to experience fraud losses due to unofficial borrowings losses by the bank tellers from the teller tills relative to those banks that do not experience periodic on-site supervisions undertaken by CBK ($p < 0.01$; RRR = 1.435). However, the study found periodic on-site supervisions undertaken by CBK are less likely to reduce frequency of falsification of documents by staff ($p > 0.05$). The findings of the study show that periodic on-site supervisions undertaken by CBK are likely increase the recovery rate of losses due to unofficial borrowings losses by the bank tellers from the teller tills. Banks experiencing periodic on-site supervisions undertaken by CBK are 1.2 times more likely to increase the recovery rate of losses due to unofficial borrowings losses by the bank tellers from the teller tills relative to those banks that do not experience periodic on-site supervisions undertaken by CBK ($p<0.01$; RRR = 1.240).

The study findings evidence that periodic on-site supervisions undertaken by CBK are likely to minimize the amount of fraud losses due to unofficial borrowings losses by the bank tellers from the teller tills ($p<0.01$). The results also show that Periodic on-site supervisions undertaken by CBK are likely increase the recovery rate of losses due to unofficial borrowings losses by the bank tellers from the teller tills ($p<0.01$). The p-value was computed using the Fisher's Exact Test given that cc > 0.20. The results therefore negate the hypothesis that periodic on-site supervisions by the CBK do not significantly reduce occurrence of fraud. The null hypothesis was therefore rejected and alternative hypothesis accepted.

4.4 Effect of Banking Fraud Investigations Department Officers' on Occurrence of Fraud:

Table 4: Banking Fraud Investigation Department (BFID) Officers

Variable	**Pearson Chi-Square**	**Pearson Chi-Square**	**Fraud Risk Estimate**	**Fisher's Exact Test**
To what extent has Banking Fraud Investigation Department (BFID) officers:	**p - Value** Asymp. Sig. (2-sided)	**cc Value** % Cells with expected count less than 5	**RRR Value** Relative Risk Ratio	**p - value** Asymp. Sig. (2-sided)
Participated in minimizing amount of fraud losses?	.000	0.25*	1.360	.000
Participated in reducing the frequency of fraud?	.007	.0	1.462	-
Participated in increasing recovery of amounts lost through fraud?	.000	.00	1.747	-

The study found that Banking Fraud Investigation Department (BFID) officers are likely to minimize the amount of fraud losses. Banks utilizing Banking Fraud Investigation Department (BFID) officers are 1.4 times less likely to experience fraud losses relative to those banks that do not utilizing Banking Fraud Investigation Department (BFID) officers ($p < 0.001$; RRR = 1.360). However, the findings show that Banking Fraud Investigation Department (BFID) officers are likely to reduce the frequency of fraud. Banks utilizing Banking Fraud Investigation Department (BFID) officers are 1.5 times more likely to minimize the frequency of fraud relative to those banks that do not utilizing Banking Fraud Investigation Department (BFID) officers ($p < 0.01$; RRR = 1.462). The results of the study show that Banking Fraud Investigation Department (BFID) officers are likely to increase the recovery of amounts lost through fraud. Banks utilizing Banking Fraud Investigation Department (BFID) officers are 1.7 times more likely to increase the recovery of amounts lost through fraud relative to those banks that do not utilizing Banking Fraud Investigation Department (BFID) officers ($p < 0.001$; RRR = 1.747).

The results of the study evidence that Banking Fraud Investigation Department (BFID) officers are likely to: minimize the amount of fraud losses ($p<0.001$); reduce the frequency of fraud ($p<0.01$; cc = 0.0); and increase the recovery of amounts

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lost through fraud (p<0.001; cc = 0.0). The p-value was computed using the Fisher's Exact Test where cc > 0.20.The results therefore negate the hypothesis that Banking Fraud Investigations Department Officers do not effectively carry out their duties.

4.5 Change of Reporting structure of BFID:

Table 5: Banking Fraud Investigation Department (BFID) Officers Reporting Structure

Variable	**Pearson Chi-Square**	**Pearson Chi-Square**	**Fraud Risk Estimate**
To what extent would the change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service impact on :	**p - value** Asymp. Sig. (2-sided)	**cc Value** % Cells with expected count less than 5	**RRR Value** Relative Risk Ratio
Minimizing amount of fraud losses	.000	.0	2.721
Reducing the frequency of fraud?	.137	.0	1.174
Increasing fraud loss recovery rate	.000	.0	2.673

The findings of the study depict that change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service is likely to reduce the amount of fraud loss. Banks subscribing to Change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service are 2.7 times more likely to minimize the amount of fraud losses relative to those banks that do not subscribe to such a structure (p<0.001; RRR = 2.721). However, the findings show that change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service is less likely to reduce frequency of fraud (p >0.05). The study results show that change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service is likely to increase the fraud loss recovery rate. Banks subscribing to Change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service are 2.7 times more likely to increase the fraud loss recovery rate relative to those banks that do not subscribe to such a structure (p<0.001; RRR = 2.673).

These results indicate that Change of reporting structure of Banking Fraud Investigation Department (BFID) to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigation under National Police Service is likely to: reduce the amount of fraud loss (p<0.001, cc =0.0); and increase fraud loss recovery rate (p<0.001, cc = 0.0). The results therefore negate the null hypothesis that Change of reporting structure of Banking Fraud Investigation Department to be answerable to the CBK Governor instead of the current structure where they are answerable to Directorate of Criminal Investigations under National Police Service would not make them effective. The null hypothesis was therefore rejected and alternative hypothesis accepted.

5. CONCLUSION

The study concluded that all the mechanisms of effective prudential control systems set by the regulator namely supervisions by the CBK, operational risk management guidelines, periodic on-site supervision, BFID and change of structure of the BFID are perceived to be critical and instrumental in minimizing amount of fraud loss and increasing fraud loss recovery rate.

6. RECOMMENDATIONS

The study recommended improvement in banking supervisions and regulations through capacity building of CBK inspectors, creation of periodic fraud specific prudential reports, fraud special courts to fast track conclusion of cases and change of BFID reporting structure to the Governor of the CBK and allocating them prosecutorial powers.

7. SUGGESTIONS FOR FURTHER STUDIES

The study suggests repetition of the study by getting the perception of the board of directors and non-top leadership staff of the commercial banks, replication of the study to other financial institutions regulated and supervised by CBK. Finally, the study suggested inclusion of other internal and external fraud typologies which were not part of this study.

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