

Driving Performance through Occupational Risk Avoidance Practices among Kenyan Commercial Banks

Johnstone Kuya¹ Dr. Susan Ngure, PhD² Dr. Anthony Ngunyi, PhD³

¹PhD Student

²School of Business Management and Economics, Dedan Kimathi University of Technology

³School of Science, Dedan Kimathi University of Technology

Abstract: *The purpose of the study was to assess the relationship between Occupational Risk Avoidance (OcRA) practices and commercial banks' performance in Kenya. The study was hypothesized on the observation that occupational risks are among the most difficult to manage, given their unpredictability and possible dwarfing consequences to commercial banks' performance. The study adopted positivism philosophy, with a census survey involving all 38 banks which were operational in Kenya during this study. Four of the banks were contacted for the pilot study, while 34 for the main study. Closed-ended questionnaires were used to collect data. Data were analyzed using the Statistical Package for Social Sciences (SPSS) tool in both descriptive and inferential form. The descriptive analysis involved proportions, means, and standard deviations, while inferential analysis involved correlations. The results were a positively high correlation between OcRA practices and performance. The study recommended that commercial banks and other stakeholders should continuously evaluate the effectiveness of the OcRA practices that they apply. Besides, there is the need to have training mechanisms to ensure effectiveness in applying OcRA practices. Further, the study recommends an embedment of OcRA practices in organizational policies to support high standards of performance.*

1. Introduction

1.1 Background of the Study

The performance of the global banking system has become stronger and more resilient, looking at the performance metrics between 2008 and 2018. The banking sector's 2018 total assets hit a \$124 trillion mark with a 0.9% return on assets-ROA (Deloit, 2019). Besides, reports reveal a significant improvement in the tier 1 capital ratio up to 6.7%, which was significantly higher in a ten-year post-crisis comparison (Deloit, 2019). This performance gets replicated in major global markets, such as the USA, where total assets went up to \$17.5 trillion and ROA 11.83% within the same period (Piggott, 2019). However, the steady performance is threatened by several risks, especially those related to employee activities. For instance, the Lehman Brothers' collapse in 2008, was partly attributed to ineffective management of employee-related risks (Milojevic, 2016). As recorded by the author, the collapse of Lehman intensified the 2008 global financial crisis, contributing to a decline of about \$10 trillion in market capitalization. Such a loss is a blow to development practices such as the Sustainable Development Goals (SDGs). A loss of jobs by more than 25,000 employees is a challenge that hinders the achievement of the first Sustainable Development Goal of eradicating poverty. Besides, global losses amounting to \$1.77 billion were incurred in 2012 in commercial banks due to fraud (Deloitte, 2014). Such a loss is almost half of what the World Bank Group (WBG) spent in 2018 in support of education worldwide, targeting to make significant achievements on the fourth SDG of supporting education (World Bank Group, 2019).

Regionally, there is the potential for improved performance, given the vastness of opportunities available in Africa for commercial banks. McKinsey and Company's (2018) report denotes a high potential for banking in African countries given the availability of new resources and avenues. King (2019) observes that the improvement in commercial banks' performance in Sub-Saharan Africa is in tandem with the economic growth, which was at 2.5% in 2017 from 2.0% in 2016. According to Mdoe (2017), despite most African banks having the potential to be the most profitable worldwide, reachability to the untapped population is sluggish, occasioned by high levels of risks and uncertainty.

Locally, the Kenyan there have been several performance challenges experienced in recent years. One of the key observations is a reduction in the earning per share (EPS) by a weighted average of 13.8% from the end of June 2017 (Cytonn Investment, 2017). The dismal performance came shortly after a vibrant growth of 15.5% the same month in 2016. Statistics by CBK (2018) detail employment losses within the banking industry from 1470 to until the end of 2017. Furthermore, 11 branches were closed in 2017 due to the performance challenges (Qonde & Chepkonga, 2017). Nonetheless, the subsequent two years, 2018 and 2019, saw an improvement in performance with an increase in pre-tax profit from Ksh. 152.7 billion to Ksh.159.1 billion in 2018 and 2019 respectively (CBK, 2020). This was attributed to a general improvement of the economy and an increase in government securities' interest rates (CBK, 2020). There are also numerous instances of bank closure within the Kenyan banking history. The latest banks to collapse include Chase Bank, Dubai Bank, and Imperial Bank, with reasons which are related to occupational risks such as insider lending (Ogola, K'Aol, & Linge, 2016). According to Akelola (2012), huge losses within the banking sector in Kenya come about as a combination of internal (staff involvement)

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and external factors such as weak prosecution structures. The Central Bank of Kenya Banking Fraud Report of 2013 indicates that fraudulent or attempted fraudulent transactions increased by 3-5% of the total financial transactions. This was an increment of 0.5% from the previous years. Commercial banks have incurred an estimated loss of about 100 million every month due to fraud-related activities (Qonde & Chepkonga, 2017). Such losses can get partly minimized through effective mitigation of occupational risks.

1.2 Statement of the Problem

Organizations have to strive to enhance performance by minimizing threats of risks. Within commercial banks, robustness in risk mitigation is a core agenda, driven by the business's risky nature. OcRA practices are expected to be effective given the high level of trust that stakeholders have in banks. The risk-based model adopted by the Central Bank of Kenya in its supervisory activities epitomizes the level of risk consciousness surrounding commercial banks. Kenyan commercial banks have been considered as key contributors to the country's economy, hence their performance is important. The contribution of the financial sector to the GDP was up to 6.6% in 2019 and 5.6% in 2018 (CBK, 2019). However, this contribution is minimal compared to other key sectors of the economy, such as the Information and Communication sector, whose contribution was up to 11.4% in 2018 and 9.0% in 2019 (CBK, 2020).

Even though commercial banks showed an improvement in their profitability, this was minimal compared to those of the developed countries. For instance, the profits of the entire banking sector in Kenya was Kes. 159.1 billion in 2019 while JPMorgan (a single bank) based in the USA was at \$36.43 billion during the same period (Norrestand, 2020). In 2019, seven commercial banks made losses higher than those made by eight banks in 2018 (CBK, 2020). Among the banks that have made significant losses is the National Bank of Kenya (NBK), which moved from profits of Kes 587 million in 2018 to a loss of Kes 821 million in 2019 (CBK, 2020). It is the streak of such results that advised the takeover of the National Bank of Kenya by the Kenya Commercial Bank (CBK) through a merger ((CBK, 2020). Further, up to 30% of the population in Kenya is still unbanked, as a result of dismal extension of the banking services especially to the poor majority. This indicates the threat towards the achievement of development goals such as the Big Four Agenda. A huge population may not have access to the necessary funding which is needed to steer such an agenda to fruition. In 2018, five banks in Kenya were fined for not reporting and preventing suspicious activities associated with fraud at the National Youth Service (CBK, 2018).

The weaknesses notable in the existing literature point to lack of scholarly attention on OcRA and performance. For instance, the studies by Mengich and Njiru (2015) on the impact of risk management on financial performance ignores occupational risks and their mitigation strategies. Meyer, Roodt, and Robbins' (2011) study on the link between people risk governance and organizational performance does not base its findings on banks, creating a contextual gap.

Further, Marcheti's (2020) study on fraud risk mitigation strategies employed by small non-profit organizations in the Florida region is limited in scope as it only focuses on fraud while ignoring other employee-related risks. Therefore, this study sought to seal such gaps by illuminating the effectiveness of various OcRA practices in influencing performance.

1.3 Research Objective

The study's objective was to assess the relationship between OcRA practices and the performance of commercial banks in Kenya.

2. Literature Review

Various scholars have propagated literature related to OcRA and performance through both theory and empirical studies as discussed below.

2.1 Protection Motivation Theory

The Protection Motivation Theory (PMT) was developed by R.W. Rogers in 1975 as a derivative of Richard Lazarus's works (Boss et al. 2015). The theory aimed at creating an understanding of the appeals of fear and how well people deal with them. The theory stipulates that people have a high likelihood of taking protective measures when they perceive that the consequences of a risk occurrence are punitive, when they desire to avoid the risks and when they have the capability or the means to avoid such risks. PMT has followership from different scholars with interests in organizational risk management. Boss et al. (2015) adopted the theory in a study on the effectiveness of using appeals of fear to motivate employees to develop protective behavior. The scholars established that such appeals were instrumental in enhancing a protective attitude among employees. According to the authors, fear appeals can be driven through approaches such as training on risks. Lee, Larose, and Rifon (2008) also did a study based on PMT on how behavior development could be incorporated in developing a model or culture of network safety within organizations. Based on the researcher's interpretation, PMT creates significant insights into understanding behavior change can manage network-related risks in technologically oriented organizations such as banks. This theory underscores the study objective, which is to assess the relationship between OcRA practices and commercial banks' Performance in Kenya.

2.2 Performance Models

Performance refers to the level at which an organization achieves its objectives (Elena-Iuliana & Maria, 2016). Different types of measurements are carried out to determine bank performance. These include both the financial and non-financial parameters. One of the models used in performance measurement is the Balanced Score Card (BSC). This model was drawn by Kaplan and Norton (1996) and assesses the financial perspective, customer perspective, internal processes, and learning and growth. Apart from the BSC, another model that is widely adopted is the CAMELS model. Most central banks worldwide, including the CBK, use this model (Mehdi & Mohammed, 2014). The specific

parameters are Capital Adequacy, Asset Quality, Management Capability, Earnings, Liquidity, and Sensitivity to Market risk, hence the acronym "CAMELS." The model has been adopted and supported by different researchers such as Hussein (2010), Ongore and Kusa (2013), and Mohiuddin (2014) while looking at different factors that influence the performance of banks. Other traditional methods used include Return on Assets (ROA), Return on Equity (ROE), Profit Margin, Net Interest Margin (NIM), among others. These measurements have been adopted by scholars such as Ketyenya and Mwaura (2017), Mikhail, Satish, and Andrey (2016), and Tomuleasa and Cocris (2014). Both the CAMELS and the traditional models have been criticized for favoring financial parameters in their approach and failing to give a wholesome performance outlook of banks (European Central Bank, 2010). This study utilized the BSC model on account of its elaborate nature in carrying out performance measurement. The model covers a wider range of financial and non-financial, hence gives a fairer view of organizational Performance.

2.3 Empirical Research

OcRA practices aim at preventing the occurrence of foreseeable risks. An organization deliberately avoids venturing into an activity which is inherently risky for fear of its impacts (Adams, Brenner, & Smith, 2013). Among the avoidance practices notable among organizations are codes of conduct, technological enhancements, employee screening, and risk management training (Thomas, Crook, & Edelman, 2017; CBK, 2013).

Among the authors who have laud employee screening as a risk avoidance practice are Stoughton, Thompson, and Meade (2015). The authors noted that social media platforms provide valuable information utilizable to avoid unsuitable employees during hiring. Bartik and Nelson (2016) also studied the effectiveness of credit references as a way of OcRA during hiring. However, most respondents thought that credit bureau references created an avenue for undue discrimination (Bartik, Nelson, 2016).

The use of the codes of conduct has been widely advocated for as a way of avoiding employee-related risks. Eisenbeiss, Knippenberg, and Fahrbach (2015) studied the relationship between compliance with the code of conduct and Performance, noting a high correlation. Erwin (2011) embarked on establishing the impact of a code of conduct on an organization's corporate social responsibility performance. The content quality of a code of ethics had a lot of influence on an organization's financial performance, as per the author's conclusion. Also, Persons (2012) did a comparative study on the financial performance of firms with codes of conduct and those that did not have. It was found that the firms with no codes of conduct had low levels of financial performance.

Other studies are centered on training as a way of avoiding risks within organizations. It is observed that most organizations hardly quantify the impact of education on their organizational performance, making it difficult to evaluate its relevance in mitigating risks (Choi & Dickson, 2009). Meyer, Roodt, and Robbins (2011) suggest that

employees should be given the right training to enhance their performance and risk mitigation capabilities. Waweru and Kalani (2009) advocated for loan administrators' training within banks in Kenya to avoid the risks of non-performing loans. Jeffrey (2011) reports that most risks, especially fraud-related, occur due to employees' inability to understand the mechanisms which are meant to curb such risks. Chen, Hsu, and Huang (2013) determined the impact of constant professional education (CPE) on the quality of risk controls. The researchers established that poor controls were a result of lack or low levels of participation in CPE in most cases.

In addition to the above, most organizations have adopted information technology in their operations (Munir & Manarvi, 2010). Banks are among the highest users of this technology as it is pivotal in most of their transactions. Hence, the embedment of technological platforms is done with employee-related risk avoidance in mind. For instance, through controlled access, users are authenticated before being allowed to use the systems (Rad, 2017).

The reviewed literature elicits various gaps, some of which can be narrowed through this study. For instance, the studies by Stoughton et al. (2015), Bartik, et al (2016), and Tsutsumi et al. (2018) fail to link the identified risk avoidance strategies with organizational performance. Apart from this, the studies by Choi and Dickson (2009) and Meyer et al. (2011) are not based within the banking industry. Therefore, their results may not be replicated in banks given the different industrial specific dynamics that exist among the different industries. With such gaps, it is necessary to continuously carry out related studies such as assessing the effectiveness of OcRA practices in driving performance.

2.4 Conceptual Framework

Figure 1 below shows the conceptual framework that was adopted in this study. The independent variable was OcRA practices, while the dependent variable was performance. The OcRA practices were employee screening, code of conduct, risk management training, and controlled access to systems. Performance was measured using the BSC model.

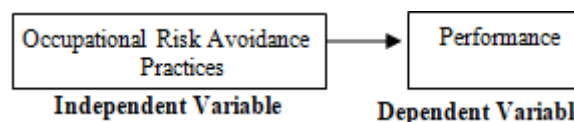


Figure 1: Conceptual Framework for Occupational Risk Avoidance practices and Performance of Commercial Banks in Kenya

3. Research Methodology

The methodology included the research philosophy, the research design, the study population, data collection methods, and the various analyses that were carried out.

3.1 Research Philosophy

The study adopted a positivist philosophy. In positivism, what is acceptable as factual should be scientifically

observable and verifiable (Fulford & Hodgson, 2016). Positivism relies only on measurable or quantifiable observations that are statistically analyzable.

3.2 Research Design

A descriptive survey was applied in this study. The main concern was describing the relationship between OcRA practices and the performance of commercial banks in Kenya.

3.3 Population of the Study

The study was a census survey; the study's target population was all the 41 commercial banks in Kenya. The accessible population was 38 banks, given that two (Chase Bank and Imperial Bank) were under receivership whereas one (Charterhouse) was under statutory management, which presented difficulties in reaching respondents. Out of the 38, four were excluded since they had been involved in a pilot study. These included NCBA Bank, Diamond Trust Bank, First Community Bank, and Standard Chartered Bank. The total banks engaged in the final research was therefore 34. The study aimed at six employees from each bank. The employees were human resource managers, risk managers, branch operations managers, customer service staff, tellers, and sales staff.

3.4 Data Collection Instruments and Procedure

Data was collected using closed-ended questionnaires. Measuring of responses was aided by Likert scale, which was found suitable for quantifying responses that are attitudinal and perceptual (Cleff, 2019). The measurements entailed rankings on a scale of 1 to 5. A mark of 5 meant "very much" whereas that of 1 meant "not at all" concerning the questions asked. The questionnaires were distributed through a drop and pick later basis.

3.5 Test for Reliability of the Instruments

Reliability measurement involved a determination of internal consistency. Internal consistency assumes that items in a particular measurement of a construct should produce closely equivalent results when induced on a large scale (Durakbasa & Gencyilmaz, 2018). Internal consistency was determined using a Cronbach's Alpha Coefficient that falls in the range of zero to one. Greater internal reliability gets assumed to be present when the Cronbach's Alpha Coefficient is closer to one (Bolarinwa, 2015). The test yielded a Cronbach's Alpha of 0.702, indicating that the instruments were reliable.

3.6 Data Analysis and Presentation

The collected data was cleaned, coded, and backed up electronically using the SPSS tool. The analysis involved descriptive statistics, factor analysis, and regression analysis. Data analysis was done by the Statistical Package of Social Sciences (SPSS). A Principle Component Analysis (PCA) was used to test the construct validity through the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy while Total Variance Explained, and the Rotated Component

Matrix were used to determine whether the parameters were indeed the drivers of OcRA and that they could be retained for further analysis. The relationship between OcRA practices and performance was determined through simple regression analysis.

4. Findings and Discussions

The findings of the study and the accompanying discussions were as follows:

4.1 Response Rate

The response rate is shown in figure 4.1 below.

Table 4.1: Response Rate

Category	Rate	Percentage
Returned Questionnaires	156	76.47%
Unreturned Questionnaires	48	23.53%
Total	204	100%

A total of 34 banks were involved in this research after a successful pilot study. A total of 204 questionnaires were distributed with each bank assigned six questionnaires. Out of the 204 questionnaires, 156 (76.47%) were correctly filled and returned. This number was considered sufficient for this research. According to Fincham (2008), a questionnaire return rate of above 60% is suitable for Social Sciences research.

4.2 Drivers of Performance of Occupational Risk Avoidance

A factor analysis was carried out on OcRA practices within commercial banks and the results were as discussed below.

4.2.1 Test for Sampling Adequacy for Occupational Risk Avoidance Practices

To establish whether all the four statements under OcRA practices were factorable and correlated, a test for sampling adequacy was performed. The results were as shown in Table 4.2:

Table 4.2: Results for Sampling Adequacy for Occupational Risk Avoidance Practices

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.746
Bartlett's Test of Sphericity	Approx. Chi-Square	99.915
	Df	6
	Sig.	.000

The KMO statistic generated from the analysis was 0.746. Since the value is above 0.5, the data was considered to be adequate for further factor analysis as advocated for by Cattell (2012). The Bartlett's Test for Sphericity was equally high with a Chi-Square of 99.915 and a p-value of 0.00, which was less than 0.05. These statistics show that items were related and factorable, hence be considered as drivers of OcRA.

4.2.2 Total Variance Explained for Occupational Risk Avoidance Practices

To determine the strength of the four statements involved as drivers of OcRA, an analysis of the Total Variance Explained was conducted and the results were as shown in Table 4.3:

Table 4.3: Total Variance Explained for Occupational Risk Avoidance Practices

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.113	52.821	52.821	2.113	52.821	52.821
2	.703	17.577	70.398			
3	.612	15.300	85.698			
4	.572	14.302	100.000			

From the results, items 1 to 4 had eigenvalues of between 2.113 and 0.572 respectively. The total variance explained was 52.821%. This was above the recommended value of 50% as supported by Watkins (2018). As such, all four components under OcRA practices were considered to have adequacy as far as the measurement of the variable concerned. All the four items were therefore included in the further analysis.

4.2.3 Rotated Component Factor Matrix for Occupational Risk Avoidance Practices

To determine whether all the items could be considered as constitutive components of Occupational Risk Avoidance, the factor loadings generated in the Rotated Component Matrix were evaluated. Table 4.4 summarizes the results of the rotation.

Table 4.4: Rotated Component Matrix for Occupational Risk Avoidance Practices

Item	Component
Employee Screening during and after recruitment is effective in preventing employee-related risks	.762
The use of the Code of Conduct enhances the prevention of employee-related risks within the bank.	.728
Training on Risk Management is effective in preventing employee-related risks.	.735
Controlled Access to Systems e.g. passwords and user profiles effectively prevents employee-related risks	.679

All the items were retained as they resulted into factor loadings between 0.679 and 0.762 for controlled access to system and employee screening respectively. These resulted into more than 0.4, hence their retention as advocated for by McDonald (2012). The items (employee screening, code of conduct, training on risk management, and controlled access to systems) were considered drivers of OcRA.

4.3 Inferential Analysis

The objective of the study was to assess the relationship between OcRA practices and the performance of commercial banks in Kenya. A regression analysis was carried out as outlined below. The first step was an analysis of the fitness of the model. The results were as shown in Table 4.5:

Table 4.5: Model Summary for Occupational Risk Avoidance Practices and Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.634 ^a	.401	.397	.36188

a. Predictors: (Constant), Occupational Risk Avoidance practices

The model $Y = b_0 + b_1X_1 + \epsilon$, was established to be fit in predicting the relationship between the variables given the values of R and R square that were attained. The R-value meant that the relationship was strong and positive ($R=0.634 > 0.5$) while the R square value of 0.401 implied that 40.10% of the variance in performance of commercial banks was explained by OcRA practices.

The second step of the analysis involved determining the significance of the model in predicting the relationship between the variables through the Analysis of Variance (ANOVA). The results were as summarized in Table 4.6:

Table 4.6: Analysis of Variance for Occupational Risk Avoidance Practices and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.521	1	13.521	103.246	.000 ^a
	Residual	20.167	154	.131		
	Total	33.688	155			

a. Predictors: (Constant), Occupational Risk Avoidance Practices

b. Dependent Variable: Performance

From the ANOVA table, the F static was 103.246. This statistic was more than the critical F value of 3.903 at $p=0.05$, an indication that the model was highly significant with a 1, 154 degrees of freedom. The p-value was $0.00 < 0.05$ hence the conclusion that the relationship between OcRA practices and performance of commercial banks in Kenya was statistically significant.

The final step involved an analysis of the regression coefficients, which was necessary for determining how bank performance was predicted by OcRA practices. The results were as shown in Table 4.7:

Table 4.7: Coefficients for Occupational Risk Avoidance Practices and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.282	.157		14.520	.000
	Occupational Risk Avoidance Practices	.409	.040	.634	10.161	.000

a. Dependent Variable: Performance

The results indicate that a one-unit improvement in OcRA practices could improve the bank's performance by 0.409 times. These estimates were significant at a p-value of 0.00. Given that $p < 0.05$, the relationship had high significance. The model estimate was thus given as $Y = 2.282 + 0.409X_1$. Where, Y=Performance,

X1= Occupational Risk Avoidance practices.

The analysis led to rejection of the null hypothesis given that the p-value (0.00) was less than 0.05. The null hypothesis was stated as:-

H_{01} : There is no Statistically Significant Relationship between Occupational Risk Avoidance practices and the Performance of Commercial Banks in Kenya.

The alternative hypothesis, that there was a statistically significant relationship between the OcRA practices and performance of commercial banks in Kenya, was accepted. The findings are consistent with prior findings of Devaro and Fields (2008), Stoughton et al. (2015), and Huang and Cappelli (2010) who established a significantly strong relationship between OcRA practices and organizational performance.

5. Conclusions and Recommendations

5.1 Conclusions

The objective of the study was to assess the relationship between OcRA practices and the performance of commercial banks in Kenya. This study concluded that there was a high correlation between OcRA practices and the performance of commercial banks in Kenya. As such, an improvement in the application of OcRA practices could lead to a significant improvement to the performance of commercial banks in Kenya. Commercial banks and other organizations are thus challenged to invigorate the use of various OcRA practices as part of their people-related risk mitigation strategies as the overall effect is an improvement in organizational performance.

5.2 Recommendations

One of the study's recommendations is that commercial banks and other stakeholders should have mechanisms in place through which the effectiveness of OcRA practices can be evaluated. Such an evaluation is important in determining where to lay more effort in enhancing the performance of organizations and at the same time creating a safe operational environment for business. Besides, there is the need to have training in place to ensure effectiveness in applying OcRA practices. For instance, employees should be continuously trained on the need to embrace various risk mitigation strategies and practices to create a safe, people-driven organizational culture. Further, the study points out the need to embed OcRA practices in policies to support high standards of their applicability.

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