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Inside Abuse: A Threat to Banks' Stability

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Abstract:

The study investigates the relationship between insider abuse and banks' stability in Nigeria for a period of twenty-two (22) years (1997 to 2019). The rationale for this study is based on the fact that insider abuse is unanimously regarded as one of the major threats to banks' stability across the globe. In order to provide a dynamic perspective for the study, four insider abuse related factors such as internal fraud (INSAB), automated machine fraud (ATMf), internet/Web fraud (ITWEB) and cheque fraud (Cf) were regressed against bank stability (BST). Employing the ordinary least square (OLS), the empirical results revealed that internal fraud (INSAB) and internet/Web fraud (ITWEB) have significant negative relationship with banks stability. Automated machine fraud (ATMf) significantly impacts banks stability, and while cheques fraud (Cf) does not have significant impact on banks stability in Nigeria within the period of investigation. The study recommends among others that, since, insider abuse internal fraud is a major factor affecting banks stability in the country, management should strengthen their internal control mechanism by way of ensuring that prospective and qualified workers with cognate integrity are employ to work in the banking industry. This would to a large extent reduce the huge amount of money involved in the incidences of banks' related frauds and hence, assures continuous stability of the Nigerian banking sector. Also, appropriate policies aimed at devising measures for curbing or checkmating associated fraud in the use of internet/Web, and ensuring banks' stability and performance must not be overlooked by the Central Bank of Nigeria (CBN) and other relevant regulatory agencies.

Keywords: *Inside abuse, fraud, banks stability, econometric and statistical methods*

1. Introduction

The financial system of a nation plays vital roles in the growth and development of the economy particularly by serving as the fulcrum for financial intermediations between the surplus unit and the deficit unit of the economy. The institution that is specifically noted in these intermediations role is the banking sector. As financial intermediaries, bank's main function is to receive deposits from the surplus unit and advance loans to the deficit unit to facilitate the flow of capital; but in the course of these operations they (the banks) are often confronted with the problem of self-serving or inappropriate conducts by insiders. Insiders are employees, contractors, consultants and even trusted individuals (directors, officers, executives, etc.). By using their special access privileges and knowledge of banking operations commit frauds and other related fraudulent activities resulting to devastating effects which can threaten banking stability.

Inside abuse is frauds; frauds occur in banks. There has been large scale of frauds in the Nigerian banking sector which at various times, among other factors, have resulted in banks distresses. Studies have shown that inside abuses constituted above sixty-five per cent of the threat to bank stability globally including devastating effects on other industries (Randazzo, Keeny, Kowalski, Cappelli & Moore, 2015). According to Wilham (2016), such losses from fraud in the US industries amounted to \$67bn (insurance), \$150bn (telecommunication), \$1.2bn (bank), \$40bn (money laundering), \$5.7bn (internet) and \$1bn (credit card), posting a significant threat to banks considering their role in the economy. It was also estimated that, of the 1,237 commercial and mutual savings banks that failed between 1989 and 2015 in the US, approximately 457 or 37% had material inside abuse or internal frauds that were detected by bank examiners (Wilham, 2016).

Owolabi (2016), traced most crises in banks over the world to fraud, while Odi (2014), acknowledges that frauds in banks shakes the foundation and credibility of most banks in Nigeria resulting to some of the banks being distressed. Related to this, the Central Bank of Nigeria's (2017), in its financial stability report (FSR) had revealed that the value of fraudulent activities in the Nigeria banking sector rose to ₦5.52 billion at the end of the 2017 financial year while the value of 2016 fraud was ₦4.12 billion. Earlier, a total of 43,118 inside cases were recorded from 2004 through 2015 involving an approximately sum of ₦202 billion and actual expected losses of ₦41.8 billion (Financial Institution Training Centers (FITC), 2016).

Since inside abuse in the banking sector is a problem, this present paper therefore aimed to examine the extent to which inside abuse and other unethical practices have impacted on banking sector stability, this has formed the basis and

the need for this paper. The paper will also examine the relationship between inside abuse and other unethical practices to bank stability, where bank stability (BSTA) is measured by Z-score; inside abuse (INSAB) are proxies by internal frauds (INFRD), ATM fraud (ATMF), online/Web fraud (ONLWF) and forged cheque or cheque fraud (FC).

Given this background, the paper is divided into five sections. Section two is the review of related empirical literature. Section three is the methodology adopted to source for data and analysis of data, followed by section four which is the presentation of the data sourced and their analysis, while section five is conclusion and recommendations.

1.1. Statement of Research Problem

Banking businesses thrives on confidence, and professionalism demands that there must be adherence to ethical standards and respect for the laws governing bank practices. But in Nigeria, unethical practices reflecting unprofessional attitudes of banks' staff (insider abuses) have resulted to operational losses to banks and customers, huge financial deficit, the depletion of shareholders' funds and banks' capital base, and the loss of confidence in the sector.

The incidence of inside abuse is increasing (Okoye&Gbegi, 2013), and its magnitude and impact on the Nigerian banking industry has been a great concern. This view was collaborated by Modugu and Anyadus (2016), Gbegi and Adebisi (2014), and Okoye and Akamobi (2015). It is on this premise that the study seeks to examine the threat of banks' inside abuse proxied by internal frauds, ATM frauds, Web/internet frauds and forged cheques or cheque fraud to bank stability, measured by z-score, hence the justification and motivation for this paper.

Studies have been conducted on the impact of frauds in the banking sector Ademoye (2012), and Odi, (2014) as well as Nigerian banking sector (Kanu&Okoroafor, 2017; Aruomoaghe & Ikyume, 2015; Owolabi, 2016; Uche and Agbo, 2013; Odi, 2014, and Ademoye, 2012). Some studies looked at it from the amount of funds lost and its relationship with dividend, credit mobilization; there is thus a gap. It is this gap in knowledge that this paper intends to fill by looking at the various aspects of inside abuse threat to bank stability. The questions now, are: does inside abuse impact on banks' stability in Nigeria? And, what is the direction of causality between Inside abuse and banks' stability? The hypothesis to be tested will be the null hypothesis:

- H_0 : that inside abuse does not impact on banks' stability.

2. Review of Related Literature

2.1. Conceptual Framework

Inside abuse are frauds and fraudulent activities carried out by banks' staff and employees. Frauds in banks ranges from theft of cash or cheque fraud to ATM fraud, fraudulent transfers and withdrawals, forgery, outright theft by staff and internet banking fraud, etc. Oluwakayode (2017), affirm that fraud and forgeries constitute the greatest challenges facing the banking sector, therefore, the very presence of fraud may weaken banks' stability and its ability to function effectively.

Theoharidou, Kukolakis, Karyda & Kiountouzis (2017), defined inside abuse as the misuse of privileges and violation of information system security policy of an organization by people who has been given access rights to an information system. These definitions clearly outline the actions of the insider, but do not place any focus on the motivation behind the misuse. According to Federal Home Loan Bank Board Report (1988), insiders are individuals have in general terms breached their fiduciary duties; traded on inside information, usurped opportunities or profits; engaged in self-dealings or otherwise used the institution for personal advantage.

The inside abuse identifies a serious threat to organization (Bishop, Engle, Peisert, Whalen & Gates, 2018). Potential results of inside abuse incidents could be negative impact on public confidence on an organization, negative impact on the revenue and a potential failure (Colwill, 2019). Inside abuse are referred to as fraud.

2.1.1. Fraud

Globally, scholars have identified fraud as the most frequent and critical of all the inside abuses confronting the banking industry (Randazzo, Keeny, Kowalski, Cappelli & Moore, 2015; Cummings et al., 2017; Inaya&Isiko, 2016, and Taiwo, Agwu, Babajide, Okafor&Isibor, 2016). Fraud is an intentional and dishonest actions practiced to acquires unjustifiable benefits (Chapman, 2013). Frauds in banks ranges from theft of cash or cheque fraud and forgery, ATM fraud, fraudulent transfer and withdrawals, outright theft by staff and internet banking fraud, etc. Frauds in our banking sector constitute the following:

2.1.1.1. Employee Frauds

Employee frauds are called internal frauds. This is coming under non-management fraud (Robertson, 2016). As per Olatunji and Adekola (2014), insiders frauds include the falsification, violation of staff code.

Some traditional frauds manifested by the employees have been highlighted by the Boniface (2011). It includes use of forged cheques, fraud diversion, suppression of cash/cheques etc.

2.1.1.2. Management Fraud

Management Frauds are a function of records and account, it has been identified by Ajala, Amuda and Arulogun (2016) and Zuraidah, MohdNor and Yusarina (2015).

2.1.1.3. Outsider Frauds

These are frauds perpetrated by customers and non-customers of banks (Onkagba,2013). Forged cheque, Cheque kitting are some of the cases of it.

2.1.1.4. Outsider/Insider Fraud

This involves a collaboration of bank staff (that is, insider) and outsider for the purpose of defrauding the bank.

2.1.1.5. Clearing Fraud

Clearing fraud hinge on suppression of an instrument of payment so that at the expiration of the clearing period applicable to the instrument, the collecting banker will give value as though the paying bank has confirmed the instrument good for payment. Clearing cheques can also be substituted to enable the fraudster divert the funds to a wrong beneficiary. Misrouting of clearing cheque can also assist fraudsters to complete a clearing fraud. The clearing fraud takes the following forms:

- Suppression of clearing instruments: This is perpetrated by paying a cheque drawn on account with insufficient fund. The appropriate thing would have been to return such cheque unpaid; but the payment of such cheque is fraud due to suppression,
- Payment against uncleared effects: This is a direct credit awarded a customer based on a cheque deficit, but which had been cleared is a fraud,
- Conversion of clearing instruments: This is common when a cheque or draft drawn in favor of a person get into the hand of a wrong person by fraudulent means and coincidentally the wrong person enjoys the value on the instrument.

2.1.1.6. Account Opening Fraud

This involves the deposit and subsequent cashing of fraudulent cheques. This is so when a dishonest person not known to the bank asks that an account be open for him or her and with false identification unknown to the bank.

2.1.2. Banks' Sharp Practices

Fraud is also defined as a deliberate action practiced by an individual or groups among corporate executives, staff or related parties resulting to presentation of false financial statements (Adeniji, 2014). The idea is to deceived the regulatory authorities and the public about the well-being of the bank, some of which do not even exist in practice (voodoo banks) having lost their licenses to the regulatory authorities, but unknown to the public keep on maintaining their banking operations with such banks until they will vanish into till air with public money with trace of there were about.

2.1.2.1. Computer Fraud

This type of fraud takes the form of alterations or manipulations of programmes or applications of software computer packages to gain access to give credit or divert credits to accounts for which the funds are not met for. This also includes ATM/Card related fraud and internet or Web-based (internet banking) fraud.

2.1.2.2. Bank Stability

In most academic literature, stability of banks has been measured under CAMELS framework by using individual indicator like return on asset (ROA) and return on equity (ROE) [Warue (2013), Mensah&Adjei (2015)]. Bank stability according to Brunnermeier et al., (2016); and Segoviano and Goodhart (2015), is the absence of banking crises when all banks are individually stable. It can also be viewed as the absence of abnormal disruption in credit supply, payment system and banking services (Ozili and Thankom, 2018). Financial stability index has been found useful due to its capabilities (Boudebousand Chichti, 2013), it allows policy makers to monitor the development of stressful situations (Raluca and Dumitru, 2014). Conference Board Methodology employed by Sere-Ejembi et al. (2014). Z-score based methodology proposed by Raluca&Dumitru (2014). It was first proposed by Altman (2005), and developed by Mercieca et al. (2007).

2.2. Theoretical Framework

The relationship between inside abuse and bank stability is a subject of different theories, ranging from fraud triangle theory to the differential opportunity theory. These theories identified factors and possible causes that could encourage insider abuses in organizations. By controlling these factors and causes, there are indications that management can go a long way to curtailing or minimizing insider abuse risk.

The fraud triangle model was propounded by Donald Cressy in 1950 as a classical theory to ascertain the prime and core ingredients that propels fraudulent activities in financial and non-financial institutions globally. According to Cressy (1950), three conditions must be present for people to commit fraud. These conditions are: perceived opportunity, perceived pressure and perceived rationalization.

Every fraud executor is confronted with some kind of pressure or need. Pressure that motivates individual to commit fraud are financial pressures (high medical bills, debts or family members' financial needs), vices (drugs, gambling and alcohol) and work-related pressures (high pressure for good result at work or the need to cover up someone's poor performance, or to report results that are better than actual performance compared to that of competitors. Berney (1970), acknowledged that about 78 per cent of financial frauds are committed by insiders where opportunity, pressure and rationalization exist. According to Abdullahi, MansorandNuhu (2015), many people know that fraudulent act is illegal and

wrong, but intentionally decided to embark on it because of what they mean to get. The fraud reasoned action model was theorized by Ajzen and Fishbein (1975). The differential opportunity theory (Owolabi, 2016); Rex and Subramaniam (2018) was propounded by Cloward and Ohlin in 1960.

2.3. Empirical Literature

Randazzo, Keeny, Kowalski, Cappelli & Moore (2015), conducted a case study of 23 incidence of threats involving 26 employees and related insiders of banks in the USA from 2006-2012.

In a similar study, Cumming, Lewellen, Mclaire, Moore & Trzeciak (2017), studied 67 insider fraud cases as well as 13 outsiders' fraud cases also in the USA banking industry from 2010-2017, and revealed the following:

- That there were evidences of abuses of privilege either by present authorized insiders or related insiders who have had authorized access, and
- That the cases involving managers and executive positions were more damaging, and that it took a long time period before detection.

Furthermore, Owolabi (2016), in his study of the various forms of fraudulent practices and their impact on banks' stability; the study adopted descriptive research design. The outcome of the study revealed that managers and supervisors accounted for 485 (37%) employees, executive officers (accountants and executive assistance, 431 (33.5%) employees, totalling 916 employees out of 1283 employees involved in fraudulent act between 2008 and 2014.

In a study by Hong, Kim and Cho (2014), while the risk and the likelihood of a threat from within was low in comparison to external threat, findings revealed that while outsider threats are more prevalent, insider threats are regarded as a more costly and detrimental to organization stability (CERT, 2016).

Yunsen, Song and Yutao (2011), explored corporate fraud and bank loans in China in relation to performance. The study examines the effect of corporate fraud on bank loans by investigating firm's credit and information risks. Findings revealed that corporate fraud destabilizes performance – bank loan relationship. Okoroafor (2013) reviewed the various forms of insider abuse and their impact on deposit money banks in Nigerian between 1993 to 2010. Similarly, Odi (2014), took an intent look at the relationship between ATM fraud, forged cheque, clearing cheque fraud and bank performance on the performance of commercial banks in Nigeria. In the same vein, Gitali and Samson (2016), assess the effect of financial fraud for the commercial banks in Kenya. Applying descriptive research design in their analysis, the study outcome revealed that banks' financial performance variable: Return on Asset (ROA) is specifically affected by liquidity ratios, and positively correlated with fraudulent practices.

In addition, Funso and Temitayo (2018), investigated the impact of fraud on the performance of deposit money banks (DMBs) in Nigeria. The study covered the periods of 1994 to 2015 and adopted bank deposit as the dependent variable while the one period lagged value of bank deposit, amount involved in reported fraud cases, expected amount lost to fraud and the number of staff involved in fraud as the independent variables. By applying the Generalized Method of Moment (GMM) estimator, the study outcome revealed that the amount involved in fraud cases, the expected amount lost to fraud and the number of staff involvement have a negative and significant influence on deposit money banks' (DMBs) performance in Nigeria.

Similarly, Taiwo, Agwu, Babajide, Okafor and Isibor (2016), in their study empirically examined the growth of bank fraud and its impact on Nigeria's banking sector. Using time series annual data for the period covering 2002-2014, the study outcome revealed that fraud inflicts liquidity problems on banks and their customers, leads to depletion of shareholders' funds and banks' capital base as well as loss of confidence in banks. The study thus suggested the circulation of staff names found wanting among banks, strict disciplinary actions, blacklisting of staff and maintaining a central data base of staff dismissed by banks.

In the same vein, Afayi (2014), investigate the effect of fraud on the performance of banking industry in the United State of America while examining how many banks have failed as a result of fraudulent activities. The study covered a period of 2008-2012. The outcome revealed that of the 523 banks that failed in the USA, the ratio of bank failure caused by fraud as opposed to other factors of the 20 banks selected, 8 banks representing 40% failed due to fraudulent practices. Both for government entities and private companies, the insider abuse has been observed by Albrecht (2017). Some motivational factors (perceived pressure, opportunity and rationalization) have been highlighted by Cressey (1950). Poor performance has been identified as the cause of financial statement fraud by firms (Povel et al., 2017). Green and Reinstein (2014), Aruomoaghe and Ikyume (2015), examine financial statement fraud. The study adopted descriptive survey research method. It was discovered that non accounting for fraud in organizations' financial statements does not reflect the true and fair view of such financial statement.

Ojeaga, Ikpefu and Odejimi (2014), investigated the factors that elicit fraud in Nigeria's banking sector. The study outcome revealed that high bank deposits was primarily responsible for the high rise of fraudulent occurrences in the Nigeria's banking sector particularly management fraud. That as most banks failed in their primary role of lending to the real sector of the economy, this results to excessive idle funds with banks thereby necessitated management frauds and other insider abuses.

Black (2015), in his study observed that insider abuse by senior bank officers occurs more frequently during economic growth periods when banks increase lending to support the real sector growth. During the early phase of economic cycle, bank loan growth rates accelerate and loans are concentrated in risky loan types increases as well. According to Black (2015), during the economic growth phase the regulatory environment is characterized by lax bank supervision (de-supervision), accommodating bank regulation (de-regulation) and a supportive political environment.

3. Summary of Empirical Literature and Research Gap

From the various empirical literatures that are reviewed in the study, it became clear that there was no uniformity in the approaches as well as in the methodologies adopted in the studies. For instance, Aruonoaghe and Ikyume (2015), examined fraud as a challenge for Nigerian banks, while Uchenna and Agbo (2013), Afayi (2014), and Odi (2014), evaluate the impact of fraud and fraudulent practices on bank performance. None of the works reviewed used the variables (bank stability, ATM/Internet fraud, cheque forgery and insider abuse) as variables for analysis, thus the gap in the study.

4. Methodology

To achieve the objective of this study, two methods are used; these are the unit root tests and the multiple regression econometric technique. The unit root tests help to establish the stationarity status of the data in order to prevent spurious regression results. The multiple regression econometric analytical frameworks for estimating variables that influences insider abuses and examining the impulse response of banking stability to shocks from insider abuses is utilized. Z-score is applied to construct an indicator for bank stability to extricate its response to shock from insider abuses in a multiple regression statistical technique.

The population of the study comprises of all the deposit money banks (DMBs) operating in Nigeria; and as at December 31st 2018, there were eighteen DMBs, with the exclusion of the Islamic banks (CBN, 2018). For the purpose of the study, we took a census of all the deposit money banks in Nigeria. Secondary data were collected from the banks' annual financial reports for various years. The variables used in the first estimation stage were internal frauds, automated machine fraud, cheque fraud (forged cheque), and internet/Web fraud. ROA, ROE and standard deviation of ROA were used to construct z-score (banking system stability).

4.1. Model Specification

The model for the study is derived from the general form:

$$Y = a + bx \quad \text{equ. 1}$$

Where:

- Y = dependent variable,
- a = constant,
- b = the coefficient of the independent variables, and
- x = the independent variables.

In line with the general form of equation 1, and following equation 2, the study adopted the model of Nwankwo (2013), but with modifications (for example, Eps was replaced with bank stability).

Nwankwo (2013), model was stated as:

$$\text{Eps} = F(\text{ATMfraud} + wF + cf) \quad \text{equ. 2}$$

Where:

- Eps = earning per share,
- ATMfraud = automated teller machine fraud,
- Wf = web fraud,
- Cf = cheque fraud (forged cheque)

Following Nwankwo (2013) model, we specify our model with modifications. The earning per share (Eps) as a dependent variable was replaced with bank stability (Bst), insiderabuse (INSAB), and internet/Web fraud (ITWEB) were added to the explanatory variables.

The functional form of our model is:

$$\text{Bst} = f(\text{INSAB}, \text{ATMf}, \text{Cf}, \text{ITWBf}) \quad \text{eq.2}$$

Where:

- Bst = bank stability,
 - INSAB = insider abuse (internal fraud),
 - ATMf = automated machine fraud,
 - Cf = cheque fraud (forged cheque),
 - ITWEB = internet/Web fraud
- $$\text{Bst} = a_0 + a_1\text{INSAB} + a_2\text{ATMf} + a_3\text{Cf} + a_4\text{ITWBf} + u \quad \text{eq.3}$$

Where:

- a_0 = constant terms,
- $a_1 - a_4$ = coefficients of the independent variables,
- u = error term.

Apriori expectation is $\beta_1 < 0$, $\beta_2 < 0$, $\beta_3 < 0$, $\beta_4 < 0$. The insider abuse (internal fraud), automated machine fraud, cheque fraud (forged cheque) and internet/Web fraud. From the Apriori expectation, all the independent variables have negative effects the stability of the bank.

4.2. Choice of a Model

Z-score measures banking system stability and it is computed with three important soundness indicators: equity/asset (R/E), the return on asset (ROA) and the standard deviation of return on asset (σ ROA) – proxy for return volatility; impliedly, z-score measures the distance from insolvency (Roy, 1952).

As formulated by Mercieca et al. (2007),

$$\frac{E}{\sigma(\text{ROA})} = \frac{\text{ROA} + A}{\sigma(\text{ROA})} \quad \text{eq. 4}$$

where:

ROA = return on asset,

$\frac{E}{A}$ = ratio of equity capital to total asset, and

σ = standard deviation.

Bank stability is measured by z-score, which is the average return on asset plus equity divided by asset, divided by standard deviation of return on asset (Beck et al. 2013).

A high z-score indicate that the banks are more stable because it is inversely related to the probability of banks' insolvency; simply put, z-score shows how many standard deviations ROA could change to make the bank total assets fall short of its total debts.

Transforming equation 4 into equation 3, our estimation model specification will be:

$$\frac{E}{\sigma(\text{ROA})} = a_0 + a_1\text{INSAB} + a_2\text{ATMf} + a_3\text{Cf} + a_4\text{ITWBf} + u \quad \text{eq. 5}$$

where:

$\frac{E}{\sigma(\text{ROA})}$ = Bank stability

5. Data Analysis and Presentation of Results

The objective of this study is to empirically estimate a model that helps explain impact of inside abuse on banks' stability in Nigeria. In doing this, the unit root tests within the context of ADF tests were employed. According to Akinlo and Folorunso (1999) and Nwaobi (2003), since time series data are not usually stationary in their levels but their first-order differences are, there is the need to investigate the stationarity status of the hypothesized variables in our model in order to avoid spurious regression results.

5.1. Unit Root Testing

A time series is stated as non-stationary if mean and variance of the time series is dependent over time. On the other hand, a time series is stated as stationary if the mean and variance is constant over time (Gordon, 1995). The Augmented dickey Fuller (ADF) test is employed in order to analyse the unit roots. The results are presented in levels and first differences Table 1 presents results of ADF test in levels without taking into consideration the trend in variables. The ADF test statistic for each of the variables is shown in the second column, while the 95 percent critical ADF value is shown in the third column. The result indicates that two of the variables (BST and ITWEB) have ADF values that are less than the 95 percent critical ADF value of -3.020686 (in absolute values). The implication of this is that these time series are non-stationary in their levels.

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
BST	-1.537339	-3.020686	Non-Stationary
INSAB	-3.160923	-3.012363	Stationary
ATMF	-3.849645	-3.012363	Stationary
ITWEB	1.316648	-3.012363	Non-Stationary
CF	-4.572776	-3.012363	Stationary

Table 1: Unit Root Test for Variables in Levels

Source: Author's Computation 2020

Box and Jenkins (1970) argue that non stationary time series in levels may be made stationary by taking their first differences. The result of the unit root test on these variables in first differences is reported in table 4.2. From the result, it is seen that the ADF test statistic for each of the variables is greater than the 95 percent critical ADF values (in absolute values). Thus, the variables are now stationary, implying that they attained stationarity after their first differences. Indeed, the variables are integrated of order one (i.e., I[1]).

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
Δ BST	-8.299582	-3.020686	Stationary
Δ INSAB	-5.270973	-3.020686	Stationary
Δ ATMF	-7.403646	-3.020686	Stationary
Δ ITWEB	-4.349897	-3.020686	Stationary
Δ CF	-5.571661	-3.020686	Stationary

Table 2: Unit Root Test for Variables at First Difference

Source: Author's Computation 2020

4.2. Regression Analysis

The behaviour of banks' stability in Nigeria in the face of inside abuse may be analyzed by the OLS estimation of the equation as can be vividly seen in Table 3 below. From the table, the result has a very impressive goodness of fit information. The R squared value of 0.95 percent is very high and it shows that the explanatory variables in the model effectively tract the behaviour of the dependent variable (banks stability). Even the adjusted R squared value of 0.86 is also very high, indicating that the model possesses a very high predictive ability. The F-values of 10.38116 is equally high and significant at the 1 percent level. Thus, we cannot reject the hypothesis of a significant linear relationship between the dependent variable bank's stability and all the respective independent variables of insider abuse (internal fraud) (INSAB), automated machine fraud (ATMf), internet/Web fraud (ITWEB) and cheque fraud (Cf) combined.

Variables	Coefficient	T-Ratio	Prob.
Constant	12.65884	7.654220	0.0016
INSAB	-0.000217	-5.086922	0.0070**
ATMF	2.65E-09	4.699364	0.0093**
ITWEB	-1.95E-08	-6.437621	0.0030**
CF	1.70E-07	0.002574	0.9981
BST(-10)	0.364735	2.364706	0.0773
AR(4)	-0.988361	-26.45271	0.0000**
R ² = 0.95	R ² = 0.86	F = 10.38116	D.W.= 1.58

Table 3: Inside Abuse: A Threat to Banks' Stability in Nigeria (OLS)

Source: Author's Computations 2020. Note: ** Sig at 1% Level

In particular, we focus attention on the individual coefficients of the explanatory variables. In the result, the coefficients of insider abuse (internal fraud) (INSAB) and internet/Web fraud (ITWEB) are negatively signed and in line with the a-priory determination of the model. However, those of automated machine fraud (ATMf) and cheque fraud (Cf) are positively signed which are not in line with apriori expectation.

More specifically, the coefficient of insider abuse (internal fraud) (INSAB) is negative and significant at the 1 percent level. This suggests that the aggregate number of internal frauds within the banking system is a significant determinant of banks stability in Nigeria. The negative sign implies that that as total insider abuse (internal fraud) (INSAB) increases it reduces the over stability of banks in the country. Thus, a unit change in INSAB reduces banks stability by -0.000217 percent. This result is seen to be in line with those of Odi (2014), Idolor (2010), Adediran and Olugbenga (2010), Chiezey and Onu (2013), Ogare (2015) and Ogbeide (2018) who submitted a significant negative relationship between fraud and banks performance. It however disagreed with those of Gitali and Samson (2016) who submitted significant positive relationship between fraudulent practices and banks performance.

Similarly, the automated teller machine fraud (ATMf) is positive and significant at the 1 percent level. This means that the rate of bank fraud associated with ATM machines has significant positive impact on banks stability in Nigeria. This result is rather surprising because, automated teller machine fraud should reduce banks stability; but the result has proven otherwise, indicating that as ATM fraud increases banks stability also increase. The probable reasons for this result could be that most automated teller machine (ATMf) related frauds are not usually reported or captured. Also, the total amount of money involved in ATM fraud are infinitesimal compared to the total amount in the bank vaults. Hence, banks are usually able to make up these differences such that it does not affect their overall performance/stability. This result agrees with those of Odi (2014) in Nigeria and Ogare (2015) in Kenya who submitted that automated teller machine fraud (ATMf) significantly impact banks performance in their respective country.

On the other hand, internet/Web fraud (ITWEB) has a strong negative relationship with bank's stability. It was significant at the 1 percent level. By this result, it is obvious that the volume of money involved in internet/Web fraud (ITWEB) on daily basis significantly reduce overall bank's stability in Nigeria within the period of investigation. Indeed, it is seen that a unit increase in internet/Web fraud (ITWEB) reduces bank's performance/stability by -1.95E-08 percent. Thus, an appropriate policy that will help to effectively checkmate incidences of internet/Web fraud in the country should be seriously pursued by the relevant regulatory authorities; especially now that the world is tilting towards internet banking. Failure to effectively checkmate this ugly tendency will spell doom for the Nigerian banking system. The finding also agrees with those of Ogare (2015), Funso and Temitayo (2018), Adegboyega, Elumaro and ObamuYi (2018), Ndungu (2015) that internet banking/internet/Web fraud significantly impact banks performance.

The coefficient of cheque fraud (Cf) is positively signed and also failed the 5 percent level of significance. This result suggests that cheque related fraud is not a significant factor in the determination of bank's stability in Nigeria. The reason might as well be that bank's staff well trained in the proper administration of cheques; hence, they are able to minimize the cheques related frauds such that it does not have significant impact on the overall performance/stability of the bank at the end of the financial year. This result is also in line with that of Odi (2014).

The lagged value of bank stability failed the 5 percent significance level. This is an indication that previous values of bank stability do not have significant impact on the current values. Also, the tenth lagged (BST(-10)) signifies that convergence of the result was achieved after 10 iterations.

Finally, the overall results obtained from the model estimation are effectively acceptable because the D.W. statistic value of 1.58 is sufficiently close to 2 and implies the absence multicollinearity in the model. Thus, the results are applicable for structural analysis as well as policy direction.

6. Conclusion and Policy Recommendations

Banks stability is a condition in which banking institutions sound enough to carry out its financial intermediation function adequately, without assistance from external institutions including the government. A sound banking system is very important as it reinforces trust in the system and prevents phenomena such as bank's run, which can destabilize an economy. It also signals to the public that their money is handled in a way which will not be unduly jeopardized.

Hence, this study investigates the relationship between insider abuse and banks' stability in Nigeria for the period 1997 to 2019. The rationale for this study is based on the fact that insider abuse is unanimously regarded as one of the major threats to banks' stability across the globe. In order to provide a dynamic perspective for the study, four insider abuse related factors such as internal fraud (INSAB), automated machine fraud (ATMf), internet/Web fraud (ITWEB) and cheque fraud (Cf) were regressed against bank stability (BST). Employing the ordinary least square (OLS), the empirical results revealed that internal fraud (INSAB) and internet/Web fraud (ITWEB) have significant negative relationship with banks stability. Automated machine fraud (ATMf) significantly impacts banks stability, and while cheque fraud (Cf) does not have significant impact on banks stability in Nigeria within the period of investigation.

6.1. Policy Recommendations

First, since, insider abuse (internal fraud) (INSAB) is a major factor affecting banks stability in the country, management should strengthen their internal control mechanism by way of ensuring that prospective and qualified workers with cognate integrity are employ to work in the banking industry. This would to a large extent reduce the huge amount of money involved in the incidences of banks' related frauds and hence, assures continuous stability of the Nigerian banking sector.

Secondly, in view of the observed significant positive relationship between automated teller machine fraud (ATMf) and banks stability in Nigeria, deliberate efforts with respect to engaging appropriate and current state of the art technology, with tracking and detective devices in minimizing the rate of fraudulent practices associated with the use of automated teller machines (ATM), should be vigorously pursued by management and the regulatory authority (CBN).

Thirdly, since the finding of this study has shown that internet/Web fraud (ITWEB) is a significant factor affecting banks stability in Nigeria; therefore, appropriate policies aimed at devising measures for curbing or checkmating associated fraud in the use of this variable (internet/Web fraud) and, ensuring banks' stability and performance must not be overlooked by CBN and other relevant regulatory agencies.

Finally, the result of the study has shown that cheque related fraud (Cf) does not affect banks stability in Nigeria. It therefore follows that the total amount involved in cheque related fraud is so insignificant to affect banks stability and performance. Thus, management should either sustain the current cheque policy administration or enhance on it; this will go a long way to further minimize cheque related fraud in the Nigerian banking sector.

7. References

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