# Effects of Operational Risks in the Lending Process of Commercial Banks Profitability in Kakamega Town

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***ABSTRACT:*** The nature of Operational risk is complex and dynamic. Unlike credit and market risk, the operational risk is largely internal to banks, difficult to assess and has the potential to wipe out the very existence of the organisation (Jorion 2005). Today risk managers believe that about 30% of the risk a financial institution runs is due to operational losses (Cruz 2003).The study adopted a descriptive approach with 54 individuals in the lending process from 10 commercial banks in KakamegaTown. Data was collected using questionnaires as the main instruments. The researcher used Statistical Package for Social Sciences (or SPSS software) version 19' in coming up with the statistical analysis for the study.Data was put on laggard scale of 1-5, coded and entered into the computer system and then analyzed by use of descriptive statistics and ordinal regression analysis with the aid of SPSS. Thereafter, data will be presented in the form of tables and equations. Operation risks were found to be significant in commercial bank performance in Kakamega Town. From the results it's evident that compliance, systems, character and culture have a strong positive correlation with profitability on the other hand fraud was found to be negatively correlated.From the regression results 0.295 is the partial regression coefficient of compliance this implies that with influence of other explanatory variables held constant any increase in compliance by one unit will lead to 0.295 changes in profitability and in the same direction. While 0.102 is the partial regression coefficient of system this shows that with influence of other explanatory variables held constant any increase in compliance by one unit will lead to 0.102 changes in profitability and in the same direction.0.365 is the partial regression coefficient of character this shows that with influence of other explanatory variables held constant any increase in compliance by one unit will lead to 0.365 changes in profitability and in the same direction. While 0.308 is the partial regression coefficient of culture this shows that with influence of other explanatory variables held constant any increase in compliance by one unit will lead to 0.308 changes in profitability and in the same direction. This therefore implies that if there is non-compliance in commercial banks their profitability will be affected negatively by the same magnitude.As per the anova analyses I therefore accept alternative hypothesis given $F_{(5, 53)} = 17.205$ $P<0.05$

## I.  INTRODUCTION

**1.1 Background**

Basel Committee defines operational risk as: "the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events". An important component is the legal risk that appears because of non-application or bad application of regulatory or contractual dispositions, which affects negatively the banks evolution and operations. But this approach doesn't take into consideration neither strategic risk, nor reputational risk. Beams (2005) noted that even though risk management had been strengthened and became more sophisticated, financial institutions are still heavily dependent on having ready access to liquidity during 'market stresses'. Another threat area is the eagerness of banks and financial institutions to consider increasing risk in the search for greater profits even in the face of declining opportunities.

Apart from this, banking channels are also becoming wider since it is now comprised of branches, banking centres or financial centres, computerised telecommunications such as automated teller machines and electronic transfers, banking logistics, telephone banking and online banking (Berger, 2003). These are perceived as either causes or resultant of globalisation, or both. How globalisation affects the services of the banking industry is now at the forefront of international debates. Global integrations are vital in the progress and development of financial services including banking services. According to Berger et al (2002) basic to all banks are both nationality and reach. There are specific aspects contributing to the globalisation of banking services such as technology, increasingly complicated customer requirements and needs and sustainable growth

brought by competition. In the last three decades, many states and government embrace the idea of lifting important international banking regulatory barriers, making possible the transfer of cash as well as information via technology from geographically dispersed locations (Berger 2003).

Such condition also facilitates the international banking arena to evaluate and manage risks in a cost-effective manner. In the process, costs of supplying banking services across borders are effectively reduced. Further, according to Krugman&Obstfeld (2006), "The globalisation of the financial industry was forced by the increasing international activities and trade of multinational corporations" In addition, globalisation have brought with it increased risks in the banking industry which need to be carefully examined so as to strike a balance between improved commercial banks profitability and risk management.

### 1.2 Statement of the Problem
Laker (2006) argues that greater complexity of banking activity andincreasing dependence on technology and specialist skills has made operational riskas one of the most important risk facing banking institutions of which outsourcing and technology risk are two major sources of operational risk. Risk management has always been both an explicit and implicit fundamental management process in financial services. Today, however, there is more pressure to avoid things going wrong while continuing to improve corporate performance in the new environment. Good risk management is a decisive competitive advantage. It helps to maintain stability and continuity and supports revenue and earnings growth. The lending process in financial institutions is, like any other activity, subject to human error, misjudgement, negligence and other improper practices, and last but not least to fraud.The nature of Operational risk is complex and dynamic. Unlike credit and market risk, the operational risk is largely internal to banks, difficult to assess and has the potential to wipe out the very existence of the organisation (Jorion 2005). Mackay & Moeller (2007) support the previous studies and show that a discriminating risk management program can significantly enhance firm value. "Today risk managers believe that about 30% of the risk a financial institution runs is due to operational losses"(Cruz 2003). Line managers must determine the level of risks they need to accept to run their businesses and to assure themselves that the combinations of earnings, capital and internal controls is sufficient to compensate for the risk exposures (Bies S. Susan 2002). Based on these arguments was therefore necessary to carry out a research on the effects of operational risks on the commercial banks profitability with special emphasis on lending process.This study intends to approximate the amount of operational risk embedded in the lending process by way of some empirical data.

### 1.3 Objective
1. To examine the effects of operational risk in lending process on commercial banks' profitability.

### 1.4 Research Hypothesis
$H_{01}$. Operational risks in the lending process of commercial banks have no significant effect on their profitability

### 1.5 Justification of the Study
This study was significant endeavour in promoting operational risk management strategies among credit officers in banks. In addition, this study provided recommendations to regulator in Kakamegatown where the researchwas aiming for further enhancement of guidelines of measurement and management of risk in banks particularly in relation to operational risk. Outside the reviewing and enhancing banks internal banks operational procedure, monitoring and control and process system under lending's, there was also need to rethink local policy making related to operational risk management practices.

## II. LITERATURE REVIEW
### 2.1Operational risks and banks profitability
Kithinji (2010) assessed the effect of credit risk management on the profitability of commercial banks in Kenya and data on the amount of credit, level of non-performing loans and profits were collected for the period 2004 to2008. The findings revealed that the bulk of the profits of commercial banks are not influenced by the amount of credit and non-performing loans, therefore suggesting that other variables other than credit and non-performingloans impact on profits. Laker (2006) argues that greater complexity of banking activity andincreasing dependence on technology and specialist skills has made operational riskas one of the most important risk facing banking institutions of which outsourcing and technology risk are two major sources of operational risk.The formulation of the firm's credit and collection policies will also be influenced by the competing demands of the financial, marketing and operational managers (Schmidt &Piumelli, 1998). The credit management units' primary concern will be to minimise the firm's investment in debtors in order to

minimise opportunity costs and the risk of default (Ming, Xialing&Lanbo, 1992). In contrast, the attitude of marketing and sales managers will generally be in favour of relaxed credit policies as a means of obtaining and maintaining customers and of increasing the firm's market position. These competing demands and tensions will have to be reconciled in formulating a definitive credit policy.The risk of having a wrong policy in place can considerably reduce company profits through wrong procedures being followed hence leakage or loopholes in operations.

For every credit or loan issued by the bank, there is a perceived risk involved. This risk refers to the possibility of non-payment of the obligation when it falls due. The credit risk may be minimised by a careful examination of the 4Cs of credit which is defined as character, capacity, capital, collateral of the borrower and the prevailing conditions surrounding the business, this is more of an operational issue and if not carefully examined will led to operational risks in the credit process. In determining credit risk, it is advised that banks to assess the Cs of loan applicant in order to guide them in their day to day business and have the assurance that the applicant will comply in the agreement (Epstein, 2009) because this can have a great impact on company profitability.

## 2.2 THEORIES
### *2.2.1.The SignallingArguments*
Thesignallingargumentstatesthatgoodcompaniesshouldprovidemorecollateralsothattheycansignaltotheb anks that they are less risky type borrowers and then they are  Charged lower interest rates.Mean while,the reverse sign alling argument states that bank sonly require ecollateraland or covenants for relatively risky firms that alsopay higher interest rates (Chodechai,2004;EwertandSchenk,1998).

### *2.2.2LoanPricingTheory*
Banks cannot always set high interest rates, e.g. trying to earn maximum interest income. Banks should consider the problems of adverse selection and moral hazard since it is very difficult to for ecast the borrower type at the start of the banking relationship (StiglitzandWeiss, 1981).If banks set interest rates too high, they may induce adverse selection problems because high- risk borrow Ersare willing to accept these high rates. Once these borrowers receive the loans, they may develop moral hazard behavior or socalled borrower moral hazard since they are likely to take on highly risky projects or investments (Chodecai,2004). From the reason in go fStigl it zand Weiss, it is usual that in some cases we may not find that the interest rates et by banks is commensu rate with the risk of the borrowers.

### *2.2.3FirmCharacteristicsTheories*
These theories predict that the number of  borrowing relationships will be decreasing for small, high-quality, informationalopaqueandconstraintfirms,allotherthingsbeenequal.(Godlewski&Ziane,2008)

## 2.5 conceptual framework
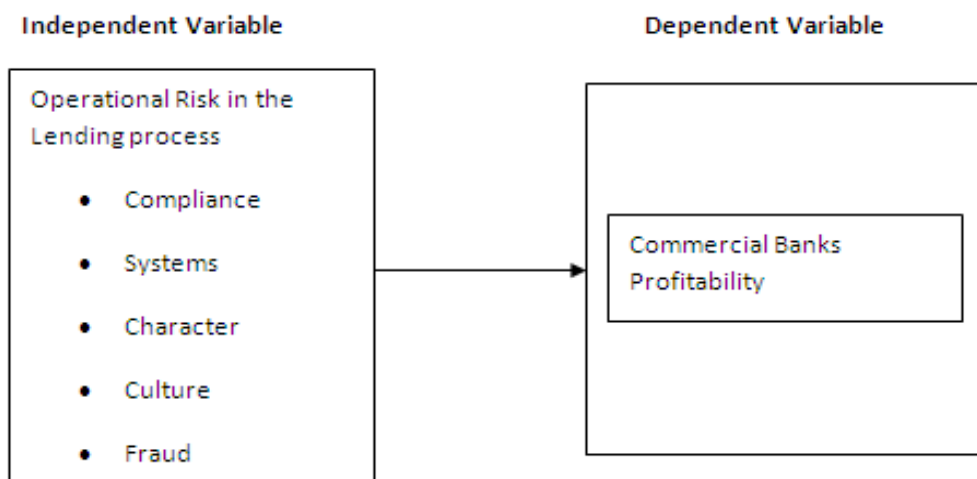


Source: Author 2013

# III. RESEARCH METHODOLOGY

**The Research Design**
The researcher use dempirical research design where primary data was collected using questionnaires'

**The Population**
The researcher dwelt on commercial banks that are licenced to carry out banking functions by CBK and have a network (branch) in Kakamegatown.

**Sampling Design**
Due to time constraints and availability of the participants, the researcher opted to use convenient sampling, by sampling participants that were reliable and available to answer such questions through a simple random sampling. The study adopted a stratified simple and random approach since the population of the study from which the sample was drawn did not constitute a homogeneous group hence purposive sampling wasconsidered.

**Sample Size**
My sample was composed of 54 individuals from different Bank involved in the lending processes in Kakamegatown who understands the current status of their organisations.

| Name of bank | Total no of employees | Total no of lending officers | Sample size | % of sample size vs lending officers |
|---|---|---|---|---|
| Equity | 45 | 14 | 10 | 71.4 |
| Co-operative | 32 | 11 | 9 | 81.8 |
| Barclays | 15 | 5 | 3 | 60 |
| Kcb | 48 | 15 | 12 | 80 |
| National bank | 18 | 7 | 4 | 57.1 |
| KWFT | 17 | 8 | 5 | 62.5 |
| Stanchart | 11 | 4 | 3 | 75 |
| Family bank | 19 | 8 | 6 | 75 |
| Diamond trust | 9 | 2 | 1 | 50 |
| Equatorial commercial | 6 | 2 | 1 | 50 |
| TOTAL | 220 | 76 | 54 | 71.1 |

**Research Instruments**
The researcher administeredstructured questionnaire where Yes-No, multiple choices and open ended questionswereused as theinstrument for data collection. On the other hand, secondary information was used in providing the ideas regarding the areas of success of bank in Kakamegatown.

**Reliability and Validity Testing**
The instruments used were taken through both reliability and validity testing. For reliability, test and re-testing method was used in which same questionnaires were given out to two separate groups at two different times and the results were compared which gave almost similar results. For validity testing, expert opinions were sought from supervisors and practitioners in the area of lending who confirmed on the same.

**Data Analysis**
After the survey questionnaire responses have been collected, the researcher will use statistics to analyse all the data. The researcher used Statistical Package for Social Sciences (or SPSS software) version 19' in coming up with the statistical analysis for this study.Data was put on laggard scale of 1-5, coded and entered into the computer system and then analyzed by use of descriptive statistics and ordinal regression analysis with the aid of SPSS. Thereafter, data will be presented in the form of tables and equation.
$Y_1 = a + b_1*X_1 + b_2*X_2 + b_3*X_3 + b_4*X_4 + b_5*X_5. + e$
Where $Y_1$ is commercial bank profitability
$b_1, b_2, b_3, b_4$ and $b_5$ are regression coefficients indicate the amount of change in the value of dependent variable for a unit change in independent variable.
$X_1$ $X_2$, $X3$, $X4$ and $X_5$ are independent variables representing Compliance, Systems, Character, Culture and Fraud respectively and e is the error term.

# IV. DATA PRESENTATION AND ANALYSIS

## 4.1 Descriptive analysis

65 % (35 respondents) of those interviewed were male while 35 % (19 respondents) were female. There is generally higher number of interviewed male lending officers as compared to their female counterparts. This may due to willingness of male bankers willingness to engage in a processes that is prone to so many risk i.e. operational risks, Credit risks and Market risks In regard to age of those interviewed 13 were between the age of 20-30, 31 were between the ages of 30-40, 8 between the ages of 40-50 while 2 were above 50 years. This is important to note because people in different age groups tend to view risk differently and therefore are willing to take different actions towards risks. Since the researcher was dealing with risks in the lending process, all those interviewed confirmed to be involved with a commercial bank involved with lending and themselves are directly involved in the lending function of the bank. They also confirmed that Compliance, Systems, Character, Culture and Fraud to be some of the operational risks they have to deal with in their daily operations. Of those interviewed 92% said that data on compliance as a risk in their respective banks are available while 12% thought it's not available. 83% thought that their banks have data of system as an operational risk, 55% thought there is data on character as an operational risk in their banks, 52% believe there is data on culture as an operational risk and 88% believe that data on fraud as an operational is available in their banks. All banks interviewed in Kakamega have both a compliance officer and system administrator in their branches which shows how serious they take operational risks. The respondents also believes that their banks strictly follows the laid down rules, regulations and procedures by their regulator (CBK)

## 4.2 Inferential Analysis

Table 4.1 Correlation Table

| | | Compliance | systems | character | culture | fraud | profitability |
|---|---|---|---|---|---|---|---|
| compliance | Pearson Correlation | 1 | | | | | |
| | Sig. (2-tailed) | | | | | | |
| | N | 54 | | | | | |
| systems | Pearson Correlation | .533** | 1 | | | | |
| | Sig. (2-tailed) | .000 | | | | | |
| | N | 54 | 54 | | | | |
| character | Pearson Correlation | .423** | .550** | 1 | | | |
| | Sig. (2-tailed) | .001 | .000 | | | | |
| | N | 54 | 54 | 54 | | | |
| culture | Pearson Correlation | .772** | .613** | .571** | 1 | | |
| | Sig. (2-tailed) | .000 | .000 | .000 | | | |
| | N | 54 | 54 | 54 | 54 | | |
| fraud | Pearson Correlation | -.549** | -.560** | -.560** | -.571** | 1 | |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | |
| | N | 54 | 54 | 54 | 54 | 54 | |
| profitability | Pearson Correlation | .719** | .723** | .672** | .743** | -.696** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | |
| | N | 54 | 54 | 54 | 54 | 54 | 54 |

** Correlation is significant at the 0.01 level (2-tailed).

From table 4.1 it's evident that compliance, systems, character and culture have a strong positive Pearson correlation with profitability. This is true because as bank staff comply with laid down rules and procedures they reduces loopholes for revenue losses and therefore increase profitability. On the other hand it means that as non-compliance increases profitability will also be affected negatively. System used by commercial banks have also been found to have a great impact in their profitability as systems time down tend to affect banks operations negatively therefore reducing their profits. As system usage and reliability increases the profitability of the bank also increases. It's therefore true to say that as risk of system failure increases in commercial bank lending process profitability of that bank decreases. Both bank staff and customer character have been found to be key in the lending process and therefore their impact on profitability. As they tend to

have a strong character the more the likelihood of completed deals and this usually translate to profitability to the bank. As both lending officers and customers gain negative character this will also affect bank's profitability negatively. Culture emerged as the variable with the highest correlation with profitability and therefore the variable that is most likely to affect profitability. Weak culture in the lending process is the one that is most likely to affect commercial bank profitability more negatively as compared to the other researched variables. At .743[**] culture have the strongest correlation with profitability followed by system at 723[**] due to importance of banking systems to the bank, compliance is third at 0.719[**] partially explained by the fact that both strong culture and systems helps reduce non-compliance. A strong positive culture in commercial banks helps improve on its profitability while a weak culture can be recipe for wiping out commercial banks profitability. This are sentiment echoed by Dr. James mwangi Equity bank CEO second largest bank by asset base and profitability in Kenya while presenting 2013 financial reports said" Equity banks culture is so strong like a religion where you either believe in us or you don't, this therefore justify huge profits that wehave just announced." Character was least correlated among the operational risks studied at .672[**] due to thorough screening put in place by banks Fraud on the other hand affects profitability negatively because as fraud cases increase they lead to direct financial losses to the Banks. At -.696[**] it means fraud is negatively correlated with profitability and is significant at 99% confidence level. As fraud increases its likely to affect profitability 0.696 times negatively.

Table 4.2: variance analysis

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-----|----------|-------------------|----------------------------|
| 1 | .801[a] | .642 | .605 | .21321 |

R square is the variance in profitability that is explained by independent variables. In my profitability model 64.2% of profitability variance can be explained by compliance, systems, character, character and fraud. R on the other hand means 80.1% of dependent variable (profitability) can be explained by explanatory variables.

**Table 4.3 ANOVA**[b]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|-----------|----------------|----|-------------|--------|-------|
| 1 | Regression | 3.911 | 5 | .782 | 17.205 | .000[a] |
| | Residual | 2.182 | 48 | .045 | | |
| | Total | 6.093 | 53 | | | |

From table 4.3

All independent variable in the model are totally significant in explaining profitability of commercial banks, this implies that the model is totally applicable for the study. This is because the level of significance (Sig.) is 0.05 and F (5, 53) = 17.205 P<0.05

**Table 4.4 regression analysis**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------|------------|------|-----------|------|-------|------|
| | | B | Std. Error | Beta | | Sig. |
| | | | | t | | |
| 1 | (Constant) | 1.231 | .778 | | 1.583 | .120 |
| | compliance | .295 | .057 | .168 | 1.670 | .001 |
| | systems | .102 | .070 | .142 | 1.454 | .003 |
| | character | .365 | .100 | .342 | 3.646 | .001 |
| | culture | .308 | .060 | .499 | 5.153 | .000 |
| | fraud | -.102 | .124 | -.080 | -.825 | .014 |

a. Dependent Variable: profitability

As per the above table it's therefore possible to derive:

$Y_1 = 1.231 + 0.295X_1 + 0.102X_2 + 0.365X_3 + 0.308X_4 - 0.102X_5$.

1.231 is constant and it means ceteris paribus profitability will be constant at 1.231.

0.295 is the partial regression coefficient of compliance this shows that with influence of other explanatory variables held constant (systems, character, culture and fraud) any increase in compliance by one unit will lead to 0.295 changes in profitability and in the same direction. While 0.102 is the partial regression coefficient of system this shows that with influence of other explanatory variables held constant (compliance, character, culture and fraud) any increase in compliance by one unit will lead to 0.102 changes in profitability and in the same direction.

0.365 is the partial regression coefficient of character this shows that with influence of other explanatory variables held constant (compliance, systems, culture and fraud) any increase in compliance by one unit will lead to 0.365 changes in profitability and in the same direction. While 0.308 is the partial regression coefficient of culture this shows that with influence of other explanatory variables held constant (compliance, systems, character and fraud) any increase in compliance by one unit will lead to 0.308 changes in profitability and in the same direction. This therefore implies that if there is non-compliance in commercial banks their profitability will be affected negatively by the same magnitude.

0.102 is the partial regression coefficient of fraud this shows that with influence of other explanatory variables held constant (compliance, systems, character and culture) any increase in compliance by one unit will lead to 0.102 changes in profitability and in the different direction.

## V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Based on this research and in reference to table 4.3 Anova analyses on effects of operational risks on profitability it was found to be significant and therefore I reject my null hypothesis that operational risks in the lending process of commercial banks has no significant impacts on banks profitability and therefore accept alternative hypothesis This is because $F_{(5, 53)} = 17.205$ $P<0.05$

This paper highlights that operational risk in the lending process is significant in affecting commercial bank profitability. It is therefore important to start looking at operational risks separately as compared to classifying them under either market risks, credit or even reputational risks. In so doing operational risks will be given importance it deserves and be managed easily. Educating commercial banks employees on operational risks and how best to manage them, will help them to be in a better position to handle this risks. Further research for researchers  Other researchers need to expand this scope and undertake research for all commercial banks in the country to see whether there will be significant difference between views at branch levels and banking industry as a whole. Other similar researches need to be done in other banking processes it will also be important for other researchers to conduct research in view of all types of risks possible in banking industry against banks performance to be able to find out which risk category affects performance most.

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