

Operational Risk Management and Organizational Performance of Banks in, Edo State

Okeke, M.N

Lecturer, Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University, Nigeria

Aganoke C.U

Lecturer, Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University, Nigeria

Onuorah, A.N

Lecturer, Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University, Nigeria

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v7-i4/5187>

DOI:10.6007/IJAREMS/v7-i4/5187

Published Online: 30 April 2018

Abstract

This work examined operational risk management and organizational performance using selected banks in Edo state. The study aims is to investigate the effect of People risk, Process risk, System and technology risk and external risk variables on organizational performance. Relevant literatures on operational risk management and organizational performance were reviewed under conceptual framework, theoretical framework, and empirical review. The theoretical framework was anchored on Extreme Value Theory. Survey research design was adopted. The population of the study is 1967. The statistical formula devised by Borg and Gall (1973) was employed to arrive at the sample size of 386. The tools used in analyzing the data collected were descriptive statistics and correlation analysis. Multiple Regression Analysis (MRA) method was employed in testing the hypotheses. The study discovered that people risk variables had a negative strong effect on organizational performance of the banks in Edo State. Process risk variables had a negative moderate influence on organizational performance of the banks in Edo State, System and technology risk had a negative significant effect on organizational performance of the banks. External risk variables had a positive weak influence on organizational performance of the banks in Edo State. The study concluded that operational risk management has a negative significant effect on organizational performance of the banks in Edo State. The study recommended that banks in Nigeria should analyze people risk variables analysis and establish a policy that will reduce it, while the regulatory authorities should pay more attention to people risk variables. Banks should take the issue of process risk variables very seriously and should put in place, appropriate checks and balances to ensure that process risk variables are made in accordance with banks' policies. The management of banks should institute stringent measures on system access and navigation

and limit system abuse by staff and colleagues. Finally, organizations should lay more emphasis on effective communication on the part of management as this will have a positive effect on the external risk variables. Thus, a comprehensive public relations department is necessary to provide effective feedback and response to public information.

Keywords: People Risk, Process Risk, Technology Risk, External Risk and Organizational Performance

Introduction

Management of operational risk by banks is a phenomenon that is widely accepted by most banking industries worldwide (Masenene, 2015). 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 reason for the existence of business enterprises inclusive of banks, and going concern status is achieved only when these organizations are making profit (Sufia, 2011; Aremu, Ekpo and Mudashiru, 2013). Operational risk becomes a major constraint since it involves taking appropriate measures to ensure the qualitative transactions without processing errors in order to deliver the best services to the customers (Grody, Harmantzis and Kaple, 2005). Fundamental changes in financial markets, increasing globalization and deregulation, as well as corporate restructuring had a large impact on the magnitude and nature of operational risks confronting banks. Following severe operational failures resulting in the restructuring of the affected financial institutions or in the sale of the entity (Barings), the emphasis on operational risk within banks has increased, leading regulators, auditors, and rating agencies to expand their focus to include operational risks as a separate entity besides market and credit risk (Helbok and Wagner, 2006). Operational risk was for the first time treated as a self-contained regulatory issue in the "Operational Risk Management" document published by the Basel Committee on Banking Supervision in 1998. "The New Basel Capital Accord" was first formulated in a proposal in 1999, released in 2001 and became effective in 2007; within the framework, operational risk was integrated in the so called Pillar 1 which implied its inclusion in the calculation of a banks' overall capital charge. Along with revising the minimum capital standards already covering credit and market risk, Basel II set a new minimum capital standard for operational risk. While requiring capital to protect against operational risk losses, the new framework was meant to encourage banks to improve their risk management techniques so as to reduce operational risk exposure and mitigate losses resulting from operational failures. The new capital accord provided incentive of lower capital requirements to those banks that demonstrated strengthened risk management practices and reduced risk exposures.

As one of the innovations proposed by the Basel II, following the widespread recognition of the importance of operational risk in banking and the knowledge that operational risk exhibited characteristics fundamentally different from those of other risks, an increasing amount of academic research has been devoted to this issue. Most research on operational risk in recent past focused either on the quality of quantitative measurement methods of operational risk exposure or theoretical models of economic incentives for the management and insurance of operational risk (Leippold and Vanini, 2005, Mignola and Ugoccioni, 2006). Only little attention has been devoted to statistical issues of coherent and consistent operational risk reporting and measurement within and across banks and operational risk reporting has remained an unexplored topic in academic research (Dima, 2009). Operating risk and/or system failure, are a natural outgrowth of their business and banks usually employ

standard risk avoidance techniques to mitigate them (Santomero, 2007). Self-risk assessment method is one of the possible tools used by banks for identifying and assessing operational risk though a bank assesses its operations and activities against a menu of potential operational risk vulnerabilities.

Statement of the Problem

Operational risk management in banks has been increasingly emphasized in the past decade. Big financial scandals, frauds and information technology system failures are important drivers for the greater attention both inside and outside banking institutions to their exposures to and internal handling of such risks. The exposure to different kinds of operational risk is nothing new for the individual bank Moosa (2007). Operational risks are the root cause for many of the (large scale) financial failures in the past decades (Moosa 2007). So many studies have noted that operational risks are not new since human mistakes, fraud, theft, process failures, system errors and external hazards, such as fires and floods, have been around for decades. However, the impact of operational risks was most often relatively insignificant (Mignola and Ugocioni, 2006; Alexander, 2003).

Operational risk is still not fully accepted and understood by academics and practitioners and it is treated as a left over risk from the other core financial banking risks (Acharyya 2012). Lack of quality data on operational risk forms a physical barrier that hinders the advancement of operational risk research. Most institutions in the past have neglected to collect any operational risk data as it was generally perceived to be unnecessary and the cost incurred in such a task could not be justified (Tang, Guan & Jin, 2010). However the collapse of bank, the oldest merchant bank in London in 1995 after losing \$1.3 billion due to insufficient internal controls, at Barings, to detect what was taking place, was a wakeup call to the operational risk management (Yazilari, 2012). Gikundi, Ondiek, Sawa and Musiega (2014) researched on the effects of operational risk on financial profitability in the lending process in ten commercial banks in Kakamega town, findings showed that operational risk positively influences profitability of banks. This is consistent with Epetimehin and Obafemi (2015) study in Nigeria on effects of operational risk on financial performance of banks and insurance industry, the results showed that operational risk had positive effects on financial performance. However, this is inconsistent with Tamimi (2015) study on operational risk on the Islamic Arab bank's performance, the study covered eleven out of forty-seven banks in the years 2000 to 2012, and results indicated that operational risk had negative effect on banks performance. This concurs with Azamat (2014) research on operational risk losses on financial performance in banks in the United States of America; the results showed operational risk had a negative effect on financial performance as most firms would hedge the risk to minimize losses. The authors further recommended research to be conducted on the influence of operational risk on financial performance in other financial sectors in different regions. Based on this argument, this research is to fill the gap with respect to findings on the influence of operational risk on organizational performance of banks in Edo state, Nigeria.

Objectives of the Study

The main objective of the study is to examine the effect of operational risk management on organizational performance. The specific objectives include to:

1. Evaluate the effect people risk on organizational performance
2. Determine the influence of process risk on organizational performance
3. Assess the effect of system and technology risk on organizational performance
4. Examine the influence of external risk on organizational performance

Research questions

The following research questions guided this study.

1. To what extent does people risk affect the organizational performance of banks in Edo State?
2. To what extent does process risk influence the organizational performance of banks in Edo State?
3. How does system and technology risk affect the organizational performance of banks in Edo State?
4. To what extent does external risk influence the organizational performance of banks in Edo State?

Hypotheses

The following hypotheses guided this study.

- Ho₁: People risk has no significant effect on the organizational performance of banks in Edo State
Ho₂: Process risk has no significant influence on the organizational performance of banks in Edo State.
Ho₃: System and technology risk have no significant effect on the organizational performance of banks in Edo State.
Ho₄: External risk has no significant influence on the organizational performance of banks in Edo state

Review of Related Literature

Conceptual Framework

Operational Risk Management

Mainelli (2002) stated that defining operational risk is complex and even slippery. The term operational risk has only been defined in the last few years. Unlike the definitions of market and credit risk which are relatively clear, the definition of operational risk continues to evolve. The Basel Committee on Banking Supervision defined operational risk in the New Basel Capital Accord (2003) as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputation risk. According to the British Bankers' Association (BBA), "Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. The Basel Accord (2007) defined operational risk as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. Malfunctions of the information systems, reporting systems, internal monitoring rules and internal procedures designed to take timely corrective actions, or the compliance with the internal risk policy rules result in operational risks (Bessis, 2010). Operational risks, therefore, appear at different levels, such as human errors, processes, and technical and information technology. Because operational risk is an event risk, in the absence of an efficient tracking and reporting of risks, some important risks will be ignored, there will be no trigger for corrective action and this can result in disastrous consequences. Developments in modern banking environment, such as increased reliance on

sophisticated technology, expanding retail operations, growing ecommerce, outsourcing of functions and activities, and greater use of structured finance (derivative) techniques that claim to reduce credit and market risk have contributed to higher levels of operational risk in banks (Greuning and Bratanovic, 2009).

Organizational Performance

Organization performance has been the most important issues for every organisation be it profit or non-profit one. It has been very important for managers to know which factors influence an organisation's performance in order for them to take appropriate steps to initiate them. However, defining, conceptualising and measuring performance have not been easy tasks. Researchers among themselves have different opinions and definitions of performance, which remains to be a contentious issue among organisational researchers (Barney, 2008). For example, according to Javier (2007), as cited in Nikbin et al (2010), performance is equivalent to the famous 3Es (i.e. economy, efficiency and effectiveness) of a certain programme or activity. However, according to Daft (2009), organisational performance is the organisation's ability to attain its goals by using resources in an efficient and effective manner. Quite similar to Daft (2009), Richardo and Wade (2010) defined organisational performance as the ability of the organisation to achieve its goals and objectives. Organisational performance has suffered from not only a definition problem, but also from a conceptual problem. Hefferman and Flood (2006) stated that as a concept in modern management, organisational performance suffered from problems of conceptual clarity in a number of areas. The first was the area of definition while the second was that of measurement. The term performance was sometimes confused with productivity. Productivity was a ratio depicting the volume of work completed in a given amount of time. Performance was a broader indicator that could include productivity as well as quality, consistency and other factors.

Chen (2002) asserts that organizational performance means the "transformation of inputs into outputs for achieving certain outcomes. With regard to its content, performance informs about the relation between minimal and effective cost (economy), between effective cost and realized output (efficiency) and between output and achieved outcome (effectiveness)". There are various ways to understand organization performance but in this work, it has been judged upon the growth of the company and sales performance which lead towards the growth. Sales performance can be explained as all the activities or investment carried out in the firm in the given period of time. It can be measured by total amount of revenue collected for the goods sold. Growth revenue defines as total amount of money collected by the company for the goods they sold in a specific time, and this amount is calculated before expenses are subtracted. Effectiveness of the organization depends on the three basics performance determinants. Organizational performance refers to ability of an enterprise to achieve such objectives as high profit, quality product, large market share, good financial results, and survival at pre-determined time, using relevant strategy for action (Koontz and Donnell, 1993). Organizational performance can also be used to view how an enterprise is doing in terms of level of profit, market share and product quality in relation to other enterprises in the same industry. Consequently, it is a reflection of productivity of members of an enterprise measured in terms of revenue, profit, growth, development and expansion of the organization. Organizational performance may be defined as the transformation of inputs into outputs for achieving certain outcomes. With regard to its content, performance informs about the relation between minimal and effective cost (economy), between effective

cost and realized output (efficiency) and between output and achieved outcome (effectiveness) (Chen and Barnes, 2006). There is no general agreement in the literature on the criteria to be used in assessing the organizational performance (Bolman and Deal 2003; DeClerk, 2008; LaRue et al, 2004).

Emekekwe (2008) maintains that there are two aspects of a company's financial performance of interest to investors. First, its financial performance may be assessed by reference to its ability to generate profit. This agrees with Pandey (2005) assertion that it is assumed 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. Hill and Jones (2009) also assert that the key measure of a company's financial performance is its profitability. Thus, ratios of financial efficiency in this respect focus on the relationship between profit and sales and profit and assets employed. Second, the company's financial performance may be assessed in terms of the value of its shares to investors. In this way, ratios of financial performance focus on earnings per share, dividend yield and price/ earnings ratios. The ratios used to measure the overall profit performance of a firm are termed profitability ratios. Pandey (2010) maintains that profitability ratios are determined on the basis of either sales or investment. Osisioma (2000) notes that the ratios are aimed at bringing to light the profitability of a firm's operation, the management efficiency as measured by the returns on capital employed and the intensity of capital usage – the rapidity with which invested capital is turned over. Different dimensions have been adopted by authors to determine corporate performance. Some of them are profitability, return on assets (ROA), gross profit, return on investment, (ROI), return on sales (ROS), return on equity (ROE), sales growth, export growth, revenue growth, market share and stock price (Emekekwe, 2008).

Theoretical Framework

This study is anchored on Extreme Value Theory Embrechts (1999). This study analyses the operational risk management theories in relation to organizational performance.

Extreme Value Theory: According to Paul Embrechts (1999), Extreme value theory (EVA) is a branch of statistics dealing with the extreme deviations from the median of probability distributions. It seeks to assess 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 highlight 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.

Empirical Review

A number of studies has looked at the operational risk management practices in different parts of the world. Some of these studies carried out in Nigeria and outside Nigeria are as follows: Siminyu, Clive, and Musiega (2017) examined the influence of operational risk on the financial performance of deposit taking savings and credit cooperatives in Kakamega County. A semistructured questionnaire was used to collect the data from a sample size of 56

respondents. The data from the respondents was coded on statistical package for social science (SPSS) software and analyzed by descriptive statistics; the mean and the standard deviation. Data was presented using frequency tables and bar graphs. Correlations, the statistical technique that can show whether and how strongly pairs of variables are related, was used to ascertain the relationship. Siminyu, Clive, and Musiega (2017) the study revealed that there was a significant positive linear relationship between financial systems and financial performance of SACCOs in Kakamega County. The study concluded that SACCOs and other financial institutions must focus on the financial systems in minimizing their operational risks.

Jussi (2016) investigated the existence of operational risks in Finnish insurance companies and company X. The data in this qualitative research was collected from interviews with operational risk managers working at insurance companies in Finland and from the employees of Company X. Operational risk managers from Finnish insurance companies offered a broad and professional perspective to the questions while employees from Company X brought a more detailed and pragmatic approach to the answers. Interviewees responded to a questionnaire that was sent to them before face-to-face interviews. The results showed that Finnish insurance companies were very much aware of operational risks, but the tools used were still relatively simple. Systems-related risks, human risks, technological development and regulations were the four main operational risks that Finnish insurance companies face today. There is one clear similarity between the tools and methods used by insurance companies in Finland, and it is also the tool used to prioritize resources for operational risk management. The results provided evidence that operational risk management in Finnish insurance companies needed further and more specific research so that companies could improve their own operational risk management.

Masenene (2015), assessed the effectiveness of operational risk management among the financial institutions in Tanzania whereby five banks in Dar es Salaam were selected as sample. The study drew 84 respondents randomly from the chosen five banks in the region, whereby the conclusions were generalized to all the banks in Tanzania. The sample was investigated using questionnaire and interview. It was found that operational risks policies, procedures and instruments existed in the financial institutions although to some extent, they were not effectively managed. Again, methods used to manage operational risks were not well implemented. Awareness of bankers on principles guiding operational risks was found to be minimal among them. The results revealed that most of the respondents proved that operational risk management in Tanzanian financial institutions were found not well implemented. The study concluded that there were lots of weaknesses in the management of Operational risks including lack of strong risk management departments, weak rules and principles, unimplemented policies and bias in the implementation of compensation.

Bagherzadeh and Jöehrs (2015) studied operational risk management improvements within internal control frameworks. The study adopted a qualitative research method. Primary data was collected through the interviews gathered from 2007 till 2014. The outcome of this study revealed that loss of reputation as a result of problems within IT system risks together with external card fraud are among the most common risks that banks should take into consideration when managing operational risks. It was concluded that although improvements have taken place in how operational risks are being managed, there is still room for improvements. Internal control frameworks still need to be modified by regulators to be more efficient while there should be reasonable amount of regulations applicable to banks.

Macha (2010), in his study on operational risk management in the financial sectors in Tanzania found that out of 56 financial intermediaries, only 20 of them have insurance against operational risk. According to Bank of Tanzania it is very risky and the possibility of bank failure is very high if the bank will not secure its cash or properties by insuring them. The study showed that although there are a number of cash operation risks facing commercial banks, lack of integrity among the staff members and the nature of business that the banking organizations deal with are the major cash operation risks that face the commercial banks. The study further established that cash operation risk management practices are very critical business processes, due to the nature of business that banks engage in. To a very great extent, each bank has engaged in the use of regulators guidelines which provided the minimum threshold of practices that must be used by all banks in managing the cash operations risks.

Methodology

The study adopted the survey method. This study was carried out in Edo state, Nigeria. The population of study was 1967, comprising fifteen banks out of the twenty two commercial banks in Edo State, Nigeria. The sample size was 386, obtained by using Borg and Gall (1973) statistical formula. The researcher made use of primary sources of data. The primary sources of data include the questionnaire and personal interview. The major instrument used in this study was questionnaire. The researchers used face and content validity in this work. The Cronbach Alpha was used to determine the reliability of the instrument. The Cronbach Alpha values of 0.637 and 0.694 respectively for operational risk management and organizational performance was obtained.

Method of Data Analysis

The study used descriptive statistics and correlation analysis. Multiple Regression Analysis (MRA) method was employed to determine the effect of operational risk management on organizational performance.

Data Presentation and Analysis

In this section, the data generated from the employees of the sampled banks are presented, analyzed and interpreted. A total of three hundred and eighty six copies of the questionnaires were distributed to the respondents, out of which three hundred and fifty were properly filled and found relevant to the study. 21 copies were not properly filled, and 16 copies got missing. Therefore, the analysis in this section was based on the three hundred and fifty relevant copies. The first section covered the demographic features of the respondents. The second section analyzed the data relevant to research questions.

Descriptive Analysis

This section presents the descriptive statistics on the operational risk management and organizational performance. The aim of the analysis is to examine the management of the operational risk variables in relation to organizational performance. The analysis of the individual characteristics of these variables is presented in the table below:

Table 1
Descriptive Characteristics of the Variables

Variables	Mean	Standard Deviation
Organizational performance	20.26	3.332
External Risk	17.89	3.751
System and Technology Risk	18.74	4.070
Process Risk	18.25	3.951
People Risk	17.72	4.264

Source: Authors' Compilation From SPSS Version 21.0

This table present the summary of statistics used in the analysis. It provides information about the mean and standard deviation of the variables used in the study. The mean value for Organizational performance is 20.26 while the standard deviation is 3.332. External risk and System and technology risk recorded a mean value of 17.89 and 18.74 with a standard deviation of 3.751 and 4.070 respectively. Process risk and People rate risk have mean value of 18.25 and 17.72 with standard deviation of 3.951 and 4.264 respectively.

Correlation Analysis

Here, Pearson correlation was employed to measure the strength of the relationship between independent variables. The Pearson correlation coefficient is a measure of the strength of a linear association between two variables and is denoted by r. Table 4.3 below shows the summary of correlation coefficient.

Table 3
Correlation Matrix

		ORGP	ERV	STR	PRV	
Organizational performance	Pearson Correlation	1	.039	-.394**	.536*	
	Sig. (2-tailed)		.558	.003	.498**	
	N	386	386	.004	.038 386	
External risk variables	Pearson Correlation	.039	1	.002	-.072	-.260**
	Sig. (2-tailed)	.558		.981	.276	.000
	N	386	386	386	386	386
System and technology risk	Pearson Correlation	-.394**	.002	1	.081	-.062
	Sig. (2-tailed)	.003	.981	386	.220	.345
	N	386	386	.081	386	386
Process risk variables	Pearson Correlation	-.498**	-.072	.220	1	.050
	Sig. (2-tailed)	.004	.276	386	386	.450
	N	386	386	-.062	.050	386
People risk variables	Pearson Correlation	-.536*	.038	-.260**	.345	.450
	Sig. (2-tailed)	.000		.000	.450	1
	N	386	386	386	386	386

Source: Author's Compilation From SPSS Version 21.0

The table above shows the extent of association between the dependent and independent variables used in the study. The correlation between external risk variables and Organizational performance shows the value of 0.039, which indicates that external risk variables has a positive weak effect on organizational performance. System and technology risk recorded a correlation coefficient of -0.394 with organizational performance which shows that System and technology risk has a negative moderate effect on organizational performance.

Furthermore, the correlation between process risk variables and organizational performance was recorded as -0.498. This indicates that process risk variables has a negative moderate effect on organizational performance. Also, people risk variables recorded a correlation coefficient of 0.536 with organizational performance. This shows that people risk variables has a negative strong effect on organizational performance.

Multiple Regression Analysis

Multiple regression result was employed to test the effect of independent variables on the dependent variables. The result of the multiple regression analysis is presented in the tables below.

Table 4.4

Summary of the Regression Result

The result of the multiple regression formulated in chapter three is presented in the tables below.

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

a. Predictors: (Constant), People risk variables, Process risk variables, System and technology risk, External risk variables

b. Dependent Variable: organizational performance

Table 4.4 shows that R^2 which measures the strength of the effect of independent variable on the dependent variable has the value of 0.690. This implies that 69% of the variation in organizational performance is explained by variations in people risk variables, process risk variables, system and technology risk and external risk variables. This was supported by adjusted R^2 of 0.504. In order to check for autocorrelation in the model, Durbin-Watson statistics was employed. Durbin-Watson statistics of 1.879 in table 4.4 shows that the variables in the model are not autocorrelated and that the model is reliable for predications.

Table 4.5

ANOVA Result ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	179.546	4	44.886	4.272	.002b
Residual	2384.937	227	10.506		
Total	2564.483	231			

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), People risk variables, Process risk variables, System and technology risk, External risk variables

The f-statistics value of 4.272 in table 4.5 with f-statistics probability of 0.002 shows that the independent variables have significant effect on the dependent variable. This shows that people risk variables, process risk variables, system and technology risk and external risk variables can collectively explain the variations in organizational performance in the selected banks.

Table 4.6

Coefficients of the Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	18.311	2.121		8.632	.000
People risk variables	.074	.059	.083	1.251	.212
1 Process risk variables	-.159	.053	-.194	-3.014	.003
System and technology risk	-.091	.054	-.128	-2.112	.026
External risk variables	-.110	.052	-.140	-2.674	.036

Source: SPSS 21.0

Table 4.6 shows the coefficient of the individual variables and their probability values. People risk variables has regression coefficient of 0.074 with a probability value of 0.212. This implies that risk associated with people risk variables have a positive but insignificant effect on organizational performance. Process risk variables have a regression coefficient of -0.159 with a probability value of 0.003 implying that Process risk variables have a negative and significant effect on organizational performance

Furthermore, System and technology risk has a regression coefficient of -0.091 with a probability value of 0.026. This implies that System and technology risk a negative and significant effect on organizational performance. On a similar note, external risk variables have a coefficient value of -0.110 and a probability value of 0.036. This shows that external risk variables have a negative and significant effect on organizational performance.

Test of Hypotheses

Here, the four hypotheses formulated in chapter one were tested using t-statistics and significance value of the individual variables in the regression result. The essence of this is to ascertain how significant the effect of independent or explanatory variables are on the dependent variables. The summary of the result is presented in the table below.

Table 4.7

T-Statistics and Probability Value from the Regression Result

Model	t	Sig.
(Constant)	8.632	.000
External risk variables System and 1 Technology risk Process risk variables People risk variables	1.251	.212
	-3.014	.003
	-2.112	.026
	-2.674	.036

Source: Authors' Compilation from the Regression Result

Test of Hypothesis One

Ho: People risk variables have no significant effect on organizational performance of banks in Edo State

Hi People risk variables have significant effect on organizational performance of banks in Edo State.

In testing this hypotheses, the t-statistics and probability value in table 4.7 is used. People risk variables has a t-statistics of -2.674 and a probability value of 0.036 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypotheses which states that People risk variables has significant effect on organizational performance of banks in Edo State

Test of Hypothesis Two

Ho: Process risk variables have no significant influence on organizational performance of banks in Edo State.

Hi: Process risk variables have no significant influence on organizational performance of banks in Edo State.

Process risk variables have a t-statistics of -2.112 and a probability value of 0.026 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis which states that process risk variables has no significant influence on organizational performance of banks in Edo State.

Test of Hypothesis Three

Ho: System and technology risk have no significant effect on the organizational performance of banks in Edo State.

Hi: System and technology risk have a significant effect on the organizational performance of banks in Edo State.

.System and technology risk have a t-statistics of -3.014 and a probability value of 0.003 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis which states that System and technology risk has a significant effect on organizational performance of banks in Edo State.

Test of Hypothesis Four

Ho: External risk variables have no significant influence on organizational performance of banks in Edo

Hi: External risk variables have a significant influence on organizational performance of banks in Edo

Risk associated with External risk has a t-statistics of 1.251 and a probability value of 0.212 which is statistically insignificant. Therefore, we accept the null hypothesis and reject the alternative hypotheses and conclude that external risk variables have no significant influence on organizational performance of banks in Edo.

Discussion of Findings

This work examined Operational risk management and organizational performance of banks in Edo state. The hypotheses formulated were tested using multiple regression analysis. At the end of the analysis, the following were discovered .

People risk variables have a negative strong effect on organizational performance of banks in Edo State. This finding is consistent with that of Bessis, 2010 and Greuning and Bratanovic 2009, the combination of a volatile interest rate environment, deregulation, and a growing array of on and off-balance-sheet products have made the management of interest rate risk a growing one and the risk has a significant effect on organizational performance of banks.

The study discovered that process risk variables have a negative moderate influence on organizational performance of banks in Edo State. This finding agrees with the findings of Basel 2002; Terry & Mak 2001 which revealed that several processes risk commonly used by banks to help them identify and assess operational risk management process is influenced by the operational risk management function of the bank.

The study found out that system and technology risk have a negative significant effect on organizational performance of banks in Edo State. This study concord to Fheili, 2011; Jordan and Silcock 2005 and Kaiser and Kohne 2006 that revealed that financial organizations always benefit from advanced, highly competitive computer applications, but those organizations that are slow in implementing high technologies or perform poor quality applications will definitely have bad results.

Finally, the study found out that external risk variables has a positive weak influence on organizational performance of banks in Edo State. This finding disagreed with Wu Yan, 2008; Khalil 2013 that uncovered catastrophic events that cause physical damage on bank assets. In retail banking, it was also discovered that higher exposure to operational risk comes from: Higher possibilities of clients' frauds and forgeries and moral hazard.

Summary of Findings

The following are the discoveries made in the course of the study:

1. People risk has a negative strong effect on the organizational performance of banks in Edo State
2. Process risk has a negative moderate influence on the organizational performance of banks in Edo State
3. System and technology risk has a negative significant effect on the organizational performance of banks in Edo State.
4. External risk has a positive weak influence on the organizational performance of banks in Edo State

Conclusion

This study examined Operational risk management and organizational performance of banks in Edo state. The study used multiple regressions analysis to analyse the data generated . From the findings the study discovered that operational risk variables, system and technology risk, Process risk variables and people risk variables had negative significant effect on organizational performance on banks in Edo State while external risk variables, had positive significant influence on organizational performance of banks in Edo state. Therefore the study concluded that operational risk management has a negative significant effect on organizational performance of banks in Edo State.

Recommendations

The study therefore recommends as follows:

1. Nigeria should analyze people risk variables and establish a policy that will reduce it. The regulatory authority should pay more attention to people risk variables.
2. Banks should take the issue of process risk variables very seriously and process risk variables should be provided appropriate checks and balances to ensure that the variables are made in accordance with the banks' policy.
3. The management of banks should institute stringent measures on system access and navigation and limit system abuse by staff and colleagues. This could be through putting data protocols with authorized access to information on the system.
4. Organization should lay more emphasis on effective communication on the part of management as this will have a positive effect on external risk variables. Therefore, a comprehensive public relations department is paramount to provide feedback and response to public information.

References

- Abdel- Rahman, k. E. (2013). The Role of Financial Analysis Ratio in Evaluating Performance (Case Study: National Chlorine industry). *Interdisciplinary Journal of Contemporary Research in Business*, 5(2) 13 – 28.
- Adarkwa, R. O. (2011). Risk management and bank performance. A case study of First Atlantic merchant bank Ghana Limited (FAMBL). A *Thesis* submitted to the Institute of Distant Learning, Kwame Nkrumah University of Science and technology in partial fulfillment of the requirement for the degree of Masters of Business Administration.
- Ahmed, N., Akhtar, M. F. and Usman, M. (2011). Risk Management Practices and Islamic Banks: An Empirical Investigation from Pakistan. *Interdisciplinary Journal of Research in Business*, 1, 50-57.

- Barney, J. (2008). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 1(17), 123 – 131
- Basel Committee on Banking Supervision (2007), —Sound Practices for the Management and Supervision of Operational Risk, Bank for International Settlements, Basel.
- Breden, D. (2017). Managing Operational Risk in a Continuously Changing Environment (Bank of Finland). Available online: <http://www.webcitation.org/6tjvV11pV>
- Can, L. & Ariff, M. (2009). Performance of East Asian banking sectors under IMF-supported programs. *Journal of the Asia Pacific Economy*, 14(1), 5-26.
- Chernobai, A. S. Rachev, S. T. Fabozzi, F. J. (2008). *Operational Risk: A Guide to Basel II Capital Requirements, Models, and Analysis*; John Wiley & Sons: Hoboken, NJ, USA, Culbertson, D. 2004. "IT risk: A new challenge for community bank", *Bank News*.
- Daft, R. L. (2009). *Organisation theory and design* (11th Ed). USA: Thomson Learning.
- Dutta, A. & Perry, J. (2006). "A Tale of Tails: An empirical analysis of loss distribution models for estimating operational risk capital. *Working paper No. 06-13*, Federal Reserve Bank of Boston (July).
- Ebnother, S. P. Vanini, A. McNeil, & Antolinez, P. (2003). Operational Risk: A Practitioner's View. *Journal of Risk*, 5: 22-35.
- Emekewue, P. E. (2008). Corporate finance management. 5th Revised ed; kinshasha: African Bureau of Educational Sciences.
- Fheili, M. I. (2011). Information technology at the forefront of operational risk: banks are at a greater risk", *The Journal of Operating risk*.6, (2), 47-67.
- Forbrun, C. J. Gardberg, N. A. & Barnett, L. M. (2000). "Opportunity platforms and safety nets: Corporate citizenship and reputational risk", *Business and Society review*.105, (1), 85-106
- Harmantzis, F. (2002). "Operational Risk Management in Financial Services and the New Basel Accord", *working paper*, Stevens Institute of Technology.
- Hefferman, M. M. & Flood, P. C. (2006). An exploration of the relationship between managerial competencies, organisational, characteristics; and performance in Irish organisations. *Journal of European Industrial Training*, 23(11), 241 - 251.
- Jongh, E., Jongh, D. R., Jongh, R. & Vuuren, G. 2013. "A review of operational risk in banks and its role in the financial crisis", *SAJEMS*, vol.16, no.4, pp.364-382.
- Jordan, E. and Silcock, L (2005), *Beating IT risks*, John Wiley & Sons Ltd. England
- Jussi, J. (2016). Operational risk management in Finnish insurance companies (Case of Company X). Master's Thesis in Accounting and Finance University of Vaasa
- Kaiser, T and Kohne, M. (2006). An introduction to operational risk, Risk books, Great Britain
- Kargi, H. S. (2011). Credit Risk and the Performance of Nigerian Banks, MSC Thesis, Ahmadu Bello University, Zaria.
- Khalil, E. A. (2013). Effectiveness of Credit Risk Management of Saudi Banks in the Light of Global Financial Crisis: A Qualitative Study. *Asian Transactions on Basic and Applied Sciences*, 03(02).
- Kithinji A. M. (2010). Credit Risk Management and Profitability of Commercial Banks in Kenya. An Unpublished MBA Project, School of Business, University of Nairobi, Kenya.
- Kolapo, T. F. Ayeni, R. K. & Oke, M. O. (2012). Credit risk and commercial banks' performance in Nigeria: A panel model approach. *Australian Journal of Business and Management Research*, 2(2), 31-38.

- Malik, S. A. (2013). Holt, B. Factors that affect the adoption of Enterprise Risk Management (ERM). *OR Insight*, 26, 253–269.
- Masenene, F. A. (2015). An assessment on the effectiveness of operational risk management among Tanzanian financial institutions: The case study of selected banks in Dar Es Salaam A *Dissertation* submitted in partial fulfilment of the Requirements for the degree of master of business Administration of the open University of Tanzania
- McCarthy, L. (2003), *IT Security: Risking the Corporation*, Prentice Hall, USA
- Moosa, I. A. (2007). Operational risk: A survey. *Financial Market. Inst. Instrum.* 16, 167–200.
- Nawaz, M. Munir, S. Siddiqui, A. T. Afzal, F. Asif, M. &Atceq, M. (2012). Credit risk and the performance of Nigerian banks. *Interdisciplinary Journal of Contemporary Research in Business*, 4(7), 49-63
- Ndung'u, A. W. (2013). Effect of financial risk management on financial performance of oil companies in Kenya. A management research *project* in partial fulfillment of the award Of Masters Of Business Administration (Finance Option) University Of Nairobi
- Nissen, V.; Marekfa, W. (2013). Towards a research agenda for strategic governance, risk and compliance (GRC) management. In Proceedings of the Conference Business Informatics (CBI), Vienna, Austria, 15,(18), 1 – 6
- Osioma, B. C. (2000). *Studies in accountancy: Test and readings*. 2nd ed; Aba: Afritoners Limited.
- Otieno, J. P. (2013). An Assessment of the Role of Risk Management Practices in Core Banking Software Project Success: A Case of Commercial Banks in Kenya. *International Journal of Academic Research in Business and Social Sciences* October 2013, 3(10).
- Pandey, I. M. (2010). *Financial management*. 10th ed; New Delhi: Vikas Publishing House PVT Ltd.
- Power, M. (2005). The invention of operational risk. *Review of the International Political Economy*, 12, (4),577-599.
- Richardo, R., & Wade, D. (2010). *Corporate performance management: How to build a better organisation through measurement driven strategies alignment*. Butterworth: Heinemann.
- Rufia, A. S., (2013). Efficacy of credit risk management on the performance of banks in Nigeria a study of Union Bank Plc (2006-2010). *Global Journal of Management and Business Research Administration and Management*, 13 (4), 1 -12.
- Tarantino, A. *Governance, Risk, and Compliance Handbook: Technology, Finance, Environmental, and International Guidance and Best Practices*; John Wiley & Sons: Hoboken, NJ, USA, 2008.
- World Economic Forum (2007), "Global Risks 2007: a Global Risk Network Report.Geneva, http://www.weforum.org/pdf/CSI/Global_Risks