

**CAPITAL MARKETS AND FINANCIAL PERFORMANCE OF  
COMMERCIAL BANKS IN RWANDA.**

**A CASE STUDY OF BANK OF KIGALI RWANDA**

**BY**

**REHEMA UWIMANA**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS  
ADMINISTRATION IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF MASTERS OF BUSINESS  
ADMINISTRATION OF NKUMBA UNIVERSITY.**

**OCTOBER 2018**

## **DECLARATION**

I, Rehema UWIMANA hereby declare that this dissertation entitled “Capital Markets and Financial Performance of Commercial Banks in Rwanda; a case study of Bank of Kigali Rwanda” is my own work, that it has not been submitted to any degree or examination in any other higher learning institution, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

.....  
**Rehema UWIMANA**  
(Researcher)

.....  
**Date:**

## **APPROVAL**

The undersigned certifies that she has read and hereby recommends for acceptance by Nkumba University, this dissertation titled the “Capital Markets and Financial Performance of commercial banks in Rwanda; case study of Bank of Kigali Rwanda limited” in the partial fulfillment of the requirement for Masters of business administration Nkumba University.

**Ms. Asimwe Violet**

Date .....

## **DEDICATION**

I dedicated this work to my family, sisters, and brothers; and all friends and colleagues at all levels

## **ACKNOWLEDGEMENTS**

I would like to express my sincere gratitude to the following persons, who by one way or another facilitated to the accomplishment of this research proposal within this time frame.

Firstly, I would like to express my sincere gratitude to my family for their cooperation they extended to me in writing this research. Without their support, I could not even start this study.

I also would like to express my sincere gratitude to my research supervisor Ms. Asiimwe Violet for her persistence support, instructions, corrections, advice and encouragement which ensured the completion of this thesis within the required time frame.

Last but not the least sincere gratitude should go to my family for their great support during the accomplishment of this thesis.

However, errors and any shortcomings in this report remain solely mine and should not be ascribed to any of the above acknowledged individual and/or institution

## TABLE OF CONTENTS

DECLARATION .....	i
APPROVAL .....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
TABLE OF CONTENTS .....	v
LIST OF TABLES .....	viii
FIGURE.....	xi
ABBREVIATIONS AND ACRONYMS .....	xii
ABSTRACT .....	xiv
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1: Background to the Study .....	1
1.2: Implementation Framework.....	6
1.3: Statement of the problem.....	9
1.4.Objectives of the Study .....	9
1.4.1: General Objective.....	9
1.4.2 Specific Objectives.....	9
1.5.1: Research Hypotheses.....	10
1.7: Scope of the study .....	11
1.7.1:Subject Scope.....	11
1.7.2 Geographical Scope.....	11
1.7.3: Time Scope .....	11
1.7.5:Organisation of the Study .....	12
<b>CHAPTER TWO .....</b>	<b>14</b>
<b>STUDY LITERATURE .....</b>	<b>14</b>
2.0 Introduction.....	14
2.1 Literature Survey.....	14
2.2 Theoretical Review .....	15

2.2.1 Pecking Order Theory .....	15
2.2.2 Agency Cost Theory.....	16
2.3 Literature Review .....	17
<b>CHAPTER THREE .....</b>	<b>25</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>25</b>
3.0. Introduction.....	25
3.1: Research Design.....	25
3.1.1: Research Approach.....	25
3.1.2: Research Duration .....	26
3.1.3:Research strategy .....	26
3.2. Population Study .....	27
3.2.1: Characteristics of Respondents .....	27
3.2.1.1: Age of Respondents.....	27
3.2.1.2: Gender of Respondents.....	28
3.2.1.3: Education of Respondents .....	28
3.3. Sample design .....	30
3.3.1. Sample Size.....	30
3.3.2. Sample selection Procedure .....	31
3.4. Data Collection instruments.....	31
3.4.1 Documentary review analysis .....	31
3.5. Data Presentation and Analysis Methods .....	32
3.5.1: Quantitative Data Analysis .....	32
3.6. Validity and Reliability of instruments .....	32
3.7. Research Ethical Considerations.....	34
3.8 Limitation of the Study.....	34
<b>CHAPTER FOUR.....</b>	<b>35</b>
<b>EFFECT OF EQUITY MARKETS ON THE FINANCIAL PERFORMANCE OF BANK OF KIGALI.....</b>	<b>35</b>
4.0 Introduction.....	35
4.1: Analysis and interpretation of the findings.....	35

4.1.1: Equity market and financial performance of Bank of Kigali.....	35
<b>CHAPTER FIVE.....</b>	<b>44</b>
<b>EFFECT OF BOND MARKET ON THE FINANCIAL PERFORMANCE.....</b>	<b>44</b>
5.1 Analysis and interpretation of the findings.....	44
<b>CHAPTER SIX .....</b>	<b>52</b>
<b>EFFECT OF SECURITIZED PRODUCTS ON THE FINANCIAL PERFORMANCE.....</b>	<b>52</b>
6.0 Introduction.....	52
6.1 Analysis of data and Interpretation of Findings.....	52
<b>CHAPTER SEVEN .....</b>	<b>60</b>
<b>CAPITAL MARKET SAND FINANCIAL PERFORMANCE OF BK RWANDA.....</b>	<b>60</b>
7.0: Introduction.....	60
7.1: Contribution of Capital Markets on the Financial Performance of BK Rwanda .....	60
7.2 Linear Regression Analysis .....	62
7.2.1 Capital Markets and profitability of Bank of Kigali Rwanda.....	63
7.2.2 Capital Markets and Liquidity of Bank of Kigali Rwanda.....	64
7.2.3 Capital Markets and Capital adequacy of Bank of Kigali Rwanda.....	65
<b>CHAPTER EIGHT .....</b>	<b>70</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>70</b>
8.0 Introduction.....	70
8.1 Summary of Major Findings.....	70
8.1.1 Effect of equity markets on the financial performance of Bank of Kigali .....	70
8.1.2 Effect of bond markets on the financial performance of Bank of Kigali .....	71
8.1.3 Effect of securitized products on the financial performance of Bank of Kigali .....	72
8.1.4 The Capital Markets and financial performance of Bank of Kigali.....	73
8.2: Conclusion.....	74
8.3 To Recommendations.....	75
REFERENCES .....	76
APPENDICES .....	79



## LIST OF TABLES

Table 3.1: Age of Respondents.....	27
Table 3.2: Gender of Respondents.....	28
Table 3.3: Education of Respondent.....	28
Table 3.4: Distribution of Respondent by Department.....	29
Table 3.5: Experience of Respondents.....	30
Table 3.6: Distribution of the Population Study.....	30
Table 3.7: Pre-test results of reliability from RCK Rwanda.....	33
Table 3.8: Legend Cronbachis test of Reliability.....	33
Table 4.1: Size of Equity market affects market capitalization for generating net profit margin for BK .....	36
Table 4.2: Size of dimension of equity market reflects turnover ratio of BK .....	36
Table 4.3: Capacity of stock market influence trading countries diversfication and equity provision function of BK.....	37
Table 4.4: Accessibilty of Equity Market Helps in the Concentration of Market Capitalization which Leads to Increase of BK Gross Profit .....	37
Table 4.5: Equity Market Investment Enhences Trading Volume of BK.....	38
Table 4.6: Efficiency of equity market helps to obtain high return on equity.....	38
Table 4.7: Equity market becomes the detectable private information trading for BK performance .....	39
Table 4.8: Efficiency equity market facilitates in Liquidity / Transaction costs of BK .....	39
Table 4.9: Stability of equity market influences volatility of shares for profit evolution of BK ..	40
Table 4.10: Effect of equity market on the financial performance of Bank of Kigali .....	41
Table 4.11:Model Summary .....	41
Table 4.12:ANOVA <sup>a</sup> .....	42
Table 5.1: Bond market of BK helps to increase its interest income .....	44
Table 5.2: Accessibility of Bond market facilitates an increase of capital gain to BK .....	45
Table 5.3: Bonds market is converted into common stock at BK to increase the bank profit .....	45
Table 5.4: Bonds Market of BK has preference over stockholders in the payment of liquidated assets.....	46

Table 5.5: BK used to loan money for future return in bonds market as debt investment.....	46
Table 5.6: Bond market is alternatively referred to as the debt, credit or fixed-income for BK...	47
Table 5.7: Bonds market of BK contributes on the financial performance by Mobilizing savings and investment .....	47
Table 5.8: Bonds market of BK system helps in financial performance of this commercial bank .....	48
Table 5.9: BK introducing bonds market for having the financial sustainability .....	48
Table 5.10: Effect of bond market on the financial performance of Bank of Kigali .....	49
Table 5.11: Model Summary .....	49
Table 5.12: ANOVA <sup>a</sup> .....	50
Table 6.1: Commercial mortgages offered by BK increases the internal return of this commercial bank .....	52
Table 6.2: Credit card receivables facilities BK to increase income from borrowers of this bank .....	53
Table 6.3: Auto loans and student loans of BK increase the net profit margin .....	53
Table 6.4: Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital .....	54
Table 6.5: Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.....	54
Table 6.6: Securitized products provides profits for financial intermediaries by keeping the profits from the spread .....	55
Table 6.7: Securitized products creates an attractive asset class for investors.....	55
Table 6.8: Securitized products Makes non-tradable assets tradable.....	56
Table 6.9: Securitization describes the process of pooling financial assets and turning them into tradable securities for BK.....	56
Table 6.10: the effect of securitized products on the financial performance of Bank of Kigali ...	57
Table 6.11: Model Summary .....	58
Table 6.12: ANOVA <sup>a</sup> .....	58
Table 7.1: With Capital Marketscontributes to BK to Mobilize savings and investment.....	60
Table 7.2: Capital Marketsof BK on Rwandan marketplace helps customers to access Finance .	61
Table 7.3: Capital Marketsof BK Modernized Payment Systems in financial services .....	61

Table 7.4: Capital Marketsof BK Promoting usages of financial products and services.....	62
Table 7.5: Linear Regression Test of Capital Marketfactors on the profitability of BK Rwanda.	63
Table 7.6: Linear Regression Test of Capital Marketfactors on the Liquidity of Bank of Kigali Rwanda.....	64
Table 7.7: Linear Regression Test of Capital Marketfactors on Capital adequacy of Bank of Kigali Rwanda .....	65
Table 7.8: Gross Profit Margin (GPM) Ratio of Bank of Kigali.....	66
Table 7.9: Net profit ratios of Bank of Kigali .....	67
Table 6.10: Return on Equity of Bank of Kigali.....	67
Table 7.11: Return on Assets of Bank of Kigali.....	68
Table 7.12: Current Ratio of Bank of Kigali .....	68
Table 7.13: Cash Assets Ratio .....	68

**FIGURE**

Figure 2.1: Conceptual Framework ..... 22

## **ABBREVIATIONS AND ACRONYMS**

BK	Bank of Kigali
CMA	Capital Markets Authority
CMAC	Capital Markets Advisory Council
CMAC	Capital Markets Advisory Council
KLSE	Kuala Lumpur Stock Exchange
MFI	Micro-Finance Institutions
NBR	National Bank of Rwanda
OELP	Operating Expenses Per Dollar Lent
OTC	Rwanda-Over-The Counter
ROA	Return On Assets
ROE	Return On Equity
RSE	Rwanda Stock Exchange
SPSS	Statistical Package for Social Sciences

## **Operational Definition of the Key Terms**

### **Capital markets**

Capital Markets defined as a market in which money is provided for periods longer than a year, the Capital Markets includes the stock market (equity securities) and the bond market (debt) (Pandey, 2002).

### **Financial performance**

Financial performance is an efficiency which describes the extent to which time, effort, or cost is well used for intended task or purpose (Marchionne, 2009).

### **Financial market**

It is market in which people trade financial security and derivatives such as futures and options at low transaction cost. Securities include stocks and bonds market. There are two types of financial market; Capital Markets and money market (Jochen, R, 2007)

## ABSTRACT

The main objectives of this study were to examine the Roles of Capital Markets on the Financial Performance of Commercial Bank. The study was guided by three objectives such as: To examine the effect of equity market on the financial performance, to assess the effect of bond market on the financial performance, to establish the effect of securitized products on the financial performance of Bank of Kigali. The study adopted quantitative approach to collect data from 32 respondents' employees of BK by using purposive sampling technique. Data collected was analyzed using SPSS, and the instruments of data collection were questionnaire, interview, and documentary techniques.

The results show that perceptions of respondents about effect of bond market on the financial performance of Bank of Kigali Rwanda show that more than 84.4% of respondents confirmed that Size of Equity market affects market capitalization for generating net profit margin for BK; and 84.4% that size dimension of equity market reflects turnover ratio of BK.

The R-Square was .759 while ANOVA shows the Sum of Squares of 7.875. The results on the effect of bond market on the financial performance of Bank of Kigali confirmed by 84.4% of respondents who said that Bond market of BK helps to increase its interest income; and 78.1% of respondents confirmed that accessibility of Bond market facilitates an increase of capital gain to BK in Rwanda. R-Square was .610 and ANOVA table shows that Sum of Squares of 7.875. The effect of securitized products on the financial performance of Bank of Kigali confirmed by more than 84.4% who said that commercial mortgages offered by BK increases the internal return of this commercial bank; 78.1% of respondents participated in the study confirmed credit card receivables facilities BK to increase income from borrowers of this bank; and 68.8% agreed that the Auto loans and student loans of BK increase the net profit margin. R-Square was .743 and its adjusted R-Square was .638.

ANOVA table shows that Sum of Squares was 7.875 combining the regression of 5.850; and residual of 2.025. Mean Square was .650 for regression while .092 was on the side of residual in the Mean Square. The relationship between Capital Markets and financial performance of Bank of Kigali was shown by The Linear Regression Test between Capital Markets and profitability of BK Rwanda show the result of  $y = 3.948 + 0.336X_1 + 0.449X_2 + 0.2750.X_3 + \varepsilon$

As conclusion, based to the findings, there is significant positive effect of Capital Markets on the financial performance of Bank of Kigali in Rwanda. By recommending, BK should continue do improvement of capital market because they are not yet achieving the needed level of performance.

# CHAPTER ONE

## INTRODUCTION

### **1.1: Background to the Study**

This study examines the roles of Capital Markets on the Financial Performance of Commercial Banks in Rwanda taking Bank of Kigali as the case study. It is why economic growth and development requires long term funding, far longer than the duration for which most savers are willing to commit their funds and this constitutes a barrier to economic growth. In this regard, the Capital Markets provide an avenue for the mobilization and utilization of long-term funds for development and hence it is referred to as the long term end of the financial system (Andritzky, 2012).

According to Anthony, et al., (2008) Capital Markets and financial sector development is important for three key reasons: it promotes economic growth; it supports U.S. strategic interests; and it complements and reinforces existing U.S. bilateral and multilateral development initiatives. Capital Markets and financial sector development promotes economic growth. In its recent publication, Finance for Growth, the World Bank concluded, getting the financial systems of developing countries to function more effectively in providing the full range of financial service is a task that is well rewarded with economic growth. More specifically, Capital Markets and financial sector development promotes growth in the following ways (Beck, et al., 2001).

Capital Markets is securities such as shares and bonds are issued to raise medium to long-term financing, and where the securities are traded. The securities might be issued by a company which could issue shares or bonds to raise money. Bonds could also be issued by other entities in need of long-term cash, such as regional or national governments. The securities are issued in what is known as the primary market and traded in the secondary market. In the primary market a company would have face to face meetings to place its securities with investors. A company might work with an investment bank that would act as an intermediary and underwrite the offering (Jamie, D., et al., 2013).

A financial market is a broad term describing any marketplace where buyers and sellers participate in the trade of assets such as equities, bonds, currencies and derivatives. Financial markets are typically defined by having transparent pricing, basic regulations on trading, costs and fees, and market forces



determining the prices of securities that trade. Financial markets can be found in nearly every nation in the world.

Investors have access to a large number of financial markets and exchanges representing a vast array of financial products. Some of these markets have always been open to private investors; others remained the exclusive domain of major international banks and financial professionals until the very end of the twentieth century. A Capital Markets is one in which individuals and institutions trade financial securities. Organizations and institutions in the public and private sectors also often sell securities on the Capital Markets in order to raise funds. Thus, this type of market is composed of both the primary and secondary markets (Gart A., 1994). Any government or corporation requires capital (funds) to finance its operations and to engage in its own long-term investments. To do this, a company raises money through the sale of securities- stocks and bonds in the company's name.

Stock markets allow investors to buy and sell shares in publicly traded companies. They are one of the most vital areas of a market economy as they provide companies with access to capital and investors with a slice of ownership in the company and the potential of gains based on the company's future performance. This market can be split into two main sections: the primary market and the secondary market. The primary market is where new issues are first offered, with any subsequent trading going on in the secondary market (Levine, 2003)

A bond is a debt investment in which an investor loans money to an entity (corporate or governmental), which borrows the funds for a defined period of time at a fixed interest rate. Bonds are used by companies, municipalities, states and U.S. and foreign governments to finance a variety of projects and activities. Bonds can be bought and sold by investors on credit markets around the world. This market is alternatively referred to as the debt, credit or fixed-income market. It is much larger in nominal terms than the world's stock markets (Liebenstein, 1966).

Investing in the cash or "spot" market is highly sophisticated, with opportunities for both big losses and big gains. In the cash market, goods are sold for cash and are delivered immediately. By the same token, contracts bought and sold on the spot market are immediately effective. Prices are settled in cash "on the spot" at current market prices. This is notably different from other markets, in which trades are determined at forward prices (Sharfstein, 1988)

The transfer of capital from investors to companies is an integral part of the Canadian economy. As a result of this transfer, businesses can grow and create jobs. At the same time, both retail and institutional investors can benefit from investing, whether they do so directly in securities such as stocks, bonds, mutual funds, ETFs (exchange traded funds) or trust units, or indirectly, through money market funds or derivative products such as equity options (Choi, S., et al., 1990)

An IPO refers to the first issue of shares a company makes available to the general public. It is a one-time transaction between a company and its shareholders. When a company decides to sell shares to the public in order to raise capital, otherwise known as “listing”, it first solicits the help of an investment dealer, the investment dealer advises the company on the number of shares to offer and at what price, and assists the company in promoting the share. This sale of new shares takes place in what is called the Primary Market (Clement, M., 1999).

After a company launches its IPO, shares are bought and sold in what is called the “Secondary Market.” In country senior equities trade on Stock Exchange, while junior equities trade on TSX Venture Exchange. Unlisted shares are traded “Over-the-Counter”, in a dealer market. It is in these markets that investors may buy and sell shares. The price of securities trading in the Secondary Market may fluctuate for a number of reasons. For example, if the supply of a stock is greater than the demand from investors, the market price for that stock likely dropped. Financial news and world events can also affect the prices of shares and the secondary market as a whole (Cochrane, J., 1997).

The policy objectives of BK Rwanda is creating value for its stakeholders by providing the best financial services to businesses and individual customers, through motivated and professional staff. Bank of Kigali aspires to be the leading provider of the most innovative financial solutions in the region where values of this commercial bank Rwanda are customer focus; integrity; quality; and excellence.

Common shares are generally classified in one of three ways such as Blue Chip Shares are usually issued by large, well-established companies. They are considered high quality and typically low-risk, and often have a record of continuous dividend payments. Growth Shares are normally considered more risky than blue chip shares. They typically have the potential for capital gains rather than income, usually do not pay dividends, and are issued by companies generally considered to have

potential for profitability and rapid growth. Penny Shares present a much higher degree of risk than blue chip or growth shares, but the returns can often be significant if the company becomes successful. Capital Markets products such as equity, debt and other securitized products affect the profitability and liquidity of the bank. However, for the relationship to be effective, the following factors must be put into consideration; corporate governance, economic conditions, size and risk management.

Capital Markets promotes private sector development. Access to and ease in movement of financial resources fundamentally influences the prospects for private sector growth in developing country economies. The extent that existing firms can borrow and grow, the ability of emerging firms to act entrepreneurially, their willingness to invest in assets, and the ability to allocate their assets freely all factor into economic growth. An examination of the levels of Capital Markets development and economic growth in Asia with those in sub-Saharan Africa shows that India and China continue to add several hundred companies to their stock exchanges annually. The immediate benefit of the flourishing Capital Markets activity in Asia is reflected in the sizeable increase in the momentum of private sector development. In contrast, the number of companies added by each of the major sub-Saharan African exchanges other than South Africa was generally fewer than ten (Beck, et al., 2001).

Financial performance is an increase of liquidity, which is linked to economic growth. An increase in the number of firms and investors participating in exchanges generates liquidity, or the volume of active trading that occurs. Liquidity has a proven relationship with economic growth; recent studies have found that countries with liquid markets experience faster rates of capital accumulation and greater productivity gains. As liquidity increases, firms gain increased assurance that they are able to exit from longer-term investments. They therefore become more willing to make the permanent investments critical to development. Simultaneously, local consumers are more willing to mobilize domestic savings. This process allows for a market-based system of allocating financial resources, whereby more resources are more efficiently distributed to the more productive and innovative firms (Beck, et al., 2001).

Capital Markets development encompasses more than just foreign inflows to emerging markets. Equally important is the cultivation of local investor interest as a means of increasing the available investment sources within an economy. An increase in domestic investor interest originates from the availability of profitable options for saving within the local economy; in other words, the existence of incentives to keep money in float domestically. Formal and credible savings options, which include

such instruments as pension plans, insurance policies, and mortgage markets, are key to generating necessary sources of financing within an economy and to allow more resources to be mobilized and allocated to various investment needs thereby serving to drive the growth process. A central benefit of this activity is the increase in local (Beck, et al., 2001).

This study is based on locally owned public commercial public bank in Bank. The researcher selected this sample due to the fact that there are only locally owned private commercial banks in Rwanda. In addition to that it is the largest private owned commercial banks in Rwanda. The study is carried in the financial sector especially in Bank of Kigali Rwanda limited. The financial sector plays an essential role in providing and channeling financing for investment. Beyond providing short-term finance for businesses' day-to-day operations and other temporary cash requirements, financial institutions, Capital Markets and institutional investors are also sources of long-term finance that is finance which is available for an extended period of time. The importance of long-term finance lies in its pivotal role in satisfying long-term physical investment needs across all sectors in the economy and specifically in key drivers of growth, competitiveness and employment such as the infrastructure, real estate, R&D and new ventures (Bekaert,*et al.*, 2006).

Further, the stability of the banking sector plays a very important role in the performance of the economy. The global financial crisis has affirmed to this. Any crisis that affects the financial institutions does not only affect the macro factor of the economy but also the micro factor of the economy (Habyarimana, 2003). Banks have a central role in any economy. They mobilize funds, allocate capital and play a decisive role in the corporate governance of other firms (Habyarimana 2003).

According to NBR, (2010) Banking institutions play an important role in the economic life of any country with the result that continued strength, stability and soundness of the entire banking system is a matter of public concern. Banking institutions act as the principal depository for public funds. The safety and ready availability of these funds for transactions and other purposes is essential to the stability and efficiency of the financial system. Banks also employ these funds to make loans and investments in addition to being the main vehicle through which monetary policy is implemented. This study was guided by three theories such as the Modigliani Miller Theorem; Pecking Order t Theory; and agency cost theory.

## **Pecking Order Theory**

The alternative theory of finance known as ‘pecking order’ theory was developed by Myers, (1984). It is based on the premise that in reality successful firms (zero’ debt firms) with high and consistent profitability rarely goes for debt financing. The origin of pecking order theory is asymmetric information where managers know more about a firm’s prospect than the outside investors. The theory suggests that if the firm issues equity shares to finance a project, it has to issue shares at less than the prevailing market price. This signals that the shares are overvalued and the management is not confident to serve the debt if the project is financed by debt. Thus issue of shares is ‘poor financial decision. The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers, 1984).

Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance vary between the financing choices. This theory is usefully in this study because it shows the information about how the firm like BK Rwanda has a particular preference order for capital used to finance, and how managers know more about a firm’s prospect than the outside investors. During this study at BK Rwanda, the researcher investigates the implementation of Capital Markets on financial performance of this commercial bank in Rwanda.

### **1.2: Implementation Framework**

In many developing countries, capital markets play an important role in the process of economic growth and development by facilitating savings and channeling funds from savers to investors (Rajni, et al., 2007). In Rwanda, Capital Markets started in 2005 as Rwanda-Over-The Counter (OTC) market and later grew to Rwanda Stock Exchange (RSE) in 2011 (Steven, 2012). The RSE is operated under the jurisdiction of Rwanda’s Capital Markets Authority (CMA), previously known as Capital Markets Advisory Council (CMAC). In 2008 the Government of Rwanda established the Capital Markets advisory council (CMAC) to run the Rwandan stock market as over the counter market (GoR, 2008). CMA has organized workshops all over the country explaining to the public and business people how the Capital Markets functions and invite them to participate in stock market in Rwanda. Over the past few decades, globally there has been an upsurge in Capital Markets activity, and emerging markets have accounted for a large amount of this boom. This suggests the growing recognition of the Capital Markets as a tool for fast-tracking economic progress in developing economies. However, critics have argued that the Capital Markets might not perform efficiently in developing countries and that it may

not be feasible for these countries to promote stock markets given the huge costs and the poor financial structures. In principle, Capital Markets is expected to accelerate economic growth by providing a boost to domestic savings and increasing the quantity and the quality of investment, provide individuals with additional financial instrument that may better meet their risk preferences and liquidity needs (Levine, Z., 1998).

Cash, H., et al., (1992) note that the emphasis on Capital Markets has resulted from the operation of a number of interrelated factors; (i) the progressive deregulation of financial markets both internally and externally in leading economies, (ii) the internationalization of these markets (iii) the introduction of a number of financial products allowing riskier and bigger financial investments and (iv) the emergence and the increasing role of new actors in the financial markets particularly, institutional investors. Capital Markets can be an important facilitator of economic growth in sub-Saharan Africa. Capital Markets comprises of all procedures and measures designed to ensure the following objectives (Pandey, 2010):

- i. To examine the effect of equity markets on the financial performance
- ii. To assess the effect of bond markets on the financial performance
- iii. To establish the effect of securitized products on the financial performance

Sule, M., (2009) specifying the channels for economic progress through the Capital Markets gone on that it provides opportunities for companies to borrow funds needed for long-term investment purposes. It also provides avenue for the marketing of shares and other securities in order to raise fresh funds for expansion of operations leading to increase in output/production. It creates a means of allocating the nation's real and financial resources between various industries and companies.

Sule M., (2009) argue further that through the capital formation and allocation mechanism the Capital Markets ensures an efficient and effective distribution of the scarce resources for the optimal benefit to the economy and it reduces the over reliance of the corporate sector on short term financing for long term projects and also provides opportunities for government to finance projects aimed at providing essential amenities for socioeconomic development.

According to Filler, H., et al., (1999) the nature and economic significance of the relationship between Capital Markets and economic progress vary according to a country's level of economic development with a larger impact in less developed economies. Singh, (1999) has argued that the Capital Markets might face serious challenges in developing countries and may not perform efficiently and that it may

not be feasible for such economies to promote Capital Markets given the huge costs and the poor financial structures. These problems are magnified in developing countries with their weaker regulatory institutions and greater macroeconomic volatility. The higher degree of price volatility on stock markets in developing countries reduces the efficiency of the price signals in allocating investment resources.

Capital Markets is market in which long term capital are sourced for. Its purpose is to transfer funds between lenders and borrowers efficiently. Norman, (1957) stated that the more efficiently the stock exchange functions, the more readily can those with savings on hand buy variable price securities, and more easily can they sell them when they need to. Thus both borrowers and lenders are better off if efficient Capital Markets is used to facilitate fund transfers.

Moreover, according to Pandey, (2002), the security prices in the Capital Markets have been observed to move randomly and unpredictably, implying that investors in the Capital Markets take a quick cognizance of all information relating to security prices, and that security prices quickly adjust to such information. The more the speed of adjustment to any available information the more efficient the price

Long term capital is as evidenced by the positive relationship between long term capital and economic growth (Demirguc,et al., 1996). In recognition of this, Kenya kicked-off the revitalization of the stock market in the late 1980s. In early 2000, it set out to revitalize the bonds market by strengthening the government bonds market. Despite the initiatives, the stock market that has been in existence for over 50 years is still shallow, narrow and thin. The bonds market is also in its infancy stage attracting more of the government bonds compared with corporate bonds. Development Financial Institutions (DFIs) set up at independence to close the resource gap for long term capital faced various problems that constrained.

Bank of Kigali is the second domestic company to be listed on the Rwanda Stock Exchange in an IPO which was recognized as the Best African Listing by Africa Investor (AI). Bank of Kigali continues to transform lives across Rwanda and each year our commitment to this course has been recognized both at home and around the world. They are proud to be the Bank that is making Rwanda proud while transforming lives (BK, 2016).

Given the continuous evolution of liquidity in banks and the presumed importance of Capital Markets for financial stability of banking sector, there is a need to study on how private commercial banks in

Rwanda should be protected from different shock by building a good capital base through capital markets. It was in that background the study intended to investigate on how does Capital Markets influence financial performance of commercial banks in Rwanda especially Bank of Kigali-Rwanda

### **1.3: Statement of the problem**

The impact of Basel III on financial markets is especially interlinked with the new funding and liquidity ratios. Weak liquidity profiles of banks were one of the core elements of the crisis, and they therefore represent a critical part of the regulatory framework going forward. The goal in establishing the liquidity framework: to require banks to with stand more severe shocks than they had been able to in the past, thus reducing the need for such massive public sector liquidity support in future episodes of stress.

Various private locally owned banks in Rwanda have been taken over by various foreign banks. A case in point, Agaseke bank was taken over by Bank of Africa 2016, Bank Popularize merged with Atlas Mara in 2016. The report by National Bank of Rwanda (NBR) (2016) revealed that most local banks lack enough liquidity to pay financial obligations to compete with the foreign banks. The report further revealed that most banks are facing a liquidity problem.

Bank of Kigali (BK) is committed to transforming the lives of Rwandans not only through providing the most innovative financial solutions on the market but also by giving back to the community, where net profit ratio in 2012 which is 33.89%%; in 2013 net profit increased on 33.13%%; in 2014, NP was 36.17%; in 2015, NP was 36.46%.2016, NPM was 34.46%; and in 2017, NPM was 31.29%.

However, it is within this context that the researcher wants to assess how Capital Markets contributes to the financial performance of commercial banks in Rwanda.

### **1.4.Purpose of the study**

The general objective to examine the roles of Capital Markets on the financial performance of the commercial banks in Rwanda especially Bank of Kigali

#### **1.4.1 Research Objectives**

- i. To examine the effect of equity market on the financial performance of Bank of Kigali
- ii. To assess the effect of bond market on the financial performance of Bank of Kigali
- iii. To establish the effect of securitized products on the financial performance of Bank of Kigali



## **1.5: Research Questions**

- i. What is the effect of equity markets on the financial performance of Bank of Kigali
- ii. What is the effect of bond markets on the financial performance of Bank of Kigali
- iii. What is the effect of securitized products financial performance of Bank of Kigali

### **1.5.1: Research Hypotheses**

**H<sub>0</sub>:** There is no statistically significant relationship between Capital Markets and financial performance of Bank of Kigali-Rwanda

**H<sub>1</sub>:** There is statistically significant relationship between Capital Markets and financial performance of Bank of Kigali-Rwanda

## **1.6: Significance of the study**

The study is beneficial to the following stakeholders

### **1.6.1: To Researcher**

- i. The study helps the researcher to improve his knowledge and skills in the field of finance.
- ii. The study helps the researcher to obtain the minimum requirement for the award of a degree of master of business administration of Kigali University.

### **1.6.2: To Banking Sector**

The study provides the strategies and policies that can help commercial banks in improving the liquidity in bank of Kigali

### **1.6.3: To Employees of Bank**

Assist in motivating employees who contributes effectively to the attainment of organizational goals and objectives. This is because this study is expected to be a guiding tool to Bank of Kigali management, to improve the management of employee performance

### **1.6.4: To Shareholders wealth**

The study provides the recommendations on how to evaluate shareholders wealth and by understanding the needs of shareholders and integrating them in performance evaluation, management is moving forward in motivating their staff to attain their target of shareholders satisfaction.

### **1.6.5: To other researchers**

Literature on the link between performance evaluation and bank performance in manufacturing organizations is rare. As such literature review on performance evaluations and its effects on performance are difficult and sometimes impossible to obtain. The findings of the study would, therefore, serve as additional source of reference for future studies.

### **1.6.6: The management of bank of Kigali**

The findings of the study helps the management of Bank of Kigali to establish appropriate training programmed that address the needs of both the bank of Kigali and the individual employees with regard to Capital Markets management. These findings may also be used by the management to strengthen the effectiveness of recruitment and selection processes and also put in place a comprehensive induction, motivation and retention strategies.

### **1.7: Scope of the study**

The study was limited in the subject, geographical and time scope as below:

#### **1.7.1:Subject Scope**

The researcher only focused on the Capital Markets as independent variable and financial performance of the banking sector in Rwanda as dependent variable.

#### **1.7.2 Geographical Scope**

The study was conducted at bank of Kigali headquarters in Kigali

#### **1.7.3: Time Scope**

The study covered a period of six years that from 2012-2017. This period is selected because it is within this period that the bank went to initial public offering.

#### **1.7.4: Setting of the Study**

The study is carried out in Rwanda by analysing how Capital Markets contributes to the financial performance of one locally owned private commercial bank, Bank of Kigali.

Bank of Kigali was incorporated in the republic of Rwanda on 22 December 1966. Initially Bank of Kigali was founded as a joint venture between the government of Rwanda and Bolognaise, with each owning 50 per cent of the ordinary shares capital. In 1967 the bank commenced its operations with its first branch in Kigali

In 2005 Bolognese began to withdraw from its operations in Africa in line with its strategy in 2007 the government of Rwanda acquired the Bolognese shareholding in bank of Kigali thereby increasing its direct and indirect shareholding in the bank to 100% of the entire issued under the new law relating to companies from bank of Kigali S.A to bank of Kigali limited

On 21 2011, the Rwandan Capital Markets advisory council approved plans for the bank to float 45% of its share and list its share on the Rwanda stock exchange (RSE), becoming the second domestic company to list on the RSE in a US\$62.5 million initial public offering.

In May 2018, at the bank's Annual general meeting, the shareholders' approved plans to cross list the stock of the on the Nairobi stock exchange (NSE), The largest in the East African community. The cross-listing and the second half of 2018 are expected 70 million.

#### **1.7.5: Organisation of the Study**

The study is organised in the following way where chapter one: general introduction; this chapter covers the background to the situation and tries to relate the topic to the current situation. It encompasses also the research objectives, research questions and the significance of the study.

Chapter two is literature review; in this chapter, the researcher attempts to embrace what other researchers have done and it looks at the literature put together by different authors on this topic, therefore, it attempts to explain and define different issues which are related to the significance of the study thus being a conceptual framework.

Chapter three is research methodology and presentation of study area; this section puts forward the methods and techniques that were used to collect data upon which findings, interpretations and conclusions were drawn. The survey or investigation therefore covered the research design, target population and sample size and selection, and data collection instrument and reliability and validity of instruments as well as data analysis.

Chapter four is analysis of the effect of equity markets on the financial performance of Bank of Kigali; this chapter deals with the presentation of the results from the data collected from various categories of respondents in relation to the objectives and hypothesis of the present research. The data to be analysed are primary and secondary data collected using questionnaires and interview.

Chapter five is an analysis of the effect of bond market on the financial performance of Bank of Kigali. Chapter Six is an analysis of the effect of securitized products on the financial performance of Bank of Kigali.

This chapter seven is Capital Markets and financial performance of BK.

Chapter eight presents the summary, conclusion, and recommendation for further researchers.

## **CHAPTER TWO**

### **STUDY LITERATURE**

#### **2.0 Introduction**

This chapter is presented in three sections. Section one presents literature survey. Literature survey is a comprehensive review of the published and unpublished work from secondary sources data in the area of Capital Markets and performance, to identify gaps and show how the current study intends to fill these gaps. Section two is a presentation of the theories and models of Capital Markets as established elsewhere in the banking sector with the view of providing best practices outside Rwanda. The last section presents the conceptual framework which is the model that relates the variables in this study.

#### **2.1 Literature Survey**

Tumukunde,(2015) studied the Capital Markets and financial performance of financial institutions in Rwanda. The objectives of the study were to identify various financial instruments used by Rwanda Stock Exchange on Rwandan Market place, to identify the indicators of financial sector development of Rwanda on basis of Capital Markets and to find out the contribution of Capital Markets of Rwanda Stock Exchange to the financial economic development of financial sector in Rwanda. Methodology used was based on the techniques and methods that are used to collect and analyze data from RSE.

The findings showed that financial instruments introduced by Rwanda Stock Exchange were Stock Market at 5%; Bond Market at 16%; Money Market at 23%; Cash or Spot Market at 21%; Derivative Market at 15%;Forexand the Interbank Market were on 15% while Rights and Warrants at 5%.Much as these instruments were identified, Tumukunde did not show the extent to which these affected commercial banking operation.

Karemera(2013)studied the relationship between regulation of Capital Markets and financial performance of Rwanda commercial banks. The objective of this study was to establish the relationship between Regulation and Financial Performance of commercial banks in Rwanda. The study had three specific objectives; establishing how capital requirement ratio, liquidity ratio and management efficiency ratio affect financial performance of commercial banks in Rwanda. The findings of the study in some areas concur with past studies while in others it contradicts past findings by other scholars. The overall finding and conclusion of the study was that all the measures of regulation used in this study are not significant predictors of financial performance of commercial

banks in Rwanda. These findings explored regulation prospects but not the effects of Capital Markets operations on commercial banking in Rwanda.

Harerimana,(1996) in an attempt to investigate the relationship between debts-to equity ratio and firm's profitability in Rwanda, taking into consideration the level of firms' investment and the degree of market power found that there is negative and statistically significant relationship between debt-to-equity ratio and profit margin. The negative sign indicated that either the cost of borrowed capital is higher than its benefit from investment, or that firms financed by retained profits are more profitable than those financed by borrowed capital. The negative relationship between the financial variable and the profit margin was in line with the results of Banker et al., (1998). The relationship between investment and profit margin is positive and statistically significant. This meant that there is an effective use of capital. However, little is still known on how exactly Capital Markets affects commercial banks in Rwanda, and wealth of shareholders

## **2.2 Theoretical Review**

This study was guided by three theories such as the Modigliani Miller Theorem; Pecking Order Theory; and Agency Cost Theory.

### **2.2.1Pecking Order Theory**

The alternative theory of finance known as 'pecking order' theory was developed by Myers, (1984). It is based on the premise that in reality successful firms (zero' debt firms) with high and consistent profitability rarely goes for debt financing. The origin of pecking order theory is asymmetric information where managers know more about a firm's prospect than the outside investors. The theory suggests that if the firm issues equity shares to finance a project, it has to issue shares at less than the prevailing market price. This signals that the shares are overvalued and the management is not confident to serve the debt if the project is financed by debt. Thus issue of shares is 'bad news.

The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers, 1984). Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance vary between the financing choices. Where the funds provider is the firm's retained earnings, meaning more information than new equity holders, the new equity holders expects a higher rate of return on capital invested resulting in the new

equity finance being more costly to the firm than using existing internal funds. A similar argument can be provided between the retained earnings and new debt-holders. In addition, the greater the exposure to the risk associated with the information asymmetries for the various financing choices besides retained earnings, the higher the return of capital demanded by each source. Thus, the firm prefers retained earnings financing to debt, short-term debt over long-term debt and debt over equity.

On the contrary if external borrowing is used to finance the project, it sends a signal that the management is confident of the future prospect of serving debt. Hence debt is preferred over shares in financing decision. If debt is issued, pricing of debt instrument remains a problem. To avoid controversy the management may wish to finance project by internal Fund generation, i.e. by retained earnings. Thus, financing follows an order, first-retained earnings, then-debt and finally equity when debt capacity gets exhausted. This explains why the profitable firm uses less debt. These preferences exhibit transitivity.

MFIs in Africa may represent an interesting scenario since retained earnings are zero and perhaps following the pecking order may opt for debt since quite a number are not regulated and therefore have no access to capital market. Should I find evidence that is consistent with the pecking order theory then my results should highlight a negative relation between capital structure and MFI profitability.

### **2.2.2 Agency Cost Theory**

The agency cost theory is premised on the idea that the interests of the firm's managers and its shareholders are not perfectly aligned. In their seminal paper, Jensen et al., (1976) emphasized the importance of the agency costs of equity. They argue that agency costs of equity in corporate finance arise from the separation of ownership and control of firms whereby managers tend to maximize their own utility rather than the value of the firm. Agency costs can also arise from conflicts between debt and equity investors.

Stockholders, because of their rights, may take undue advantage over bond holders in an attempt to maximize their fortunes in a firm. Bond holders are therefore compelled to protect themselves from such contingencies. Such covenants adversely affect the corporate legitimate operations to some extent the costs of lost efficiency and other costs. Although Modigliani et al., (1963) recommends that firms should maximize their debt financing opportunities; such a situation does not hold in the long run due

to such agency problems between stake holders. Therefore costs related to protective covenants are substantial and rise with the increase in debt financing.

## **2.3 Literature Review**

This section illustrates the literature on the effect of equity market on the financial performance; the effect of bond market on the financial performance; and the effect of securitized products on the financial performance

### **2.3.1 Effect of equity markets on the financial performance**

Equity market allows investors to buy and sell shares in publicly traded companies. They are one of the most vital areas of a market economy as they provide companies with access to capital and investors with a slice of ownership in the company and the potential of gains based on the company's future performance. This market can be split into two main sections: the primary market and the secondary market. The primary market is where new issues are first offered, with any subsequent trading going on in the secondary market (Levine, 2003).

Information content of earnings is an important issue for investors. Various valuation models arrive at the equity market base on different aspects of financial performance. The earnings approach estimates the value of common stock based on size, degree of certainty and the rate of growth of corporate earnings per share whereas in the dividend approach the present worth of a common stock is the sum of its discounted future cash receipts in the form of dividends and cash proceeds from its eventual sale (Bauman, 1965).

An equity market is a market in which shares are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance. A market that gives companies a way to raise needed capital and gives investors an opportunity for gain by allowing those companies' stock shares to be traded.

In the equity market, investors bid for stocks by offering a certain price, and sellers ask for a specific price. When these two prices match, a sale occurs. Often, there are many investors bidding on the same stock. When this occurs, the first investor to place the bid is the first to get the stock. When a



buyer pay any price for the stock, he or she is buying at market value; similarly, when a seller will take any price for the stock, he or she is selling at market value.

Companies sell stocks in order to get capital to grow their businesses. When a company offers stocks on the market, it means the company is publicly traded, and each stock represents a piece of ownership. These appeals to investors, and when a company does well, its investors are rewarded as the value of their stocks rise. The risk comes when a company is not doing well, and its stock value may fall. Stocks can be bought and sold easily and quickly, and the activity surrounding a certain stock impacts its value. For example, when there is high demand to invest in the company, the price of the stock tends to rise, and when many investors want to sell their stocks, the value goes down.

### **2.3.2 Effect of bond markets on the financial performance**

A bond is a debt investment in which an investor loans money to an entity (corporate or governmental), which borrows the funds for a defined period of time at a fixed interest rate. Bonds are used by companies, municipalities, states and U.S. and foreign governments to finance a variety of projects and activities. Bonds can be bought and sold by investors on credit markets around the world. This market is alternatively referred to as the debt, credit or fixed-income market. It is much larger in nominal terms than the world's stock markets (Liebenstein, 1966).

Bonds and stocks compete for investment money at a fundamental level, which suggests that a strengthening equity market would attract funds away from bonds. This would tend to lower the demand for bonds; sellers would have to lower prices to attract buyers. Theoretically, the price of bonds would gravitate south until bond yields rose to a level that was competitive with the risk-adjusted returns found in the stock market. Even though the actual relationship between bonds and stocks often doesn't fit this simple theory perfectly, it does help to describe the dynamic nature of these investment alternatives. Whether declining bond prices are a positive effect depends on the type of bond investor. Current bondholders with fixed coupons become increasingly harmed by dropping bond prices as their securities approach maturity. Those who are purchasing bonds like dropping bond prices because it means that they can get higher yields.

The bond market is a key funding tool for many financial institutions and corporate. A wide range of issuers and investors participate in the market. The non-government bond market can be divided into

four main categories: bonds issued by financial institutions; bonds issued by corporate (non-financials); long-dated asset-backed securities (ABS) issued by-domiciled vehicles.

Bond prices fluctuate with changing market sentiments and economic environments, but bond prices are affected in a much different way than stocks. Risks such as rising interest rates and economic stimulus policies have an effect on both stocks and bonds, but each reacts in an opposite way.

When stocks are on the rise, investors generally move out of bonds and flock to the booming stock market. When the stock market corrects, as it inevitably does, or when severe economic problems ensue, investors seek the safety of bonds. As with any free-market economy, bond prices are affected by supply and demand.

Bonds are issued initially at par value, or \$100. In the secondary market, a bond's price can fluctuate. The most influential factors that affect a bond's price are yield, prevailing interest rates and the bond's rating. Essentially, a bond's yield is the present value of its cash flows, which are equal to the principal amount plus all the remaining coupons. Bonds affect the stock market because they both compete for investors' dollars. Bonds are safer than stocks, but they offer a lower return. As a result, when stocks go up in value, bonds go down.

Stocks do well when the economy is booming. Consumers are buying and companies receive higher earnings thanks to higher demand. Investors feel confident. They want to beat inflation, and stocks are the best way to do that. They sell their bonds and buy stocks.

When the economy slows, consumers buy less, corporate profits fall, and stock prices decline. That's when investors prefer the regular interest payments guaranteed by bonds. Sometimes, both stocks and bonds can go up in value at the same time. This happens when there is too much money, or liquidity, chasing too few investments. It happens at the top of a market. It could occur when some investors are optimistic and others are pessimistic. There are also times when stock and bonds both fall. That's when investors are in a panic and are selling everything. During those times, gold prices rise.

### **2.3.3 Effect of securitized products on the financial performance**

Securitization can contribute to banks' stability. Banks can expand financing resources through securitization to reduce the ratio of current assets with higher holding cost, which can improve the profit of banks and increase the loan supply. The securitization can reduce the sensitivity of loan supply to the external financing cost and reduce return volatility. During the financial crisis, the effect of securitization on large banks' stability has not changed while the effect has changed for small banks.

During the 1970s, banks began to explore ways to transfer risk off their balance sheets by packaging mortgages into securities and selling them to investors. This method of packaging and transferring cash flows from collateral to investors, or "structuring," represented the creation of a new asset class that is broadly known today as securitized products. As the market evolved, these new securities were further "sliced" or "trenched" into various categories to provide investors with choices of cash flow parameters, income characteristics, and risk profile

### **2.3.4 Capital Markets and financial performance**

The capital market of a country can exert considerable influence on the firm by imposing certain rules and regulations relating to the firm's governance practices. Whilst the legal and regulatory structures are essential, the capital market, with adequate transparency and accountability in place, can ultimately reward or punish firms for their governance practices<sup>10</sup> (Drobetz et al., 2004). The Capital Markets can wield its governance role in mitigating the agency problems through disciplining the management and improving the firm's overall governance.

Gugler et al., (2003) argue that the strength of a country's external capital market determines the degree of a firm's investment performance regardless of how closely managers' and owners' interests match. However, the corporate governance role of the capital is less likely to be effective in a developing economy.

As Iskander, et al., (2000) observe, the capital markets in developing countries provide little incentive for better corporate governance (either in the real sector or in the financial sector), primarily because of the dominance of a few large firms, low trading volumes and liquidity, absence of long-term debt instruments and inactivity of institutional shareholders. Moreover, the cause and effect relationship can work in the opposite direction e.g. the state of country as well as

firm level corporate governance might have a significant influence on the development of the capital market.

Shleifer, et al., (1997) argue that a firm is likely to get external finance not only because of the reputation of the capital market and excessive investor optimism, but also due to assurances provided by the corporate governance system.

Capital Markets and financial sector development is important for the following key reasons: it promotes economic growth; it supports U.S. strategic interests; and it complements and reinforces existing U.S. bilateral and multilateral development initiatives. Capital Markets and financial sector development promotes economic growth. In its recent publication, *Finance for Growth*, the World Bank concluded, “Getting the financial systems of developing countries to function more effectively in providing the full range of financial services is a task that is well rewarded with economic growth”.

It promotes private sector development. Access to and ease in movement of financial resources fundamentally influences the prospects for private sector growth in developing country economies. The extent that existing firms can borrow and grow, the ability of emerging firms to act entrepreneurially, their willingness to invest in assets, and the ability to allocate their assets freely all factor into economic growth.

It increases liquidity, which is linked to economic growth. An increase in the number of firms and investors participating in exchanges generates liquidity, or the volume of active trading that occurs. Liquidity has a proven relationship with economic growth; recent studies have found that countries with liquid markets experience faster rates of capital accumulation and greater productivity gains. As liquidity increases, firms gain increased assurance that they are able to exit from longer-term investments. They therefore become more willing to make the permanent investments critical to development. Simultaneously, local consumers are more willing to mobilize domestic savings.

It helps mobilize local savings and makes resources available for local decision making. Capital Markets development encompasses more than just foreign inflows to emerging markets. Equally important is the cultivation of local investor interest as a means of increasing the available investment sources within an economy. An increase in domestic investor interest originates from the availability of profitable options for saving within the local economy; in other words, the existence of incentives to keep money in float domestically. It enhances bank competition and develops a greater diversity of

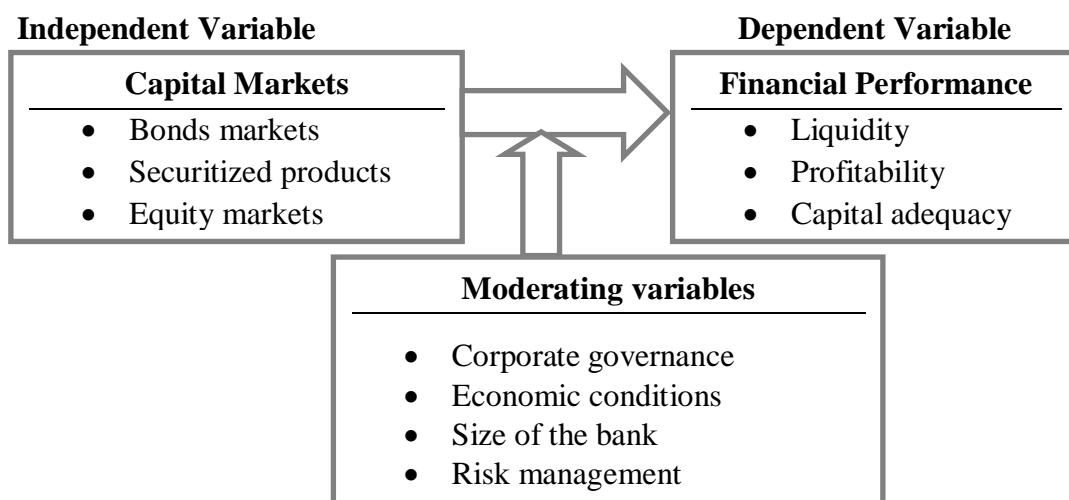
financial institutions. At the heart of local Capital Markets development is the mobilization of domestic savings for a broader array of institutions with varied investment objectives.

It could increase remittances and facilitate their use. Establishing mechanisms for facilitating cost-effective transfers and savings of funds received through remittances a rapidly emerging source of private capital in developing countries can also contribute to economic growth.

It leads to improved corporate governance. Capital Markets necessitates the creation of a legal and regulatory framework incorporating increased transparency and information dissemination. These monitoring systems heighten corporate governance, improve transparency, and boost investor confidence. Industry-level data from various studies have shown a positive relationship between market-based governance and improvements in industry efficiency. It rewards sound economic policies and creates tools for African countries to conduct monetary policy. The cost of sovereign borrowing is directly related to the economic conditions and policies in a country. A government that implements good economic policies is rewarded by lower borrowing costs on its sovereign bond issues, thus creating a market-based versus donor driven incentive to strengthen financial sectors. Furthermore, debt markets provide a tool for central banks to manage the money supply and control inflation.

## 2.4 Conceptual Framework

This section shows the relationship between variables. The independent variable which is Capital Markets and dependent variable which financial performance



**Figure 2.1: Conceptual Framework**

**Source:** *Gart Alan, (1994)Capital Markets and Financial Sector Development in Sub-Saharan Africa*

Elizabeth Duncan, et al., (2004) showed that all financial performance measures as interest margins, return on assets, and capital adequacy are positively correlated with customer service quality scores many researchers have been too much focus on asset and liability management in the banking sector,

MedhatTarawaneh (2006)Capital Markets and financial sector development is important for the following key reasons: it promotes economic growth; it supports U.S. strategic interests; and it complements and reinforces existing U.S. bilateral and multilateral development initiatives. Capital Markets and financial sector development promotes economic growth. In its recent publication, *Finance for Growth*, the World Bank concluded, “Getting the financial systems of developing countries to function more effectively in providing the full range of financial services is a task that is well rewarded with economic growth. It promotes private sector development. Access to and ease in movement of financial resources fundamentally influences the prospects for private sector growth in developing country economies. The extent that existing firms can borrow and grow, the ability of emerging firms to act entrepreneurially, their willingness to invest in assets, and the ability to allocate their assets freely all factor into economic growth.

It increases liquidity, which is linked to economic growth. An increase in the number of firms and investors participating in exchanges generates liquidity, or the volume of active trading that occurs. Liquidity has a proven relationship with economic growth; recent studies have found that countries with liquid markets experience faster rates of capital accumulation and greater productivity gains. As liquidity increases, firms gain increased assurance that they are able to exit from longer-term investments. They therefore become more willing to make the permanent investments critical to development. Simultaneously, local consumers are more willing to mobilize domestic savings.

It helps mobilize local savings and makes resources available for local decision making. Capital Markets encompasses more than just foreign inflows to emerging markets. Equally important is the cultivation of local investor interest as a means of increasing the available investment sources within an economy. An increase in domestic investor interest originates from the availability of profitable options for saving within the local economy; in other words, the existence of incentives to keep money

in float domestically. It enhances bank competition and develops a greater diversity of financial institutions. At the heart of local Capital Markets is the mobilization of domestic savings for a broader array of institutions with varied investment objectives.

It could increase remittances and facilitate their use. Establishing mechanisms for facilitating cost-effective transfers and savings of funds received through remittances a rapidly emerging source of private capital in developing countries can also contribute to economic growth. It leads to improved corporate governance. Capital Markets necessitates the creation of a legal and regulatory framework incorporating increased transparency and information dissemination. These monitoring systems heighten corporate governance, improve transparency, and boost investor confidence. Industry-level data from various studies have shown a positive relationship between market-based governance and improvements in industry efficiency.

It rewards sound economic policies and creates tools for African countries to conduct monetary policy. The cost of sovereign borrowing is directly related to the economic conditions and policies in a country. A government that implements good economic policies is rewarded by lower borrowing costs on its sovereign bond issues, thus creating a market-based versus donor driven incentive to strengthen financial sectors. Furthermore, debt markets provide a tool for central banks to manage the money supply and control inflation.

The mentioned authors did not establish the exact contribution of Capital Markets on the financial performance of commercial banks in Rwanda as geographical Gap. Therefore this study intends to clarify the exact percentage of Capital Markets to the performance Bank of Kigali by using coefficient of determination using SPSS version 20.0 as statistical tool.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0. Introduction**

This chapter presents the research methodology that was used in the study. The research design includes a description of the research approach, research strategy, research classification and research duration. The study population and the sample are also described. The instruments that were used to collect the data, including methods that were implemented to maintain validity and reliability of the instruments are described. The chapter also describes the data collection procedure, data processing and analysis and the ethical considerations.

#### **3.1: Research Design**

BK design was used to collect original data for describing a population too large to observe directly (Mouton, 1996). A survey obtains information from a sample of people by means of self-report, that is, the people respond to a series of questions posed by the investigator (Polit, et al., 1993).

In this study, the data was collected through self-administered questionnaires distributed personally to the subjects by the researcher.

BK was selected because it provided an accurate portrayal or account of the characteristics, for example behavior, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group where the study describing the effect of equity market on the financial performance; the effect of bond market on the financial performance; and the effect of securitized products on the financial performance

##### **3.1.1: Research Approach**

This study followed the phenomenological research approach which focuses on understanding why something is happening rather than describing why it is happening. Quantitative and qualitative research approaches using a case study were followed. Burns and Grove (1993) define quantitative research as a formal, objective, systematic process to describe and test relationships and examine cause and effect interactions among variables. Surveys be used for descriptive, explanatory and exploratory research.

Yin, (1994) defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly defined. Yin, (1994) argues that ‘the case study allows an investigation to retain the holistic



and meaningful characteristics of real-life events such as individual life cycles, organizational and managerial processes, neighborhood change, international relations and the maturation of industries. Therefore, the case study approach is especially useful in situations where contextual conditions of the events being studied are critical and where the researcher has no control over the events as they unfold. The case study, as a research strategy, should encompass specific techniques for collecting and analyzing data, directed by clearly stated theoretical assumptions. Furthermore, data should be collected from different sources and its integrity should be ensured.

### **3.1.2: Research Duration**

Longitudinal analysis was adopted by the researcher. Saunders and Cornett and Kothari ,(2004) assert that longitudinal study duration involves studying the changes in the phenomenon over a long period of time. This research duration has been adopted by the researcher because this study involves studying the implementation of economic capital by local banks in the period of five years ranging from 2012 to 2017.

The researcher selected this study duration because it was within this study duration that Basel expected many countries to have completed the implementation of the Basel II capital accord in which economic capital is defined.

### **3.1.3: Research strategy**

The study strategy was based on a multi-method strategy which used quantitative research strategy. A case study and a survey strategy were used in this study. This helped the researcher to have a triangulation of different strategies. According to Bryman, B., et al., (2003), a multi-method strategy occurs when more than one research strategy and data source are used in a study of social phenomena. A multi-method approach can be undertaken within a single research strategy by using multiple sources of data or across research strategies (Marlow, et al., 2006). The quantitative design strategy has been recommended and used by researchers in situations where one of the approaches is insufficient to reveal all that is required to be known about a phenomenon (Bryman *et al.*, 1996).

In addition to the questionnaire survey, the quantitative study also involved consensus analysis which was performed on directors of risks' experiences in order to establish whether quantification of risks in economic capital exists within the local banks. This method helped the researcher to find and understand common methods of managing risks within the banks.

### 3.2. Population Study

Kasomo, (2006) defined the population as aggregate of all cases that conform to some designated set of specification, whereas Mugenda, (2008) defined it as all elements in the universe. In this research, the researcher surveyed on the 40 employees located at the head office as target population from different departments.

$$n = \frac{x^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}$$

Where: n is the sample size,  $X^2$  is the Chi square, N is the total population size, P is probability of success and  $d^2$  is the degree of freedom. According to Krejcie and Morgan (1970), at the degree of freedom ( $d^2$ ) of 1% (0.01), the Chi square ( $X^2$ ) is 6.64. The probability of success (P) is 50% (0.5).

Substituting in the formula:  $n = \frac{6.64 \times 40 \times 0.5(1-0.5)}{0.01 \times 39 + 6.64 \times 0.5 \times 0.5} \Rightarrow n = 32$

#### 3.2.1: Characteristics of Respondents

This section illustrates the profile of respondents that included the ages, gender, education level, occupation departments, and experience in working with BK in relation with Capital Markets and financial performance.

##### 3.2.1.1: Age of Respondents

The ages of people in employment opportunity play a big role in the organization goals achievement because when you compare the target of aged people with youth are not the same. The table 3.1 presents the distribution of respondents by Age at Bank of Kigali Rwanda.

**Table 3.1: Age of Respondents**

Ages	Frequency	Percent	Cumulative Percent
21 and 30 years	15	46.9	46.9
31 and 40 years	11	34.4	81.3
41 and 50 years	3	9.4	90.6
51 - 60 years	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source:** *Primary data, (2018)*

Table 3.1 presents the distribution of respondents by age in BK. Out of 100.0% of respondents, the 46.9% of respondents have the ages between 21 -30 years; the 34.4% respondents are aged between

31- 40 years. The 9.4% respondents have the ages from 41 to 50 years, while, minority of 9.4% of respondents were between 51-60 years. However during the study at BK, the findings show that BK employs in majority staffs who are mature, productive people and who know what to do to develop the financial performance of Bank of Kigali.

### 3.2.1.2: Gender of Respondents

Gender in employment opportunity is the way to employ both sexes in organization. BK has both sexes in employment opportunity of Capital Markets and financial performance as indicated in table 3.2 as follows:

**Table 3.2: Gender of Respondents**

Gender	Frequency	Percent	Cumulative Percent
Male	18	56.3	56.3
Female	14	43.7	100.0
Total	32	100.0	

**Source:** *Primary data, (2018)*

Table 3.2: presents the gender distribution of respondents from BK. The majority of participants were males. This is justified by 56.3% respondents who are male while, 43.8% respondents are females. Therefore, BK employs both sexes in Capital Markets and management of finance; this helps BK to achieve on the financial performance. However, it was that BK respects gender law balance in Rwanda that expecting the 30% of female in working environment.

### 3.2.1.3: Education of Respondents

It was found that to employ higher educated employees' lead to the development of an organization and impact its level of quality service delivery. Education is typically divided into a number of educational stages covering early childhood education, primary education, secondary education and higher education. The table 3.3 illustrates data on qualifications of respondents from BK.

**Table 3.3: Distribution of Respondents by Education level**

Education Level	Frequency	Percent	Cumulative Percent
Bachelor's degree	19	59.3	59.3
Masters	11	34.4	93.8
PhD	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source:** *Primary data, (2018)*

Table 3.3 shows the level of education of respondents where 59.4% of respondents have the bachelors' degree. The 34.4% of respondents have Master's degree; while 6.3% have PhD. BK has educated employees who have knowledge on what they are responsible to do in the Capital Markets which contribute to the increase of financial performance of BK Ltd.

### 3.2.1.4: Occupation Departments

During the study at Bank of Kigali Rwanda, the researcher selects the respondents from Capital Markets department; finance department; accounting department; and internal audit department of BK as table 3.4 presents as follows.

**Table 3.4: Distribution of respondents by Departments**

<b>Departments</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Capital Markets department	14	43.8	43.8
Finance department	9	28.0	71.9
Accounting department	6	18.7	90.6
Internal audit department	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source:** *Primary data,(2018)*

Table 3.4 illustrates the respondents selected at each in the above mentioned department. The data show that in Capital Markets department participated on 43.8%; finance department was 28.1%; accounting department was 18.8%; and internal audit department was 9.4%. This shows the hope to get quality data because every respondent met during the study knows something to Capital Markets of BK.

### 3.2.1.5: Experience of Respondents

To be experienced on what you do is very important to the organization especially bank. The table 3.5 illustrates data collected from respondents of BK in relation with experiences they have in working with Capital Markets and financial performance of this commercial bank.

**Table 3.5: Experience of Respondents**

<b>Experience</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Less than 1 year	5	15.6	15.6
Between 2-3years	22	68.8	84.4
Above 4 years	5	15.6	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 3.5 illustrates the distribution of respondents by working experience. The study revealed that 15.6% is new comers with less than 1 year of experience in working at BK. The 68.8% of respondents have experiences from 2-3 years; and the 15.6% respondents have experience on the above of 4 years. Therefore, BK has experienced employees who worked in different departments of this commercial bank.

**Table 3.6: Distribution of the study population**

<b>Department/Section</b>	<b>Population</b>
Capital Markets department	17
Finance department	11
Accounting department	8
Internal audit department	4

Source: *departmentalization of BK, (2017)*

The study population used during this study was 40 employees who worked in relation with Capital Markets in BK Rwanda. It was used because they are ones who have important information more than interviewing customers' beneficiaries.

### **3.3. Sample design**

A sample is a sub set of the population being investigated by the researcher, whose characteristics was generalised to represent the whole population (Kasomo, 2006). According to Kothari (2000) a sample design is the technique or the procedures the researcher would adopt in selecting the items from the population. A sample design includes a sample size and sampling in procedures.

#### **3.3.1. Sample Size**

A sample size is the number of items to be selected from the universe to constitute a sample (Kothari 2000). In selecting a sample an optimum sample size was considered. According to Kothari (2000) an optimum sample is the one which fulfils the requirement of efficiency, representativeness, reliability

and flexibility. The sample size was determined using the formula of Krejcie and Morgan (1970). The formula for determining a sample size of a known population size as Krejcie and Morgan is given by:

$$n = \frac{x^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}$$

Where: n is the sample size,  $X^2$  is the Chi square, N is the total population size, P is probability of success and  $d^2$  is the degree of freedom. According to Krejcie and Morgan (1970), at the degree of freedom ( $d^2$ ) of 1% (0.01), the Chi square ( $X^2$ ) is 6.64. The probability of success (P) is 50% (0.5).

Substituting in the formula:  $n = \frac{6.64 \times 40 \times 0.5(1-0.5)}{0.01 \times 39 + 6.64 \times 0.5 \times 0.5} \Rightarrow n = 32$

### **3.3.2. Sample selection Procedure**

The respondents within the selected population were selected purposively. Since the study requires people with technical knowledge about the study, the respondents within each sample were selected using purposive judgement. Purposive sampling is that technique in which you select a sample basing on your judgement of how that sample enables you to answer your questions and to meet your objectives (Saunders, et al., 1999)

### **3.4. Data Collection instruments**

This section entails on how data was collected from respondents.

#### **3.4.1 Documentary review analysis**

In respect of secondary data, the research used the documentary reviews where the researcher sought and read the annual financial reports, and publication journal about Capital Markets and financial performance from 2012 up to 2017.

#### **3.4.2 Questionnaire**

The quantitative data was collected using one sets of questionnaire that were given to the bank employees. The questionnaire were designed using a five point likert scale, both closed and open ended questions are used. Open ended questions sought the views of respondents on the subject matter. In this study the researcher used both the structured and the unstructured self-administered questionnaires.

The researcher decided to use this type questionnaires in the study because of the advantages it has over other instruments as cited by Saunders et al., (2008), it is relatively cheap to collect data through the use of questionnaires since it involves only spending money in preparing the questionnaire and mailing it to the respondents. In addition, when the study involved both deductive and inductive approach, questionnaire is best suit in the study. Furthermore when the study involved identifying a relationship between variables, the questionnaires helps to get data that describe a relationship between different variables.

### **3.5. Data Presentation and Analysis Methods**

#### **3.5.1: Quantitative Data Analysis**

The survey data that was generated from the questionnaires was analysed using both exploratory and confirmatory statistical techniques. After receiving the completed questionnaires from the field, a data entry capture template was designed in the Statistical Package for Social Scientists (SPSS) which was used for data entry. After data entry and cleaning up, exploratory statistical data analysis is conducted using frequency distribution tables to summarise and display the respondents' views on the questions under study.

### **3.6. Validity and Reliability of instruments**

#### **3.6.1: Validity of research instruments**

Jha (2008) argued that validity of research is to prove that the research is valid and it must reflect significant results which are more than a one-off finding and be inherently repeatable. He emphasized that in this regard researches should be able to perform exactly the same experiment under the same condition and generate the same results.

The researcher made sure that the questionnaire is assessing what it is supposed to measure in line of the objectives of the research project. To make the research valid (measure what it is supposed to measure), the framework and questionnaire was elaborated bearing in mind the objectives of the study, the context of the country and respondents. To ensure the validity of research findings, the researcher consulted books, colleagues, lecturers, development professionals and the supervisor.

The validity of instruments was measured by using the content validity Index (CVI) where the researcher computed the validity coefficient. The content validity index is equal to the total number of valid items divided by the total number of items. Thus, the content validity index (CVI) = $R/R+IR$

whereby R= relevant questions; IR= irrelevant questions. The instrument was certified the valid when its minimum content validity index is at least at 0,7 (Amin, 2005).

Total number of questionnaire = 5

Total number of valid questionnaire (R) = 4

Total number of Irrelevant questionnaire (IR) =1

Content validity index =  $4/(4+1)= 0.8$

The content validity index is 0.8; thus the instruments are certified valid because is more than required minimum which is 0.7.

### 3.6.2: Reliability of research of instruments

Regarding reliability, Kirk (1986) said that it is the fact that people and other research can rely on that research results. To be proved it needs to encompass the entire experimental concept and establish whether obtained results meet requirements of the scientific method.

Reliability was concerned with consistency, dependability or stability of a test. A pilot study is used in order to make sure that the questionnaire is valid and reliable. To establish the reliability of the questionnaire the researcher uses pre-test method where a questionnaire was distributed to 5 employees of KCB in finance department. This helps the researcher to clear some ambiguous and inconsistencies that is detected. The pretesting is proved using Cronbach's Alpha which allows the researcher to proceed. However, the questionnaire guide for final data collection is updated according to pilot test results. After the pre-test done at KCB Rwanda in the five questionnaires distributed for pre-test, the result obtained is as follows:

**Table 3.7: Pre-Test Result of reliability from KCB Rwanda**

Items	Pre-test result
5	.80

**Source:** *Reliability result of Cronbach Alpha, 2018*

**Table 3.8: Legend Cronbach's Test of Reliability**

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable (Surveys)
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable



The pre-test of Cronbach alpha done at KCB Rwanda in the five items showed the result of 0.8 of reliability which is acceptable in legend Cronbach's test of Reliability. This allows going on the field of this research (BK Rwanda).

### **3.7. Research Ethical Considerations**

The following ethical considerations were adopted by the researcher while collecting and preparing to collect the required data from the respondents. The researcher provided a clear purpose of the study and the type of the data required from the respondents. During the period of sending the introduction letter requesting access to information, the researcher outlined the objective of the proposed study and also explained to the respondents how they must help and what was required out of them. Another ethical issue that was considered by the researcher is allowing sufficient time and persuading for some value of credibility. In order to accomplish this, the researcher used self-administers questionnaires which use less time in the organisation.

### **3.8 Limitation of the Study**

The researcher encountered the problems during the research: The time constraint: time provided for conducting the research project was short in carrying out the research and get the required information that requires enough time.

Insufficient funds: The constraints of money to cover the overall costs compared to the budgeted requirements. Objectivity of respondents in answering questionnaires in any way without considering the objectivity of the questions asked.

The managers have not willing to reveal their financial records due that they are still confidential. However, this can be solved by assuring them that the study is for academic purpose only.

Some records are prepared in French language whereas the study results must be in English, matching the two systems being another constraint. But Google translate was used to resolve this problem.

Some of respondents was suspicions about the study and are reluctant to give the need information, and some have completely refused to the questionnaire distributed to them. Responses without facts and evidence were given due to the negligence of respondents; some of them answered to the questionnaire without taking into consideration their perception.

## **CHAPTER FOUR**

### **EFFECT OF EQUITY MARKETS ON THE FINANCIAL PERFORMANCE OF BANK OF KIGALI**

#### **4.0 Introduction**

This chapter presents mainly the results from data analysis to the effect of equity market on the financial performance of Bank of Kigali. Data were collected from selected respondents worked in Bank of Kigali in relation with Capital Markets and financial performance of this commercial bank in Rwanda. Therefore, data are presented quantitatively and qualitatively on basis to first specific objective mainly using computer software specifically Statistical Packages for Social Sciences (SPSS).

#### **4.1: Analysis and interpretation of the findings**

The questionnaire was distributed to 32 respondents' employees of BK and were given one week and two days of responding the questions. The researcher achieved the participation rate of 100.0% of respondents. This helped the researcher to continue with editing, coding, recording, classifying and making statistical tables.

##### **4.1.1: Equity market and financial performance of Bank of Kigali**

An equity market is a market in which shares are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance (Maverick, 2018).

In the equity market, investors bid for stocks by offering a certain price, and sellers ask for a specific price. When these two prices match, a sale occurs. Often, there are many investors bidding on the same stock. When this occurs, the first investor to place the bid is the first to get the stock. When a buyer pays any price for the stock, he or she is buying at market value; similarly, when a seller take any price for the stock, he or she is selling at market value. During the study at Bank of Kigali in Rwanda, the researcher found that to use equity market affects positively much to the financial performance of this commercial bank as confirmed by selected respondents.

**Table 4.1: Size of Equity market affects market capitalization for generating net profit margin for BK**

Size of Equity market affect net profit	Frequency	Percent	Cumulative Percent
Strongly Agree	15	46.9	46.9
Agree	12	37.5	84.4
Neutral	1	3.1	87.5
Disagree	2	6.3	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.1 presents the perception of respondents about the effect of Equity market on the financial performance of Bank of Kigali. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that Size of Equity market affects market capitalization for generating net profit margin for BK in Rwanda. This is justified by 46.9% and 37.5% respondents who strongly agreed and agree that Size of Equity market affects market capitalization for generating net profit margin for BK in Rwanda.

The 3.1% were neutral, while 6.3% of respondents were both disagreed and strongly disagreed that Size of Equity market affects market capitalization for generating net profit margin for BK. Generally, more than 84.4% of respondents who participated during the study confirmed that Size of Equity market affects market capitalization for generating net profit margin for BK

**Table 4.2: Size dimension of equity market reflects turnover ratio of BK**

Equity market reflects turnover ratio	Frequency	Percent	Cumulative Percent
Strongly Agree	18	56.3	56.3
Agree	9	28.0	84.4
Neutral	2	6.3	90.6
Disagree	1	3.1	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.2 presents the perception of respondents about the size dimension of equity market that reflects turnover ratio of BK. Majority of respondents who participated in the study at Bank of Kigali confirmed on rate of 84.4% that size dimension of equity market reflects turnover ratio of BK. This

means that 56.3% and 28.1% respondents were strongly agreed and agree that size dimension of equity market reflects turnover ratio of BK. Only 6.3% respondents were neutral, while 3.1% and 6.3% of respondents disagreed and strongly disagreed that size dimension of equity market reflects turnover ratio of BK.

**Table 4.3: Capacity of stock market influence trading activities, diversification, and liquidity provision function of BK**

stock market influence trading activities and liquidity of BK	Frequency	Percent	Cumulative Percent
Strongly Agree	11	34.4	34.4
Agree	18	56.3	90.6
Neutral	1	3.1	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.3 presents the perception on the capacity of stock market influence trading activities, diversification, and liquidity provision function of BK in Rwanda. Out of 100.0% of respondents, the 34.4% and 56.3% of respondents strongly agreed and agree that capacity of stock market influence trading activities, diversification, and liquidity provision function of BK. The 3.1% were the neutral, disagreed, and strongly disagreed that capacity of stock market influence trading activities, diversification, and liquidity provision function of BK. More than 90.7% of respondents participated during the study confirmed that the capacity of stock market influence trading activities, diversification, and liquidity provision function of BK

**Table 4.4: Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit**

Equity market helps to increase of BK Gross profit	Frequency	Percent	Cumulative Percent
Strongly Agree	12	37.5	37.5
Agree	13	40.6	78.1
Neutral	2	6.3	84.4
Disagree	4	12.5	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.4 presents the perception on accessibility of equity market helps in the concentration of market capitalization which leads to increase of BK Gross profit. Out of 100.0% of respondents, more than of 78.1% of respondents confirmed that accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit where the 37.5% and 40.6% of respondents strongly agreed and agree that accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit. The 6.3% were the neutral, 12.5% disagreed, and 3.1% were strongly disagreed that Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit.

**Table 4.5: Equity market investment enhances trading volume for BK**

Equity market enhances trading volume	Frequency	Percent	Cumulative Percent
Strongly Agree	15	46.9	46.9
Agree	14	43.8	90.6
Neutral	1	3.1	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.5 presents the perceptions of respondents on the Equity market investment enhances trading volume for BK. Majority of respondents who participated in the study at Bank of Kigali confirmed on rate of 90.7% that Equity market investment enhances trading volume for BK. Only 3.1% respondents were neutral, disagreed and strongly disagreed that Equity market investment enhances trading volume for BK in Rwanda.

**Table 4.6: Efficiency of equity market helps to obtain high return on equity**

Equity market helps to obtain high return on equity	Frequency	Percent	Cumulative Percent
Strongly Agree	11	34.4	34.4
Agree	12	37.5	71.9
Neutral	4	12.5	84.4
Disagree	2	6.3	90.6
Strongly Disagree	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.6 presents the perception of respondents about the efficiency of equity market helps to obtain high return on equity. Out of 100.0% of respondents, majority who participated in the study at Bank of

Kigali agreed that the efficiency of equity market helps to obtain high return on equity. This is justified by the 34.4% and the 37.5% of respondents who strongly agreed and agree that the efficiency of equity market helps to obtain high return on equity. The 12.5% were neutral, while the 6.3% and the 9.4% of respondents were both disagreed and strongly disagreed that the efficiency of equity market helps to obtain high return on equity. More than 71.9% of respondents participated during the study confirmed that the efficiency of equity market helps to obtain high return on equity

**Table 4.7: Equity market becomes the detectable private information trading for BK performance**

Equity market influences BK performance	Frequency	Percent	Cumulative Percent
Strongly Agree	16	50.0	50.0
Agree	12	37.5	87.5
Neutral	2	6.3	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.7 illustrates the perception on Equity market becomes the detectable private information trading for BK performance. Out of 100.0% of respondents, more than of 87.5% of respondents confirmed that Equity market becomes the detectable private information trading for BK performance where the 50.0% and 37.5% of respondents strongly agreed and agree that Equity market becomes the detectable private information trading for BK performance. The 6.3% were the neutral, 3.1% disagreed, and strongly disagreed that Equity market becomes the detectable private information trading for BK performance.

**Table 4.8: Efficiency equity market facilitates in Liquidity / Transaction costs of BK**

Equity market facilitates in Liquidity	Frequency	Percent	Cumulative Percent
Strongly Agree	17	53.1	53.1
Agree	12	37.5	90.6
Neutral	1	3.1	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.8 presents the perception of respondents about efficiency equity market facilitates in liquidity / transaction costs of BK. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that the Efficiency equity market facilitates in liquidity / transaction costs of BK. This is justified by the 53.1% and 37.5% of respondents who strongly agreed and agree that the efficiency equity market facilitates in liquidity / transaction costs of BK. The 3.1% were both neutral, disagreed and strongly disagreed that efficiency equity market facilitates in Liquidity / Transaction costs of BK. More than 90.6% of respondents participated during the study confirmed that efficiency equity market facilitates in liquidity / Transaction costs of BK in Rwanda

**Table 4.9: Stability of equity market influences volatility of shares for profit evolution of BK**

Equity market influences volatility of shares	Frequency	Percent	Cumulative Percent
Strongly Agree	15	46.9	46.9
Agree	12	37.5	84.4
Neutral	1	3.1	87.5
Disagree	2	6.3	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 4.9 presents the perception of respondents on Stability of equity market influences volatility of shares for profit evolution of BK. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that the Stability of equity market influences volatility of shares for profit evolution of BK. This is justified by the 46.9% and the 37.5% of respondents who strongly agreed and agree that the stability of equity market influences volatility of shares for profit evolution of BK. The 3.1% were neutral, while the 6.3% of respondents were disagreed and strongly disagreed that stability of equity market influences volatility of shares for profit evolution of BK. More than 84.4% of respondents participated during the study confirmed that Stability of equity market influences volatility of shares for profit evolution of BK

**Table 4.10: Effect of equity market on the financial performance of Bank of Kigali**

	Mean	Std. Deviation	Comments
Size of Equity market affects market capitalization for generating net profit margin for BK	1.87500	1.15702	Strong heterogeneity
The size dimension of equity market reflects turnover ratio of BK	1.75000	1.13592	Strong heterogeneity
The capacity of stock market influence trading activities, diversification, and liquidity provision function of BK	1.84375	0.88388	Strong heterogeneity
Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit	2.03125	1.12118	Strong heterogeneity
Equity market investment enhances trading volume for BK	1.71875	0.92403	Strong homogeneity
The efficiency of equity market helps to obtain high return on equity	2.18750	1.25563	Strong heterogeneity
Equity market becomes the detectable private information trading for BK performance	1.71875	0.95830	Strong heterogeneity
Efficiency equity market facilitates in Liquidity / Transaction costs of BK	1.65625	0.93702	Strong heterogeneity
Stability of equity market influences volatility of shares for profit evolution of BK	1.87500	1.15702	Strong homogeneity
<b>Overall Assessment</b>	<b>1.85069</b>	<b>1.0555</b>	<b>Strong heterogeneity</b>

Source: *Primary data, (2018)*

Table 4.10 describes the effect of equity market on the financial performance of Bank of Kigali. Overall assessment shows that equity market affects the financial performance of Bank of Kigali; this was indicated by a mean of 1.85069 and a standard deviation of 1.0555. This implies that there is an effect of equity market on the financial performance of Bank of Kigali.

**Table 4.11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871 <sup>a</sup>	.759	.660	.29382



**Predictors: (Constant)**, Stability of equity market influences volatility of shares for profit evolution of BK, Equity market investment enhances trading volume for BK, the capacity of stock market influence trading activities, diversification, and liquidity provision function of BK, Efficiency equity market facilitates in Liquidity / Transaction costs of BK, the efficiency of equity market helps to obtain high return on equity, Equity market becomes the detectable private information trading for BK performance, the size dimension of equity market reflects turnover ratio of BK, Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit , and the Size of Equity market affects market capitalization for generating net profit margin for BK. It was found that model summary table 4:11 shows the R-Square of .759 with Adjusted R-Square of .660, this shows that there is significant effect of equity market on the financial performance of Bank of Kigali.

**Table 4.12: ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	5.976	9	.664	7.691	.000 <sup>b</sup>
Residual	1.899	22	.086		
Total	7.875	31			

**Dependent Variable:** Financial performance

**Predictors: (Constant)**, Stability of equity market influences volatility of shares for profit evolution of BK, Equity market investment enhances trading volume for BK, The capacity of stock market influence trading activities, diversification, and liquidity provision function of BK, Efficiency equity market facilitates in Liquidity / Transaction costs of BK, The efficiency of equity market helps to obtain high return on equity, Equity market becomes the detectable private information trading for BK performance, The size dimension of equity market reflects turnover ratio of BK, Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit , and Size of Equity market affects market capitalization for generating net profit margin for BK. The findings on ANOVA table show that Sum of Squares was 7.875 included by regression of 5.976 and residual of 1.899. Mean Square was also .664 for regression while on residual, the Mean Square was .086.

#### **4:12 Conclusion**

Companies sell stocks in order to get capital to grow their businesses. When a company offers stocks on the market, it means the company is publicly traded, and each stock represents a piece of ownership. These appeals to investors, and when a company does well, its investors are rewarded as the value of their stocks rise. The risk comes when a company is not doing well, and its stock value may fall. Stocks can be bought and sold easily and quickly, and the activity surrounding a certain stock impacts its value. For example, when there is high demand to invest in the company, the price of the stock tends to rise, and when many investors want to sell their stocks, the value goes down.

According to the results from the research done at Bank of Kigali, the researcher found that Size of Equity market affects market capitalization for generating net profit margin for BK; the size dimension of equity market reflects turnover ratio of BK; the capacity of stock market influence trading activities, diversification, and liquidity provision function of BK; accessibility of equity market helps in the concentration of market capitalization which leads to increase of BK Gross profit ; Equity market investment enhances trading volume for BK; the efficiency of equity market helps to obtain high return on equity; the equity market becomes the detectable private information trading for BK performance; the efficiency equity market facilitates in liquidity / transaction costs of BK; and stability of equity market influences volatility of shares for profit evolution of BK in Rwanda. Based to the above data the researcher confirmed that there is significant effect of equity market on the financial performance of Bank of Kigali.

## CHAPTER FIVE

### EFFECT OF BOND MARKET ON THE FINANCIAL PERFORMANCE

#### 5.0: Introduction

The chapter five of this research presents the findings on the effect of bond market on the financial performance of Bank of Kigali. The data also were collected from thirty-two respondents and the analysis of the findings was done using computer software of SPSS.

#### 5.1 Analysis and interpretation of the findings

The analysis here focuses on the effects of bond market on the financial performance of Bank of Kigali where during the study at BK, the researcher found that Bond market of BK helps to increase its interest income; accessibility of Bond market facilitates an increase of capital gain to BK; Bonds market is converted into common stock at BK to increase the bank profit; Bonds Market of BK have preference over stockholders in the payment of liquidated assets; BK used to loan money for future return in bonds market as debt investment.

The bond market is alternatively referred to as the debt, credit or fixed-income for BK; Bonds market of BK contributes on the financial performance by Mobilizing savings and investment; Bonds market of BK system helps in financial performance of this commercial bank; and BK introducing bonds market for having the financial sustainability. The tables below illustrate the perceptions from respondents confirming the bond market on the financial performance of Bank of Kigali as follows.

**Table 5.1: Bond market of BK helps to increase its interest income**

Bond market helps to increase interest income	Frequency	Percent	Cumulative Percent
Strongly Agree	12	37.5	37.5
Agree	15	46.9	84.4
Neutral	2	6.3	90.6
Disagree	2	6.3	96.9
Strongly Disagree	1	3.0	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.1 illustrates the perception on Bond market of BK helps to increase its interest income. Out of 100.0% of respondents, more than of 84.4% of respondents confirmed that Bond market of BK helps to increase its interest income where the 37.5% and 46.9% of respondents strongly agreed and agree that Bond market of BK helps to increase its interest income. The 6.3% were the neutral and

disagreed, and 3.1% were strongly disagreed that Bond market of BK helps to increase its interest income.

**Table 5.26: Accessibility of Bond market facilitates an increase of capital gain to BK**

Bond market facilitates an increase of capital gain	Frequency	Percent	Cumulative Percent
Strongly Agree	10	31.3	31.3
Agree	15	46.9	78.1
Neutral	3	9.4	87.5
Disagree	2	6.3	93.8
Strongly Disagree	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.2 presents the perception of respondents about accessibility of Bond market facilitates an increase of capital gain to BK. Out of 100.0% of respondents, more than of 78.1% of respondents confirmed that accessibility of Bond market facilitates an increase of capital gain to BK in Rwanda where the 31.3% and 46.9% of respondents strongly agreed and agree that accessibility of Bond market facilitates an increase of capital gain to BK. The 9.4% were the neutral and 6.3% disagreed and strongly disagreed that accessibility of Bond market facilitates an increase of capital gain to BK in Rwanda.

**Table 5.3: Bonds market is converted into common stock at BK to increase the bank profit**

Bonds market of BK increase the bank profit	Frequency	Percent	Cumulative Percent
Strongly Agree	13	40.6	40.6
Agree	19	59.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.3 presents the perception on the Bonds market is converted into common stock at BK to increase the bank profit where all of 100.0% respondents participated in the study confirmed that Bonds market is converted into common stock at BK to increase the bank profit

**Table 5.47: Bonds Market of BK has preference over stockholders in the payment of liquidated assets**

Bonds Market of BK has preference over stockholders	Frequency	Percent	Cumulative Percent
Strongly Agree	14	43.8	43.8
Agree	13	40.6	84.4
Neutral	1	3.1	87.5
Disagree	2	6.3	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.4 shows the perception of respondents about Bonds Market of BK has preference over stockholders in the payment of liquidated assets. Out of 100.0% of respondents, more than of 84.4% of respondents confirmed that Bonds Market of BK has preference over stockholders in the payment of liquidated assets where the 43.8% and 40.6% of respondents strongly agreed and agree that Bonds Market of BK has preference over stockholders in the payment of liquidated assets. The 3.1% were the neutral and 6.3% disagreed and strongly disagreed that Bonds Market of BK has preference over stockholders in the payment of liquidated assets.

**Table 5.5: BK used to loan money for future return in bonds market as debt investment**

BK used to loan money for future return	Frequency	Percent	Cumulative Percent
Strongly Agree	16	50.0	50.0
Agree	12	37.5	87.5
Neutral	2	6.3	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.5 above illustrates the perception from respondents on BK used to loan money for future return in bonds market as debt investment. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that the BK used to loan money for future return in bonds market as debt investment. This is justified by the 50.0% and the 37.5% of respondents who strongly agreed and agreed that BK used to loan money for future return in bonds market as debt investment. The 6.3% respondents were neutral, 3.1% of respondents were disagreed and strongly disagreed that BK used to loan money for future return in bonds market as debt investment. Majority of 87.5% of respondents confirmed that BK used to loan money for future return in bonds market as debt investment

**Table 5.6: Bond market is alternatively referred to as the debt, credit or fixed-income for BK**

Bond market is alternatively debt, credit or fixed-income for BK	Frequency	Percent	Cumulative Percent
Strongly Agree	14	43.8	43.8
Agree	12	37.5	81.3
Neutral	2	6.3	87.5
Disagree	3	9.4	96.9
Strongly Disagree	1	3.0	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.6 presents the perception of respondents on the bonds Bond market is alternatively referred to as the debt, credit or fixed-income for BK. Out of 100.0% of respondents, majority of 81.3% confirmed that the Bond market is alternatively referred to as the debt, credit or fixed-income for BK. This is confirmed by 43.8% and the 37.5% of respondents who were strongly agreed and agreed that Bond market is alternatively referred to as the debt, credit or fixed-income for BK. Only 6.3% were neutral, while 9.4% of respondents disagreed and 3.1% were strongly disagreed that Bond market is alternatively referred to as the debt, credit or fixed-income for BK. That is an indicator of how Bond market is alternatively referred to as the debt, credit or fixed-income for BK in Rwanda.

**Table 5.7: Bonds market of BK contributes on the financial performance by Mobilizing savings and investment**

	Frequency	Percent	Cumulative Percent
Strongly Agree	12	37.5	37.5
Agree	17	53.1	90.6
Neutral	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.7 shows the information from respondents of BK on the Bonds market of BK contributes on the financial performance by Mobilizing savings and investment. Out of 100.0% of respondents, majority respondents participated in the study at Bank of Kigali agreed that the Bonds market of BK contributes on the financial performance by Mobilizing savings and investment. That is indicated by 37.5% and the 53.1% of respondents strongly agreed and agreed that Bonds market of BK contributes on the financial performance by Mobilizing savings and investment. The 9.4% were neutral about the Bonds market of BK contributes on the financial performance by Mobilizing savings and investment.

Majority of 90.6% of respondents participated during the study confirmed that Bonds market of BK contributes on the financial performance by Mobilizing savings and investment.

**Table 5.88: Bonds market of BK system helps in financial performance of this commercial bank**

	Frequency	Percent	Cumulative Percent
Strongly Agree	14	43.8	43.8
Agree	12	37.5	81.3
Neutral	2	6.3	87.5
Disagree	3	9.4	96.9
Strongly Disagree	1	3.0	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.8 illustrates the perception of respondents on the bonds market of BK system helps in financial performance of this commercial bank. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that the Bonds market of BK system helps in financial performance of this commercial bank where the 43.8% and the 37.5% of respondents who strongly agreed and agree that Bonds market of BK system helps in financial performance of this commercial bank. The 6.3% were neutral, while the 9.4% of respondents disagreed and 3.1% were strongly disagreed that the bonds market of BK system helps in financial performance of this commercial bank. More than 81.3% of respondents participated in the study confirmed the Bonds market of BK system helps in financial performance of this commercial bank.

**Table 5.9: BK introducing bonds market for having the financial sustainability**

	Frequency	Percent	Cumulative Percent
Strongly Agree	15	46.9	46.9
Agree	9	28.1	75.0
Neutral	3	9.4	84.4
Disagree	3	9.4	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 5.9 presents the perception of respondents on the BK introducing bonds market for having the financial sustainability. Out of 100.0% of respondents, majority who participated in the study at Bank of Kigali agreed that the BK introducing bonds market for having the financial sustainability. That is indicated by 46.9% and the 28.1% of respondents who strongly agreed and agree that BK introducing bonds market for having the financial sustainability. The 9.4% were neutral, 9.4% of respondents

disagreed and 6.3% were strongly disagreed that the BK introducing bonds market for having the financial sustainability More than 75.0% of respondents participated during the study confirmed that BK introducing bonds market for having the financial sustainability.

**Table 5.10: Effect of bond market on the financial performance of Bank of Kigali**

	<b>Mean</b>	<b>Std. Deviation</b>	<b>Comments</b>
Bond market of BK helps to increase its interest income	1.90625	0.99545	Strong heterogeneity
Accessibility of Bond market facilitates an increase of capital gain to BK	2.09375	1.11758	Strong heterogeneity
Bonds market is converted into common stock at BK to increase the bank profit	1.59375	0.49899	Strong heterogeneity
Bonds Market of BK have preference over stockholders in the payment of liquidated assets	1.90625	1.14608	Strong heterogeneity
BK used to loan money for future return in bonds market as debt investment	1.71875	0.95830	Strong homogeneity
Bond market is alternatively referred to as the debt, credit or fixed-income for BK	1.90625	1.08833	Strong heterogeneity
Bonds market of BK contributes on the financial performance by Mobilizing savings and investment	1.71875	0.63420	Strong heterogeneity
Bonds market of BK system helps in Financial performance of this commercial bank	1.90625	1.08833	Strong heterogeneity
BK introducing bonds market for having the financial sustainability	2.00000	1.24434	Strong homogeneity
<b>Overall Assessment</b>	<b>1.86066</b>	<b>0.974222</b>	<b>Strong heterogeneity</b>

Source: *Primary data, (2018)*

Table 5.10 describes the Effect of bond market on the financial performance of Bank of Kigali. Overall assessment shows that bond market affects the financial performance of Bank of Kigali; this was indicated by a mean of 1.86066 and a standard deviation of 0.974222. This implies that there is an effect of bond market on the financial performance of Bank of Kigali

**Table 5.11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781 <sup>a</sup>	.610	.450	.37373



**Predictors: (Constant)**, BK introducing bonds market for having the financial sustainability , Bonds market of BK contributes on the financial performance by Mobilizing savings and investment, Bonds market of BK system helps in Financial performance of this commercial bank, Accessibility of Bond market facilitates an increase of capital gain to BK, Bond market of BK helps to increase its interest income , BK used to loan money for future return in bonds market as debt investment , Bonds market is converted into common stock at BK to increase the bank profit, Bonds Market of BK have preference over stockholders in the payment of liquidated assets , and Bond market is alternatively referred to as the debt, credit or fixed-income for BK. The model summary table shows that the R-Square was .610 and its adjusted R-Square was .450. This result helps us to confirm there is significant effect of bond market on the financial performance of Bank of Kigali.

**Table 5.12: ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4.802	9	.534	3.820	.005 <sup>b</sup>
Residual	3.073	22	.140		
Total	7.875	31			

**Dependent Variable:** *Financial Performance*

**Predictors: (Constant)**, BK introducing bonds markets for having the financial sustainability , Bonds markets of BK contributes on the financial performance by mobilizing savings and investment, Bonds markets of BK system helps in financial performance of this commercial bank, accessibility of Bond markets facilitates an increase of capital gain to BK, Bond markets of BK helps to increase its interest income , BK used to loan money for future return in bonds markets as debt investment , Bonds market is converted into common stock at BK to increase the bank profit, Bonds Markets of BK have preference over stockholders in the payment of liquidated assets , and Bond market is alternatively referred to as the debt, credit or fixed-income for BK. The findings on ANOVA table show that Sum of Squares was 7.875 that included by regression of 4.802 and residual of 3.073. Mean Square was also .534 for regression while on residual, the Mean Square was .140

## **Conclusion**

Analysis of the effect of bond markets on the financial performance of Bank of Kigali, the study confirmed that owning a bond is, essentially, like possessing a stream of future cash payments. Those cash payments are usually made in the form of periodic interest payments and the return of principal when the bond matures. However, in the absence of credit risk (the risk of default), the value of that stream of future cash payments is simply a function of your required return based on your inflation expectations. If that sounds a little confusing and technical, don't worry, this article will break down bond pricing, define the term bond yield, and demonstrate how inflation expectations and interest rates determine the value of a bond.

The findings on the effect of bond markets on the financial performance of bank of Kigali show that the 84.4% of respondents confirmed that Bond markets of BK helps to increase its interest income; 78.1% of respondents confirmed that accessibility of Bond markets facilitates an increase of capital gain to BK in Rwanda; all of 100.0% respondents participated in the study confirmed that Bonds markets is converted into common stock at BK to increase the bank profit; 84.4% of respondents confirmed that Bonds Markets of BK has preference over stockholders in the payment of liquidated assets; 87.5% of respondents confirmed that BK used to loan money for future return in bonds markets as debt investment; 81.3% confirmed that the Bond markets is alternatively referred to as the debt, credit or fixed-income for BK; majority of 90.6% of respondents participated during the study confirmed that Bonds markets of BK contributes on the financial performance by mobilizing savings and investment; 81.3% of respondents participated in the study confirmed the Bonds markets of BK system helps in financial performance of this commercial bank; and 75.0% of respondents participated during the study confirmed that BK introducing bonds markets for having the financial sustainability.

## CHAPTER SIX

### EFFECT OF SECURITIZED PRODUCTS ON THE FINANCIAL PERFORMANCE

#### 6.0 Introduction

This chapter presents the perceptions from respondents selected at Bank of Kigali Rwanda in relation with the effects of securitized products on the financial performance of Bank of Kigali. It shows the achievement of the third objective of this research.

#### 6.1 Analysis of data and Interpretation of Findings

During the study at BK, the findings shows that commercial mortgages offered by BK increases the internal return of this commercial bank; credit card receivables facilities BK to increase income from borrowers of this bank; Auto loans and student loans of BK increase the net profit margin since 2012 to 2017. The securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital; the securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.

The securitized products provide profits for financial intermediaries by keeping the profits from the spread; the securitized products create an attractive asset class for investors; securitized products make non-tradable assets tradable. The securitization describes the process of pooling financial assets and turning them into tradable securities for BK in Rwanda. So, the tables presented in this chapter show the perceptions of respondents on the effect of securitized products on the financial performance of Bank of Kigali.

**Table 6.1: Commercial mortgages offered by BK increases the internal return of this commercial bank**

	Frequency	Percent	Cumulative Percent
Strongly Agree	18	56.3	56.3
Agree	9	28.1	84.4
Neutral	1	3.1	87.5
Disagree	1	3.1	90.6
Strongly Disagree	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.2 shows the perceptions of respondents on the commercial mortgages offered by BK increases the internal return of this commercial bank. More than 84.4% confirmed that commercial mortgages offered by BK increases the internal return of this commercial bank; these are included by 56.3% and

28.1% of respondents who were strongly agreed and agreed that Commercial mortgages offered by BK increases the internal return of this commercial bank. Only 3.1% respondents were neutral and disagree, and the 9.4% respondents were strongly disagreed that the commercial mortgages offered by BK increases the internal return of this Commercial Bank.

**Table 6.2: Credit card receivables facilities BK to increase income from borrowers of this bank**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	11	34.4	34.4
Agree	14	43.8	78.1
Neutral	1	3.1	81.3
Disagree	4	12.5	93.8
Strongly Disagree	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.2 presents information about the credit card receivables facilities BK to increase income from borrowers of this bank. Out of 100.0% of respondents, 34.4% and the 43.8% of respondents were strongly agreed and agreed that Credit card receivables facilities BK to increase income from borrowers of this bank. The 3.1% respondents were neutral, 12.5% of respondents disagreed and 6.3% were strongly disagreed that Credit card receivables facilities BK to increase income from borrowers of this bank. Majority of 78.1% of respondents participated in the study confirmed credit card receivables facilities BK to increase income from borrowers of this bank.

**Table 6.3: Auto loans and student loans of BK increase the net profit margin**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	10	31.3	31.3
Agree	12	37.5	68.8
Neutral	8	25.0	93.8
Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.3 presents the perception of respondents on the Auto loans and student loans of BK increase the net profit margin since 2012 to 2017. Out of 100.0% of respondents, majority of 68.8% agreed that the Auto loans and student loans of BK increase the net profit margin since 2012 to 2017 including the 31.3% and the 37.5% respondents who were strongly agreed and agree that Auto loans and student loans of BK increase the net profit margin since 2012 to 2017. Only 6.3% were neutral about Auto loans and student loans of BK increase the net profit margin since 2012 to 2017.

**Table 6.4: Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital**

	Frequency	Percent	Cumulative Percent
Strongly Agree	14	43.8	43.8
Agree	7	21.9	65.6
Neutral	5	15.6	81.3
Disagree	4	12.5	93.8
Strongly Disagree	2	6.2	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.4 shows the confirmation level of respondents on securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital. Out of 100.0% of respondents, 43.8% and the 21.9% of respondents were strongly agreed and agreed that securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital. The 15.6% were neutral, 12.5% of respondents disagreed and 6.3% were strongly disagreed that securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital. Majority of 65.6% respondents participated in the study at BK Rwanda confirmed securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital.

**Table 6.5 Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.**

	Frequency	Percent	Cumulative Percent
Strongly Agree	15	46.9	46.9
Agree	14	43.8	90.6
Neutral	1	3.1	93.8
Disagree	1	3.1	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.5 presents the perception of respondents on securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth. Out of 100.0% of respondents, 46.9% and 43.8% of respondents strongly agreed and agreed that securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK

growth. Only the 3.1% were neutral, disagreed and strongly disagreed that securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth. More than 90.6% of respondents participated during the study confirmed that securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.

**Table 6.6: Securitized products provides profits for financial intermediaries by keeping the profits from the spread**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	14	43.8	43.8
Agree	14	43.8	87.5
Neutral	2	6.3	93.8
Disagree	1	3.0	96.9
Strongly Disagree	1	3.1	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.6 presents the perception of respondents on securitized products provides profits for financial intermediaries by keeping the profits from the spread. Out of 100.0% of respondents, 43.8% of respondents were both strongly agreed and agreed that securitized products provide profits for financial intermediaries by keeping the profits from the spread. The 6.3% were neutral, 3.1% of respondents disagreed and strongly disagreed that securitized products provide profits for financial intermediaries by keeping the profits from the spread. Majority of 87.5% of respondents confirmed that securitized products provide profits for financial intermediaries by keeping the profits from the spread.

**Table 6.7: Securitized products creates an attractive asset class for investors**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	10	31.3	31.3
Agree	17	53.0	84.3
Neutral	2	6.3	90.6
Disagree	1	3.1	93.8
Strongly Disagree	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.7 presents the perception of respondents on the securitized products creates an attractive asset class for investors. Out of 100.0% of respondents, majority who participated in the study at Bank of

Kigali agreed that securitized products create an attractive asset class for investors. That is indicated by 31.3% and the 53.1% of respondents who strongly agreed and agree that securitized products creates an attractive asset class for investors. The 6.3% were neutral, 3.1% of respondents disagreed and 6.3% strongly disagreed that securitized products creates an attractive asset class for investors. More than 84.4% respondents participated in the study confirmed that securitized products create attractive asset class for investors

**Table 6.8: Securitized products Makes non-tradable assets tradable**

	Frequency	Percent	Cumulative Percent
Strongly Agree	12	37.5	37.5
Agree	11	34.4	71.9
Neutral	3	9.4	81.3
Disagree	3	9.4	90.6
Strongly Disagree	3	9.4	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.8 presents the perception of respondents on the securitized products makes non-tradable assets tradable. Out of 100.0% of respondents, majority of 71.9% participated in the study at Bank of Kigali confirmed that securitized products makes non-tradable assets tradable. That is indicated by 37.5% and the 34.4% of respondents strongly agreed and agreed that securitized products make non-tradable assets tradable. The 9.4% respondents neutral, disagreed and strongly disagreed that securitized products makes non-tradable assets tradable.

**Table 6.9: Securitization describes the process of pooling financial assets and turning them into tradable securities for BK**

	Frequency	Percent	Cumulative Percent
Strongly Agree	11	34.3	34.3
Agree	16	50.0	84.3
Neutral	2	6.3	90.6
Disagree	1	3.1	93.7
Strongly Disagree	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

Source: *Primary data, (2018)*

Table 6.9 illustrates the perception of respondents on the securitization describes the process of pooling financial assets and turning them into tradable securities for BK. Out of 100.0% of respondents, 34.4% and 50.0% of respondents strongly agreed and agreed that securitization describes

the process of pooling financial assets and turning them into tradable securities for BK. Only 6.3% respondents were neutral, the 3.1% of respondents disagreed and 6.3% strongly disagreed that securitization describes the process of pooling financial assets and turning them into tradable securities for BK. Majority of 84.4% of respondents confirmed that securitization describes the process of pooling financial assets and turning them into tradable securities for BK.

**Table 6.10: Effect of securitized products on the financial performance of Bank of Kigali**

	<b>Mean</b>	<b>Std. Deviation</b>	<b>Comments</b>
Commercial mortgages offered by BK increases the internal return of this commercial bank	1.81250	1.25563	Strong heterogeneity
Credit card receivables facilities BK to increase income from borrowers of this bank	2.12500	1.21150	Strong heterogeneity
Auto loans and student loans of BK increase the net profit margin since 2013 to 2017	2.06250	0.91360	Strong heterogeneity
Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital	2.15625	1.29787	Strong heterogeneity
Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.	1.71875	0.92403	Strong homogeneity
Securitized products provides profits for financial intermediaries by keeping the profits from the spread	1.78125	0.94132	Strong heterogeneity
Securitized products creates an attractive asset class for investors	2.0000	1.04727	Strong heterogeneity
Securitized products Makes non-tradable assets tradable	2.18750	1.30600	Strong heterogeneity
Securitization describes the process of pooling financial assets and turning them into tradable securities for BK	1.96875	1.06208	Strong homogeneity
<b>Overall Assessment</b>	<b>1.978777</b>	<b>1.106222</b>	<b>Strong heterogeneity</b>

Source: Primary data, (2018)

Table 6.10 describes the securitized products influences the financial performance of Bank of Kigali. Overall assessment shows that securitized products influence the financial performance of Bank of Kigali.; this was indicated by a mean of 1.978777, and a standard deviation of 1.106222. This implies that there is significant effect of securitized products on the financial performance of Bank of Kigali.



**Table 6.11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.862 <sup>a</sup>	.743	.638	.30339

**Predictors: (Constant)**, Securitization describes the process of pooling financial assets and turning them into tradable securities for BK, Securitized products provides profits for financial intermediaries by keeping the profits from the spread, Commercial mortgages offered by BK increases the internal return of this commercial bank, Securitized products creates an attractive asset class for investors, Securitized products Makes non-tradable assets tradable, Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth, Auto loans and student loans of BK increase the net profit margin since 2012 to 2017, Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital , Credit card receivables facilities BK to increase income from borrowers of this bank. The model summary table shows that the R-Square was .743 and its adjusted R-Square was .638. However, this result helps us to confirm there is significant the effect of securitized products on the financial performance of Bank of Kigali

**Table 6.12 :ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	5.850	9	.650	7.062	.000 <sup>b</sup>
1 Residual	2.025	22	.092		
Total	7.875	31			

**Dependent Variable:** *Financial Performance*

**Predictors: (Constant)**, securitization describes the process of pooling financial assets and turning them into tradable securities for BK, Securitized products provides profits for financial intermediaries by keeping the profits from the spread, Commercial mortgages offered by BK increases the internal return of this commercial bank, Securitized products creates an attractive asset class for investors, Securitized products Makes non-tradable assets tradable, Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth., Auto loans and student loans of BK increase the net profit margin since 2013 to 2017, Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital, and Credit card receivables facilities BK to increase income from borrowers of this bank. ANOVA table shows that Sum of Squares was 7.875 combining the regression of 5.850; and residual of 2.025. Mean Square was .650for regression while .092 was on the side of residual in the Mean Square.

## CHAPTER SEVEN

### CAPITAL MARKETS AND FINANCIAL PERFORMANCE OF BK RWANDA

#### 7.0: Introduction

This chapter illustrates the relationship between Capital Markets and financial performance of BK Rwanda using computer software of SPSS version 20.0 by analyzing linear regression between the factors representing independent variable and the factors indicating dependent variable.

#### 7.1: Contribution of Capital Markets on the Financial Performance of BK Rwanda

Silva (2008) argued that there is contribution of capital structure on MFIs performance. This study found that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Long term debt ratio had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. This shows that if MFIs use long term debt to finance their operations, there may not be a pressure on management of MFI.

MINECOFIN (2013) elaborated the Rwanda Financial Sector Strategy and Capital Markets structure. The overarching vision of the sector is to develop a stable and sound financial sector that is sufficiently deep and broad, capable of efficiently mobilizing and allocating resources to address the development needs of the economy and reduce poverty. This five year strategy has been developed to address the major challenges in the Rwandan Financial sector covering the period of 2013-2018 which will enable the country is financial sector to play significant role to transforming and contributing meaningfully to the development objectives of the country. The strategy focuses on the following most critical priorities namely mobilizing savings and investment; access to finance; financial inclusion; modernized payment systems; skills development for the financial sector; international financial service centre; and mobilizing savings for investment. This section illustrates the perceptions of respondents of BK on the contribution of Capital Markets on the financial performance of BK Rwanda as follows.

**Table 7.1: Capital markets contributes to BK in Mobilizing savings and investment**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	10	31.25	31.25
Agree	20	62.5	93.75
Disagree	2	6.25	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source:** *primary data, (2018)*

Table 7.1 presents the agreement of respondents about how with Capital Markets contributes to BK to Mobilize savings and investment. Where, 31.25% and 62.5% respondents were strongly agree and agree that with Capital Markets contributes to BK to Mobilize savings and investment, while, only 5.1% respondents were disagreed that with Capital Markets contributes to BK to Mobilize savings and investment. Majority of 93.75% respondents confirmed that with Capital Markets contributes to BK to Mobilize savings and investment.

**Table 7.29: Capital Markets of BK on Rwandan marketplace helps customers to access Finance**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	9	28.1	28.1
Agree	21	65.6	93.7
Disagree	2	6.3	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source: primary data, (2018)**

Table 7.2 presents the agreement of respondents about how Capital Markets of BK on Rwandan marketplace helps customers to access Finance. Where 28.1% and 65.6% respondents were strongly agree and agree that Capital Markets of BK on Rwandan marketplace helps customers to access Finance, while, only 6.25% respondents were disagreeing that Capital Markets of BK on Rwandan marketplace helps customers to access Finance. Majority of 93.7% respondents confirmed that Capital Markets of BK on Rwandan marketplace helps customers to access Finance

**Table 7.3: Capital Markets of BK Modernized Payment Systems in financial services**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	10	31.25	31.25
Agree	20	62.5	93.75
Disagree	2	6.25	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source: primary data, (2018)**

Table 7.3 presents the agreement of respondents about how Capital Markets of BK Modernized Payment Systems in financial services. Where, 31.25% and 65.5% respondents were strongly agree and agree that Capital Markets of BK Modernized Payment Systems in financial services, while, only 3.25% respondents were disagreeing that Capital Markets of BK Modernized Payment Systems in financial services. Majority of 96.9% respondents confirmed that Capital Markets of BK Modernized Payment Systems in financial services.

**Table 7.4: Capital Markets of BK Promoting usages of financial products and services**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly Agree	8	25.0	25.0
Agree	20	62.5	87.5
Disagree	4	12.5	100.0
<b>Total</b>	<b>32</b>	<b>100.0</b>	

**Source: primary data, (2018)**

Table 7.4 presents the agreement of respondents about Capital Markets of BK Promoting usages of financial products and services, where 25.0% and 62.5% respondents were strongly agree and agree that Capital Markets of BK Promoting usages of financial products and services, while, only 12.5% respondents were disagreeing that Capital Markets of BK Promoting usages of financial products and services. Majority of 87.5% respondents confirmed that Capital Markets of BK promoting usages of financial products and services.

Mohamad (1994) made a research on the relationship between Capital Markets and profitability of listed industrial firms on the main board of the Kuala Lumpur Stock Exchange (KLSE). Mohamad used ordinary least squares and Correlation Analysis to analyze the data which consisted of two sets. Profitability was measured by the Return on Investment, whereas capital structure had two indicators: debt to equity ratio and debt to total assets ratio. Once again, the M&M propositions were disputed as Mohamad made the following conclusions: “the results showed that there were significant relationships between market imperfections changes in capital structure on firm’s profitability. The study was also in agreement with the U.S. findings where debt and equity size were negatively related to firm’s profitability.

## **7.2 Linear Regression Analysis**

A linear regression line is used as an equation of the form  $Y = a + bX$ , where  $X$  is the explanatory variable and  $Y$  is the dependent variable. The slope of the line is  $b$ , and  $a$  is the intercept (the value of  $y$  when  $x = 0$ ). The study uses linear regression by analyzing the Capital Markets in terms of “*Bond market; Securitized products; and Equity market investment*” as independent variable, with financial performance in terms of “*profitability; liquidity, and Capital adequacy*” as dependent variable. The study used the formula of  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$

$Y$  is dependent variable indicator which is “financial performance”  $X$  is independent variable factors which are “Bonds market; Securitized products; and Equity market investment”.

### 7.2.1 Capital Markets and profitability of Bank of Kigali Rwanda

This section shows the influences of Capital Markets to the profitability of Bank of Kigali Rwanda as table 7.5 indicated as follows:

**Table 7.5: Linear Regression Test of Capital Markets factors on the profitability of BK Rwanda**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.948	.521		7.578	.000
1 Bond market	.336	.146	.366	2.307	.029
Securitized products	.449	.156	.455	2.887	.007
Equity market investment	.275	.157	.278	1.752	.091

#### a. Dependent Variable: Profitability of BK Rwanda

The Linear Regression Test between Capital Markets and profitability of BK Rwanda show the result of  $y = 3.948 + 0.336X_1 + 0.449X_2 + 0.275X_3 + \varepsilon$

The  $X_1$  represent Bond market,  $X_2$  represent Securitized products,  $X_3$  is Equity market investment and lastly,  $\varepsilon$  represents standard errors. As explained by the linear regression equation, it is clear that one unit change of  $X_1$ ,  $X_2$ , and  $X_3$  lead to change times 0.336, 0.449, and 0.275 of dependent variable respectively. In the other case if all independent variable indicators are zero, the dependent variable equals to the constant (3.948).

Thus, according to the results indicated to the table 7.5, there is positive relationship between profitability and Bond market; securitized products; and Equity market investment as indicators of capital markets.

- ✓ When BK Rwanda adopts Bond market only without other factors, result on the profitability became  $y = 3.948 + 0.336X_1 + .146$ ;
- ✓ While BK used Securitized products without the presence of bond market and equity market, the profitability result was  $y = 3.948 + 0.449X_2 + .156$ ;
- ✓ Therefore when BK used only Equity Market investment, the profitability was becoming  $y = 3.948 + 0.275X_3 + .157$

Liebenstein, (1966) argued that bond is a debt investment in which an investor loans money to an entity (corporate or government), which borrows the funds for a definite period of time at a fixed interest rate. Bonds are used by companies, municipalities, states and foreign governments to finance a

variety of projects and activities. They can be bought and sold by investors in the credit markets around the world. This market is alternatively referred to as the debt, credit or fixed-income market. It is much larger in nominal terms than the world's stock markets. Bonds and stocks compete for investment money at a fundamental level, which suggests that strengthening equity market would attract funds away from bonds. This would tend to lower the demand for bonds; sellers would have to lower prices to attract buyers.

### 7.2.2 Capital Markets and Liquidity of Bank of Kigali Rwanda

This section illustrates the influence of Capital Markets and liquidity of Bank of Kigali Rwanda as table 7.6 presented as follows.

**Table 7.6: Linear Regression Test of Capital Markets factors on the Liquidity of Bank of Kigali Rwanda**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.170	.658		1.778	.089
Bond market	.203	.083	.01	2.434	.024
Securitized products	.148	.076	.028	1.939	.065
Equity market investment	.343	.210	.039	1.629	.117

#### a. Dependent Variable: Liquidity of BK Rwanda

Linear Regression Test between Capital Markets factors and Liquidity of Bank of Kigali Rwanda shows the result of  $y = 1.170 + 0.203X_1 + 0.148X_2 + 0.343X_3 + \varepsilon$

The  $X_1$  represent Bond market,  $X_2$  represent Securitized products,  $X_3$  is Equity market investment and lastly,  $\varepsilon$  represents standard errors. As explained by the linear regression equation, it is clear that one unit change of  $X_1$ ,  $X_2$ , and  $X_3$  lead to change times 0.203, 0.148, and 0.343 of dependent variable respectively. In the other case if all independent variable indicators are zero, the dependent variable equals to the constant (1.170). Thus, according to the result indicated to the table 7.06, there is significant influence between liquidity and Bond market; securitized products; Equity market investment as indicators of Capital Markets of BK Rwanda.

Bond market of BK Rwanda influences the liquidity of BK Rwanda on  $y = 1.170 + 0.203X_1 + .083$

Securitized products of BK Rwanda influences the liquidity on  $y = 1.170 + 0.148X_2 + .076$

When BK used only Equity Market investment, the liquidity was  $y = 1.170 + 0.343.X_3 + .210$

Hüttenrauch& Schneider, (2009) argued that securitization can contribute to banks’ stability. Banks can expand financing resources through securitization to reduce the ratio of current assets with higher holding cost, which can improve the profit of banks and increase the loan supply. The securitization can reduce the sensitivity of loan supply to the external financing cost and reduce return volatility. During the financial crisis, the effect of securitization on large banks’ stability has not changed while the effect has changed for small banks. As the market evolved, these new securities were further “sliced” or “trenched” into various categories to provide investors with choices of cash flow parameters, income characteristics, and risk profile.

### 7.2.3 Capital Markets and Capital adequacy of Bank of Kigali Rwanda

This section illustrates the information about the relationship between Capital Markets and Capital adequacy of Bank of Kigali Rwanda

**Table 7.7: Linear Regression Test of Capital Markets factors on Capital adequacy of Bank of Kigali Rwanda**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>(Constant)</b>	1.028	.394		2.609	.016
<b>1</b> Bond market	.106	.182	.244	.585	.565
Securitized products	.131	.061	.295	2.144	.043
Equity market investment	-.021	.161	-.036	-.129	.898

**a. Dependent Variable: Capital adequacy of Bank of Kigali Rwanda**

Linear Regression Test of Capital Markets actors on Capital adequacy of Bank of Kigali Rwanda shows the result of  $y = 1.028 + 0.106X_1 + 0.131X_2 - 0.021X_3 + \varepsilon$

The  $X_1$  represent Bond market,  $X_2$  represent Securitized products,  $X_3$  is Equity market investment and lastly,  $\varepsilon$  represents standard errors. As explained by the linear regression equation, it is clear that one unit change of  $X_1$ ,  $X_2$ , and  $X_3$  lead to change times 0.106, 0.131, and - 0.021of dependent variable respectively. In the other case if all independent variable indicators are zero, the dependent variable equals to the constant (1.028). Thus, according to the result indicated in table 7.7, there is significant



influence between capital adequacy and Bond market; securitized products as indicators of Capital Markets of BK Rwanda. Bond market of BK Rwanda influences capital adequacy of BK Rwanda on  $y = 1.028 + 0.106X_1 + .182$

Securitized products of BK Rwanda influences the liquidity on  $y = 1.028 + 0.131X_2 + .061$

When BK used only Equity Market investment, the liquidity was  $y = 1.028 - 0.021X_3 + .161$

Levine, (2003) argued that Equity market allows investors to buy and sell shares in publicly traded companies. They are one of the most vital areas of a market economy as they provide companies with access to capital and investors with a slice of ownership in the company and the potential of gains based on the company's future performance. This market can be split into two main sections: the primary market and the secondary market. The primary market is where new issues are first offered, with any subsequent trading going on in the secondary market.

Information content of earnings is an important issue for investors. Various valuation models arrive at the equity market base on different aspects of financial performance. The earnings approach estimates the value of common stock based on size, degree of certainty and the rate of growth of corporate earnings per share whereas in the dividend approach the present worth of a common stock is the sum of its discounted future cash receipts in the form of dividends and cash proceeds from its eventual sale (Bauman, 1965).

### 7.3 Financial Performance of Bank of Kigali Rwanda after joining Capita Markets

The profitability ratio is considered as one measure of financial performance of commercial bank like Bank of Kigali. However the common profitability ratios used in analyzing of BK financial performance include GPM Ratio, Net Profit Margin Ratio (NPM), Return on Assets (ROA), Return on Equity (ROE).

**Table 7.8: Gross Profit Margin (GPM) Ratio of Bank of Kigali**

	2012 "Rwf '000"	2013 "Rwf '000"	2014 "Rwf '000"	2015 "Rwf '000"	2016 "Rwf '000"	2017 "Rwf '000"
Gross Profit (GP)	14 466 909	18 756 236	22 758 705	25,737,232	29,981,115	34172034
Net Sales (NS)	34,758,424	44,759,241	50,637,587	56,170,282	59,823,515	74609432
<b>GPM:</b> GP/NS*100	<b>41.62%</b>	<b>41.90%</b>	<b>44.94%</b>	<b>45.82%</b>	<b>50.12%</b>	<b>45.80%</b>

Source: Secondary data, BK annual reports,(2017)

The GPM indicates the percentages of sales available for expenses and profit after the cost of merchandise is deducted from sales. Table 7.8 above illustrates the profitability evolution of BK in 2012 was 41.62% increased clearly in 2013 until 41.90% and in 2014, Gross profit Margin was 44.94% . The year 2015, GPM was 45.82%; 2016 GPM was 50.12% and 2017, it was 45.80%

**Table 7.9 : Net profit ratios of Bank of Kigali**

	2012 “Rwf ‘000”	2013 “Rwf ‘000”	2014 “Rwf ‘000”	2015 “Rwf ‘000”	2016 “Rwf ‘000”	2017 “Rwf ‘000”
<b>Net profit</b>	11,781,336	14,830,235	18,316,825	20,484,058	20755867	23348880
<b>Net sales</b>	34,758,424	44,759,241	50,637,587	56,170,282	59823515	74609432
<b>NPM NP/NS*100</b>	33.89%	33.13%	36.17%	36.46%	34.70%	31.29%

**Source: Secondary data, BK annual reports, (2017)**

The Profit margin (after tax) tells you the profit per sales after all expenses are deducted from sales. The table 7.9 presents the net profit ratio in 2012 which is 33.89%%; in 2013 net profit increased on 33.13%%; in 2014, NP was 36.17%; in 2015, NP was 36.46%. 2016, NPM was 34.46%; and in 2017, NPM was 31.29%.

**Table 6.10: Return on Equity of Bank of Kigali**

	2012 “Rwf ‘000”	2013 “Rwf ‘000”	2014 “Rwf ‘000”	2015 “Rwf ‘000”	2016 “Rwf ‘000”	2017 “Rwf ‘000”
Net income	11,781,336	14,830,235	18,316,825	20,484,058	20755867	23348880
Shareholder Investment	63,107,293	70,763,684	89,547,734	99,245,545	108485600	122750132
<b>ROE= NI/SI*100</b>	18.66%	20.95%	20.45%	20.63%	19.13%	19.02%

**Source: Secondary data, BK annual reports, (2017)**

Returned stockholders ‘equity (after tax) reveals the percentage of profit after income taxes that the corporation earned on its average common stockholders ‘balances preferred stock, or the earnings per shares (EPS): Expresses the corporation’s net income after tax on a per share of common stock basis.  $EPS = \text{Net income after tax} / \text{weighted average number of common shares outstanding}$ . The table 7.51 shows that ROE was in 2012 became 18.66%, while in 2013 was became 20.95% and in 2014 became 20.45%, and in 2015, ROE was 20.63%. In 2016, ROE was 19.13%, and 2017 it became 19.02%.

**Table 7.11: Return on Assets of Bank of Kigali**

	2012 "Rwf '000"	2013 "Rwf '000"	2014 "Rwf '000"	2015 "Rwf '000"	2016 "Rwf '000"	2017 "Rwf '000"
Net income	11,781,336	14,830,235	18,316,825	20,484,058	20,755,867	23,348,880
Assets	322,794,214	422,360,073	482,607,964	561,226,400	638,336,598	727,204,700
<b>ROA=(NI/A*100)</b>	3.64%	3.51%	3.79%	3.64%	3.25%	3.21%

Source: Secondary data, BK Annual reports, (2017)

The table 7.11 presents return on Asset was in 2012 was 3.64%, in 2013; return on asset was 3.51%, in 2014, ROA was 3.79% while the year of 2015, ROA was 3.64% and in 2016, ROA was 4.10%. In 2016, ROA was 3.25% while in 2017, ROA was 3.21%.

**Table 7.12: Current Ratio of Bank of Kigali**

	2012 "Rwf '000"	2013 "Rwf '000"	2014 "Rwf '000"	2015 "Rwf '000"	2016 "Rwf '000"	2017 "Rwf '000"
Current assets	54,304,202	199,023,241	233,439,509	313,925,535	385,824,570	471,704,315
Current liabilities	5,894,345	8,705,581	10,860,278	9,656,897	628,6996	17,390,729
<b>CR= (CA/CL)</b>	9.21	22.86	21.49	32.50	6136.87	2712.38

Source: Secondary data, BK annual reports, (2017)

The current ratio measures the liquidity of the company. It provides the investor with a measure of the company's ability to pay current liabilities with current assets. The calculation of the measure is current ratio equals current assets / current liabilities. The table 7.12 presents the current ratio of BK where current ratio was 9.21 in 2012; CR was 22.86 in 2013; and in 2014, CR was 21.49, and in 2015, CR was 32.50; in 2016, CR was 6136.87 and 2017, CR was 2712.38.

**Table 7.13: Cash Assets Ratio**

	2012 "Rwf '000"	2013 "Rwf '000"	2014 "Rwf '000"	2015 "Rwf '000"	2016 "Rwf '000"	2017 "Rwf '000"
Current Assets	54,304,202	199,023,241	233,439,509	313,925,535	385,824,570	471,704,315
Marketable Securities	63,107,295	70,763,684	89,547,734	99,245,545	108,485,600	122,750,132
Total current liabilities	5,894,345	8,705,581	10,860,278	9,656,897	628,6996	17,390,729
<b>CA+MS/TCL</b>	19.91	30.99	29.74	42.79	44.11	20.06

Source: Secondary data, BK annual reports, (2017)

The table 7.13 illustrates cash asset ratio equals to 19.91 in 2012; 30.99 in 2013; cash assets ratio was 29.74 in 2014 and in 2015, cash assets ratio was 42.79. In 2016, Cash Assets Ratio was 44.11 and in 2017, Cash Assets Ratio was 20.06

## **CHAPTER EIGHT**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **8.0 Introduction**

This chapter presents the summary of the analysis and data collected the foregoing discussions, conclusions and suggestions which were made. The response was based on the objectives of the study.

#### **8.1 Summary of Major Findings**

The questionnaire was distributed to 32 respondents' employees of BK and they have been given one week and two days of responding the questions where the researcher found the participation rate of 100.0% of respondents. This section illustrates summary of main findings in relation with the effect of equity market on the financial performance of Bank of Kigali; the effect of bond market on the financial performance of Bank of Kigali; and the effect of securitized products on the financial performance of Bank of Kigali.

##### **8.1.1 Effect of equity markets on the financial performance of Bank of Kigali**

The results show that the perceptions of respondents about effect of equity markets on the financial performance of Bank of Kigali Rwanda. The findings show that more than 84.4% of respondents who participated during the study confirmed that Size of Equity market affects market capitalization for generating net profit margin for BK; 84.4% that size dimension of equity market reflects turnover ratio of BK; 90.7% of respondents participated during the study confirmed that the capacity of stock market influence trading activities, diversification, and liquidity provision function of BK; the 78.1% of respondents confirmed that accessibility of equity market helps in the concentration of market capitalization which leads to increase of BK Gross profit; 90.7% that Equity markets investment enhances trading volume for BK; 71.9% of respondents participated during the study confirmed that the efficiency of equity market helps to obtain high return on equity; 87.5% of respondents confirmed that Equity markets becomes the detectable private information trading for BK performance.

The 90.6% of respondents participated during the study confirmed that efficiency equity market facilitates in liquidity / Transaction costs of BK in Rwanda; 84.4% of respondents participated during the study confirmed that Stability of equity market influences volatility of shares for profit evolution of BK.

Overall assessment shows that equity market affects the financial performance of Bank of Kigali; this was indicated by a mean of 1.85069 and a standard deviation of 1.0555. This implies that there is an effect of equity market on the financial performance of Bank of Kigali. It was found that model summary table shows the R-Square of .759 with Adjusted R-Square of .660, this shows that there is significant effect of equity market on the financial performance of Bank of Kigali. The findings on ANOVA table show that Sum of Squares was 7.875 included by regression of 5.976 and residual of 1.899. Mean Square was also .664 for regression while on residual, the Mean Square was .086

An equity market is a market in which shares are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance. A market that gives companies a way to raise needed capital and gives investors an opportunity for gain by allowing those companies' stock shares to be traded. Information content of earnings is an important issue for investors. Various valuation models arrive at the equity markets base on different aspects of financial performance. The earnings approach estimates the value of common stock based on size, degree of certainty and the rate of growth of corporate earnings per share whereas in the dividend approach the present worth of a common stock is the sum of its discounted future cash receipts in the form of dividends and cash proceeds from its eventual sale (Bauman, 1965). As to recommend, BK should improve the way equity market implemented in order to achieve great performance where this helps this commercial bank to increase its return on equity.

### **8.1.2 Effect of bond markets on the financial performance of Bank of Kigali**

The results show the appreciation of respondents on the effect of bond market on the financial performance of Bank of Kigali where the findings on the effect of bond market on the financial performance of bank of Kigali show that the 84.4% of respondents confirmed that Bond market of BK helps to increase its interest income; 78.1% of respondents confirmed that accessibility of Bond market facilitates an increase of capital gain to BK in Rwanda; all of 100.0% respondents participated in the study confirmed that Bonds market is converted into common stock at BK to increase the bank profit; 84.4% of respondents confirmed that Bonds Market of BK has preference over stockholders in the payment of liquidated assets; 87.5% of respondents confirmed that BK used to loan money for future return in bonds market as debt investment; 81.3% confirmed that the Bond market is alternatively referred to as the debt, credit or fixed-income for BK; majority of 90.6% of respondents

participated during the study confirmed that Bonds market of BK contributes on the financial performance by Mobilizing savings and investment; 81.3% of respondents participated in the study confirmed the Bonds market of BK system helps in financial performance of this commercial bank; and 75.0% of respondents participated during the study confirmed that BK introducing bonds market for having the financial sustainability.

Overall assessment shows that bond market affects the financial performance of Bank of Kigali; this was indicated by a mean of 1.86066 and a standard deviation of 0.974222. This implies that there is an effect of bond market on the financial performance of Bank of Kigali. The model summary table shows that the R-Square was .610 and its adjusted R-Square was .450. This result helps us to confirm there is significant effect of bond market on the financial performance of Bank of Kigali. The ANOVA table shows the Sum of Squares of 7.875 included by regression of 4.802 and residual of 3.073. Mean Square was .534 for regression while on residual, the Mean Square was .140

Liebenstein (1966) argued bond is a debt investment in which an investor loans money to an entity (corporate or governmental), which borrows the funds for a defined period of time at a fixed interest rate. Bonds are used by companies, municipalities, states and foreign governments to finance a variety of projects and activities. Bonds can be bought and sold by investors on credit markets around the world. This market is alternatively referred to as the debt, credit or fixed-income market. It is much larger in nominal terms than the world's stock markets. BK should check debt investment in which an investor loans money to an entity which borrows the funds in defined period of time at a fixed interest rate in order to bring back high internal rate of return to this commercial bank.

### **8.1.3 Effect of securitized products on the financial performance of Bank of Kigali**

The findings confirmed that more than 84.4% confirmed that commercial mortgages offered by BK increases the internal return of this commercial bank; 78.1% of respondents participated in the study confirmed credit card receivables facilities BK to increase income from borrowers of this bank; 68.8% agreed that the Auto loans and student loans of BK increase the net profit margin; 65.6% respondents participated in the study at BK Rwanda confirmed securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital; 90.6% of respondents participated during the study confirmed that securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth; 87.5% of respondents confirmed that securitized products provide profits for financial intermediaries by keeping

the profits from the spread; 84.4% respondents participated in the study confirmed that securitized products create attractive asset class for investors; 71.9% participated in the study at Bank of Kigali confirmed that securitized products makes non-tradable assets tradable; 84.4% of respondents confirmed that securitization describes the process of pooling financial assets and turning them into tradable securities for BK.

Overall assessment shows that securitized products influence the financial performance of Bank of Kigali.; this was indicated by a mean of 1.97877, and a standard deviation of 1.1062. This implies that there is significant effect of securitized products on the financial performance of Bank of Kigali. The model summary table shows that the R-Square was .743 and its adjusted R-Square was .638. However, this result helps to confirm there is significant the effect of securitized products on the financial performance of Bank of Kigali. ANOVA table shows that Sum of Squares was 7.875 combining the regression of 5.850; and residual of 2.025. Mean Square was .650 for regression while .092 was on the side of residual in the Mean Square.

Norman (1957) stated that the more efficiently the stock exchange functions, the more readily can those with savings on hand buy variable price securities, and more easily can they sell them when they need to. Thus both borrowers and lenders are better off if efficient Capital Markets is used to facilitate fund transfers. Moreover, according to Pandey (2002), the security prices in the Capital Markets have been observed to move randomly and unpredictably, implying that investors in the Capital Market stake a quick cognizance of all information relating to security prices, and that security prices quickly adjust to such information. As to recommend, BK is advised to improve the Capital Markets system in order to improve a financial market in which long term capital are sourced for in order to transfer funds between lenders and borrowers efficiently.

#### **8.1.4 The Capital Markets and financial performance of Bank of Kigali**

Thus, according to the result indicated that there is positive relationship between profitability and Bond market; securitized products; and Equity market investment as indicators of capital markets. When BK Rwanda adopts Bond market only without other factors, result on the profitability became  $y = 3.948 + 0.336X_1 + .146$ ; while BK used Securitized products without the presence of bond market and equity market, the profitability result was  $y = 3.948 + 0.449X_2 + .156$ ; therefore, when BK used only Equity Market investment, the profitability was becoming  $y = 3.948 + 0.275X_3 + .157$ .



Thus, according to the result indicated that there is significant influence between liquidity and Bond market; securitized products; Equity markets investment as indicators of Capital Markets of BK Rwanda. Bond market of BK Rwanda influences the liquidity of BK Rwanda on Securitized products of BK Rwanda influence the liquidity on  $y = 1.170 + 0.148X_2 + .076$ , when BK used only Equity Market investment, the liquidity was  $y = 1.170 + 0.343.X_3 + .210$ . Thus, according to the result indicated that there is significant influence between capital adequacy and Bond markets; securitized products as indicators of Capital Markets of BK Rwanda. Bond markets of BK Rwanda influences capital adequacy of BK Rwanda on  $y = 1.028 + 0.106X_1 + .182$ ; securitized products of BK Rwanda influence the liquidity on  $y = 1.028 + 0.131X_2 + .061$ ; when BK used only Equity Markets investment, the liquidity was  $y = 1.028 - 0.021X_3 + .161$ .

As Iskander and Chamlou, (2000) observe the capital markets in developing countries provide little incentive for better corporate governance (either in the real sector or in the financial sector), primarily because of the dominance of a few large firms, low trading volumes and liquidity, absence of long-term debt instruments and inactivity of institutional shareholders. Moreover, the cause and effect relationship can work in the opposite direction e.g. the state of country as well as firm level corporate governance might have a significant influence on the development of the capital market. Shleifer and Vishny (1997) argue that a firm is likely to get external finance not only because of the reputation of the capital market and excessive investor optimism, but also due to assurances provided by the corporate governance system. BK should do follow up in the following critical priorities in order to stimulate financial sector development in Rwanda: Mobilizing savings and investment, Access to finance, financial inclusion, modernized payment systems, Skill development for the financial services, international financial service Centre

## **8.2: Conclusion**

According to the findings, the problem of the study was solved, research objectives were achieved, research questions were answered and hypotheses were verified, the null hypothesis that said “there is no significant relationship between Capital Markets and financial performance of bank of Kigali (BK)” was rejected after data analysis, while alternative hypothesis that said “there is significant relationship between Capital Markets and financial performance of bank of Kigali (BK)” was retained.

The findings help us to confirm that there is a significant relation between Capital Markets and financial performance of Bank of Kigali in Rwanda

### **8.3 To Recommendations**

The bank of Rwanda management should work much harder to improve its corporate governance, respond positively to economic conditions, and wake up to constructive risk management. This improves the corporate image of the commercial banks thereby raising the prices of the shares. When more people buy the shares, the banks raise more capital hence improved performance.

The management of the banks should work on proper advertising of their bond markets by attaching attractive interest rates. This entices the dealers to take more debt in form of loans, thus making the banks more liquid in the long run.

The securitized products like loans should be offered to the public after a clear assessment on who legally qualifies for the product. This puts the risk of default very low. When this happens, the bank raises more liquid hence improved performance.

### **8.4 Suggested areas for further studies**

Risks management and performance of the banking sector in Rwanda

Capital markets management and performance of micro finance institutions in Rwanda

## REFERENCES

- Aghion, P., Bacchetta, P. & Banerjee, A. (2004), Financial Development and the Instability Of Open Economies, *National Bureau of Economic Research*, Working Paper No. 10246.
- Andrew, C., (2009) *Introduction to International Capital Markets: Products, Strategies, Participants*.
- Andritzky, J., (2012) *Market response to policy initiatives during the global financial crisis*,"vol. 87(1), pages 162-177.
- Anthony, S., et al., (2008), *Financial markets and institutions The McGraw –Hill/Irwin series in Finance, Insurance & Real estate*.
- Arestis, P., Demetriades, P. O. & Luintel, K. B. (2001), *Financial development and Economic Growth: The Role of Stock Markets*’, *Journal of Money, Credit and Banking*, February, Vol. 33, No. 1.
- Atje, R., and Jovanovic, B., (1993), ‘*Stock Markets and Development*’, *European Economic Review*, Vol. 37: pp. 632-640.
- Babbie, E. R. (2001), *The practice of social research*, 9<sup>th</sup> ed., Wadsworth Thomson Learning, Belmont, CA.
- Baronov, D. (2004), *Conceptual foundations of social research methods*, Paradigm Publishers, Boulder,
- Beck, T. & Levine, R. (2001), ‘*Stock markets, Banks and Growth: Correlation or causality*’, *The World Bank*, Policy Research Paper No. 2670.
- Beck, T. (2006), ‘*Creating an efficient financial system: Challenges in a global economy*’, *World Bank*, Working Paper No. 3856.
- Beck, T., Levine, R., and Loayza, N. (2000). ‘Finance and the Sources of Growth’, *Journal of Finance and Economics*, Vol.58, pp. 261-300.
- Bekaert, G., Harvey, C. R., & Lundblad, C., (2006), *Emerging Equity Markets and Economic*
- Bonfiglioli, A., and Mendicino (2004): “*Financial liberalization, Banking crises and growth*”: *Assessing the links*. SSE/EFI Working Paper No. 567. Central Bank of Nigerian (CBN): *Statistical Bulletins* of 2005, 2006 and 2008. Abuja: Central Bank of Nigeria Publication.
- Choi, S., Smith, B. & Boyd, J. (1996), ‘*Inflation, financial markets, and capital formation*’, *The Federal Reserve Bank of St. Louis Review*, Vol. May/.

- Claessens, S., Klingebiel, D. & Schmukler, S. L. (2002), 'Explaining the migration of stocks from exchanges in emerging economies to international centers', *The World Bank*, Policy Research Working Paper No. 2816. 58(66)
- Damodaran, A. (2001), *corporate finance: Theory and practice*, 2nd ed, John Wiley & Sons Inc., New York.
- Development', *Journal of Development Economics*, vol. 66 (2 Dec), pp. 465-504.
- FEAS (2006), 'Market Capitalisation & Index', *Federation of Euro-Asian Stock Exchanges*, Found at: < <http://www.feas.org/Member.cfm?MemberID=10> >
- Francis D. R. (2006), 'Financial Development Helps the Poor in Poor Countries', National Bureau of Economic Research, Found at: <<http://www.nber.org/digest/jul05/w10979.html>>.
- Garcia, F. V. and Liu, L. (1999). *Macroeconomic determinants of stock market development (Electronic version)*. *Journal of Applied Economics*, Vol. II. No.1
- Goldsmith, R., W., (1969). *Financial structure and development*. Yale University Press, New Haven
- Greenwald, B.C., & Stieglitz, J., E, (1993). "Financial Market Imperfections and Business Cycles," *The Quarterly Journal of Economics*, MIT Press, vol. 108(1).
- International Monetary Fund (2005), *Rwanda: Financial System Stability Assessment*. Washington, D.C. *ions and Market Volatility*
- Jochen, R., (2007). *Capital Markets Development in a Small Country*
- Lerner, J., (1998), *capital formation and investment in venture markets*;
- Levine, R. & Zervos, S. (1996). *Stock market development and long-run growth*. *The World Bank Economic Review*, Volume 10, Issue 2.
- Levine, R. and Zervos S. (1998), 'Stock Markets, Banks, and Economic Growth', *American Economic Review* 88, p. 537-558.
- McKinnon, R. I. (1973). *Money and capital in economic development*. The Brookings Institution, 1775 Massachusetts Avenue, N. W., Washington D. C. Retrieved March 2011, from
- McKinnon, R.I. (1973), *Money and Capital in Economic Development*, Brooking Institution, Washington, DC, Microfinance Bill, 2006
- Mikdashi, Z. (2003), *Regulating the financial sector in the era of globalization*, Palgrave Macmillan, New York.
- Modigliani, F. & Miller, M., (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment"

- Modigliani, F., & Miller, M. H. (1958). *The Cost of Capital, Corporate Finance and the Theory of Investment*. *The American Economic Review*, 48 (3), 261-297.
- Morduch, J., (1999). *The Microfinance Promise*. *Journal of Economic Literature*, 37 (4), 1569- 1614.
- Mugenda, O., and Mungenda, A. , (2003), *Research Method Quantitative & Qualitative Approaches*: Nairobi Kenya: acts Press. Nairobi, Institute for policy analysis and Research.
- Nazir, S. M., Nawaz, M. M., & Gilani, J. U. (2010). *Relationship between economic growth and stock market development (Electronic version)*. *African Journal of Business Management*, Vol. 4(16), pp. 3473-3479.
- Nuhiu, A. R., & Hoti, H. A., (2011). *Effects of Capital Market development on economic growth of Western Balkan countries (Electronic version)*. *European Journal of Economics, Finance and Administrative Sciences*.
- Obstfeld, M. & Taylor, A., (2004), *Global Capital Market– Integration, Crisis, and Growth*, Cambridge University Press, New York.
- Saunders, A. & Cornett, M. M. (2004), *Financial markets and institutions*, McGraw-Hill/Irwin, New York.
- Saunders, A., & Cornett, M.M (2004) *Financial Markets and Institutions*, 5th edition, McGraw Hill. (The 4th edition is an adequate substitute for the 5th edition.)
- Stiglits, J. (2004) *Capital Markets liberalization economic growth and instability*.
- Stulz, R.M. (2003) *International Capital Markets*, 3 volumes
- Tachiwou, M. A. (2010). *Stock market development and economic growth: The case of west African Monetary Union*. *International Journal of Economics and Finance*, Vol. 2, No. 3.
- Uthoff, A. (2000), 'Pension reform in Chile', in Sawyers, L., Schydrowsky, D. & Nickerson, D. (eds), *Emerging financial markets in the global economy*, American University, Washington DC.
- World Bank (1989). *Financial systems and development*. World Development Report, World Bank and Oxford University Press, pg 26, Washington DC. Washington DC.

## APPENDICES

### Appendix I: SELFADMINISTRERS QUESTIONNAIRE (SAQ)

#### Re: Introductory Letter to Respondents

Dear Respondent,

I'm REHEMA UWIMANA, a student in Masters at Nkumba University, in MBA. As part of the requirements for the Degree award, I have to present a dissertation. The study is all about, « *the roles of Capital markets on the financial performance of commercial banks in Rwanda. A case study of Bank of Kigali Rwanda Ltd*»; I am now on my field part of collecting information for this dissertation, and you are kindly requested to respond to the various questions in the questionnaire attached. Your responses are treated with great confidentiality.

I would be grateful for your cooperation in this regard.

Thank you.

**REHEMA UWIMANA**

#### SECTION I: Identification of Respondents

*(Please tick (V) on appropriate answer)*

##### 1. Age

Less than 20 years [ ]

21 -30 years [ ]

31- 40 years [ ]

41-50 years [ ]

51 - 60 years [ ]

61years and above [ ]

##### 2. Gender

Male [ ]

Female [ ]

##### 3. Education Level

Secondary Level [ ]

Bachelor's Degree [ ]

Masters Level [ ]

PhD [ ]

Others, specify them .....

**4. Department occupied at BK**

Capital Markets department [ ]

Finance department [ ]

Accounting department [ ]

Internal audit department [ ]

**5. How long have you been working with BK?**

Less than 1 year [ ]

Between 2-3years [ ]

Above 4 years [ ]

**SECTION II: QUESTIONSON CAPITAL MARKETSand FINANCIAL PERFORMANCE  
OF BANK OF KIGALI**

**6. Effect of equity market on the financial performance of Bank of Kigali?**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i. Size of Equity market affects market capitalization for generating net profit margin for BK					
ii. The size dimension of equity market reflects turnover ratio of BK					
iii. The capacity of stock market influence trading activities, diversification, and liquidity provision function of BK					
iv. Accessibility of equity market helps in the Concentration of market capitalization which leads to increase of BK Gross profit					
v. Equity market investment enhances trading					

	1	2	3	4	5
volume for BK					
vi. The efficiency of equity market helps to obtain high return on equity					
vii. Equity market becomes the detectable private information trading for BK performance					
viii. Efficiency equity market facilitates in Liquidity / Transaction costs of BK					
ix. Stability of equity market influences volatility of shares for profit evolution of BK					

#### 7. Effect of bond market on the financial performance of Bank of Kigali?

	1	2	3	4	5
i. Bond market of BK helps to increase its interest income					
ii. Accessibility of Bond market facilitates an increase of capital gain to BK					
iii. Bonds market is converted into common stock at BK to increase the bank profit					
iv. Bonds Market of BK have preference over stockholders in the payment of liquidated assets					
v. BK used to loan money for future return in bonds market as debt investment					
vi. Bond market is alternatively referred to as the debt, credit or fixed-income for BK					
vii. Bonds market of BK contributes on the financial performance by Mobilizing savings and investment					
viii. Bonds market of BK system helps in Financial performance of this commercial bank					
ix. BK introducing bonds market for having the financial sustainability					



**Effect of securitized products on financial performance of Bank of Kigali?**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i. Commercial mortgages offered by BK increases the internal return of this commercial bank					
ii. Credit card receivables facilities BK to increase income from borrowers of this bank					
iii. Auto loans and student loans of BK increase the net profit margin					
iv. Securitization provides BK with a mechanism for removing assets from their balance sheets, thereby increasing the pool of available capital					
v. Securitized products increased abundance of capital as rate required on loans and interest rates promote increased BK growth.					
vi. Securitized products provides profits for financial intermediaries by keeping the profits from the spread					
vii. Securitized products creates an attractive asset class for investors					
viii. Securitized products Makes non-tradable assets tradable					
ix. Securitization describes the process of pooling financial assets and turning them into tradable securities for BK					

**9. What are the contributions Capital Markets on financial performance of BK Rwanda?**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i. With Capital Markets contributes to BK to Mobilize savings and investment					
ii. Capital Markets of BK on Rwandan marketplace helps customers to access Finance					
iii. Capital Markets of BK Modernized Payment Systems in financial services					
iv. Capital Markets of BK Promoting usages of financial products and services					

**THANK YOU SO MUCH**

## Appendix II: DATA BASE FROM SPSS

Q1S1	Q2	Q3	Q4	Q5	Q6S2	Q6_2	Q6_3	Q6_4	Q6_5	Q6_6	Q6_7	Q6_8	Q6_9	Q7S2	Q7_2	Q7_3	Q7_4	Q7_5
.02	.02	.02	.01	.03	.01	.02	.01	.01	.01	.03	.01	.01	.01	.02	.01	.01	.01	.02
.02	.01	.02	.01	.03	.01	.02	.01	.01	.01	.03	.01	.01	.01	.02	.01	.02	.01	.03
.02	.01	.02	.01	.03	.01	.02	.01	.05	.01	.05	.01	.01	.01	.02	.01	.02	.01	.05
.02	.01	.02	.01	.03	.01	.02	.01	.04	.01	.04	.01	.01	.01	.02	.01	.02	.01	.04
.02	.01	.02	.01	.03	.01	.01	.01	.04	.01	.05	.01	.01	.01	.03	.01	.02	.01	.03
.02	.01	.02	.01	.02	.01	.01	.01	.04	.01	.05	.01	.01	.01	.04	.01	.02	.01	.01
.03	.01	.02	.01	.02	.01	.01	.01	.04	.01	.04	.01	.01	.02	.05	.01	.02	.01	.01
.03	.01	.02	.01	.02	.01	.01	.01	.03	.01	.03	.01	.05	.02	.04	.02	.02	.02	.01
.03	.02	.02	.01	.02	.02	.01	.02	.03	.01	.01	.02	.04	.02	.03	.02	.02	.02	.01
.03	.02	.03	.01	.02	.02	.05	.02	.02	.01	.01	.02	.03	.02	.01	.02	.02	.02	.01
.03	.02	.03	.01	.02	.02	.05	.02	.02	.01	.01	.02	.02	.03	.01	.02	.02	.02	.01
.03	.02	.03	.01	.02	.02	.04	.02	.01	.01	.01	.02	.02	.04	.01	.02	.02	.02	.01
.03	.02	.03	.01	.02	.02	.03	.02	.01	.02	.01	.02	.02	.04	.01	.02	.02	.02	.01
.03	.02	.03	.01	.02	.02	.03	.02	.01	.02	.02	.02	.02	.05	.01	.03	.02	.02	.01
.03	.02	.03	.02	.02	.03	.02	.02	.01	.02	.02	.03	.02	.05	.02	.04	.02	.02	.02
.02	.02	.02	.02	.02	.04	.02	.02	.01	.02	.02	.04	.02	.02	.02	.05	.02	.02	.02
.02	.02	.02	.02	.02	.04	.02	.03	.01	.02	.02	.05	.02	.02	.02	.04	.02	.01	.02
.02	.02	.02	.02	.02	.05	.02	.04	.01	.02	.02	.03	.02	.02	.02	.03	.02	.01	.02
.02	.02	.02	.02	.02	.05	.02	.05	.01	.02	.03	.02	.02	.02	.02	.02	.02	.01	.02
.02	.02	.02	.02	.02	.02	.01	.02	.01	.02	.01	.02	.02	.01	.02	.02	.02	.01	.02
.02	.02	.03	.02	.02	.02	.01	.02	.01	.02	.01	.02	.02	.01	.02	.02	.01	.01	.02
.04	.01	.03	.02	.02	.02	.01	.02	.02	.02	.01	.02	.02	.01	.02	.02	.01	.01	.02
.04	.01	.03	.02	.02	.02	.01	.02	.02	.02	.01	.02	.01	.01	.02	.02	.01	.02	.02
.04	.01	.02	.03	.02	.02	.01	.02	.02	.03	.01	.02	.01	.02	.02	.02	.01	.02	.02
.03	.01	.02	.03	.02	.02	.01	.02	.02	.04	.02	.01	.01	.02	.02	.01	.01	.03	.02
.02	.01	.02	.03	.02	.01	.01	.01	.02	.05	.02	.01	.01	.01	.01	.01	.01	.04	.01
.02	.01	.02	.03	.02	.01	.01	.01	.02	.01	.02	.01	.01	.01	.01	.01	.01	.04	.01
.05	.01	.02	.03	.01	.01	.01	.01	.02	.01	.02	.01	.01	.01	.01	.05	.01	.05	.01
.05	.01	.04	.03	.01	.01	.01	.02	.02	.01	.02	.01	.01	.01	.01	.03	.01	.05	.01
.05	.01	.04	.04	.01	.01	.01	.02	.02	.02	.02	.01	.01	.01	.01	.02	.01	.02	.01
.03	.01	.03	.04	.01	.01	.01	.02	.02	.02	.02	.01	.01	.02	.01	.02	.01	.01	.01
.02	.01	.03	.04	.01	.01	.01	.02	.02	.02	.01	.01	.01	.02	.01	.02	.01	.02	.01

Q7_6	Q7_7	Q7_8	Q7_9	Q8S2	Q8_2	Q8_3	Q8_4	Q8_5	Q8_6	Q8_7	Q8_8	Q8_9
.01	.02	.02	.02	.01	.02	.03	.02	.01	.03	.01	.02	.01
.01	.02	.02	.01	.01	.02	.03	.01	.01	.05	.01	.01	.01
.01	.02	.02	.05	.01	.01	.03	.01	.01	.04	.01	.01	.01
.01	.03	.02	.01	.01	.01	.03	.01	.01	.03	.01	.01	.01
.01	.03	.02	.01	.01	.01	.02	.01	.01	.02	.01	.01	.01
.01	.03	.02	.01	.01	.01	.02	.01	.01	.02	.01	.01	.02
.02	.01	.02	.04	.01	.02	.02	.01	.01	.02	.01	.03	.02
.02	.01	.02	.04	.01	.02	.02	.01	.01	.01	.02	.03	.02
.02	.01	.01	.03	.01	.02	.02	.03	.01	.01	.02	.02	.02
.02	.01	.01	.03	.01	.02	.02	.03	.01	.01	.02	.02	.02
.01	.02	.01	.05	.01	.02	.02	.03	.02	.01	.02	.04	.02
.01	.02	.01	.04	.01	.04	.02	.03	.02	.01	.02	.04	.02
.01	.02	.01	.03	.02	.04	.01	.04	.02	.02	.02	.05	.02
.01	.02	.01	.01	.02	.05	.01	.04	.02	.02	.02	.05	.03
.01	.02	.01	.01	.02	.05	.01	.04	.02	.02	.02	.05	.04
.01	.02	.01	.01	.02	.04	.01	.05	.02	.02	.03	.04	.05
.01	.02	.01	.02	.02	.04	.01	.05	.02	.02	.04	.03	.05
.01	.02	.03	.02	.02	.03	.01	.04	.02	.02	.05	.02	.03
.02	.02	.04	.02	.03	.02	.01	.03	.02	.02	.05	.02	.02
.02	.02	.05	.02	.04	.02	.01	.02	.02	.02	.02	.02	.02
.02	.02	.04	.02	.05	.02	.01	.02	.03	.02	.02	.02	.02
.02	.02	.01	.02	.05	.02	.01	.02	.04	.02	.02	.02	.02
.02	.02	.01	.02	.05	.02	.02	.02	.05	.02	.02	.02	.02
.02	.02	.01	.02	.02	.02	.02	.02	.01	.01	.02	.02	.01
.03	.01	.01	.01	.02	.02	.02	.02	.01	.01	.03	.02	.01
.04	.01	.02	.01	.02	.01	.02	.01	.02	.01	.01	.01	.01
.05	.01	.02	.01	.01	.01	.03	.01	.02	.01	.01	.01	.01
.04	.01	.02	.01	.01	.01	.03	.01	.02	.01	.02	.01	.02
.04	.01	.02	.01	.01	.01	.04	.01	.01	.01	.02	.01	.02
.03	.01	.03	.01	.01	.01	.04	.01	.01	.01	.02	.01	.02
.02	.01	.04	.01	.01	.01	.03	.01	.01	.01	.02	.01	.01
.02	.01	.01	.01	.01	.01	.03	.01	.02	.01	.01	.01	.01

## Appendix III: FINANCIAL STATEMENTS OF BK RWANDA

STATEMENT OF COMPREHENSIVE INCOME YEAR ENDED 31 DECEMBER 2012			
	Note	2012 RwF '000	2011 RwF '000
Interest income	7	32,069,789	22,671,124
Interest expense	8	(8,338,615)	(6,075,680)
<b>Net interest income</b>		<b>23,731,174</b>	<b>16,595,444</b>
Fees and commission income	9	6,678,935	4,326,856
Foreign exchange income	10	7,031,504	7,643,851
Other operating income	11	964,100	888,719
<b>Operating income before impairment losses</b>		<b>38,405,713</b>	<b>29,454,870</b>
Net impairment on loans and advances	12	(3,647,289)	(4,544,321)
Impairment loss on equity investments		-	(49,920)
<b>Net operating income</b>		<b>34,758,424</b>	<b>24,860,629</b>
Personnel costs	13(i)	(9,615,156)	(7,070,435)
Depreciation and amortisation	13(ii)	(3,678,098)	(2,432,320)
Other operating expenses	13(iii)	(6,998,261)	(4,703,966)
<b>Total operating expenses</b>		<b>(20,291,515)</b>	<b>(14,206,721)</b>
<b>Profit before income tax</b>		<b>14,466,909</b>	<b>10,653,908</b>
Income tax expense	14(a)	(2,685,573)	(1,965,143)
<b>Net profit for the year</b>		<b>11,781,336</b>	<b>8,688,765</b>
Comprehensive income			
Other comprehensive income net of taxes:			
Effect of change in tax rate on revaluation		-	1,021,506
<b>Total comprehensive income for the year</b>		<b>11,781,336</b>	<b>9,710,271</b>

	Note	2012 RwF'000	2011 RwF'000
<b>Assets</b>			
Cash in hand	29 (a)	9,595,769	8,123,088
Balances with the National Bank of Rwanda	29 (b)	54,304,202	61,621,376
Due from banks	16	25,898,920	51,994,652
Held to maturity investments	17(a)	13,119,325	8,190,524
Loans and advances to customers	18(a)	185,066,752	123,130,687
Equity Investments	17(b)	218,455	218,455
Other assets	19	12,624,707	14,920,439
Property and equipment	21	21,627,964	19,554,303
Intangible assets	22	338,120	146,350
<b>Total Assets</b>		<b>322,794,214</b>	<b>287,899,874</b>
<b>Liabilities</b>			
Due to banks	23	18,418,926	19,090,060
Deposits and balances from customers	24	208,424,579	181,019,654
Tax Payable	14(b)	320,745	137,024
Deferred tax liability	25	2,454,218	2,345,641
Dividends Payable	20	5,894,345	-
Other liabilities	26	18,229,130	18,725,051
Long-term finance	27	5,944,978	4,998,112
<b>Total Liabilities</b>		<b>259,686,921</b>	<b>226,315,542</b>
<b>Capital and Reserves</b>			
Share Capital (page 39)	28(i)	6,673,370	6,673,370
Share Premium (page 39)	28(ii)	18,108,176	18,233,653
Revaluation Reserves (page 39)	28(iii)	7,354,844	7,763,446
Statutory Risk Reserves (page 39)	28(iv)	19,100	-
Other Reserves (page 39)	28(v)	24,058,727	19,714,345
Retained earnings (page 39)	28(vi)	6,893,076	9,199,518
<b>Total Equity</b>		<b>63,107,293</b>	<b>61,584,332</b>
<b>Total Liabilities And Equity</b>		<b>322,794,214</b>	<b>287,899,874</b>

The financial statements were approved by the Board of Directors on .....<sup>27</sup> March 2013 and were signed on its behalf by:

Director:

Director:

The notes set out on pages 41 to 88 form an integral part of these financial statements.



## BANK OF KIGALI LIMITED

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME  
FOR THE YEAR ENDED 31 DECEMBER 2014

		2014	2013
	Note	FRw'000	FRw'000
Interest income	7	31,909,827	45,210,732
Interest expense	8	(12,634,600)	(10,013,908)
<b>Net interest income</b>		<b>39,255,227</b>	<b>35,194,844</b>
Net Fees and commission income	9	10,899,134	10,801,233
Foreign exchange related income	10	7,724,323	7,476,133
Other operating income	11	301,838	281,008
<b>Operating income before impairment losses</b>		<b>58,180,544</b>	<b>53,753,240</b>
Net impairment on loans and advances	12	(7,342,937)	(8,993,999)
<b>Net operating income</b>		<b>50,637,587</b>	<b>44,759,241</b>
Personnel costs	13(a)	(14,427,737)	(11,707,238)
Depreciation and amortisation	13(b)	(3,663,534)	(4,639,637)
Administration and General expenses	13(c)	(9,787,611)	(9,636,130)
<b>Total operating expenses</b>		<b>(27,878,882)</b>	<b>(26,003,005)</b>
<b>Profit before income tax</b>		<b>22,758,705</b>	<b>18,756,236</b>
Income tax expense	14(a)	(4,441,880)	(3,926,001)
<b>Net profit for the year</b>		<b>18,316,825</b>	<b>14,830,235</b>
Other comprehensive income net of taxes:		-	-
<b>Total comprehensive income for the year</b>		<b>18,316,825</b>	<b>14,830,235</b>
Basic earnings per share in FRw	15	27.34	22.20
Diluted earnings per share in FRw	15	27.22	22.13
Dividend per share (FRw) - proposed	15	16.33	11.10

**BANK OF KIGALI LIMITED**
**CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
AS AT 31 DECEMBER 2014**

		2014	2013
	Note	FRw'000	FRw'000
<b>Assets</b>			
Cash in hand	16 (a)	12,020,669	11,110,210
Balances with the National Bank of Rwanda	16 (b)	46,938,373	24,855,050
Due from banks	17	102,988,217	107,377,323
Held to maturity investments	18(a)	58,596,907	50,820,690
Loans and advances to customers	19(a)	233,439,509	199,025,241
Equity Investments	18(b)	221,425	218,455
Other assets	20	7,665,385	7,695,005
Property and equipment	21	20,508,423	21,018,894
Intangible assets	22	234,056	239,005
<b>Total Assets</b>		<b>482,607,964</b>	<b>422,360,073</b>
<b>Liabilities</b>			
Due to banks	23	15,214,461	17,345,024
Deposits and balances from customers	24	324,601,160	280,489,463
Tax Payable	14(b)	692,518	1,828,573
Deferred tax liability	25	1,431,391	1,620,650
Dividends Payable	26	5,469	7,416,579
Other liabilities	27	11,185,264	8,705,581
Long-term finance	28	39,929,967	34,190,519
<b>Total Liabilities</b>		<b>393,060,230</b>	<b>351,596,389</b>
<b>Capital and Reserves</b>			
Share Capital (page 43)	29(a)	6,713,706	6,684,500
Share Premium (page 43)	29(b)	18,572,040	18,236,171
Revaluation Reserves (page 43)	29(c)	6,537,638	6,946,241
Other Reserves (page 43)	29(d)	37,364,514	29,949,395
Retained earnings (page 43)	29(e)	20,359,836	8,947,377
<b>Total Equity</b>		<b>89,547,734</b>	<b>70,763,684</b>
<b>Total Liabilities and Equity</b>		<b>482,607,964</b>	<b>422,360,073</b>

The financial statements were approved by the Board of Directors on 15<sup>th</sup> March 2015 and were signed on its behalf by:

		2015	2014
	Note	FRw'000	FRw'000
Interest income	7	59,966,855	51,909,827
Interest expense	8	(13,727,086)	(12,654,600)
<b>Net interest income</b>		<b>46,239,769</b>	<b>39,255,227</b>
Net fees and commission income	9	11,884,277	10,899,154
Foreign exchange related income	10	5,301,247	7,724,325
Other operating income	11	292,651	301,838
<b>Operating income before impairment losses</b>		<b>63,717,944</b>	<b>58,180,544</b>
Net impairment on loans and advances	12	(7,547,662)	(7,542,957)
<b>Net operating income</b>		<b>56,170,282</b>	<b>50,637,587</b>
Personnel costs	13(i)	(15,029,991)	(14,427,737)
Depreciation and amortisation	13(ii)	(3,807,120)	(3,663,534)
Administration and General expenses	13(iii)	(11,595,999)	(9,787,611)
<b>Total operating expenses</b>		<b>(30,433,050)</b>	<b>(27,878,882)</b>
<b>Profit before income tax</b>		<b>25,737,232</b>	<b>22,758,705</b>
Income tax expense	14(a)	(5,253,174)	(4,441,880)
<b>Net profit for the year</b>		<b>20,484,058</b>	<b>18,316,825</b>
<b>Comprehensive income</b>			
Other comprehensive income net of taxes:		-	-
<b>Total comprehensive income for the year</b>		<b>20,484,058</b>	<b>18,316,825</b>
Basic earnings per share in FRw	15	30.49	27.34
Diluted earnings per share in FRw	15	30.38	27.22
Dividend per share (FRw) – proposed	15	12.15	16.33

The notes set out on pages 45 to 100 form an integral part of these financial statements.



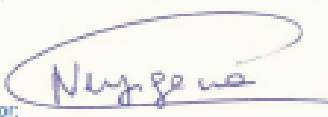
**BANK OF KIGALI LIMITED**

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
AS AT 31 DECEMBER 2015**

		2015	2014
	Note	FRw'000	FRw'000
<b>Assets</b>			
Cash in hand	16 (a)	14,951,617	12,020,669
Balances with the National Bank of Rwanda	16 (b)	44,572,594	46,938,173
Due from banks	17	62,568,118	102,988,217
Held to maturity investments	18(a)	90,508,198	58,596,907
Loans and advances to customers	19(a)	313,925,535	233,439,509
Other assets	20	8,255,500	7,665,385
Equity investments	18(b)	221,425	221,425
Property and equipment	21	22,845,684	20,503,423
Intangible assets	22	381,529	234,056
<b>Total Assets</b>		<b>561,226,400</b>	<b>482,607,964</b>
<b>Liabilities</b>			
Due to banks	23	22,609,724	15,214,461
Deposits and balances from customers	24	384,713,700	324,601,360
Tax Payable	14(b)	898,141	692,518
Deferred tax liability	25	1,682,520	1,431,391
Dividends Payable	26	34,230	5,469
Other liabilities	27	9,656,897	10,880,278
Long-term finance	28	42,475,643	40,254,954
<b>Total Liabilities</b>		<b>461,980,855</b>	<b>393,080,231</b>
<b>Capital and Reserves</b>			
Share Capital	29(i)	6,713,842	6,713,706
Share Premium	29(ii)	18,665,604	18,572,040
Revaluation Reserves	29(iii)	6,128,038	6,537,638
Other Reserves	29(iv)	11,958,110	17,364,513
Retained earnings	29(v)	55,810,954	20,359,836
<b>Total Equity</b>		<b>99,245,545</b>	<b>89,547,733</b>
<b>Total Liabilities and Equity</b>		<b>561,226,400</b>	<b>482,607,964</b>

The financial statements were approved by the Board of Directors on 22 February 2016 and were signed on its behalf by:

Director: 

Director: 

Date: 22/2/2016

Date: 22/2/2016

The notes set out on pages 45 to 100 form an integral part of these financial statements.

**CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2017**

	Note	THE BANK		THE GROUP	
		2017 FRw'000	2016 FRw'000	2017 FRw'000	2016 FRw'000
Interest income	7	82,086,644	72,233,071	82,223,868	72,254,385
Interest expense	8	(18,240,069)	(16,545,576)	(18,325,080)	(16,556,236)
Net interest income		63,746,575	55,687,495	63,907,888	55,698,149
Net Fees and commission income	9	18,341,278	14,111,523	18,341,278	14,560,203
Foreign exchange related income	10	7,800,144	6,584,107	7,786,502	6,583,450
Other operating income	11	1,117,425	181,442	2,426,510	465,392
Operating income before impairment losses		91,005,422	76,564,667	92,462,178	76,907,204
Net impairment on loans and advances	12	(16,489,292)	(10,448,958)	(16,489,292)	(10,448,958)
Account maintenance fees	13	(1,863,454)	(6,634,811)	(1,863,454)	(6,634,811)
Net operating income		72,652,676	59,480,796	74,109,432	59,823,515
Personnel costs	14(i)	(19,935,048)	(13,799,529)	(21,227,700)	(14,075,178)
Depreciation and amortisation	14(ii)	(4,418,855)	(3,954,900)	(4,501,210)	(3,955,171)
Administration and General expenses	14(iii)	(14,793,758)	(11,783,277)	(14,808,488)	(11,812,051)
Total operating expenses		(39,147,661)	(29,537,706)	(40,537,398)	(29,842,400)
Profit before income tax		34,005,015	29,943,090	34,172,034	29,981,115
Income tax expense	15 (a)	(10,758,093)	(9,212,208)	(10,823,154)	(9,225,248)
Net profit for the year		23,246,922	20,730,882	23,348,880	20,755,867
Other comprehensive income not to be reclassified to profit and loss in subsequent periods					
Revaluation of property, plant and equipment net of tax		-	5,458,581	-	5,458,581
Total comprehensive income for the year		23,246,922	26,189,463	23,348,880	26,214,447
Basic earnings per share in FRw	16			34.67	30.87
Diluted earnings per share in FRw	16			-	30.76
Dividend payout ratio	16			40%	40%

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
AS AT 31 DECEMBER 2017**

ASSETS	Note	THE BANK		THE GROUP	
		2017	2016	2017	2016
		FRw'000	FRw'000	FRw'000	FRw'000
Cash in hand	17 (a)	15,731,699	15,000,721	15,731,699	15,000,721
Balances with the National Bank of Rwanda	17 (b)	42,583,327	31,800,058	42,583,327	31,800,058
Due from banks	18	51,852,516	84,634,868	53,055,021	84,634,868
Held to maturity investments	19(a)	94,248,923	77,962,606	94,248,923	77,962,606
Loans and advances to customers	20(a)	471,704,315	385,804,570	471,704,315	385,804,570
Other assets	21	10,521,561	8,581,483	11,452,009	8,877,766
Equity investments	19(b)	2,621,425	1,421,425	221,425	221,425
Property and equipment	22	33,339,337	33,378,208	33,529,626	33,435,701
Intangible assets	23	557,224	449,798	678,355	514,880
<b>TOTAL ASSETS</b>		<b>727,569,327</b>	<b>639,117,735</b>	<b>727,204,700</b>	<b>638,336,598</b>
<b>LIABILITIES</b>					
Due to banks	24	42,377,460	28,205,184	42,377,460	28,105,184
Deposits and balances from customers	25	457,589,724	420,465,054	455,213,393	419,017,263
Tax Payable	15(b)	6,898,150	4,159,740	6,000,898	4,165,800
Deferred tax liability	26	2,350,917	6,796,000	2,351,802	6,795,553
Dividends Payable	27	9,378,311	8,343,104	9,378,311	8,343,104
Other liabilities	28	15,252,061	5,709,181	17,390,729	6,286,996
Long-term finance	29	70,842,175	57,137,068	70,842,175	57,137,068
<b>TOTAL LIABILITIES</b>		<b>604,688,798</b>	<b>529,815,351</b>	<b>604,454,568</b>	<b>529,850,968</b>
<b>CAPITAL AND RESERVES</b>					
Share Capital	30(i)	6,745,370	6,724,428	6,745,370	6,724,428
Share Premium	30(ii)	18,036,176	18,605,343	18,036,176	18,605,343
Revaluation Reserves	30(iii)	13,000,149	13,630,625	13,000,149	13,630,625
Retained earnings	30(iv)	83,789,834	60,251,988	84,068,417	60,435,204
<b>TOTAL EQUITY</b>		<b>122,471,529</b>	<b>108,302,384</b>	<b>122,750,132</b>	<b>108,485,600</b>
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>727,569,327</b>	<b>639,117,735</b>	<b>727,204,700</b>	<b>638,336,598</b>

The financial statements were approved by the Board of Directors on 23 February 2018 and were signed on its behalf by:

Director: 

Director: 

Date: 23/02/2018

Date: 23/02/2018

The notes set out on pages 59 to 138 form an integral part of these financial statements.



**BANK OF KIGALI**  
Financially transforming lives



Kigali, 21 April 2018

Ref. No: HR&ADM/ELUY/0477/2018

**REHEMA UWIMANA**

co/Nkumba University

Dear Madam,

**Subject: Response to Your Request for Data Collection**

We acknowledge, with thanks, receipt of the research authorization request from Nkumba University; whereby you request for carrying out your research on the following topic "Capital Markets and Financial Performance of Commercial Banks in Rwanda" A case - Study of BK Headquarters; for the completion of your Masters in finance and accounting

We have the pleasure to inform you that your request was approved. You can access requested data related to your research topic through our BK website and any clarification you can send to us specific data required to be transmitted to you.

Sincerely yours,

**Vanessa MUTAMBA**  
HR Administration Officer



**Gerald BITANGA**  
Compensation & Benefits Officer

Company Code/TIN No. 100003458 RSE Ticker: BOK Capital: FRW 6,721,842,000 Swift: BKIGRW  
P.O. Box: 175 Kigali 6312, Avenue de la Paix - Kigali Tel: (250) 252 593 100 Cell: (250) 788 143 000  
Fax: (250) 252 575 504, (250) 252 573 463 Email: [bk@bk.rw](mailto:bk@bk.rw) | [www.bk.rw](http://www.bk.rw)

