

OPERATIONAL RISK MANAGEMENT AND PERFORMANCE OF SELECTED
COMMERCIAL BANKS IN ANAMBRA STATE, NIGERIA

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Abstract

The study examined the effect of system and technology risk on the organizational performance of selected commercial banks in Anambra State, Nigeria. The population of the study was three hundred and twenty (320) employees of the selected banks in Anambra. 300 copies of the questionnaire were returned and certified fit for the study. Census method was employed because of the manageable size of the population. Descriptive survey design was employed in the collection of data which were analyzed using correlation analysis, and the hypotheses were tested at a 5% level of significance. A five-point Likert structured questionnaire was deployed in eliciting data from the respondents. The Cronbach Alpha was used to determine the reliability of the instrument. The Cronbach Alpha value of 0.637 and 0.694 respectively were obtained. The study employed Regression method to determine the effect of operational risk management and performance of selected commercial banks under study. System and technology risk has a t-statistics of -3.014 and a probability value of 0.003 which is statistically significant. Thus, we reject the null hypothesis and accept the alternate hypothesis which states that system and technology risk has a significant effect on organizational performance of selected commercial banks in Anambra State, Nigeria. Therefore, the study recommended that, the management of banks should institute measures on system access and navigation, as well limit system abuse by staff and bank customers. This could be made manifest by establishing data protocols with authorized access to information on the system.

Keywords: Operational Risk, Management, Performance, Commercial Banks, Anambra State.

1. INTRODUCTION

Certainly, risk management is not alien to banks and other financial institutions. This is because risks taking is part and parcel of the industry. Any bank that is afraid of committing financial risks may be stagnant and may not adequately service the legitimate credit needs of its customers. Conversely, any organization that takes excessive risks is prone to run into uncountable problems.

Virtually every management aims at ensuring that the enterprise creates value, accomplishes its core objectives, and always abide by the laws and regulations. It includes the structures, processes and the know-how which are used to manage all other relevant resources, and risk in an enterprise. Pursuing and putting more resources for an effective business model which maximizes the possibility of achieving the organization's objectives and a huge profit margin ought not be the only focus of an organization that wants to achieve growth. The banking sector is without doubt one of the most crucial sectors of any economy. Some labels it the life wire of any economy due to its ability to provide capital to other sectors of the economy (Obayagbona and Osagiede, 2023). So, whatever happens to the bank can equally affect the entire economy of a nation.

Without a proper operational risk management taking a center stage as one of the core objectives of any organization that professes growth, such organization is certainly looking for the alternative. Operational risk simply means being conscious of to what extent *operational choices and related operational risks* may arise on the road to achieving organizational goals. Preponderance of scholarly literature describe operational risk to mean the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (Seivold, Leifer, Ulman, 2018). This definition includes legal risk but excludes strategic and reputational risk. The Basel Committee's definition includes what the Committee considers to be crucial elements; each bank's definition for internal management purposes should recognize its unique risk characteristics, including

its size and sophistication, as well as the nature and complexity of its products and activities (Seivold, Leifer, Ulman, 2018).

Operational risk management in banks is a growing trend that is widely accepted by most banking industries globally (Muteti, 2019). This is substantiated by the fact that most banks are taking cognizance of the qualitative and quantitative criteria for operational risk management advocated by the Basel Committee on banking supervision (2003). Profit maximization has been identified as the primary motive of most business enterprises, inclusive of banks, and the going concern status is achieved only when these organizations are making profit (Lalon, 2020). Operational risk is not a new concept in the banking industry. Risks associated with operational failures stemming from events such as processing errors, internal and external fraud, legal claims, and business disruptions have existed at financial institutions since the inception of banking (Seivold, Leifer, Ulman, 2018). Operational risk has been known for a while, but its position has not been the same, as that of given credit and market risk until recently. Operational risk becomes a major problem since it involves taking appropriate measures to ensure the qualitative transactions without processing mistakes in order to convey the best services to the customers (Apanga, Appiah & Arthur, 2019). Furthermore, the growing complexity in the banking industry, several large and widely publicized operational losses in recent years, mind blowing financial scandals, and failures of information technology systems and a changing regulatory capital regime have prompted both banks and banking supervisors to increasingly view operational risk management (ORM) as an evolving area of study for both inside and outside banking institutions.

It is against this background that the researchers consider the study, Operational risk management and performance of selected commercial banks in Anambra State, Nigeria. Specifically, this study seeks to ascertain the effect of system and technology risk on the organizational performance of selected commercial banks in Anambra State, Nigeria.

2. REVIEW OF RELATED LITERATURE

Operational Risk Management (ORM)

Every business Organization often faced with a situations or fundamental changes in its lifetime that might pose varying levels of risk, ranging from minor inconveniences to a crisis that could put the organization's entire operation at risk (Bissonette, 2016). Operational risk management (ORM) is a set of processes that encompass risk assessment, decision making, and implementation of risk control, to reduce such threats to bearable levels (Adeusi, and Obawale, 2010). According to Basel Committee on Banking Supervision, operational risk is the "risk of loss resulting from inadequate or failed internal processes, people, systems, or external events. As such, operational risk captures business continuity plans, environmental risk, crisis management, process systems, and operations risk, people-related risks and health and safety, and information technology risks". Operational risks for financial institutions will definitely look different from operational risks of other sectors of the economy. The ultimate thing is that, a robust operational risk management process is necessary for every organization to avoid unforeseen issue that is bigger than the organization. Operational risk management (ORM) is critical to keep operations running smoothly so the business can advance on its strategic plans.

The operational environment for many banks has evolved dramatically in recent years. Globalization of financial services, the proliferation of new and highly complex products, large-scale acquisitions and mergers, and greater use of outsourcing arrangements have led to increased operational risk profiles for banks in Nigeria. Technological advances, including growth in e-banking transactions, automation, and other related business applications also present new and potentially heightened exposures from an operational

risk standpoint (Anoke, Osita, Maduka, & Onu, 2021). Evidences abound that banks' operational environments are getting riskier.

Operational Risk Management Benefits

Operational risk management helps organizations to assure business continuity and lower compliance costs. Adequate ORM drives business resilience, improves efficiency, and lowers compliance costs. The control activities associated with ORM streamline decision-making based on quantitative metrics. Internal controls are developed based on risk assessments, and business processes are designed to prevent and detect illicit activities in the enterprise.

Another benefit of operational risk management is that it helps a company to reduce potential losses from poorly identified and emerging risks. Establishing an effective operational risk management program prepares a company to achieve its strategic objectives and assures business continuity despite unanticipated disruptions to operations. A solid operational risk management program also indicates to customers and stakeholders that the company is prepared to deal with disasters and losses. Different types of risks require different risk mitigation methods. Fraud, and natural disasters require various internal and risk internal control activities. ORM frameworks help organizations categorize risks and approach them squarely. Risk assessments help you aggregate risks and then prioritize them, so that each risk has the right level of attention based on the likelihood of occurrence and effect to the business. Proper prioritization allows senior management to justify investments to prevent high risk threat.

Fundamental principles of operational risk management (according to the Basel Committee on Banking Supervision Committee, 2003)

First, the board of directors should champion the establishment a strong risk management culture. After which, a corporate culture that is guided by strong risk management that supports and provides appropriate standards and incentives for professional and responsible behavior be established by the board of directors and senior management team. In this regard, it is the mandate of the board of directors to ensure that a strong operational risk management culture enshrined in the whole organization.

Second, Banks should establish, implement and maintain a framework that is fully integrated into the bank's overall risk management processes. The framework chosen by an individual bank is contingent on a range of factors like: nature, size, complexity and risk profile. Third, the board of directors should establish, approve and periodically review the framework and equally oversee senior management to ensure that the policies, processes and systems are implemented effectively. Fourth, the board of directors should approve and review a risk related and tolerance statement for operational risk that articulates the nature, types, and levels of operational risk that the bank is willing to assume.

Fifth, Senior management should develop for approval by the board of directors a clear, effective and robust governance structure with well defined, transparent and consistent lines of responsibility. Senior management is responsible for consistently implementing and maintaining throughout the organization policies, processes and systems for managing operational risk in all of the bank's material products, activities, processes and systems consistent with the risk appetite and tolerance.

Sixth, Identification and assessment of the operational risk prevalent in all material products, activities, processes and systems by senior management. This is to make sure the inherent risks and incentives are well understood. Seventh, approval of all new products, activities, processes and systems that fully assesses operational risk should be ensured by Senior management. Eight, implementation process that will regularly monitor operational risk profiles and material exposures to losses and appropriate reporting mechanisms that should be in place at the board, senior management, and business line levels that support

proactive management of operational risk should be the prerogative of the Senior management. Ninth, every bank should have a strong control environment that utilizes policies, processes and systems; appropriate internal controls; and appropriate risk mitigation strategies tactics. Tenth, banks should have business resiliency and continuity plans in place to ensure an ability to operate on an ongoing basis and limit losses in the event of severe business disruption. Finally, stakeholders should be allowed to assess the approach to operational risk management in every bank.

Types of Bank Risks

(1) Credit risk: This is the most obvious risk in banking industry, and arguably the most important in terms of potential losses. Any default could create a very huge losses and in an extreme case could lead to insolvency. This risk comes in inform of unpaid loans or investments that will deteriorate in quality or go into default with consequent loss to the bank. Credit risk is not limited to the risk that borrowers are unable to pay; it also includes risks associated with delayed payment on borrowed credit. Bankers must exercise discretion in maintaining a sensible distribution of liquidity in assets, and also conduct a proper evaluation of the default risks associated with borrowers.

(2) Liquidity risk: This is where there is likelihood that customers demand for credit will require the sale or forced collection of assets at a loss. Liquidity risk relates to the eventuality that banks cannot fulfil one or more of these needs. Banks must ensure that they have a satisfactory mix of various assets or liabilities to fulfil their liquidity needs.

(3) Interest rate risk: This type of risk has to with the exposure of banks' profits to interest rate changes which affect assets and liabilities in different ways. Banks are exposed to interest rate risk because they operate with odd balance sheets. When bankers are confronted with a strongly premonition that interest rates are going to skyrocket in a certain direction in the future, they have a strong incentive to position the bank accordingly.

(4) Market risk is a risk of loss that is associated with negative deviations in the value of the trading portfolio, which arises through nosediving in income, prices or foreign exchange. This occurs when banks hold equity as some form of collateral. Many large banks have dramatically increased the size and activity of their trading portfolios, and this has resulted in greater exposure to market risk.

(5) Country risk is the strength of citizens looking for bank credit to meet up with their obligations. It is thus a credit risk on obligations advanced across borders. Assessment of country risk relies on the analysis of economic, social and political variables that relate to the particular country in question. Although the economic factors can be measured objectively, the social and political variables will often involve subjective judgments.

(6) Solvency risk relates to the risk of not having enough capital to cover losses generated by all other types of risks and is thus effectively the risk of default of the bank. Adequate capital is critically important for the stability of the banking industry.

Organizational Performance

Organization performance has been an essential focus of every organization whether profit or non-profit organization. It is highly imperative for managers to know which factors directly impacts on organization's performance to enable them take necessary steps to initiate them. Nevertheless, conceptualizing, defining, and measuring performance have really not been an easy task (Anoke,Nzewi,eze,& Igwebuike,2022). Researchers themselves have different views and definitions of performance, which remained contentious among organizational researchers (Barney, 2018). From Javier (2007), as cited in Nikbin et al (2020), performance is equivalent to the well-known "3Es" (economy, efficiency and effectiveness) of a certain programme or activity. But Noor, Prahallad, & Banik, (2020), affirms that, organizational performance is the organization's ability to attain its goals by using

resources in an efficient and effective manner. Organizational performance also means the ability of the organization to achieve its goals and objectives (Richardson & Wade 2019).

Meanwhile, Organizational performance is believed to be a definitional and conceptual problem (Anoke, 2019). According to Hefferman and Flood (2019), the concept of organizational performance in modern management is often interchanged with productivity. Productivity relates to a ratio depicting the volume of work completed in a given amount of time, Performance on the other hand has a broader indicator that could include productivity as well as quality, consistency and other factors. In the words of Chen (2018), organizational performance refers to the “transformation of inputs into outputs for the attainment of specified outcomes. So, there are different views to what organizational performance stands for, but for the purpose of this research work, the researchers focused on financial performance of commercial banks in the area under study.

Financial performance simply means the ability to make profit. This cursory definition is in line with the views of Pandey (2018), who avers that profit maximization causes the efficient allocation of resources under the competitive market conditions, and profit is considered as the most appropriate measure of a firm's performance. Standing on the above definition, Marozva, (2019), opines that, the fundamental measure of a company's financial performance is its profitability. So, the company's financial performance could be measured using the value of its shares to investors. This means that ratios of financial performance focus on earnings per share, dividend yield and price ratios. So, profitability ratios are the ratios that assess the entire profit performance of an organization (Anoke, Okafor, & Onu, 2023). Ratios make known the profitability of a firm's operation, the management efficiency obtained from the returns on capital employed as well as the intensity of capital usage, and the intensity with which invested capital is

turned over (Osisioma, 2000).

2.2. Theoretical Framework

Extreme Value Theory (EVA)

This study is anchored on Extreme value theory of Paul Embrechts (1999) This theory is a branch of statistics that deals with the extreme deviations from the median of probability distributions. It seeks to asses from a given order sample of a given random variable, the probability of events that are more extreme than previously observed. The financial industry including banking and insurance is undergoing major changes. The reinsurance industry is increasingly exposed to catastrophic losses for which requested cover is only available. An increasing complexity for financial instruments calls for sophisticated risk management tool. This theory expands the knowledge of operational risk management as it indicate the securitization of risk and alternative risk transfer, highlights the convergence of finance and insurance at the product level.

Extreme value theory plays an important methodological role within risk management for insurance, reinsurance and finance, and this marks the link between the study and the theory.

2.3. Empirical Review

Santika, Fakhrughozy, Nur, Lestari (2022), studied the effect of operational risk on financial performance in banking industry IDX in Indonesia. The study argued how risk affects financial performance can reduce the probability of bankruptcy and provide greater stability of banking. This study aims to determine the effect of the dependent variable on financial performance as measured by return on assets and return on equity and the independent variable net interest income, average asset turnover, total operating expense, interest over years, exchange rate.

Obayagbona and Osagiede (2023), examines the relationship between risk management and the performance of the Nigerian banking industry. The panel data analysis technique based on the fixed effects estimation was employed to analyze the Nigerian banking industry performance. A total of 18 most active deposit money banks listed on the Nigerian Stock Market for a period of 22 years (2000 to 2021) were used in the analysis. The empirical findings revealed that credit risk and operational risk variables were negative and do not have any significant relationship with the performance of the Nigerian banking industry while liquidity risk and market risk have significant positive effect on bank performance, interest rate risk has significant negative relationship with banks performance in Nigeria within the period of study. The study recommends among others that, banks' management should have proper understanding of how credit policy affects the operations of their banks to ensure judicious utilization of deposits and maximize profit. Improper credit risk management reduces bank profitability, affects the quality of its assets and increases loan losses and nonperforming loan which may eventually lead to financial distress.

Okere, Isiaka and Ogunlowore (2018) investigated the impact of risk management (credit and liquidity) on financial performance of ten Deposit Money Banks in Nigeria. The study employed panel data analysis techniques. Findings from the empirical results reveal a positive relationship between risk management and financial performance of money deposit banks. The study recommends that banks in Nigeria should augment their capacity in, liquidity risk analysis, and credit analysis and loan administration while the regulatory bodies should pay more attention to banks' compliance to regulations of the Bank and other Financial Institutions prudential guidelines.

3.METHODOLOGY

The study adopted a survey research design because data were collected through the use of questionnaire. The population of the study consists three hundred and twenty (320) employees of five most prominent banks in Anambra State that were randomly selected. The banks are: First bank, United bank for Africa (UBA), Fidelity bank, Zenith bank, and Access bank. To this end, the researchers divided the banks into three Senatorial zones of the State (Anambra North, Anambra Central, Anambra South). The segmentation of the banks into zones was to aid distribution of questionnaire. 120 employees of the banks were selected from Anambra north senatorial zone. This is because the zone (because of Onitsha) houses greater chunks of banks in Anambra State. While 100 employees each were selected from other two zones. The study employed the use of census because the entire population for the study was considered. Out of three hundred twenty copies of questionnaire distributed, three hundred (300) copies of questionnaire were returned and certified fit for the study. A five-point Likert structured questionnaire was deployed in eliciting data from the respondents. The Cronbach Alpha was used to determine the reliability of the instrument. The Cronbach Alpha value of 0.637 and 0.694 respectively were obtained. The study employed Regression method to determine the effect of operational risk management and performance of banks.

The regression model is represented below as:

$$Y = a + B_1X_1 + e$$

Where:

Y= Organizational Performance (OP)

B = Beta coefficients

X1 =System and Technology Risk (STR)

e = Error Term.

Table 3.1 Descriptive Variable

| Variables | Mean | Standard Deviation |
|----------------------------|-------------|---------------------------|
| Organizational Performance | 20.26 | 3.332 |
| System and Technology Risk | 18.74 | 4.070 |

Source: Authors' Compilation from SPSS Version 21.0

The table above summarizes the information about the mean and standard deviation of the variable of the study. The mean value of Organizational performance is 20.26. System and technology risk has a mean value of 18.74, and standard deviation value of 4.070.

Table 3.2 Correlation Matrix

| Organizational Performance. | Pearson correlation sig. (2 tailed) N | Organizational Performance | System and Technology Risk |
|------------------------------------|--|-----------------------------------|-----------------------------------|
| System and Technology Risk | Pearson correlation sig. (2 tailed) N | -0.394 | -062 |

Source: Authors' Compilation from SPSS Version 21.0

The table above shows degree of association between the dependent and independent variable of the study. System and technology risk has a correlation coefficient of 0-394 with organizational performance. This shows that System and technology risk has an adverse effect on organizational performance.

Table 3.3 Summary of the Regression Analysis

| Model | R | R square | Adjusted R square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| 1 | .265 | .690 | .504 | .3.241 | 1.879 |

a constant: system and technology risk. b = Dependent Variables: organizational Performance.

From the above table, R^2 which measure the strength of the effect of independent variable on the dependent variable have the value of 0.690. This shows that 69% of the variations in organizational performance is explained by variation in system and technology risk variable. This supported by adjusted R^2 of 0.504.

Table 3.4 Coefficients of the Model

| Model | Unstandardized coefficients | | Standardized coeff. | T | Probability value |
|-----------------------|-----------------------------|-----------------|---------------------|--------|-------------------|
| | B | Standard error. | | | |
| Constant | 18.311 | 2.121 | | 8.632 | .000 |
| System and tech. risk | -.091 | .052 | -.128 | -2.112 | .026 |

Source: SPSS 21.0

The table shows that system and technology risk has a regression coefficient of -0.091 with a probability value of 0.026. This shows that system and technology risk has a significant negative effect on organizational performance of selected commercial bank in Anambra State, Nigeria.

Test of Hypothesis

H₀ : System and Technology risk has no significant effect on organizational performance of selected commercial banks in Anambra State.

System and technology risk has a t-statistics of -3.014 and a probability value of 0.003 which is statistically significant. Thus, we reject the null hypothesis and accept the alternate hypothesis which states that system and technology risk has a significant effect on organizational performance of selected commercial banks in Anambra State, Nigeria.

4.0. Discussion of findings

The study reveals that, System and technology risk has a significant negative effect on organizational performance of selected commercial banks in Anambra State. This finding is in consonance with studies of Santika, Fakhrughozy, Nur, Lestari (2022), which reveals that organizations that are slow in implementing high technology or perform poor quality applications will definitely have a discouraging result.

5.0. Conclusion and Policy Recommendation

Operational risk management has emerged as a distinct area of study in response to Basel II framework, the increasing number of large operational losses, bank fraud, and the growing size, sophistication, and complexity of the banking industry, regulators expect banks to adopt Basel II committee on banking supervision recommendations and implement comprehensive operational risk management system. The study therefore, recommended that, the management of banks should institute measures on system access and navigation as well limit system abuse by staff and bank customers. This could be made manifest by establishing data protocols with authorized access to information on the system.

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