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The Effect of Fraud on Bank Financial Performance in Cameroon: Case Study of NFC Bank

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Abstract

Fraud is like an epidemic disease that affects banking sector and has great effects on the country's economy. Fraud causes decline in liquidity of commercial banks and affects performance. Therefore, the study identified the effects of fraud on financial performance of commercial banks in Cameroon taking a case of NFC bank. Specifically, the study sought to assess the effects of fraudulent money transfer, unauthorized withdrawals and fraudulent loans on bank performance. Descriptive and correlation research designs were utilized in the study. A sample size of 100 respondents from different NFC bank branches was selected which majorly composed of the managers, tellers, credits and risk officers and finance officers. The study utilized primary data collected using questionnaires and secondary data sourced from NFC bank and the bank of central African states. Data was analyzed using IBM SPSS version 21 and presentation done in figures and tables. From correlation findings, Pearson correlation coefficient of -.690, -.630 and .650 for fraudulent money transfer, unauthorized withdrawals and fraudulent loans respectively was found. This implies that as financial fraud cases increase, commercial banks performance reduces. The R squared value was 62.4% and F statistic was 53.09 in the regression analysis. Additionally, the beta coefficients for fraudulent money transfer, unauthorized withdrawals and fraudulent loans were -0.151, -0.582 and -0.431 respectively with respective significance values of 0.039 for fraudulent money transfer and 0.000 for both unauthorized withdrawals and fraudulent loans. The study concluded that fraud particularly fraudulent money transfer, unauthorized withdrawals and fraudulent loans have significant negative effect on bank performance. The recommendation of this study includes commercial banks putting in place fraud detection mechanisms and strengthen risk department to ensure that potential fraud risks are detected on time to avoid their occurrence. Additionally, the study recommends appropriate scrutiny of loan applicants documents to ensure they are true documents. Lastly the study recommends strict adherence to fraud control mechanisms in place within and outside the bank.

Keywords: commercial bank, fraud, performance of commercial banks

1. Introduction

Fraud is a pervasive issue in the banking sector, with far-reaching consequences for financial institutions (Adeyemo, 2012). In Cameroon, the banking industry has experienced significant growth, but fraud remains a major challenge (World Bank, 2020). NFC Bank, a prominent financial institution in Cameroon, has faced instances of fraud, highlighting the need for effective fraud management strategies. Some of the potential risk of fraud at NFC bank include contactless payment fraud which is a growing concern globally where fraudsters use stolen bank card information to make unauthorized transaction (Financial Fraud Action UK, 2022). NFC also faces a specific type of contactless payment fraud where stolen card information is used to link smart devices to payment platforms, allowing transactions without OTP validation. This study aims to explore the effects of fraudulent money transfers, unauthorized withdrawals and fraudulent loans on the financial performance of commercial banks in Cameroon. By examining these relationships, this research seeks to provide insights that can inform policy and practice within the banking sector, ultimately contributing to improved financial stability.

1.1 Statement of the Problem

The effect of fraud on bank performance in Cameroon is a critical concern (Kumi, 2019). Despite efforts to combat fraud, NFC Bank continues to experience losses due to fraudulent activities. The banking sector in Cameroon is facing significant challenges that threaten its overall performance, particularly due to the rising incidence of fraud. Ideally, commercial banks should exhibit strong performance indicators such as high profitability, robust asset quality, and elevated customer trust. However, the current landscape reveals a troubling scenario where these indicators are increasingly compromised by fraudulent activities, notably fraudulent money transfers, fraudulent loans and unauthorized withdrawals. According to the Bank of Central African states (BEAC), financial losses attributed to fraud have surged by approximately 30% from2019 to 2021, leading to decreased profitability for many banks (Banque des Etats de l'Afrique Centrale, 2021). This alarming trend raises questions about the resilience of the banking sector and its capacity to safeguard customer assets.

The root causes of this decline in performance can be traced back to the rapid adoption of digital banking services without corresponding enhancements in security measures. The World Bank (2021) reported that over 2.5 billion people globally are utilizing digital financial services, yet many banks in Cameroon have struggled to implement effective fraud detection mechanisms. A study by KPMG (2020) highlighted those financial institutions lose an estimated 5% of their annual revenues to fraud, with developing countries like Cameroon experiencing even higher rates due to less stringent regulatory environments. The increase in digital transactions has made banks more vulnerable to sophisticated fraudulent schemes, which has resulted in unauthorized withdrawals and fraudulent money transfers that directly impact customer trust and bank performance.

While some banks have initiated steps toward improving their fraud prevention strategies, including transaction monitoring and biometric authentication, these efforts have not fully addressed the underlying challenges. As a result, the current state of bank performance in Cameroon is characterized by declining profitability, increased customer dissatisfaction, and a growing lack of trust in financial institutions. Fraudulent components such as unauthorized withdrawals, fraudulent loans and fraudulent money transfers pose serious threats to bank performance by eroding customer confidence and affecting key performance indicators. To restore stability and enhance performance, it is crucial for commercial banks in Cameroon to adopt comprehensive fraud detection mechanisms that not only identify fraudulent activities but also improve overall risk management strategies. By addressing these gaps and implementing more effective fraud prevention measures, banks can work towards regaining customer trust and improving their performance metrics. The cost of fraud stretches deeper resulting to reputational effects, financial effects, and psychological effects. As a result of this problem the researcher was interested in investigating bank fraud and performance and identify strategies to mitigate these risks.

1.2 Research Questions

The main research question for this study is; What is the effect of fraud on the financial perform of NFC bank?

The specific questions include:

i. What is the effect of fraudulent money transfer on the performance of NFC bank in Cameroon?

ii. To what extent does unauthorized withdrawal affect performance of NFC bank in Cameroon?

iii. To what extend does fraudulent loans affect the performance of NFC bank in Cameroon?

1.3 Objectives of the Study

The main objective of this study is to investigate the effect of fraud on the financial performance of NFC bank.

The specific objectives are;

i) To examine the effect of fraudulent money transfer on the performance of NFC Bank in Cameroon.

ii) To investigate the effect of unauthorized withdrawal on the performance of NFC bank in Cameroon

iii) To assess the effect of fraudulent loans on the performance of NFC bank in Cameroon.

1.4 Research Hypotheses

The following research hypothesis were formulated and later tested.

H_1: Fraudulent money transfer significantly affects the performance of NFC bank.

H_2: Unauthorized withdrawal significantly affects the performance of NFC bank.

H_3: Fraudulent loans significantly affect the performance of NFC bank.

2. Literature Review

2.1 Conceptual Review

2.1.1 Fraud

Fraud is an intentional act of deception designed to secure an unfair or unlawful gain. In the context of banking, it encompasses a variety of illegal activities that can lead to financial loss for both the institution and its clients. According to the Association of Certified Fraud Examiners (ACFE, 2020), fraud typically involves misrepresentation, concealment, or violation of trust, resulting in a financial or personal benefit to the perpetrator. According to Aker et al. (2018), there exist several forms of fraud within the banking sector, including but not limited to credit card fraud, loan fraud, identity theft, and internal fraud committed by employees. The increasing sophistication of these fraudulent schemes has made it imperative for banks to implement robust risk management frameworks to detect and prevent such activities (Mbanga, 2020).

Fraud is a deliberate deception to secure unfair or unlawful gain, often involving manipulation of financial information or assets. It encompasses a wide range of illicit activities designed to mislead individuals or organisations for financial benefit. According to the Association of Certified Fraud Examiners (ACFE, 2018), fraud can manifest in various forms, including financial statement fraud, asset misappropriation, and corruption. The complexity and evolving nature of fraud make it a significant concern for financial institutions, necessitating robust detection and prevention mechanisms. Therefore, this study adopts the definition given by Aker et al. (2018) as it highlights the various forms of fraud which forms the variables in this study.

2.1.1.1 Types of Fraud

Fraudulent Loans

Fraudulent money transfer refers to unauthorized transactions that involve transferring funds from one account to another without the account holder’s consent, often facilitated through deceptive practices such as phishing or hacking. Holtfreter et al. (2008) highlight that fraudulent money transfers are increasingly prevalent in modern banking, exacerbated by technological advancements that allow for easier access to sensitive financial information. These fraudulent activities can significantly undermine customer trust and lead to substantial financial losses for banks.

Among the traditional functions of financial institutions is to offer loans and other credit facilities to the customers. In this process of extending credit to the customer, possibilities of fraud occurrence are evident. The fraud may occur in any stage right from the first interaction between the customers and the bank agents and the final receipt of loan by the customer. In the process of credit extension, fraud may occur at any stage, from the first interaction between the customer and the bank to the final payment of the loan (Abolade & Olusola, 2020). Fraudulent loan occurs when credit is granted to a non-borrower customer or to a customer who exceeds his or her credit limit. The fraud dimension of this act is the intention to conceal the deal to the head office staff on routine basis to deceive with forged statements and documents. At advanced levels of credit fraud, perpetrators apply for approval of credit facility of another customer who is unrelated with the first customer. Meaning a credit facility for customer ‘X’ to be drawn is diverted for use of customer ‘Y’. Fraudulent loans have been found to significantly relate to bank performance since bank sometimes take the burden of fraudulent loans if the fault is on its. This reduces profitability of the bank. Additionally, frequent occurrence of fraudulent loans scares away customers in that particular bank affecting its interest earnings on loans and profitability (Owolabi, 2010).

Fraudulent Invoices and Payments Invoice

Fraudulent invoices and Payments Invoice fraud involves fake invoices being sent to the company as a request for payment or presented to the bank for payment processing. The information in fake invoices is always altered in order to benefit a particular person conducting the fraud. Employees in the banking sector can also collude with customers to conduct invoice fraud for a certain company. They can withdraw the funds from the company’s account by setting up frau vendors in accounts payable and pay fake invoices since they have all the details of the company in the system. Alternatively, bank employees can switch account numbers in online bill pay system and utilize company finances for various payments. According to Musoke (2008) some employees use software to obtain blank cheque and insert their name in to the payee line. Additionally, they submit fake receipts on draft report for expenses or they deposit company cheques into their personal accounts. ACFE (2009), Kingsely (2012) and Akinyomi (2012) also stated that staff can collude to defraud an organisation of its assets such as cash, inventory and customer information. Banks should therefore take keen interest of the security of its assets by ascertaining the location, and responsible employee for the assets. Therefore, banks must take into consideration the location, place and security of assets and the responsible employees for the assets. According to Kingsley (2012) studies the common employee frauds involves paying for non-existent goods, presentation and payment of inflated invoices and unlawful acquisition of property information.

Unauthorized Bank Withdrawals

According to Norton and Palmer (2016), unauthorized withdrawal is the act of removing funds from a bank account without the account holder’s permission, typically resulting from identity theft or other fraudulent access to banking credentials. Norton and Palmer (2016) explain that unauthorized withdrawals can occur through various means, including hacking into online banking accounts or using stolen debit cards. Such activities not only result in direct financial losses but also damage the reputation of banks and erode customer confidence in their security measures.

Miller (2006) explains that unauthorized bank withdrawal is a situation where someone manages to access and withdraw money from another person's account without their direct authority. This can take a form of someone forging another person's details including the signature and withdrawing the money from the bank counter and it can also take the form of a fraudster accessing person's identification number (PIN) details then using it to withdraw money from the Automatic Teller Machines (ATM). According to Kanu and Okorafor (2013), who carried research to examine the nature, the extent and even looked at the effect of fraud on commercial Banks deposits in Nigeria. Their main objective was to establish the amounts of moneys that are involved in fraud. After collecting the quarterly fraud case reports from Nigerian Banks between the period of 1993 and 2010 they established that the most common type of fraud in Nigeria Banking sector is withdrawals that are fraudulent.

Fraudulent Money Transfer

Akinyomi (2012), from his research on fraud in Nigeria banking sector and its prevention, he established that fraud cash transfer is a situation where a criminal or fraudster gets a fraudulent request and changes a legal fund transfer consciously with a purpose of committing the fraud. The criminal then collaborates with another fraudulent staff in that Bank to access the money from fraud.

According to Klein et al. (2017), fraudulent loans are loans acquired through deceitful practices, such as providing false information or using stolen identities to secure financing that would not otherwise be granted. Klein et al. (2017) discuss how fraudulent loan applications exploit information asymmetry in the lending process, where borrowers misrepresent their financial status to gain approval. This type of fraud poses significant risks to banks, leading to increased default rates and potential financial instability.

2.1.2 Performance of Banks

According to Akhter et al. (2020), bank performance refers to the overall financial health and operational efficiency of a bank, typically assessed through key performance indicators such as profitability (e.g., return on assets and return on equity), asset quality, and customer satisfaction. Akhter et al. (2020) note that measuring bank performance is crucial for stakeholders to evaluate the effectiveness of management strategies and operational processes. A decline in bank performance can often be linked to increased instances of fraud, as financial losses directly affect profitability and market reputation. Performance is the end result of activity and the appropriate measure selected to assess corporate performance is considered to depend on the type of organisation to be evaluated and the objective to be achieved through that evaluation. Performance has also been defined as how well an organisation uses resources at its disposal (Masud & Haq, 2016). Traditionally, performance of banks is measured using quantitative financial ratios such as Profit before Tax (PBT), Return on Asset (ROA), Return on equity (ROE), Profit After Tax (PAT), Earnings Per Share (EPS) to mention a few. Masud and Haq (2016) identified additional key quantitative performance indicators of banks as total assets, advances, investment and deposits. A more contemporary approach is the use of the balance score card which identifies other qualitative measures such as customers, internal business operations, learning and growth as indicators of organisational performance.

To best understand what bank performance entails, one must understand the general meaning of organisational performance. The ability of an organisation through its resources that cut across human and financial resources to post the best result compared to its goals and objectives can be said to be organisational performance (Hoffman, 2018). This further involves the ability of an organisation to accomplish its mission via sound management, strong governance, and a persistent rededication to achieving results. In another study by Kiyeng (2018), organisational performance has been defined as the accomplishment of a given task measured against preset known standards and the major measures of organisational performance, including financial performance, market performance, and shareholder value performance.

According to Kagendo (2018), organisations are said to have high organisational performance when all the parts of an organisation work together to achieve great results, measured in terms of the value they deliver to customers. The various parts of the organisation would include strategic objectives, business performance measures, effective allocation of resources and processes, and reward structures. These parts are interrelated, and a change to one will impact the others. These parts must work in harmony to achieve the desired results. In most studies examining commercial banks, financial performance has been a central measure of performance, making it relevant for this study. According to Monyoncho (2015), financial performance measures gauge the effectiveness and efficiency by which organisations utilize their investments to generate value for shareholders. The most used and recommended measures for financial performance analysis include profitability, liquidity, and solvency (Ombati et al., 2019). The valuable profitability ratios and measures used to capture bank performance in this study are the return on assets (ROA), return on equity (ROE), return on capital employed and the operating profit margin in addition to the net revenues.

2.1.2.1 Return on Assets as a Measure of Bank Performance

Return on assets (ROA) which is the net income for the year divided by the total assets (Ogoye, 2013), defines a firm's ability to utilize its assets to generate profits. Profit earned on capital invested is often a more indicative measure of financial performance than in the level of profits as a percentage of sales. A higher ROA suggests that the company is effective in converting its investments into profit (Ehrhardt, 2016).

2.1.2.2 Return on Equity as a Measure of Bank Performance

Return on equity (ROE) measures the profitability of a company in relation to shareholders' equity. It reflects how well the company is using the equity invested by shareholders to generate profits. A higher ROE is generally seen as a sign of effective management and strong financial performance (Gibson, 2013). Return on Equity (ROE) that is the internal performance measure of shareholder's value (Machiuka, 2010). ROE is what the shareholders see as a return to their investment.

2.1.2.3 Net Profit Margin as a Measure of Bank Performance

This ratio measures the percentage of revenue that remains as profit after all expenses are deducted. It provides insight into the overall profitability of a company, indicating how much profit is generated from each dollar of revenue (Horngren et al., 2013). Net Profit Margin meanwhile indicates what percentage of a company's/Bank's revenue would remain after all costs have been taken in]to account. This is best compared with other companies in the same industry and analysed over time, considering that variations from year to year may be due to abnormal conditions. To explain this further, a declining net profit margin ratio may indicate a margin squeeze possibly due to increased competition or rising costs (D'Amato, 2010).

2.1.2.4 Return on Capital Employed as a Measure of Bank Performance

Return on Capital Employed (ROCE) is a financial metric used to assess a company's efficiency in generating profits from its capital. It measures the returns that a company is able to generate from its capital employed, which includes both equity and debt. ROCE is calculated using the formula:

$$ROCE = (\text{Earnings Before Interest and Tax (EBIT)})/ (\text{Capital Employed})$$

Where Capital Employed is typically defined as total assets minus current liabilities or total equity plus total debt. A higher ROCE indicates that a company is using its capital more effectively to generate profits, which is particularly important for investors and stakeholders when evaluating the performance of a business (Ormiston, 2010). This metric is useful for comparing the profitability of companies within the same industry, as it provides insights into how well a company is utilizing its capital compared to its peers (Healy, 2008).

2.1.3 Conceptual Framework

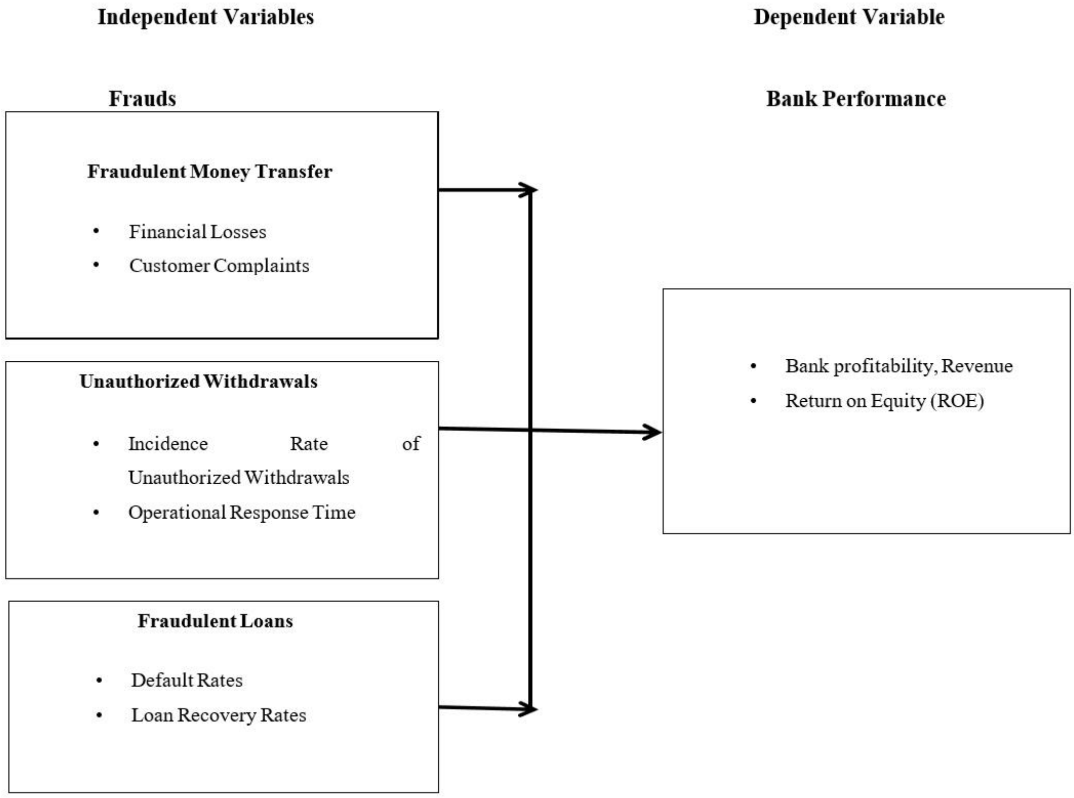

Figure 1. Conceptual Framework

Source: Authors (2025).

The study's conceptual framework illustrates the relationship between fraud and bank performance, with independent variables including fraud types including fraudulent money transfer, unauthorized withdrawals and fraudulent loans and dependent variable bank performance metrics.

2.2 Theoretical Review

2.2.1 Differential Association (by Edwin Sutherland 1939)

Differential Associationism theory as proposed by Sunderland (1939), as cited in Olongo (2013) states that Crime is learned like other issues or business. Learning of criminal activities occurs with other persons in a process of socialization. Fraud related problems are passed on to the community through criminal actions sponsored by the fraudulent gains. Fraud losses cause a major problem to many businesses including banks and other financial institutions. It suggests that individuals learn values, techniques, and motives for criminal behaviour from people they associate with. The theory assumes that criminal behaviour is not inherent but learned, emphasizing the role of social interactions in fostering deviant behaviour.

In the context of fraud in commercial banks, employees may learn fraudulent practices from peers or supervisors, leading to a culture of misconduct. This learning can manifest in various forms, such as fraudulent money transfers or unauthorized withdrawals, which could significantly impact the bank's performance. As Sutherland (1939) noted, the environment and associations play a critical role in shaping individuals' actions, suggesting that if fraudulent behaviours are normalized within a bank's culture, they may proliferate.

One limitation of this theory is that it does not account for the individual's personal characteristics or motivations that may lead to criminal behaviour. Additionally, it may overlook structural factors such as economic conditions that contribute to fraud. Despite the weaknesses of this theory, it is significant to this study as it helps explain how a culture of fraud can develop within banks in Cameroon, thereby affecting their performance. Understanding the social dynamics that foster such environments can inform strategies for prevention and intervention.

2.2.2 The Theory of Fraud Triangle (Donald Cressey, 1973)

The classical theory of fraud triangle was developed by Donald Cressey in 1973. According to Cressey (1973), fraud is likely to occur if a combination of these three factors exists, that is pressure (motivation), opportunity and rationalization. Trusted persons become trust violators when they conceive themselves as having a financial problem which is non-shareable, and are aware this problem can be secretly resolved by violation of the position of financial trust, and are able to apply to their own conduct in that situation which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property. Cressey (1953) propounded this theory, which states that the propensities for fraud is a triangle of perceived non-sharable financial need (pressure), perceived opportunity to secretly resolve the financial pressure and perceived rationalization (ability to rationalize and justify the illegal conduct/crime in their mind) (Onanuga & Oshinloye, 2012). According to Chiezey and Onu (2013), pressures that move individuals to commit fraud are financial pressures (greed, debts, etc.), peer pressure vices (drugs, gambling and alcoholism), work-related pressures (high expectation for good results/targets at work or a need to cover up someone's poor results or to report results that are better than actual performance compared to the competition). Other pressures include frustration with job content or even a persistent urge to beat the system, as well as the opportunity and attitude to commit fraud. Perpetrators of fraud must believe that they can commit the fraud without being caught (or if caught, nothing untoward will happen): severity and probability of punishment (Chiezey & Onu, 2013).

In commercial banks in Cameroon, opportunities for fraudulent money transfers or unauthorized withdrawals may arise from weaknesses in internal controls. Pressure could stem from personal financial issues or unrealistic performance expectations. Rationalization allows individuals to justify their actions, believing that they are entitled to the funds or that their actions will not harm the institution. This framework is crucial for understanding how these factors interact to affect bank performance negatively.

One limitation is that the theory does not address external pressures or broader economic factors influencing fraud. It also assumes that all individuals will act rationally when faced with these three components, which may not always be the case. The fraud triangle is significant to this study as it provides a clear framework for analysing how specific types of fraud (e.g., fraudulent loans) can emerge within banks. By identifying these elements, banks can implement targeted measures to reduce opportunities for fraud and mitigate its impact on performance.

2.2.3 The Fraud Diamond Theory (Wolfe and Hermanson, 2004)

Fraud Diamond theory propounded by Wolfe and Hermanson (2004) expands upon the fraud triangle by adding a fourth element capability to explain why individuals commit fraud. This theory assumes that an individual must have the ability or capacity to commit fraud, which includes having access to resources and knowledge about how to exploit them.

According to Wolfe and Hermerson (2004), as cited in Olongo (2013) a person's potential, personality characters and skills can play a serious role in determining whether fraud may occur. Olongo (2013) further cited that even though occasions open the door to fraud, incentive and rationalization will catch the attention of people, however, such person must have the potential to acknowledge the open entrance way as a chance and will be ready to take an unjustified advantage of the recognized loopholes.

In commercial banks in Cameroon, capability can manifest through access to financial systems or sensitive information that enables fraudulent activities such as loans or money transfers. This theory underscores that merely having opportunity, pressure, and rationalization is insufficient; individuals must also possess the means to commit fraud effectively. Wolfe and Hermanson (2004) emphasize that understanding capability is essential for developing effective anti-fraud measures.

A limitation of this theory is its potential overlap with concepts from the fraud triangle, which may lead to redundancy in analysis. Additionally, it may not adequately address external influences on an individual's decision-making process. The fraud diamond theory is significant to this study as it provides a comprehensive framework for examining fraud in banking contexts. By considering capability alongside other factors, banks can better assess vulnerabilities and enhance their performance by implementing stronger controls against fraud.

2.2.4 Social Control Theory (Travis Hirschi, 1990)

Self-control theory propounded by Gottfredson and Hirschi (1990) posits that individuals with low self-control are more likely to engage in criminal behaviour because they seek immediate gratification without considering long-term consequences. The theory assumes that self-control is established early in life and remains relatively stable throughout a person's life. Those with low self-control are more prone to impulsive actions, including engaging in fraudulent activities. According to Gottfredson and Hirschi (1990), as cited in Olongo (2013), suggest that abusing the method of socialization and social learning helps to create in self-control in persons and thus, decrease the tendency to indulge in conduct recognized as anti-social.

In the banking context, employees with low self-control may be more susceptible to committing fraud, such as unauthorized withdrawals or fraudulent loans, due to their inability to resist immediate temptations. This behaviour can lead to significant financial losses for banks, affecting overall performance. Gottfredson and

Hirschi (1990) argue that self-control is a critical factor in understanding why individuals engage in deviant behaviour.

A limitation of this theory is its focus on individual traits while neglecting situational factors that may influence behaviour. Additionally, it may oversimplify complex motivations behind fraudulent actions. This theory is significant to this study because it highlights the importance of individual characteristics in understanding fraud in banks. By assessing employees' levels of self-control, banks can develop training and monitoring programs to mitigate risks associated with fraud.

2.3 Review of Empirical Literature

Previous studies have shown that fraud can have significant negative impacts on bank performance, including financial losses, reputational damage, and decreased customer trust (Adeyemo, 2012; Kumi, 2019). We will review empirical literature with respect to the study specific objectives.

2.3.1 Fraudulent Money Transfer and Bank Performance

Manyo et al. (2023) examined the effect of fraud on bank performance in Nigeria. The specific objectives were to: investigate the relationship between the number of frauds and bank performance in Nigeria, assess the relationship between the amounts lost to frauds and bank performance in Nigeria and to examine the relationship between the numbers of staff involved in fraud loses and bank performance in Nigeria. The study utilizes secondary sources of data extracted from the Nigerian Deposit Insurance Corporation (NDIC) Annual Report and CBN Statistical Bulletin from 1994 to 2020. Statistical methods such as descriptive analysis, Pearson correlation and OLS regression techniques were employed in the evaluation of the data. The result of the hypotheses revealed number of fraud cases as well as the total amount lost to fraud had a positive and significant impact on bank performance while the total number of staff involved in fraud was found to be negative and significant on deposit money banks performance in Nigeria.

Tchouakeu and Nguefack (2023) investigated the Incidence of fraudulent transactions and customer retention in Cameroon using a case study approach. The target population included Customers of selected commercial banks in Cameroon where a sample of 100 customers was selected through purposive sampling. Primary data collected through surveys and focus group discussions was analysed using qualitative content analysis. The findings indicated a strong correlation between fraudulent money transfers and increased customer complaints, leading to higher account closures.

Mensah and Owusu (2022) assessed the relationship between frequency of fraudulent transfers and financial performance (return on assets, net income) in Ghana using a longitudinal study design. The study targeted Commercial banks in Ghana where Data from 10 banks over five years was collected. Data collected through financial statements and fraud reports was analysed using time-series analysis. The study revealed that banks with higher incidences of fraudulent money transfers experienced a decline in financial performance over time.

Nwankwo and Ijeoma (2021) examines the effect of fraudulent money transfer incidents and operational efficiency of banks in Cameroon using a cross-sectional survey design. The study targeted Bank managers and staff in Cameroon where a sample of 150 respondents was selected using simple random sampling. Data collected through questionnaire and interviews was analysed using ANOVA. The research indicated that increased fraudulent money transfers led to lower operational efficiency, thereby impacting overall bank performance negatively.

Employing regression analysis, Akintola and Oluwalaiye (2020) examined fraud and performance of the Nigeria banking industry from 2005 to 2016. Secondary data obtained from the Nigeria deposit insurance corporation annual report of various year were used for the study. Ex–post facto research designed was adopted for this study and the data were analysed using ordinary least square (OLS) method with the aid of EViews. Findings from this study showed that there is a direct relationship between fraudulent activities in the Nigeria banking industry and the expected loss of the banking industry. The study therefore recommends appointment of trusted and honest officials to represent banks in the clearing house. Bank official should be well trained and severe punishment should be arranged for fraudulent personnel. Lastly, effective internal control should be put in place by every bank to reduce incidence of fraud in banks.

Kolapo and Olaniyan (2020) investigated the impact of fraud on the performance of deposit money banks in Nigeria between the periods from 1994 to 2017. In this study, bank deposit was specified as the dependent variable while the one-period lagged value of bank deposit, amount involved in reported fraud cases, amount lost to fraud and number of staffs involved in fraud cases were used as independent variables. The Generalized Method of Moments (GMM) estimator was employed to analyze the data. This study showed that the amounts involved in fraud cases, amount lost to fraud and number of staffs involved in fraud have a negative and significant influence on the deposit of banks in Nigeria. Meanwhile, the past value of bank deposit has a positive and significant relationship with deposit of banks in Nigeria. The significance of the past value of bank deposit justifies the introduction of dynamism to this study. It was recommended that bank management should not only strengthen their internal control system, but also utilize whistle blowing policy and other “speak-up” mechanisms, which have remained underused and underrated in the Nigerian financial sector, since greater dependence on the process-type fraud detection methods simply encourage complacency.

Adebayo and Adeola (2020) researched on the effect of fraudulent money transfers (frequency of incidents, amount lost) on bank performance (profitability, customer trust) in Nigeria adopting a descriptive survey design. The study target population was employees of commercial banks in Nigeria where a sample of 200 employees selected through stratified random sampling. Primary data collected through structured questionnaires was analysed using Regression analysis. The study found that fraudulent money transfers significantly reduced bank profitability and customer trust, indicating that banks need to strengthen their internal controls.

2.3.2 Unauthorized Withdrawals and Bank Performance

Fon and Ngah (2022) studied the effect of unauthorized withdrawals (measured incident reports) on employee turnover (measured by resignation rates) in Cameroon commercial banks adopting a longitudinal study design over three years. The study target population were employees of commercial banks in Cameroon capturing data from four banks with varying sizes; total sample size was 150 employees over three years. Data collected through Internal records on employee turnover rates linked to security incidents was analysed using statistical analysis using descriptive statistics and trend analysis. The findings revealed that higher rates of unauthorized withdrawals correlated with increased employee turnover due to job dissatisfaction related to security concerns.

Osei and Gyasi (2021) assessed the Incidence of unauthorized withdrawals (captured through annual reports) and customer satisfaction (by service ratings) in Ghana using a mixed-methods approach combining qualitative and quantitative data. The study targeted customers of commercial banks in Ghana selecting a sample of 300 customers through convenience sampling. Data collected through surveys and focus group discussions was analysed using thematic analysis for qualitative data; quantitative data analysed using SPSS software. The study found a significant relationship between unauthorized withdrawals and decreased customer satisfaction levels among banking clients.

Taiwo et al. (2020) examined the causality between fraud and bank performance in Nigeria over the period 2000-2016 for quarterly financial data using Johansen’s Multivariate Cointegration Model and Vector Autoregressive (VAR) Granger Causality analysis. The results showed a long-run relationship between the variables. Bank performance was found to be linked to Granger fraud variables and vice versa at 10% significant level. This study reveals that there was a direct causal relationship between bank performance and fraud because increase in fraudulent activities in the banking sector leads to reduction in bank performance. Hence, this study recommends that internal control systems of banks should be strengthened so as to detect and prevent fraud. In this way, bank assets would be protected.

Ngwa and Tchamyou (2020) examined the effect of Unauthorized withdrawals (measured by frequency, monetary loss) and overall bank performance (measured by profitability, market share) in Cameroon adopting a cross-sectional survey design. The study targeted Bank employees across various branches in Cameroon selecting 250 employees using stratified random sampling. Primary data collected through questionnaires and interviews with bank managers were analysed using descriptive statistics and regression analysis. The results indicated that unauthorized withdrawals significantly reduced profitability margins for affected banks.

Kanu and Okafor (2019) assessed the incidence of unauthorized withdrawals (measured by the number of incidents, total value) and financial stability (by liquidity ratios, capital adequacy) in Nigeria adopting a descriptive correlational study. The study targeted employees of commercial banks in Nigeria selecting a sample of 120 employees using systematic sampling. Data collected through surveys and bank records was analysed using correlation analysis. The study concluded that unauthorized withdrawals negatively impacted the financial stability of banks, leading to decreased liquidity ratios.

Ogbeide (2018) undertook a study which was an empirical examination of fraudulent banking practices and their impact on the financial performance of the banking industry in Nigeria. Using exploratory and longitudinal research designs, the study focused on all banks in Nigeria and collected sectoral data from the NDIC annual reports. The study found that even a three-year lag in the number of fraud cases had a significant inverse effect on the financial performance of banks. In addition, the same study found that a one-year lag of total amount involved in the fraud and actual loss had a statistically significant inverse effect on the banking sector’s financial performance in Nigeria.

The effect of fraud on the profitability of the Indian public sector banks was investigated by Verma and Singh, (2017). A quantitative research design was employed while data were sourced from the India Stat which covered a period of 11 years, that is, between 2005 and 2015. The sample involved 26 public sector banks. Panel least square regression was used for the analysis, together with help of E-Views statistical software. The study found that the frequency and severity of frauds had had a significant effect on profitability, which was measured by return on assets (ROA) and return on equity (ROE), in the Indian public sector banks.

Inaya and Isito (2016) evaluated the social impact of fraud on the Nigerian banking industry. The study adopted an ex-post facto research design and sourced data from the Nigerian Deposit Insurance Corporation and annual financial reports of commercial banks from1990 to 2014. Ordinary Least Square (OLS) was also used to analyse the data. The study discovered that although the banks in Nigeria appeared to continue to thrive under the high rate of fraud, it had a negative social impact on the Nigerian banking industry.

2.3.3 Fraudulent Loans and Bank Performance

Amadou and Tchamyou (2023) assessed the Incidence of fraudulent loans (captured by number of cases reported) and customer loyalty (by retention rates) in Cameroon commercial banks using mixed-methods design combining qualitative interviews with quantitative surveys. The study targeted Customers who have taken loans from commercial banks in Cameroon selecting 200 customers selected through stratified random sampling based on loan types. Data collected through surveys complemented by interviews with bank managers was analysed using descriptive statistics for quantitative data; thematic coding for qualitative data. The results indicated a negative impact of fraudulent loans on customer loyalty, with many customers expressing distrust towards banks involved in such practices.

Kengne and Moukoko (2022) conducted a study to assessed the rates of fraudulent loans (measured by loan default rates) and operational efficiency (measured by cost-to-income ratio) in Cameroon banks using a longitudinal study over five years focusing on loan performance metrics in selected banks. The study targeted financial analysts within commercial banks in Cameroon.

Secondary data collected through financial statements from banks; reports on loan performance metrics from five banks analysed over five years were analysed using time-series analysis to assess trends over time. The research indicated that higher rates of fraudulent loans were associated with deteriorating operational efficiency.

Nguimkeu and Tchouakeu (2021) examined the effect of Fraudulent loan applications (captured by approval rates) and bank profitability (captured by profit before tax) in Cameroon using a case study design focusing on three major banks in Cameroon. The study targeted Loan officers at selected banks in Cameroon selecting 90 loan officers using purposive sampling technique based on their experience with loan processing. Data collected through Interviews and document analysis for loan approval records were analysed using qualitative thematic analysis alongside quantitative descriptive statistics. Findings showed that a high incidence of fraudulent loans led to decreased profitability due to increased provisions for bad debts.

Olabamiji and Suleiman (2021) examined the effect of fraud on the profitability of listed Banks in Nigeria. To achieve this objective, the study adopted a correlational research design and utilised secondary data extracted from the Nigerian Deposit Insurance Commission (NDIC) and published financial statements of the Banks. The study focused on 14 listed Banks for a six-year period (2012-2017). Panel multiple regression technique was used to estimate the model of the study. The findings showed that fraud (proxied by actual loss from fraud and staff involvement in fraud) has a negative and significant effect on profitability (proxied by return on asset) of listed Banks in Nigeria. In line with the findings, this study has recommended that listed Banks should establish fraud detection mechanisms which will entail the setting up of an efficient, reliable and functioning fraud detection unit to monitor transactions that may be susceptible to fraud.

Abba and Ayo (2020) assessed the Incidence of fraudulent loans (captured by amounts involved) and financial performance (captured by return on equity, net profit margin) in Nigeria banks using a quantitative correlational study design. The study targeted commercial banks in Nigeria selecting 100 loan officers using stratified random sampling. Surveys distributed to loan officers; secondary data from bank financial records were analysed using Pearson correlation coefficient analysis. The study found a significant negative correlation between fraudulent loans and financial performance metrics such as return on equity.

Muritala, Ijaiya, Afolabi and Yinus (2020) examined the causality between fraud and bank performance in Nigeria over the period 2000-2016 for quarterly financial data using Johansen's Multivariate Co-integration Model and Vector Autoregressive (VAR) Granger Causality analysis. The results show a long-run relationship between the variables. Bank performance was found to be linked to Granger fraud variables and vice versa at 10% significant level. This study reveals that there was a direct causal relationship between bank performance and fraud because increase in fraudulent activities in the banking sector leads to reduction in bank performance. Hence, this study recommends that internal control systems of banks should be strengthened so as to detect and prevent fraud. In this way, bank assets would be protected.

A study was conducted by Meiryani et al (2020) in Indonesia to determine the effect of financial target and stability on fraudulent financial statements. The study utilized secondary data from Indonesia stock exchange and companies were chosen purposively. Regression model was used to attain the research objective. The study concluded that financial target has a significant effect on fraudulent financial statements whereas financial stability had insignificant effects. The recommendations for the study included strengthening of internal control systems and employing competent auditors and accountants to minimize fraudulent practices hence achievement of financial targets.

Gitau and Samson (2016) assessed the effects of frauds on Commercial Banks Performance. Specifically, the study identified the effect of cheque fraud, the effect of fraudulent invoice and payments, examined the extent of money laundering and to identify the effect of fraudulent loans on the financial performance of Commercial Banks in Nakuru town. The study adopted a descriptive research design targeting Tier I banks in Nakuru County. A survey of 11, Tier 1 Banks was sufficient, and specifically targeted; management, tellers, Loans department, and Accounts opening section. Primary data for the study was collected using self-administered questionnaires, while secondary data was collected from annual reports at Central Bank of Kenya, Bank fraud investigation unit and audited financial reports of the banks. The data was analysed using SPSS for correlation analysis and regression analysis and was presented using figures and tables for ease of interpretation and elaboration. The study found that fraudulent invoice and payments, money laundering and fraudulent loans all have a significant effect on the financial performance of Commercial Banks in Nakuru town.

Kanu and Idume (2016) undertook a study to evaluate the insecure situation of bank fraud and its impact on bank performance. The researchers used secondary data collected from the NDIC's Annual Report and employed multiple regression analysis. The findings revealed a negative relationship between expected losses on insecurity and fraud (ELF), rate of fraud cases (NFC) and rate of staff involvement in fraud and earnings before tax of commercial banks in Nigeria. The Granger causality test showed a uni-directional causality of bank insecurity and fraud with commercial bank performance. However, the volume (amount) of bank insecurity, NFC and earnings of commercial banks in the parsimonious error correction mechanism (ECM) revealed a direct and significant relationship.

2.4 Gaps and Contributions

Based on the empirical literature reviewed, several research gaps emerge: While there are numerous studies exploring fraud in banking contexts globally or within other African nations, there is a lack of comprehensive research specifically addressing the unique context of commercial banks in Cameroon. Again, most existing studies either generalize types of fraud or focus on one aspect without exploring the interconnected effects on bank performance comprehensively. In addition, many studies adopt cross-sectional designs which do not capture changes over time concerning fraud incidents or their effects on bank performance metrics. The researcher aims to contribute to the existing body of knowledge by focusing specifically on the Cameroonian banking sector analyzing how various types of fraud; fraudulent money transfers, unauthorized withdrawals, and fraudulent loans interact to affect overall bank performance adopting a longitudinal approach, to offer insights into trends over time regarding fraud incidents within commercial banks in Cameroon.

3. Methodology

3.1 Research Design

This study made use of descriptive and correlational research designs. The study approach was mainly quantitative where numerical data was used to achieve the research objectives and it is considered appropriate for the present study which has as objective to investigate the relationship between fraud and performance of commercial banks in Cameroon. This study employs a quantitative method, using a survey approach to collect data from NFC Bank staff (Creswell, 2014). The survey design allows for the collection of numerical data, which can be analyzed using statistical methods.

3.2 Area of the Study

This study is carried out in Cameroon. Cameroon has a total land area of 475,442 kilometers (183,569 square kilometers). It is bordered by Nigeria to the west and north, chad to the northeast, the Central African Republic to the east, and Equatorial Guinea, Gabon, and the republic of Congo to the south. The country also has a coastline in the Atlantic Ocean to the southwest, along the Gulf of Guinea. Cameroon's geographical coordinates are 7.3697° n latitude and 12.3547° e longitude. The average estimated population of Cameroon was around 27.9 million people according to the United Nations World Population Prospects 2022.

Early inhabitants of the territory included the Sao civilisation around Lake Chad, and the Baka hunter-gatherers in the South Eastern rainforest. Portuguese explorers reached the coast in the 15th century and named the area *Rio dos Camarões* (*Shrimp River*), which became *Cameroon*in English. Fulani soldiers founded the Adamawa Emirate in the north in the 19th century, and various ethnic groups of the west and northwest established powerful chiefdoms and fondoms.

The official languages of Cameroon are French and English, the official languages of former French Cameroons and British Cameroons. Christianity is the majority religion in Cameroon, with significant minorities practicing Islam and traditional faiths. Large numbers of Cameroonians live as subsistence farmers. The country is often referred to as "Africa in miniature" for its geological, linguistic and cultural diversity. Its natural features include beaches, deserts, mountains, rainforests, and savannas. Its highest point, at almost 4,100 metres (13,500 ft), is Mount Cameroon in the Southwest Region. Its most populous cities are Douala on the Wouri River, its economic capital and main seaport; Yaoundé, its political capital; and Garoua. Limbe in the southwest has a natural seaport. Cameroon is well known for its native music styles, particularly Makossa, Njang and Bikutsi, and for its successful national football team. It is a member State of the African Union, the United Nations, the *Organisation Internationale de la Francophonie* (OIF), the Commonwealth of Nations, Non-Aligned Movement and the Organisation of Islamic Cooperation.

Sampling Procedures and Sample Size

The sample population was 100 staff from NFC bank branches in Yaound, Douala, Buea, Kumba, Bamenda and Limbe. The respondents comprised of Head of Departments, branch Managers Operations Managers and Customer care/Front desk officers. A sample of 100 staff members was selected using a stratified random sampling technique (Sekaran & Bougie, 2016). The sample size is sufficient to represent the population of NFC Bank staff.

3.3 Sources of Data and Method of Data Collection

This study utilized both primary and secondary data in order to effectively analyze financial fraud and Commercial Bank performance. Questionnaires containing closed ended questions were used in collecting primary data. Secondary data was however sourced from BEAC reports and annual internal reports of NFC bank. Questionnaires were distributed to respondents after getting approval from the management of NFC bank. Data was collected for a period of one week. A structured questionnaire was used to collect data on fraud types, frequency, and impact on bank performance. The questionnaire was designed based on previous studies (Adeyemo, 2012; Kumi, 2019).

3.4 Research Instruments

A questionnaire was the major instrument which was used for data collection. The questionnaire was preferred for this study because it enabled the researcher reach a larger number of respondents within a short time, thus made it easier to collect relevant information. The first section in the questionnaire was the face sheet, to collect data on profile of respondents. The second section in the questionnaire was on variable of fraud (fraudulent money transfer, unauthorized withdrawals and fraudulent loans); the third section of the questionnaire had questions of performance of the bank. The demographic characteristics of the respondents was capture using closed ended multiple questions. The second section in the questionnaire was on variable of fraud was capture with statement about Fraud in NFC bank to reflect their frequency and prevalence (1-frequent, 2-less frequent, 3-Rarely frequent, 4-not frequent) and the questions as regard bank performance were measured on a Likert Scale on five points ranging from 1= strongly disagree, 2 = disagree, 3 = Neutral, 4 = Agree and 5=strongly agree. The questionnaire contained close-ended questions to collect quantifiable data relevant for precise and effective correlation of research variables. They were also preferred to save time, enabled respondents to easily fill out the questionnaires and keep them on the subject and relatively objective.

3.5 Validity and Reliability of the Instruments

3.5.1 Validity of the Instruments

The researcher ensured the validity of the instrument by face validity analysis using research supervisors who went on checking if all the items which was constructed, helped achieve the aim of the study. This was done by giving copies of questionnaire to five lecturers (experts) to judge the validity of the questions according to objectives.

The experts, all university academics, were asked for their opinions about the actual questions and their relevance to the topic. Some questions were deleted as inappropriate statements according to the experts. The expert panel that reviewed the questionnaire items comprised five experts whose details are provided on Table 1.

Table 1. University academics on the expert panel for questionnaire items

Panel member no	**Country**	**Qualification/Rank**	**Specialty**
1	Cameroon	Associate professor	Finance
2	Cameroon	Associate professor	Economics
3	Cameroon	Associate professor	Economics

4	Cameroon	Associate professor	Accounting
5	USA	Ph.D.	Business management

Source: Author (2024).

The feedback provided by the expert panel members was used to improve the research instrument. A number of changes were made until the final version was approved via email communications with the experts.

A content validity index (CVI) was computed using the following formula:

Table 2. Content Validity Index for the questionnaires

Variable	Description	No. of items	CVI
Dependent variable	Financial performance	10	0.772
Independent variable	Fraudulent money transfer	17	0.861
	Unauthorized withdrawals	10	0.754
	Fraudulent loans	7	0.813

3.5.2 Reliability of the Instruments

The research instrument was examined for its reliability by using Cronbach's Alpha value. All the items included in the scale adopted from reviewing literature were subjected to reliability testing. According to Cronbach Alpha Coefficient Test, the questionnaire is considered reliable if all the coefficients are greater than 0.70 (Sekaran, 2003).

Table 3. Content Reliability Indices for the questionnaire

Variable	Description	No. of items	Cronbach Alpha
Dependent variable	Financial performance	10	0.913
Independent variable	Fraudulent money transfer	17	0.832
	Unauthorized withdrawals	10	0.884
	Fraudulent loans	7	0.817

3.6 Data Analysis Procedure

Descriptive statistics and inferential statistics (regression analysis) were used to analyze the data (Field, 2013). The regression analysis will help to identify the relationship between fraud and bank performance.

3.6.1 Descriptive Analysis

The univariate statistics of mean, median, standard deviation, minimum, and maximum will be used to describe the patterns of the data.

Data analysis involved use of descriptive statistics approach. Additionally, inferential statistics was also utilized in achieving study objectives. This involved conducting correlation and regression analysis. IBM SPSS version 21 was utilized to process, analyze the data and compute findings. Content analysis was adopted in the analysis of qualitative data. Data was analyzed using means and percentages and presented in form of tables and graphics. The regression model used to link the financial fraud and bank performance was as follows.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \propto$$

Where Y, X_1, X_2 and X_3 and $\propto$ are bank performance, fraudulent money transfer, unauthorized withdrawals, fraudulent loans and error term respectively. β_S represent regression coefficients.

Where;

Y = bank performance.

$\beta_0 - \beta_4$- (Regression co-efficient of independent variables).

X_1 – fraudulent money transfer

X_2 – unauthorized withdrawals

X_3 –fraudulent loans

e - Error term accounts for the probable aspects that could affect the dependent variable that were not seized in the study.

3.6.2 Inferential Analysis

The multiple linear regression model and correlation analysis will be used to analyzed the hypotheses of the research. This method is used because it would help in determining the relationship the independent variables and dependent variables. Predictions can also be made with the use of the equation. It also determines the degree to which a particular independent variable influence a dependent variable.

The regression analysis will be conducted at 95 % confidence level. t-test will be used for the test of individual significance of independent variables, F-test for joint significance of all variables, and R-squared for the explanatory power of the model.

3.7 Ethical Consideration

In this study, ethical considerations will be carefully considered to protect the rights and wellbeing of the participants. Prior to data collection, informed consent will be obtained from all participants, clearly explaining the purpose of the study, their voluntary participation, and their right to withdraw at any time without penalty. Confidentiality will be maintained from the bank's information. All references and citations will be acknowledged.

4. Presentation of Findings and Analyses

Response Rate

The response rate of study was ascertained to indicate whether the number of questionnaires that were returned was sufficient enough for analysis. All the 100 questionnaires that were distributed were all filled and returned, leading to achievement of 100% response rate (Table 4).

Table 4. Response rate

Issued questionnaires	Questionnaires filled and returned	Response rate
100	100	100%

Source: Field work (2025).

4.1 Demographic Characteristics of Respondents

The majority of the participants were males (n=68, 68%), most of the respondents had completed Bachelor's level of education (n=77, 77%). By age, 38% (n=38) were less than 30 years and 38% were between 30 to 39 years. This implied that the age category of most of the respondents was less than 40 years. By years of experience, 46% (n=46) had less than 5 years of experience and 39% had 5 to 10 years of experience. This implies that the majority of the respondents had experience of 10 years and below. By department, 43% were from operation department, 25% were from sales department, 18% from IT department and 20% from credit department (Table 5).

Table 5. Demographic characteristics of respondents

Variable	**Frequency**	**Percentage**
Sex		
Male	68	68
Female	32	32
Education level		
Diploma	16	16
Bachelors	77	77
Masters	7	7
Age category		

Less than 30 years	38	38
30 - 39 years	38	38
40 - 49 years	14	14
50 years and over	10	10
Years of experience		
Less than 5 years	46	46
5 - 10 years	39	39
11-15 years	9	9.0
Over 15 years	6	6.0
Department		
Operations	43	43.0
Sales	25	25.0
IT	18	18.0
Credit	20	20.0

Source: Field work (2025).

4.2 Fraudulent money transfer and Commercial Banks Performance

Banks and other financial institutions do carry out money transfer operations. Due to advancement in technology, fraudulent activities do take place in money transfer operations. The author gathered respondents' opinions on the various ways in which fraudulent money transfer may occur to ascertain the frequency of occurrence at NFC bank Plc.

Table 6. Frequency of Occurrence of Fraudulent money transfer in NFC Bank Plc

Statement	**frequent**	**Less frequent**	**Rarely frequent**	**Not frequent**	**mean**	**Std Dev**
weak authentication		31%	35%	34%	1.97	0.810
identity theft		28%	31%	41%	1.87	0.824
lack of transaction monitoring		38%	31%	31%	2.07	0.831
insufficient customer verification		23%	33%	44%	1.79	0.795
technologies vulnerabilities and human error		23%	35%	42%	1.81	0.787

Source: field work (2025).

From the table above, 31% of respondents stated that weak authentication in money transfer is less frequent at NFC bank Plc, 35% stated that it's rare to find the bank in situations of weak authentication in money transfer whereas 34% stated that cases of unauthorized money transfer are not frequent at NFC bank Plc. The results also show that 28%, 31% and 41% of respondents did indicate that at NFC bank identity theft and unauthorized money transfer occurs less frequently, rarely occur and not frequently occur respectively. The results further indicate that 38%, 31% and 31% of respondents opined that at NFC bank Plc fraudulent money transfer activities as a result of lack of transaction monitoring are less frequent, rarely frequent and not frequent respectively. Additionally, 23% of respondents did indicate that fraudulent money transfer as a result of insufficient customers verification are less frequent at NFC bank. while 33% and 44% were for rarely frequent and not frequent in that order. Lastly, 23% of respondents stated that cases of fraudulent money transfer as a result of technologies vulnerabilities and human error are less frequent at NFC bank. However, 35% of respondents were of the opinion that cases of fraudulent money transfer do occur rarely while 42% reported that such cases are not frequent. These results widely show that cases of cases of unauthorized money transfer are very minimal at NFC bank but continue to be a problem which need to be completely prevented.

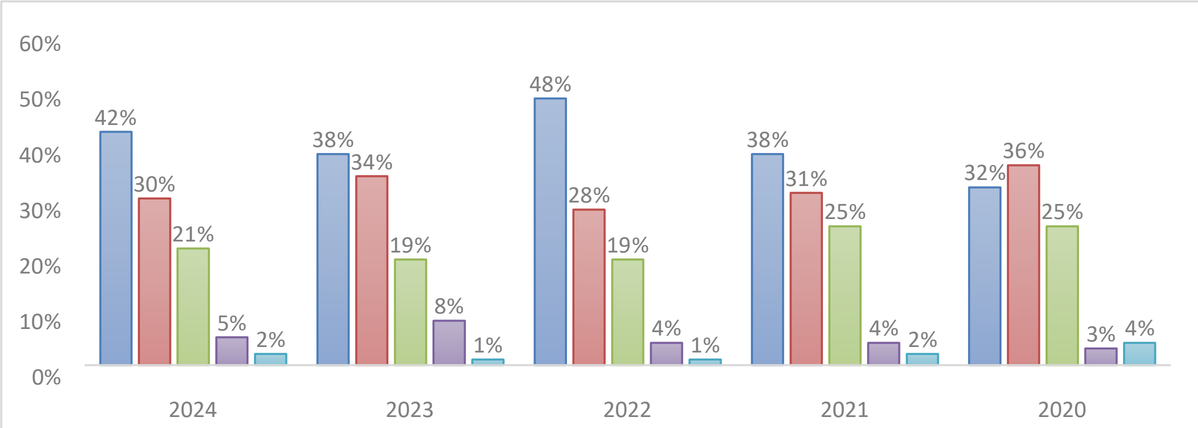

Figure 2. Fraudulent money Transfer Occurrence at NFC bank for the past 5 Years

The above figure 2 indicate that 42%, 38%, 48%, 38% and 32% of respondents opined that fraudulent money transfer were not frequent for the years 2024, 2023, 2022, 2021 and 2020 respectively. Regarding whether fraudulent money transfer were rarely frequent, 30%, 34%, 28%, 31% and 36% of respondents supported for 2024 down to 2020 respectively. The respondents who stated that occurrence of fraudulent invoices at Equity Bank Rwanda Plc. was less frequent were 21%, 19%, 19%, 25% and 25% respectively for the five years staring 2020 downwards. Additionally, some respondents were of the opinion that there were frequent fraudulent invoice cases from 2020 down to 2016 accounting for 5%, 8%, 4%, 4% and 3% respectively. Lastly the findings did indicate that 2% of respondents were of the view that fraudulent invoices were highly frequent in 2020 and 2017 while 1% indicated that they were highly frequent in 2019 and 2018 and finally 4% did indicate high frequency of occurrence of fraudulent invoices in 2016.

Table 7. Correlation between Fraudulent money transfer and Bank Performance

		Fraudulent invoices	Bank performance
Fraudulent money transfer	Pearsons Correlation	1	-.630**
	Sig. (2-tailed)		.028
	N	100	100
Bank performance	Pearsons Correlation	-.630**	1
	Sig. (2-tailed)	.028	
	N	100	100

Source: Field work (2025).

The findings indicate a Pearson correlation coefficient of -0.630 and significance value of 0.028. Since the Pearson coefficient value is above 0.5 but less than 0.7 in absolute terms, there is a moderate association between fraudulent money transfer and bank performance. The relationship between the two is negative indicated by the negative sign of the correlation coefficient. Lastly the relationship between fraudulent money transfer and bank performance is significant since the significance value of 0.028 is less than 0.05.

4.3 Unauthorized withdrawal and Commercial Banks Performance

The second form of financial fraud that the study focused on is unauthorized withdrawal where the person's identity details are accessed by someone else hence able to access the financial details of the person. This can cause theft of funds since the person can easily access the accounts of the victim. There is possibility that such cases can taint the name of the bank negatively and reduce its financial performance hence need for appropriate measures to curb the vice.

Table 8. Frequency of Occurrence of authorized withdrawal at NFC bank

Statement	**frequent**	**Less frequent**	**Rarely frequent**	**Not frequent**	**mean**	**Std Dev**

Credit card theft	27	38	35	1.92	0.787
Debt card theft	32	37	31	2.01	0.798
Theft of customer passport/national ID numbers	27	40	33	1.94	0.776
Theft of account numbers and PIN	29	40	31	1.98	0.778
Fraudulent change of personal address	17	35	46	1.75	0.809

Source: field work (2025).

The findings in the above table 8 indicate that 27%, 38% and 35% of respondents did indicate that theft of credit card is less frequent, rarely frequent and not frequent respectively. In terms of debt card theft, the 32% and 37% of respondents opined that they less and rarely frequent while 31% indicated that they are not frequent. Theft of customer passport or national ID numbers was perceived to be less frequent by 27% of respondents and rarely frequent by 40% of respondents though 33% indicated that it's not a frequent occurrence at NFC bank Plc. Additionally, theft of account numbers and PIN was supported by 29% of respondents as being less frequent and 40% as being rarely frequent at NFC bank, while 31% opined that such cases are not frequent. Last but not least, the findings indicated that 17% of respondents were of the view that fraudulent change of personal address is less frequent while 35% indicated that this practice is rarely frequent and a majority of respondents at 46% reported that the practice is not frequent at NFC bank. Lastly the mean values from the table indeed are all ranging at approximately 2 which indicates that all the forms of identity theft highlighted are rarely frequent at NFC bank. These results generally show that the unauthorized withdrawal practices are not common at NFC bank though they occur.

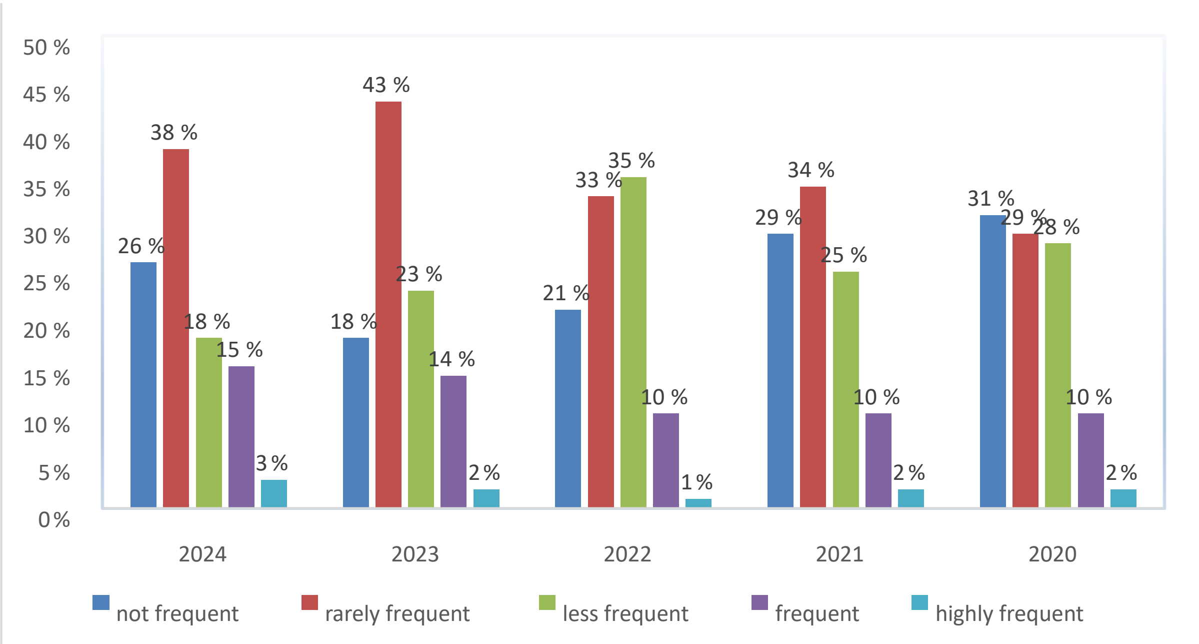

Figure 3. Unauthorized withdrawal Occurrence at NFC bank for past 5 Years

From the above figure 3, 38%, 43%, 33%, 34% and 29% of respondents opined that the occurrence of unauthorized withdrawal was very rare between 2020 and 2024 respectively in a descending order. Additionally, 26%, 18%, 21%, 29% and 31% of respondents stated that identity theft cases were not frequent for 2024, 2023, 2022, 2021 and 2020 respectively. Moreover, 18%, 23%, 35%, 25% and 28% of respondents did state that the occurrence of unauthorized withdrawal at NFC bank was less frequent for 2024 to 2020 respectively in a descending order. Last but not least, 15%, 14%, 10%, 10% and 10% of respondents did indicate that unauthorized withdrawal occurrence was frequent in 2024 going down to 2020 respectively. Lastly, 3%, 2%, 1%, 2% and 2% of respondents were of the opinion that the occurrence of unauthorized withdrawal was highly frequent from 2024 down to 2020 respectively. These results indeed indicate that generally the occurrence of unauthorized at NFC bank has been very rare for the past 5 years indicating the effectiveness of the measures put in place to minimize the occurrence of unauthorized withdrawal frauds but more need to be done to completely eradicate this situation.

Table 9. Correlation between unauthorized withdrawal and Bank Performance

		Authorized	Bank performance
Identity theft	Pearson's Correlation	1	-.650**
	Sig. (2-tailed)		.014
	N	100	100
Bank performance	Pearson's Correlation	-.650**	1
	Sig. (2-tailed)	.014	
	N	100	100

Source: Field work (2025).

The findings above indicate a Pearson's correlation coefficient of -0.650 and a significant value of 0.014. The Pearson's correlation coefficient is negative and falls between 0.5 and 0.7, an indication that there is a moderate negative association between authorized withdrawal and bank performance. When there is a reduction in unauthorized withdrawal cases, the bank performance increases in terms of profitability. Additionally, the association between unauthorized withdrawal and bank performance is significant indicated by the significant value which is less than 0.05.

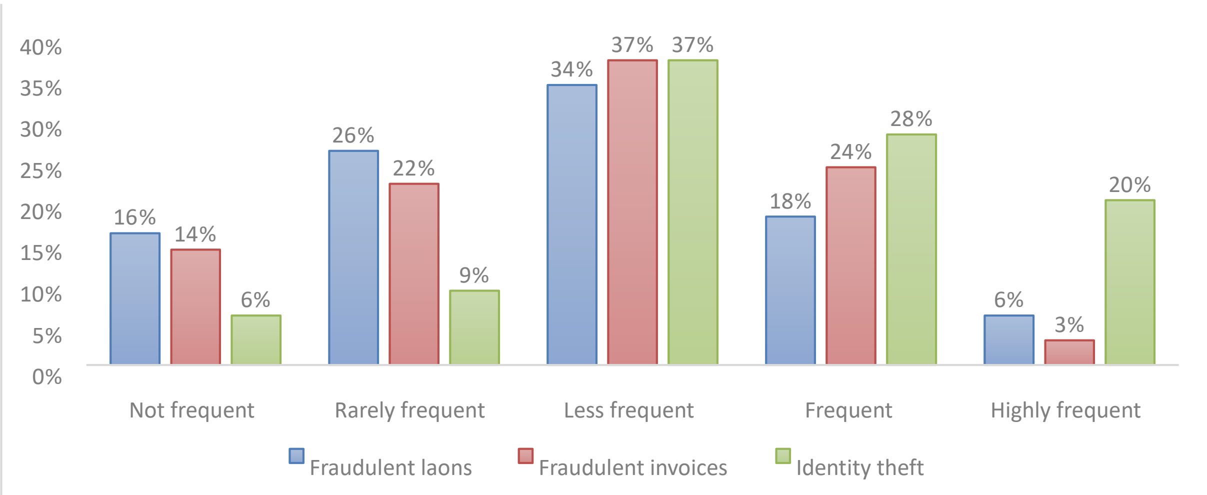

Figure 4. Frequency of unauthorized withdrawal in NFC bank

The results indicate that 16%, 26%, 34%, 18% and 6% of respondents are of the opinion that unauthorized withdrawals occur not frequently, rarely frequent, less frequent, frequent and highly frequent respectively. Additionally, 14%, 22%, 37%, 24% and 3% of respondents indicated that unauthorized withdrawal occur in the NFC bank not frequently, rarely frequent, less frequent, frequent and highly frequent respectively. Lastly the results indicate that 6%, 9%, 37%, 28% and 20% opined that the occurrence of unauthorized withdrawal in NFC bank is not frequent, rarely frequent, less frequent, frequent and highly frequent respectively. These results indeed confirm that as much as banks are trying to minimize the cases of authorized withdrawal, they are still there as evidenced by a good percentage of respondents who indicated that the cases are still frequent and some even indicating that they highly frequent. The results actually show that financial frauds result mostly from unauthorized withdrawal, followed by fraudulent money transfer and lastly fraudulent loans. However, these cases are widely minimal as majority indicated that financial fraud cases are not, rarely or less frequent with majority indicating that financial frauds do occur less frequently.

4.4 Fraudulent Loans and Commercial Banks Performance

Respondents opinion on statements regarding fraudulent loans and bank performance are summarized in below table. The scale range was from 1 to 5 where 1, 2, 3, 4, 5 represented not frequent, rarely frequent, less frequent, frequent and highly frequent respectively. The results are summarized in the following table.

Table 10. Frequency of Occurrence of Fraudulent Loans at NFC bank

Statement	**frequent**	**Less frequent**	**Rarely frequent**	**Not frequent**	**mean**	**Std Dev**
False documentation		33%	34%	33%	2.00	0.817
Ghost borrowers		31%	26%	43%	1.88	0.856
Undisclosed liabilities		35%	30%	35%	2.00	0.841
Misrepresentation		32%	39%	29%	2.03	0.784
Loan kiting		21%	33%	46%	1.75	0.783
Overvaluation of collateral		35%	34%	31%	2.04	0.815

Source: Field work (2025).

From the above results, 33% of respondents indicated that cases of false documentation by loan applicants occur less and not frequently whereas 34% indicated that such cases rarely occur. Regarding cases of ghost borrowers, 31% and 26% agreed that they occur less frequently and rarely frequent respectively at NFC bank Plc. While 43% were of the opinion that they occur not frequently. Additionally, undisclosed liabilities by some borrowers occur less frequently supported by 35% of respondents, occur rarely frequent at 30% and 35% of respondents indicated that it does not frequently occur. Moreover, the results did indicate that 32%,39% and 29% of respondents agreed that borrower's misrepresentation in order to increase their chances of getting a loan is less frequent, rarely frequent and not frequent respectively. Further, 21% of respondents opined that loan kiting that is applying for multiple loans from different banks using the same collateral or false information occur less frequently at NFC bank Plc. While 33% were of the opinion that it occurs rarely and finally 46% of respondents did indicate that it doesn't occur frequently. Last but not least, based on the cases of few or non-reputable referees, the findings did indicate that the 35% of respondents agreed that it occurs less frequently while 34% and 31% were for the rare occurrence and not frequent occurrence respectively. Lastly, the mean values for all cases of fraudulent loans presented was reported at approximately 2 which implies that the fraudulent loans rarely occur at NFC bank Plc.

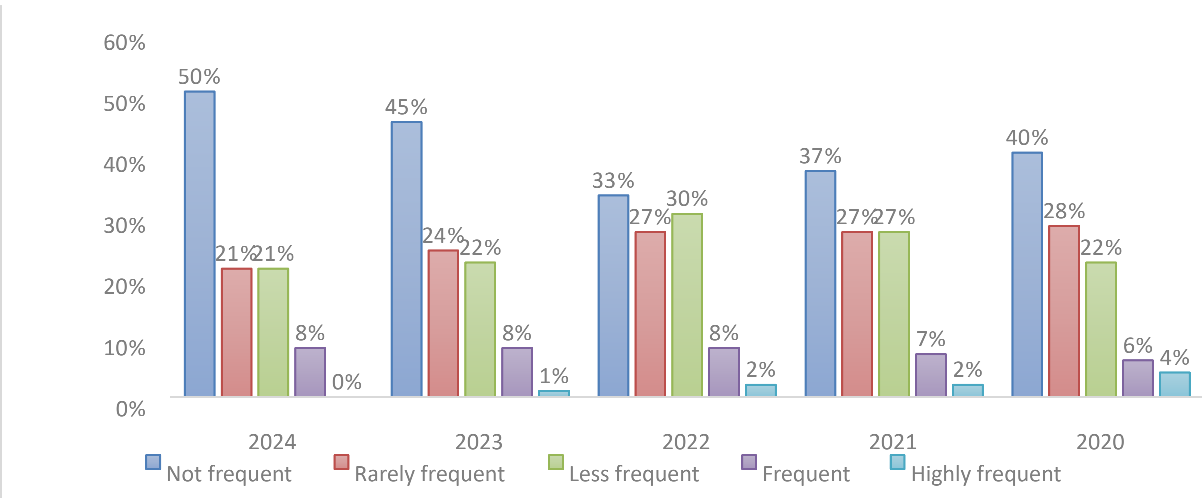

Figure 5. Frequency of Occurrence of Fraudulent Loans for past 5 years at NFC Bank Plc

The above figure indicates that 50%, 45%, 33%, 37% and 40% of respondents opined that fraudulent loans were not frequent for the years 2024, 2023,2022,2021 and 2020 respectively. Regarding whether fraudulent loans were rarely frequent, 21%, 24%, 27%, 27% and 28% of respondents supported for 2024 down to 2020 respectively. The respondents who stated that occurrence of fraudulent loans at NFC bank Plc. was less frequent were 21%, 22%, 30%, 27% and 22% respectively for the five years staring 2024 downwards. Additionally, 8% of respondents were of the opinion that fraudulent loans cases occurred frequently in 2024, 2023 and 2022. However, 7% and 6% of respondents were of the same opinion for 2021 and 2020 respectively. Lastly 1% of respondents indicated that fraudulent loans cases were highly frequent in 2023 while 2% were of the same opinion in 2022 and 2021 and finally 4% indicated the same in 2020.

Table 11. Correlation between fraudulent loans and Bank Performance

		Fraudulent loans	**Bank performance**
Fraudulent loans	Pearsons Correlation	1	-.690**
	Sig. (2-tailed)		.031
	N	100	100
Bank performance	Pearsons Correlation	-.690**	1
	Sig. (2-tailed)	.031	
	N	100	100

Source: Field work (2025).

The results above show that the Pearson correlation coefficient is -0.690 with a significance value of 0.031 (Table 2). This indicates a moderate negative significant association between fraudulent loans and bank performance. Therefore, when fraudulent loan cases reduce, profitability of the bank increases.

4.5 Fraud Control Mechanisms and Bank Financial Performance

The author looked at the contributions of the internal and external mechanisms in place towards reducing financial fraud in the banking sector.

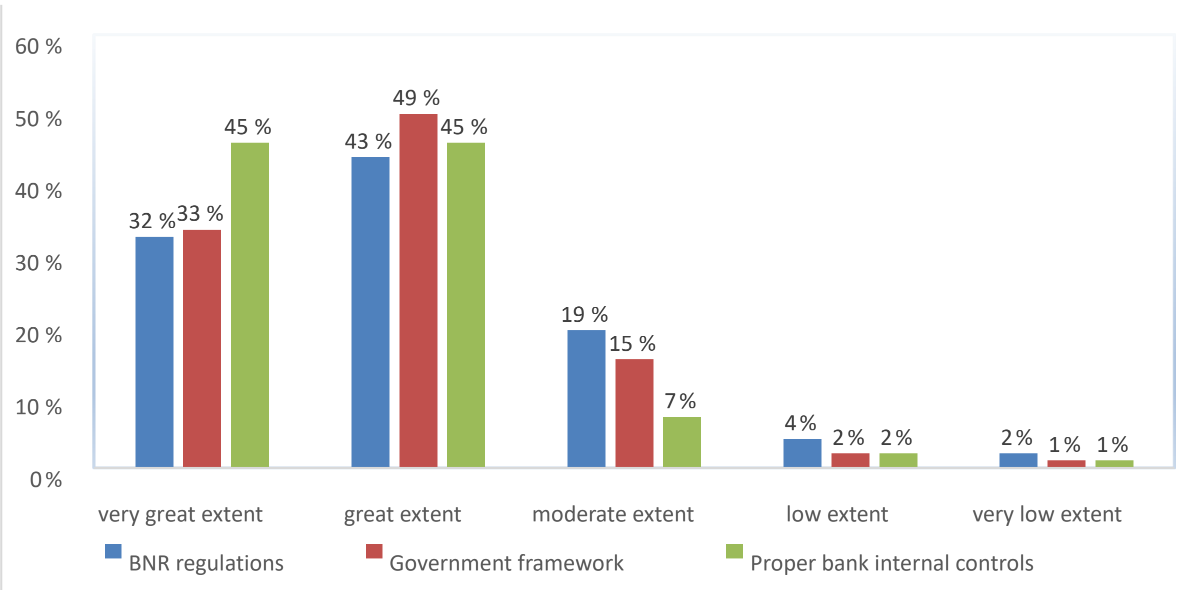

Figure 6. Fraud Control Mechanisms and Bank Performance

The results above show that bank regulations contribute a lot towards controlling financial frauds. This was evidenced by a greater percentage accounting for 94% indicating that such regulations contribute to a moderate, great and very great extent towards controlling financial frauds. However, 6% opined that bank regulations contribute to financial frauds control to low and very low extent. Regarding government framework, 97% of respondents did agree that they contribute to a moderate, great and very great extent towards controlling financial frauds in the banking sector. However, only an insignificant number of 3% indicated the contrary opinion. Lastly proper bank internal control mechanisms in place was also found to contribute greatly in controlling financial frauds supported by 90% of respondents and moderate contribution supported by 7% of respondents. On the contrary, only an insignificant number of 3% of respondents stated that proper bank internal controls contribute to a low and very low extent towards controlling financial frauds.

4.6 Regression Analysis

In order to ascertain the effects of financial frauds particularly fraudulent money transfer, unauthorize withdrawal and fraudulent loans on bank performance, regression analysis was conducted, and the results were as follows.

Table 12. Model Summary

Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624	.612	.45382

Source: Field work (2025).

The model summary above indicate that R squared value is 0.624 equivalent to 62.4%. This implies that the three forms of financial fraud discussed in this study including fraudulent money transfer, unauthorize withdrawal and fraudulent loans explains 62.4% of the variations in bank financial performance. The remaining 37.6% of the variations in bank financial performance are explained by other determinants of bank performance other than the three forms of financial fraud in this study.

Table 13. ANOVA

Model	Sum of Squares	Df	F Statistic	Significance
Regression	32.789	3	53.069	0.000
Residual	19.771	96		
Total	52.560	99		

Dependent variable: Bank Performance.

Source: Field work (2025).

Analysis of variance is conducted to ascertain the validity of the model used to analyze the relationship between or among variables. The study conducted a Two-Way ANOVA and the results from the table above indicate that F statistic value is 53.069 and the significance value is 0.000. The F table value for F (3,96) at alpha value of 0.01 is 3.95 which is less than F calculated value of 53.069. This implies that the null hypothesis of the inappropriateness of the linear regression model used in this study is rejected. Therefore, the linear regression model used to show the effect of fraud on bank performance adopted in this study is appropriate.

Table 14. Model Coefficients

Model	**Coefficient**	**Std Error**	**T Statistic**	**Significance**
Constant	6.072	.174	34.902	.000
Fraudulent money transfer	-.151	.072	-2.094	.039
Unauthorized withdrawal	-.581	.076	-7.627	.000
Fraudulent loans	-.431	.080	-5.413	.000

Dependent Variable: bank performance.

The above table shows the coefficients of the regression model and the significance values. From the table the coefficient term is 6.072 while the coefficients for Fraudulent money transfer, Unauthorized withdrawal and Fraudulent loans are -.151, -.581 and -.431 respectively. This implies that as fraud cases increase, bank performance reduces. The significant value for constant term, Unauthorized withdrawal and fraudulent loan is 0.000 while that of Fraudulent money transfer is 0.039. The dependent variable is bank performance. When there are no effects of fraud variables, bank performance value stands at 6.072. Keeping other factors constant, 1% change in fraudulent money transfer, unauthorized withdrawal and fraudulent loans leads to a 15.1%, 58.1% and 43.1% change in bank performance in the opposite direction. A reduction in fraud leads to an increase in bank performance as indicated by negative signs of the predictor variables. The effects of fraud on bank performance are strongly significant since the p values for all the predictor variables are less than 0.05 and all are zero except in the case of fraudulent money transfer.

$$Y = 6.072 - 0.151X_1 - 0.581X_2 - 0.431X_3 + \propto$$

Where Y, X_1, X_2 and X_3 and $\propto$ are bank performance, fraudulent money transfer, unauthorized withdrawal, fraudulent loans and error term respectively.

5. Discussion of Results

The findings of this study are consistent with previous research, highlighting the detrimental impact of fraud on bank performance (Adeyemo, 2012; Kumi, 2019). The study's results have implications for NFC Bank's management, policymakers, and regulators. We will discuss the results with respect to the study specific objectives in order to get more insight.

5.1 Effect of Fraudulent Money Transfer on Commercial Bank Performance

Determining the effects of fraudulent money transfer on commercial bank performance formed the first objective of this study. The researcher gathered data from the respondents and analyzed in order to achieve this objective. Descriptive analysis involved seeking respondents' opinion on the state of fraudulent money transfer occurrence in the banking sector in general and also specifically at NFC bank. The various forms of fraudulent money transfer or potential causes of fraudulent money transfer was assessed from respondents including weak authentication, identity theft, lack of transaction monitoring, insufficient customer verification, technologies vulnerabilities and human error. All these factors may lead to fraudulent money transfer being processed. The findings did indicate that these practices are less, rarely or not frequent at NFC bank meaning that there are prudent policies put in place to avoid occurrence of fraudulent money transfer at NFC bank. Additionally, fraudulent money transfer was found to a large extent not frequent in NFC bank though they occur.

Correlation findings did indicate Pearson correlation coefficient of -.690 and significance value of 0.031 which implies that there is moderate negative significant association between fraudulent money transfer and commercial bank performance. Moreover, regression analysis indicates that 1% fall in fraudulent loans leads significant increase in bank performance by 15.1% keeping another factors constant. Therefore, these results show that fraudulent money transfer has negative significant effect on bank performance, for NFC bank to improve its performance appropriate measures must be in place to minimize or eliminate the occurrence of fraudulent money transfer.

These results are in concurrence with those of Odhiambo (2013) who conducted a study in Kenya on financial fraud and liquidity on financial performance of commercial banks. The study in deed established that financial fraud on form of fraudulent money transfer reduces bank liquidity and therefore negatively affects the financial performance of commercial banks. Additionally, this study concurs with NDIC (2010) research which found that financial frauds in the form of unauthorized money transfer may plunge the bank in a liquidity trap where by its not able to have enough funds to give as loans and being that loans interests are major source of revenue for banks, frequent occurrence of unauthorized money transfer in a bank may negatively affect bank profitability. The study findings are also in agreement with Proskurnova et al. (2020) who analyses the transactions with bank card in relation to unauthorized transactions and unauthorized money transfer and bank performance and found that online bank fraud and unauthorized transfer significantly predict bank performance.

5.2 Effect of Unauthorized Withdrawal on Commercial Bank Performance

Unauthorized withdrawal in a bank refers to the act of withdrawing money from an account without the account holder's permission or knowledge. This might because of a situation where personal identity details are stolen by someone else who then benefits by accessing the accounts hence causing financial damage to the victim (Koong et al., 2012). The study assessed the status of unauthorized withdrawal at NFC bank. The study established that at NFC bank unauthorized withdrawal cases are minimal though they occur. These include theft of debt card, credit card, theft of personal address, ID numbers, account numbers and PIN numbers among others. The findings indicate that there is a moderate occurrence of unauthorized withdrawal in NFC bank. Technology advancement has brought insecurity challenges since fraudsters can manipulate the systems and get access to some information regarding someone and this poses a threat to the victim. Additionally, these fraudsters can collude with workers in the banking sector and get some information regarding the identity of a person hence exposing the person to financial risks and affecting her performance (Albrecht et al., 2014).

The study conducted correlation between unauthorized withdrawals and bank performance and established moderate negative association between the two. This implies that as unauthorized withdrawal cases increase, bank performance reduces and vice versa. Additionally, regression analysis findings did indicate that there is significant negative effect of unauthorized withdrawals on bank financial performance. A 1% reduction in unauthorized withdrawal cases results to 43.1% chances of increased bank performance keeping another factors constant. These findings support various findings from other countries who also found negative significant effects of identity theft on bank financial performance (Gates & Jacobs, 2009; Akindele, 2011; Odhiambo, 2013).

5.3 Effect of Fraudulent Loans on Commercial Bank Performance

The third objective of the study focused on examining the effect of fraudulent loans on commercial banks performance. The study analyzed descriptively the status of fraudulent loans occurrence in NFC bank. The major avenues of fraudulent loans that the study explored included false documentation, ghost borrowers, undisclosed liabilities, misrepresentation, loan kiting and overvaluation of collateral. The study, however, established that the occurrence of these avenues of fraudulent invoice payments are widely less and rarely frequent at NFC bank. However, the study established that the cases of fraudulent loans indeed exist but not frequent. Fraudulent loans though not frequently occur in NFC bank, it's evident in the NFC bank as supported by a significant percentage of respondents. This finding agrees with the study of Kumar et al., (2018) which found that fraudulent loans can significantly impact bank performance, leading to financial losses and reputational damage.

Correlation findings did indicate that there is moderate significant negative relationship between fraudulent loans and bank financial performance. This implies that an increase in cases of fraudulent loans leads to a fall in bank profitability hence financial performance goes down. Additionally, there is 58.1% chances of increased bank performance if there is 1% reduction in fraudulent loan cases in NFC bank. This shows the greatest negative effect that fraudulent loans have on bank performance. This supports the study findings of Gates and Jacob (2009) who opined that bank frauds not only affect the bank performance but also the customers. Banks are forced to refund to their customers' money lost through fraudulent loans and the customers on the other hand bear the burden of inconvenience in terms of opening a new account and changing account details which are both time and financially consuming. Additionally, the study also concurs with the findings of Akindele (2011) who argued that bank frauds are a negative effect in the banking sector of Nigeria as they reduce bank profitability and financial performance. The study findings are also in agreement with the research of Adeyeye et al. (2018), which concluded that bank frauds cause commercial banks to suffer reputational damage.

5.4 Summary of Findings

The summary of the findings of this research were based on the objectives that the study sought to achieve.

1) To examine the effect of fraudulent money transfer on performance of commercial banks

The results of this study regarding the effects of fraudulent money transfer on performance of commercial banks were presented in both descriptive and inferential forms. Descriptive findings involve examining the frequency of occurrence of fraudulent money transfer at NFC bank. The findings did indicate that at NFC bank the cases of fraudulent money transfer are significantly frequently supported by significant percentage of respondents (27%). Correlation analysis did indicate a Pearson correlation coefficient of -0.630 and significance value of 0.028. Regression findings on the had indicated beta coefficient of -.581 with a significance value of 0.000. This is an implication that the relationship between fraudulent money transfer is negative and significant and that the effect of fraudulent money transfer on bank performance is negative.

2) To determine the effect of unauthorized withdrawal on performance of commercial banks

The second objective of this study was to determine the effects of unauthorized withdrawal on bank performance. Descriptive findings revealed that unauthorized withdrawals are less, rarely and not frequent occurring at NFC bank. However, the findings revealed that unauthorized withdrawals frequently occur in the banking sector supported by nearly half of the study respondents (48%). Theft of ID numbers, debt and credit cards, account numbers and personal address are found to be frequent in the banking sector according to this study finding. The study further revealed that for the past 5 years, unauthorized withdrawals cases have been there but largely less and rarely frequent at NFC bank though they are on the rise in the banking sector as indicated earlier. Correlation findings indicated a Pearson correlation coefficient between unauthorized withdrawals and bank performance of -0.650 with a significance of 0.014. Additionally, regression analysis findings indicated that beta coefficient for unauthorized withdrawals is -.431 with significance value of 0.000. This implies that unauthorized withdrawals and bank performance are negatively and significantly related and that unauthorized withdrawals have negative effect on bank performance at NFC bank.

3) To assess the effect of fraudulent loans on performance of commercial banks

In order to achieve this objective, the study sought opinion of respondents on the frequency of occurrence of cases of fraudulent loans at NFC bank and banking sector as a whole. Additionally, the study conducted correlation and regression analysis to ascertain the relationship between the variables and the effects of fraudulent loans on bank performance. The study established that cases of fraudulent loans though occur are rare and less frequent at NFC bank however they are significantly frequent in the banking sector. The findings also indicate that for the past 5 years, the occurrence of fraudulent loans has been less, rarely or not frequent at NFC bank. Correlation findings did indicate that Pearson correlation coefficient was -0.690 with a significance of 0.031 while the regression findings indicated that the beta coefficient for fraudulent loans was -.151 with a significance value of .039. This implies that the effect of fraudulent loans on bank performance is negative and significant. The association between fraudulent loans and bank performance is inverse and moderate.

5.5 Conclusion

Based on the above findings, the study came up with some conclusions in line with objectives.

Firstly, the study concludes that fraudulent money transfer has negative significant effect on NFC bank performance. A reduction in fraudulent money transfer cases results into an increase in bank financial performance. Fraudulent money transfer makes banks to facilitate payments which are based on invalid documents or information which can ultimately lead to the bank losing its liquidity since it results to refunding the customer if the bank is on the wrong side. Therefore, the bank loses money which could be part of its liquidity base.

Secondly, the study concludes that unauthorized withdrawals have a significant negative effect on bank performance. An increase unauthorized withdrawals cases leads to a reduced bank performance. The beta coefficient for identity theft is negative and Pearson correlation coefficient is also negative meaning that unauthorized withdrawals and bank financial performance are inversely related. Once a person’s identity documents are stolen, the person’s financial records can be accessed, and the fraudsters can easily conduct transactions using the accounts of the victim. Additionally, it’s also possible that someone can easily take loans and enjoy other financial advantages once he or she is in possession

Thirdly, regarding the effects of fraudulent loans on bank performance, the study concludes that there is a negative significant effect of fraudulent loans on commercial banks financial performance. This was exhibited by the fact that the correlation findings revealed a negative correlation coefficient with a significance value of less than 5%. Additionally, the coefficient of fraudulent loans in the regression analysis was negative with p value less than 0.05. An increase in fraudulent loans negatively affects commercial banks financial performance.

Lastly the study concludes that financial fraud cases though not frequent, there occurrence commands a significant percentage in the banking sector more so identity theft. The great role that the various control mechanisms in place also contributes to financial performance. Particularly the BNR, Government framework and bank proper internal control mechanisms in place contributes to a greater extent towards reducing financial frauds hence improved financial performance.

This study demonstrates the significant negative effect of fraud on bank performance in NFC Bank. To mitigate these risks, NFC Bank should enhance its internal controls, conduct regular audits, and provide staff training on fraud prevention and detection.

5.6 Recommendation

Based on the findings that fraud has a significant effect on the performance of NFC bank, the study recommends the following:

1) Commercial banks should put in place fraud detection and prevention mechanisms and strengthen risk department to ensure that potential fraud risks are detected on time to avoid their occurrence.

2) Banks should continue creating awareness to their customers on the appropriate ways of managing their accounts for example being sensitive with their identity details and immediately report to the bank in case they have lost or shared unwillingly identity documents. This will ensure speedy action is taken before damage.

3) Additionally, the study recommends appropriate scrutiny of loan applicants documents to ensure they are true documents. Banks should also invest in proper monitoring of loans taken to ensure that true figures and documents are kept to avoid risk of default or fraud. This is achieved by ensuring that credit and risk department is well resourced with appropriate technology and human skills able to detect fraudulent loan application documents and act swiftly to minimize risk occurrence hence boost financial performance.

4) Lastly the study recommends strict adherence to the control mechanisms in place within and outside the bank. Internal control mechanisms should be adhered to and periodic transparent audits should be enhanced in all the departments to ensure that quality guidelines are adhered to which is beneficial to the bank’s

performance. Additionally, trainings should be continuously conducted on leadership and corporate governance to ensure that unethical issues are addressed and enhance proper management of the bank which ultimately leads to improved bank performance.

5.7 Suggestions for Further Study

This study focused on the effect of fraud on performance of commercial banks. More studies can be conducted on financial fraud and the performance of other financial institutions such microfinance institutions and insurance firms which also deal with advancing loans and protection against risk respectively hence frauds can be eminent.

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Author Contributions

A.T conceived the topic and did the draft of the Manuscript, H.J reviewed the manuscript. H.J further reviewed and revised the Manuscript, enhancing its content, clarity and accuracy met the highest standards.

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Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Consent for publication

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Ethics, Consent to Participate and Consent to Publish Declarations

Not applicable.

Disclaimer

The views in this research do not necessarily reflect those of NFC bank Cameroon.

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Appendix

APPENDIX I: QUESTIONNAIRE FOR STAFFS OF NFC BANK

Introduction:

Dear respondent, I am **Dr Ayuk Takemeyang**, pursuing a conducting a research entitled **"The Effect of Fraud on Bank Performance in Cameroon: A Case Study of NFC Bank."** You have been selected to participate in this study because you are one of the staffs of NFC bank and therefore you are considered to be knowledgeable about fraud and financial performance dynamics of this bank. You are kindly requested to spare some of your time to assist and provide your honest feedback to the questions.

Please note that the responses given will be treated with utmost confidentiality and will only be used for academic purpose only. Anonymity of the respondent is also guaranteed.

Thank you in advance.

SECTION A: BACKGROUND INFORMATION

1. Sex(Please tick)

Male ☐ Female ☐

2. Education level (Tick highest)

Diploma ☐ Bachelors ☐ Masters ☐

Other (specify) ………………………………………….

3. Age bracket (Please tick)

Less than 30 years ☐ 30 -39 years ☐

40 -49 year ☐ Above 50 years ☐

4. Years you been working with the organization (Please tick)

Less than 5 years ☐ 5-10 years ☐

10-15 years ☐ More than 15 years ☐

5. Department you work in (Tick appropriate)

Operations ☐ Audit ☐ Risk management ☐

Loans ☐ IT ☐ Human resource ☐ Other………………………

SECTION B: FRAUD

Evaluate each statement about Fraud in your bank to reflect their frequency and prevalence (1-frequent, 2-less frequent, 3-Rarely frequent, 4-not frequent)

	2024				**2023**				**2022**				**2021**				**2020**			
a. Fraudulent money transfer	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
1. weak authentication																				
2. identity theft																				
3. lack of transaction monitoring																				
4. insufficient customer verification																				
5. technologies vulnerabilities and human error																				
b. Unauthorized withdrawals																				
6. Credit card theft																				
7. Debt card theft																				
8. Theft of customer passport/national ID numbers																				
9. Theft of account numbers and PIN																				
10. Fraudulent change of personal address																				
Fraudulent loans																				
11. False documentation																				
12. Ghost borrowers																				
13. Undisclosed liabilities																				
14. Misrepresentation																				
15. Loan kiting																				
16. Overvaluation of collateral																				

SECTION C: FINANCIAL PERFORMANCE

Evaluate each statement concerning performance to reflect to what degree you agree or disagree with it (1-SD=strongly disagree, 2-D= disagree, 3-U= undecided, 4-A =Agree, 5-SA= strongly agree**)**

17. Profitability of this institution has reduced over time as a result of fraud	**5**	**4**	**3**	**2**	**1**
18. The fraud management system has enabled the institution to reduce the number of fraud cases					
19. There is a steadily moving sales growth in the operations					

20. Cases of Bank fraud has affected the performance of the bank					
21. Fraud damage your bank reputation.					
22. The bank current ratio for this bank is following accounting norms					
23. The bank quick ratio for this bank is following accounting norms					
24. The bank performance in term of timeless, quality, accuracy of financial reporting has been progressing well					
25. The return on asset for this bank has been good in the last three years					
26. The return on equity and profit for this bank has been good in the last three years					