ISSN 2278 – 0211 (Online)

Risk Management as a Tool for Financial Stability in Rwandan Commercial Banks: Case Study of Bank of Kigali Head Office

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Abstract:
The purpose of this study is to discuss in depth, the types of risks encountered by commercial banks, the tools and techniques used in risk management. It will also throw some light on how risk management enhances financial stability of Rwandan commercial banks. Rising global competition, increasing deregulation, introduction of innovative products and delivery channels have pushed risk management to the forefront of today's financial landscape. Ability to gauge the risks and take appropriate position will be the key to success.This research study employed descriptive design and the researchers adopted a case study approach whereby Bank of Kigali was chosen as a case study. A case study was adopted because the researcher could not be able conduct a broader study in all Commercial banks in Rwanda. Further, the researchers targeted Bank of Kigali being the bank with biggest market share in the Rwandan commercial banks. The main method used by the researcher in study was questionnaire. The population of this study consisted of employees of Bank of Kigali and purposive sampling technique was used in selecting the sample of respondents. Data was collected from both primary and secondary sources. This study assessed how risk management enhances financial stability of commercial banks in Rwanda. There are various forms of financial institutions in Rwanda which encounter risks in their activities. But commercial banks were selected because of being pivotal in Rwandan economy. This research sought to evaluate the relationship between how commercial banks manage their risks and its eventual consequence on their Financial Stability in Rwanda. The bank is exposed to a range the risks ranging from Credit, operational, liquidity, Strategic and market risk as indicated by 100% of respondents. It was found that the bank uses a number of tools ranging from strong MIS(58%), Board and Senior management oversight, Having policies and procedures in place (25%). The research showed that 75% of respondents mentioned that risk management enhances financial stability on the rate of 50% and above percentage .This means that risk management is a key factor in financial stability of the bank. Risk management should be infused through the organization, not only for certain departments, but the entire bank involving strategic and operational decisions. Its clear that banks face increasing range of risks, therefore, they have to keep pace with ever changing and challenging risk environment. Risk Management implementation efforts should be accelerated with appropriate support from senior management and board of directors.

Keywords: *Risk management, financial sustainability, commercial bank*

1. Introduction

Term risk is derived from the Italian language, which means primarily the project, whose outcome is unknown or uncertain, or the possibility that something will succeed or fail (Biegańskin &Janca, 2001), or otherwise as a condition in which the outcome achieved in the future is unknown, but it can identify its future alternatives, assuming that the chances of possible alternatives are known . The beginning of modern risk management adopted in years 1955-1964, then a risk management sharply began to develop, both on academic and professional ground. Initially there was a risk management in insurance, and many companies now involved in risk management, has roots in the form of insurance companies. Also, research on risk management in terms of research carried out at universities of insurance. Despite the fact that the basis of risk management was the purchase of insurance, there are a number of other equally important factors that influenced the development of the field of risk management (Williams,Smith, &Young, 2002). The Software Engineering Institute defines risk management as "a proper risk management is a process in which risks are continuously identified and analyzed. The risks are tracked, mitigated and controlled. Efforts are underway to prevent potential problems, and employees focus on the risks affecting the quality of the product or products" (Barkley, 2004).

The Basel Committee on Banking Supervision defines financial risk management as a sequence of four processes: The identification of events into one or more broad categories of market, credit, operational and other risks (and then into specific sub-categories), the assessment of risks using data and a risk model; the monitoring and reporting of the risk assessments on a timely basis; and the control of these risks by senior management. As can be seen from the definition, the generic risk management framework includes four major risk management components: risk identification, risk measurement, risk mitigation, and risk monitoring and reporting. In a holistic view, banking risks are categorized into three types, namely pure risk (hazard risks), financial risks and non-financial risks. Some of the major financial risks are market risk, credit risk, liquidity risk, interest rate risk, foreign exchange risks, solvency and capital adequacy risk. As for non-financial risks-the major one is operational risk. The Basel Committee on Banking Supervision (BCBS) was formed in 1974 by G10 central bankers under the auspices of the Bank for International Settlements (BIS) following the collapse of Bankhaus Herstatt in Germany and Franklin National Bank in the United States in 1974 (Engelen, 2005).

Initially, the Basel Accord was developed for internationally participating banks. However, it can equally be applied to banks with varying levels of complexity (BCBS, 2001). The Accord provides a principled framework for the treatment of risk coupled with supervisory review, hence adding increased flexibility in the calculation of risk and respective capital levels. Thus, the Accord has also contributed towards improvements in corporate governance and transparency (Makwiramiti, 2008). The financial crisis exposed inherent weaknesses in the risk management system, soloed infrastructures, disparate systems and processes, fragmented decision-making, inadequate forecasting and a dearth of cohesive reporting, among others. The impact of these flaws on many institutions shocked the industry. As a result, there has been a seismic shift in attitude toward risk Management (Gerhard, 2002).

Given that the Rwandan banking system has experienced a rapid growth, it has always faced some challenges particularly related to risk management .Risk management and risk-detection can never be fully be complete since there are always unforeseen and unintended aspects of risk environment (National Bank of Rwanda [NBR], 2011). In addressing the need to mitigate risk and to predict future losses in the economy, National Bank Of Rwanda (NBR) requires Bank managers to provide adequate risk management (National Bank of Rwanda [NBR], 2005).

The Rwandan financial system is comprised of insurance, banking pension funds. The financial sector has nine (9) commercial banks; one development bank; two specialized banks; three micro-finance bank; one discount house, an estimated one hundred seventeen (122) micro-finance institutions currently operating and 416 Umurenge Sacco's, eleven (11) insurance companies and the Social Security Fund of Rwanda (National Bank of Rwanda[NBR],2012) .

The commercial banks include, Bank of Kigali, Banque commerciale du Rwanda, Cogebanque, Access Bank, Ecobank, Fina Bank, Kenya commercial bank, Banque Populaire du Rwanda and Equity bank. However Bank of Kigali is the largest bank in Rwanda by total assets, total loans and total deposits with a market share of 32%,34.6% and 28.7% respectively as of 30th September 2012 (NBR,2012).

In 2011, Bank of Kigali became the second domestic company to be listed on the Rwanda Stock Exchange. Since 2009, the Bank of Kigali has been recognized for three years running as the Best Bank in Rwanda by emeafinance and Bank of the Year by The Banker. In 2011 it was also recognized as the Company of the year by the Kenya Institute of Management Rwanda. In 2012, it was further bestowed with the Best East African Bank Award by the African Banker magazine.

1.1. Statement of the Problem

Risk Management in Commercial Banks and any other company is indispensible, if profit maximization and Survival has to be achieved. Commercial Banks in their operations are sometimes exposed to different challenges; they range from closure of business, Inflationary tendencies, foreign exchange rates fluctuations and other problems as a result of interconnectedness within the industry. With this knowledge, commercial banks formulate mechanisms to deal with the unforeseen challenges (risks), however the management of various institutions, banks in particular has an upper hand in what to implement or not, when and how. Commercial banking being a pivot sector in economic development has no room for mistakes as they may get affected by their decisions. The current study evaluates the relationship between risk management in commercial banks and its eventual consequence on their Financial Stability in Rwanda.

1.2. Objectives of the study

At the end of this research study the researcher will be able to determine how risk management acts as a tool in maintaining financial stability in Rwandan commercial banks. Specifically, this research study sought to achieve the following objectives: To ascertain risk management tools employed by commercial banks in Rwanda, to assess the extent to which risk management enhances financial stability of banks, to assess whether employed risk management tools mitigates risks to the minimum level of residue.

2. Methodology

The research is descriptive in nature and a case study approach was used whereby Bank of Kigali was chosen, the researchers targeted Bank of Kigali being the bank with biggest market share in the Rwandan commercial banks. The researchers chose the employees of Bank of Kigali as the population of study because the research did not aim to analyze the risk management of all Commercial banks in the country, but rather in the Bank of Kigali. Purposive sampling technique was used in carrying out this study. This was done to enable the researchers to choose only respondents who meet the purpose of the study. The sample size under this study is given by 7 Staff working in Risk management department,6 Key managers of Bank of Kigali, that is Head of Credit, head of Treasury, head of

operations, head of IT, Head of Internal Audit, Head of legal and compliance department. In totality the respondents were thirteen (13) as shown in the table below:

Department	Respondent's role	Number
Risk management	Risk officers	6
Risk management	Head of Risk	1
Credit	Head of Credit	1
Internal Audit	Head of Internal Audit	1
Legal & compliance	Head	1
Operations	Head of Operations	1
IT	Head of IT	1
Treasury	Head of Treasury	1
TOTAL		13

Table 1

The main instrument used by the researchers in this study was Questionnaire. The questionnaire was pre-tested to four respondents who are in the same position with the researcher's target population. Data obtained from questionnaires, and documentary source was analyzed and tabulated and provided the basis ground for recommendations. The major aim of analyzing was to check the completeness and accuracy. Data analysis also involved editing both open and closed ended questions where responses were classified and tabulated into categories to bring out essential patterns to give the exact picture of how many respondents choose a particular category.

3. Results and Discussions

To determine types of risks commercial banks are exposed to in Rwanda

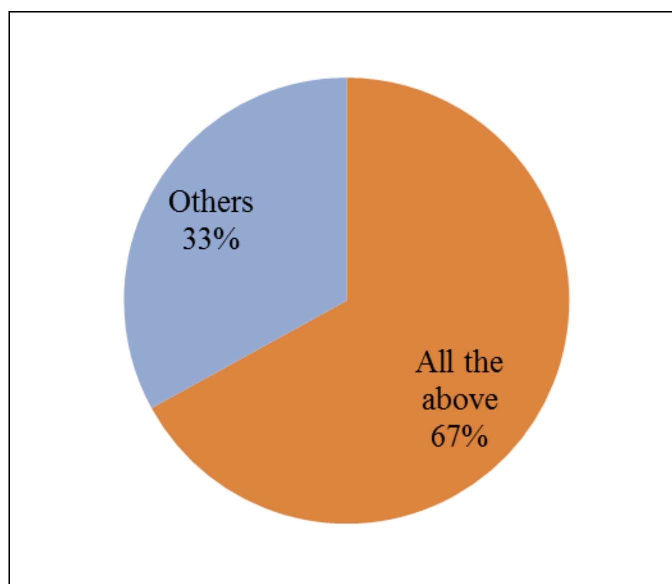


Figure 1: Risks covered in risk management guidelines
Source: Primary data

Figure 1 shows the percentage of respondents who agreed with the different risk included in the guidelines. 67 percent of respondents mentioned Credit risk, operational risk, strategic risk,liquidity risk and market risk(All the above) that they are included in the risk management guidelines. While 33% of respondents added on legal and compliance risk and reputational risk(others) that they are included in the risk management guidelines of the bank.

The risk management guidelines cover almost all the major traditional risks that is credit, operational, strategic risk, liquidity, market risk which is comprised of interest rate and Foreign exchange risk. Legal and compliance risk and reputational risk have become critical due to competitive landscape of new entrants in the market. Compliance risk is also being focused on due to risk based supervision model introduced by National Bank of Rwanda.

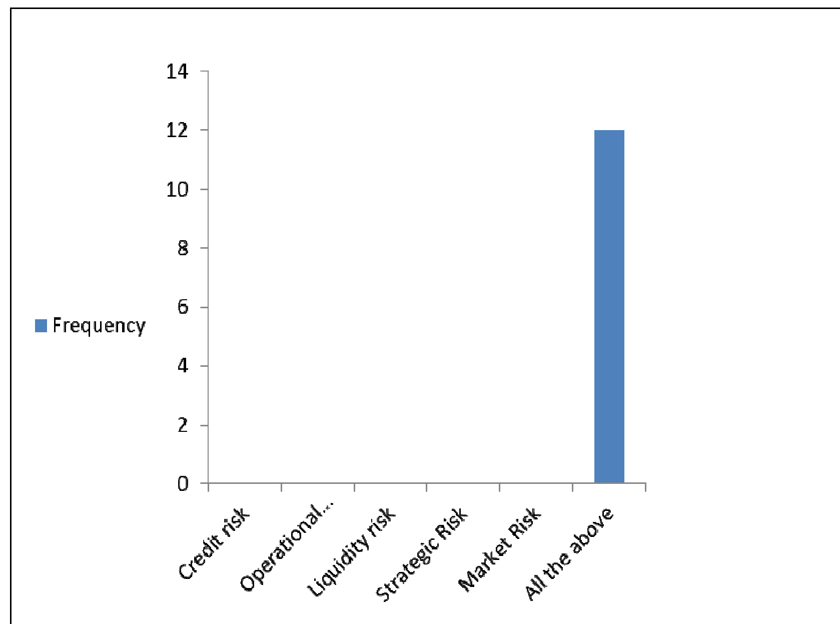


Figure 2: Types of risks the bank is exposed to.
Source: Primary data

Figure 2 indicates that All the respondents i.e 100% responded that the bank is exposed to all the risks ranging from Credit, operational, liquidity, Strategic and market risk. The bank being exposed to a wide range of risks means that the risk management function is so critical in contributing towards effective strategic decisions due to its comprehensive view of risk across the bank.

3.1. To Ascertain Risk Management Tools Employed by Commercial Banks in Rwanda

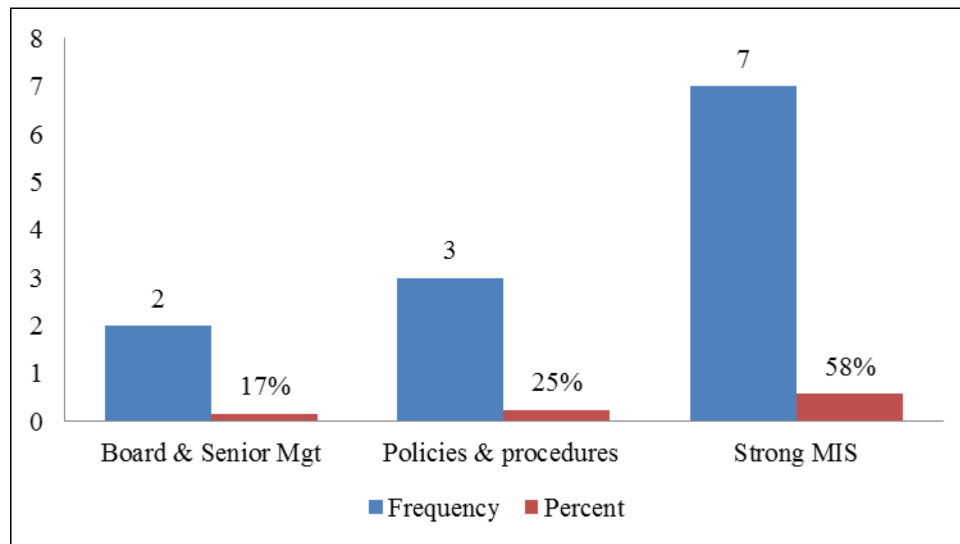


Figure 3: Tools used by the bank to manage risks
Source: Primary data

Figure 3 shows that 58% of respondents indicated that the bank largely utilizes having strong MIS in managing risks. 25% of respondents said that the bank utilizes having policies and procedures in place and 17% of respondents indicated the oversight of board of directors and senior management as a tool to manage risks.

Strong MIS in terms of managing risk is considered due to timely information given, A bank's MIS provides timely and relevant information concerning the institutions' risk profile. This information includes all risk exposures, including those that are off-balance sheet. MIS is be capable of providing regular, accurate and timely information on the bank's aggregate risk profile, as well as the main assumptions used for risk aggregation. MIS should be adaptable and responsive to changes in the bank's underlying risk assumptions and should incorporate multiple perspectives of risk exposure to account for uncertainties in risk measurement.

Policies and procedures as a tool to manage risks help to guide all banks activity. Policies and procedures set specific firm-wide prudential limits on the principal risks relevant to a bank's activities. A bank's policies and procedures provide specific guidance for

the implementation of broad business strategies and should establish, where appropriate, internal limits for the various types of risk to which the bank may be exposed.

Board of Directors and senior management oversight as a tool to manage risks help in setting the strategic goals of a bank, policies and procedure in place to guide all banks activity. It is the responsibility of the board of directors and senior management to define the institution's risk appetite and to ensure that the bank's risk management framework includes detailed policies that set specific firm-wide prudential limits on the bank's activities, which are consistent with its risk taking appetite and capacity.

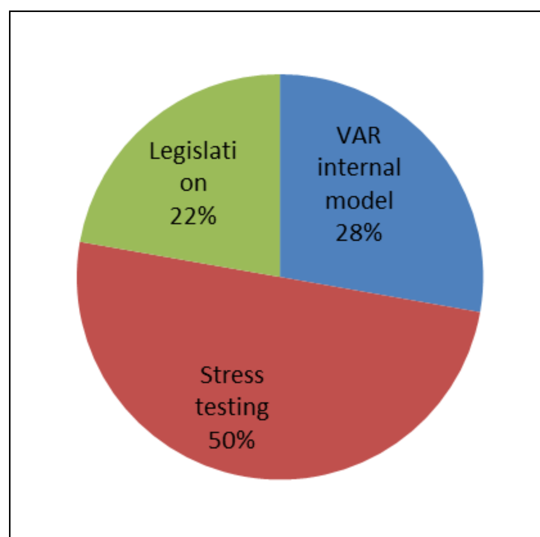
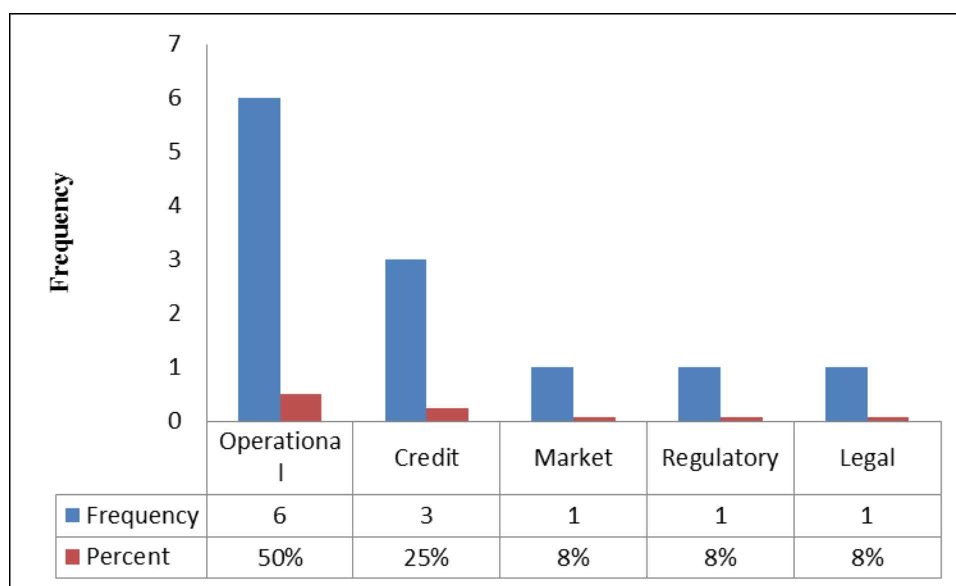


Figure 4: Instruments introduced by the regulatory authority
Source: Primary data

Figure 4 shows that 50% of respondents mentioned that the type of instruments introduced by the regulatory authority in making the banking system more efficient was to produce detailed guideline on stress testing, 28% of respondents mentioned admit the VAR – based model while 22% of respondents mentioned improving legislation.

With the outbreak of Financial crisis in 2007 stress testing has gained popularity because it is an important tool that is used by banks as part of their internal risk management that alerts bank management to adverse unexpected outcomes related to a broad variety of risks, and provides an indication to banks of how much capital might be needed to absorb losses should large shocks occur.



	Operational	Credit	Market	Regulatory	Legal
Frequency	6	3	1	1	1
Percent	50%	25%	8%	8%	8%

Figure 5: The type of risk information which the bank reports to Board of Directors
Source: Primary data

According to figure 5 on the type of risk information reported to board of directors 50% of respondents mentioned operational, 8% mentioned Market, regulatory and legal while 25% mentioned credit and . Operational failures were critical items reported to the board as shown by majority respondents.

3.2. To Assess the Extent to Which Risk Management Enhances Financial Stability of Banks

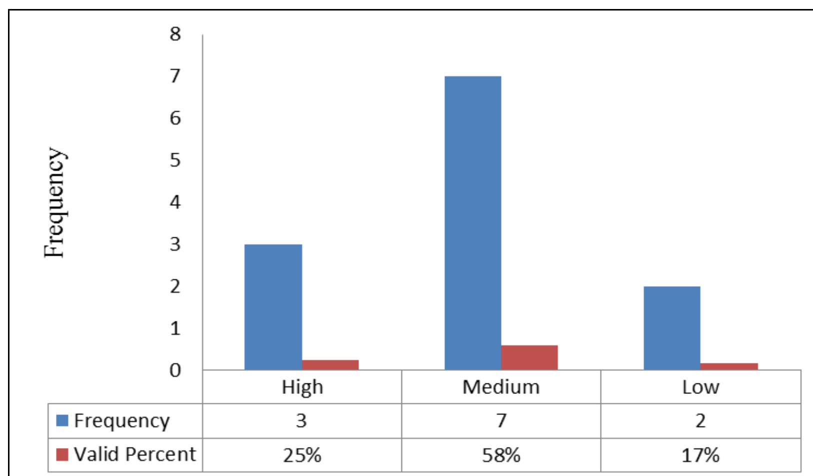


Figure 6: The level of risk management awareness in the bank
Source: Primary data

As shown in figure 6, 58% of respondents said that the level of risk mnagement awareness in the bank is medium, 25% of respondents said that the awareness is high while 17% of the respondents said it is low. The majority of respondents saying that the risk management awareness being medium yet these respondents come from risk management department needs the bank to raise the awareness for proper management and ownership of risks across the entire bank.

	Frequency	Percent
Excellent	1	8%
Good	6	50%
Fair	4	34%
Poor	1	8%
Total	12	100

Table 2: Effectiveness of the bank in overall risk management
Source: Primary data

Table 2 shows that 50% of respondents mentioned that the bank is good in terms of effectiveness in risk management, 38% said fair,8% said excellent and 8% also said poor. Although the effectiveness of risk management may not be easily quantified, majority of the respondents felt that the bank is effective in overall risk management. However, there are some respondents who do not see or fill the effectiveness of risk management across the bank. Risk management is still work in progress in the bank. This mirrors the continuous evolution of risk management in an organization.

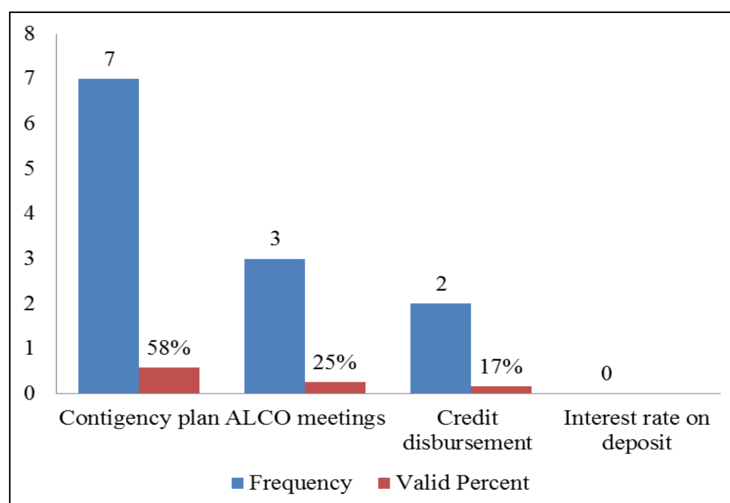


Figure 7: Measures introduced by the bank since liquidity crisis started
Source: Primary data

As indicated in Figure 7, indicates that 58 percent said that preparation of contingency plans has been introduced, 25 % mentioned increase frequency of reporting and Alco meetings and 17% mentioned credit disbursement based on deposit increase. .Liquidity contingency plans are of importance to ensure with a high degree of confidence that the bank is in a position to both address its daily liquidity obligations and withstand a period of liquidity stress affecting both secured and unsecured funding. This goes hand in hand with increased ALCO meeting to assess the bank's liquidity issues.

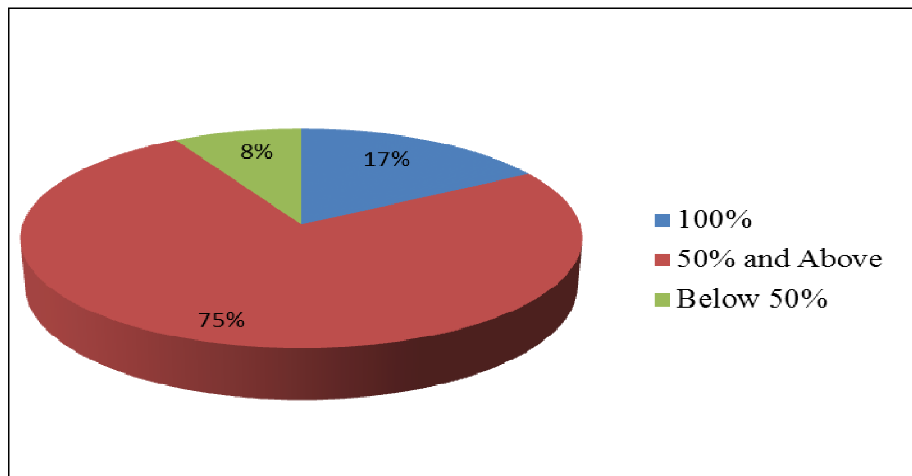


Figure 8: The extent of Risk Management in enhancing Financial Stability
Source: Primary data

Figure 8, indicates that 75 percent of respondents said that risk management enhances financial stability by 50% and above while 17% of respondents said that risk management enhances Financial Stability by 100% and only 8% of respondents said that risk management enhancement to financial stability is below 50%.
Risk management practices like Governance which includes board oversight that is involved in setting the strategic goals of a bank, policies and procedure in place to guide all banks activity. It is the responsibility of the board of directors and senior management to define the institution's risk appetite and to ensure that the bank's risk management framework includes detailed policies that set specific firm-wide prudential limits on the bank's activities, which are consistent with its risk taking appetite and capacity. With the majority of respondents mentioning that risk management enhances financial stability by 50% and above percentage means that risk management is a key factor in financial stability of the bank.

3.3. To Assess Whether Employed Risk Management Tools Mitigates Risks to the Minimum Level of Residue

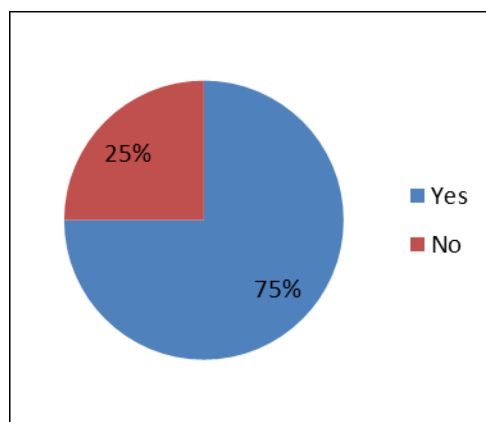


Figure 9: Incorporation of Risk Management into performance goals across the bank
Source: Primary data

Figure 9 on incorporation of Risk management in the performance goals a cross the bank shows that 75 percent of respondents agree that it's incorporated across the bank while 25 percent said no. The incorporation of risk management responsibility into performance goals has become a key leading practice. The objective is that the employees especially those with authority take decisions that entail significant risk, have incentives to consider the risk associated with those decisions. The importance of aligning compensation and incentive plans with appropriate risk taking has received increasing attention.

	Frequency	Percent	Cumulative Percent
Yes, risk is qualitatively and quantitatively defined and approved	5	42%	42%
No, We don't have a statement of a firm's risk appetite	2	16%	58%
I don't know	5	42%	100
Total	12	100	

Table 3: Having Enterprise level of risk appetite
Source: Primary data

Table 3 shows that 42 percent of respondents agreed that the enterprise level of risk appetite is qualitatively and quantitatively approved, 16 percent mentioned that, the bank does not have a statement of firm's risk appetite while 42% said that they don't know. To support the effectiveness of Risk management across the bank, the institution should consider having an approved enterprise level of risk appetite. A bank can benefit from having an explicit statement of risk appetite, reviewed and approved by the board of directors as an important part of their oversight responsibilities. The risk appetite statement can then be translated into specific limits and tolerances of business and for specific risk categories. Establishment of risk limits for different categories of risks can be an important step towards monitoring that an institution's activities are consistent with its risk appetite

	Frequency	Percent	Cumulative Percent
Yes	12	100	100
No	0	0	0

Table 4: Having Chief Risk Officer in the bank
Source: Primary data

As shown in the Table 4 all the respondents mentioned that the bank has a chief risk officer. The presence of a chief risk office who is a member of the senior management team helps risk management efforts and initiatives to receive appropriate high level attention. The breadth and scope of responsibilities has expanded well beyond the traditional focus areas of credit and market risk, with CROs now involved throughout the chain of decisions from new products through to strategy.

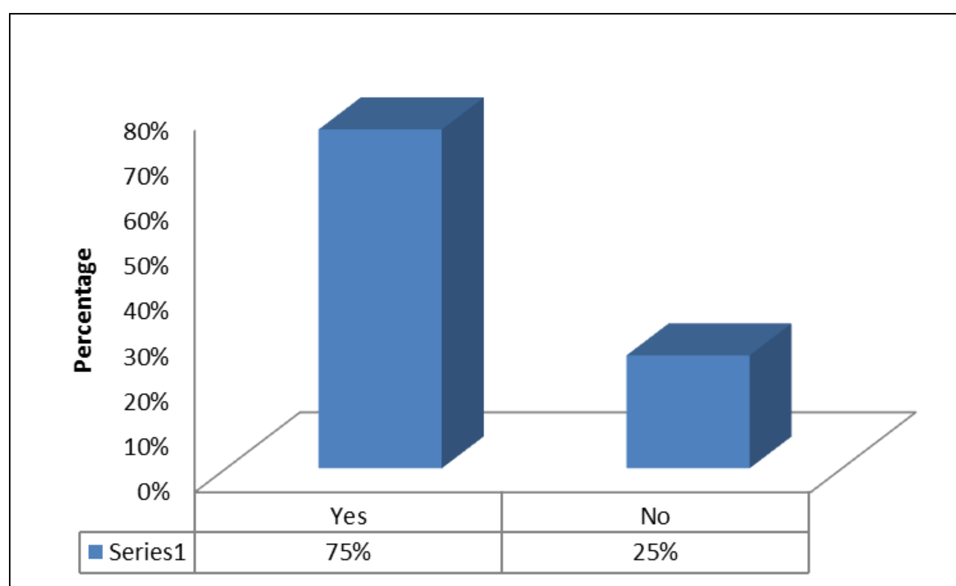


Figure 10: Performance of stress testing.
Source: Primary data

Figure 10 shows that 75 Percent of respondents said that the bank performs stress testing while 25% said no on stress testing performance. Stress testing is an important tool that is used by banks as part of their internal risk management that alerts bank management to adverse unexpected outcomes related to a broad variety of risks, and provides an indication to banks of how much capital might be needed to absorb losses should large shocks occur. Since the global financial crisis, there has been increased attention on managing systemic risk. Stress testing is a tool that banks use to help prepare potential impact of extreme but rare events happening.

	Frequency	Percent	Cumulative Percent
Excellent	1	8	8
Good	5	42	50
Fair	5	42	92
Poor	1	8	100
Total	12	100	

Table 5: Effectiveness of employed risk management tools in risk mitigation
Source: Primary data

Table 5 indicates that in terms of effectiveness of employed risk management tools in risk mitigation 42% mentioned good and Fair while 8% mentioned excellent and Poor. Though the majority of respondents mentioned that the available risk management tools are effective in risk mitigation, there is a need to explore other tools to effectively manage the risk to the minimum residue of risk.

4. Conclusion

Risk Management enhances financial stability of Rwandan commercial banks. Risk management is fundamental to success in banking industry and a basic expectation of shareholders, regulators and customers. In challenging and changing risk environment, the bar on what constitutes effective risk management is constantly being raised.

Risk management underscores the fact that the survival of an organization depends heavily on its capabilities to anticipate and prepare for the change rather than just waiting for the change and react to it. The objective of risk management is not to prohibit or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that it can be measured and mitigated.

Board of Directors has an important role to play in providing active oversight of risk management, including the approval of their risks management frame work and risk appetite.

The bank uses a number of tools in managing risks ranging from strong MIS, Board and senior management oversight, Having policies and procedures in place. MIS is be capable of providing regular, accurate and timely information on the bank's aggregate risk profile, as well as the main assumptions used for risk aggregation. Board of Directors and senior management oversight as a toll to manage risks help in setting the strategic goals of a bank, policies and procedure in place to guide all banks activity Policies and procedures as a tool to manage risks help to guide all banks activity.

It is worth noting that there is a relationship between the way commercial banks manage their risks and its eventual consequence on their financial stability. Though this depends on how effective the bank is in terms of managing risks.

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