# **Evaluation of Operational Risk Management of Commercial Banks in Ghana**

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#### **Abstract**

Operational risk has adverse effect on financial performance and business sustainability of commercial banks. This concern has provoked the need to assess the effective means of dealing with bank operational risk. The study sought to empirically evaluate operational risk management of commercial Banks in Ghana. Using descriptive analysis to examine data sourced from 32 commercial in Ghana, the study found minimal comprehension of operational risk prerequisites, lack of systematic risk identification procedures and minimal risk assessment. The study also found that development of active methods of risk monitoring and control were not pronounced among the commercial banks in Ghana. It is therefore, recommended that the commercial banks should inculcate the culture of risk awareness, proper risk identification mechanisms and widespread risk monitoring and control approaches as these have far-reaching implications for effective implementation of any operational risk management efforts of commercial banks.

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**Keywords:** Operational risk; Commercial banks; descriptive analysis; Ghana

## 1 Introduction

Banks are invariably faced with different types of risks that may have a potential negative effect on their businesses. Risk management in banking operations

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thrives on four core pillars, which include risk identification, risk measurement and risk assessment, risk monitoring and control (Hameeda et al., 2012). The main objective of relying on these pillars is to minimize negative effects risks can have on the financial result and capital base of a bank. Banks are, therefore, required to form a special organizational unit in charge of risk management. Also, they are required to prescribe procedures for risk identification, measurement and assessment, as well as procedures for risk management.

The risk which a bank is particularly exposed to in its operations are varied and may include liquidity risk, credit risk, market risks, exposure risks, investment risks and risks relating to the country of origin of the entity to which a bank is exposed as well as operational risk, legal risk, reputational risk and strategic risk. Therefore, risk management is crucial concept for any banking business as most financial decisions centre around the corporate cost of holding risk (Adu-Mensah et al., 2015).

It is argued that the future of banking service undoubtedly rests on risk management dynamics. This simply means that only those banks that have efficient risk management system will survive in the market in the long run (Ghana Association of Bankers, 2010).

The effective management of risk is a critical component of comprehensive risk management essential for long-term success of banking institutions. This presupposes that banks must not only be interested in reporting credit and interest rate risks but wholistic risk management approach should be devoted to operational risk management (Etu-Menson, 2011). Credit risk is the oldest and biggest risk that a given bank, by virtue of its very nature of business, inherits. This has however, assumed a greater significance in terms of attention in the recent past for various reasons such as liquidity constraint, insolvency and possible collapse. In the light of these, banks would need to develop the right balance between risk management and growth by ensuring full transparency across all facets of risks. Putting in place vigorous risk governance structures, and clearly defining and complying with the bank's risk appetite, and instilling strong risk culture, optimize risk-return trade-offs within a defined risk strategy.

In today's increasingly competitive environment, quality service and customer satisfaction rest on effective management of operational risk. Delivering high quality service is linked to increased profits, cost savings and corporate image. It is argued that customer satisfaction is the route to sustained high performance in banking. Thus, top management has the responsibility of creating an environment that fosters effective risk control and hence customer driven services in a customer-oriented organization such as a bank (Lovelock et al., 2014). This implies that managers of banks should be aware of the fact that customer dissatisfaction leads to defection and long-term losses.

Therefore, ensuring effective risk management which enhances quality customer service is everybody's business in banking organizations. Behind every operational risk management approach is a customer-focused philosophy aimed at

delivering services that customers seek, increasing market share and profits derived by keeping close to remote customers (Bradley et al., 2014). To be successful, a customer focus must start with a forceful commitment via risk awareness culture from senior executives. At the same time, it must be acknowledged that employees who deal directly with customers are in the key position to ensure that every risk management approach fit into a marketing plan of the bank.

This notwithstanding, in an attempt to win more customers, many banks have breached risk management procedures and internal policies, leading to loss of customers' funds. This has resulted in further loss of customer confidence and loyalty, thus, worsening the plight of such banks. According to Kembo (2015), the overall confidence and satisfaction of clients in the banking industry have been considered as criteria to assess the link of banks and the market. The basis of this assertion emanates from the fact that contacts with bank clients through the improvement of bank products and services has significant impact on bank operations. Thus, quality customer satisfaction and quality relationships between banks risk management and their customers' confidence should be perceived as the basis of better financial performance of banks (Arbore & Busacca, 2009).

The primary objective of the study, therefore, is to evaluate the effect of operational risk management of commercial Banks in Ghana. This study undoubtedly contributes significantly to the contemporary debate of bank risk management and operational direction of commercial banks towards strategic business objectives. The rest of the paper is organized as follows. Section two presents literature review. The third section is the methodology used for the study. Section four presents the results and discussion. Section five contains the conclusions and recommendations emanating from the study.

## 2 Literature Review

## 2.1 Theoretical Perspective

Theoretically, risk analysts have proven that one major indicator of pervasive, ever-increasing and severity of poverty and, dwindling businesses globally is lack of innovative approaches to combat the detrimental effect of operational risk (Mukhtar, 2013). Slovic et al. (2005) perceived risk as underpinned by two fundamental issues: risk as feeling and risk perceived as analysis. Theoretically, risk management is perceived as a feeling that brings to bear an intuitive reaction to danger. It is assumed further that risk as analysis propagates reasoning, which degenerates into scientific solution purported to ensure risk management. Thus, in theory, how managers of banks perceive risk and respond to it has significant bearing on risk management. According to Wamsler and Lawson, (2011) risk can be conceptualized as the likelihood of adverse effect; thus, risk management is

underpinned by the reduction of the probability of adverse risk exposures.

## 2.2 Empirical literature review

Recent financial tragedies that have engulfed many banking institutions and non-financial performance of banks point up the need to adopt risk management strategies to arrest the situation. Various empirical studies have delved into critical analysis of operational risk management among banks and have also pointed out the link between customer service management and bank disaster risk reduction. According to Pyle (1997) financial misadventures are hardly a new phenomenon in the banking industry, however, the rapidity with which banks can get into trouble is what has provoked empirical debate about how banking crisis can be dealt with. Abdul Rahim et al. (2014) examined perceived risk management and customer complaints in Malaysian conventional banking industry. Using multiple regression to examine data on 132 respondents; the study found common perceived operational risk management as important across the banking industry. It also found out that operational risk control measures had significant connection to customers complaints. However, the extent to which management could mitigate operational risk was not clear in the study.

Boahen, Dasah and Agyei (2012) investigated credit risk and profitability of selected banks in Ghana using panel data set covering a period of 2005-2009. Contrary to expectation, the results from the analysis indicated that there is a positive link between credit risk of banks and profit levels of banks. The empirical analysis also revealed that bank size, bank growth and bank debt capital strongly influence profitability of banks in Ghana. Though, the findings from the study sounds appealing, clear assessment of bank operational risk management procedures were not clear in the study. This leaves a room for further empirical evaluation of banks operational risk management. Dusuki and Abdullah (2007) examined the factors that motivate bank customers to patronize banks in Malaysia using a primary data drawn from a sample of 750 respondents. The analysis revealed strong link between customer patronage of banking services and quality customer driven service delivery by banks. Also, it was found that appealing risk management practices and product prices strongly motivate customers to patronize banking services. The revelation of the study has appealing implications for the banking sector, however, the core operational risk management practices which impact on banks survival and its ability to draw customers to commercial banks did not clearly feature in the analysis of the study. An attempt to ignore the clear link between approaches to operational risk management and customer service delivery of a bank makes the study inconclusive.

Owusu-Frimpong (1999), Examined patronage behaviour of Ghanaian bank customers. The result showed that bank customers opt to join a bank based on understanding of bank products and attractive interest rates on savings. The study concludes on conviction that banks can draw more customer via intensification of

information dissemination by word-of -mouth, radio and television adverts. The study's recommendation sound convincing, however, a mere dissemination of information can do part of the work of a bank, but management of possible inherent operational risk, which has significant potential of boosting customers confidence is not clear in the study. In a related study, Owusu (2015) investigated operational risk management and competitive advantage in the Ghanaian banking industry and found that banks have gained realisation and significance of operational risk management. The study therefore, concludes on linkages of operational risk management activities to business objectives. Though, the study's recommendations have implications for effective operational risk management, the extent to which risk management could lift competitiveness and customer driven prospects in the commercial banking industry has not been clearly addressed in the study.

Sensarma and Jayadev (2009) examined whether bank stock prices are sensitive to bank risk management using risk management scores from Indian commercial banks for the period 1999-2000 and found that banks with good risk management behaviour have had rewarding consequences for their shareholders. Though, the finding of the study has significant implications for customer base sustainability, the emphasis on stock prices alone leaves much to be desired in the wake of multifaceted nature of factors that govern risk and its management in banking. Associating to the risk management in banks discussion, Evelyn et al. (2008) empirically investigated credit risk management system of commercial banks in Tanzania. The study found marked differences in credit risk management approaches among commercial banks. The implication therefore, was that environment within which banks operate is important factor for consideration in credit risk management practices among commercial banks as opposed to economic and financial variables. The approach of the study sounds appealing, however, clear evaluation of bank risk management prerequisites and unknown socio-economic and environmental factors hypothesised to underpin the behaviour of risk and its management were not investigated in the study.

In a related empirical study by Nair, Purohit and Choudhary (2014) the authors studied into influence of risk management on performance of banks. Using multiple regression analysis, the study found risk identification, risk assessment and risk management practices to have significant impact on performance of banks. The findings of the study have far-reaching effect on operational risk management, however, inability to assess operational risk procedures leads to inconclusive findings from the study. In a related study conducted by Lyambiko (2012) on effects of operational risk management practices on the financial performance in commercial banks in Tanzania using data from 36 commercial banks, the study found positive relationship between operational risk management and financial performances of commercial banks. The study recommended to commercial banks to handle risk factors appropriately in order to boost image and

financial solvency. However, particular risk factors that needed appropriate handling as alluded to were not clear in the study.

Exploiting the downside of Lyambiko (2012), a related study on Ghana by Seyram and Awudu (2013) examined risk management practices among commercial banks. Results from the analysed data obtained from selected commercial banks showed that risk management and control were the influencing factors in risk management among the commercial banks. Further the study found differences in among commercial banks in terms of risk identification, understanding, monitoring and control. Though the study's findings sound appealing, the recommended approaches by which commercial banks can sustainably manage operational risk was not clear from the study. This makes the assertions of this empirical work inconclusive. In furtherance to this, Ofosu-Hene and Amoh (2016) studied risk management and performance of listed banks in Ghana using data over the period 2007-2014. The study found positive relationship between risk management and performance and banks listed on Ghana stock company were found to have declining risk indexes. However, the extent to which the study recommendations ensure effective risk mitigation among commercial banks were not clear in the study.

# 3 Research Methodology and Data Sampling Procedure

For the purpose of ensuring full representation and reliable data; the study used a total of 32 commercial banks located in Accra, the largest capital city of Ghana as at the time of the study. Thus, the population for the study involved all the 32 licensed commercial banks located in the city of Accra in 2018. Again, for the purpose of obtaining a representative sample and ascertaining reliable survey result, we included all the 32 licensed commercial banks located in Accra; the most popular city with brisk business activities in Ghana. Besides, Accra being the largest city in Ghana and playing host to headquarters of all banks in Ghana makes it all-encompassing to choose the banks used for the study from the city of Accra. Focusing on the risk management department of the selected banks we obtained data from 32 risk management representatives through face-to-face scheduled interview. Thus, the size of the population was the same as the sampled risk management representatives. Although, the response rate is very high, there is no evidence of non-response bias, and there is high internal consistency within the responses. The selection of the banks risk management representatives was randomly done employing a systematic sampling frame. We first randomly selected a starting bank for the interview, then risk management representative of every other commercial bank among the selected commercial banks in the Accra metropolis was selected for the interview. We collected information on respondent's basic demographic characteristics such as age, gender, educational level, risk understanding, risk identification, risk assessment and risk monitoring and control approaches.

## 4 Results and Discussion

## 4.1 Background characteristics of respondents

There is a consensus in the livelihood discourse which suggests a link between background characteristics of individuals and the type of livelihood tactics they tend to pursue at the work place (Dauda et al., 2013; Ellis, 2000). Thus, sociodemographic variables covered include age, sex and level of education. This section of the study presents descriptive analysis from the data obtained from the field work. To ensure accurate results, the data was carefully compiled and examined to check for completion of responses to all data points included in the interview schedule after the field work. The data was then coded and entered using Statistical Package for the Social sciences (SPSS) software version 17.0.

Table 1: Sex Distribution of Respondents

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Description	Frequency	Percentage	_	
Male respondents	26	81.25		
Female respondents	6	18.75		
Total	32	100		

Source: Field work, 2018

The target respondents in this study were risk management representatives in the selected commercial banks. Table 1 portrays the number of male and female respondents in the survey. Table 1 shows that 26 (81.25%) of the respondents were male and only 6 (18.75%) of the respondents interviewed were females. This male dominating situation whereby male employees occupy dominant position is not surprising as a common observed trend in recent times in the banking industry is growing male employees handling key risk management positions.

Table 2: Description of Age group of respondents

Age (years)	Number (N)	Percentage (%)
30-39	13	40.62
40-49	9	28.12
50-59	10	31.25
Total	32	100

Source: Field work, 2018

As shown in Table 2, the age of respondents ranged from 30 to 59 years with the mean age being 44 years. As indicted in the table, respondents in the age cohort 30-39 dominate the age groups and formed 40.62 percent. The outcome of

youthful age group has significant implication for banking work connected to risk management practices. In the real-world case, young enterprising employees when often attracted by banks to represent at the risk management departments serve corporate governance objective for beneficiary banks. Thus, the dominant youthful age group is surprising.

Table 3: Level of Educational Distribution of Respondents

Level of Education	Number (N)	Percent (%)
Bachelor's Degree	3	9.37
Professional Qualification	6	18.75
Master's Degree	21	65.62
Doctorate Degree	2	6.25
Total	32	100

Source: Field work, 2018

Table 3 reports the level of educational level and thus, qualifications of respondents captured in the field survey work. As shown, a significant number of 21 respondents representing 65.62 percent were found to have attained master's level on the educational ladder compared to 3 (9.37%) and 6 (18.75%) respectively for bachelor's degree and professional level qualifications respectively. As shown in Table 3, only two (2) respondents representing 6.25% had attained doctoral level education. The significant number of respondents as risk management representatives for the sampled banks with master's degrees has beneficial implications for banking activities. Again, a relatively 6.25 percent of the respondents with Doctorate degrees at the corporate risk management department is a significant added advantage to banks with such expertise in motion.

This is so, because the need to have higher level expertise to manage risk affairs of a bank presents useful strategy as far as corporate risk management objective and banking risk management practices are concerned. This assertion is compatible with that of Rasmussen (1997) who asserts that occasional deviation from the norm due to human errors necessitates behavioural shaping mechanism which is found in sound human resource training via formal education.

## 4.2 Analysis of prerequisites of operational risk understanding

This section describes the level of understanding of nature of operational risk management prerequisites of the sampled respondents. Table 4, therefore, presents descriptive statistics of responses on operational risk management prerequisites.

The study used four (4) direct questions to solicit for the respondent's affirmation or otherwise on agreement of the stated operational risk management prerequisites as stated in Table 4.

Respondents were asked the extent to which they agreed to the provided statement in accordance to a scale of 1-5, where the number one (1) represents strongly

disagree, two (2) disagree, three (3) slightly agree, four (4) agree and five (5) strongly agree.

Table 4: Prerequisites of Operational Risk Understanding of Respondents

Prerequisites of operational risk	1=Strongly Disagree	2=Disagree	3=Slightly Agree	4= Agree	5=Strongly Agree	N
There is a common understanding of operational risk management across the bank	12 (37.5%)	10 (31.25%)	5 (15.62%)	3 (9.37%)	2 (6.25%)	32
There is a proper system for understanding operational risk in the bank	13(40.62%)	9(28.12%)	5(15.62%)	3 (9.37%)	2(6.25%)	32
Responsibility for operational risk management is clearly set out and understood throughout the bank	14(43.75%)	7(21.87%)	5(15.62%)	4(12.50%)	2(6.25%)	32
Accountability for operational risk management is clearly set out and understood throughout the bank	13(40.62%)	8(25.00%)	7(21.87%)	3(9.37%)	1(3.12%)	32

Source: Field work, 2018

Analysis of respondents' common understanding of risk management across the banks shown in Table 4, revealed that, 37.5 percent of the respondents strongly disagree that there is common understanding on operational risk management prevailing in their respective banks while 31.25 percent disagree on common understanding on risk management across the banks. Again, 15.62 percent, 12.50 percent and 6.25 percent respectively slight agree, agree and strongly agreed that there was a common understanding across their banks on operational risk management. These revelations have implication for bank risk management activities. One basic strategy towards approaching risk management practices is common understanding of operational risk prerequisites and how they could be managed. This is in perfect agreement with Abdullah et al. (2018) who conclude that for better management of operational risk in banks, understanding risk and how best to approach risk are vital ingredients for proper risk mitigation. However, a significant proportion of respondents' disagreement on common understanding across the commercial banks on operational risk management fundamentals presents a challenge to banks in Ghana, particularly how to approach risk management.

Also, institutionalization of clear system for operational risk management is

paramount in achieving bank's operational risk management objective. Analysis of levels of agreement on proper system for understanding operational risk in commercial banks revealed that 40.62 percent of respondents strongly disagreed that there was proper understanding of systems for operational risk management. Only 9.37 and 6.25 percent respectively agreed and strongly agreed that systems for proper risk management characterized operations of the commercial banks. Again, this is a clear indication of a fundamental downside of the commercial banks in the sense that institutionalization of systems must invariably predate any effective risk management endeavour. This is in sharp contrast to that of Owusus (2015) who has maintained in a previous study that linkages of operational risk management systems remain the only pillars for effective risk management. The import of this revelation is grounded on the fact that understanding fundamental systems of risk management promotes co-ordination and structured approach towards risk and its effective management.

#### 4.3 Evaluation of risk identification

Further, analysis on responsibility for operational risk identification fundamentally sought to ascertain the peculiar nature of risk facing commercial banks and how it can be identified and handled. Since it is believed that risk identification forms the basis for effective risk treatment this section discusses bank's operational risk identification precepts. Figure 1 therefore, presents distribution of responses on systematic identification of operational risk, recognition of changes in operational risk situation, development of procedure for systematic risk identification and availability of sophisticated system for risk identification. This marries coherently with bank's risk management fundamentals such as identifying risk threats, assessment of the probability of risk occurrence, estimation of impact on the bank's operations and diversification of traditional strategies for risk management (Gurgu & Savu, 2015). Figure 1 presents respondents' evaluation of procedures of risk identification among commercial banks.

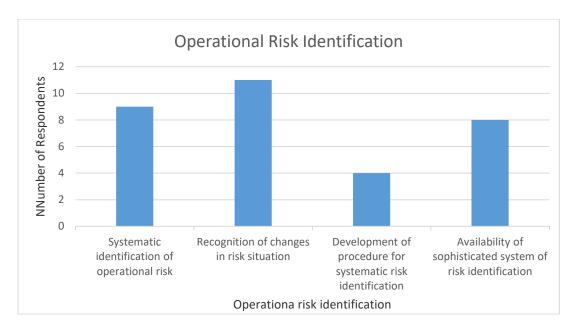


Figure 1: Operational risk identification

N = 32 Source: Field work, 2018

As figure 1 shows, nine (9) respondents which forms 28.12 percent indicated that there was a systematic identification of operational risk among the commercial banks in Ghana. Also, significant proportion (34.37%) of the respondents in the survey indicated the banks' recognition of changes in their operational risk situation. Again, the analysis revealed that only 12.50% and 25.00% respectively, indicated that the banks had developed procedure for risk identification and have had available sophisticated system of risk identification.

These revelations suggest the need for the management of Ghanaian commercial banks to take risk identification as a top priority. This notwithstanding the significant proportion of respondents who revealed systematic identification of operational risk and recognition of risk situation among the commercial banks, only 12.50 percent adduced the fact that there was development of clear procedure for systematic risk identification among the commercial banks in Ghana. This implies minimal capacity for clear cut approach towards operational risk management and mitigation among commercial banks in Ghana. This is in sharp contrast to the finding by Nair et al. (2014) who revealed proper risk identification practices to have significant impact on performance of banks.

## 4.4 Evaluation of operational risk assessment

To tackle bank's operational risk comprehensively, risk management should not end at risk identification. Thus, this section examines operational risk assessment approaches of commercial banks. Figure 2 describes distribution of respondents on operational risk assessment methods of commercial banks.

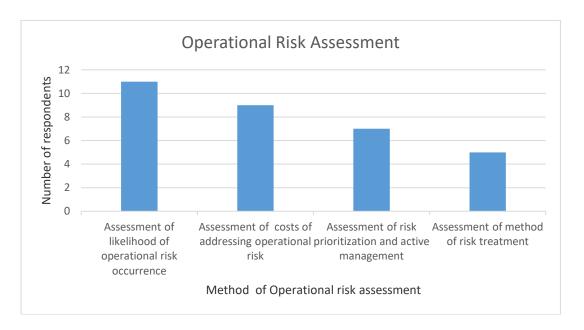


Figure 2: Operational Risk Assessment

N = 32

As Figure 2 shows, the assessment of commercial banks operational risk was underpinned by four approaches. Thus, the survey sought to determine the banks assessment of likelihood of operational risk occurrence, assessment of costs of addressing operational risk, assessment of risk prioritization and active management and the assessment of availability of clear method of risk treatment. As shown, a significant proportion of 34.37% of the sampled respondents indicated an assessment of likelihood of operational risk occurrence among the commercial banks. However, when it comes to efforts to assess the costs of addressing operational risk, 28.12% of the respondents indicate that the commercial banks perform assessment of costs involved in addressing operational risk. However, relatively low proportions of 21.87% and 15.62% respectively indicate that banks have directed efforts towards prioritization of risk and active management as well as development of clear method of risk treatment. Clearly, relatively low effort towards risk prioritization and method of risk treatment have implications for effective risk management. Notwithstanding the high indication of assessment of likelihood of operational risk assessment, the inclination to prioritize risk and active method of risk treatment is not pronounced among the commercial banks in Ghana; and this has critical implications for risk control and hence sound banking business. This finding is in consonance with the finding by Seyram and Awudu (2013) who also found risk management and control as the most influencing factors in risk management among the commercial banks.

## 4.5 Evaluation of operational risk monitoring and control

The concern about frequent bank failures in recent times presents a case for operational risk monitoring and risk control. This section analyses Ghanaian commercial banks effort towards risk monitoring and control mechanisms. The section thus, analyses data from respondents on availability of systems for operational risk monitoring and control, attainment of appropriate level of risk control, existence of risk monitoring and control methods and whether risk monitoring and control are widespread among the commercial banks.

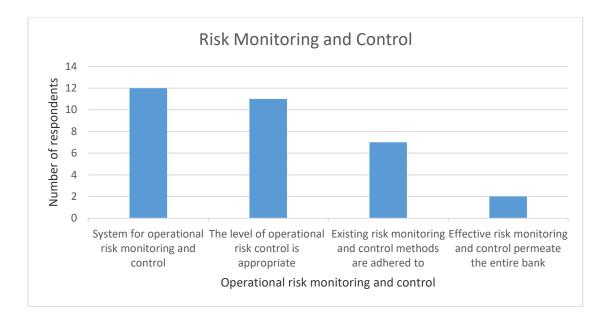


Figure 3: Operational risk monitoring and control

N = 32

As shown in Figure 3, as high as 37.50% of the respondents indicated availability of systems for risk monitoring and control in their banks. This is a clear indication of the fundamental approach of instituting measures to ensure total operational risk management in banking. Also, 34.37 percent of the respondents revealed that the current level of operational risk control was appropriate for their banks. As shown in Figure 3, 21.87% of the sampled respondents indicated that existing risk operational risk monitoring and control methods were adhered to. Again, adherence to operational risk monitoring and control methods has far reaching implications for bank's risk management capabilities. In respect of how effective risk monitoring and control are widespread among the commercial banks in Ghana, only 6.25% of the respondents revealed that effective monitoring and control do not permeate in the commercial banks in Ghana. This has serious implication for effective implementation of any operational risk management efforts of commercial banks. Further, successful risk management in any bank rests

predominantly on total endorsement of the entire workforce of any commercial bank. This implies that for successful operational risk management, the approach must be clear, holistic and all-encompassing approach as far as risk monitoring and control mechanisms are concerned. This assertion confirms the assertion by Owusu (2015) that banks have gained realization and significance of operational risk management however, there must be linkages of operational risk management activities to marry operational objectives of commercial banks.

## 5 Conclusion and Recommendations

The study sought to empirically investigate operational risk management of commercial Banks in Ghana. Bank's operational risk is recognized to constitute a fundamental factor of business failure. The concern of risk and its management among commercial banks has caught the attention of risk analysts and researchers, particularly due to ever increasing insolvency and collapse of banks in contemporary times. Therefore, proper assessment of banks operational risk management serves as a conduit for risk mitigation. Using data from 32 commercial banks in Ghana, the results presented imply that there is minimal comprehension of operational risk prerequisites leading to ineffective approach to operational risk management among the commercial banks in Ghana. Also, the results showed that though, there was significant recognition of operational risk situation among the commercial banks in Ghana, there was complete lack of systematic risk identification procedure among the commercial banks.

Again, the study found high indication of assessment of likelihood of operational risk assessment, however, the inclination to prioritize risk and development of active methods towards risk treatment are not pronounced among the commercial banks in Ghana. From these findings of the study, it is therefore, recommended that the commercial banks should inculcate the culture of risk awareness, proper risk identification mechanisms and widespread risk monitoring and control approaches to ensure effective operational risk management as these, have far-reaching implications for effective implementation of any operational risk management efforts of commercial banks in Ghana.

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